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Section	Description of ground
6(a)	as release would be likely to prejudice the security or defence of
	New Zealand or the international relations of the New Zealand
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6(b)	as release would be likely to prejudice the entrusting of information
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	(i) the Government of any other country or any agency of
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	which any person has been or could be compelled to provide under the
	authority of any enactment, where the making available of the
	information would be likely to prejudice the supply of similar information,
- 4-1 4- 1 4-1	or information from the same source, and it is in the public
9(2)(ba)(ii)	to protect information which is subject to an obligation of confidence or
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9(2)(f)(ii)	to maintain the constitutional conventions for the time being which
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	and officials
9(2)(g)(i)	to maintain the effective conduct of public affairs through the free and
9(Z)(g)(i)	frank expression of opinions by or between or to Ministers of the Crown
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~(~ /()/	organisation holding the information to carry on, without prejudice or
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REMANATO WAYA MINISTRY OF TRANSPORT

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Security Classification

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This deliverable has been informed by mana whenua and Māori engagement; further engagement will be required before this deliverable is endorsed by mana whenua. Please refer to the Document Review Record for relevant feedback relating to this deliverable.



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1 Strategic Case Executive Summary

Tāmaki Makaurau Auckland is at a critical crossroads. As Aotearoa New Zealand's largest and most diverse city, Tāmaki Makaurau Auckland is central to the nation's economic performance. Aotearoa New Zealand needs Tāmaki Makaurau Auckland to function effectively as a globally competitive, productive, and attractive city.

The choice facing Tāmaki Makaurau Auckland

Tāmaki Makaurau Auckland's historic growth patterns have led to pronounced challenges today. In particular, a long-standing misalignment between the location of growth and when and where investment is made in infrastructure, the city is facing three connected challenges:

- **Aucklanders are stuck in traffic** congestion has a \$1.3bn impact on the city's economy each year.
- There is not enough housing, and limited housing choice hindering the ability to attract and retain skills.
- **Ongoing environmental degradation and increasing emissions** are impacting quality of life and exposing a lack of resilience in our infrastructure.

Together, these challenges are restricting Tāmaki Makaurau Auckland's ability to become a productive and inclusive city that is an attractive place to live, work, and play.

Tāmaki Makaurau Auckland is growing and will continue to grow. Now is the time to decide if we will carry on a reactive pathway, which will exacerbate Auckland's challenges, or take a proactive course to managing growth which will alleviate these challenges and create opportunities for investment.

For Tāmaki Makaurau Auckland to grow into a competitive city it is critical that we maintain a quality compact approach, driven by integrated transport and land use planning and investment.

Why this corridor?

The City Centre to Mangere corridor is home to some of Auckland's most economically and culturally significant locations, including the city's two largest employment and economic hubs. It is a key contributor to the city's overall performance and success but represents a significant gap in Tāmaki Makaurau Auckland's strategic transport network. This is limiting the ability of the corridor to contribute to a sustainable and economically productive city.

Areas of the corridor, including Mt Roskill and Māngere, have long been identified as key locations to accommodate housing and employment growth. Investment in infrastructure is critical to enabling this growth and intensification aligned with Tāmaki Makaurau Auckland's quality compact approach while improving environmental outcomes. However, the corridor is suffering from a lack of investment driven by uncertainty in how to address the transport investment, limiting how intensively land can be developed.

For Tāmaki Makaurau Auckland to successfully compete on the international stage for inward investment, attract, retain, and nurture talent, and capitalise on a reputation for liveability and sustainability it is critical that the corridor can fully play its role in supporting these efforts.



Why mass rapid transit?

As the most significant and influential investment in the corridor, addressing the gap in the strategic transport network will catalyse and shape future investment. A high-capacity mass rapid transit system is the only transport investment which will fully realise the potential of the CC2M corridor.

Investment in a mass transit system will improve accessibility, connect with the wider transport network and unlock planned rapid transit network projects, and uplift land values across the corridor.

Beyond these immediate benefits, mass rapid transit will shape a more intense and quality compact urban form – supporting the delivery of new homes and jobs – and reduce carbon emissions. By taking a proactive and integrated approach to urban and transport investment, additional benefits will be amplified and accelerated. By bringing forward growth in this corridor benefits will be captured sooner rather than later – accruing a greater overall benefit over time.

The time is now

Investment in mass rapid transit is a city-shaping decision, which will result in a more productive, attractive, and well-functioning future for Tāmaki Makaurau Auckland. As a result of investment in this corridor Tāmaki Makaurau Auckland will benefit from:

- Reduced congestion allowing people and goods to move through the city more efficiently.
- Greater housing choice and a quality compact city improving quality of life and ensuring people are able to live, work, and play where they want to.
- More efficient and affordable infrastructure investment saving money and allowing Government to prioritise investment in the right place at the right time.
- Improved environmental quality + reducing emissions and regenerating environmental and ecological systems.

To understand and respond to these significant challenges and benefits an innovative approach is required. This takes the form of the ALR Corridor Business Case (CBC) which represents a step-change in how major infrastructure projects are developed in Aotearoa New Zealand.



2 Introduction to the Corridor Business Case

Tāmaki Makaurau Auckland is facing significant and pressing challenges. To function effectively the city needs to address the immediate and severe problems which are hampering performance and make a concerted effort towards the development of a more accessible, sustainable, and economically productive city:

- Growing congestion is impacting the city's economy and worsening people's ability to access jobs, education, and health services.
- A high reliance on private vehicles is generating greenhouse gas emissions, adversely affecting the climate, and increasing harm from injuries.
- Poorly integrated urban and transport systems are supressing quality compact urban form, increasing inequities and reducing social cohesion.

Official forecasts make clear that Tāmaki Makaurau Auckland is about to enter a period of rapid and sustained growth. This growth could see its population increase by around 665,000 people, to reach 2.3 million by 2051¹. However, the city's historic approach to growth has led to a long-standing misalignment between when and where investment has been made in infrastructure, shaping the challenges Tāmaki Makaurau Auckland faces today.

Without immediate action to respond to the city's challenges, growth will exacerbate them. As Tāmaki Makaurau Auckland grows, it will deepen the city's existing transport issues, erode productivity, further entrench the inequities that are already affecting residents, and exacerbate the environmental impact of the way we live now.

This Corridor Business Case (CBC) considers a potentially decisive investment in a key part of the city. This investment seeks to put Tāmaki Makaurau Auckland in a better position to solve the immediate and critical problems facing the city and to prepare for growth in way which will achieve a more equitable, sustainable, and productive city.

2.1 What is the proposed investment?

This CBC assesses the costs and benefits of a core transport infrastructure investment within the City Centre to Mangere (CC2M) corridor, alongside associated urban interventions to amplify and accelerate those benefits.

The rapid transit investment

Integrating with the current and future public transport network, a rapid transit connection along the CC2M corridor will help people avoid congestion and peak delays by providing a new and easier way to travel in and out of the city. It will improve access to jobs, education, and opportunities, free up road space for freight, and unlock other Rapid Transit Network projects. By doing so, it will enhance the efficiency and competitiveness of the city's economy.

By unlocking significant urban development potential, rapid transit in the CC2M corridor will also trigger a significant degree of market-led urban growth around its stations, creating a significant number of homes and jobs with easy access to public transport, providing a wider range of housing choices for a growing population, and supporting Tāmaki Makaurau Auckland's progression towards a quality compact urban form. In so doing, it will reduce the burden on the public purse and support a cleaner and healthier environment.

¹ Auckland Plan 2050 (<u>Link</u>)



As a result of each of these improvements, rapid transit in the CC2M corridor will reduce Tāmaki Makaurau Auckland's carbon footprint by supporting substantial mode shift away from private vehicles, encouraging more sustainable lifestyles, and reducing the need to invest in enabling infrastructure associated with dispersed development.

The urban intervention

The significant benefits brought about by rapid transit in the CC2M corridor will be accelerated and amplified through additional investments in urban enabling infrastructure. These will:

- Bring forward the substantial urban growth impact of the rapid transit connection,
- Drive greater levels of mode shift and more sustainable travel patterns, and
- Bring forward lasting reductions in carbon emissions.

This is a genuinely transformational project. It will support a new way of living, working, and moving around Tāmaki Makaurau Auckland.

2.2 What is a Corridor Business Case?

This City Centre to Māngere Corridor Business Case (CBC) represents a change in how major infrastructure projects are developed in Aotearoa New Zealand.

The purpose of this Corridor Business Case is both to establish the case for investment for the transport infrastructure (to Detailed Business Case level) and to consider the case for complementary urban development investment (to at least Indicative Business Case level) within the CC2M corridor.

It will enable an investment decision on the transport infrastructure, and also set out options for urban investment which could be carried forward into subsequent Detailed Business Cases.

As the first business case in Aotearoa New Zealand to consider both transport and urban infrastructure investment, it recognises that integrating these two components is key to realising and maximising long-term benefits for Tāmaki Makaurau Auckland.

This CBC grasps the unique opportunity to create a business case blueprint that can be used more widely throughout Aotearoa New Zealand for other transport projects with significant urban development potential.

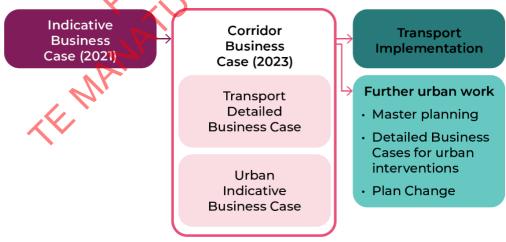


Figure 2.1 Corridor Business Case Representation



Collectively, the separate cases of this Corridor Business Case:

- Confirm the case for investment in rapid transit along the CC2M corridor to support improved transport outcomes and sustainable, quality compact urban form.
- Set out the case for urban interventions which will better integrate urban and transport systems, given greater certainty to achieving urban and transport outcomes.
- Confirm the preferred rapid transit solution, its costs, and benefits, with a focus on value for money.
- Confirm the feasibility of both the transport and urban solutions and confirms the procurement model for the transport elements including urban development on land controlled by the project.
- Identify further urban commercial opportunities along the corridor that will be attractive to the market.
- Provide recommendations on funding arrangements.
- Make recommendations for how delivery of the project can be achieved by what entity, and how strong partnerships will be key to the success of the project.

2.3 Progress to date

The Indicative Business Case (IBC) for improvements to Tāmaki Makaurau Auckland's public transport network in the CC2M corridor was completed in September 2021.

The IBC demonstrated that the existing transport infrastructure and services in the CC2M corridor lack the capacity and quality of service (e.g., speed and reliability) needed to meet the corridor's future transport needs, nor to support quality compact growth, nor reduce reliance on private vehicles, and reduce carbon emissions.

The CC2M Rapid Transit IBC sought to identify the transport investment which would best meet the desired outcomes of the ALR project.

Exploring a wide range of public transport options such as light rail, light metro, heavy rail, and bus rapid transit, along with several route options, the IBC identified the three best-performing options as:

- 1. Light Rail
- 2. Light Metro (tunnelled)
- 3. Tunnelled Light Rail

A detailed assessment of these three options demonstrated that all had the potential to deliver the outcomes sought by the Investment Objectives and could be justified economically. The IBC identified the Tunnelled Light Rail option (which was separated from traffic save for short sections through Onehunga and Māngere Town Centre) as the preferred way forward, given its service-capacity, flexibility, and relatively limited construction disruption impact.

Alongside this analysis the CC2M IBC established that there was strong potential to amplify the benefits of the transport investment with a complementary investment to enable, facilitate, and secure urban development to deliver integrated urban and transport outcomes.

In developing the IBC, Mana Whenua along the route were engaged, and Mana Whenua leaders identified opportunities, aspirations, issues, and challenges related to the Project.



These were reflected in Te Rautaki Huanga Māori (Māori Outcomes Strategy) which sets out the aspirations for Mana Whenua and Māori for the CC2M corridor.

Te Rautaki Huanga Māori sets Ngā Uara: Values; Ngā Mātāpono: Principles for Engagement and Ngā Putanga: Māori Outcomes for the Project, and has helped to set its strategic direction.

Te Rautaki Huanga Māori reflects Te Tiriti o Waitangi, and it was agreed by 11 out of the 15 Mana Whenua leaders in the corridor, and formed part of the IBC. Consideration of Mana Whenua and Māori social, economic, environmental, and cultural advancements will ensure the project is set up for success.

2.4 CBC Point of Entry

Cabinet endorsed the IBC in December 2021, and in June 2022, the Minister of Transport confirmed through an Investment Management System (IMS) letter that Tunnelled Light Rail, as set out in the IBC, should be the 'point of entry' for the next phase of the CC2M business case, while also indicating that there could be merit in further consideration of grade-separation south of Mt Roskill.

Auckland Light Rail Limited (ALR Ltd) was established to carry out this work, and ALR Ltd procured a planning and design alliance to support the confirmation of the case for investment in the transport infrastructure and investigate further the case for the urban transformation needed to enable the benefits of this investment to be realised.

The June 2022 IMS letter described the high-level expectations for this business case to inform a Final Investment Decision (FID) and advance to the delivery phase. This included direction to increase the level of focus on urban development, with an updated Investment Logic Map (ILM).

The IMS letter recognised that integrating transport infrastructure with urban development is critical to unlock new possibilities for a city facing housing, transport, and environmental challenges.

It emphasised that information around the transport investment must be presented at Detailed Business Case (DBC) or equivalent level, while recognising that aspects of the urban development programme may need to be presented at a broader level of detail and further developed in subsequent phases.

The IMS letter also noted that a fully integrated transport and urban development business case, which captures the widest benefits and integrates both urban development and transport appraisal, was unprecedented in Aotearoa New Zealand.

2.5 Governance

The Project is being taken forward via partnership between the Crown, Auckland Council, and Mana Whenua as the foundational framework for overseeing the project.

A Sponsors' agreement sets out the Project's strategic objectives. The Project's sponsors are:

- The Minister of Transport,
- The Minister of Finance,
- The Minister of Housing,
- His Worship Mayor Wayne Brown and Councillor Darby, and
- Mana Whenua Representatives Ngarimu Blair, Karen Wilson, and Paul Majurey.



This arrangement recognises the significant role each Sponsor has in advancing the project and realising the wider benefits of the ALR programme.

ALR Ltd is responsible for advancing the project through the detailed planning phase and developing a Business Case to enable the Crown to make a final investment decision in relation to the Auckland Light Rail Project.

Strong governance and partnerships are key to the success of the Project. The key partnerships are with partner agencies and with Mana Whenua.

The Project's governance framework has been designed to reflect its importance, scale, and complexity, and to mitigate identified risks in delivering the Project's outcomes. It is likely that the Project's governance framework will evolve with the Project as it progresses through further development into implementation, but it will continue to follow the principles described above.

An overview of the governance structure is presented in **Figure 2.2** below.

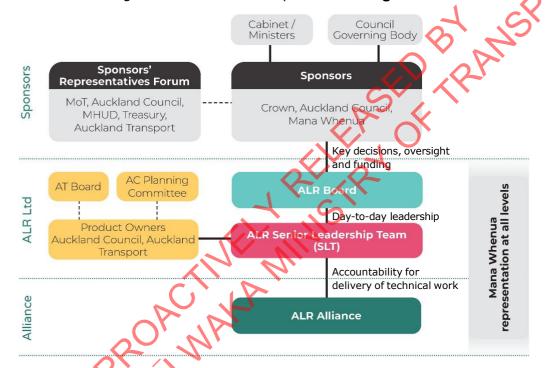


Figure 2.2 ALR Governance Structure

Further information on the roles of key bodies within the governance structure is presented in **Appendix A**, along with the key project risks, constraints, and dependencies.

Te Tiriti o Waitangi (Treaty of Waitangi)

ALR recognises and respects Te Tiriti o Waitangi as the foundation to Māori and Crown relations.

Mana Whenua are kaitiaki, the custodians of the land and people in Tāmaki Makaurau and have responsibilities to care for Tāngata (people) and Whenua (land). ALR recognises the significance of these connections to Mana Whenua as kaitiaki and their values.

In providing direction for transport and urban investment and decision making, Auckland Light Rail Limited recognises the relationship and obligations between Māori and the Crown. These include:

- Partnership, Participation and Protection



- Kāwanatanga: The Crown's right to govern

- Tino Rangatiratanga: Self-determination/autonomy

- Ōritetanga: The rights of Māori as citizens

2.6 Engagement

A comprehensive engagement programme has been underway with partners, stakeholders, and communities since the project's IBC phase. The overarching purpose of the engagement approach taken to date has been to inform and shape the development of the project and ensure success implementation.

Engagement summary

A detailed summary of the engagement programme and approach is presented in **Appendix B** with an overview of key engagement outlined below.

- Mana Whenua and Māori: 13 iwi out of 15 recognised with an interest in the corridor have been engaged with regularly.
- Project Partners: Partnership and collaboration with Central and Local Government partners has been embedded into the project to ensure shared outcomes are achieved.
- Proxy Operator: Auckland Transport was established as the proxy operator for the transport infrastructure elements of the project with responsibility for advising on desired performance outcomes, network integration and the approach to / costs associated with mitigating the impact of construction on the existing network.
- Waka Kotahi: Have been engaged as both a project partner and as the rail regulator to promote an effective working relationship.
- Ministry of Transport: The Ministry of Transport ran a parallel policy programme which included the delivery of policy work to enable the project.

It is important to note that Mana Whenua engagement to date has focused on securing Kaitiaki input to the optioneering process in particular – and that there remains a need for further engagement on the broader content of the CBC.



3 Strategic Case

3.1 The purpose of the Strategic Case

The Strategic Case is one of several Cases within the Corridor Business Case (CBC) for the City Centre to Māngere (CC2M) project. The Strategic Case establishes the need for the project, placing it within an overall strategic context and outlining the project scope and objectives. It presents the 'case for change'.

Study Area and Corridor Business Case Scope

The study area for the Project is defined broadly as the area extending from Tāmaki Makaurau Auckland's City Centre, through the Central Isthmus to Onehunga, across the Manukau Harbour to Māngere, and then on to the airport.

This area is known as the CC2M corridor. The study area is illustrated in **Figure 3.1**, below.



Figure 3.1 Project Study Area



The scope of the Corridor Business Case is:

- To confirm the preferred transport option for investment to service the public transport needs of people along the CC2M corridor.
- To develop of a series of urban interventions, which could be used to give further certainty or realise additional benefits generated by the rapid transit investment, enabling the shift to a more quality compact city. This may include development opportunities at and around proposed stations.
- To confirm the procurement, governance and management arrangements required to progress to the next stage.

The following matters may be impacted by the proposed investment, but are beyond the scope of this Corridor Business Case:

- Improvements to urban enabling infrastructure that may be required by central or local government to facilitate development unlocked through this investment except where the targeted funding of enabling infrastructure could form one of the urban interventions referred to above, as a means of achieving greater amounts of higher-density development more rapidly.
- Development of the wider rapid transit network for other areas of Auckland.

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REPROPRIE Exclusions to the scope of the investment will be investigated where appropriate as the project is developed further.



4 Strategic Context

4.1 Tāmaki Makaurau Auckland is Aotearoa New Zealand's key city

Tāmaki Makaurau Auckland is by far the biggest city in Aotearoa New Zealand, and it is also the country's economic engine and a key cultural hub.

With a population of over 1.7 million people, Tāmaki Makaurau Auckland is home to a third of all New Zealanders ². The city employs 35.3% of the national workforce and contributed over a third (37.4%) of the country's GDP in 2022³.

The city is also the nation's international gateway: Auckland Airport welcomes 75% of Aotearoa New Zealand's overseas visitors, while 171,00 tonnes of international freight are processed in the city each year⁴.

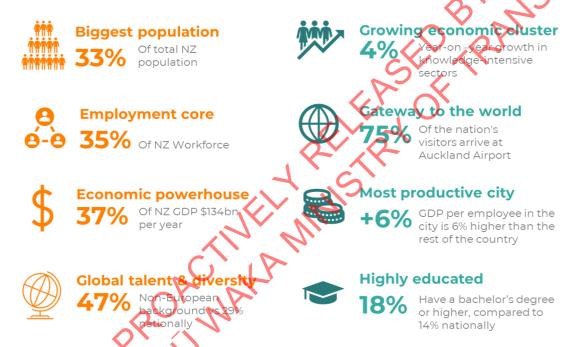


Figure 4.1 Summary of Tāmaki Makaurau Auckland's performance

The critical mass of people, talent, and businesses in Tāmaki Makaurau Auckland make it an attractive place for investment, and over 60% of the country's Top 200 companies are located in the city.⁵.

This concentration also makes businesses more efficient and productive relative to other places in Aotearoa New Zealand (GDP per employee in Tāmaki Makaurau Auckland (\$140,804) is 6.0% higher than the Aotearoa New Zealand average⁶).

² Stats NZ 2023 Subnational Population Estimates (Link)

³ Infometrics (2022), Regional Economic Profile (Link)

⁴ Auckland Airport (2020), Fast Facts (Link)

⁵ Deloitte (2020), Analysis of the Top 200 firms and Top 10 Māori businesses (<u>Link</u>)

⁶ Infometrics (2022), Regional Economic Profile (Link)



Reflecting the wide range of people and skills available, the city maintains a higher percentage of filled jobs (+0.3%) compared to the national average⁷. Employment growth in Tāmaki Makaurau Auckland also consistently outperforms the rest of Aotearoa New Zealand.

Tāmaki Makaurau Auckland also attracts higher-skilled, higher value-added jobs to its economy. In particular, while traditional manufacturing and trade sectors continue to play an important role, the share of employees in the city working in knowledge-based sectors such as professional services and technology is 3.6 percentage points above the Aotearoa New Zealand average⁸. Māori working in the study area are predominantly employed in service sector industries, and in professional, administrative, and managerial roles.

Spotlight on Te Öhanga Māori (The Māori Economy)

In Tāmaki Makaurau Auckland the financial value of Te Ōhanga Māori (The Māori Economy) asset base is \$12.5 billion. This asset base comprises:

- \$9 billion assets in the businesses of 2,393 Māori employers
- \$1.4 billion assets in trusts, incorporations, and other Maorientities
- \$2.1 billion assets in the businesses of 4,965 self-employed Maori.

The sectors employing the largest numbers of Māori in the city are retail, accommodation and food services, construction, and administration. While agriculture is the lowest employer of Māori, this is likely due to the historic and ongoing urbanisation of Tāmaki Makaurau.

There are currently 1,393 registered Pakihi Māori (Māori businesses) within Tāmaki Makaurau Auckland. There are close to 2,870 Pakihi Māori in the entire rohe which is still growing. Out of 1,393 registered Pakihi Māori in the city, 232 (16%) are in the CC2M, primarily in construction. Rapid transit offers significant opportunities for these businesses. The second highest concentration of Pakihi Māori is in Professional, Scientific, and Technical Services, indicating significant Māori presence in this sector, especially in the city centre and Isthmus.

4.2 Historic growth patterns have left Tāmaki Makaurau Auckland facing three key problems

The challenges that this Strategic Case will describe are rooted in the way that the city form has responded to growth pressures over most of the last century, following a shift away from Māori values in which the relationship between whenua (land) and tāngata (people) is guided by kaitiakitanga.

Kaitiaki refers to not only the obligation to guard but to protect, conserve and preserve. Kaitiakitanga involves the integration of spiritual, cultural, and social life of Mana Whenua and is holistic across land, air, and sea, including all people within the concept of te taiao (environment).

Prior to the 1950s, Tāmaki Makaurau Auckland's urban development centred around relatively dense, walkable neighbourhoods, which later grew along the city's extensive tramway network.

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⁷ Infometrics (2022), Regional Economic Profile (Link)

⁸ Infometrics (2022), Regional Economic Profile (Link)



From the 1950s onward, however, as Aotearoa New Zealand and Tāmaki Makaurau Auckland continued to urbanise, along with the urbanisation of Māori, Tāmaki Makaurau Auckland began to take a new path.

With the closure of the tramways, the explosion of automobile use, and continual investment in road infrastructure, growth was increasingly accommodated through physical expansion of the city. This process also frequently entailed the displacement of established communities, often Māori and Pasifika, who were replaced by new residents – themselves often of European origin.

Though outwards expansion is now the exception, this process continued until recently (nearly 70% of urban growth in the city between 2006 and 2013 occurred more than 10km from the city centre 9).

In recent years, the dominant means of accommodating urban growth has been to infill the existing urban boundaries with small-scale developments (typically through the subdivision of single house sites into two to three dwellings), a trend which is likely to continue in the absence of investment to support a different outcome.



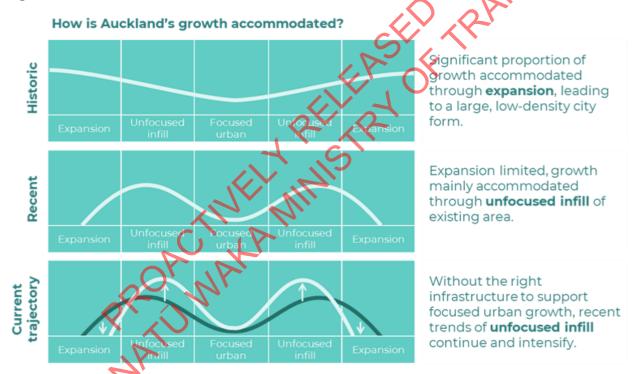


Figure 4.2 Phases of development in Tāmaki Makaurau Auckland

The net result of these patterns has been the development of a very large urban area, the largest in Aotearoa New Zealand.

This has left Tāmaki Makaurau Auckland facing three interrelated problems, which individually and collectively threaten to undermine the city's role as the nation's preeminent economic powerhouse:

- A very low-density pattern of land use
- A highly car-dependent and congested transport system
- A correspondingly high environmental footprint

⁹ OECD (2017), Environmental Performance Reviews: New Zealand (Link)



4.3 The importance of the CC2M Corridor to city outcomes

The CC2M corridor is a linear area of the city, running from the City Centre, through the Central Isthmus, via Onehunga and Māngere, to the Airport.

A key contributor to the city's performance

Home to some of Tāmaki Makaurau Auckland's most economically and culturally significant communities, sites, and locations, the corridor is critically important to the city:

- The city centre and the Airport district are two of Tāmaki Makaurau Auckland's largest employment and economic hubs, and account for 24% of all jobs in the city.
- The city centre acts both as a central business district and as a significant residential area featuring high-density apartments, and as the city's cultural and civic heart home to the Waitematā Harbour, Art Gallery, Museum, and the location for many of the city's biggest events and celebrations.
- Meanwhile, the airport business district and airport industrial corridor host 28,800 employees.
- The corridor is also home to two of the city's major tertiary institutions: the University of Auckland and Auckland University of Technology. It is therefore a key contributor to the skill base of Tāmaki Makaurau Auckland both present and future.
- The corridor contains a significant number of Auckland's Future Growth Area's and short-medium term priorities for investment as identified in the Auckland Plan 2050 Future Development Strategy (including the City Centre, Wesley-Mount Roskill, and Mangere), as shown in **Figure 4.3**.
- In 2018, over 170,000 people (11% of Auckland's population, including 11% of its Māori population) lived in the CC2M corridor.



Figure 4.3 Auckland's Future Growth Areas 10

¹⁰ Auckland Council, Auckland Future Development Strategy (Link)



Sharing the city's challenges

As Section 5 will illustrate, the CC2M corridor is a place of challenges and contrasts, and it exhibits all three of the problems identified above as stemming from the city's historic pattern of growth.

- The corridor is one of the most significant gaps in the city's rail-based transit network, and its roads are highly congested,
- Transport access, liveable places, and quality housing are poorly integrated and inequitably shared, with disparities often apparent between demographic groups, and
- The travel and development patterns of the corridor increase its carbon footprint

Given the critical role of the CC2M corridor in the life and economic performance of Tāmaki Makaurau Auckland as a whole, addressing these challenges is of fundamental importance.

A focus for the city's growth

Along with other parts of Tāmaki Makaurau Auckland, the population of the CC2M corridor is set to grow significantly ¹¹, and the Future Growth Area locations within the corridor are key focal points for the city's growth.

By 2051, Tāmaki Makaurau Auckland's population will have grown by 665,000 to reach some 2.3 million people. Even without the investment that this CBC recommends, it is expected that 13% of this growth (along with 27% of its job growth) will take place within the CC2M corridor, taking it from some 220,000 residents in 2021 to almost 304,000 in 2051 – an increase of almost 40% ¹².

This growth threatens to intensify the challenges described above. But with appropriate preparation, it could instead be a catalyst for transformative improvement. As Tāmaki Makaurau Auckland and Aotearoa New Zealand compete internationally for inward investment, seek to attract, retain, and nurture talent, and capitalise on their reputation for liveability and sustainability, it is essential that the CC2M corridor can fully play its part.

4.4 Strategic Alignment

As Aotearoa New Zealand, and Tamaki Makaurau Auckland within it, grows and continues to urbanise, the direction of policy at both national- and city-level is clearly towards compact, high quality, transit-oriented development. **Figure 4.4** shows the hierarchy of the key plans that set this direction and their relationship to each other.

This focuses on a deliberate concentration of development along transit routes, supporting new development and better public realm.

 $^{^{11}}$ The Corridor Business Case is informed by Auckland Council's i11v6 population projections ($\underline{\text{Link}}$), and further modelling undertaken for ALR by LUTI consultants

¹² MSM 2018 Do Minimum Scenario



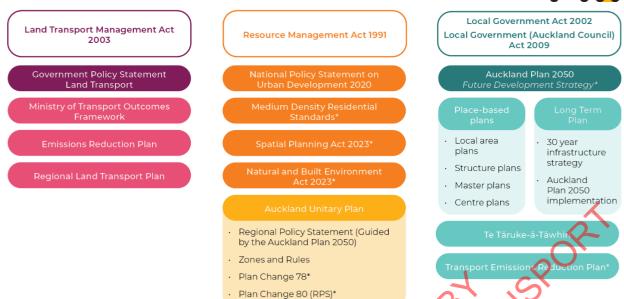


Figure 4.4 Hierarchy of relevant strategic direction

4.4.1 National direction

4.4.1.1 Urban transport: supporting equity, productivity, and carbon outcomes

The Ministry of Transport (MoT) Transport Outcomes Framework identifies the key role of New Zealand's transport system in supporting and improving wellbeing. The Government Policy Statement on land transport (GPS: Transport) 2021 also establishes "Better travel options", which support people-friendly places with healthy environments and improve wellbeing and economic prosperity, as a strategic direction for the transport network. It also outlines the importance of implementing policies and programmes to manage traffic congestion through "reduc[ing] the need for users to travel long distances and enabl[ing] others to use dedicated travel routes and frequent public transport services".

As an emerging policy, the draft GPS: Transport 2024 outlines a strategic priority of "Sustainable urban and regional development". This focuses on increasing housing supply, choice and affordability while developing resilient and productive towns and cities through effective transport networks that provide a range of low-emission options and reduce congestion. Investment in rapid transit networks, supported by changes in how and where intensification can occur, is identified as a key action to achieve this.

4.4.1.2 Housing: liveable communities and sustainable development

The GPS: HUD identifies public and active transport networks, and connections between communities, jobs, education, and amenities as integral to creating thriving and resilient communities. This includes a focus on ensuring land, infrastructure, urban design, and the right types of housing supply come together in the right places. This direction is supported by the National Policy Statement for Urban Development (NPS: UD) which requires Tier 1 local authorities, including Auckland Council, to enable building heights of at least six storeys within a walkable catchment of existing and planned rapid transit stops, city centres or metropolitan centres.

MAIHI Ka Ora, the Māori Housing Strategy, establishes the importance of making more efficient use of land and infrastructure and the criticality of improving housing for Māori. This will be achieved through six priority actions. Of relevance are the need for a strong



Māori/Crown partnership to strengthen housing solutions, a focus on Māori-led local solutions to deliver fit-for-purpose housing while taking a 'by Māori for Māori' approach and supporting whanau to sustain connections to their land while looking at ways to making housing more sustainable, innovative, and responsive to the effects of climate change.

In Auckland the walkable catchment for a rapid transit stop has been defined as a 10-minute walk (approximately 800m) from a station entrance point. This recognises intensification supported by rapid transit as central to achieving "well-functioning urban environments" that provide for social, economic, and cultural wellbeing.

4.4.1.3 Environment: the need for integrated transport and land use

The Emissions Reduction Plan (ERP) identifies the central role of higher density urban forms, which depend on transport, in meeting the country's emissions targets. The ERP establishes a target to "reduce total kilometres travelled by the light fleet by 20 per cent by 2035 through improved urban form and providing better travel options, particularly in our largest cities".

Under the NPS: UD Councils can no longer set minimum car parking requirements. On-site car parking minimums were removed from the Auckland Unitary Plan (AUP) in February 2022 to meet the NPS: UD requirements. The purpose of this is to enable more housing and commercial developments, particularly in higher density areas well connected by active and public transport where there is a reduced need for a private vehicle to access jobs, services, or amenities.

4.4.2 Tāmaki Makaurau Auckland direction

4.4.2.1 Urban transport: supporting equity, productivity, and carbon outcomes

The Auckland Plan 2050 identifies the need to better connect people, places, goods, and services as integral to supporting the city's growth prosperity. Auckland Transport (AT) also connects the role of the transport network to the issue of urban density through the Auckland Transport Alignment Project (ATAP) and Regional Land Transport Plan (RLTP). ATAP also acknowledges the role of rapid transit in supporting and shaping the city's growth and development – with the speed and reliability provided by rapid transit making the areas around stations more attractive to live, work, and spend time in.

Future Connect, AT's integrated network plan, echoes GPS: Transport in identifying a lack of competitive travel options and high car dependency as key impediments to a quality compact urban form. It also highlights the negative impact that transport deficiencies are having on access to opportunities seeks and to support intensification in brownfield areas through a network of new rapid public transit links connecting the City Centre to Māngere, the North Shore, and the Northwest.

In response to these challenges, emerging policies also propose measures to directly manage traffic and demand. This includes changes to increase city centre parking charges and reduce provision, with a greater focus on providing for short-term parking turnover rather than provision for extensive longer-stay parking. This is particularly the case for onstreet provision, where the reuse of some parking bays is envisaged for other purposes such as active travel provision. There is also an expectation that road user charging will be introduced to help manage the challenge of ever-increasing highway travel demand ¹³. The Congestion Question (TCG) acknowledges the impact traffic congestion has on productivity

¹³ Inquiry into congestion pricing in Auckland: Report of the Transport and Infrastructure Committee, August 2021 (Link)



and quality of life in Auckland, with 33% of businesses highlighting congestion as the main impediment to their growth and daily operations, up from 5% in 2015¹⁴.

4.4.2.2 Housing: liveable communities and sustainable development

Auckland Council's Long Term Plan (2021-2031) focuses on supporting growth through investment in infrastructure in key areas. This includes the Auckland Housing Programme areas of Mt Roskill and Māngere which sit within the CC2M corridor. This approach supports the aspirations of the AUP and the Auckland Plan 2050 (Auckland Plan). The Auckland Plan sets the strategic direction for growth in Auckland, including the adoption of a quality compact approach (see Section 4.4.3, below).

The Auckland Plan reinforces the need for a collaborative approach to investment to ensure the best value for money, at the right time and in the right place, with two focus areas of particular relevance 'target new transport investment to the most significant challenges' and 'better integrate land use and transport'. This is supported by the Future Development Strategy (FDS) which highlights the importance of land efficiency and transport integration with an emphasis on 'quality compact growth', focusing growth within existing urban areas that are easily accessible by public transport, cycling, and walking. The FDS emphasises the need to prioritise where growth happens and to ensure this occurs in line with infrastructure investment – with a growth rationale based on accessibility to jobs and services via public transport.

4.4.2.3 Environment: the need for integrated transport and land use

The FDS recognises that a compact urban form is a critical requirement for reducing the greenhouse gas emissions generated through vehicle travel and outlines the importance of investing in infrastructure to reduce emissions, adapt to natural hazards, and increase accessibility. It highlights the need for infrastructure investment to focus on resilient solutions, providing a sustainable foundation for communities to thrive.

This focus is echoed in Te Tāruke-ā-Tāwhiri. Auckland's Climate Plan, which emphasises the role of integrated land-use and transport planning in determining future emissions and climate risk exposure through the creation of efficient and sustainable transport systems. The Transport Emissions Reduction Pathway (TERP) gives effect to Te Tāruke-ā-Tāwhiri, outlining the need to build up, not out, supported by access to good quality transport options as a key it to reducing transport emissions. Without action current policies and planned investment are projected to reduce transport emissions by only about a tenth of what is needed by 2030.

A detailed summary of strategic alignment to policy is outlined in **Appendix C.**

4.4.3 Tāmaki Makaurau needs Quality Compact Growth

Tāmaki Makaurau Auckland has taken a quality compact approach to growth for more than 20 years (a strategic direction detailed in Section 4.4.2.). As explained in the Auckland Plan 2050, to become a globally competitive city, Tāmaki Makaurau Auckland needs to grow in a quality compact way in order to be an attractive, well-functioning and thriving place that provides opportunities for people to live, work, and play.

A competitive city attracts financial capital and investment, sustains economic productivity, and supports overall quality of life for communities. For a city to attract people, investment, and business, six interconnected factors need to perform well, shown in **Figure 4.5**.

-

¹⁴ The Congestion Question Technical Report, July 2020 (Link)





While there is evidence this approach has started to change the form and shape of the city, significant effort is required to achieve the desired quality compact urban form that delivers benefits to Aucklanders.

Central to this is ensuring growth and higher density development patterns within urban areas are well connected to the public transport network and easily accessible to employment, services, and amenities.

Figure 4.5 Factors of a well-functioning city

Improvements to accessibility, through investment in mass rapid transit will attract investment, support economic productivity and the delivery of additional homes and jobs that Auckland needs, and reduce carbon emissions. In Tāmaki Makaurau, a quality compact urban form will result in:

- **Greater productivity and economic growth** due to greater proximity between businesses, workers, and consumers.
- **Enhanced environmental outcomes** through the concentration of urban activities into fewer receiving areas and opportunities for environmental enhancement.
- **Improved transport outcomes** as more people are brought closer together supported by more frequent and reliable public transport services reducing congestion and GHG emissions.
- **Rural amenity and productivity being maintained** through encouraging growth within existing urban areas.
- **More efficient use of existing infrastructure** as growth within existing urban areas allows for efficient use of existing assets and co-ordinated prioritisation of investment.
- **Greater social and cultural vitality** as walkable neighbourhoods provide for the needs of diverse communities.

The challenge for Tamaki Makaurau Auckland has been to secure the investment that will realise this approach at the pace that is required.



5 Case for Change

5.1 The Investment Logic Map

The Case for Change rests on the project's Investment Logic Map (ILM). The ILM developed to guide the IBC has been refined for this CBC to ensure urban development factors were appropriately incorporated, reflecting the December 2021 Cabinet Paper and Minister Wood's IMS letter to the Chair (7 June 2022).

The project's ILM highlights three interlinked problems in the CC2M corridor, and identifies the benefits of addressing them, setting out three objectives which the CC2M project seeks to achieve

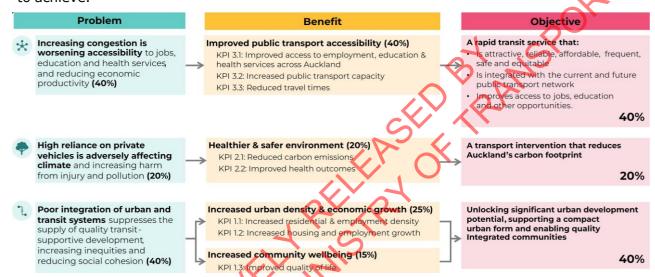


Figure 5.1 Project Investment Logic Map

First, noting an increasing level of congestion in the city, and the associated erosion of access which in turn reduces productivity, the ILM sets the objective of a rapid transit service that can improve public transport accessibility in the city.

Next, the ILM highlights high dependence on private vehicle travel within the city, which is causing environmental and personal harm – and seeks a transport intervention that reduces Tāmaki Makaurau Auckland's carbon footprint.

Finally, identifying a lack of integration between urban development and public transport systems, the ILM calls for an intervention that unlocks urban development potential, supporting a compact urban form and enabling quality, integrated communities.

The problem areas outlined in the ILM above are intrinsically linked. For example, the poor integration of urban and transport systems has not provided transit-supportive development leading to an over reliance on cars. This in turn leads to congestion which impedes access to key services, and to excessive climate emissions.

In effect, the critical problems outlined above are locked into a vicious cycle and are all interdependent with each other in terms of the evidence that supports them, along with the need for change.

The following sections step through each of these problems in turn.



5.2 Increasing congestion is reducing accessibility and productivity



Along the CC2M corridor, as across Tāmaki Makaurau Auckland as a whole, rising traffic levels are leading to serious problems. These include significant congestion, poor journey time reliability, and a consequent lack of accessibility to jobs and opportunities. These problems adversely affect the city's environment and economy.

Since the CC2M corridor will be the focus of substantial growth over the coming decades, existing transport challenges will intensify unless we take action to address them.

5.2.1 Congestion is a serious and growing problem

High levels of car usage in Tāmaki Makaurau Auckland have resulted in significant congestion. Aucklanders currently spend an average of almost 80 hours stuck in congestion each year, with an estimated \$1.3bn impact on the city's economy, and it is estimated that a third of morning peak travel time for those travelling by car is spent in congestion ¹⁵, ¹⁶.

In the CC2M corridor, which acts a primary route into and out of the central city for those in the Central Isthmus and Māngere, congestion is particularly apparent on high volume routes such as the State Highways and on Sandringham and Dominion roads, as well as others which support access to these roads and onward into the central city.

As the population increases, the travel demand in the corridor will increase in turn, notwithstanding trends in home working. For example, the absolute number of trips departing from Māngere/Favona/Māngere Bridge is expected to increase by some 40% over the coming 20 years.

Although forecasts indicate that the relative *share* of trips which are made by car is likely to fall by some 10 percentage points in the years to 2050, in part reflecting expectations of tightening policy settings towards driving (such as changes to car parking and the potential introduction of congestion pricing), the car will remain by far the most used mode of transport, accounting for around 70% of all trips¹⁶.

Given the overall scale of growth in travel anticipated, the absolute increase in car use will therefore be significant, putting further pressure on a road network which is already under strain. As a result, congestion is set to worsen markedly with future growth (see **Figure 5.2** below) ¹⁷.

¹⁵ NZIER (2017), Benefits from Auckland road decongestion (Link)

¹⁶ AA (2018). Auckland congestion report 2018 (Link)

¹⁷ Auckland Forecasting Centre, 2023



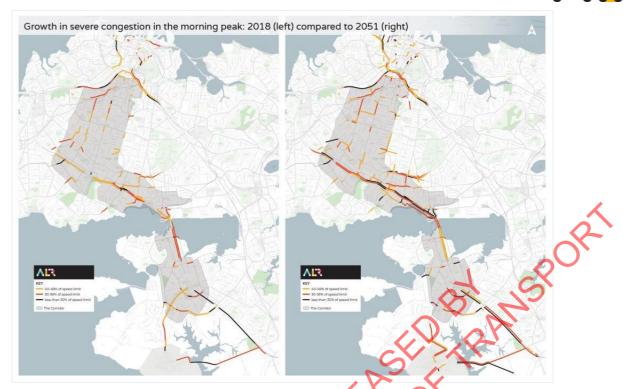


Figure 5.2 Forecast growth in severe congestion along the corridor 2018 v 2051 (do-minimum scenario)

As congestion rises, journey times will increase further. To give two examples, average peak period car journey times from Māngere to the City Centre are forecast to increase from 30 minutes today to 41 minutes by 2051 (an increase in travel time of 36%), while travel times from Māngere to the Airport are forecast to double from 8 minutes to 16 minutes over the same period ¹⁸.

This directly undermines productivity and growth: 33% of businesses responding to Auckland Council's Business Survey in 2019 identified Traffic as a barrier to growth (up from around 10% in the preceding five years) ¹⁹.

The provision of a rapid transit service that operates on dedicated infrastructure away from road congestion, coupled with urban intensification around stations, would substantially mitigate the effects of slow on-road journeys on access and productivity.

5.2.2 Journey time reliability is poor

As well as making journeys slower, congestion also makes journey times less reliable. This variability in travel time means that people must add a 'buffer' time to ensure they arrive at their destination on time, or risk being late. It reduces ease of access to work, education, and community activities – ultimately reducing productivity.

This affects both car travel and the quality and reliability of public transport, a particular issue for this project given that four of the city's six busiest bus routes operate within the central isthmus.

Figure 5.3 shows the variability of travel times between various locations within the CC2M corridor by car and public transport. For most car trips shown, the longest journey times are

^{18 2018} MSM Model (do-minimum scenario)

¹⁹ The Congestion Question Technical Report, July 2020 (Link)



more than double the shortest, while bus journeys (which run to schedules which take account of variable traffic conditions as far as practicable, and in some cases benefit from bus priority) vary by up to around 50% for the journeys shown.



Figure 5.3 Travel times within the corridor (Source: Google Maps)

Giving just one example of the sheer variability of travel times on public transport resulting from congestion, the figure below shows the range of end-to-end travel times by hour of departure on bus route 27H across the month of March 2019.

Travelling between Hillsborough and Britomart, at peak times, the journey time can vary by almost half an hour (in the morning peak the lower bound travel time at 8am was approximately 40 minutes, while the upper bound travel time was approximately 70 minutes)²⁰.



Figure 5.4 Travel time variation along bus route 27H, March 2019²⁰

5.2.3 Accessibility to jobs and opportunities is being undermined

The journey time and journey time reliability issues described above directly erode the city's productivity by reducing access to jobs and opportunities. They also undermine quality of life by making it harder to maintain social connections and undertake leisure activities.

²⁰ AT real time GTFS



Indeed, evidence shows that there is significant transport disadvantage across the city, with many residents finding travel within Tāmaki Makaurau Auckland difficult and expensive ²¹, while a 2016 NZIER report on closing income gaps in South Auckland identified that long commutes are a key constraint to finding work ²².

Public transport is a key means of providing equitable access to opportunities and employment. This is especially true for those with lower household incomes and wealth who may not be able to afford to own or use private transport. Public transport access creates opportunity for all groups in society to contribute to the economy, reduces social exclusion, and fosters equity within society.

It is therefore concerning that 60% of Aucklanders do not live within easy walking distance of a rapid or frequent public transport service²³, and that across the CC2M corridor, accessibility to employment by public transport is both relatively low outside of the central city, and unequally distributed.

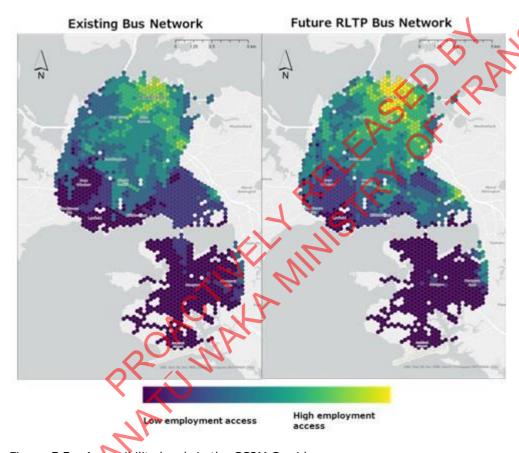


Figure 5.5 Accessibility levels in the CC2M Corridor

A comparison of three different locations within the CC2M corridor highlights the disparity. A person living in Māngere Town Centre can currently access approximately 62,000 jobs within a 45-minute travel time on public transport in morning peak hours. The comparable figure for Onehunga is 123,000. This is significantly lower than someone living within the City Centre, who can currently access approximately 350,000 jobs within the same length of time.

²¹ Ministry of Transport (2020), Equity in Auckland's Transport System (<u>Link</u>)

²² NZIER (2016). Resilient South, a strategy for closing income gaps in South Auckland

²³ Auckland Transport: Summary of draft Regional Public Transport Plan (Link)



While the maps above show that employment access will improve to a degree in some locations as a result of improvements envisaged in the Regional Land Transport Plan (RLTP), there will remain stark differences in public transport accessibility along the CC2M corridor.

Meanwhile, as congestion rises and without a strong public transport alternative, inequalities of access will increase.

Although the public transport improvements proposed in the RLTP offer the potential to improve these accessibility levels in some locations, areas such as Māngere will continue to have much poorer accessibility levels.

Beyond access to employment, the transport network is also vital for connecting people to places of importance to them – for instance, marae, healthcare facilities, and kura and other places of education.

Significant investment in public transport infrastructure within the corridor, along with support for urban intensification around stations, offers the potential to address these imbalances. Good transport connections are shown to result in improved socio-economic wellbeing, as a reliable and accessible transport network can help sustain access to employment and raise household incomes ²⁴.

This would be of benefit both for those in Tāmaki Makaurau Auckland who currently make more use of public transport, and for those who currently make little use of public transport because it is not convenient or suitable for the journeys they wish to make.

Spotlight on: Public Transport Needs for Māori

In 2018, 4,300 trips of 59,000 trips to work by Māori in Tāmaki Makaurau Auckland were made using public transport. 45,000 (76%) were undertaken using private vehicles²⁵.

This in part reflects a lack of public transport provision in areas where large Māori populations live, for example in Manukau, Manurewa, and Henderson.

Māori tend to travel within their local board areas.

When it comes to work-related trips, public transport frequently leads to the city centre, while car trips often end in the Maungakiekie-Tāmaki local board area.

The future importance of feeder services from proposed stations becomes evident, as trips may not align directly with planned transport routes.

The prevalence of private car usage among Māori reflects the challenges posed by inadequate public transport in residential areas, highlighting the need for more suitable transportation solutions.



Figure 5.6 Māori travel to work patterns across all modes

 $^{^{24}}$ Crisp et al (2018) Tackling transport-related barriers to employment in low-income neighbourhoods. Joseph Rowntree Foundation ($\underline{\text{Link}}$)

²⁵ Source: Stats NZ, 2018 Census



5.2.4 Aucklanders' desire for change

Engagement undertaken for the project has highlighted residents' desire for a rapid transit system so that they are well connected to existing transport networks, including trains, buses, and active modes of transport (walking and cycling). The persona below illustrates the complexities Aucklanders currently face and why they are seeking a new approach.



ALR Personas | Cynthia

Cynthia is a young professional living in Mount Roskill who has just graduated from university. She currently finds it hard to access job opportunities that suit her qualifications. She lives in an area which does not have direct public transport access to areas like the city centre where many jobs are located, and she cannot move closer to the city centre as housing is unaffordable.

Some 73% of respondents to the project's most recent consultation (March-April 2023) indicated that they would use rapid transit, and Aucklanders have already shown their propensity to shift to good quality public transport. A prime example is the opening of Britomart Station. Since it was opened in 2003, annual train patronage has risen from 2.5 million to more than 22 million in 2019 (a 780% increase)²⁶. Similarly, following the opening of the Northern Busway in 2008, 40-50% of people who come across the Harbour Bridge use the busway²⁷.

5.3 Poor integration of land use and transport is inefficient and leads to missed opportunities

After nearly two centuries of expansion and a pattern of incoherent infill development over recent decades, Tāmaki Makaurau Auckland's urban form is now highly dispersed, and housing has a been delivered in isolation from public transport and far from employment and amenities.

This leads to several ongoing problems in the CC2M corridor:

- It contributes to the transport problems described above (and the carbon problem described below in Section 5.4) by entrenching car-dependence.
- It increases the cost of infrastructure and development to the public purse, ultimately exacerbating a lack of housing choice.
- It means Tāmaki Makaurau Auckland loses out on potential productivity benefits (see boxed text below).
- It impacts on the liveability of places and affects communities' sense of place, connectedness for individuals, whanau, and communities.
- It fails to support Mana Whenua interests, and gentrification has historically entrenched disadvantage in Tāmaki Makaurau Auckland by disrupting longstanding Māori through displacement driven by rising property values and continuous urban development.

These are serious problems, but Tāmaki Makaurau Auckland is not alone in facing them. And cities worldwide (including London, Dublin, Sydney, Porto, San Francisco, Toronto, and

²⁶ Intelligent Transport (2019) Auckland Records 2019 public transport ridership of over 100m (Link)

²⁷ Greater Auckland (2023) What to do about the Northern Busway (<u>Link</u>)



Vancouver among many others) have shown the effectiveness of integrating the delivery of transport infrastructure with urban interventions to address similar problems.

The twin case studies of the Dublin Luas Cross City light rail project and Tāmaki Makaurau Auckland's Britomart Station precinct provide clear illustrations of how integrated transport and urban intervention can address often long-standing problems.

Dublin Luas Cross City light rail 28



Dublin faced challenges with high levels of traffic congestion. This resulted in lost productivity, loss of inward investment and wider environmental implications.

Investment in light rail provided a muchneeded integrated solution providing a cross-city public transport link, increasing public transport capacity, and offering a more sustainable choice for traveling where previously there was none.

Transport investment was coupled with urban realm improvements successfully enabling urban regeneration, improving access to opportunities, increased retail footfall, and increased land values.

Since the delivery of the project, the centre of Dublin has become denser by increasing intensive development through increasing typical building heights and areas of the city, which were left behind have become active parts of the city.

For example, Heuston, an area within the city has seen a wave of regeneration as a result of the investment.

As a result of improved public transport connectivity there has been a shift of functions from the city centre to Heuston with the establishment of the Dublin Grange Gorman University campus and the role of the station as a cultural neighbourhood acting as an arrival point for commuters and visitors from the suburbs and regions.

Britomart Station



In the early 2000s Auckland's Britomart area was transformed by the opening of the new heavy rail station, which brought commuter rail back into the heart of the city centre. Prior to investment in the station the area had become renowned as being unsafe for pedestrians and was not a desirable location for businesses.

Transport investment was coupled with urban realm improvements, through a development agreement with Cooper and Co, successfully enabling urban regeneration, improving access to employment, increased retail footfall, and increased land values.

Within ten years of the station opening the surrounding precinct was unrecognisable and boasted:

- 25 bars and restaurants
- 31 retail outlets
- \$1.3b economic benefit to Auckland
- \$450m construction costs to date
- 9,210 newly created jobs

The commercial vacancy rate had reversed from one of the highest in the city centre to by far the lowest (1.1% compared to 11.7% for the city centre) and commercial rents were higher than any other city centre precinct.

Today, Britomart is an exemplar of transitoriented development succeeding in transforming an under-utilised part of Auckland's city centre into a vibrant and people focused hub for commercial and leisure activities. Investment in rail provided the initial catalyst and an integrated development opportunity delivered the urban outcome.

²⁸ Worthington and Nicolaou (2019), Parkgate Street: A Focus for Heuston Northern Quarter (Link)



These investments, and the other examples across the world, have proven effective because they support urban density, access, and thereby productivity.

How investment in mass rapid transit drives productivity

Cities have become the 'engines of economic growth', powered by the increasing density of economic activity, known as agglomeration. From an economic perspective, better accessibility in cities through higher capacity transit enables greater urban density, and this leads to higher productivity.

This is why cities with efficient and effective transport systems tend to have higher productivity than those with less well-developed systems. The accessibility improvement created by ALR will act as a catalyst for increased productivity and economic development in Auckland. The scale of the productivity benefit is expected to be significant, and a portion of this will flow to the Crown via additional tax revenue.

5.3.1 Lack of integration makes the CC2M corridor heavily car dependent

Investment in transport infrastructure in Tāmaki Makaurau Auckland has for decades favoured road-based solutions, which has led to a car-oriented network, and in turn to a low-density form, further reinforcing car-dependent travel patterns.

A generally low level of urban density increases the challenge of cost-effectively providing public transport, while the city's several centres of economic gravity increase the challenge, since each requires its own set of radial services into the low-density land uses which surround it.

As a result, public transport provision is relatively low, and mode share is strongly biased towards private transport – indeed, the overwhelming majority of the trips which originate in the City Centre to Māngere corridor are undertaken by private vehicles ²⁹. (In Tāmaki Makaurau Auckland as a whole, the car mode share is 81%, compared to 32% in Melbourne, 59% in Dublin, and 68% in both Vancouver and Toronto.)

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²⁹ 2018 MSM Model (do-minimum scenario)



The significant share of trips which are made by car leads to serious challenges, and the transport problems described in Section 4.2, above, are therefore in part a result of the poor integration of transport infrastructure with the urban form.

Without intervention, despite some more densely populated areas, the forecast growth is likely to result in a fairly even spread of density across the CC2M corridor (see **Figure 5.7**), which does little to support better city outcomes.

The integrated delivery of rapid transit and urban interventions would facilitate quality compact growth in the CC2M corridor, and help to reduce Tāmaki Makaurau Auckland's dependency on private transport.

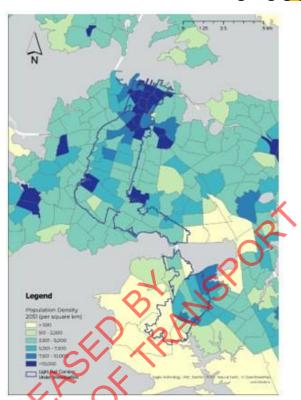


Figure 5.7 | Population Density 2051 Do Minimum Scenario 30

5.3.2 Poor integration reduces housing choice

While very low-density development is becoming less common in Tāmaki Makaurau Auckland, an absence of integrated transport infrastructure nevertheless places a practical limit on how intensively land can be developed.

In the CC2M corridor, where there is no high-capacity transit infrastructure to support clustering, the cost of both implementing and maintaining urban infrastructure is therefore higher than it could be, since economies of scale through co-location of dwellings sharing the same trunk infrastructure cannot be fully capitalised upon.

An extensive literature review on this topic, carried out in 2016 by SGS Economics & Planning for Infrastructure Victoria in Australia, identified a very clear inverse relationship between density and infrastructure costs. It further revealed that infrastructure for greenfield housing typically costs two to four times what it does in infill sites, depending on the capacity of existing infrastructure in infill locations to support additional people³¹.

This dynamic also puts pressure on the finances of government bodies ³². With proactive integrated planning of transport and urban infrastructure, there is scope to optimise investment spend, asset utility, and land regeneration and preservation. Indeed, estimates carried out to support the Economic Case of this CBC indicate that asset owners could save close to \$2 billion through more efficient infrastructure provision through this investment ³³.

³⁰ Source: MSM Do Minimum 2051

³¹ SGS Economics & Planning (2016), Comparative costs of urban development: a literature review (Link)

³² Yan et al (2021), How Does Low-Density Urbanization Reduce the Financial Sustainability of Chinese Cities? A Debt Perspective (<u>Link</u>)

³³ Figures are in July 2022 prices based on analysis undertaken for the CBC.



Housing choice in Tāmaki Makaurau Auckland

Tāmaki Makaurau Auckland has some of the most expensive accommodation, relative to earnings, of any major world city.

Over the last 30 years, the median house sale price for Auckland city has increased from $$164,000 \text{ to } $1,100,000 \text{ (571\% increase, or compound annual growth rate of 6.5\%), and in fact peaked some five years ago at $1,351,000, a 723% increase)³⁴.$

Figure 5.8 outlines the housing affordability index in Tāmaki Makaurau relative to Aotearoa New Zealand. The ratio of average house prices to average incomes in the city has been between 8:1 and 10:1 since 2016.

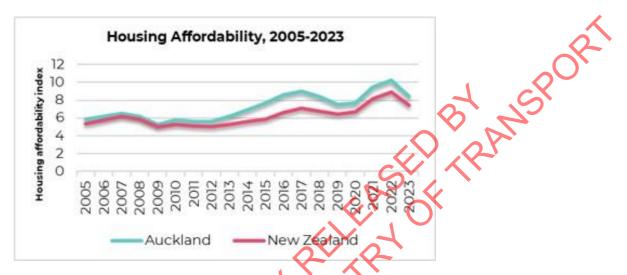


Figure 5.8 Housing Affordability 2005-2023

According to the Demographia International Housing Affordability Report ³⁶, in 2022 Tāmaki Makaurau Auckland ranked 88th in housing affordability out of 94 city markets, making it the 7th least affordable city of those assessed. Since so many New Zealanders live in Tāmaki Makaurau Auckland, this means that affordable housing is far out of reach for a significant proportion of the country. Indeed, housing unaffordability been identified as the primary reason for people moving, or considering moving, out of the city ³⁷.

In Tāmaki Makaurau Auckland, this is exacerbated by a lack of choice in housing typologies, dwelling sizes, and tenures. This impacts the availability of housing which meets the needs of current and future communities across the CC2M corridor. Providing a mix of housing solutions, including the right type, size, and tenure of housing in the right place for is particularly critical to improving housing outcomes for Mana Whenua and Māori.

Housing affordability is a particular issue for Māori within the corridor. There is a higher proportion of renters in the corridor despite there being a generally higher earning demographic.

Better integration between the city's urban and transport systems, facilitated by rapid transit and targeted urban investment in the CC2M corridor, would begin to directly address these issues. Any increase in housing supply needs to provide a mix of housing solutions and reflect Māori and Mana Whenua aspirations for where and how they want to live.

³⁶ Demographia (2023 edition), International Housing Affordability (<u>Link</u>)

³⁴ REINZ House Price Index for Auckland City, September 1993 – September 2023 (<u>Link</u>)

³⁵ Infometrics (2023) Housing Affordability 2005-2023 (Link)

³⁷ Radio New Zealand (2022). "Thousands leave Auckland for other New Zealand Centres amid Covid-19" (Link)



5.3.3 Tāmaki Makaurau Auckland is missing out on productivity benefits

A lack of integration between transport and land use planning also means that potential productivity benefits are missed. This is because lower densities and limited transport links make it harder for people to access jobs, and more difficult for businesses to connect and source labour.

As noted above in Section 4.3, the CC2M corridor is the location of employment hubs of both city- and national-scale significance. But the absence of integrated transport connections supporting access means they cannot achieve their full potential.

Knowledge-based sectors have contributed the most to the city's GDP growth over recent years, with the rate of growth increasing from 1.3% year-on-year in 2008 to 4% year-on-year in 2022⁶. In particular, the technology sub-sector has shown steady growth in its contribution to Tāmaki Makaurau Auckland's GDP, increasing from 9.7% in 2012 to 15.6% in 2022⁶.

The growing importance of knowledge-based industries in the economy of Tamaki Makaurau Auckland is of particular relevance to this project because these sectors tend to benefit more than most from co-location and ready access to skilled labour. They are also particularly exposed to systemic economic risks which arise ultimately from the city's historic patterns of growth.

As the city centre and wider employment clusters within the C2M corridor continue to grow in importance, the importance of connections with the labour pool across Tāmaki Makaurau Auckland will grow in turn.

A rapid transit connection supported by targeted urban investment would support the creation of valuable connections through the supply chain, and make it easier to connect skilled workers to high-value jobs.

5.3.4 Impact of Tāmak Makaurau Auckland's historic development patterns on Mana Whenua and Māori

Mana Whenua have established and maintained enduring relationships and connections that reinforce the significance of place in Tāmaki Makaurau Auckland. These include the Manukau Harbour, moana (sea), whenua (land), maunga (mountains), waterways, and wāhi tapu (significant sites).

In submissions to the Auckland Plan 2050 Future Development Strategy 2023-2053³⁸, Mana Whenua highlighted the following outcomes from development that are relevant to the ALR project:

- Recognise the compounding impact on Mana Whenua,
- All development should enable Mana Whenua and broader Māori wellbeing, whether greenfield or brownfield,
- Support the environmental focus, however the kaitiaki role of Mana Whenua should be further enhanced and strengthened, and See email for context.
- Actively provide for and protect the rights of Mana Whenua, including development rights

The ongoing development of whenua in the way that Tāmaki Makaurau Auckland has historically grown, and the ongoing support of land-intensive styles of living, has the potential to have a detrimental impact on the Mauri (life-force, life-sustaining capacity) of the

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³⁸ Auckland Council Future Development Strategy 2023-2053 (Link)



natural environment and the expression of kaitiakitanga. Patterns of growth over the past century have also often entailed the displacement of Māori people.

A holistic view of development is needed to support Mana Whenua and broader Māori wellbeing, and to allow Mana Whenua values to endure. The project offers an opportunity to address these issues in partnership with Mana Whenua.

5.3.5 Poor integration entrenches disadvantage

The lack of integration between urban development and transport access also undermines efforts to address inequality and disadvantage.

There are acute disparities along the CC2M corridor. As shown in **Figure 5.9**, below, areas located in the west and south of the corridor appear higher in the New Zealand Socio-Economic Distribution Index (NZSEI) than areas to the east and north. The NZSEI takes into account factors including housing tenure, car ownership, life satisfaction and deprivation.

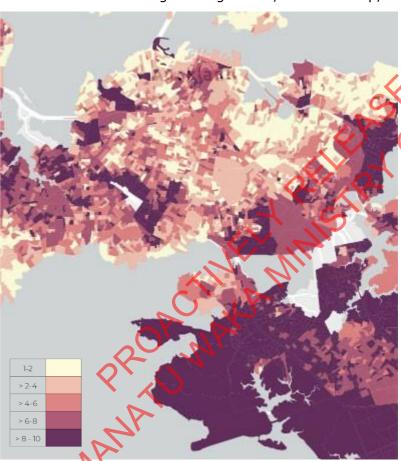


Figure 5.9 Socio-economic distribution index (2018)³⁹

The correlation between these areas and those which have poorer public transport access to employment (as shown in Section 5.2.3) makes clear that the transport system is doing little to address disadvantage by providing access to jobs, opportunities, and amenities.

Such disparities can deeply affect local productivity and local economic opportunity and spend.

A lack of access to transport infrastructure can be particularly problematic for people (such as parents of young children or those working shifts such as nurses, midwives, and social

³⁹ 2018 New Zealand Index of Multiple Deprivation and 2018 Census



care workers) whose travel needs are complex. The persona below provides an illustration of this issue:



ALR Personas | Emma

Emma's family has access to one car. Her partner uses the car to get to work and so Emma relies on lifts from friends and family to get around. Relying on lifts from others makes Emma feel limited in where she can go.

Emma wishes that she could get out to the family business in Mangere and be able to drop her children to school without relying on others or using a car. Frequent, fast, and reliable services on the ALR CC2M allows Emma to carry out multiple trips between her home and the family business without fear of delay.

By improving the range of housing choice within ready access to the jobs and opportunities along the CC2M corridor, rapid transit and accompanying investment in urban development would help to address the systematic spatial inequities that are seen today.

The environmental costs of the current path are considerable



Tāmaki Makaurau Auckland's transport and settlement patterns also lead to significant environmental costs. The city's carbon footprint is higher than it could be, its transport network is highly susceptible to disruption from climate-related weather events, human health suffers in myriad ways, and land is used for development that could be put to better use.

5.4.1 Carbon emissions and climate change

Climate change is the defining intergenerational challenge of our era. Auckland Council has declared a climate emergency and set a target to reduce the city's transport emissions by 64% from a 2016 baseline by 2030. Meeting this target requires action across both government and the private sector.

Reflecting the city's reliance upon road transport, 43.6% of Tāmaki Makaurau's total emissions were generated from transport, 86% of this deriving from road transport 40

As a result, transport contributes almost half of the city's caron footprint, threatening our pathway to Net Zero by 2050.

The share of Tāmaki Makaurau Auckland's carbon emissions generated by transport is higher than many comparator cities, as shown in Figure 5.10



Figure 5.10 Transport carbon emissions across global cities 41.

The next generation of Aucklanders will be left with an unsolvable climate challenge if steps are not taken to help meet transport emission targets.

⁴⁰ Te Tāruke-ā-Tāwhiri – Auckland's Climate Plan, Auckland's greenhouse gas emissions (GHG) profile (Link)

⁴¹ Various sources: Auckland (<u>Link</u>), San Fransisco (<u>Link</u>), Stockholm (<u>Link</u>), Vancouver (<u>Link</u>), Toronto (<u>Link</u>), Copenhagen (<u>Link</u>), Dublin (<u>Link</u>), Melbourne (<u>Link</u>)



The level of growth expected in the city means we cannot rely on the take up of electric vehicles (EVs) to ensure Tāmaki Makaurau Auckland reaches its target. Auckland Council's Transport Emissions Reduction Pathway indicates that current policies, trends in EV uptake, and planned investments are projected to reduce transport emissions by only about a tenth of what is needed by 2030 42.

Fundamentally, Tāmaki Makaurau Auckland needs to transition away from energy-intensive private vehicle travel to more sustainable travel patterns, and adopt more energy-efficient, compact urban forms.



ALR Personas | Tom

Tom is a vocational training student. He already sees the impact of climate change around him, and is concerned for a future without significant action to limit negative impacts.

"My generation is really invested in cleaning up the air and avoiding envissions."

More compact urban forms enable people to access goods and services closer to where they live. They enable more trips to be made via sustainable modes and limit the levels of vehicular movement, in turn reducing carbon emissions. There is also a link to the housing typologies that have traditionally been developed, with higher density housing having lower emissions impacts (resulting in fewer embodied and lifetime emissions than standalone buildings).

Unless Tāmaki Makaurau Auckland makes a decisive shift towards a more integrated development between transport and urban development, the excessive carbon cost of both types of infrastructure will continue to hinder its progress towards net zero.

⁴² Auckland Council (2022)Transport Emissions Reduction Pathway (Link)

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5.4.2 Climate resilience

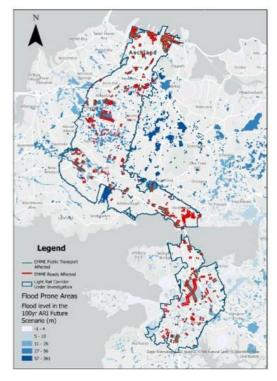


Figure 5.11 Flood prone areas within the ALR CC2M corridor 43

Even now, the effects of climate change are apparent in Tāmaki Makaurau Auckland, and are posing direct threats to the transport system, businesses, and homes.

Extreme weather events leading to road closures are becoming more common, revealing a serious lack of resilience in the transport network within the CC2M corridor, with flooding affecting up to 9.37% of the road network and up to 6.7% of the public transport network as shown in **Figure 5.11**.

While this challenge is not explicitly defined within the ILM, it is a critical issue whose urgency has only been heightened since the development and approval of the updated ILM, during a period in which Tamaki Makaurau Auckland has experienced numerous extreme weather events.

The most recent events, in early 2023, caused a significant amount of damage to the city's infrastructure and paralysed the road network.

Tāmaki Makaurau Auckland's dependence on road-based transport makes this a critical risk to the functioning of the city.

Without a strong backbone of resilient transport infrastructure, the increasing frequency of extreme weather poses direct danger to the mobility of Aucklanders and those in the CC2M corridor in particular. A modern rapid transit system, deliberately designed to withstand weather events, would enhance resilience to extreme weather through minimising service disruption and damage.

5.4.3 Human health (injuries, air quality, noise)

As well as generating excessive carbon emissions, Tāmaki Makaurau Auckland's dependence on car travel leads to systematic impacts on human health.

The most direct impact comes in the form of traffic-related injuries and deaths. Auckland Transport's Vision Zero strategy sets out the aim of eliminating transport-related deaths and serious injuries by 2050.

 $^{^{43}}$ MSM 2018 Do Minimum Scenario, based on the potential 100-year ARI flood impact on the Do Minimum road and public transport network 2051



Underscoring the scale of this challenge, between 2018 – 2023 in the CC2M corridor alone, there were:

- 11 fatal crashes
- 253 serious injury crashes
- 1,465 minor injury crashes⁴⁴

Research has shown that children living in areas of historical underinvestment have a higher injury rate from private vehicle crashes 45.

Vision Zero identifies Māori as having the highest rates of death and serious injury from traffic accidents across Tāmaki Makaurau Auckland as a whole. It also indicates that the crash rate is higher for Māori and Pasifika children.

Vehicle use also causes less visible, longer-term health impacts. Heavy car use in the CC2M corridor results in air quality impacts that affect health and wellbeing, increasing the risk of illnesses such as lung cancer, heart disease, and acute respiratory infections ⁴⁶.

Exhaust chemicals and fine particulates from tyre and break wear mean that the busiest roadways exhibit high concentrations of harmful airborne pollutants. **Figure 5.12** shows that a large proportion of roads in the corridor have high levels of carbon monoxide road emissions.



Figure 5.12 Estimated carbon monoxide road emissions 47

Again, these impacts often fall most heavily on the most vulnerable. Children, those with long-term illnesses, and elderly people are at the greatest risk from airborne pollution, a particularly serious concern given the concentration of education facilities, health care facilities, and retirement homes along roads in the CC2M corridor.

Environmental Health Intelligence New Zealand's HAPINZ 3.0 study reported that in 2016, across New Zealand as a whole, human-made air pollution resulted in 3,317 premature deaths in people aged over 30 years, with around a third of these occurring in Tāmaki Makaurau Auckland. It identifies motor vehicles as the largest contributor to air pollution, leading to 2,247 premature deaths across Aotearoa New Zealand.

The social costs of air pollution from motor vehicles to the Aotearoa New Zealand economy were estimated at \$10.5bn in 2016. These impacts are rising – HAPINZ 3.0 records a 10% increase in premature death associated with air pollution between 2006 and 2016 ⁴⁸.

⁴⁴ CAS data consisting entire NZ by Waka Kotahi Transport Agency

⁴⁵ University College London (2022) The inequalities of road traffic injury (<u>Link</u>)

⁴⁶ UN Environment Programme (2018), Young and old, air pollution affects the most vulnerable (<u>Link</u>)

⁴⁷ Waka Kotahi GIS Vehicle Emission Tool

⁴⁸ HAPINZ 3.0 (2022) Key Findings (Link)



Traffic noise also negatively affects health, especially in priority groups. Children are more susceptible to changes in road noise⁴⁹, and children who live near noisy airports and streets have been found to suffer from stress and other problems such as impaired memory, reduced attention levels, and lower reading skill attainment. Without a shift away from cardependency, these impacts will only increase with growth.

Finally, the city's dependence on car travel undermines physical activity levels. Studies have repeatedly shown correlations between public transport use and physical activity levels, with benefits to health outcomes. For example, one recent Australian study found that public transport accessibility was positively correlated with walking at recommended levels (including for those people who were not actively exercising) ⁵⁰.

Integrated investment will enable a shift in travel patterns and urban realm improvements which will improve conditions for all groups within the community. Overall, the investment will enable a more sustainable future for the city, reducing the impact its residents have on the environment and improving outcomes for those who live in Tāmaki Makaurau Auckland.

5.4.4 Wider impacts of Land Use Change

ENANA

Historic patterns of disjointed growth, and the lack of integration between transport and urban interventions, have inevitably led to loss of greenfield land, resulting in reduced environmental amenity and irreversible environmental impacts.

Recent development patterns have also led to the loss of Tāmaki Makaurau Auckland's highly productive soils ⁵¹. As a nationally important growing region, protecting high value soils in Tāmaki Makaurau Auckland is critical for maintaining New Zealand's food security. With the introduction of the National Policy Statement on Highly Productive Land, Auckland Council now has statutory backing to better protect elite and prime land from urbanisation, rural lifestyle development and other inappropriate land uses.

A step-change in integrated land use and public transport planning, leading to a more compact, high quality urban form, would reduce the further loss of Tāmaki Makaurau Auckland's precious natural assets.

This is reflected in the FDS which provides for most growth in the existing urban area, less and slower growth in future urban areas (greenfield) and limited growth in rural areas. This approach provides housing and lifestyle choice while protecting natural assets, responding to climate change, particularly flooding hazards, and avoiding development in places without the necessary infrastructure and services.

⁴⁹ Stansfeld et al (2005), Aircraft and road traffic noise and children's cognition and health: a cross-national study (Link)

⁵⁰ Barr, A., Rebecca B., Julie A. S., Jan S., Neville O., David D., Lukar T., Lauren K., and Anne K. (2016), Associations of public transport accessibility with walking, obesity, metabolic syndrome, and diabetes. Journal of Transport & Health, Volume 3, Issue 2

 $^{^{51}}$ Parliamentary Commissioner for the Environment (2023) Aotearoa's cities are losing their leaves ($\underline{\text{Link}}$)



6 Why this investment is needed now

Tāmaki Makaurau Auckland is at a critical crossroads. For the city to function effectively as a globally competitive city, which draws inward investment and attracts, retains, and nurtures talent, critical investment decisions must be made.

The immediate and growing challenges facing the city impact all of areas of life – from access to opportunities, to where and how people live, to the quality of the natural environment. If these challenges are not addressed their impacts jeopardise both Tāmaki Makaurau Auckland's success and the nation's performance.

Tāmaki Makaurau Auckland is also looking ahead to decades of substantial growth. Now is the time to decide if we continue on a reactive pathway, which will exacerbate the challenges facing the city, or take a proactive course – alleviating these challenges and creating opportunities for investment.

For Tāmaki Makaurau Auckland, its people, and te taiao to thrive, the city needs a proactive and integrated approach to transport and urban investment, in which the exercise of kaitiakitanga by Mana Whenua is supported.

Only a conscious step-change in the urban and transport ambition will support the future that Tāmaki Makaurau Auckland deserves, and ensure the city is able to thrive on the international stage.

6.1.1 Tāmaki Makaurau Auckland's global competitiveness will fall

As described in Section 3, above, Tāmaki Makaurau Auckland is unquestionably Aotearoa New Zealand's preeminent city economy. It therefore exists in a globally connected world, in which competition for inward investment between individual cities is fierce.

In *The State of the City* ⁵², a 2023 report co-produced by the Committee for Auckland, Deloitte, and Tātaki Auckland Unlimited, the city is compared with a selection of global peers – including Austin (USA), Brisbane (Australia), Copenhagen (Denmark), Dublin (Ireland), Fukuoka (Japan), Helsinki (Finland), Portland (USA), Tel Aviv (Israel), and Vancouver (Canada) – selected for their broadly comparable size, location, as well as their reputation for liveability.

The report highlights an intensifying competition for talent, investment, and visitors, particularly in the aftermath of the Covid-19 pandemic. It notes that global talent, in particular, demands ever-better amenities, a secure work-life balance, and exceptional experiences, while the importance of decarbonising and mending social divisions is increasingly prominent.

Assessing Tāmaki Makaurau Auckland's performance relative to its peers, the report identifies a clear connectivity deficit and housing affordability concerns as key issues – which in turn pose real risks to a prosperous future for the city because of the way that they tend to undermine the liveability, efficiency, and amenity that in turn attract footloose global investment and talent. It summarises Tāmaki Makaurau Auckland's performance relative to its peers in the diagram below.

⁵² Deloitte State of the City Report (2023), Benchmarking Tāmaki Makaurau Auckland's international performance (Link)



The key areas in which Tāmaki Makaurau Auckland lags its peers are in the Connectivity, Opportunity, Innovation, and Knowledge domains, highlighting the importance of strong connectivity to overall city performance.

The evidence is clear that Tāmaki Makaurau Auckland's place on the world stage is threatened by a lack of public transport infrastructure.

Congestion already costs the economy \$1.3bn a year, putting the city on the back foot in the global competition for talent and inward investment. Without any intervention, the cost of congestion to the economy would increase from \$1.3 billion to about \$1.9 billion per annum by 2051.



Figure 6.1 Comparison of city metrics, State of the City report

These issues are already affecting the city's liveability, making it less attractive for highly skilled young people.

As outlined in the figure above, Tāmaki Makaurau Auckland is one of the lowest ranked cities for students compared to its peers ⁵³. In recent years, Tāmaki Makaurau Auckland has suffered a widely reported 'brain drain', which has seen the city struggle to retain talent which has migrated to other global cities due to unaffordable housing and lower incomes. The city is losing highly skilled workers, especially young people aged from 20 to 29, whose numbers have fallen by nearly 22,000 (a 3.2% drop) across the country ⁵⁴.

When compared to its peers, Tamaki Makaurau Auckland also ranks below other comparator cities particularly in terms of connectivity. Auckland's share of private car use is 20% higher than the average among peers (~80% vs 63% peer average) refelecting the issues of poor public transport access and choice 55.

Property within the city is as expensive, if not more expensive than comparator cities, with a property price to income ratio of 10.7, higher than half of its peers ⁵⁶.

Over time, these challenges could also come to impact on other areas where the city currently ranks above its peers. To remain a competitive city and secure a high quality of life for residents, action is therefore required now.

Tāmaki Makaurau Auckland is not alone in facing transport and urban challenges as it grows, but it spends less than most of its peers on transport to address them, despite having an above average projected annual population growth (see **Figure 6.2**).

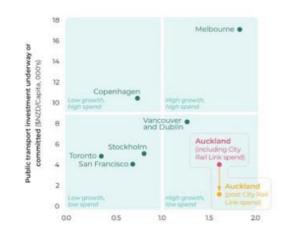


Figure 6.2 PT investment compared to population growth

⁵³ QS (2023) Best Student Cities (Link)

⁵⁴ Infometrics (2022), Brain drain hits the regions differently (Link)

⁵⁵ Deloitte (2020) City Mobility Index Auckland (Link)

⁵⁶ Numbeo (2023), Property Prices Index by City (Link)



6.1.2 Why rapid transit is needed now

The evidence set out in this Strategic Case shows that we are now at the point where a new approach is needed. The current approach has led to severe congestion which is eroding access to jobs and opportunities, a disconnect between urban and transport systems, and excessive environmental impacts.

These problems are already undermining the city's competitiveness, and with a significant level of growth expected in the coming decades, there is a need for a new model of growth.

Underpinned by a decisive investment in rapid transit, which can support a shift to the quality compact form the city needs, harnessing good growth for the benefit of Tāmaki Makaurau Auckland's future.

There are already substantial delays on the roads in the corridor, and bus patronage is already close to the limit of capacity.

Without action, these problems will only worsen with time. Analysis indicates that the growing CC2M corridor is likely to generate demand for upwards of 10,000 public transport trips per hour into the central city in the morning peak by 2050 in the base case, reflecting absolute increases in population and anticipated future policy settings such as the introduction of congestion pricing. With the growth in demand, transport delays per person per year would increase by 37.5 hours.

Baseline demand for buses is forecast to increase by 161% to 160 million annual journeys by 2051 (a Compound Annual Growth Rate of 2.95%), but the number of bus vehicles entering the City Centre in the AM Peak is only forecast to increase by 24% over the same time period (a Compound Annual Growth Rate of 0.65%) ⁵⁷.

To serve this demand with buses alone would require in the order of three buses every minute in just one direction. It is clear that the limited capacity on roads, especially in the city centre, would make such an increase extremely challenging to deliver.

The 2012 Auckland City Centre Future Access Study ⁵⁸ identified the fundamental inability of the road network to accommodate bus demand – with physical constraints being the limitation (i.e. it is not simply a matter of operating more buses on existing roads as there is currently not enough space to accommodate them).

More recently, the 2021 City Centre Bus Plan⁵⁹ identifies that despite increasing patronage in recent years, space for buses has decreased as a result of the introduction of new public realm and active travel infrastructure.

Future increases in patronage resulting from population growth cannot be sustained by bus improvements alone.

A step-change in public transport provision is required

The transport needs of the CC2M corridor can only be facilitated by a high-capacity mass-transit solution. A lower-capacity solution would have lower initial costs but would only meet around half of the corridor's transport demand and offer significantly lower journey times, making it a less attractive alternative travel mode.

It would therefore inevitably require further similar investments in the future as demand increases and capacity is reached.

⁵⁷ LUTI transport modelling for ALR, informed by Auckland Macro Strategic Model (MSM)

⁵⁸ Auckland Transport (2012), City Centre Future Access Study (CCFAS)

⁵⁹ Auckland Transport (2021), City Centre Bus Plan (Link)



A larger, one-off investment is required to fully meet the transport demand within the CC2M corridor. A fully-separated mass rapid transit system will provide a faster and more reliable option compared to existing public transport or peak hour car travel.

It will generate the required shift to public transport to relieve the already pressured road network and create more sustainable travel patterns across the city.

In order to build resilience into the city's network, investment into a separated rapid transit link will provide the additional capacity to enable Tāmaki Makaurau Auckland to reach its true potential. It will enable much-needed densification that the city is currently lacking and unlock a greater level of housing choice improving access to more affordable housing, a critical challenge that Aucklanders are currently facing.

A step-change in urban ambition

Urban development too would be best supported by a high-capacity mass-transit solution. While a lower capacity connection could support some intensification, up to around 48,000 new homes in the corridor, a high-capacity metro service with supporting urban intervention could support up to some 75,000 new homes.

The implementation of a lower capacity system would greatly reduce the ability for further intensification within the corridor, since once a certain level of development has taken place, it is highly unlikely that further, more intensive, development can be accommodated on land that has already been developed, given the likely cost and disbenefits of rebuilding.

This project provides the city with the opportunity to make a decisive step towards quality compact urban growth.

The role of rapid transit on the CC2M in unlocking the wider Rapid Transit Network

Beyond its role in meeting the needs of the CC2M corridor, a separated system has an important part to play in unlocking a fully-integrated rapid transit network for the city.

As the best opportunity to remove buses from the city centre without reducing access, a rapid transit system in the CC2M corridor is a critical enabler of the Northern and Northwestern busway projects, which are otherwise likely to be constrained by bus capacity in the central city.



Already, space for buses in the city centre is almost fully utilised. With background growth across the city, there is not enough room for the new buses that will be needed for these projects. With many its users coming from buses, a CC2M metro rapid transit line would take 100+ buses out of the city centre in the AM peak (2051). This allows the implementation of the Northwestern and Northern Busway projects.

A lower-capacity investment would be at risk of being a standalone system separate from the wider network, and could make the North Shore and Northwest busway projects more challenging by taking up additional road space in the central city.

In the longer term, with possible upgrades, the implementation of the CC2M rapid transit system would allow delivery of a 3-line integrated light metro system with connections through to the North Shore and Northwest.

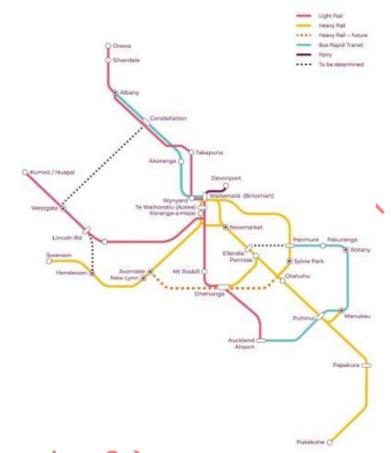


Figure 6.3 Wider Rapid Transit Network

6.1.3 Why incremental urban investment now will compound the benefits of rapid transit investment

Beyond its immediate transport benefits, by increasing the accessibility and hence value of land in the CC2M corridor, the implementation of a mass rapid transit solution would directly support the delivery of new homes and jobs and reduce carbon emissions.

These benefits would be amplified and accelerated by interventions to facilitate additional urban development. By bringing forward growth supported by rapid transit this incremental investment would allow these benefits to be captured sooner, meaning that a greater overall benefit is accrued over time.

Since one of the key aims of the project is to reduce Tāmaki Makaurau Auckland's carbon footprint, the sooner these benefits are harnessed, the better placed the city will be to meet its Net Zero target.



Other benefits of urban investment include:

- Supporting a quality compact urban form by directing growth into the corridor.
- Efficient and equitable investment in infrastructure through coordinated infrastructure planning.
- Greater housing and lifestyle choice which better meets the needs of current and future communities.
- Improved quality of life, community vibrancy and social cohesion.
- Attract private capital and deliver a social return on investment through improved economic performance and opportunity.

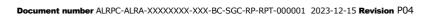
6.1.4 The cost of this vital investment will only increase

The challenges of the CC2M corridor will only intensify as its population increases, and investment will inevitably be needed to resolve them.

The most cost-effective opportunity to deal with them is now. Delaying this essential spend will lead to the costs of investment rising, as underlying costs steadily rise. Indeed, analysis of infrastructure cost inflation over recent years suggests that this cost could exceed \$300m for each year it is deferred.

Implementation costs are only one part of this story. Any delay to investment would also result in a growing opportunity cost, as the benefits that would have been generated by the elor a be in the internal second and internal project would not be realised. Analysis developed for the Economic Case of this CBC suggests that this opportunity cost could be in the order of \$750m each year.

The time is now to shape a better Tāmaki Makaurau Auckland.





7 The benefits and opportunities of addressing these problems

A rapid transit solution in the CC2M corridor would directly address each of the problems described above – and with the additional implementation of urban interventions the outcomes will be amplified and accelerated.

The potential benefits are immense. The table below shows how the CC2M project would deliver the benefits sought by the project's Investment Logic Map.

This project will	Ву
Improve access to employment, education & health services across Auckland (KPI 3.1)	 Providing an attractive, reliable, affordable, frequent, safe, and equitable transport option Integrating with the current and future public transport network Improving customers' experience on public transport Making public transport more attractive and accessible, further helping to attract people out of private vehicles and increasing uptake of public transport. Through the project Māori will experience improved accessibility to schools, health providers, and marae. This is most significant in the Isthmus which is home to many schools and four marae. There also are some accessibility benefits for Māori in Māngere where four marae are currently situated, together with two near the airport. Creating opportunities for mixed-use developments which put jobs, amenities, and opportunities within easy reach of residents.
Increase public transport capacity (KPI 3.2)	 Expanding rapid transit capacity along the CC2M corridor Creating a much larger and better integrated rapid transit network that serves the whole of the city. Connecting with the existing heavy rail network, with buses and active modes of transport, and with proposed future rapid transit corridors. Ensuring effective interchange with City Rail Link (CRL), maximising the benefit of that investment. Supporting the provision of transport improvements for the North Shore and Northwest, as well as opening up access for users of the Airport to Botany link
Reduce travel times (KPI 3.3)	 Providing a high-speed alternative to congested bus and car journeys Operating a reliable and frequent service that minimises wait times Reducing congestion and freeing up road space for trips which cannot be made by public transport, including freight Co-locating development and transit to reduce journey distances and access times to public transport nodes
Increase residential and employment density (KPI 1.1)	 Supporting intensification of commercial and other land uses in the corridor and the critical employment hubs at each end. Improving accessibility and moving large numbers of people into key employment hubs, free from congestion Supporting agglomeration, which drives productivity and is the rock upon which city growth sits.
Increase housing and employment growth	 Enabling the development of new housing a greater range of housing choice, alongside new employment opportunities.



(KPI 1.2)	 Supporting 38,000 additional homes and 120,000-125,000 new and more productive jobs with improved amenity and placebased outcomes. This includes benefits for Mana Whenua and Māori through enhanced employment activities through procurement, partnerships, and upskilling opportunities for Pakihi Māori. There is a substantial opportunity to meet the expectations of Te Rautaki Māori by partnering with Mana Whenua and Māori to provide investment and commercial opportunities resulting from the project. There is also the opportunity to leverage off the ALR project to grow Te Ōhanga Māori and contribute to the creation of wealth and intergenerational prosperity for Māori while making a positive contribution to the wider Aotearoa New Zealand economy. The correlation between employment and Pakihi Māori data indicates that Māori in professional roles and businesses stand to benefit the most from investing in rapid transit along the CC2M Corridor. While there are fewer Pakihi Māori and businesses in the south, the planned Airport Precinct developments, combined with transit investments, could foster increased participation in these areas.
Improve quality of life	- Delivering better urban outcomes, with access to amenities, services and opportunities and enhanced social and cultural
(KPI 1.3)	 vitality. Reducing inequities of transport access Improving housing choice for Mana Whenua and Māori through enhanced access to a mix of housing solutions which reflect Māori and Mana Whenua aspirations for where and how they want to live. Improving the environment and reducing the frustrations of congestion and unreliable journeys Bringing benefits for Mana Whenua particularly through respecting kaitiakitanga over te taiao and preserving cultural heritage, Incorporating Māori culture and language into the project design and development.
Reduce carbon emissions	- Enabling more compact urban development and reducing
(KPI 2.1)	associated carbon intensive development Allowing people to live closer to jobs, amenities, and opportunities, reducing their need to use private car to travel. Reducing the city's heavy reliance on cars and thus helping to reduce air pollution and greenhouse gas emissions. Improving the resilience of the transport network, which is critically important as the city continues to feel the impacts of climate change (e.g., extreme weather events).
Improve health outcomes	- Encouraging more walking and cycling, because more people will

These benefits are profound, and deeply interconnected. Rapid transit and integrated urban development in the CC2M corridor will support Tāmaki Makaurau Auckland's progress towards quality compact growth which benefits the city's residents, its environment, and its ability to attract talent and investment which supports the economy of Aotearoa New Zealand as a whole.

walk or cycle to and from stops/stations.

around the corridor will reduce,

Improving air quality

Reducing peoples' dependence on private vehicles, VKT in and

Reducing harm from road danger, air pollution, and noise



Appendix A Governance, constraints, dependencies, and risks

Governance Roles

Role	Responsibility
Crown	The Crown is responsible for changes to the project scope, the governance arrangements for the programme, the final delivery arrangements, and the final investment decision.
	The Crown is represented by its shareholding Ministers, the Ministers of Transport, Finance and Housing.
Sponsors	At the core of the governance arrangements is the partnership between the Crown, the Auckland Council and mana whenua (known as the ALR Sponsors) to provide governance for the wider programme. This arrangement recognises the significant role each Sponsor has in advancing the project and realising the wider benefits of the ALR programme.
	In addition to the Crown Sponsors, the Ministers of Transport, Finance and Housing, there are two Council sponsors (currently the Mayor and Councillor Darby) and there are three mana whenua Sponsor representatives, Paul Majurey, Ngarimu Blair and Karen Wilson.
	Specific sponsor responsibilities include:
PRO	Crown through a national framework for the approach to planning, funding and delivery of rapid transit (including integration of planning for transport and land use).
KE N.	Sponsors have retained decision rights over changes to the programme, the approach to land acquisitions, progressing early capital works, the parameters for growth and/ or urban intensification, preferred station location and route alignment decisions and the lodgement of statutory approvals.
Sponsors Representatives Forum	The governance arrangements also include the Sponsors Representatives' Forum, which provides a platform for Sponsor agencies to coordinate advice and test recommendations on DPP workstreams prior to seeking decisions from Sponsors. The Sponsors Representatives' Forum consists of senior officials from:



Role	Responsibility
	the Ministry of Transport, the Ministry of Housing and Urban Development; the Treasury; Auckland Council and Auckland Transport.
	Their role is to:
	 provide oversight of the integrated work programme, which is delivered by Crown agencies, Auckland Council and ALR Ltd. have overall responsibility for the policy work programme, leading policy workstreams, ensuring integration with wider government and consulting with other agencies including ALR Ltd, and seeking decisions from Sponsors monitor of ALR Ltd (Ministry of Transport is the lead agency) Item 2 provide second line advice to Sponsoring Ministers when reports and advice are presented to Ministers from ALR Ltd. This is to ensure alignment with the Sponsors' project expectations and wider government priorities.
ALR Ltd	Auckland Light Rail is a Crown entity company named under Schedule 2 of the Crown Entities Act. It is responsible and accountable to the sponsors for advancing the project through the detailed planning phase, including associated planning advice and activities required to develop a business case to enable the Crown to make a final investment decision in relation to ALR in mid-2024.
	ALR Ltd's board comprises 7 independent directors, appointed by shareholding Ministers, to provide governance at the project-level. This Board has been populated with individuals that bring the broad range of skills necessary to guide the planning of the project, with a view to delivery as well.
op.C	The board sets the strategic direction for ALR Ltd's Senior Leadership Team. These are further informed by the Product Owners – Auckland Council and Auckland Transport, and their respective Planning Committee and Board.
, ,	A Project Planning and Funding Agreement is in place between ALR Ltd, Auckland Council and the Crown. This sets out:
TE MAN	 The roles and responsibilities of the Crown, Sponsors (being in addition to the Crown, Auckland Council and Mana Whenua (collectively known as the Sponsors and defined as such in the Project Planning and Funding Agreement)) and the Company; Assurance and monitoring arrangements in relation to the Project;
	 The terms under which the Crown will provide funding to the Company; and The key objectives and other terms and conditions on which the Company is appointed to advance the Project through the detailed planning phase.
ALR Alliance	The day-to-day delivery of ALR Ltd's key priority areas and technical workstreams is supported by an alliance of consultants,



Role	Responsibility
	primarily Aurecon and Arup. This allows the workforce contributing to ALR to be scaled up and down appropriately to meet specific needs.

Project Assumptions

The following table set out the key assumptions that have been made for this business case.

Assumptions	Description
Government enabled housing	Kāinga Ora will continue to build new homes along the CC2M corridor.
	Eke Panuku will continue to deliver urban regeneration along the CC2M corridor.
Capable resources with capacity	The proposal assumes that sufficient skilled resource can be sourced/trained.
Growth assumptions	Population growth will continue in line with Statistics New Zealand's medium projection.
COVID-19	There are minimal long-lasting impacts associated with COVID-19 regarding travel behaviour, and this will not require changes to construction or operational requirements.
Climate Change	Legislation and policy changes will drive mode shift.
Legislation	No legislative change is required to deliver the Project (except for any legislation required for any new value capture tools that the Government may choose to implement).
Funding	Funding will be committed for a multi-year period for detailed planning, design and consenting, before the final investment decision is made.

Investment constraints

A constraint is a limitation or a restriction on what can be achieved, how it can be achieved and when it can be achieved. The following table set out the key constraints for this IBC.

Constraints	Description
Available Funding	There are a significant number of competing priorities for infrastructure funding. Depending on the proposed solution, the availability of funding may be a constraint.
Existing environment- natural and built	The existing environment has a significant number of constraints on the proposed investment. This can come in the form of the natural environmental features such as water bodies, volcanic cones and tuff rings, and topography. The built environment also presents a substantial number of constraints, including existing buildings, private property, cultural property, parks and open spaces, and other features associated with the historic development of Auckland.



Existing and	There has already been significant investment in
planned	infrastructure over the last 100+ years, e.g. underground water,
infrastructure	gas, and other utilities. Therefore, the location and nature of this infrastructure is highly likely to place a constraint on future investment decisions. Care will need to be taken to
	ensure renewal plans for this investment are integrated where appropriate into the augmentation (growth) investments of the nature being proposed here.

Investment dependencies

An investment dependency is something that prevents the proposed investment being completed or impacts on its ability to be completed until one or more other conditions, events, or tasks have occurred. Dependencies can impact on the ultimate success of the investment proposal. As emphasised throughout the strategic case, the importance of the integrated delivery of rapid transit and urban development is essential to achieving the benefits identified. The table below sets out the key dependencies to delivering this Project from both a rapid transit (RT) and an urban development (UD) perspective.

Dependencies	RT	UD	Description
Whole of	\checkmark	\checkmark	The establishment of a governance and whole of government
government			partnership framework which can secure urban development
approach			outcomes driven by the rapid transit investment, and which
			can initiate urban change to deliver optimum urban
			development
Planning	√	√	There are likely to be a range of changes required to planning
riaiiiiig			policy to enable and unlock the
			desired urban development uplift, including but not limited to:
			amendments to existing AUP requirements for affected
			and adjacent land e.g. such as minimum parking
			requirements, overlays, etc.
			nore disadive planning and policy levers to drive
			more directive planning and policy levers to drive
			intensification and urban quality
Developers	√	N	On the assumption that the success of any potential
		"	investment is closely associated with the ability to redevelop at
	0		pace and scale along the length of CC2M corridor, and the fact
	X	/	that a substantive component of development will be required
X			to be delivered by the private sector at the right time and
	_^		, ,
		·	place, the investment is highly dependent on development
	71		feasibility, the capability and capacity of the development
			industry and private developers' ability to
, NY	-		acquire and amalgamate property secure financing to
			obtain the necessary approvals

Key Risks

A risk is something that could impact on the ability of the investment to deliver the desired outcomes. These are separate from project delivery risks. The following table sets out the key risks to realising the desired outcomes.

Risk	Description
Patronage	Patronage is:
	 lower than projected, resulting in lower revenue being collected than
	assumed and impacting on overall affordability with higher operating



	expenses than projected lower and not achieving sufficient mode shift.
	 higher than projected which means the solution is insufficient for the future and additional investment in adjacent corridors is required.
Urban development	Quality urban development fails to occur in the manner (scale, location, timing, form) assumed in the Business Case, resulting in lower benefits being realised or benefits taking longer to be realised than projected.
Displacement through gentrification	The investment is so successful that those communities the proposal is intended to help, including local businesses and the communities of Mt Roskill and Māngere, are displaced by the regeneration associated with the proposal. This risk was highlighted during engagement with Mana Whenua.
Social licence	The sheer scale of the Project means that construction and property disruption may undermine social licence.
Integration with RTN	Developing a rapid transit solution that does not optimally integrate with the rest of the RTN may lead to future cost in other RTN projects and inefficient sequencing.
P. MAN	ATIONALA MINISTRA



Appendix B Stakeholder Engagement

A comprehensive and ongoing outreach programme with stakeholders and communities has been established since the IBC. This has built trusted relationships with elected representatives, local boards, communities, and interest groups. The overarching purpose of the engagement approach taken to date has been to inform and shape the development of the project and ensure success implementation.

In summary the following approach has been taken with key groups:

Group	Approach
Project partners	Partnership and collaboration has been embedded into the project to ensure shared outcomes are achieved. This includes the development of a relationship framework, three Huihuinga Forums and a quarterly Partners Forum of senior leaders from central and local government agencies including Auckland Council, Auckland Transport, Eke Panuku, Treasury, Kāinga Ora, Ministry of Transport, Ministry of Housing and Urban Development, Waka Kotahi, Ministry of Education, Ministry of Health, Tātaki Auckland Unlimited and WaterCare.
Mana Whenua and Māori	Establishing a genuine relationship with Mana Whenua to enable their aspirations and improve outcomes for Māori has been at the heart of the Auckland Light Rail approach to partnership. This is underpinned by Mana Whenua involvement at all levels of decision making, at sponsors, governance, leadership and kaitiaki. We engaged regularly with 13 iwi out of 15 recognised with an interest in the project corridor, to ensure they have an understanding of the project and hear their perspectives, values and aspirations. A targeted programme to engage with Mataawaka (urban Māori) has been developed. The Strategic Case will require in-depth engagement with Mana Whenua Leadership and Kaitiaki.
Key stakeholders	The project has regular engagement and touchpoints with key stakeholders to raise awareness, build relationships, and encourage collaboration.
Elected representatives	Regular engagement with elected representatives and local boards has been carried out, to gain local insights and align with wider transport and urban development goals for Auckland.
Corridor communities	Significant community engagement has taken place through Neighbourhood Liaison Groups, targeted workshops and community events and activations. This has focused on local priorities in the six corridor communities along the route. Local feedback and information have then helped to inform project decisions.
Industry engagement	Engagement has been carried out so that key industries including civil contractors and property developers have a good understanding of the project, their feedback informs project planning, and they are informed about the timing for potential procurement.



Waka Kotahi NZ Transport Agency	Waka Kotahi has been engaged as both a project partner and as the rail regulator through the Light Rail Licensing Group, to promote an effective working relationship.
Public sector bodies and technical specialists	Development of the transport investment and urban response has been informed by multiple rounds of engagement with subject matter experts within public sector bodies.

The project will continue to engage with stakeholders and communities to ensure understanding and visibility of the project, and to provide opportunities for input into decision-making.

7.1 Auckland Transport – Proxy Operator

Auckland Transport was established as a proxy operator for the transport infrastructure elements of the project during the Detailed Planning Phase, unless and until Sponsors determine the ultimate ownership and operating arrangements for the Project.

AT's key responsibilities for the role include advising on:

- desired performance outcomes including transport and customer service, whole of life costs, long term ownership and asset management,
- implications for the network integration and the impacts the Project will have on AT's broader transport network, and
- the impacts construction will have on the existing transport network, how these can be mitigated and associated cost.

7.2 Tri-Rail

A fully integrated service strategy was developed which covers the whole future light rail / metro network with Reference Case timings. This has been developed collaboratively with the Waitematā Harbour Connections and North West projects. While these projects are being delivered separately a high level of coordination and alignment is required to ensure the overall Rapid Transit Network outcomes sought are achieved, each projects benefits are fully realised.

7.3 Waitemata Harbour Connections

In addition to the above integration with the Waitematā Harbour Connections project is occurring at multiple levels. Integration with AWHC is occurring at multiple levels within both projects, overseen by an Integration Manager. Members of senior leadership of both projects meet on a regular basis and steering groups have been set up to work through specific matters to be integrated across the project particularly the business case, transport design and urban workstreams.

7.4 Ministry of Transport

The Ministry of Transport ran a parallel policy programme to the Corridor Business Case. This included the delivery of the following policy work to enable the project:

- Funding Principles
- Owner and Operator
- Delivery Entity



• Business Disruption

7.5 Rationale for engagement

<u>Corridor-wide:</u> Ongoing engagement has been undertaken around technical matters – notably including collaboration with strategic partners to ensure that shared outcomes are achieved through three Huihuinga Forums and a quarterly Partners Forum of senior leaders from central and local government agencies. Regular engagement has also been undertaken with strong relationships built with the 13 iwi recognised as Mana Whenua along the corridor on matters including governance, leadership and kaitiaki. Furthermore, development of the transport investment and urban response has been informed by multiple rounds of engagement with subject matter experts within public sector bodies.

<u>Dominion Junction and Kingsland:</u> Local, community-oriented engagement has been undertaken to communicate the vision for stations as local hubs supporting new housing development and business growth, as well as being transport hubs with facilities to other public transport and walking and cycling connections. We asked stakeholders and communities what facilities and services they would like to see at stations, to support urban outcomes and the development of city fringe communities.

Onehunga: Local, community-oriented engagement has been undertaken on two route options were under consideration in Onehunga: Option A was a shared light rail and heavy rail route alongside the Southwestern Motorway (SH20) and the Onehunga Bay Lagoon. Option B was a shared light rail and heavy rail route using the KiwiRail land set aside for rail in the future. The benefits and considerations for each option were put forward for community consideration.

<u>Māngere</u>: Local, community-oriented engagement has been undertaken on options included locating a station either alongside the Southwestern Motorway (SH20A) near Māngere Town Centre or a route into the town centre itself. A number of benefits and considerations were outlined for community consideration.

Further details on these forms of engagement are set out below.

7.5.1 Public engagement

During March and April 2023, ALR Ltd asked for Aucklanders' views about options route and station locations, to help develop a preferred route for ALR through the CC2M corridor. This included questions about options for a shared light rail and heavy rail route in the Onehunga area, two options for light rail to connect into Māngere, and on new station hub s at Dominion Junction and Kingsland.

Engagement was promoted in a variety of ways to reach as many people as possible, as well as undertaking engagement on the ground within communities to have conversations and gather input. This also included use of an ALR 'mobile hub' which travelled to communities along the CC2M route, facilitating greater levels of conversation and collaboration. The mobile hub included an interactive SIM city model to give people a chance to reimagine their areas around a sample station and consider the design of their neighbourhood and wider city as they would like them to be in the future.

The process of public engagement received:

- 32,000 website visits
- 24,000 engagement portal visits
- 30,500 clicks on ALR advertising



- 22 news, TV and radio articles
- 1,497 completed feedback forms

A diverse range of feedback and viewpoints were expressed. However, broad support for ALR was expressed by 74% of respondents – with the highest level of support being 90% in Māngere. The lowest level of support was 67% in Onehunga, where a number of responses related to the relative disruption and community impacts of one of the potential route options.

7.5.2 Key stakeholders

ge cock and self-bands of the As part of engagement, meetings have been held with a comprehensive range of stakeholder groups to share information about the project, receive feedback and answer questions. Key stakeholder groups engaged with include:

- Advocacy groups
- **Business associations**
- · Community organisations
- · Educational facilities and providers
- Elected representatives
- Environmental groups
- · Individual businesses
- Peak body groups
- Residents associations
- Vulnerable user groups

This engagement resulted in the provision of written submissions from six local boards along the CC2M corridor. These set out a variety of comments on topics including broad support for the principle of ALR, station locations, route alignment, environmental impacts and processes for further development of the scheme and future engagement. Further details are listed below.

Stakeholder Group	Key themes
Elected Representatives	A mixture of in person and online sessions were utilised to engage these stakeholders.
LE MANA.	 Overall support for the project was consistent due to the considerable transport, economic and development benefits light rail can bring. Recommendations to consider the scale of change presented by light rail, and whether communities across the corridor understand this. More visual representation suggested to help communities conceptualise what light rail can mean to them. Their communities have shared that they need more efficient public transport and believe light rail can improve choices for them. Flooding resilience is now crucial and light rail needs to demonstrate how the project will provide mitigation for communities that have experienced significant flooding events.



Stakeholder Group	Key themes
	 Opposition to the inclusion of the existing KiwiRail land set aside for rail as a route, due to the impact it would have on established residential neighbourhoods in Onehunga. Reference was also made to the special character zoning. Recommendations made for further consideration on tunnelled and above ground options to Onehunga. A preference for a Mangere Town Centre station for the benefits and opportunities this route will bring, including the potential for town centre transformation and economic growth.
Advocacy Groups	Advocacy groups provided feedback at Neighbourhood Liaison Group forums in both the City Centre and Onehunga. O Heavy rail is not supported in Onehunga and will detrimentally impact light rail's reputation. O The KiwiRail land option would require up to 15 level crossings. Not seen as a simple route solution just because there is an existing rail designation there. O How can the light rail business case realise and support Council and Crown mode shift aspirations, that they don't appear to have the budget to deliver.
Community Organisations	Community organisations were represented across all Neighbourhood Liaison Group forums. They assisted in socialising the engagement events and the engagement survey to their local communities. O Anticipation light rail will provide opportunity to regenerate town centres. Dight rail perceived as an opportunity to help address and generate a transport mode shift across corridor communities. Advocated for feeder transport options to be achieved through light rail to ensure usage and patronage is attracted from outside the corridor neighbourhoods. Highly desirable to co-ordinate a partnered and planned approach with other Council and Crown agencies to minimise consultation fatigue on place shaping developments.
Business Associations	Business Associations were represented at the City Centre, Onehunga, and Māngere Neighbourhood Liaison Group forums. Uptown Business Association were engaged online with a focused session. Support in principle the development opportunity in Dominion Junction. Encouraged the project team to think and plan appropriately to maximise the best urban outcomes. Support in principle the need for new transport infrastructure in Onehunga Stressed genuine concern and opposition to the potential use of the KiwiRail land in Onehunga. Support in principle the transport infrastructure opportunity in Māngere. Stressed the need to work closely with them and other key neighbourhood groups and take a holistic approach,



Stakeholder Group	Key themes
	incorporating community and business aspirations and planning.
Peak Body Groups	 In person working group forums were held with the Property Council New Zealand. Recommended project needs to make bold changes to support greater density in and around stations, to support greater growth and make development commercially viable. Acknowledged historical challenges around negative perceptions of intensification, however there is a need to improve the corridor for the greater good. Advised there is potential to focus intensification at certain points along the route. Focused intensification supports feasibility and leads to higher quality urban outcomes.
Environmental Groups	Environmental groups were strongly Onehunga focused and attended the Neighbourhood Liaison Group to contribute, along with separate follow up meetings to support their formal submissions. They also assisted in socialising engagement events and the survey to their local communities. O Concerned about the potential displacement and social impact on existing community groups who utilise the 'green belt' of the KiwiRail land set aside for rail in Onehunga and for community wellbeing and biodiversity initiatives. Acknowledged the need for new public transport infrastructure in Onehunga. Support expanded public transport options and growing connections between the central isthmus suburbs and Mangere. The rail system should promote the use of the Port of Onehunga and invigorate its redevelopment. Connection to the waterfront and port area is very important for the future. Would like improved flood resilience. The project must include mitigation for the negative environmental effects.
Educational Facilities	 In person presentations and workshops were carried out with teachers and students in 'communities of learning' forums. Highlighted a need for station safety and security to be prioritised, particularly after hours and for safer connections and transfers to other campuses. Concern the KiwiRail land route would cut through a recently developed building at Onehunga Primary School. Concern the KiwiRail land route would remove biodiversity from the creek that runs through the corridor, which is unique to the area. Suggest safe and secure bike storage be included at all stations and would be a great community benefit.



Stakeholder Group	Key themes
	 Support place activation under any viaducts, citing the Melbourne example.
Residents Associations	The Māngere Bridge Residents and Ratepayers Association attended the Māngere Neighbourhood Liaison Group forum. The project team then hosted a separate focused session with 27 Association members.
	 Emphasised concerns for customer safety if accessing a station from a motorway route. Requested Crime Prevention Through Environmental Design (CPTED) principles be incorporated into the planning, for the safety of customers accessing the station and utilising public transport.
Vulnerable User Groups	Vulnerable users advocates attended the City Centre Neighbourhood Liaison Group forum.
	 Advocated passionately for better accessibility for all. Highlighted the need for better design and use of common areas and public accessways to offer universal and accessible patronage for all light rail customers.
Large Businesses	An in person meeting took place with Eden Park representatives and Auckland Stadiums attended the Onehunga Neighbourhood Liaison Group.
	 All feedback received was generally supportive. Eden Park and Auckland Stadiums believe light rail offers tangible urban and economic benefits for all Aucklanders and for accessing large venues. Highlighted an interest in incorporating and planning for intuitive public connections to local stadiums.

7.5.3 Partners Forum

Following several engagement sessions with partner organisations to discuss relationship health and next steps, a quarterly Partners Forum of senior leaders was established to strengthen ongoing collaboration. The purpose of the forum is to discuss challenges and opportunities and foster transparency and best practice.

Members of the Forum are Waka Kotahi NZ Transport Agency, Auckland Council, Auckland Transport, Kāinga Ora, Eke Panuku and KiwiRail. Meetings have taken place on 27 March, 15 June and 20 September 2023.

7.5.4 Huihuinga

Three Technical Excellence Huihuinga have been set up to provide advice to the Auckland Light Rail project team. A Huihuinga is the Te Ao Māori concept for a regular meeting of significance, with a focus and purpose.



The purpose of the Huihuinga is to provide technical guidance and support to the project team. The team will present topics, issues or packages of work to the relevant Huihuinga to seek guidance, review and challenge. This guidance and commentary inform the work of the project team.

The three Huihuinga take place monthly and cover the following workstreams:

- Urban
- **Business Case**

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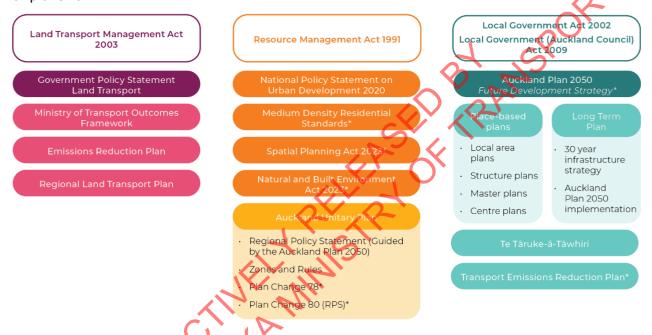


Appendix C Strategic Alignment to Policy

This appendix sets out the full suite of plans and policies, national and local, which have been considered as part of the strategic case. Details of these plans and policies are set out in further detail below.

Policy landscape in Tāmaki Makaurau Auckland

The diagram below shows the wide range of legislation and policies that either influence or set the direction for growth and urban development in Tāmaki Makaurau Auckland. Many of these have been considered as part of the strategic case and throughout the development of plans for ALR.



Since the IBC was completed in September 2021, both central and local government have introduced plans and policies designed to improve urban and transport outcomes, reduce GHG emissions and improve our environment. These, alongside emerging plans and policies, will align with and be enabled by ALR CC2M. This appendix sets out the full suite of plans and policies which have been considered as part of the strategic case.

National policy

Guiding policy

Living Standards Framework

Central Government has committed to prioritising the wellbeing of people living in Aotearoa New Zealand. The Living Standards Framework (LSF) is the overarching framework which sets out what matters to New Zealanders' wellbeing, now and into the future. Auckland Light Rail will also be guided by Him Ara Waiora which identifies a Māori perspective on wellbeing. Identification and development of the options for CC2M has focused directly on providing positive impacts on the four capitals (human, natural, social and financial / physical). As a major infrastructure project within New Zealand, CC2M will have significant effects on the natural environment, social cohesion, human capability, and financial and physical capital. ALR will deliver a net positive benefit to each identified capital by assisting in decarbonising travel across Auckland, improving access to opportunities for local residents, boosting local and regional economic growth, and helping connect and integrate communities together.



Transport Outcomes Framework

Ministry of Transport's Transport Outcomes Framework sets a purpose for the transport system centred around the wellbeing of New Zealanders and the liveability of places. It outlines 5 outcome areas to contribute to this purpose:

- inclusive access.
- •healthy and safe people,
- economic prosperity,
- environmental sustainability, and
- resilience and security.

The Transport Outcomes Framework does not set out the specific interventions the government will pursue to deliver the outcomes, but it helps the transport sector work together, provides a framework for assessing the effectiveness of policy, and ensures all forms of transport are considered when planning, investment and regulatory decisions are made.

National Policy Statement on Urban Development (NPS UD)

This sets out the objectives and policies for planning for well-functioning urban environments under the Resource Management Act 1991. It aims to enable improved housing affordability and community wellbeing while allowing Māori to express their cultural traditions and norms. Well-functioning urban environments are to also support reductions in greenhouse gas emissions, be resilient to effects of climate change and have good accessibility for all people between housing, jobs, community services, natural places, open spaces and use of public and active transport.

Of relevance to ALR, Policy 3(c) of NPS UD requires councils to enable a minimum height of six storeys for areas within a walkable catchment of rapid transit stops, or the edge of city centre and metropolitan centre zones. Six storeys is the minimum and not a target and, in many cases, local authorities should enable higher than six storeys, especially where there is evidence higher buildings would be appropriate.

Although implementation of NPS UD is an Auckland Council responsibility, there is an opportunity for ALR to work with Auckland Council to shape urban development outcomes along the corridor, synergise with relevant policies that look to improve access to housing, improve access to jobs, and raise living standards along the corridor.

MAIHI Ka Ora - National Maori Housing Strategy

MAIHI Ka Ora was developed in partnership with Māori, for Māori. For MAIHI Ka Ora to succeed, Government agencies must work with each other and with Māori in genuine partnership over the next 30 years towards a shared vision that all whānau have safe, healthy, affordable homes with secure tenure, across the Māori housing continuum. The strategy is an expression of the articles of Te Tiriti o Waitangi. It sees the Government using levers from Article One of Te Tiriti o Waitangi to enable Māori-led local housing solutions (Article Two) so Māori housing aspirations are achieved. If the Crown and Māori work together, the strategy will provide oritetanga equity (Article Three).

MAIHI Ka Ora identifies six priorities to address issues facing housing insecurity amongst Māori. These include Māori/Crown partnerships, Māori-led local solutions, Māori housing supply, Māori housing support, a Māori housing system, and Māori housing sustainability. The delivery of Auckland Light Rail will cascade agglomeration benefits into the corridor as well as increase the possibility of transport-oriented development to be delivered along the corridor. ALR's own aspirations to improve living standards, housing accessibility, and economic outcomes for Māori and Pacifika peoples align closely with the Māori housing strategy.

Government Policy Statement on Land Transport (GPS: Transport)



The GPS: Transport sets the Government's priorities for land transport investment over the next 10-years. It outlines how money from the National Land Transport Fund (NLTF – see below) is spent on activities such as public transport, state highway improvements, local roads, and road safety. Waka Kotahi and local authorities need to ensure spending on transport reflects Government priorities outlined by the GPS: Transport. The GPS: Transport sets out the Government's strategic direction for the land transport system and guides how we invest the National Land Transport Fund (NLTF).

Ministry of Transport's Transport Outcomes Framework. These are: inclusive access, economic prosperity, healthy and safe people, environmental sustainability, and resilience and security.

ALR aligns with GPS: Transport's climate and transport objectives in so far as enabling inclusive access to transport, improving the economic prosperity of those living along the corridor, and improving the environmental sustainability of Auckland's public transit system.

National Land Transport Programme (NLTP)

The NLTP is a three-year programme that sets out how Waka Kotahi, will work with its partners and outlines plans to invest the National Land Transport Fund (NLTF) to create a safer, more accessible, better connected and more resilient land transport system that keeps New Zealand moving. Activities in the NLTP must reflect the priorities in the most recent GPS: Transport. NLTP development is also guided by the laws in the Land Transport Management Act (2003).

<u>Hīkina te Kohupara – Kia mauri ora ai te iwi – Transport Emissions: Pathways to Net Zero by</u> 2050 (in progress)

This identifies what Aotearoa could do to shift the transport system onto a zero emissions pathway. It sets out a system-wide approach for reducing transport emissions. Hīkina te Kohupara identifies opportunities to reduce emissions across three themes, based on the 'Avoid, Shift, Improve' framework. These are: changing the way we travel, improving our passenger vehicles, and supporting a more efficient freight system.

ALR aligns with Hīkina te Kohupara's ambitions to encourage modal shift away from private vehicles and into public transport options. Additionally, the delivery of a high-speed rail line will drastically improve the average quality of public transit options within Auckland and deliver a much-needed upgrade to public transport infrastructure more widely.

New Zealand Economic Plan

The New Zealand Economic Plan outlines ambitions to create a high wage, low emissions economy structured under unleashing business potential, strengthening international connections, increasing capabilities and opportunities, strengthening foundations, supporting Māori and Pacific aspirations.

The relevance for ALR include maximised opportunities to build capacity within ALR limited and support the creation of local jobs, enable equitable access and income to spend towards health services, enable greater equitable access for all along the corridor to access job opportunities, and enable spaces and systems to provide improved services to their communities.

Changes since the Indicative Business Case

Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 This amendment to the RMA introduces the Medium Density Residential Standards (MDRS). The MDRS requires territorial authorities in Aotearoa New Zealand's main urban areas to enable the development of three homes of up to three storeys on each site, without the need for a resource consent. Tamaki Makaurau Auckland is considered a 'main urban area' and Auckland Council must implement MDRS via the Auckland Unitary Plan.



Emissions Reduction Plan: Te hau mārohi ki anamata

Aotearoa New Zealand's first Emissions Reduction Plan sets the direction for climate action for the next 15 years. It lays out targets and actions to meet emission reduction targets across every part of government and every sector of the economy. Of direct relevance to ALR are emissions reductions for sectors including transport, building and construction, energy and industry and waste.

<u>National Adaptation Plan: Urutau, ka taurikura: Kia tū pakari a Aotearoa i ngā huringa</u> <u>āhuarangi</u>

The National Adaptation Plan sets out what the Government will do to enable better risk-informed decisions, drive climate-resilient development in the right locations, help communities assess adaptation options (including managed retreat) and embed climate resilience into all of the Governments work. Although ALR isn't directly required to give effect to the plan, ALR is a vehicle to implement changes other organisations (i.e. local government) make to existing strategies and policies to better understand and respond to climate change risks.

Emerging policy changes

Government Policy Statement: Housing and Urban Development (GPS: HUD)

The GPS: HUD sets a direction for housing and urban development in Aotearoa New Zealand. It presents a multidecade system strategy for housing and urban development and informs, influence and align activity across the system to respond to the challenges we face. It was developed alongside MAIHI Ka Ora – the National Maori housing strategy both will be implemented side by side. GPS: HUD has four key aims:

- thriving and resilient communities,
- wellbeing through housing,
- Māori housing through partnership, and
- an adaptive and responsive housing system.

It offers the opportunity for ALR to shape urban development outcomes along the corridor, synergise with relevant policies that look to improve access to housing, improve access to jobs, and raise living standards along the corridor.

Spatial Planning Act (SPA) and Natural and Built Environment Act (NBEA)

The Spatial Planning Act and the Natural and Built Environment Act as two of three pieces of resource management reform legislation. The SPA requires each region to develop a regional spatial strategy that sets out the long-term issues, opportunities and challenges for development and the environment in the region. It works alongside the Natural and Built Environment Act, the main replacement for the Resource Management Act 1991.

The Natural and Built Environment Act (NBA) requires each region to develop a natural and built environment plan for land use and environmental management. These will replace the regional policy statements and district and regional plans currently required under the RMA. It also introduces the National Planning Framework (NPF) that will provide direction on matters of national significance, environmental limits and targets, as well as identifying and resolving conflict among outcomes if possible. It works alongside the Spatial Planning Act, which creates a new requirement for long-term regional spatial planning.

Local policy

Guiding policy

Auckland Plan 2050

The Auckland Plan 2050 sets the 30-year strategic direction for Auckland. It contains six outcomes and the long-term spatial plan for managing the growth and development of Auckland – the Future Development Strategy (FDS). It is required by legislation to contribute to Auckland's social, economic, environmental, and cultural wellbeing. The plan's six outcomes, as well as its FDS, are:



- Belonging and participation,
- Māori identity and wellbeing,
- · Homes and places,
- Transport and access,
- · Environment and cultural heritage,
- Opportunity, and prosperity.

Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan

Te Tāruke-ā-Tāwhiri provides a pathway to reduce emissions by 50 per cent by 2030 and achieve net zero emissions by 2050 (against a 2016 baseline). At the core of the plan is to create thriving and fair communities that are inclusive and place equitable climate action at the centre of all decision making.

Te Tāruke-ā-Tāwhiri implies the following opportunities for the ALR scheme: improving the economic benefits from circular economy by supporting the prioritization of circular economy businesses and providing an alternative transportation system and reducing car usage and traffic congestion.

Kia ora Tamaki Makaurau 2021

Kia ora Tamaki Makaurau is Auckland Council's Māori Outcomes Framework. It brings together Māori aspirations and outlines outcomes to focus on holistic wellbeing for Tāmaki Makaurau. The guiding principles of the document focus on housing, business and tourism, development, Te Reo Māori (language), and Māori identity and culture.

Te Tiriti o Waitangi and Māori and Mana Whenua Values and Outcomes are fundamental to Auckland Light Rail. In particular, several opportunities arise for Māori:

- 1. Protect and celebrate Māori identity and culture by collaboratively partnering with local Mana Whenua in development and supporting Marae in the corridor.
- 2. Support the Māori economy to grow and thrive to create intergenerational wealth with strong Māori Businesses and Employment representation.
- 3. Support the delivery of a range of residential typologies that meets the needs of the Māori population to contribute to the local employment, self-employment and business owner base.

In understanding urban outcomes, Auckland Light Rail has ensured that Māori outcomes are front and centre within business case.

Te Rautaki Wai ki Tāmaki Makaurau: Auckland Water Strategy (the Water Strategy)

The Water Strategy is Auckland Council's strategy to protect and enhance te mauri o te wai, the life-sustaining capacity of water. It considers Tāmaki Makaurau's broader context over the life of the strategy including:

- 1. land use change, in particular as driven by population growth
- 2. mitigating and adapting to climate change
- 3. partnership approach with mana whenua
- 4. growing iwi capacity and further settlements that will affect governance structures 5. technological change.

The Water Strategy will direct investment and activity across the council group. It is a 'tier two strategy' sitting underneath the Auckland Plan 2050, alongside Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan and directs other strategies, policies and plans across the council group.

Ngā Hapori Momoho - Thriving Communities' Strategy 2022-2032

Nga Hapori Momoho is Auckland Council's core strategy for social and community development. It sets out four outcomes to be achieved in the next ten years to ensure all Aucklanders can thrive, now and into the future. The four outcomes are:

- 1. manaakitanga the essentials of a good life, with the ability to fulfil their potential
- 2. whanaungatanga connectedness to other people and a feeling of belonging
- 3. kotahitanga participation in our community, while taking action to meet common goals
- 4. kaitiakitanga connectedness to the natural environment.



The relevance for ALR include maximised opportunities to influence and support the creation of local jobs, enable equitable access and income to spend towards health services, enable greater equitable access for all along the corridor to access job opportunities, and enable spaces and systems to provide improved services to their communities.

Auckland Transport Alignment Plan 2021-2031 (ATAP)

ATAP sets the strategic approach to transport for Auckland and was developed jointly with the Ministry of Transport, Waka Kotahi, Auckland Council and Auckland Transport. The aim of ATAP was to develop a joined up approach to address Auckland's transport challenges and ensure the opportunities of a growing and diverse city are maximised. ATAP ensures Auckland has a transport system that encourages more people to use public transport, to walk and to cycle, addresses congestion, increases accessibility, reduces negative impacts on the environment and sees a reduction in deaths and serious injuries on our roads. ATAP informs statutory processes including the National Land Transport Programme and Auckland's Regional Land Transport Plan.

<u>Future Connect – AT's integrated network plan</u>

Future Connect is the long-term network plan for Auckland's transport system. It identifies the most important parts of the transport network and identifies the most critical issues and opportunities. This informs the 10-year investment programme, the Regional Land Transport Plan (RLTP).

Each of the transit and transport network plans bear significant relevance to ALR which looks to deliver a high-quality high-speed rail line within the region, representing a significant amount of investment into the transport network as well as delivering additional decarbonisation, social mobility, and economic benefits.

Regional Land Transport Plan (RLTP)

The RLTP is the 10-year funding plan for Auckland's transport network. It details the areas that Auckland Transport, Waka Kotahi NZ Transport Agency and KiwiRail will focus on to respond to Auckland's transport challenges. It is the proposed 10-year investment programme for specific transportation projects.

The RLTP takes its strategic direction from the Auckland Plan 2050 and its content is guided this as well as a number of other central and local government policies, strategies, and decisions.

Auckland's Vision Zero Strategy

This looks to eliminate transport-related deaths and serious injuries by 2050. Part of this strategy will require reducing the popularity of car modal travel and diverting users onto public transport alternatives.

The delivery of ALR will provide an attractive high-quality alternative to Aucklanders which in turn will translate to reducing transport-related deaths as rail use increases.

Changes since the Indicative Business Case

The Transport Emissions Reduction Pathway (TERP)

TERP was developed by Auckland Council and Auckland Transport to give effect to Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan and its pathway to reduce transport emissions by 64% (relative to 2016) by 2030. ALR will contribute towards this emission reduction with increased public transport capacity, a 'build up not out' philosophy, and low emissions public transport option.

Proposed Plan Change 78; Intensification to the Auckland Unitary Plan

To meet its intensification obligations under the National Policy Statement for Urban Development (NPS UD), Auckland Council developed and notified Proposed Plan Change 78: Intensification. This enables intensification across Tāmaki Makaurau to:

 enable more development in the city centre and at least six-storey buildings within walkable catchments from the edge of the City Centre, Metropolitan Centres and Rapid Transit Stops



- enable development in and around neighbourhood, local and town centres
- incorporate Medium Density Residential Standards that enable three storey housing in relevant residential zones in urban Auckland
- implement qualifying matters to reduce the height and density of development required by the RMA to the extent necessary to accommodate a feature or value that means full intensification is not appropriate.

The ALR Corridor is not included in Proposed Plan Change 78: Intensification at this point in time largely due to the pending decision of route and station locations, as well as the appropriateness of existing planning provisions to deliver the outcomes sought by ALR. ALR is working with Auckland Council to determine the best approach to meeting NPS UD intensification requirements in the corridor. Proposed Plan Change 78: Intensification is required to be operative by March 2025.

Economic Development Action Plan (EDAP)

The EDAP provides a coordinated reference point for the Council's economic development activity. The plan draws on other key city guidance, including the Opportunity and Prosperity outcome in the Auckland Plan 2050, the economy related goal of Te Tāruke-āTāwhiri: Auckland's Climate Plan and Kia Ora te Umanga, the Māori business tourism and employment objective of Kia Ora Tāmaki Makaurau, Auckland Council's Māori Outcomes Framework. The economic development outcomes have been brought together in this document. Measures against the objectives, progress on deliverables, performance measures and targets will be reported annually.

Emerging policy changes

Auckland Plan 2050 Future Development Strategy (FDS)

The FDS is a component of the Auckland Plan 2050 and sets out where and when Auckland should grow over the next 30 years to achieve the best outcomes for Tāmaki Makaurau. The FDS takes a quality compact approach to growth, prioritising most growth and investment in existing urban areas with a strong focus on alignment of urban growth with infrastructure investment.

As the Auckland Plan 2050 and its Future Development Strategy sets the strategic direction and approach to growth for Auckland, its strategic directions directly relate to the urban and transport outcomes predicted by the implementation of ALR.

Auckland Rapid Transit Plan (ARTR)

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The ARTP is a 30-year reference case for where and when rapid transit should be invested in across the region. Its role is to act as a starting point for individual project investigations and decisions, while protecting the 'network view'. The plan was prepared because individual projects were proceeding without awareness or consideration of the impacts of their decisions on network infrastructure and services, and without a detailed future network endpoint.