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# City Centre to Māngere Rapid Transit

**Urban Summary Technical  
Report**

October 2021

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# Executive Summary

In March 2021, the Government reaffirmed that the delivery of rapid transit investment in the City Centre to Māngere (CC2M) corridor is a priority and an “important city-shaping project”. Central government is seeking a high level of ambition to optimise the accessibility, climate and urban benefits for Auckland from the project. This includes leveraging value from existing public investment in the City Rail Link Project and Kāinga Ora’s Large-Scale Projects.

The Auckland Light Rail Establishment Unit was created to look at the case for a rapid transit solution along this corridor (The Project) as “an enabler of higher density and better-quality urban development, leading to stronger communities, greater vitality, and attractive compact urban form”.

This report brings together the key findings of all technical analysis undertaken to inform the urban inputs and advice to the Project including the Indicative Business Case and ‘The Urban Story’.

Auckland has a world-wide reputation for its quality of life and liveability largely due to its outstanding natural environment and the lifestyle opportunities it offers. To ensure Auckland remains an attractive place to live and visit in the future and to address Auckland’s pressing growth challenges and opportunities, investment in city shaping infrastructure such as rapid transit will be critical.

It is a key decision that will fundamentally shape Auckland’s urban form to benefit current and future generations and will be instrumental to tackling the key issues facing Auckland such as climate change, housing supply, equity, social cohesion and the ability to get around. Rapid transit will also improve the efficiency and productivity of the most important regional economy in New Zealand.

Analysis undertaken by the Establishment Unit has shown that investment in rapid transit alone will not achieve central governments urban transformational expectations nor will it optimise the transport, climate and socio-economic outcomes. These expectations and outcomes will only be achieved through an integrated approach to investment which supports transit focused development.

The range of urban related benefits that could be realised through an integrated approach include improved quality of life, emissions reduction, equity, housing choice and personal health and safety as well as greater accessibility to employment, amenities and services and vibrant public places and spaces.

An integrated approach can also deliver many transport related benefits such as mode shift, reduced vehicle kilometres travelled, improved fare box recovery and value for money through beneficial transport outcomes related to system operational efficiency.

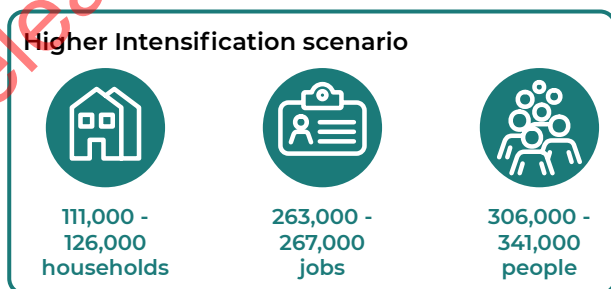
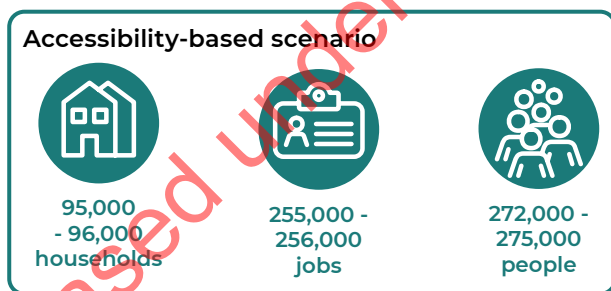
Five route and mode options were identified and assessed through a Multi Criteria Assessment (MCA) process. All five options enable changes in land use to support rapid transit investment. However, enablement alone will not be enough. The extent of transformational change depends on the implementation of:

- an integrated approach to securing the benefits of urban development and the rapid transit investment (Integrated Approach)
- the level of urban intervention undertaken
- the effectiveness of a “whole of government” approach to governance, partnership and delivery of outcomes.

To understand how much additional urban development (households and jobs) could be triggered with investment in rapid transit for each option, three alternative land use scenarios were tested. These scenarios are described as:

- The **Auckland Council's Growth scenario** remained constant across all five short listed options.
- The **Accessibility-based scenario** has been modelled for five short listed options, modelling additional growth in the corridor triggered by the accessibility benefits of investment. This is over and above Auckland Council's Growth Scenario due to an improvement in accessibility.
- The **Higher Intensification scenario** has been modelled for the three 'best-performing' short-listed options (Light Rail Dominion Road, Light Metro Sandringham Road and Tunnelled Light Rail). This models additional growth that could occur if significant urban intervention is used. This is over and above Auckland Council's Growth Scenario and the Accessibility-based scenario.

Based on the results of this scenario testing the urban benefits of a limited intervention (Accessibility-based), and significant intervention (Higher-intensification) in supporting a rapid transit investment can be quantified and is shown below.



An Integrated Approach will be realised through the implementation of an Urban Development Programme (Programme). This Programme is a comprehensive series of urban interventions which will integrate with and support the implementation of the Project. The use of urban interventions will aid the delivery of transit supportive urban development.

The Programme will identify the range of interventions required across the corridor relating to people, place, environment, movement and economy.

Implementation of the Programme will:

- enable a robust platform that supports a more quality compact and sustainable Auckland that enables efficient movement and mode shift from private vehicle travel to more active and public transport modes supporting climate and environmental goals.
- deliver a city centre that is critical to the regional economy which supports the growth, efficiency and productivity of the regional economy due to the benefits of economies of transportation, scale, scope, agglomeration and density.
- improve the quality of life and well-being of communities in the corridor particularly in terms of housing, employment and education choice, accessibility, health, safety, social cohesion and equity.
- deliver successful places that meet people's needs and are places that people choose to visit, work, live and play.

The Urban Development Programme will be:

- part of the scope, function and resourcing of the Project governance and delivery structure in a "whole of government" partnership approach built on the respective skills, capital, competencies, risk profiles and frameworks of existing public and other entities
- strategically and spatially informed through an urban vision and master plan for the corridor alongside more place-specific precinct and implementation plans.

- highly place responsive, informed by a fundamental understanding of all factors influencing and driving transit-supportive urban change.
- intentional about utilising interventions to influence land use change factors including, accessibility, physical and social character, land attributes, statutory conditions and prevailing and future market and commercial drivers.

The next phase of the project will identify route alignment and station / stop locations. To successfully integrate urban and transport outcomes, the alignment and station / stop locations must be informed by an analysis of existing conditions as well as the necessary conditions required for optimum transit-supportive urban development at the corridor and place level.

To understand potential urban outcomes for the corridor in greater detail (e.g. level of development ambition, what and who will deliver interventions required to secure development and the range of costs associated with implementing urban interventions) a corridor masterplan and place-based precinct/station planning will need to be undertaken as a critical part of the next phase of the Project.

The following table is a summary of the key findings and advice in respect of the urban issues. This summary should be read in conjunction with the full Urban Summary Technical Report and The Urban Story which forms the overall advice to the Project on integrated urban and rapid transit issues. These findings and the advice have informed the Indicative Business Case and overall advice on the Project to the Auckland Light Rail Establishment Unit Board and Sponsors.

## Summary of key urban findings and advice

Route and Mode – urban analysis key findings
<p><i>Light Rail (Dominion Road)</i></p> <ul style="list-style-type: none"> <li>• Offers a high level of urban accessibility across the corridor; it has more stops than Light Metro which results in more walkable catchment area but may create a more dispersed built form across the corridor. It could accommodate at least 50,000 additional homes and 93,000 additional jobs by 2051.</li> <li>• The existing vitality and mixed commercial and residential community that this area offers is difficult to recreate in other locations which makes the Dominion Road alignment a unique opportunity to leverage high amenity mixed use transit focused development.</li> <li>• The southern part of the corridor, particularly through Bader Drive, connects to the existing and future communities better than Light Metro. In doing so it has less hostile motorway stops which have poor walkable catchments.</li> <li>• The street presence of Light Rail means it is attractive to disadvantaged communities including older people, parents with prams and those with disabilities as it is highly visible and easy to use. Being at street level also means it feels safer, which was a key concern expressed by communities in the southern part of the corridor through the Project's engagement process.</li> <li>• While serving the length of Queen Street, the alignment does not directly serve the Universities, and has longer journey times into the city centre for southern communities.</li> </ul>
<p><i>Light Metro (Sandringham Road)</i></p> <ul style="list-style-type: none"> <li>• Serves the Universities, Kāinga Ora's Large-scale project at Mount Roskill and provides flexibility in terms of alignment. This flexibility means that it is not restricted to serving an existing corridor alignment and its associated land use. It could therefore directly serve all key opportunities in the corridor. This option could accommodate at least 66,000 additional homes and 97,000 additional jobs by 2051.</li> <li>• Tunnelling through the central isthmus allows the alignment to serve key destinations such as the Universities, Kāinga Ora land in Wesley and Mount Roskill, while avoiding disruption and demolition along built up areas of the corridor.</li> <li>• However, this option follows the motorway, missing the opportunity to connect through the Māngere community and new Kāinga Ora housing at Bader Drive.</li> <li>• Fewer stops overall than Light Rail mean there is less walkable catchment area, but higher density development is possible at each stop.</li> <li>• More stops adjacent to the motorway mean more areas will have poor urban environments and walkable catchments resulting in a less desirable customer experience.</li> </ul>

Route and Mode – urban analysis key findings
<p><i>Tunnelled Light Rail</i></p> <ul style="list-style-type: none"> <li>• Delivers the best aspects of Light Rail and Light Metro. As with Light Metro, this option provides flexibility in terms of alignment. This flexibility means that it is not restricted to serving an existing corridor alignment and its associated land use. It could therefore directly serve all key opportunities in the corridor. As with the Light Metro option this option has the potential to accommodate at least 66,000 additional homes and 97,000 additional jobs by 2051.</li> <li>• Fewer stops overall than Light Rail mean there is less walkable catchment area, but higher density development is possible at each stop.</li> <li>• Tunnelling through the Isthmus affords flexibility to serve key areas along the route including Dominion Junction, Wesley, Mount Roskill and potentially the established, mixed commercial and residential areas along Dominion Road.</li> <li>• It also avoids the disruption associated with at-grade construction through the City Centre.</li> <li>• It will minimise motorway stops in the southern part of the route and take rapid transit directly into the Māngere community along Bader Drive to serve new Kāinga Ora housing on its way into Māngere Town Centre.</li> <li>• The ability to have surface level stops in the southern part of the corridor will provide street presence and a sense of safety for the Māngere community which has been expressed as a key concern from public engagement.</li> <li>• It connects people living in Ōnehunga and Māngere to jobs and the Universities in the city centre, faster than the Light Rail option.</li> </ul>
Urban potential and value for money
<p>Unlocking urban potential and driving value for money will require development of and resourcing the Programme. The Programme will support the proposed rapid transit investment by securing the delivery of integrated transit-supportive urban interventions.</p>
Project Governance and Delivery Framework
<ul style="list-style-type: none"> <li>• A “whole of government” project governance and delivery framework, including partner roles and responsibilities for urban outcomes, must have the mandate, accountability, resources and responsibility for securing optimum, city shaping, transit-supportive urban outcomes.</li> <li>• Delivery tasks identified in the Programme will be undertaken by the respective partners having regard to their existing mandates, expertise and capital and funding sources</li> <li>• Partners must seek to actively secure investment and development through the private sector.</li> </ul>
Funding and Financing
<ul style="list-style-type: none"> <li>• The Programme will need to optimise the use of existing partner initiatives, funding, capital and other sources (e.g. the Infrastructure Funding and Financing Act) alongside identifying additional funding requirements through the next phase.</li> <li>• Proposals to capture value must be cognisant of their implications on the feasibility of high-density transit supportive development including impacts on more vulnerable communities in the corridor.</li> </ul>
Key Actions - The Next Phase
<p>The following Key Actions are suggested for the next phase.</p> <p><b>Mandate</b> - The partners to have a clear mandate and accountability to secure quality transit supportive urban outcomes including housing, employment, community, environmental and Te Ao Māori outcomes through the Programme.</p> <p><b>Planning policy</b> - Planning policies to be reviewed and amended as appropriate to ensure quality transit supportive development is enabled.</p> <p><b>Funding</b> - Identify funding sources, strategies and structure to support potential value capture.</p> <p><b>Strategic assessment and master planning</b> - Place-based assessment across the corridor and node by node to determine the scale of urban development opportunities and constraints followed by a masterplan to determine the vision and urban ambition required to enable, unlock and secure quality transit supportive urban development.</p> <p><b>Interventions</b> - Identify specific interventions required, including enabling infrastructure, amenity and land purchases, catalyst transit supportive development opportunities, risk analysis and strategy for implementation.</p> <p><b>Delivery</b> - Optimise, organise and operationalise the Programme to secure urban outcomes, including private sector partnerships.</p> <p><b>Governance</b> - The Governance group be tasked with responsibility for overseeing and securing the Project’s urban development outcomes.</p>

# 1. Purpose

The purpose of the Urban Summary Technical Report is to outline the key urban advice based on the technical analysis undertaken across six pillars of the Urban Workstream for the City Centre to Māngere Light Rail Project (“the Project”). Various technical reports have been produced across these pillars and form appendices to this report.

This report sets out a summary of key findings of the workstreams analysis and provides the next steps and key actions to be taken forward beyond the Indicative Business Case (IBC) stage of the project.

The workstream advice and analysis has been integrated into the overall project advice including the Indicative Business Case. It has also informed the development of the Workstreams narrative piece ‘The Urban Story’ (Appendix 2 to the Indicative Business Case).



*This image is an example of the type of urban outcomes which could be supported by investment in rapid transit.*

## 2. Urban Workstream background

### 2.1 CC2M workstreams

The Project is made up of six interrelated workstreams, as shown in Figure 1 below:

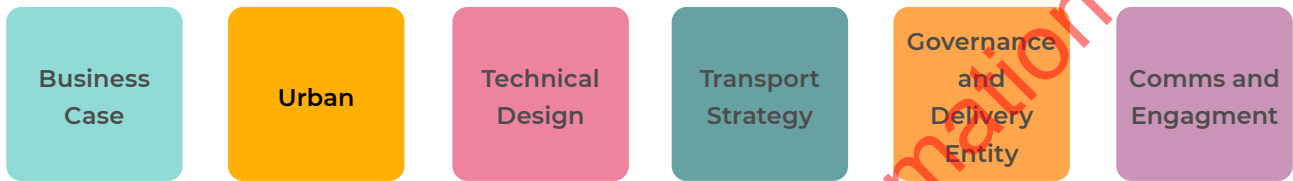


Figure 1: CC2M workstreams

### 2.2 The Urban workstreams

The Urban Workstream contains six integrated pillars of work. These pillars are shown in Figure 2 below:

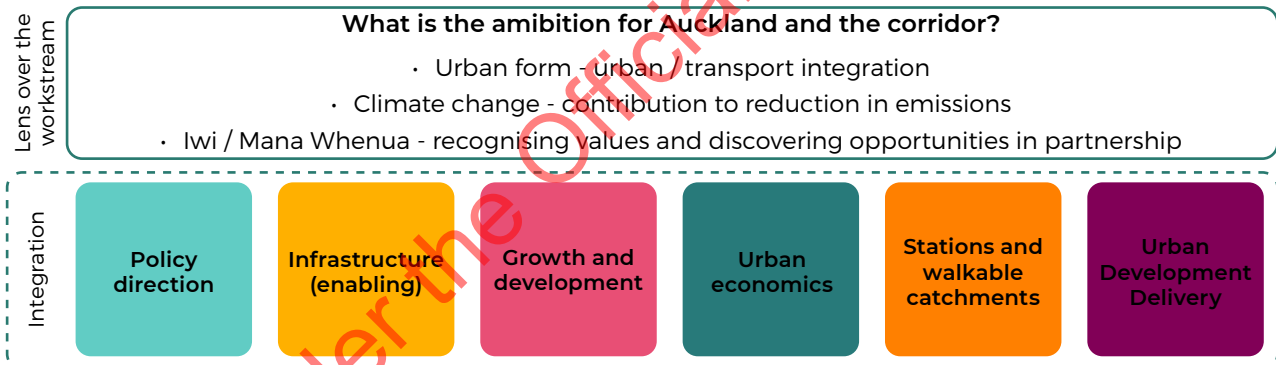
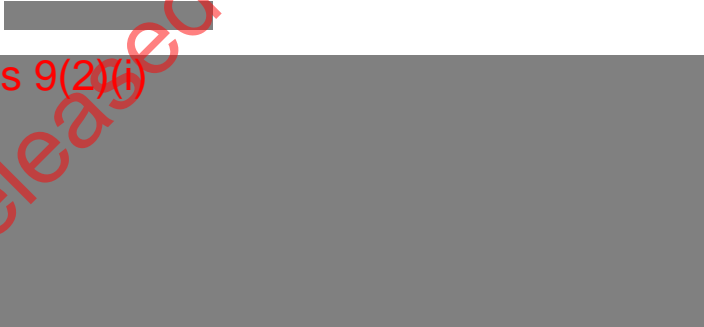


Figure 2: Urban Workstream pillars of work

Each pillar of the Urban Workstream produced a technical report, which s 9(2)(i)





## 2.3 Key urban assumptions

The following key assumptions have been made for the purposes of undertaking the urban analysis:

- The Auckland Council growth scenario is constant across all five short-listed options and was the starting point, or base scenario, for the project.
- Two dynamic land use scenarios have been applied as part of the modelling for the Project:
  - Accessibility-based scenario: empirical analysis was carried out to measure existing relationships between land value, accessibility and population density in Auckland. These relationships were used to estimate changes in density resulting from the rapid transit investment.
  - Higher Intensification scenario: a more aspirational scenario which assumes substantially higher intensification within the corridor.
  - Detailed assumptions can be found in Section 7 of this report, and s 9(2)(i)
- Two plan enabled capacity scenarios have been modelled for the Project:
  - Auckland Unitary Plan (AUP) scenario which used existing zoning provisions.
  - National Policy Statement on Urban Development (NPS UD) scenario which assumed three density scenarios: High (approx. 15 storeys), Medium (approx. 8 storeys) and Minimum (6 storeys).
  - Detailed assumptions can be found in s 9(2)(i)
- As part of scenario development and modelling for the CC2M corridor, anticipated growth in other parts of Auckland has been reallocated to the corridor.
- Anticipated growth is growth that is projected to occur over the next 30 years but is not guaranteed to happen.
- The approach to the assessment of economic effects of the rapid transit investment on the Auckland Economy included the standard economic impact indicators such as monetary

contributions to output, value added and employment.

- The economic assessment assumed that the micro-level scope is not adequate for assessing an initiative like this investment as it will have economy-wide effects over a long period of time.
- The nature and quantum of development across the commercial and residential land use typologies will be influenced by the investment including on different housing typologies/densities, retail and office.
- Market demand and market financial parameters associated with the mixed-use transit-oriented development envisaged along the route will respond to the rapid transit investment and will have potential property market and development implications.
- s 9(2)(i)
- For feasibility assessment for lighthouse sites, the residential value per unit is a derived value on the basis of the average apartment size in each of the projects being 72 sqm and the value per unit is merely an indicative figure if such apartments existed in the projects.
- None of the modelling undertaken for this analysis has considered constraints associated with enabling infrastructure or geotechnical considerations.
  - The assumption is that infrastructure and geotechnical challenges and constraints are engineering issues which can be resolved provided they are given the necessary time, resource and funding.
- A broad analysis of other infrastructure requirements to enable urban development within the CC2M corridor was undertaken for this phase of the Project. However, further investigation will be required, including an understanding of costs, in the next phase.

# 3. Project outcomes and investment objectives

## 3.1 Overview

Cabinet views the Project as a fully integrated transport and urban investment initiative which optimises the transit and urban outcomes for Auckland. This sits alongside gaining improved urban value and transport outcomes from current Crown investments including the City Rail Link (CRL) and the Kāinga Ora Large Scale Developments.

## 3.2 Outcomes

The key outcomes for rapid transit in the CC2M corridor as required by Cabinet are:



**Access and Integration:** Improved access to opportunities through enhancing Auckland's Rapid Transit Network and integration with the current and future transport network.



**Environment:** Optimised environmental quality and embedded sustainable practice.



**Experience:** A high quality service that is attractive to users and highly patronised.



**Urban and Community:** Enabling of quality integrated urban communities, especially around Māngere, Ōnehunga and Mount Roskill.

While the 'Urban and Community' outcome is of primary relevance to the work undertaken by the Urban Workstream, urban research and analysis has identified opportunities that deliver on all four outcomes.

## 3.3 Investment Objectives

The Investment Objectives for the IBC are:

**Objective 1:** A rapid transit service that:

- is attractive, reliable, frequent, safe and equitable
- integrated with the current and future active and public transport network
- improves access to employment, education and other opportunities.

**Objective 2:** A transport intervention that embeds sustainable practice and that reduces Auckland's carbon footprint.

**Objective 3:** Unlocking significant urban development potential, supporting a quality compact urban form and enabling integrated and healthy communities.

Work undertaken has informed the solution developed to address all three Investment Objectives. This includes identifying the need for an Urban Development Programme to achieve Investment Objective 3 and unlock significant urban development potential.

# 4. Policy and urban context

There are a number of key strategies, policies and plans both at the national and local level that provide Auckland's strategic urban and transport planning context **s 9(2)(i)**

Figure 3 shows the hierarchy of these key plans and their relationship to each other.

Climate change response policies which have also been adopted recently will also influence the future location and form of urban development. Central and local government are integrating climate change objectives and outcomes into their wide suites of strategies, plans and policies. This is further detailed in **s 9(2)(i)**

Reforms to the Resource Management Act 1991 and the introduction of the Urban Development Act 2020 will further impact the planning and delivery of urban outcomes across the corridor. These changes will help improve how central and local government plan for housing and urban development. This includes better coordination of future infrastructure with land use, development and urban growth.



Figure 3: Hierarchy and relationship of plans and policies

## 4.1 Auckland's urban form is changing

Auckland Council's growth scenario anticipates that by 2051 Auckland could grow by another 720,000 people to be a city of 2.4 million. This would require 320,000 new dwellings and 263,000 additional jobs, increasing demand for infrastructure and services. One of the biggest challenges facing

Auckland, is how to prioritise, sequence and fund growth-related infrastructure, while delivering on the Auckland Plan's ambition of a quality, compact urban form. Focusing growth in locations that are well connected and within walking distance of local services and public transport will enable communities to thrive.

Trade-offs will need to be made when deciding where to invest in growth. Rapid transit can be part of the solution to addressing pressing challenges around climate change, wellbeing, jobs and housing capacity and choice. Strategic decision making will be required when considering investment in new infrastructure to target key locations and provide for increase scale and intensity. It is critical to understand the vision for Auckland, the CC2M corridor and places within it in order to achieve desired urban outcomes.

Auckland is New Zealand's dominant and strongest performing urban economy. The direct impacts of rapid transit will be focused on the CC2M corridor and the city centre and Airport Precinct employment hubs at each end. There will also be wider effects across the city and region, and for the economy as a whole, in the medium and long term. At the same time, Auckland's climate is changing. Rapid transit presents an opportunity to support Auckland's shift to a lower emission economy, reducing transport emissions and delivering more accessible, connected communities.

The outcome of integrated investment in more intensive housing and employment opportunities, planned around rapid transit stops or stations, will unlock significant economic benefits while minimising the costs and negative social and environmental costs of urban sprawl. The ability to access a range of transport options significantly impacts on people's ability to access opportunities which in turn enables people to prosper, and ultimately supports wellbeing.

#### 4.1.1 Auckland's urban trends

Auckland's built form is changing and becoming denser to accommodate anticipated growth. Around 63 percent of new dwellings consented in the year ending April 2021 were for higher density typologies such as apartments and town houses<sup>1</sup>. Consents for these typologies are growing at a faster rate than standalone homes. These trends are reflected in Auckland's Monthly Housing update and in annual monitoring of the Auckland Plan 2050 Development Strategy including:

- of the 19,157 new developments consented in 2020/2021 94 percent were within the existing urban area<sup>2</sup>
- between July 2020 – July 2021, 16 percent of all dwellings consented were within 1,500m of Rapid Transit Network (RTN) stations<sup>3</sup>

The proportion of jobs accessible within 45 minutes by public transport is less than 50 percent of that accessed by private vehicle<sup>4</sup>. Public transport accessibility and mode-share is the lowest for Auckland's most vulnerable communities located in South and West Auckland and this polarisation of access to employment is projected to grow<sup>5</sup>.

<sup>1</sup> Source: Auckland Council (2021) Auckland Monthly Housing Update – September 2021 (accessed 06/09/2021)

<sup>2</sup> Source: Auckland Council (2021) Auckland Monthly Housing Update – June 2021 (accessed 06/09/2021)

<sup>3</sup> Source: Auckland Council (2021) Auckland Monthly Housing Update – June 2021 (accessed 06/09/2021)

<sup>4</sup> Source: Richard Paling (2018): Journey to work and education in Auckland

<sup>5</sup> Source: Richard Paling (2018): Journey to work and education in Auckland

# 5. Defining the CC2M corridor

The spatial extent of the CC2M corridor has been defined as the approximate distance that people would be willing to walk to or from a station or stop. The distance considered appropriate for this corridor is 1,000 metres either side of the potential rapid transit route.

This distance has been used to understand the characteristics of the corridor's urban environment along with its development potential as illustrated in Figure 5.



## 5.1 Corridor characteristics

It is important to understand the key demographics for the corridor compared with Auckland as a whole. The demographics within key locations in the corridor are very different to other parts of the corridor. The demographic overview for the corridor does not show the extent of diversity in this corridor.

Figure 4 illustrates key characteristics of the corridor.

Across the corridor, over 30 percent of the population are of Pacific ethnicity compared to just over 10 percent for Auckland. Around 20 percent identify as European compared to around 45 percent across Auckland.

Around 38 percent of residents in the corridor own their own homes, compared to 59 percent across Auckland.

The proportion of residents under the age of 15 is similar in the corridor and across Auckland while there is a smaller proportion of over 65 year olds in the corridor compared with Auckland.

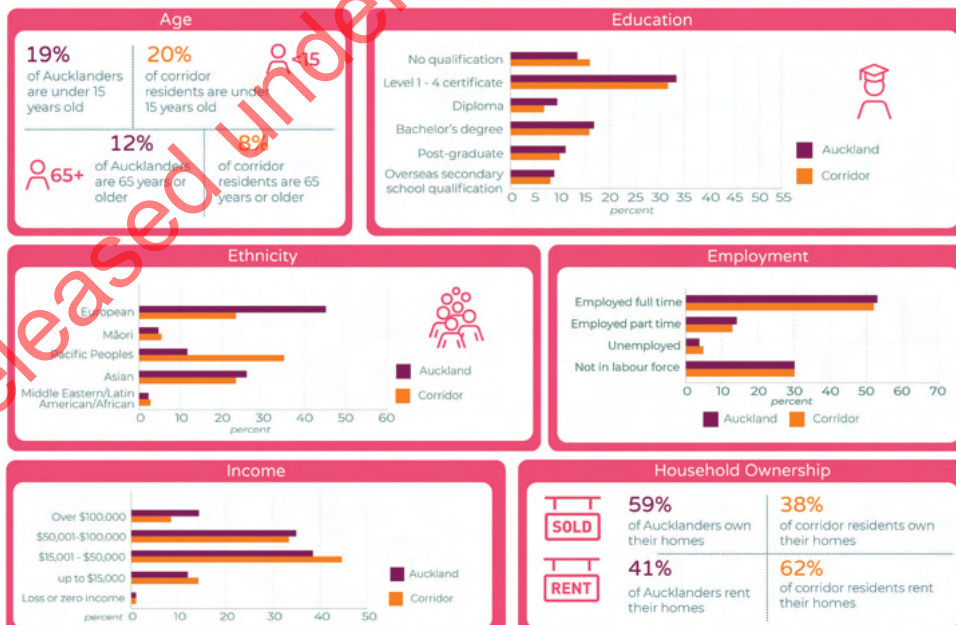


Figure 4: Key characteristics of the corridor

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**City Centre**

The city centre is a key employment anchor that supports economic uplift and urban intensification along the corridor. The direction and ambition for Auckland's city centre is defined in the City Centre Masterplan.



current: 15k  
future: 25k



current: 105k  
future: 165k



value uplift\*  
\$1,500m

**City Centre**



**Dominion Junction**

Dominion Junction (located at the north end of Dominion Road) can be unlocked by rapid transit and its proximity to City Rail Link to deliver quality high-density housing, jobs, facilities and services.



current: 3k  
future: 13k



current: 5k  
future: 14k



value uplift\*  
\$500m

**Dominion Junction**



**Mount Roskill**

Existing community and interest from Kāinga Ora in urban uplift and regeneration response. Urban investment must be led with equitable solutions that prioritise an outcome in line with community needs.



current: 5k  
future: 11k



current: 4.5k  
future: 5.5k



value uplift\*  
\$1,100m

**Mount Roskill**



**Onehunga**

The focus for redevelopment will be on improving connectivity, amenity and public realm to support ongoing investment by Eke Panuku in the town centre and surrounds.



current: 2.5k  
future: 6k



current: 4.5k  
future: 4.5k



value uplift\*  
\$300m

**Onehunga**



**Māngere**

Responsive to place and people. Unlocking development must support the needs of existing and future communities.



current: 4k  
future: 11k



current: 2.5k  
future: 3k



value uplift\*  
\$400m

**Māngere**



**Airport Business Precinct**

Auckland Airport owns over 1,500 hectares of freehold land. Over 890 businesses have already chosen to locate themselves at the airport precinct in a wide range of property types which include warehouse, office, retail, service and accommodation facilities.



current: 20k  
future: 40k



value uplift\*  
\$100m

**Airport**



- Interchange
- Value uplift  
\*2021 money
- Additional Homes
- Additional Jobs

Figure 5: The CC2M corridor and key areas of focus within its extent

## 5.2 Dominion Road and Sandringham Road

The project has assessed whether the rapid transit route should follow Sandringham Road or Dominion Road.

### Dominion Road

Dominion Road, one of Auckland's busiest roads, is a busy public transport link. This began with the construction a tram line in the early 1900's and subsequent commercial development at the Balmoral shops as well as the transition of rural farmland to residential sites<sup>6</sup>. Dominion Road now has five distinct centres of various sizes and roles.

These, along with the varied built and architectural form, contribute to the vibrancy of place and make it an attractive destination.

Investment in rapid transit provides an opportunity to enhance and strengthen Dominion Road's vibrancy and support the existing commercial uses, through catalysing further growth in large scale housing as well as encouraging other businesses to locate in the corridor. Development in this corridor can be characterised as redevelopment of a brownfields area as it provides the opportunity to leverage off the existing mix of business and residential uses. The challenge will be to get the scale of development without compromising its inherent character.

s 9(2)(i)

<sup>6</sup> Balmoral and Sandringham Heritage Walks, Auckland City Council, 2009

### Sandringham Road

Sandringham Road is also a busy public transport route. The areas transition from rural to urban began in the early 1900s. The extension of the electric tram service to the Sandringham shops in 1925 catalysed commercial development clustered at the intersection of Sandringham and Kitchener Roads. Surrounding residential development increased at the same time, including the development of state houses in the 1930s. Today, Sandringham Road is home to three centres of various sizes and functions, although the bulk of the corridor in this area is dominated by residential development.

Investment in rapid transit provides the opportunity to redevelop large areas of existing, low density residential development around Sandringham Road into higher density development with a mix of business and residential uses focused around stops and stations. The challenge will be how to get the market interested in creating new centres (at scale). The Sandringham Road alignment picks up significant Kāinga Ora land holdings in Wesley which are already undergoing large scale housing redevelopment.

s 9(2)(i)

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### 5.2.1 Key considerations

While investment in rapid transit presents differing constraints and opportunities in the Dominion Road and Sandringham Road corridors, there are key considerations that will determine the potential location, scale, form and timing of growth and urban development which could be realised in the corridor. These include:

- The project will work in partnership with Kāinga Ora to identify and optimise their development opportunities.

- The project will work with private developers to harness market appetite for development.
- Land acquisition strategies will be considered, particularly in regard to large-scale urban development opportunities around stations.
- While both corridors are generally well served by enabling infrastructure for the current demand there is likely little capacity for uplift in either route section, as detailed in Table 1 below.

**Table 1: Enabling infrastructure capacity risk - Sandringham Road and Dominion Road**

Sandringham / Dominion Corridor	Capacity Risk Sandringham Road	Capacity Risk Dominion Road
Water Supply	This section of the route is served reasonably well by water supply. However, it is unlikely to have sufficient capacity to deal with the proposed uplift and further investigation will need to be undertaken at DBC stage to better understand the level of capacity needed in this area. This is true for both Sandringham and Dominion so at this stage would not be a differentiator.	This section of the route is served reasonably well by water supply. However, it is unlikely to have sufficient capacity to deal with the proposed uplift and further investigation will need to be undertaken at DBC stage to better understand the level of capacity needed in this area. This is true for both Sandringham and Dominion so at this stage would not be a differentiator.
Wastewater	The Central Interceptor project is currently underway and unlocks the required capacity for the Kāinga Ora development. There is some capacity over and above this but significant development beyond that will need further capital works to unlock.	The Central Interceptor project is currently underway and unlocks the required capacity for the Kāinga Ora development. There is some capacity over and above this but significant development beyond that will need further capital works to unlock.
Stormwater	Much of this section provides opportunities for soakage due to the geology. Therefore, it should be possible to provide additional SW capacity with local upgrade work. It is suggested that this would be explored further at the next phase.	Much of this section provides opportunities for soakage due to the geology. Therefore, it should be possible to provide additional SW capacity with local upgrade work. It is suggested that this would be explored further at the next phase.
Transport	Even with the arrival of the rapid transit and the assumptions around mode shift, it is likely that significant upgrades to the roading network will be required. It is recommended that a full ITP is undertaken once details such as mode, route, station location and assumed Yield uplift have been agreed.  In the Wesley area, roading infrastructure upgrades have been undertaken by Kāinga Ora to identify required upgrades to support their growth in this area.	Even with the arrival of the rapid transit and the assumptions around mode shift, it is likely that significant upgrades to the roading network will be required. It is recommended that a full ITP is undertaken once details such as mode, route, station location and assumed Yield uplift have been agreed.
Utilities - Power and Communications	Vector and Chorus have been unable to provide detailed information on its ability to support the growth without clarification of the anticipated yields. However, the network generally has the ability to handle the additional capacity with the inclusion of additional local Infrastructure.	As per Sandringham Road.
Geotech	A wider range of Geotech conditions along the corridor and needs further investigation.	A wider range of Geotech conditions along the corridor and needs further investigation.

## 6. The options

Five options were short-listed and assessed as part of the business case process (Table 2). Following a Multi Criteria Assessment, the three top scoring short-listed options were investigated in more detail. These are highlighted in orange in the table below.

**Table 2: Short-list options assessment**

Option	Description	Stations / stops
Sandringham Road Light Metro	Light Metro from the city centre down Sandringham Road to the Airport, via SH20	17 stations
Sandringham Road Light Rail	Light Rail from the city centre down Sandringham Road to the Airport, via Bader Drive	23 stops
Dominion Road Light Metro	Light Metro from the city centre down Dominion Road to the Airport, via SH20	16 stations
Dominion Road Light Rail	Light Rail from the city centre down Dominion Road to the Airport, via Bader Drive	22 stops
Tunnelled Light Rail	Light Metro from the city centre down Sandringham Road until Wesley, Light Rail from Wesley to the Airport via Bader Drive	18 stations / stops

s 9(2)(i)

The Sandringham Road Light Rail option was discounted in favour of the Dominion Road Light Rail alignment due to existing utilities along Sandringham Road which would require relocation to Dominion Road. This option would therefore see works and disruption to both Sandringham and Dominion Roads.

The Dominion Road Light Metro option was discounted in favour of the Sandringham Light Metro alignment because, the Sandringham Road alignment achieved slightly better patronage and urban uplift. This was primarily based on the accessibility to the Kāinga Ora developments in Mt Roskill, so was chosen as the preferred alignment.

s 9(2)(i)

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## 6.1 Urban outcomes

Urban transformation of the current built form within the corridor, particularly at or near future rapid transit stops or stations, will be critical to delivering the desired outcomes. This includes changing the current residential and commercial land use in terms of density, mix of uses and urban form. The form, location, quality and scale of the urban outcomes delivered by rapid transit will be shaped by the route and mode. Key considerations related to route and mode are summarised as follows.

### 6.1.1 Urban form and mode

Investment in either Light Rail or Light Metro will drive different urban outcomes, fundamentally impacting the shape and scale of Auckland's future urban form. While both modes support

increased housing and employment density, the scale, form and implementation of this differs. In order to ensure investment in rapid transit meets the transport and urban needs of the corridor and Auckland, it is essential to understand what the desired future urban form is. This may change from place to place, with the potential for the Tunnelled Light Rail option to deliver the 'best of both worlds' in this regard.

Broadly speaking, the key impacts of each mode on the urban form are as follows (and illustrated in Figure 9).

Currently there is a mixture of low-density subdivision with private vehicles through to apartments and medium density with rapid bus (i.e. Northern Busway).

Light Rail is anticipated to result in high-density precincts around stops surrounded by medium

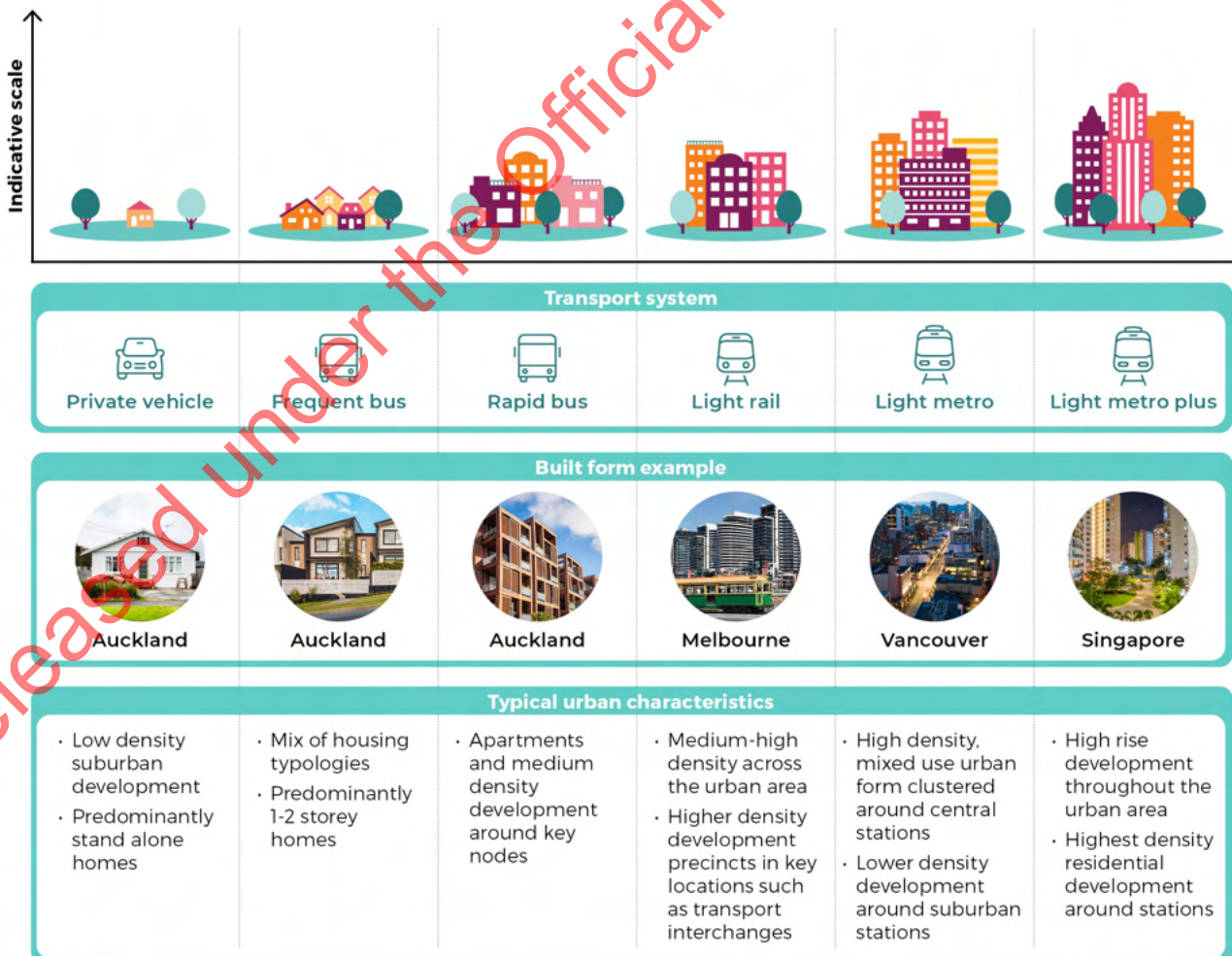


Figure 9: Typical relationship between urban ambition and mode

density development between stops and in the outer reaches of the walkable catchment. It delivers more stops, creating a more dispersed urban form within the corridor and improving accessibility more widely along the corridor. Light Rail with surface level running and stops has a more immediate impact on the street and supports street-front activations along the corridor.

Light Metro could result in more high-density and mixed-use development heavily concentrated around stations with lower density between stations and on the outer reaches of walkable catchment. The construction of Light Metro requires less physical intervention that could affect existing character along the corridor – less land acquisition and demolition of existing buildings

### 6.1.2 Ability for the urban uplift to be delivered

The likelihood of development being realised is higher on publicly owned land and on privately owned large plots with a land value to capital value ratio of greater than 0.75. Large plots are defined as those with a land area greater than 1,000sqm<sup>7</sup>.

#### **Sandringham Road Light Metro and Tunnelled Light Rail options**

- The Sandringham alignments pick up significant areas of public land and large plots (CV/LV of >0.75) within Mount Roskill and Māngere.

s 9(2)(i)

- The tunnelled option also provides flexibility in the northern half of the corridor as tunnelling means the alignment does not necessarily need to follow a road corridor.

#### **Light Rail Dominion Road option**

- This option captures a moderate amount of public land and large plots (CV/LV of >0.75).

s 9(2)(i)

- It notably misses the Wesley Kāinga Ora development land.
- A key benefit of the Dominion Road alignment is the ability to leverage off the well established commercial and mixed use activities along the Dominion Road corridor. Further investment will help to significantly enhance the already established vibrancy and attractiveness of this area.

Regardless of route and mode, an Urban Development Programme will be required to identify and implement interventions to help realise the opportunities for growth in the corridor.

### 6.1.3 Safety and attractiveness of stops/stations

A differentiator between the Light Metro and Light Rail modes is the legibility, visibility and diversity of land use such as night time economy and proximity to community facilities around stations. This is largely dependent on whether stops or stations are located alongside the motorway or fully integrated into existing places and communities.

Motorway stations along the corridor are less attractive, with legibility and safety being key concerns. This is partly due to the physical location of the stations, and also influenced by the nature of the underground stations with less prominence within the streetscape. s 9(2)(i)

A key matter that will be addressed at the next phase is the detailed location and design of stations, in particular those located in close proximity to the motorway. From an urban development perspective, these stations should be located away from the motorway corridor. Motorway corridors are generally less desirable places for people due the hostile environment they create. Mitigation measures could

<sup>7</sup> PwC, ALR Shortlist Assessment – Land Use Change and Development Capacity, 30 July 2021

be implemented to overcome some of the negative impacts of the development next to motorways however the outcome will still be compromised.

Light Rail is more attractive to those that may have some mobility challenges – e.g. older people, those with disabilities, parents with prams. Street presence means it Light Rail is more legible and feels safer. Feedback from communities in southern parts of the corridor indicated that this is particularly important to them.

Better urban outcomes could be achieved if stops and station locations were located away from motorway corridors as they are in the Light Rail options.

#### 6.1.4 Accessibility

##### **Light Rail Dominion Road option**

- Light Rail offers urban accessibility at a corridor scale as it has more stops, better walkable catchments and creates a more dispersed but still intensive, built form.
- s 9(2)(i)
- The Light Rail option does not serve the university precinct as well as other options. This is particularly relevant for communities in the southern part of the corridor, who may not have other active or public transport options.

##### **Sandringham Road Light Metro**

- Light Metro serves the university precinct better than the Light Rail option and gives flexibility in terms of alignment (tunnel doesn't have to follow the existing road network).
- Tunnelling through the isthmus allows the alignment to pick up key destinations such as the university precinct, Kāinga Ora land in Wesley and Mount Roskill, whilst avoiding disruption and demolition.
- This option follows the motorway for longer as opposed to connecting to the community in Māngere. It does not deliver on the opportunity

to pick up new Kāinga Ora housing along Bader Drive.

- In terms of walkable catchments, fewer stations overall mean it's a less accessible option. More motorway adjacent stations have poor urban environments and walkable catchments. The user experience is likely to be less desirable.

##### **Tunnelled Light Rail**

- Tunnelling through the central Isthmus provides flexibility to serve key areas along the route including Dominion Junction, Wesley, Mount Roskill and potentially Dominion Road. It also avoids the disruption associated with surface level construction through the city centre. This flexibility to go where the opportunities are should be further considered at the next phase of the project.
- This option will avoid motorway stops south of Māngere Bridge by bringing rapid transit directly into the neighbourhoods along Bader Drive and into Māngere Town Centre. This will help to support existing and future communities in these areas including planned development on Kāinga Ora land in Māngere and future opportunities to enhance Māngere Town Centre.
- Stops and stations located in the southern part of the corridor that are at the same level as the street environment will enable communities to have seamless access to the trains without the need to negotiate stairs and elevators. Having a street presence will also allow communities to feel safe as they access this option, a key concern expressed through engagement with the Māngere community.
- For people living in Ōnehunga and Māngere, Tunnelled Light Rail significantly improves travel times to jobs and university precinct in the city centre compared to Light Rail.

This section has summarised the qualitative benefits of the options considered. This needs to be balanced against the quantitative urban development benefits which is introduced in the next section.

# 7. Land use scenario testing

Land use scenario testing was used to understand the quantitative benefits of investment - how much additional urban development could be triggered with investment in rapid transit, over and above Auckland Council's growth scenario. As shown in Figure 10, three anticipated growth scenarios, and two plan enabled capacity scenarios were modelled.

This section of the report focuses on the three anticipated growth scenarios. s 9(2)(i)

The Auckland Council growth scenario is constant across all five short-listed options and was the starting point, or base scenario, for the project. The Accessibility-based scenario was modelled to understand the accessibility benefits triggered by the investment for the short-listed options that were assessed as part of the MCA for the project. This was based on empirical analysis that was carried out to measure existing relationships between land value, accessibility and population density in Auckland. These relationships were used to estimate changes in density resulting from the rapid transit investment.

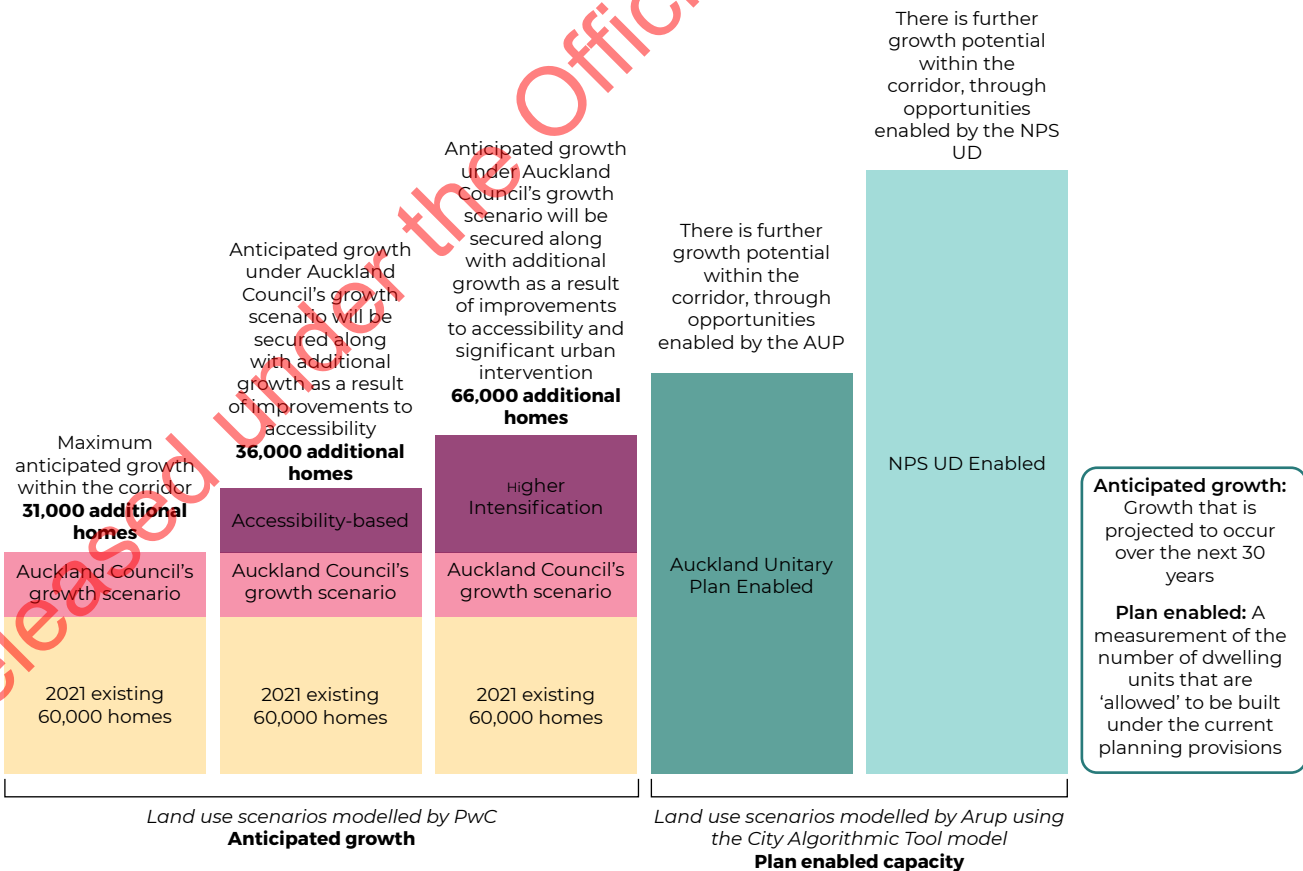


Figure 10: Urban modelling scenarios<sup>8</sup>

<sup>8</sup> "Auckland Council Growth Scenario", is a modified version of Auckland Council's growth scenario - i11v6. The Growth Scenario was modified for this project to remove previous growth assumptions as a result of light rail from the Dominion Road corridor.

Subsequent to the MCA, the Higher Intensification scenario was modelled to understand what further growth could be triggered with the investment along with the application of significant urban interventions. This was modelled for the three 'best-performing' short-listed options and represents a more aspirational scenario which assumes substantially higher intensification within the corridor.

The full methodology for the anticipated growth scenarios (Accessibility-based and Higher Intensification) and for the enabled capacity scenarios can be found in s 9(2)(i)

Under the Accessibility-based scenario, intensification is highest within the corridor but also occurs outside the corridor. This is because improvements in accessibility are not limited to station catchments. For example, rapid transit would be expected to change travel patterns and reduce traffic congestion, providing benefits across the entire transport network.

By contrast, under the Higher Intensification scenario, intensification is assumed to be fully concentrated within the corridor. It also assumes that increases in jobs will occur exclusively in the city centre and the Airport Business Precinct. These are areas which are projected to experience significant growth in employees even under the Auckland Council growth scenario<sup>9</sup>.

Under both scenarios, total growth in households and jobs across Auckland is assumed to be consistent with the Auckland Council growth scenario. Household growth is reallocated from peripheral growth areas of Auckland, s 9(2)(i). Employment growth is reallocated from across the region in proportion to changes in accessibility (away from areas with relatively lower improvements in accessibility).

Improvements in accessibility delivered by the project, combined with complementary planning policies in the corridor and other interventions, may help deliver between 30 percent and 50 percent of the additional household growth incorporated under the Higher Intensification scenario.

Additional growth, including that in the Auckland Council growth scenario, is not however guaranteed. Under any scenario, realisation of growth is heavily dependent on the market's ability to deliver and the timing and sequencing of enabling infrastructure investment. Initiatives that help to increase the likelihood of development, particularly in areas zoned for higher intensification, may include:

- land assembly tools to facilitate comprehensive redevelopment
- master planning and 'packaging' development opportunities for the market
- catalysing development in non-market attractive locations
- delivering additional amenities
- delivering public realm and quality public spaces to support safety and accessibility at key nodes
- implemented in a consistent and coordinated way, international evidence suggests that a package of initiatives such as this can help deliver the type of transformational land use change envisaged under the Higher intensification scenario and increase the likelihood of development.

The following sections summarise the anticipated growth over the next 30 years in the corridor, for households and jobs. The analysis below shows that significant growth is already anticipated in the corridor in the Auckland Council growth scenario. Some additional growth will be triggered by the accessibility benefits of rapid transit investment. Further growth will be triggered if urban interventions are used to maximise the urban development potential in support of desired urban outcomes.

<sup>9</sup> Higher intensification land use change - ALR' dated 10 September 2021, PwC



## 7.1 Auckland Council growth scenario

At 2021, there were approximately 60,000 households and 169,000 jobs in the corridor. Under the Auckland Council growth scenario, the corridor is anticipated to grow by over 30,000 households and 81,000 jobs. This equates to 10.8 percent of Auckland's total household growth and 10.9 percent of Auckland's total job growth.

**Table 3: BAU anticipated growth**

Households			Jobs		
2021	2051	Growth	2021	2051	Growth
60,325	91,083	30,758	169,973	251,144	81,170

### 7.1.1 The opportunity rapid transit brings to the corridor

Investment in rapid transit will enhance and accelerate housing and business growth in the corridor. The combination of housing initiatives with the investment in rapid transit has the potential to aid the development of centres.

In addition to enabling and unlocking urban development, it is also important to ensure that development at scale is well planned to fit the context of the specific place and fully integrated with station locations. s 9(2)(i)

## 7.2 Accessibility-based scenario

The Table 4 compares the estimated additional growth in the corridor triggered by the accessibility benefits of investment in rapid transit by each short-listed option. This is over and above the Auckland Council growth scenario due to an improvement in accessibility.

The Light Metro Sandringham Road option triggers the most additional growth with Light Rail Dominion Road the least, albeit not too different to the other options.

Across the options, this scenario is between 13 and 17 percent over and above the Auckland Council growth due to an improvement in accessibility. Growth in this scenario also equates to 12.6 percent of Auckland's total household growth and 11.6 percent of Auckland's total job growth.

**Table 4: Accessibility-based scenario anticipated growth**

	Households			Jobs		
	2021	2051	30 year Growth	2021	2051	30 year Growth
Auckland Council Growth	60,325	91,083	30,758	169,973	251,144	81,170
Options						
Light Rail Dominion Road	60,325	95,166	34,841	169,973	254,873	84,899
Light Metro Sandringham Road	60,325	96,208	35,883	169,973	256,490	86,516
Tunnelled Light Rail Sandringham Road	60,325	96,121	35,796	169,973	256,239	86,265
Light Rail Sandringham Road	60,325	95,484	35,159	169,973	255,241	85,267
Light Metro Dominion Road	60,325	96,037	35,712	169,973	256,130	86,156

### 7.3 Higher Intensification scenario

The following table shows the estimated additional growth that could occur if significant urban intervention is used.

The Light Metro Sandringham Road option and the Tunnelled Light Rail option would receive the most additional growth in households and jobs. This is largely due to the higher capacity that these options would provide rather than the opportunity created by a specific route. Although lower than Light Metro Sandringham Road, the benefit for Light Rail Dominion Road is still significant.

Across the options, this scenario could result in 46 percent more growth compared with the Accessibility-based scenario for the Light Rail Dominion Road option and around 84 percent more growth in the Light Metro Sandringham Road and Tunnelled Light Rail options. Growth in this scenario also equates to 16 percent of Auckland's total growth in this corridor for the Light Rail Dominion Road option and 21 percent of Auckland's total growth in this corridor for the Light Metro Sandringham Road and Tunnelled Light Rail options.

**Table 5: Higher Intensification scenario anticipated growth**

	Households			Jobs		
	2021	2051	30 year Growth	2021	2051	30 year Growth
Auckland Council Growth	60,325	91,083	30,758	169,973	251,144	81,170
Options						
Light Rail Dom. Road	60,325	111,083	50,758	169,973	263,144	93,170
Light Metro Sand. Road	60,325	126,083	65,758	169,973	267,144	97,170
Tunnelled Light Rail Sand. Road	60,325	126,083	65,758	169,973	267,144	97,170

### 7.4 Enabling infrastructure

In addition to enabling and unlocking urban development it is important to understand that some constraints exist in other infrastructure networks. These constraints will need to be addressed before large-scale development can occur. s 9(2)(i)

### 7.5 The incremental growth potential and benefits for the corridor

Figure 11 illustrates the incremental growth potential and benefits for the corridor. It shows that investment in rapid transit alone will not be enough to secure the potential growth and benefits. urban form.

Auckland Council's growth scenario anticipates a maximum of 31,000 additional households in the CC2M corridor by 2051. The realisation of this growth is not certain or guaranteed because it is assumed that no further significant investment occurs in the corridor. In this scenario it is likely that the quality of the urban environment will deteriorate which will drive growth to other parts of Auckland. Investment

in rapid transit will help secure the anticipated additional 31,000 households along with other planned investment in the corridor.

If investment in rapid transit occurs this will trigger some additional growth above that currently anticipated in the Auckland Council growth scenario. A modest amount of additional growth could occur as a result of the accessibility benefits triggered by investment in rapid transit alone. This is reflected in the Accessibility-based scenario which shows that the accessibility benefits are fairly even across the five short-listed options.

If investment in rapid transit occurs and the Project is committed to using urban interventions to optimise urban outcomes, further growth could occur over and above both the Auckland Council growth scenario and the Accessibility-based scenario. This is reflected in the Higher

Intensification scenario. This scenario shows that, although the amount of additional growth for the Light Rail Dominion Road option is not insignificant, the Light Metro Sandringham Road and Tunnelled Light Rail options have the potential to realise significantly more growth. This is largely due to the greater capacity of the rapid transit system that these two options would provide.

Detailed information about the benefits of this growth can be found in sections 9 and 10 of this report.

### The incremental growth potential and benefits for the corridor

For the highest performing options (tunnelled Light Rail and Light Metro)

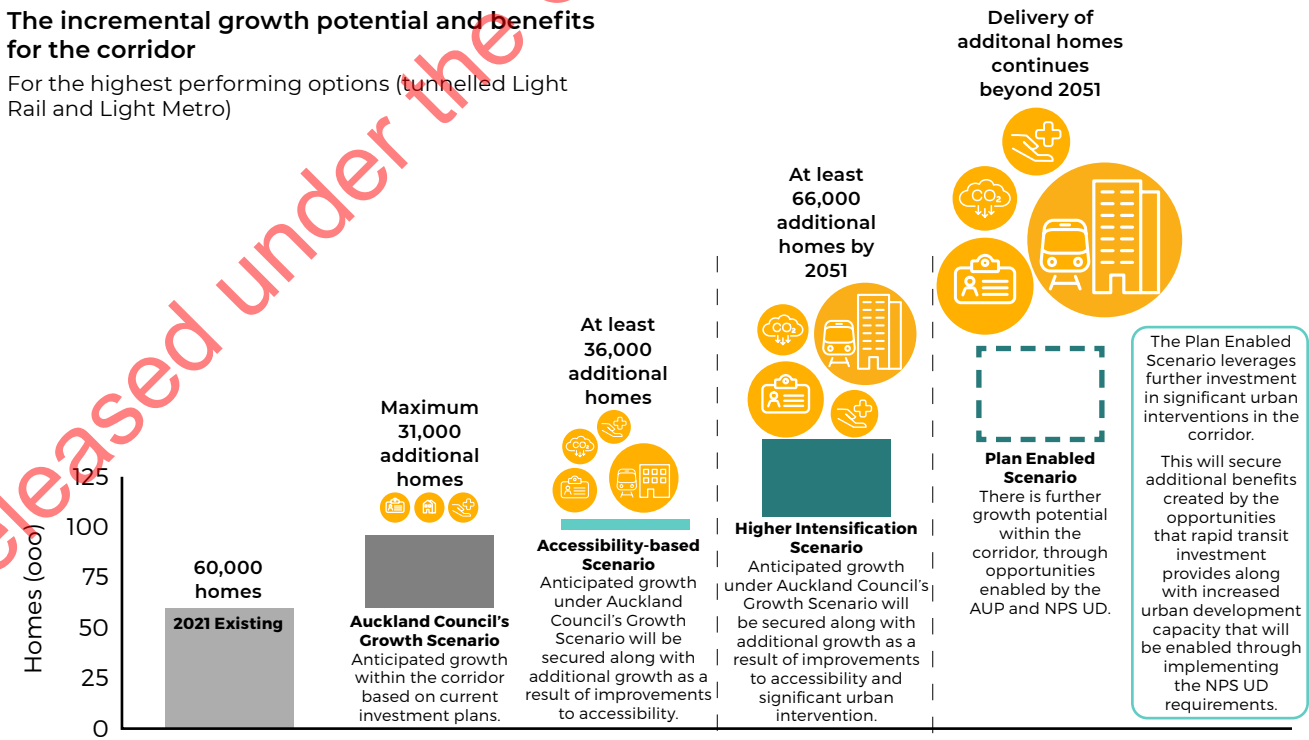


Figure 11: The incremental growth potential and benefits for the corridor

## 8. What does urban success look like?

There are two critical pre-requisites to achieving integrated urban and transport success and optimising the urban value:

- Existing and future urban conditions, including the ability to positively influence those future conditions via urban interventions contained in an Urban Development Programme. This includes decisions relating to route, mode, operating characteristics and ultimately station locations.
- The Urban Development Programme must be resourced and implemented to ensure that improvements in transport performance, value for money and urban value are fully explored, optimised and secured.

### 8.1 Defining urban value

The urban value derived from an integrated rapid transit approach is represented in five key elements, as illustrated in Figure 12.

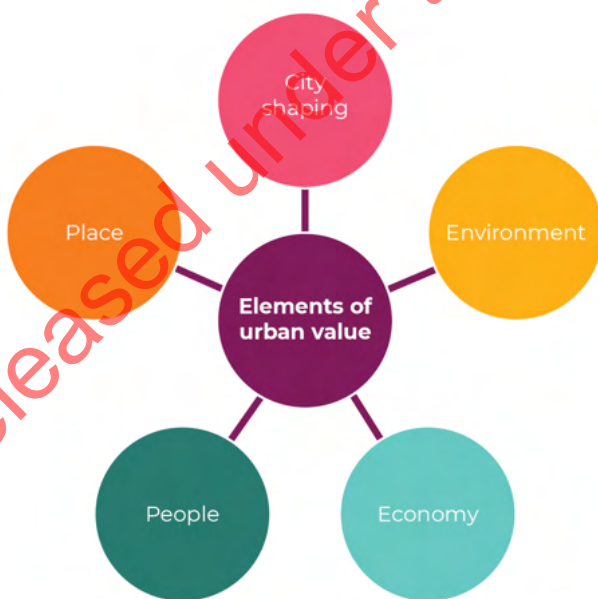


Figure 12: Defining urban value

These elements are defined as:

**City Shaping:** The economic drivers of cities as central places apply constant pressure to enable higher intensity of activity, with the necessity to increase the transport and travel capacity to support this intensity. Systems such as rapid transit are capable of substantially influencing and directing more sustainable growth towards a quality, compact, connected and transit-oriented future with multiple benefits outlined below.

**Environment:** The environmental and climate benefits of a quality, compact, connected and transit-oriented city are internationally recognised and documented. This includes more opportunities to avoid vehicle movement, modal shift to public transport and active modes, reduced Vehicle Kilometres Travelled and reduced emissions. By refocusing growth away from greenfield areas there is also the potential to reduce effects on freshwater resources associated with urban development.

**Economy:** The proposed investment supports the Auckland city centre as a critical component of the regional economy. It will improve the growth, efficiency and productivity of New Zealand's most important regional economy as it benefits from economies of transportation, scale, scope, agglomeration and density.

**People:** Improved quality of life and well-being of all Aucklanders is achieved by positively impacting on their material living conditions, employment choices, accessibility and "economic safety", health and safety, education choices and accessibility and social interaction and community integration.

**Place:** Delivers "place success", defined by places that people choose to access, visit, work in, live, interact and satisfy their wants and needs. Improved urban quality and amenity, more active

frontages, more walkable communities, placed based responses that reflect cultural values and identity and more diverse urban form and uses, all contribute to improved place. This results in improved sociability, greater mix of uses and activities, improved comfort and image perceptions and vastly improved accessibility.

The transport system, its infrastructure footprint, technology, networks, operations, accessibility

and flows, make it an all-encompassing element of society. It impacts on a multitude of movement decisions influencing the daily lives of people, businesses and the places we inhabit and experience. Accordingly, investment in rapid transit affects each element of urban value, s 9(2)(i)

[Redacted]



*This image is an illustration and has been developed solely to illustrate the potential scale of change and application of urban interventions in practice.*

# 9. Securing urban success

Integration of urban and transport outcomes is critical to delivering urban success for the project. Transport and economic modelling have demonstrated that urban interventions will be essential to support the transport system and optimise urban outcomes.

- An increase in population and employment in the corridor will lead to an increase in both patronage and mode shift from private motor vehicles.
- This in turn leads to a decline in Vehicle Kilometres Travelled (VKT) with associated climate benefits.
- Increased population and employment provide additional Wider Economic Benefits across options that support the project.

Urban interventions will be a key component of the Urban Development Programme which is described in the following section.

## 9.1 Urban Development Programme

An Urban Development Programme will be required to secure the integrated urban and transit outcomes. This Urban Development Programme is a comprehensive series of urban interventions which will integrate with and support the implementation of the rapid transit project. The use of urban interventions will aid the delivery of transit supportive urban development.

Interventions related to People, Place, Environment, Movement and Economy will be programmed within the Urban Development Programme, as shown in Figure 13 below. This is a recognised approach to realising the urban and transport value gained from a fully integrated, system approach to investment in rapid transit infrastructure.

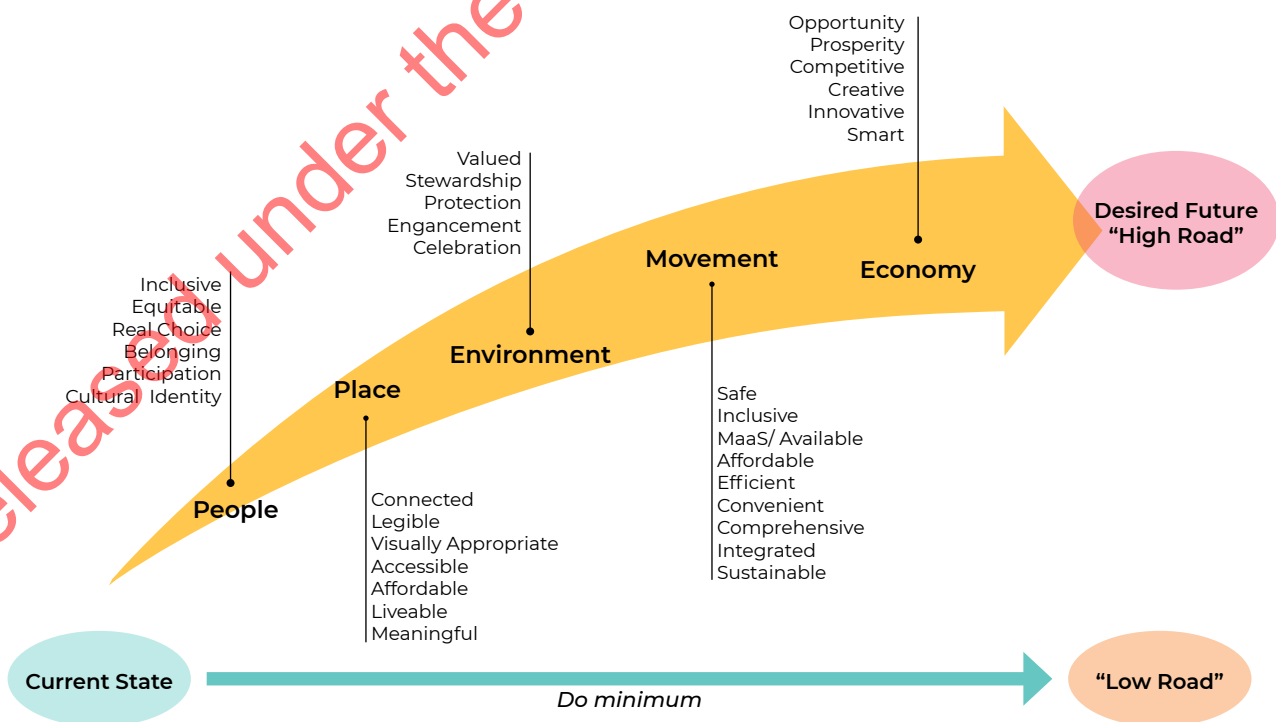


Figure 13: Pathway to securing the desired urban future

### 9.1.1 Land use change factors

An internationally recognised framework identifying six fundamental factors which drive positive land use change will inform the Urban Development Programme.



Figure 14: Land use change factors: (Adapted from Higgins, Ferguson, and Kanaroglou [2014]; Knight and Trygg [1977])

These factors will be fully understood on a place basis within the Programme. This analysis will include the relative strengths and weaknesses of each factor and help guide the interventions framework. s 9(2)(i)

### 9.1.2 Urban development principles and key success factors

The Urban Development Programme will be underpinned by key urban development principles, which are fundamental to securing the urban benefits to support the transport system. These can be summarised as:

- adopting a total system approach alongside complementary policies and strategies
- being place and evidenced based
- comprehensively addressing all the land use factors via a variety of levers and interventions
- adopting internationally recognised transit-oriented development principles

- providing a foundation for enduring success via robust governance partnership and accountability regimes.

s 9(2)(i)

### 9.1.3 Urban development - Approach, levers and interventions

Interventions to realise land use change fall within a strategic continuum of 'Enable, Unlock or Deliver'.

The Urban Development Approach is outlined in Figure 15 below.

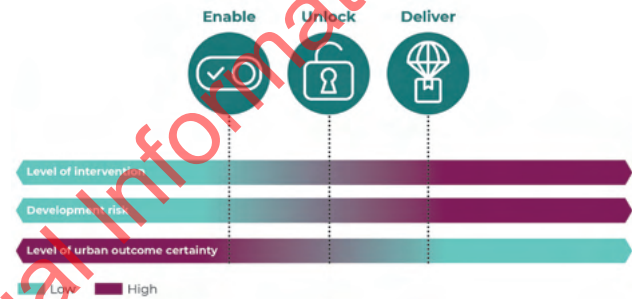


Figure 15: Urban Development Approach

Enabling interventions are the lowest risk and focus on creating an environment for change. Unlocking interventions carry medium risk, and influence change through a more direct approach. Delivery interventions carry the highest risk but deliver the most beneficial outcomes.

Several levers and subsequent interventions are available to enable, unlock and deliver land use change to secure urban success. Some possible levers and interventions are identified in Table 6 below:

Table 6: Levers and Interventions

Levers	Intervention Toolbox Examples
Policies	Value Capture and funding tools
Strategic Planning	Vision, Strategic, Master and Precinct Planning
Financial	Infrastructure Cost sharing, Development Contributions, Strategic Land Purposes, Cost Sharing
Planning Policy	Changes to planning policy e.g. new zones, inclusionary zoning, minimum densities, increased height
Information	Design guides, engagement, progress communications
Partnerships	Planning, infrastructure or delivery across all of government and iwi
Investment	Direct investment or development e.g. place making, facilitating or procuring development

### 9.1.4 Urban Development Programme Action Plan

The Urban Development Programme will secure the urban and transport benefits from the investment through an Action Plan. This requires an integrated, whole of government approach across three phases.

Figure 16 illustrates the phases of the Urban Development Programme. The first phase of the Programme “Setting the Platform for Success” is further detailed below. Phases 2 and 3 “Building the Core Success” and “Consolidating Success” will come at later stages.

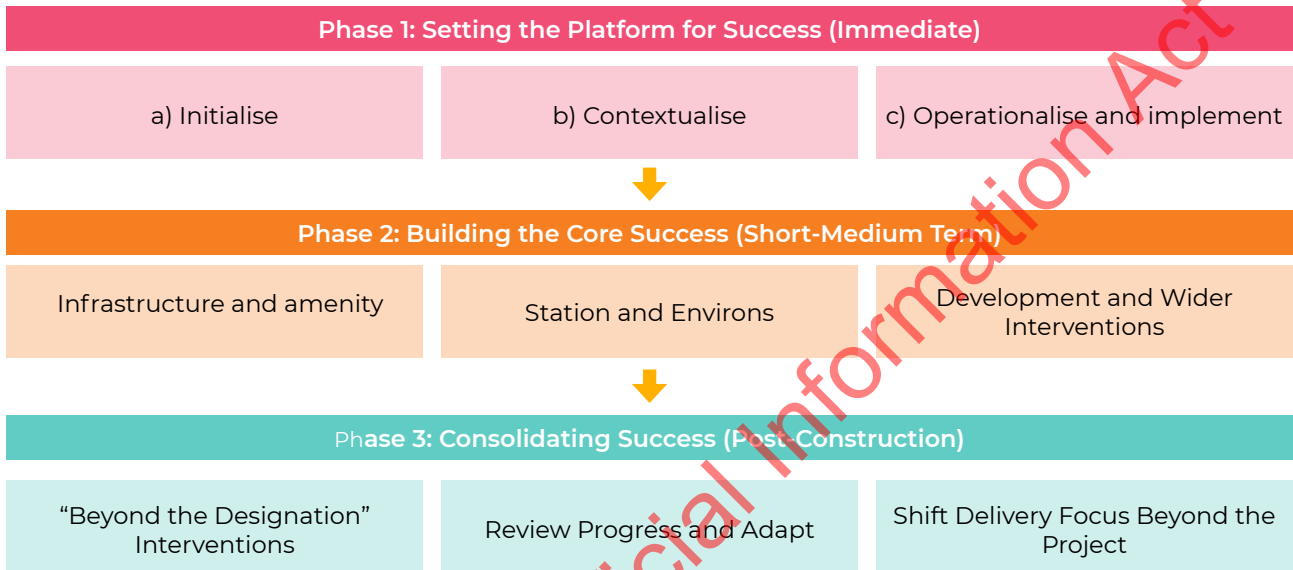


Figure 16: Urban Development Programme phases

### 9.1.5 Phase 1: Setting the Platform for Success

#### Part a) Initialise: Project Enablement, Governance and Partnership

The initialise phase requires confirmation of Project scope and governance. Of particular importance is embedding a 'whole of government approach'. § 9(2)(i)

§ 9(2)(i)

#### Part b) (i) Contextualise: Urban Context

Within the collaborative structure:

1. Drive the delivery of transit orientated development through strategic, spatial and statutory planning which will:
  - a. inform the final route and station locations
  - b. inform the identification of place-based urban interventions; and
  - c. enable the successful delivery of future urban interventions.
2. Undertake a spatial planning review of all existing spatial plans along the route to assess they're fit for purpose and identify any spatial planning gaps.

3. Complete a corridor strategic and place-specific masterplan.

#### Part b) (ii) Contextualise: Preparing the Urban Development Programme

1. Undertake a place-based audit and assessment of all station locations to establish a package of urban interventions to be adopted as the Urban Development Programme.
2. Prepare transit supportive development plans and proposals for the critical transit junctions e.g. Dominion Junction, Mount Roskill, Ōnehunga and Māngere.
3. Establish an overall commercial development procurement programme.
4. Prepare development prospectuses for critical transit junctions.
5. Establish partner roles, a programme, performance measures and a budget to deliver an integrated Urban Development Programme with wider government complementary initiatives e.g. Kāinga Ora Largescale Development Projects



*Part c) Operationalise: Urban Development Programme Budget, Resources, Monitoring and Reporting*

The following table identifies some Phase 1 Actions that will enable, unlock and deliver urban development.

Establish and obtain approval for the Urban Development Programme, budget, performance measures, monitoring and reporting requirements.

**Table 7: Phase 1 Actions**

Phase 1: Actions	Who (eg)
<b>Partnership Arrangements:</b> Establish the partnership arrangements including, but not limited to, corridor strategic/master planning, strategic land purchases, community/stakeholder engagement and establishing infrastructure and amenity upgrade investment plans in support of intensification.	s 9(2)(i)
<b>Corridor Planning:</b> Undertake corridor strategic and, master planning, and identify opportunities for strategic land purchases.	
<b>Commercial Partnerships:</b> Establish and negotiate a framework for the basis of commercial partnerships, including the potential utilisation of the Crown and Council estates.	
<b>Precinct Planning:</b> Establish the process to undertake precinct planning, together with the potential role of Māori commercial interests and the private sector in this process.	
<b>Commercial Procurement:</b> Establish a commercial procurement and partnership framework for engagement and possible partnership with the private sector in precinct development, including the potential for creative housing options, e.g. build to rent.	

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# 10. Place summaries

This section provides a high-level summary of the places within the corridor including a brief history that has led to the existing urban form.

s 9(2)(i)

Further detail on the corridor existing environment and place can also be found in Auckland Council's Mass Rapid Transit Corridor Study, City Centre to Māngere (July 2019).

The corridor can be described as two distinct halves:

- the northern half, between the city centre and Mount Roskill having earlier and more intensive urban development

- the southern half, between Mount Roskill and Māngere having comparatively more recent low density, suburban development patterns.

Four locations have been identified as key areas of focus for the Project, due to their potential for urban transformation and the need to address the ambitions of their established communities. Two are in the northern half of the corridor and two are in the southern half.

## Potential scale of change and application of urban interventions in practice in the CC2M corridor



## 10.1 Dominion Junction

### 10.1.1 Current state

Dominion Junction is located one kilometre from the edge of Auckland's city centre, with mixed use zoning and high levels of active and public transport accessibility. This includes heavy rail in Kingsland and the Maungawhau / Mount Eden CRL station. Apartments are the dominant residential typology in Dominion Junction, with little growth in office supply over the last 10 years.

The interchange at Dominion Junction, commonly known as the Dominion Road flyover, was built in the mid-1960's as the first section of what was to be a new motorway running down Dominion Road towards Mount Roskill. The development of the flyover resulted in the removal of many houses and the community being severed. Plans

to build the motorway were cancelled soon after the interchange was built, making the interchange effectively redundant. There is a current proposal to remove the interchange which would free up around three hectares of land for redevelopment<sup>10</sup>.

A key consideration for any significant urban development in Dominion Junction is the limited capacity of existing infrastructure, s 9(2)(i). While there are significant opportunities for development synergies with City Rail Link to unlock growth, lack of infrastructure capacity could restrict realisation of development opportunities.

**Table 8: Enabling infrastructure capacity risk - Dominion Junction**

Dominion Junction	Capacity Risk
Water Supply	
Wastewater	Wastewater network is already very constrained.
Stormwater	The majority of this area is already 100% impervious area so while some upgrades will be required and sw/ww separation would be recommended, the additional growth is not likely to trigger a requirement for significant upgrades.
Transport	The Dominion Junction area is likely to see significant redesign with regards to the roading network. Therefore, it wasn't deemed necessary to assess the existing layout. Once details such as mode, yield assumptions and the final location of the station has been agreed it is recommended that a full ITA for the area is undertaken to understand the required roading network that will be required to support the uplift in yield.
Utilities - Power and Communications	Vector and Chorus have been unable to provide detailed information on its ability to support the growth without clarification of the anticipated yields. However, the network generally has the ability to handle the additional capacity with the inclusion of additional local Infrastructure
Geotech	Relatively low risk but needs further investigation

<sup>10</sup> <https://www.stuff.co.nz/auckland/79871969/aucklands-dominion-rd-interchange-may-be-removed-for-housing-development>

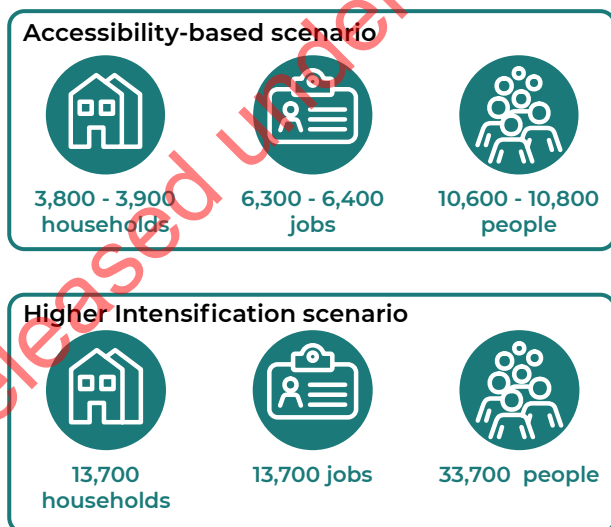
### 10.1.2 The opportunity

Without investment in rapid transit, Dominion Junction is not anticipated to experience significant growth over the next 30 years.

s 9(2)(i) [redacted]. The characteristics of the area and proximity to local and regional opportunities and amenities represent a significant development opportunity unlocked by investment in either Light Rail or Light Metro. Removal of the flyover would unlock the development potential on publicly owned land for high density, market attractive development and catalyse urban transformation of the area.

Investment in high quality, transit-oriented development would support a vibrant, mixed use neighbourhood for current and future residents. Further opportunities exist in the broader area for the private sector to leverage off this investment, contributing to Dominion Junction's success.

Potential increases in households, jobs and residents in the area, above the Auckland Council growth scenario are as shown below.



### 10.1.3 Readiness for development

Figure 17 identifies the degree of readiness for development in Dominion Junction across six urban development characteristics s 9(2)(i) [redacted]

Development in Dominion Junction would be led by the Project.



Figure 17: Readiness for development - Dominion Junction

10.1.4 Early moves

s 9(2)(i)



s 9(2)(i)



s 9(2)(i)



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## 10.2 Mount Roskill

### 10.2.1 Current state

Mount Roskill is located seven kilometres south of the city centre. Currently characterised by low-medium density residential and commercial development, the area is experiencing major housing redevelopment. Three and four bedroom townhouses and walk-ups dominate the residential market in Mount Roskill, with essentially no office supply in the area.

s 9(2)(i) summarised in Table 9 below, significant short comings have been identified in the existing infrastructure network. These will be investigated further to realise the anticipated growth.

**Table 9: Enabling infrastructure capacity risk - Mount Roskill**

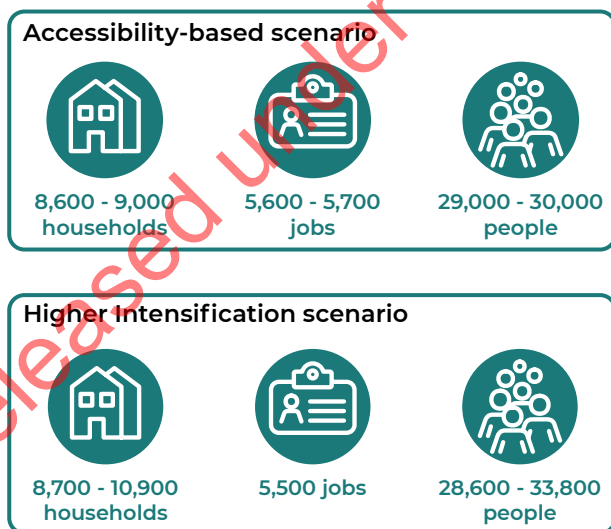
Mount Roskill (Wesley)	Capacity Risk
Water Supply	Watercare are underway with the following Shovel Ready neighbourhood enabling projects: <ul style="list-style-type: none"> <li>Wesley Stage 1 (complete Sept 2021)</li> <li>Wesley Stage 2 (complete end of 2022)</li> </ul>
Wastewater	Wastewater options are still to be confirmed with Auckland Council. Development of Wesley is heavily reliant on Central Interceptor drop shaft programme (both upstream in Waikowhai and internal to Wesley). Once Central Interceptor is completed this should go to green and have sufficient capacity for the development.
Stormwater	Flood mitigation options are still to be confirmed with Auckland Council.
Transport	Significant mode shift and public transport improvements required to accommodate the proposed increase in yield. Even with the arrival of the Rapid transit and the assumptions around mode shift, it is likely that significant upgrades to the roading network will be required. It is recommended that a full ITP is undertaken once details such as mode, route, station location and assumed Yield uplift have been agreed. In the Wesley area, roading infrastructure assessments have been undertaken by Kāinga Ora to identify required upgrades to support their growth in this area.
Utilities - Power and Communications	No major Vector upgrades until 1,100 new dwellings built. Vector upgrade projects have been identified for remainder of neighbourhood build out.
Geotech (dwellings)	
Geotech (infrastructure)	Basalt expected in service trenches more than 1m deep through the majority of Wesley between Stoddard Road and Oakley Creek only.

### 10.2.2 The opportunity

Mount Roskill is anticipated to experience significant growth over the next 30 years. This is primarily due to large scale housing development led by Kāinga Ora. Investment in rapid transit has the potential to support the implementation of this development by improving accessibility and providing an incentive to deliver higher density mixed-use development. It also has the ability to unlock development potential around Stoddard Road and Mount Roskill town centre.

The amount of growth triggered by rapid transit in Mount Roskill is dependent on both the mode and route. The Sandringham Road alignment (Tunnelled Light Rail or Light Metro) services a higher amount of Kāinga Ora land compared to the Dominion Road alignment (Light Rail). Kāinga Ora's development in Wesley in particular would benefit from the delivery of rapid transit on a Sandringham Road alignment, as it supports mode shift and would ease the burden on alternative transport modes to support this higher density neighbourhood.

Potential increases in households, jobs and residents, above the Auckland Council growth scenario:



### 10.2.3 Readiness for development

Figure 19 identifies the degree of readiness for development in Mount Roskill across six urban development characteristics s 9(2)(i).

Development in Mount Roskill would be led by Kāinga Ora.



Figure 19: Readiness for development - Mount Roskill

10.2.4 Early moves

s 9(2)(i)

s 9(2)(i)

s 9(2)(i)

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s 9(2)(i)

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## 10.3 Ōnehunga

### 10.3.1 Current state

Located eight kilometres south of the city centre, Ōnehunga is a predominantly residential and light industrial suburb. Apartments are the dominant new residential typology in Ōnehunga, with some limited demand for office space. The area is well connected to the wider Auckland region, through the proximity of the state highway and high levels of public transport access including a heavy rail link.

There is significant opportunity for the public and private sectors to work collaboratively to deliver the desired urban outcomes in Ōnehunga, building on the plans Eke Panuku have developed for the area. As outlined in s 9(2)(i) and Table below, little is known about the capacities and constraints of infrastructure in Ōnehunga. This is a key consideration which will require future detailed investigation at the next phase.

**Table 10: Enabling infrastructure capacity risk - Ōnehunga**

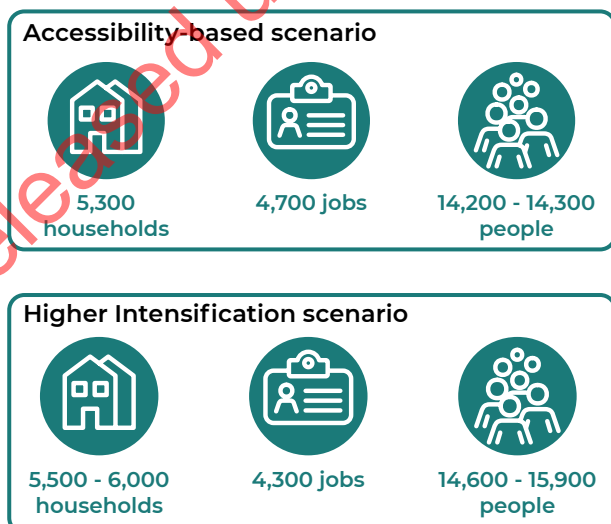
Ōnehunga	Capacity Risk
Water Supply	The area has a reasonable network to cover the existing level of intensity but is unlikely to be able to support any significant uplift. Watercare have confirmed that further investigation would be required to understand the current capacity the the required upgrades to support the anticipated uplift.
Wastewater	The area has a reasonable network to cover the existing level of intensity but is unlikely to be able to support any significant uplift. Watercare have confirmed that further investigation would be required to understand the current capacity the the required upgrades to support the anticipated uplift.
Stormwater	Little information available and further investigation required.
Transport	Commute have undertaken an indicative assessment of the roading infrastructure in Onehunga. Even with the arrival of the Rapid transit and the assumptions around mode shift, the proposed intensification in Onehunga is likely to trigger a requirement for roading network upgrades as per the diagram below.
Utilities - Power and Communications	
Geotech (dwellings)	Low risk Geotechnical conditions.

### 10.3.2 The opportunity

Ōnehunga is anticipated to experience significant growth over the next 30 years. This is largely due to the Eke Panuku Transform Ōnehunga project as well as investment opportunities triggered by the relocation of the heavy rail station in Ōnehunga. However, investment in rapid transit presents an opportunity to support and build on this anticipated growth. This includes the potential to catalyse the revitalisation of the town centre, creating a more concentrated core supported by a multi-modal public transport interchange. In addition, residential areas surrounding Ōnehunga present an opportunity for urban regeneration that delivers sustainable quality, compact urban form supported by rapid transit.

Delivery of the desired urban outcomes in Ōnehunga will require using public landholdings, partnership opportunities and a demand-led market approach to catalyse development. In terms of the potential outcomes, Light Rail in Ōnehunga would be more legible due to its street presence and is likely to be more attractive to those with mobility challenges, including older people, those with disabilities and parents with prams. Light Metro would provide an efficient connection to university precinct in the city centre for Ōnehunga residents, and Tunnelled Light Rail would achieve outcomes from both options.

Potential increases in households, jobs and residents in the area, above the Auckland Council growth scenario:



### 10.3.3 Readiness for development

Figure 22 identifies the degree of readiness for development in Ōnehunga across six urban development characteristics s 9(2)(i)



Figure 22: Readiness for development - Ōnehunga

10.3.4 Early moves

s 9(2)(i)



s 9(2)(i)



s 9(2)(i)



## 10.4 Māngere

### 10.4.1 Current state

Located 15 kilometres south of the city centre, Māngere is one of Auckland's largest suburbs. The multi-cultural area is characterised by a strong Pasifika community. Stand-alone houses are the dominant residential typology in Māngere, with limited demand for office space.

An extensive amount of work has been undertaken to understand the existing infrastructure in Māngere, across the three neighbourhoods that are subject to focused Kāinga Ora urban development investment. As outlined in [§ 9\(2\)\(i\)](#) and summarised in Table 11 below, this work has identified significant short comings in the existing network which will need to be addressed alongside investment in rapid transit.

**Table 11: Enabling infrastructure capacity risk - Māngere**

Māngere	Capacity Risk - Māngere Central (Town Centre)	Capacity Risk - Māngere West	Capacity Risk Aorere (Favona)
Water Supply	No further information available (Precinct Water supply study to be completed end of 2021).		No further information available (Precinct Water supply study to be completed end of 2021).
Wastewater	No further information available (Precinct Wastewater Study for this neighbourhood to commence end of 2021).	Medium readiness. Majority of wastewater upgrades to service Māngere West A (area north of Bader Drive) are complete. Precinct Wastewater study for Māngere West B (area south of Bader Drive) to commence end 2021.	Wastewater precinct study for Favona area has been completed. Shovel Ready funding is available for some of the required upgrades.
Stormwater	Preferred stormwater management options still to be confirmed with Auckland Council. Stormwater Plan for the Tararata catchment is due to be completed end 2021.	Preferred stormwater management options still to be confirmed with Auckland Council. Stormwater Plan for the Tararata catchment is due to be completed end 2021.	Part of Favona falls within Tararata catchment (area generally west of Robertson Road) and part within the Harania catchment.
Transport	High medium readiness	High medium readiness	Medium-low readiness
Utilities - Power and Communications	Medium-low readiness	Medium-low readiness	Medium-low readiness
Geotech	Average ground - Shallow Tauranga Group	Very Poor Ground - Recent Swamp/Tauranga Group alluvium	Average ground - Shallow Tauranga Group

### 10.4.2 The opportunity

Māngere is anticipated to experience significant growth over the next 30 years. This is largely due to large scale development led by Kāinga Ora in the area. Investment in rapid transit has the potential to have a significant positive effect on Māngere, as a place and a community, supporting and enabling growth by delivering strong amenity benefits and positive social effects in Māngere town centre and the surrounding residential areas. Protecting the vibrancy and unique character of Māngere Mall will be key to successfully unlocking the potential redevelopment of the town centre, including any over site development of a potential Māngere station.

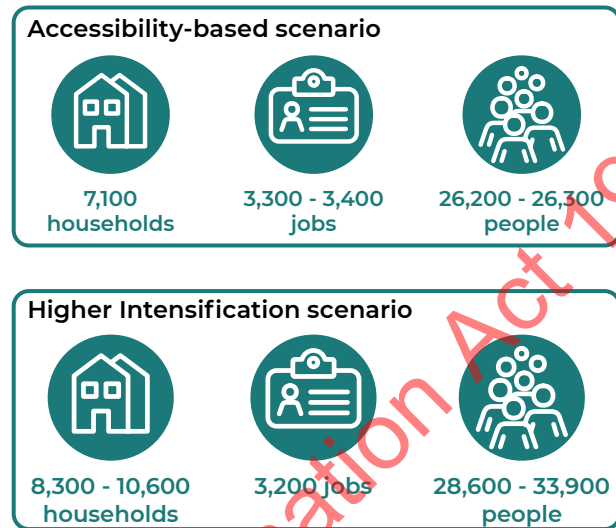
The Light Rail and Tunnelled Light Rail options deliver the best outcomes for Māngere. As a mode, it is more attractive to those who are mobility challenged – older people, those with disabilities, parents with prams. Street presence means it is more legible. It feels safer, which we have heard from people in Māngere is particularly important to them.

Of particular importance, the Light Rail and Tunnelled Light Rail alignments depart from the motorway and travel along Bader Drive. This brings the alignment into the heart of the community and services Kāinga Ora development land.

Light Metro continues further along the motorway, introducing stations with poor walkable catchments and severance issues. Some aspects of the tunnelled system make it appear less attractive and feel less safe, which is a priority urban consideration for this area.

A key benefit of the Tunnelled Light Rail option for Māngere is that it brings rapid transit into the heart of the community, whilst also connecting residents to university precinct in the city centre. Creating opportunities for people in Māngere to access education and jobs in the city centre helps to address transport inequity within the corridor.

Potential increases in households, jobs and residents in the area, above the Auckland Council growth scenario:



### 10.4.3 Readiness for development

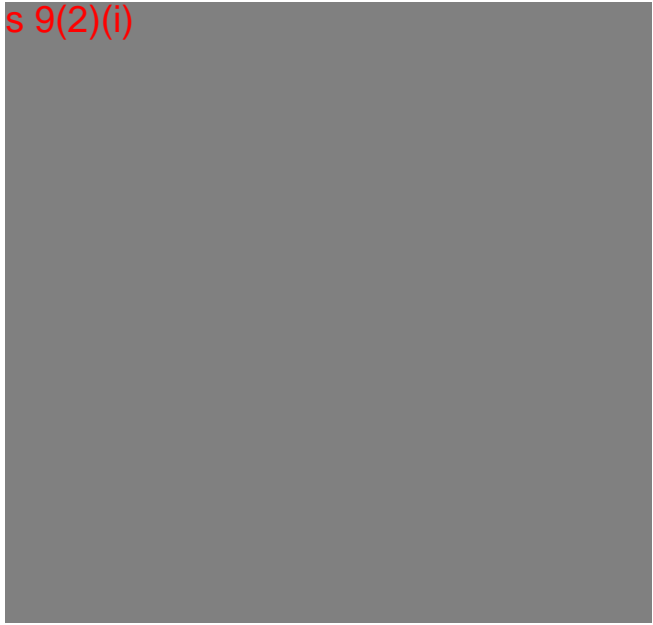
Figure 24 identifies the degree of readiness for development in Māngere across six urban development characteristics s 9(2)(i)



Figure 24: Readiness for development - Māngere

10.4.4 Early moves

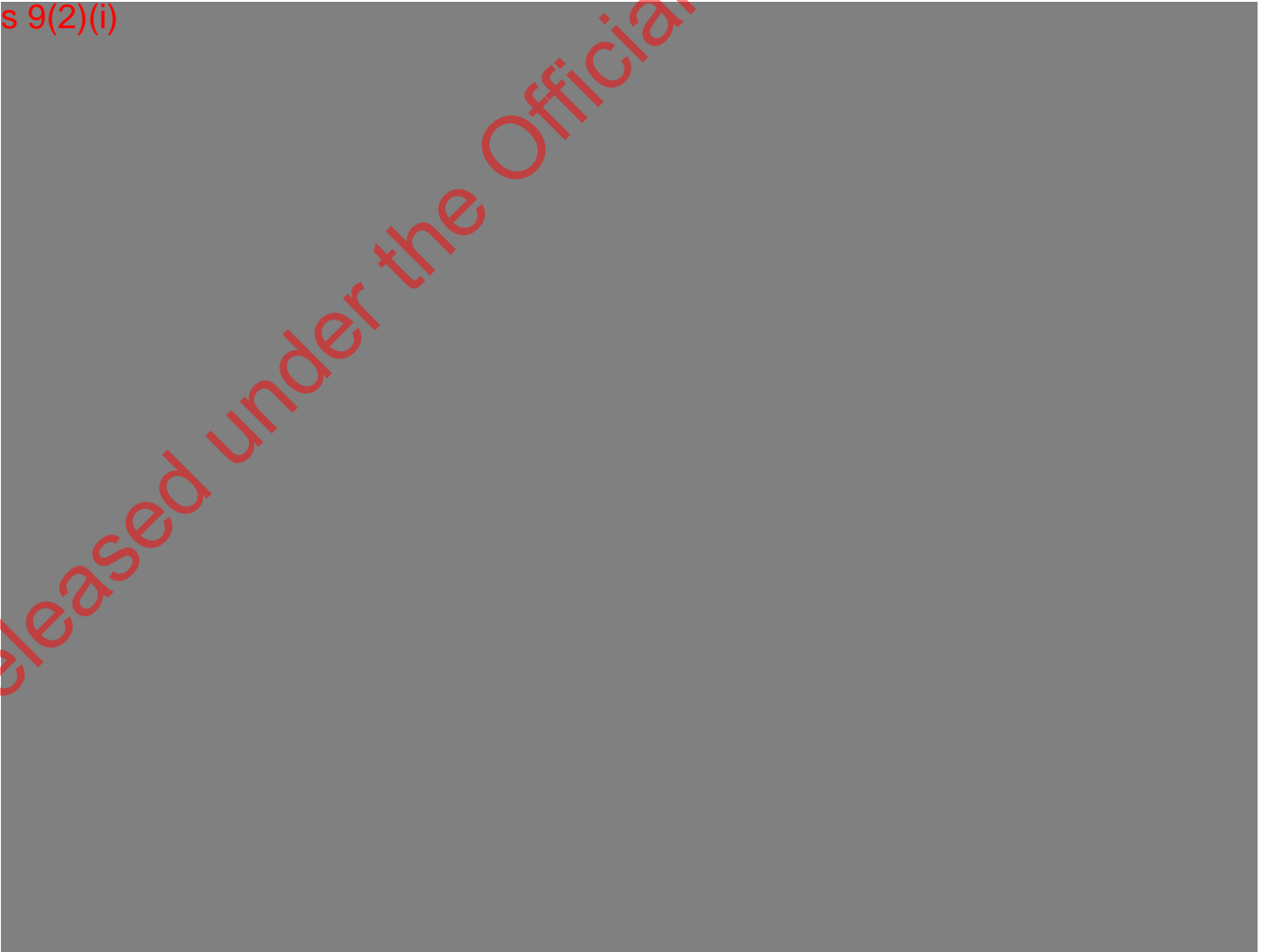
s 9(2)(i)



s 9(2)(i)



s 9(2)(i)



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# 11. Opportunities, challenges and risks to urban success

To achieve the urban and transport outcomes, Auckland requires more than just an investment in a rapid transit system. This may include using a range of urban interventions as part of the Urban Development Programme. The key opportunities, challenges and risks associated with achieving the desired outcomes are summarised below.

## 11.1 Opportunities

### 11.1.1 A whole of government approach

Taking a whole of government approach to growth and development in the CC2M corridor is critical to securing urban success. There are many significant investments being made in this corridor by both central and local government. These include:

- City Rail Link (CRL) – Joint Venture between Auckland Council and central government
- Kāinga Ora Large Scale Developments
- Transform Ōnehunga – led by Eke Panuku

There is an opportunity for the Project to align with the other investments and for the other investments to align with the project. Together, they have the potential to deliver integrated and synergistic opportunities. These opportunities are summarised in the Urban Development Programme and could take the form of:

- integrated master planning for the corridor and for places within the corridor
- improving efficiencies in the planning, design and delivery of relocated and upgraded services
- partnering with the private sector to achieve transit-supported development
- gaining and optimising social license particularly in the suburbs of Mount Roskill, Ōnehunga and Māngere.

### 11.1.2 Corridor-wide masterplan

A corridor-wide masterplan provides the opportunity to set a vision for future growth and development within the corridor. It will need to recognise that urban outcomes differ across the corridor and will be dependent on place, local built form and need.

A key part of this masterplan will be economic considerations. While growth will drive increased employment opportunities it is important to optimise local business and employment provision as well as potential for commercial office through the incorporation of an economic plan for the corridor.

### 11.1.3 Planning policy

Although there may be small areas of the corridor which would benefit from some amendments to the AU), the current provisions offer extensive opportunities for urban growth. Further growth will also be enabled once Auckland Council implements the requirements of the recently released NPS UD.

### 11.1.4 Market

Market analysis has indicated that there has been a shift within the Auckland residential market over the last 10 years, particularly since adoption of the Auckland Unitary Plan in 2016. Higher density housing typologies, particularly those closely linked with frequent and rapid transit services have become more prevalent. This observation is supported by Auckland Council's ongoing monitoring of building consent activity which shows a greater mix of typologies being consented across Auckland and within the CC2M corridor.

The Project will look to engage in market led development, commercial partnerships which



could incentivise where the market deliver urban development. These partnerships could include:

- use of publicly owned land that is available for urban development as equity
- use of financial incentives such as reduced development contributions and partnership arrangements which share a reduced profit margin
- pre-purchase of affordable / KiwiBuild dwellings to underwrite market risk
- use of “build to rent” incentives to offer another, more affordable product offering to the market.

## 11.2 Challenges

### 11.2.1 Accessibility-based scenario vs Higher Intensification scenario

Accessibility modelling has determined that the investment in rapid transit alone will enable additional growth of approximately 5,000 dwellings and 5,000 jobs in the corridor. This is over and above the 31,000 household growth in the Auckland Council growth scenario. Urban interventions will enable a more intentional growth response, that will influence the location and type of growth to achieve an urban form consistent with Auckland Council's vision for quality compact urban development. These could be optimised through use of urban interventions that are identified in a Urban Development Programme. An additional 30,000 households could be triggered if commitment is made to using urban interventions to achieve higher

intensification, total growth of 66,000 households in the corridor.

As outlined in Section 9.4 above, an Urban Development Programme, mapping out interventions will be developed and will set out how to optimise the benefits of the transport investment.

### 11.2.2 Market feasibility

s 9(2)(b)(ii)

### Feasibility analysis

s 9(2)(l)

s 9(2)(i)



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### 11.2.3 Gentrification

Improving accessibility through investment in rapid transit is likely to increase the desirability of areas along the CC2M corridor. The investment triggers development and attracts people with higher incomes, drawn to walkable, transit-friendly communities. This is a positive outcome, however it can displace existing residents and businesses, creating significant social equity concerns.

A strategy of multiple interventions to tackle displacement and protect businesses and cultural spaces will be particularly important moving forward. Such interventions can include prioritising government-owned land for affordable housing, inclusionary zoning requiring new developments to incorporate a component of affordable housing, protections for tenants against evictions, and Community Benefits Agreements – agreements between Government, developers and the community on new developments.

Kāinga Ora incorporates its own social equity initiatives into housing investment programmes. To support its housing investment Kāinga Ora is partnering with Mana Whenua, Auckland Council, Crown entities such as the Ministry of Education and local community organisations. They collaborate on a wide range of ‘infrastructure’ that will significantly improve the amenity and liveability of a neighbourhood. This investment includes such things as new in ground infrastructure that will significantly improve the water quality and biodiversity of waterways, new and enhanced parks, new attractive and safe streets and new walking and cycling routes and connections. This uplift in amenity and environmental quality will benefit all members of a community.

Kāinga Ora commits to its tenants that they have a ‘choice to return if a tenant is relocated as part of redevelopment work. Furthermore, increased state housing provision also means that those people

that qualify for a state house and have strong connections to a community will have the chance to live in and contribute to that community.

The developments also contribute to local economic prosperity, with a strong obligation to training and employing local residents throughout their 20-year development programme, as well as the economic benefits for local businesses that are created by an increase in population.

Different mechanisms will be needed for different parts of the corridor. However, there is an opportunity for the Project to integrate with the work Kāinga Ora is already doing in this space. The most appropriate approaches will be fully explored at the next phase.

#### 11.2.4 Enabling infrastructure

Investment in rapid transit does not, in of itself, allow for growth to occur, there are many factors to be considered and the infrastructure capacity is a significant challenge that needs to be addressed.

The current infrastructure networks do not have capacity to allow significant growth in the corridor. If anticipated growth is to be realised it will require a significant commitment to infrastructure upgrades and the cost of this work would be significant.

Housing intensification has multiple dependencies and relies on the presence of all infrastructure assets in order to be feasible such as the absence of one asset renders all the others useless. In other words, if there is sufficient water supply and storm water infrastructure in place but not enough capacity for wastewater then the infrastructure is not sufficient to allow any development. Therefore, the coordination of all assets, collectively, is of vital importance.

In some areas of the corridor large scale developments are already underway and as part of these projects, infrastructure will be delivered to allow significant uplift. This presents an opportunity to align central and local government funding and create synergies with the rapid transit investment.

To fully understand the capacity of the infrastructure networks it will be necessary to undertake infrastructure master planning as part of the next phase of the Project. This cannot happen

until the decision around, mode, alignment and urban development potential have been finalised. Infrastructure master planning would form part of the corridor-wide masterplan.

While the responsibility for delivery of urban outcomes might be shared across various entities, the responsibility to manage the programme of work for enabling infrastructure is best managed by a single entity as a programme of work, and in partnership with the key parties identified in this report including Auckland Council and Kāinga Ora. This will ensure a considered approach to prioritisation, ensure all infrastructure is sized to the optimum capacity. This will need to be considered as part of the scoping of the next phase of the Project.

The single biggest constraint for enabling infrastructure will be funding. This is a very complicated environment with many moving parts and it is likely that multiple sources of funding will be required and this will be a significant piece of work to be undertaken by the Project.

### 11.3 Risks

Interventions will vary in scope and scale based on a place-based assessment. Key risks to the delivery of these interventions include:

- Whole of government collaborative approach is not realised.
- Lack of market attractiveness and competing market activity outside of the corridor.
- Significant land fragmentation.
- Some spatial and/or planning constraints in desirable locations.
- Limited public levers to influence market risks or outcomes.
- Infrastructure capacity.
- Opportunities for more intensification could be lost both on publicly owned land and within private sector holdings over the next 10 years without early direction and intervention.
- Unconstrained market roll out of intensification along the corridor will likely result in less than optimum outcomes as development projects compete for market share.

# 12. Next Steps

Greater intensification within the CC2M corridor can play a role in slowing urban sprawl at the edge of the city and support climate action. It can reduce dependence on private vehicles, giving greater access to public transit and walking and cycling routes, greater access to jobs, services, amenities and health care. It can also enable more efficient use of public infrastructure funding.

Upgrading the street network to prioritise people, improving wayfinding and creating new public spaces will also enhance the quality of the public realm and improve safety through better visibility, legibility and street activation<sup>12</sup>.

Investment in rapid transit has the potential to trigger more growth, over and above the Auckland Council growth scenario. Each option benefits from investment to some degree. However, the amount of growth that is eventually realised in any option is highly dependent on the level of intervention committed to in each of the key focus areas and across the corridor.

## 12.1 Key Actions

The following key actions and advice have been identified as necessary in order to secure the urban outcomes:

### **Mandate**

The project partners to have a clear mandate and accountability to secure quality transit supportive urban outcomes including housing, employment, community, environmental and Te Ao Māori outcomes through an Urban Development Programme.

### **Planning policy**

Planning policies to be reviewed and amended as appropriate to ensure quality transit supportive development is enabled.

### **Funding**

Identify funding sources, strategies and structure to support the Urban Development Programme and potential value capture.

### **Strategic assessment and master planning**

Place-based assessment across the corridor and node by node to determine the scale of urban development opportunities and constraints followed by a masterplan to determine the vision and urban ambition required to enable, unlock and secure quality transit supportive urban development.

### **Interventions**

Identify specific interventions required, including enabling infrastructure, amenity and land purchases, catalyst transit supportive development opportunities, risk analysis and strategy for implementation.

### **Delivery**

Optimise, organise and operationalise the Urban Development Programme to secure urban outcomes, including private sector partnerships.

### **Governance**

The Governance group be tasked with responsibility for overseeing and securing the project's urban development outcomes.

<sup>12</sup> <https://www.aucklandccmp.co.nz/opportunities/dominion-road-junction-creating-a-future-urban-neighbourhood/>

## 13. Urban Workstream technical reports

s 9(2)(i)

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