

Auckland Regional Land Transport Plan

2018–2028





Introduction from the Chair

To be completed



Table of Contents

Introduction from the Chair	2
Table of Contents	3
01. Our Vision	4
02. Feedback from Consultation	5
03. Purpose and Scope of the Regional Land Transport Plan	11
04. Auckland's Challenges	18
05. Addressing Auckland's Challenges	36
06. Maintaining and Renewing Existing Assets	52
07. Inter-Regional Priorities	55
08. Measuring outcomes	57
09. Funding and Expenditure	59
Appendix 1 – Auckland Transport Capital Programme	64
Appendix 2 – New Zealand Transport Agency Investment Programme	65
Appendix 3 – Rail Infrastructure Capital Programme	66
Appendix 4 – Department of Conservation Programme	67
Appendix 5 – Significance Policy	68
Appendix 6 – Glossary	71



01. Our Vision

Auckland is New Zealand's largest city and home to almost 1.7 million people. Its population has grown strongly over the past few years, and over the 10 years of this Regional Land Transport Plan (RLTP) Auckland is expected to grow by a further 300,000 people.

Growth brings opportunities to improve prosperity and well-being through the greater diversity of social, cultural and economic opportunities that a larger population provides. However, rapid population growth has brought challenges, including increased congestion, reduced accessibility, increased deaths and serious injuries on the road network, and increasing negative impacts on the environment.

The refresh of the Auckland Transport Alignment Project (ATAP) has provided the opportunity for Auckland to make a major step forward in addressing these challenges. Through ATAP, the Government and Auckland Council agreed on a transformative and visionary plan for Auckland, supported by a \$28 billion package of transport investment over the next 10 years.

The 10-year programme set out in this RLTP is built on this agreed investment package. It provides for significant improvements to be made in public transport, including rapid transit, walking and cycling, network initiatives to help to address congestion, and support for greenfield and urban redevelopment. It also provides for a major focus on improving safety on Auckland's road network.

The programme set out in this RLTP will enable the delivery of a safe, reliable and accessible transport system that supports and shapes Auckland's development. It will encourage the move away from single-occupant vehicles as the dominant mode of travel, enabling public transport, walking and cycling to play a significant role in the transport system.

It will lead Auckland towards being a city where there is growth without increased congestion, where it is easy to access employment and services, where it is safe to drive, walk and cycle, where there are genuine travel choices, and where the negative impacts of the transport system on people and the environment are minimised.



02. Feedback from Consultation

Introduction

This section summarises the feedback received through submissions on the draft RLTP.

Consultation

Public consultation on the draft RLTP ran from Tuesday 1 May 2018 to Monday 14 May 2018. The consultation process was aligned with Auckland Council's consultation on the proposed Regional Fuel Tax (RFT). Auckland Council also undertook initial consultation on a proposed new Development Contributions policy.

Feedback was sought on the draft RLTP as follows:

- Have we correctly identified the challenges facing Auckland?
- Have we allocated the available funding to the highest priorities?
- Have we excluded any projects or activities from the proposed transport programme that should be included?

The following consultation responses were received on the proposed RFT and the draft RLTP:

- 18,091 submissions were received, including 17,930 submissions from individuals and 161 from organisations or companies.
- Over 60 people attended public drop-in events held in Takapuna on Monday 7 May 2018, in Manurewa on Tuesday 8 May 2018, and in two sessions on Saturday 12 May 2018 in New Lynn and Grey Lynn.
- Four organisations took the opportunity to present their views at the regional stakeholder event on Friday 11 May 2018

Six iwi elected to present to a formal hui on Tuesday 15 May 2018, led by the Governing Body with members of the Regional Transport Committee (RTC) in attendance. The Auckland Council Mana Whenua Kaitiaki Forum (a leadership-governance forum) as a whole also provided a submission, though elected not to present. In total, 13 of the 19 members of the Kaitiaki Forum submitted, as well as the Forum itself.

All 21 Local Boards adopted resolutions giving feedback on the draft RLTP, with most boards also appending detailed feedback. Twenty Local Boards presented feedback on the draft RLTP in person to representatives of the RTC on Monday 7 May 2018.



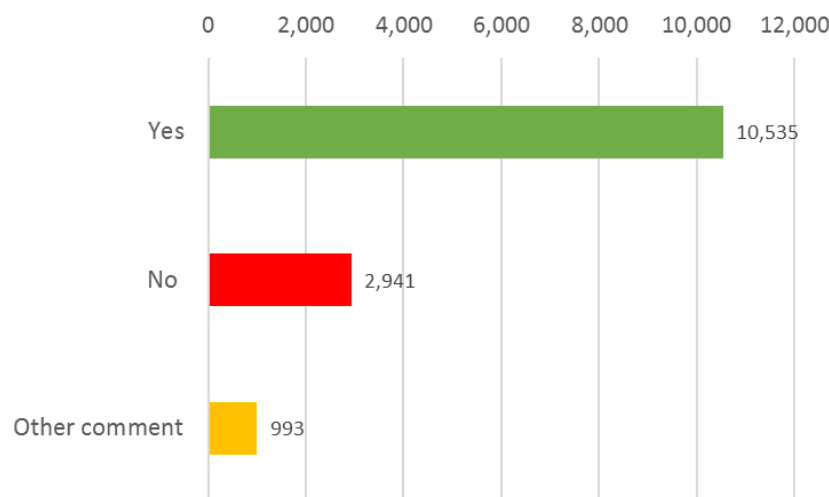
Feedback from Individuals and Organisations

Submitters were asked for their feedback on the specific challenges identified in the RLTP, which were:

- Safety
- Congestion
- Decreases in accessibility
- Impact on the environment
- Supporting growth in the region.

The majority of submitters agreed with the draft RLTP's statement of transport challenges, as shown in Figure 1 below.

Figure 1: Do you think we have correctly identified the most important transport challenges facing Auckland?



Submitters who answered No were prompted to say what other transport challenges they considered should be included. Most submitters used this opportunity to emphasise the importance of one of the challenges already raised, or to give a specific example of a project or activity they felt was important, as distinct from raising a new high-level issue.

There were some new high-level issues raised, though only a handful of submitters mentioned each of these:

- Value for money, including the broader costs and benefits of investing (or not investing)
- Affordability, both of public transport and of vehicle travel, for low-income households. This was of particular concern to those on the urban fringe who consider themselves to be most affected by the RFT
- Disruption/ future challenges, including autonomous vehicles, climate change, and new technology

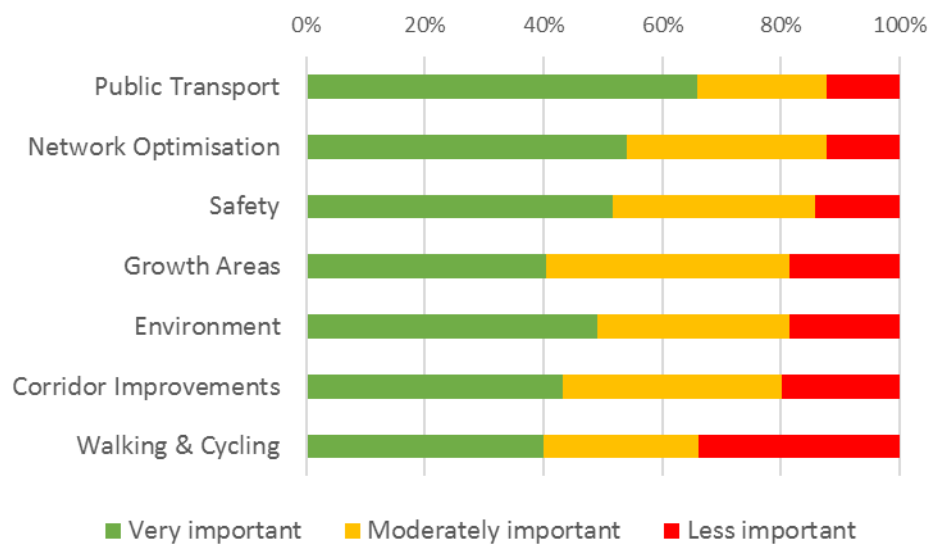


- Health, in its broadest sense including inactivity, air quality impacts and social isolation.

A clear majority of submitters felt that the draft RLTP had identified the key challenges correctly. Some submitters used the comments section to emphasise the need to “get on with it”.

The draft RLTP consultation also sought feedback on the level of support for specific areas of focus, to inform the prioritisation of funding. Overall, there was a high level of support (over 80%) for investment in the areas listed in the draft RLTP, as shown in Figure 2 below. The exception to this was walking and cycling, with 34% of submitters saying that walking and cycling were “less important” to them.

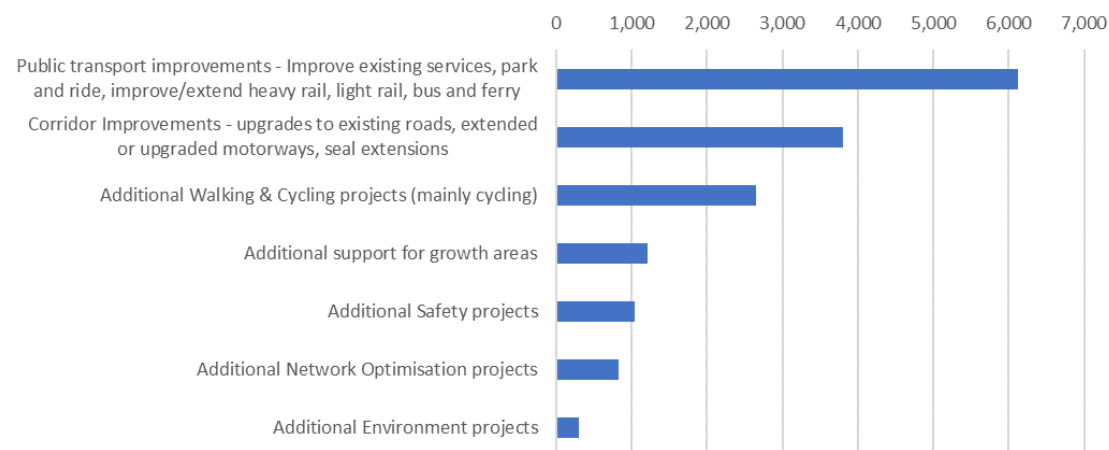
Figure 2: Please indicate how important the following areas are to you



Submitters were also asked if there were any projects or activities they thought should be included. These responses show a clear preference for emphasis on public transport improvements, as shown in Figure 3 below.



Figure 3: Please indicate activities and projects that should be included



Iwi Feedback

Accessibility

Iwi submissions consistently reflected a broad definition of accessibility, with many specifically linking accessibility to affordability.

“If iwi/whānau can’t afford petrol they can’t always attend manaaki manuhiri, pōhiri, tangihanga”

Improved access to public transport was seen as unlocking a range of benefits including better access to education and economic opportunities, however most marae are located away from public transport links. The cost of public transport fares is also a barrier, with some iwi requesting that discounts be available for Māori and/or for low-income groups generally.

Safety

All iwi emphasised the importance of improving safety, with some noting that the burden of road trauma falls disproportionately on Māori communities. Iwi were keen to build on the Māori road safety partnerships already underway, and to expand this area of work in future. The safety of State Highways was a concern alongside the safety of local roads.

Impact on the environment

Tiaki taiao or nurturing the environment was another key concern, with iwi supporting the initiatives underway to be more energy efficient and to promote electric vehicles, but requesting that AT do more to reduce pollution and litter from roads entering natural waterways.



Local Board Feedback

Transport Challenges

Local Boards were overwhelmingly in support of the transport challenges identified, with all but four Local Board submissions specifically agreeing with the vision and direction, and on the identified challenges. Several Local Boards commented on the alignment with Local Board Plans.

Safety	Safety was identified as the major concern. Every Local Board commented on the need to improve road safety, and five Local Boards specifically commended the proposed Vision Zero approach.
Congestion	Eighteen of the Local Boards specifically mentioned congestion, often in the context of a specific project to reduce local congestion.
Decreases in accessibility	<p>Only five Local Boards mentioned accessibility specifically, although support for accessibility was reflected in all Local Board feedback.</p> <p>Local Boards in low income areas were passionate about affordability, and the need for the RLTP to benefit low income communities:</p> <p>“Most of our families live tough and we are literally bracing ourselves for the implications of the looming regional fuel tax to hit our pockets! It is important therefore that public transport is cheaper and easier to access.” (Mangere-Otahuhu)</p>
Impact on the environment	Local Boards supported the inclusion of impact on the environment on the list of challenges.
Supporting growth in the region	All 21 Local Boards emphasised the importance of supporting growth in their areas. Urban Local Boards emphasised that intensification is as important as greenfield growth, with Waitemata pointing out that it is the fastest growing Local Board area.

Priorities

Key points about funding priorities made by multiple Local Boards included:

Safety	Safety was identified as a high priority for funding. Local Board feedback was consistent with the emphasis on high-risk road upgrades, speed management and monitoring.
---------------	--



Public Transport	Local Boards agreed that public transport is a priority, and each made suggestions for public transport expansions/improvements in their areas. Local Boards were especially keen to help improve access to the Rapid Transit Network, through a combination of walking and cycling links, feeder services, park & ride and land use integration.
Walking and Cycling	Local Boards were all in favour of the emphasis on walking and cycling, and in particular for a connected, safe, off-road network. The role of Local Boards in local placemaking was emphasised, as was the need to work together to achieve this. Local Boards were optimistic about the opportunities to work with AT to deliver better local connections, and saw this as an opportunity to invest the increased Local Board Improvements Fund to achieve good transport outcomes.
Supporting growth areas	Local Boards emphasised the sheer scale and speed of growth, and the need to think differently, because new challenges cannot be met by old thinking. All of the Local Boards except Great Barrier saw themselves as “growth areas” with the need to support intensification being at least as significant a challenge as support for greenfield growth.
Environment	Several Local Boards noted that the environment priority was aligned with the priorities in Local Board Plans. One Local Board submitted that environmental sustainability should cover the whole programme – how we do things, rather than a separate budget area.
Network Optimisation and Corridor Improvements	Local Boards generally supported corridor improvements and network optimisation, and were generally more focused on regional issues than individual submitters, with many expressing support for improvements not in their areas.



03. Purpose and Scope of the Regional Land Transport Plan

Purpose of the Regional Land Transport Plan (RLTP)

A Regional Land Transport Plan (RLTP) sets out the region's land transport objectives, priorities and measures for at least 10 years. It must be prepared every six years in accordance with the Land Transport Management Act 2003 (LTMA) and include a 10-year programme of activities to support the achievement of these objectives. It includes the land transport activities of Auckland Transport (AT), the New Zealand Transport Agency (the Transport Agency), KiwiRail and other agencies.

The RLTP must contribute to the purpose of the LTMA that seeks an effective, efficient and safe land transport system in the public interest. It is also required to be consistent with the Government Policy Statement on Land Transport (GPS). It must take into account a range of other matters, including likely funding from any source and any relevant national and regional policy statements.

All publicly funded land transport activities in Auckland are contained in the RLTP, including:

- Transport planning and investment in improvements for customers.
- The road network, including state highways
- Road safety activities delivered in partnership by AT, the Transport Agency, and the New Zealand Police
- Public transport (bus, rail and ferry) services
- Improvements to bus stops, rail stations and ferry wharves, and the creation of transport interchanges and park & ride facilities
- Footpaths and cycleways
- Management and improvement of rail track infrastructure by KiwiRail and City Rail Link Limited (CRL)
- Parking provision and enforcement activities
- Travel demand management.

The RTC is required to complete a review of the RLTP during the six months prior to the end of the third year of the Plan, to ensure that the Plan is relevant, aligned with the strategic context, and that it gives effect to the GPS. Public consultation is required if the RLTP is revised.

The RTC (which comprises the AT Board and a representative of the Transport Agency) decided that, given Auckland's rapid growth and the change in government priorities, a full revision of the RLTP was warranted.



Strategic Context

Key planning documents and other information that have guided the preparation of this RLTP are briefly described below.

Government Policy Statement on Land Transport (GPS)

The purpose of the GPS is to guide investment in land transport over the next 10 years by providing a longer-term strategic view, and by setting out where the Government intends to focus its resources.

The Government's revised draft GPS 2018 identified the four strategic priorities for 2018-28:

- Safety
- Access
- Environment
- Value for money.

Safety and access are the two key strategic priorities for the Government and these are supported by the priorities of environment and value for money.

Each strategic priority has a number of objectives:

- Safety: a land transport system that is a safe system free of death and serious injury
- Access: a land transport system that:
 - provides increased access to economic and social opportunities
 - enables transport choice and access
 - is resilient
- Environment: a land transport system that reduces the adverse effects on the climate, local environment and public health
- Value for money: a land transport system that delivers the right infrastructure to the right level at the best cost.

The draft GPS also includes themes to assist understanding of how to deliver effectively on priorities. These themes are:

- A mode neutral approach to transport planning and investment decisions
- Incorporating technology and innovation into the design and delivery of land transport investment
- Integrating land use and transport planning and delivery.

The draft GPS 2018 signals that a second stage GPS is likely to be required to fully realise the Government's direction for land transport. This is expected to address a



range of matters, including how funding for rail and coastal shipping might be incorporated into the GPS framework, the development of a new road safety strategy, investigating interventions to improve the affordability of public transport, and any future recommendations and targets produced by the Climate Change Commission.

The Auckland Plan

The Auckland Plan is a long-term strategy for managing Auckland's growth and development over the next 30 years, which brings together social, economic environmental and cultural objectives.

Auckland Council undertook a refresh of the Auckland Plan and consulted on the revised draft Plan in conjunction with the Long-term Plan 2018-28.

The Auckland Plan identifies the three major challenges facing Auckland:

- Population growth and its implications
- Sharing prosperity with all Aucklanders
- Reducing environmental degradation.

To address these challenges, the Auckland Plan is structured around six integrated outcomes that are spatially reflected in a development strategy. The six outcomes are:

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

Transport contributes to achieving all six outcomes, with the strongest links to Transport and Access. The Auckland Plan strategic directions and focus areas for the Transport and Access outcome are set out in the table below.



Auckland Plan – Transport and Access Outcome

Aucklanders will be more easily able to get to where they want to go, and will have choices about how they get around.

Directions	Focus Areas
Better connect people, places, goods and services	Make better use of existing transport networks
Increase genuine travel choices for a healthy, vibrant and equitable Auckland	Target new transport investment to the most significant challenges
Maximise safety and environmental protection	Maximise the benefits from transport technology
	Make walking, cycling and public transport preferred choices for many more Aucklanders
	Better integrate land use and transport decisions
	Move to a safe transport network, free from death and serious injury
	Develop a sustainable and resilient transport system

Auckland Transport Alignment Project (ATAP)

The impact of Auckland's growth and on the transport system was the subject of detailed examination through ATAP in 2016. This process involved central and local government working together to identify an aligned strategic approach for the development of Auckland's transport system.

The Minister of Transport and the Mayor of Auckland agreed in late 2017 to reconvene ATAP to refresh its recommendations to give effect to the Government's intention for its transport priorities to shape Auckland's urban form and development. This includes placing greater weight on the Government's priorities and developing a transport system for Auckland that provides safe, reliable and sustainable access. This means that transport:

- Easily connects people, goods and services to where they need to go
- Provides high quality and affordable travel choices for people of all ages and abilities
- Seeks to eliminate harm to people and the environment



- Supports and shapes Auckland's growth
- Creates a prosperous, vibrant and inclusive city.

The ATAP Report provides advice on recommended investment priorities for 2018-28 to reflect the Government and Auckland Council's shared direction for transport in Auckland. The ATAP report recommended a package of investments (the ATAP Package) to provide direction to the RLTP and the National Land Transport Plan (NLTP), and other statutory documents.

The ATAP Package contains around \$28 billion of investment in Auckland's transport system over the next decade. This is based on planned and assumed funding, including an expected increase of \$4.6 billion on previous funding plans from the following sources:

- An additional \$2.8 billion from the National Land Transport Fund (NLTF)
- \$1.5 billion from the proposed RFT scheme
- \$360 million from Crown Infrastructure Partners (CIP).

The ATAP Package seeks to balance transformational change while also addressing the critical transport challenges that Auckland currently faces. The key outcomes expected from the ATAP package include:

- Supporting substantial growth in key rapid transit corridors, to enhance capacity and the potential for housing growth
- Initial support to enable greenfield development where around 30 per cent of Auckland's growth is expected to occur
- Support for an increase in public transport and cycling mode share, with flow on benefits for health, safety, the environment and congestion
- Improved access as a result of more congestion free alternatives for travel and changes in land use enabled by rapid transit investment
- A 60 per cent reduction in deaths and serious injuries on Auckland's transport network, from 813 in 2017 to no more than 325 by 2027
- Improved environmental outcomes through the provision of lower carbon alternatives for travel and by encouraging less single-occupant travel.

In addition to the ATAP Transport Package, the report also identifies further priority investments that should be progressed as funding becomes available. Further bus priority investments are recommended as the highest priority for additional funding. More investment for walking and cycling, a more extensive network optimisation programme, increased funding for greenfield growth, and further rail network upgrades are noted as important for Auckland.

National Energy and Conservation Strategy 2017 - 22

The National Energy and Conservation Strategy is prepared by the Energy Efficiency and Conservation Authority. Its goal is to guide and promote an energy productive



and low emissions economy. The current strategy was put in place in 2017 and has three priority areas:

- Renewable and efficient use of process heat
- Efficient and low emissions transport
- Innovative and efficient use of electricity.

The target for efficient and low emissions transport in the strategy is for electric vehicles to make up two per cent of the vehicle fleet by the end of 2021.

Māori Outcomes

Māori outcomes in this RLTP are guided by the key directions and focus areas identified in the revised Auckland Plan. The key direction areas for the Māori Identity and Wellbeing are:

- Advance Māori wellbeing
- Promote Māori success, innovation and enterprise
- Recognise and provide for Te Tiriti o Waitangi outcomes
- Showcase Auckland's Māori identity and vibrant Māori culture.

The mana whenua groups who comprise the majority of Auckland's iwi have agreed five strategic pou for Māori aspirations. These have direct relevance for transport in Auckland:

- Cultural identity. We will work to preserve and enhance the unique cultural identity of Māori and its place at the forefront of New Zealand's way of life
- Economic well-being. Opportunities will be sought to provide economic development for Māori businesses and people consistent with procurement requirements
- Leadership and Influence. We will continue to work with mana whenua to recognise their role under the Treaty of Waitangi for kawanatanga
- Infrastructure and Property. We will continue to work with mana whenua on land use issues and in the design and construction of facilities and infrastructure
- Natural environment. We have a large impact on the environment. We will work with mana whenua to minimise adverse impacts and to preserve and enhance the natural environment.

These strategic priorities are consistent with other strategic planning priorities, and are incorporated into the resources and programme for the next 10 years.



Auckland Transport Māori Responsiveness Plan

AT's commitment to meeting its legal and relationship responsibilities, and how AT will be responsive to Māori, are set out in its Māori Responsiveness Plan. The Plan focuses on three areas:

- Empowering AT to respond more effectively to Māori through strong, committed and coordinated leadership, by enhancing the capability and capacity of our people and processes to respond more effectively to Māori
- Ensuring AT has the right relationships and processes in place to enable partnership with mana whenua and effective participation in decision-making, including meaningful, timely and inclusive engagement at all levels
- Developing AT's current and future role in contributing to and delivering positive outcomes for and with Māori. This involves integrating activities and operations across outcomes and connecting Māori communities to opportunities in support of their development needs and aspirations.

AT ensures that its transport partners in Auckland are fully aware of AT's legal and relationship responsibilities under the AT Māori Responsiveness Plan.

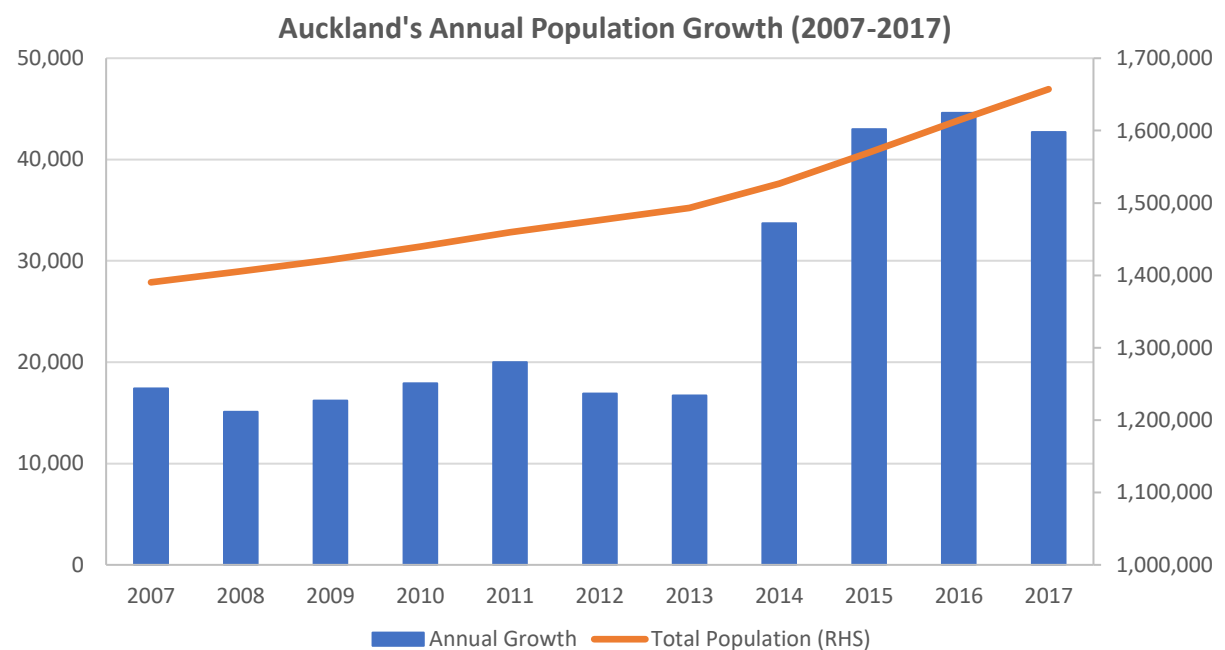
04. Auckland's Challenges

Introduction

This section describes the growth Auckland has experienced in recent years and the impact of that growth on travel demand and Auckland's transport system. This growth has led to Auckland facing significant challenges. This section describes the key challenges to be addressed over the 10 years of this RLTP.

Overview

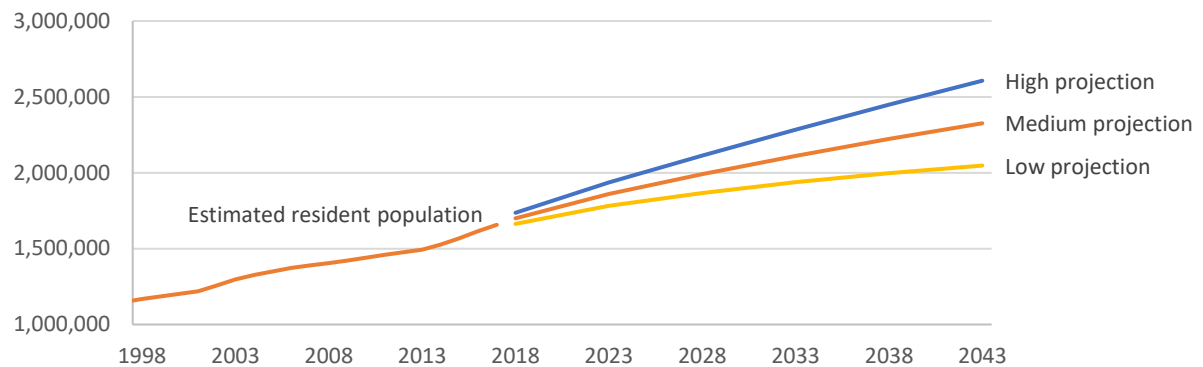
Auckland is the largest urban area in New Zealand, and home to almost 1.7 million people. Over the past few years, the rate of population growth has increased substantially, from around 17,000 people each year from 2006 to 2013 to over 40,000 since 2015, making Auckland the fastest growing major city in Australasia.



Over the next 25 years, Auckland population is expected to increase by more than the rest of New Zealand's population growth combined, to reach 2.3 million by 2043.¹ Over the 10 years of this RLTP, Auckland is expected to grow by an additional 300,000 people.

¹ Medium projection, Statistics NZ June 2017

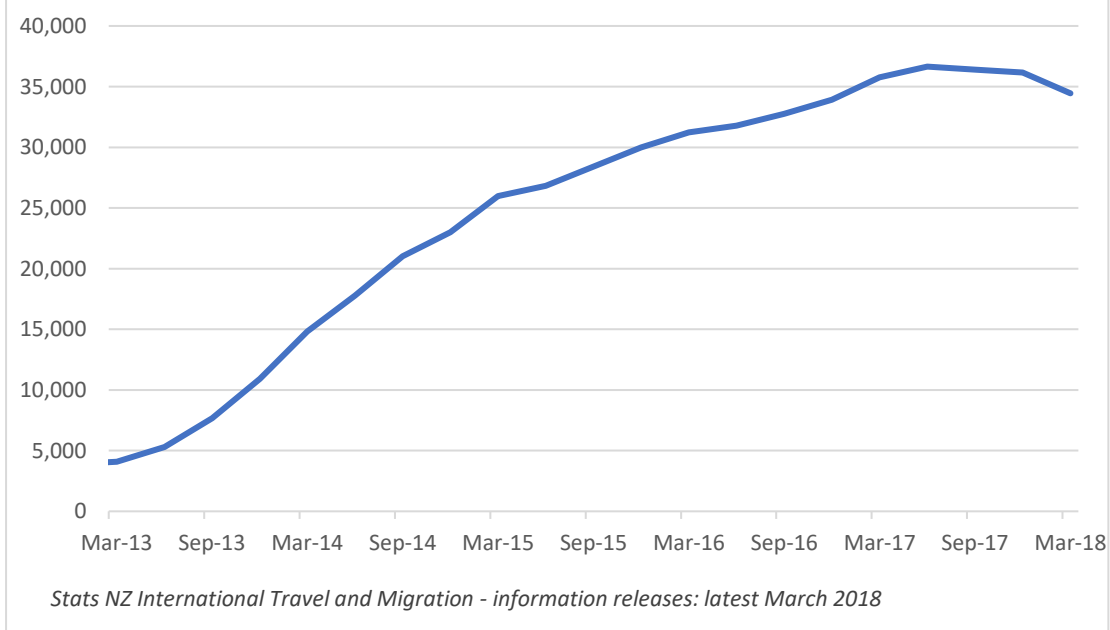
Annual population estimates at 30 June



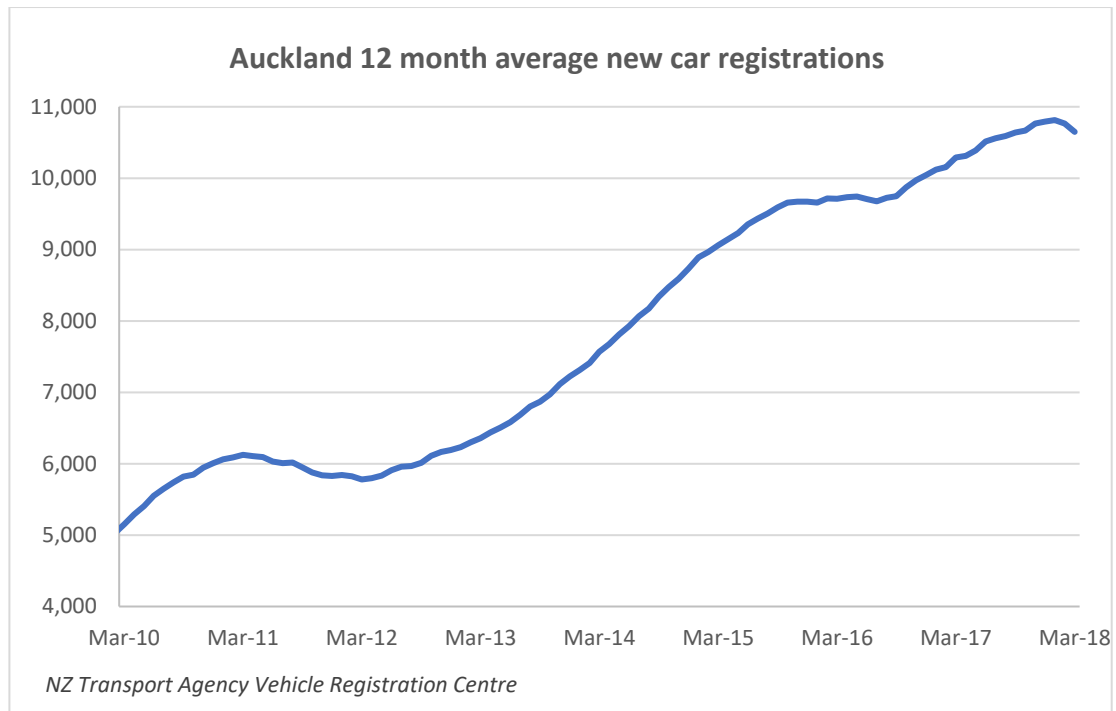
Based on data from Statistics NZ, Estimated resident population: June 2017;
Statistics NZ, Subnational population projections: February 2017

A significant portion of the growth in Auckland's population is due to migration, with Auckland experiencing significant in-migration since 2013. Annual net migration rose from just over 5,000 each year in 2013 to around approximately 36,500 in the year to June 2017, dipping slightly to 34,500 in the year to March 2018.

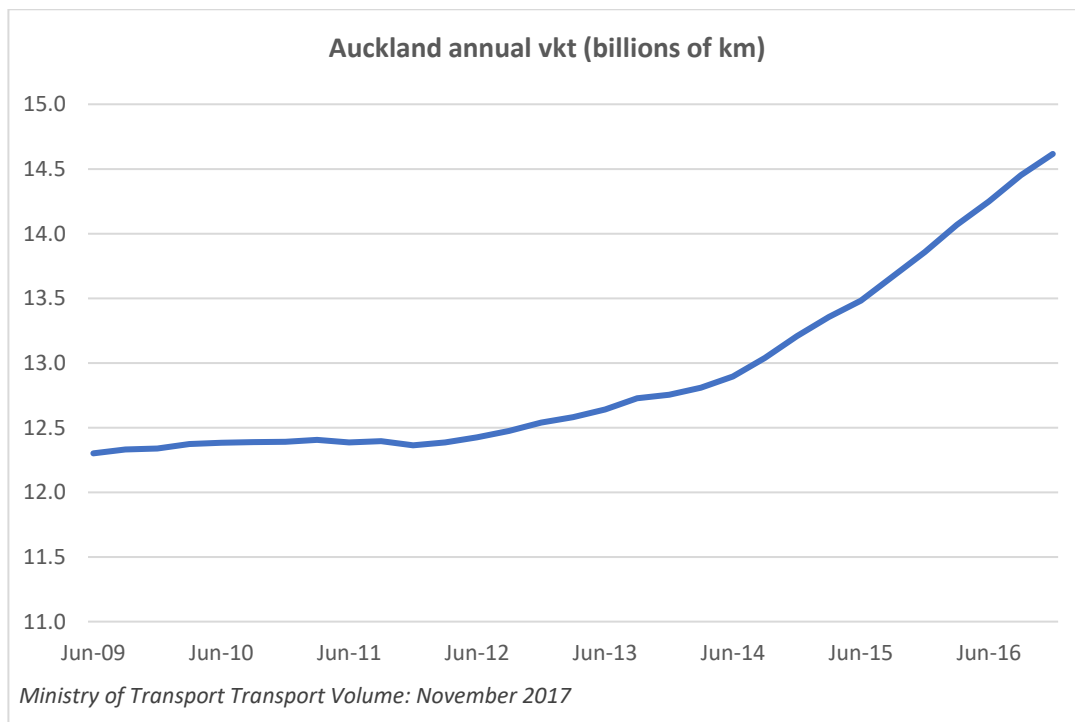
Auckland annual net migration



Alongside population growth, there has been a strong upward trend in new car registrations in Auckland. New car registrations increased from just over 6,000 vehicles in 2013 to almost 11,000 in the year to September 2017, falling slightly to around 10,500 in the year to March 2018.



Rapid population growth, lower fuel prices, a buoyant economy and increases in car ownership have led to substantial growth in travel demand over the past few years. Vehicle kilometres travelled have increased strongly over the past four years, up from 12.6 billion kilometres in the year to June 2013 to 14.2 billion kilometres in the year to June 2016.



This growth provides opportunities to improve the prosperity and well-being of all New Zealanders, through the greater diversity of social, cultural and economic opportunities that a larger population provides. However, these benefits will only be



realised if new opportunities can be accessed safely, sustainably, conveniently, and affordably.

Safety

Safety is one of the components of the transport system that can significantly drift into failure if road design, vehicle safety, education, regulation and enforcement do not keep pace with constantly changing and complex travel patterns. Improving road safety is one of the key strategies for unlocking increased public and active transport in urban environments, as well as generating significant health, access and environmental benefits.

While deaths and serious injuries have steadily reduced over the last thirty years to a record low in 2012, Auckland has experienced substantial increases in both deaths and serious injuries in recent years. There were 64 road deaths and 749 serious injuries (DSI) in Auckland in 2017, with a social cost estimated at \$1.3 billion, a level of road trauma that was last seen in 1996.

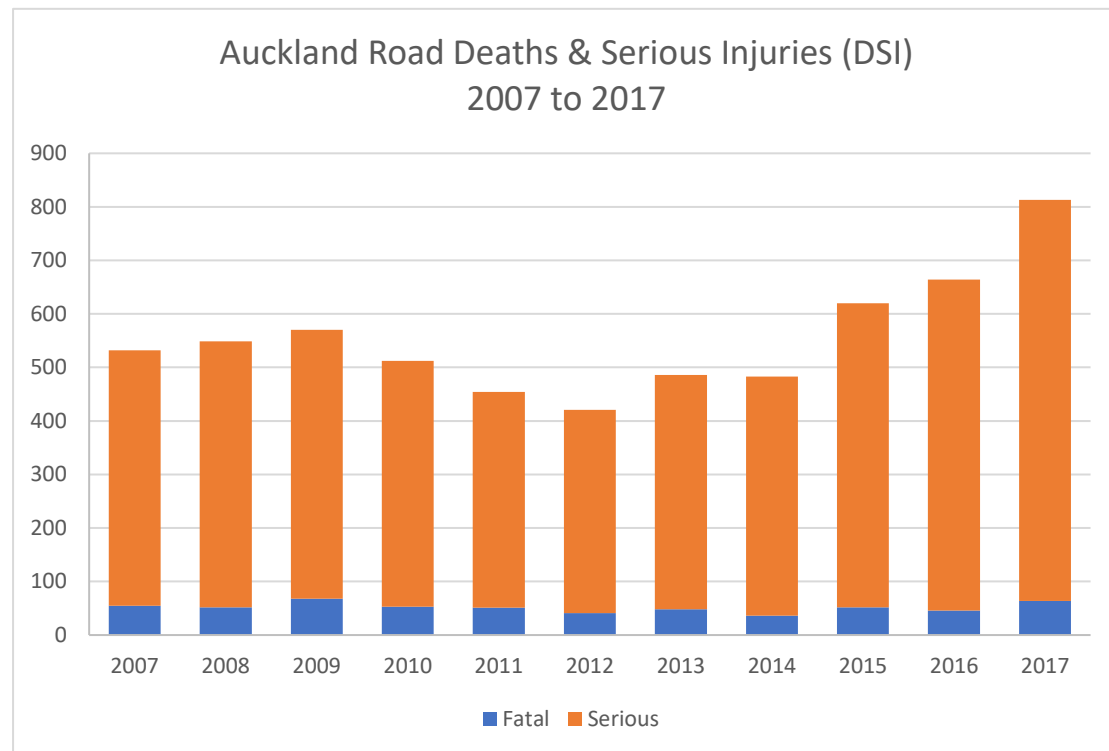
Rates of road trauma per head of population and per vehicle kilometre travelled are also increasing, suggesting that there are other underlying factors generating worsening road safety outcomes. When compared to similar low density Australasian cities, Auckland is a poor performer. Compared to the rest of New Zealand, Auckland has experienced a 70 per cent increase in DSI since 2014, while the rest of the country experienced a 30 per cent increase.

This recent poor performance includes a significant increase in vulnerable road user trauma (particularly pedestrians and motorcyclists) as more diverse travel choices are made in urban environments, and these changing travel patterns occur on a complex road network with reduced margins for error. The major part (70 per cent) of Auckland road trauma occurs on urban roads. Additionally, Auckland's housing growth in rural areas has generated increased travel by new drivers on unforgiving high-speed rural roads and State Highways.

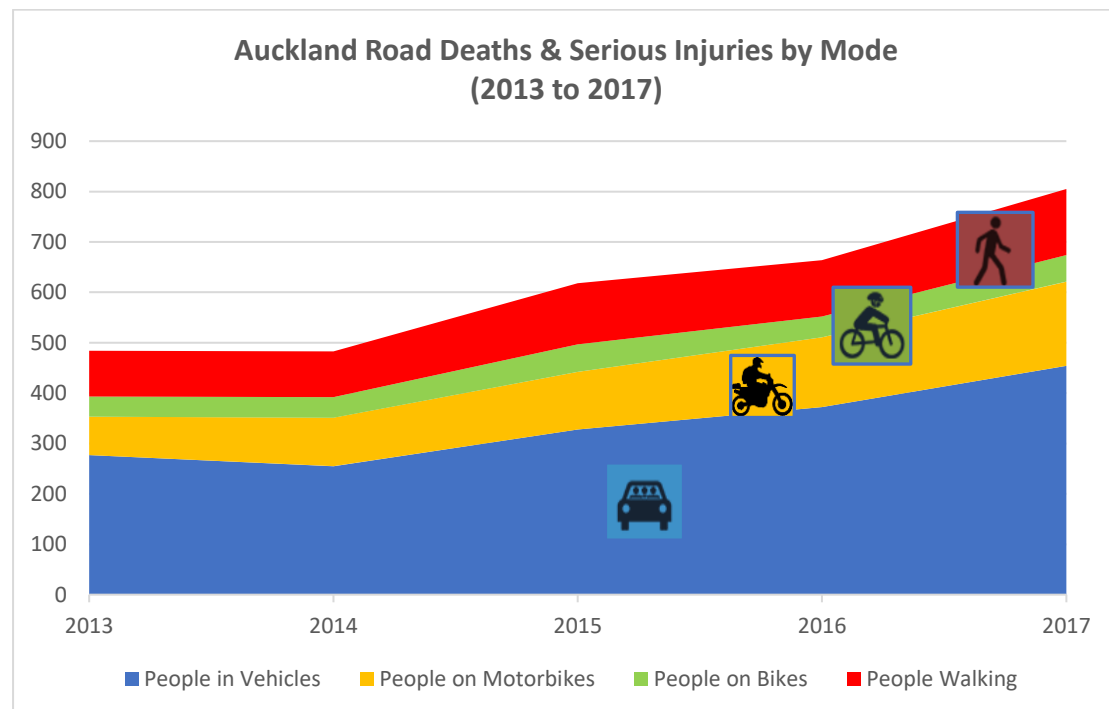
Contributing factors to the recent increase in Auckland road trauma include speed, failure to give-way at intersections, inattention on urban arterials, loss of control on rural roads, driving under the influence of alcohol or drugs, non-use of restraints, and distraction. Some communities are over-represented in road trauma including young drivers and passengers, older road users, and Māori. For example, Māori made up 10 per cent of the Auckland population in 2017, but were involved in an estimated 15 per cent of the DSI in the region.

Vulnerable road user trauma (pedestrians, motorcyclists and cyclists) makes up a significant portion of all Auckland road trauma (47 per cent in 2015). Vulnerable road user crash numbers have continued to grow while vehicle crash numbers have increased sharply. This will continue to be one of the region's key safety challenges over the next 10 years.

Increasingly unsafe aspects of the transport system can limit the range of realistic travel options, through both perceived and real safety concerns, discouraging walking, cycling and reducing opportunities for healthy active lifestyles. Real benefits can be gained in the next 10 years from providing quality integrated land use, safe access to and from public transport, safe infrastructure and speeds for active modes, and ensuring that private vehicle trips are as safe as they can be.



Source: NZ Transport Agency Crash Analysis System



Source: NZ Transport Agency Crash Analysis System



Access

Population growth and the increase in travel demand have led to significant pressure on Auckland's transport system, leading to congestion, increased travel times, impacts on the movement of people and goods, and reduced accessibility to employment, education and other activities.

Congestion

Demand for travel is exceeding capacity on many parts of the transport network.

While some level of congestion is the by-product of a successful and growing city, the performance of many parts of Auckland's transport network has deteriorated rapidly over the past few years. In 2014, 19 per cent of the region's arterial road network was congested during the morning peak compared with 24 per cent in 2017 – a 25 per cent reduction in arterial road network performance over three years. Congestion is increasingly spreading into inter-peak times, negatively affecting the commercial and freight movements that occur during this period.

Analysis undertaken as part of the current investigation into the feasibility of introducing congestion pricing in Auckland indicates that road network performance will continue to decline, even with major investment in transport infrastructure and services.² The analysis indicates that by 2046:

- The proportion of car travel in severe congestion is projected to increase by 29 per cent in the morning and afternoon peaks and by 38 per cent in the inter-peak
- Severe congestion on the freight network during both the morning peak and inter-peak is projected to increase by 50 per cent.

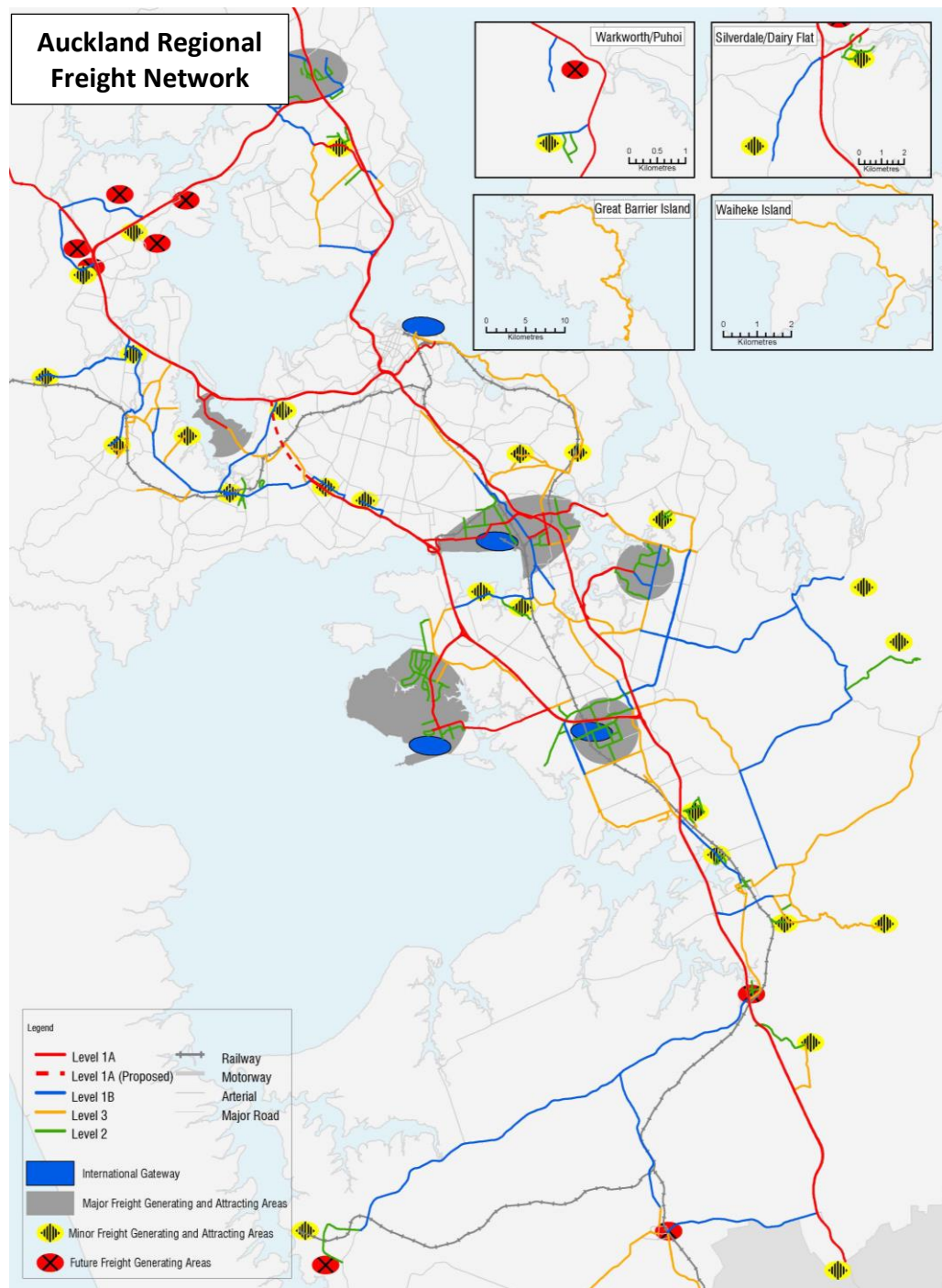
Freight

Increased travel times and poor reliability have a particularly severe impact on the freight industry and the efficient movement of goods and services. Auckland has a nationally significant freight logistics function in the production and distribution of freight to the rest of New Zealand, and internationally. Travel delays and poor reliability create substantial costs to businesses that are ultimately borne by all Aucklanders.

Analysis undertaken for the Ministry of Transport indicates that in 2012 63.25 million tonnes of freight was moved within, to, from and through Auckland. The bulk of that movement (87 per cent) was carried by road. Internal distribution and service trips make up the major portion of commercial travel within Auckland, with freight moved initially within Auckland before it is sent to its final destination. Within Auckland, freight moves primarily on the State Highways, motorways, and arterial road

² The Congestion Question Phase I report 2018

network. However, in industrial areas, freight movements make up a substantial portion of travel on local roads as they provide access to warehouses and distribution centres.



Freight in Auckland is expected to grow substantially over the next 30 years, with total freight carried projected to increase from 63.25 million tonnes to 108.63 million tonnes by 2046, an increase of 72 per cent.³ Freight kilometres travelled are

³ National Freight Demand Study 2014

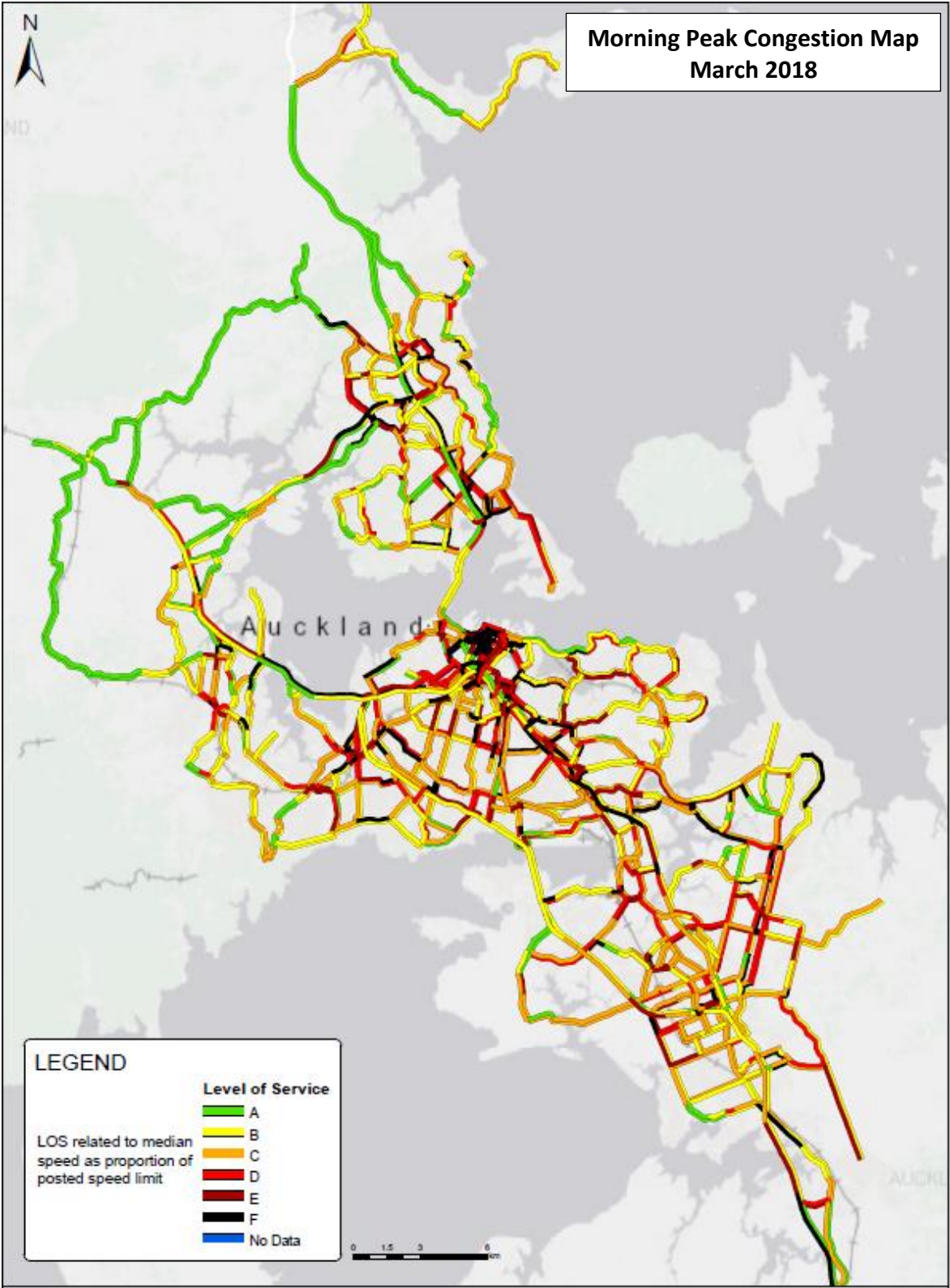


projected to increase by 53 per cent over the same period, with freight kilometres travelled within Auckland projected to rise by 85 per cent.

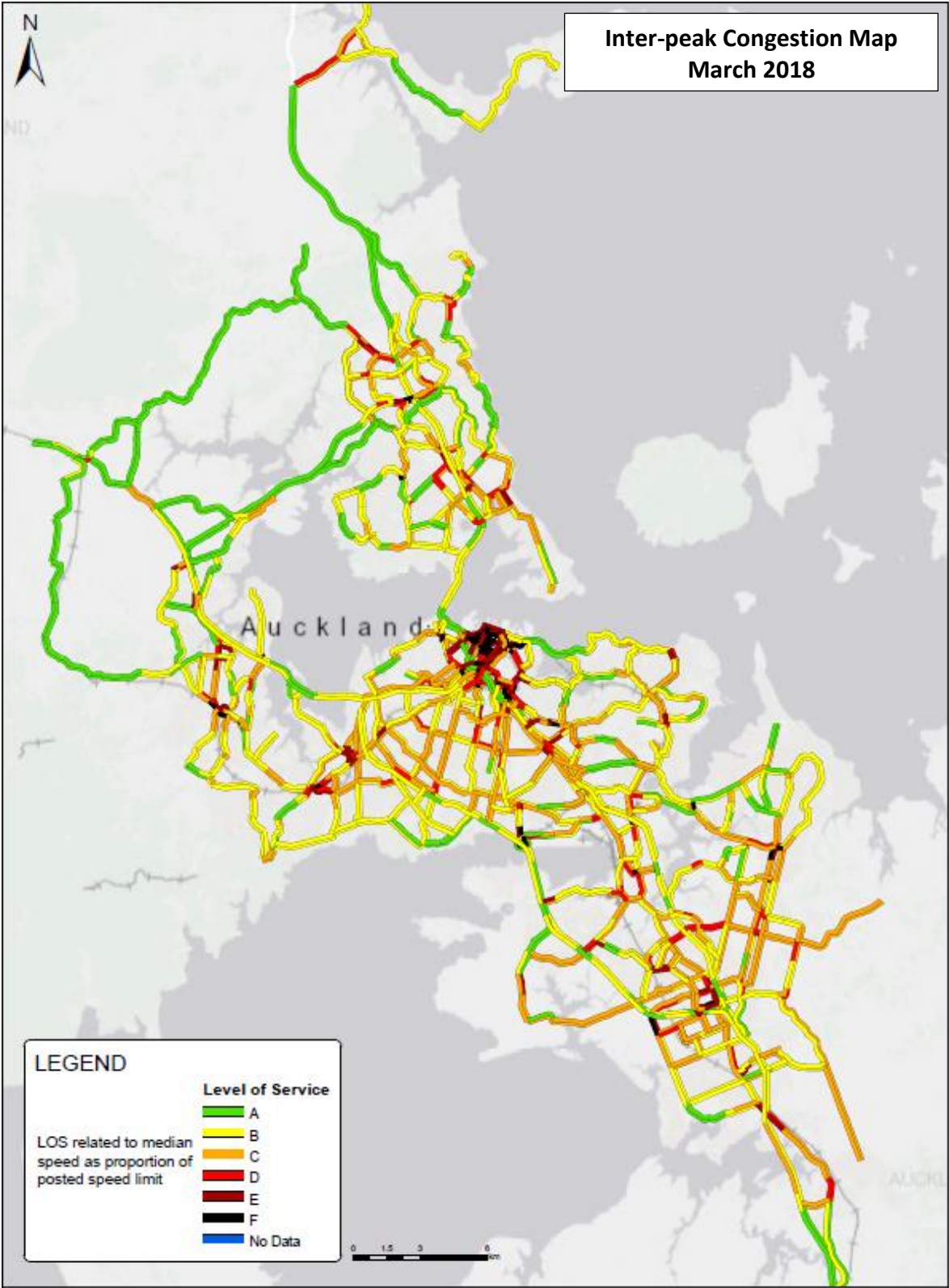
The key challenge will be to limit the growth in congestion on the freight network, particularly in the inter-peak, and to improve the efficiency of connections to major freight hubs. Catering for freight movements through currently rural areas experiencing housing development and growth will also need to be addressed to avoid slower travel times and safety issues.

The figures below illustrate the extent of current congestion on the Auckland road network during the morning and afternoon peak periods, and the inter-peak, during March 2018. The maps show the actual median speed on each road link compared with the posted speed limit on that link.⁴ Service levels D to F, shown as red, dark red and black in the figures below represent congested conditions.

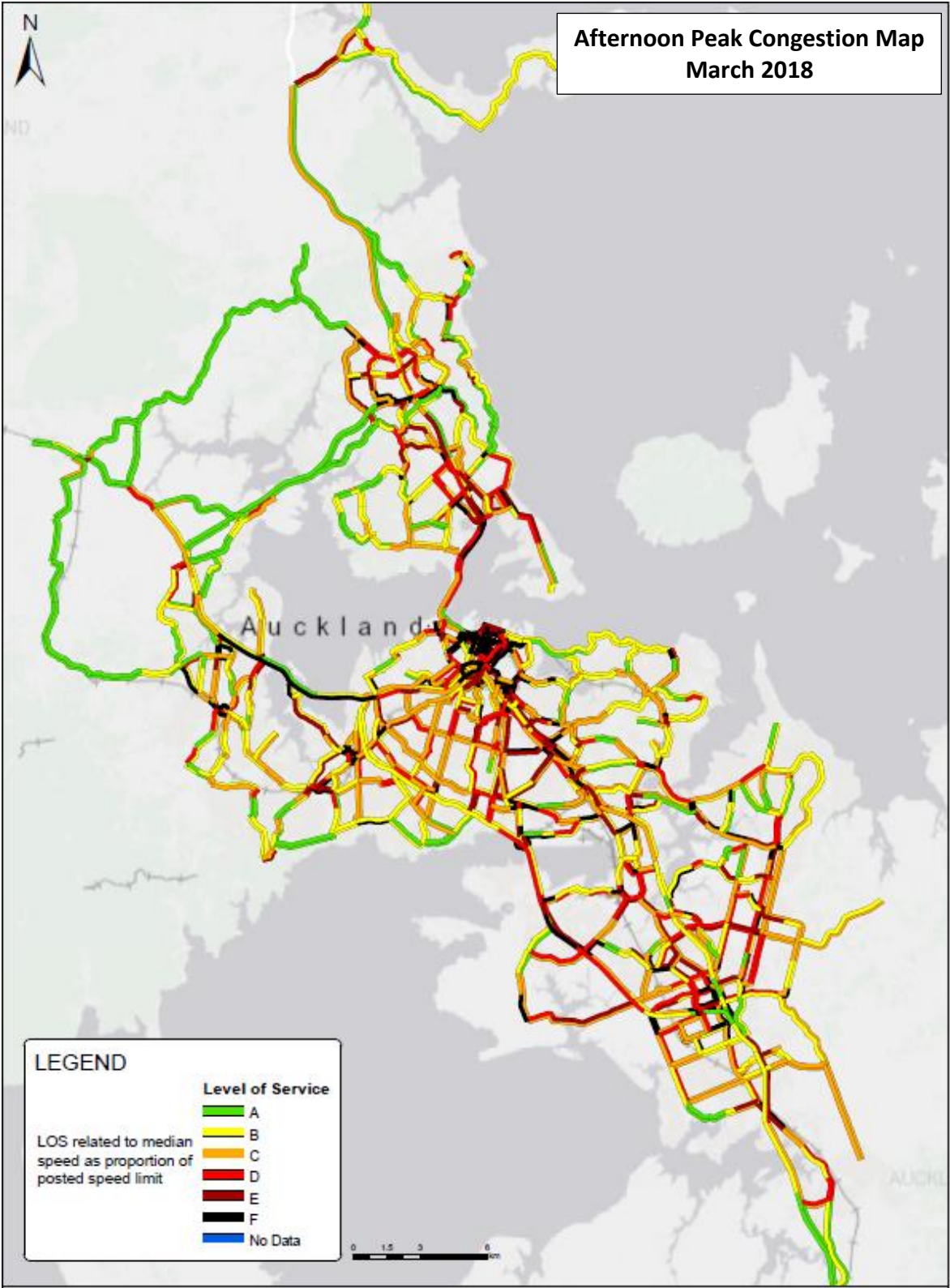
⁴ Arterial road level of service is measured by median speed as a percentage of the posted speed limit and is categorised as follows: A is 90 per cent and greater, B is 70 per cent to 90 per cent, C is 50 per cent to 70 per cent, D is 40 per cent to 50 per cent, E is 30 per cent to 40 per cent, F is less than 30 per cent.



Source: Auckland Transport



Source: Auckland Transport



Source: Auckland Transport



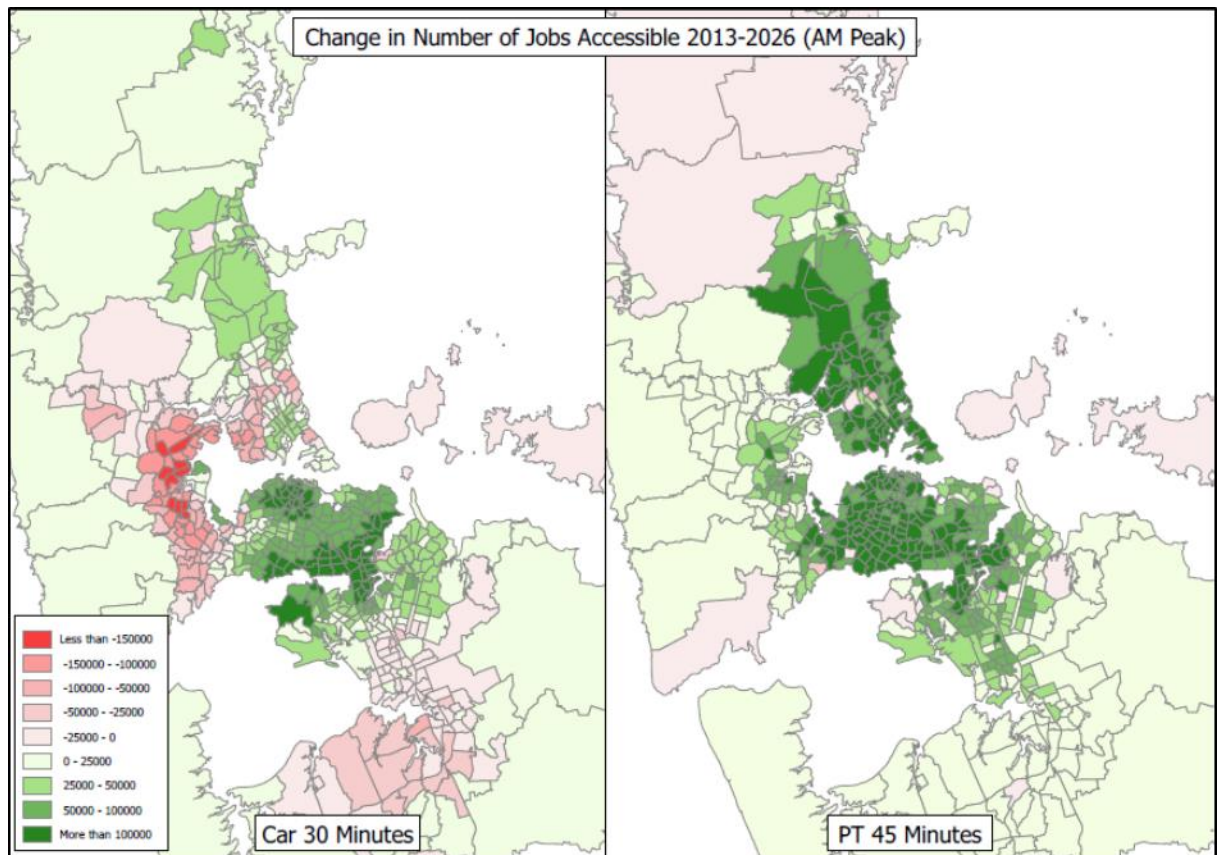
Accessibility

Increased congestion has resulted in longer travel times and reduced travel time reliability, making it more difficult to reach employment, education, healthcare, shopping, services, recreation and other activities. Easy access to jobs and education is crucial to boosting Auckland’s economic productivity and prosperity, as well as improving the quality of life for Aucklanders generally.

The figures below illustrate forecast changes in access to employment 2013-2026, based on analysis undertaken as part of the original ATAP project.⁵ The figures illustrate the change in the number of jobs accessible by car within 30 minutes and public transport within 45 minutes in the morning peak. The analysis assumes a base level of investment in transport infrastructure. The areas in green illustrate where the numbers of jobs accessible increases between 2013 and 2026, and the areas in red illustrate where the numbers of jobs accessible decrease over the same period. The darker the colour, the greater the increase or decrease in the number of jobs accessible.

The figure illustrating the change in access by car shows the decline in accessibility to employment from the west, south and some parts of the North Shore over the period 2013-2026. The west and south contain some of the poorest communities in Auckland. Given this and the expected growth in these areas, focused effort is required to improve access for these parts of Auckland. Appropriate provision of business land in greenfield areas is also needed to reduce the need to travel.

⁵ Auckland Transport Alignment Project 2016

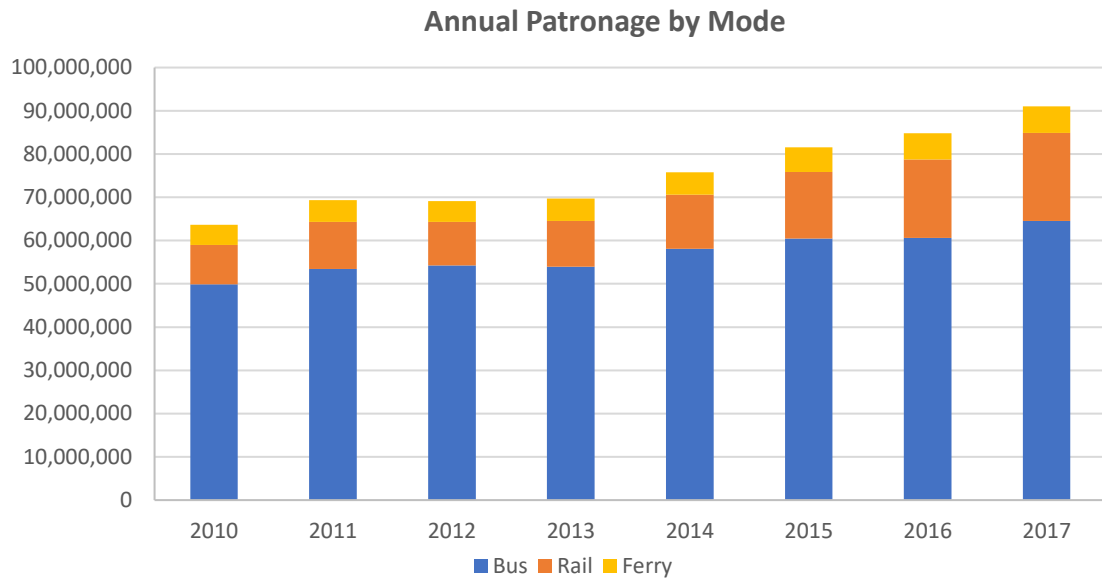


ATAP (CEE4) Baseline projections

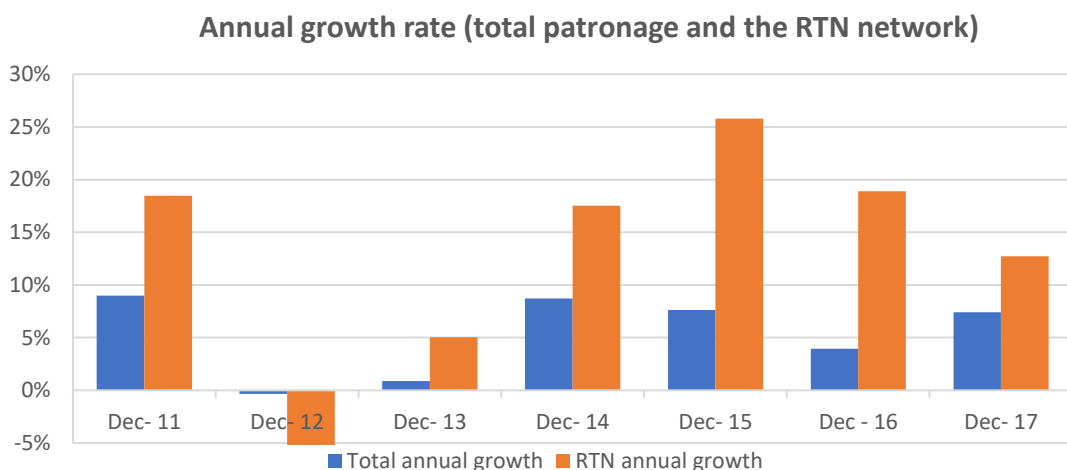
The availability of public transport is also a key factor influencing accessibility. Extending public transport coverage and service frequency will play a key part in improving accessibility and increasing public transport mode share.

There has been considerable success in recent years in increasing public transport uptake in Auckland. Annual public transport boardings have increased by 31 per cent, from 69.7 million in the year to December 2013 to 91.1 million in the year to December 2017. Rail has been a big component of that growth, with boardings increasing by over 92 per cent since 2013, on the back of initiatives such as new fleet of electric trains. Bus patronage has also increased, by 20 per cent from 53.9 million in the year to December 2013 to 64.6 million in the year to December 2017, with the rollout of the new network, integrated ticketing and new fare structure.

Growth in public transport patronage has been significantly higher on the rapid transit network (RTN) where public transport runs in its own right of way, unaffected by congestion. The RTN currently comprises the Auckland rail network and the Northern Busway, and growth on the RTN totalled 12.7 per cent in the year to December 2017 compared with 7.4 per cent for the public transport network as a whole.



Auckland Transport Annual Patronage: December 2017



Auckland Transport Annual Patronage: December 2017

Walking and cycling can also play a greater role in meeting Auckland's transport needs. As with public transport, urban development patterns and the lack of investment in safe walking and cycling facilities has not encouraged the use of active modes.

A very small proportion of people in Auckland have access to a completed part of the cycle network to take them safely and comfortably to their destinations. As a result, just 1.2 per cent of people ride to work and just three per cent cycle to school. The lack of connectivity in the network means that cycling does not currently play the significant role it could play in moving people. Auckland is not receiving the significant health, social and environmental benefits that a connected network of safe cycleways would provide.

Nearly half of peak time trips are under six kilometres, a distance that can be travelled in 25 minutes by bicycle. Over half of Aucklanders live within a 15-minute



ride of Auckland's rapid transport network. While there has been an increase in investment in the cycle network in recent years, only a small proportion of the protected cycle network is in place. This network has however delivered significant increases in trips by bicycle, for example Upper Queen Street where several protected routes meet has seen a 406 per cent increase since 2013.

Walking accounts for 14 per cent of journeys taken in Auckland and AT's research indicates there is significant potential for more. The quality of the pedestrian environment is the key barrier to increasing the number of walking trips, particularly the lack of safe, direct routes for walking. Around Auckland 51 per cent of pedestrian DSI occurs away from a formal crossing point. There is clear potential to encourage walking for short journeys for people who live close to the city centre, nearby public transport stations, for school journeys and trips to local centres, supported by safe places to cross, and accessible and connected walking routes.

Environment

Auckland's transport network forms a large part of the region's public space. Where the balance between movement and place is tilted towards moving vehicles, the network can create a number of unwanted impacts on people and communities.

These impacts include noise and air pollution that can affect visual amenity, sense of community, and reduce physical connections between key local destinations and within communities. As transport corridors become more congested, it becomes increasingly difficult to manage the balance between movement and place, and to create attractive and welcoming public spaces. This is particularly the case in the city centre, and where major arterial routes pass through local and regional centres. Historical development patterns and legacy practices have also resulted in significant disparity in tree cover in different parts of the region, including within the road corridor.

Transport also has significant impacts on surrounding ecosystems. These include:

- contributing to the contamination of waterways through run-off
- flooding and stormwater overflow due to infrastructure being unable to cope with extreme weather events
- visual and noise pollution
- loss of green space
- disruption to ecosystems with the construction of new transport infrastructure
- soil and groundwater contamination.

At the local level, runoff from the transport network contributes to the pollution of waterways while the construction of new transport infrastructure has the potential to generate environmental, cultural and social impacts that need to be appropriately mitigated.



Particulates and other vehicle emissions compromise air quality and harm the health of Aucklanders. Unattractive environments for walking and cycling contribute to lower levels of physical activity and a wide variety of associated health problems, including obesity and diabetes.

Transport is Auckland's largest contributor to greenhouse gas emissions at 40 per cent, which is much higher than the 18 per cent national average, the majority of which comes from road transport. This in turn contributes to the global challenge of climate change. Reducing greenhouse gas emissions from the transport system is fundamental to meeting regional, national and international commitments to mitigate the impact of climate change.

Addressing greenhouse gas targets represents a significant challenge and opportunity with the growth anticipated within Auckland. The Government will be undertaking engagement on the Zero Carbon Bill in 2018. Auckland Council will also be updating Low Carbon Auckland in 2018.

Growth

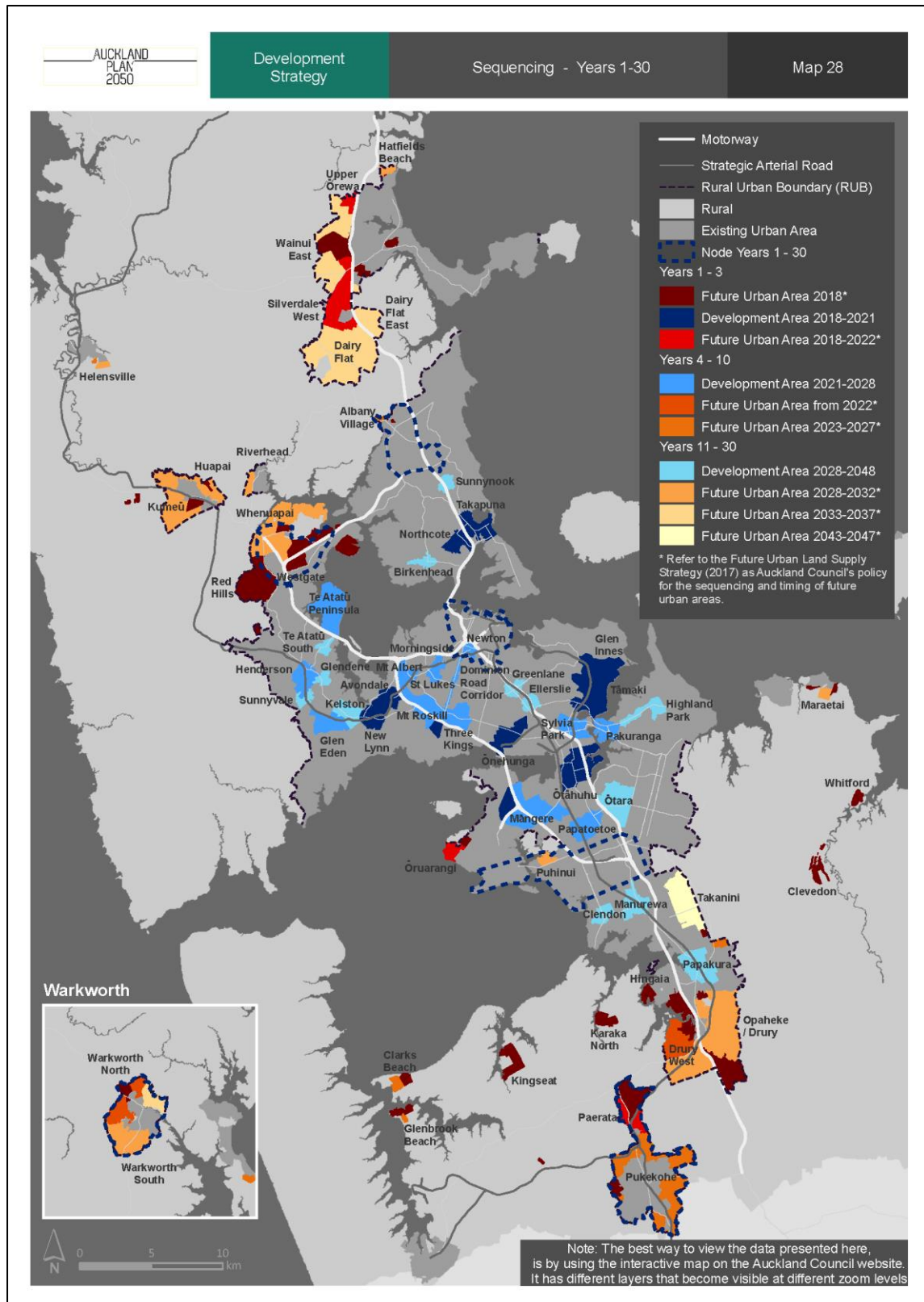
Accommodating Auckland's rapid population growth requires accelerating the construction of housing and business development. Opening up rural land for development, and facilitating redevelopment of existing urban areas to higher densities, is frequently dependent upon the provision of new transport infrastructure and services.

At current rates of population growth and household occupancy, Auckland will likely require another 320,000 dwellings to be built by 2050.⁶ Two thirds are expected to be built in existing urban areas, and the rest in areas that are currently rural.

Significant investment is required to enable and support growth in the region. The Unitary Plan identifies around 15,000 hectares of rural land for future urbanisation to accommodate around 135,000 dwellings. This will require new transport, water and wastewater infrastructure in targeted growth areas. While this infrastructure will be partly provided by developers, it will require significant public sector investment. The map below illustrates the scale and location of key areas of proposed development in the Auckland region over the next 30 years.

Managing the transport impacts of both private and public sector development will also be a major challenge over the next decade. While integrated planning of new development can assist in reducing travel demand, the direct impacts of accommodating demand generated by new developments, and those arising from the provision of transport infrastructure, will be significant.

⁶ Auckland Plan 2050



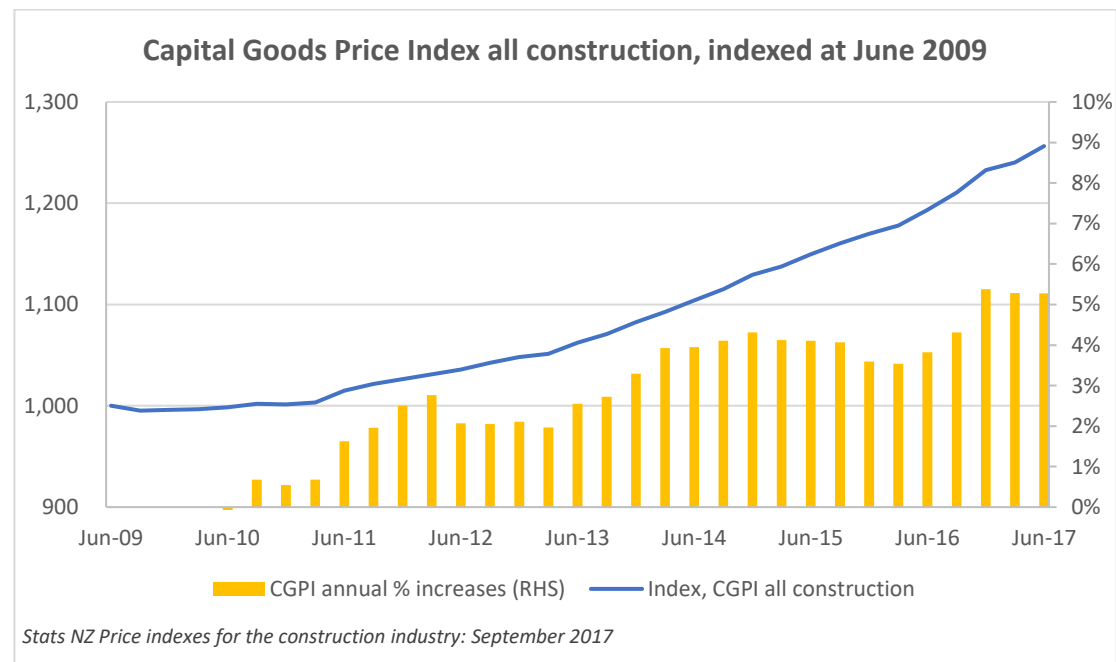
Auckland Council: The Auckland Plan 2050 Development Areas

Value for money

A major challenge in Auckland is to ensure ratepayers and taxpayers receive value for money in the delivery of transport services and infrastructure in an environment where there are significant growth pressures, rapid increases in property, land and construction costs, and an increasing number of parties delivering transport infrastructure.

Added to this are the difficulties of building infrastructure in already developed areas, such as the city centre, and the increasing complexity of the infrastructure required. Such examples include the Waterview Tunnel, which opened in mid-2017, and the City Rail Link (CRL), which is currently under construction.

Construction costs have increased significantly since 2011, with particularly strong growth since 2014. The figure below illustrates the national trend in construction costs since 2009, with particularly strong upward growth evident since 2014.



The increasing number of parties involved in the delivery of transport infrastructure also creates the challenge of ensuring that transport investment is made in the most cost effective way. The need to clearly define roles, responsibilities, interface arrangements and agree risk allocation can add time, cost and complexity to the planning, funding and delivery of transport projects and services.

Several parties have been established to deliver transport infrastructure over the past two years, including CRLL to deliver the CRL, and CIP to assist in the delivery of roading infrastructure to support housing development. There is potential for additional agencies to be established during the period of this RLTP.



05. Addressing Auckland's Challenges

Introduction

This chapter describes the funded transport programme for the 10 years of this RLTP.

The programme seeks to align the outcomes sought by the Auckland Plan, the GPS 2018, and the ATAP recommendations, consistent with the funding available over the next decade, including the Auckland RFT scheme. It reflects the feedback received during public consultation on the draft RLTP.

Appendix 1 provides AT's programme shown in two parts. Table 1A of Appendix 1 lists the projects included in the funded transport programme described in this chapter. Table 1B lists projects that are not currently included in the funded programme, but which may be considered for inclusion should additional funding become available.

Appendix 2 provides the Transport Agency's Investment Programme including committed projects, and major State Highway and rapid transit projects.

Appendix 3 lists rail infrastructure projects included in the funded transport programme. Appendix 3 also includes provision for inter-regional and express rail services, identified in ATAP as a priority as further funding becomes available.

Appendix 4 lists projects to be undertaken by the Department of Conservation.

Strategic Approach

The programme set out in this RLTP will enable Auckland to address its current challenges and take advantage of future growth, while at the same time enabling the creation of an accessible, well-connected, safe and sustainable region.

It will support the move away from a city where the dominant mode of travel is by single occupant private vehicles, to a city where public transport and walking and cycling play a more important role. Significant investment in transport infrastructure such as light rail, mass transit, bus priority and cycle ways, supported by improvements to bus, rail and ferry services, will support Auckland achieving these goals. This will be supported by a much greater focus on customer needs and improving customer experience.

Investment in walking and cycling facilities will be supported by the provision of more shared spaces, amenity improvements, cycleways and footpaths, better



network connections, end of journey facilities, more and improved pedestrian crossings, signal phasing that prioritises pedestrians, and safer traffic speeds.

Addressing the negative impacts of the transport system is a core element of the programme in this RLTP, in particular to reduce deaths and serious injuries (DSI). This will be achieved through a comprehensive programme of safety improvements, including targeted initiatives such as improvements to high-risk intersections and corridors, and speed management.

Minimising transport impacts on the environment is also a core focus of the programme, through better design, greater use of more sustainable travel options, the rollout of LED lighting, the installation of pollutant traps to minimise the impacts of road stormwater damage, and encouraging the uptake of electric vehicles.

Improving network capacity and performance by making the most of the existing transport system is key. For example, optimising the network through targeted changes such as improving the coordination of traffic lights, the use of dynamic lanes at peak times, and removing bottlenecks to mitigate congestion. Maximising the benefits from new technology and taking opportunities to influence travel demand through encouraging car sharing and mobility as a service (MaaS) are also important, and in the longer term considering the introduction of pricing to address congestion.

While the primary focus is to reduce reliance on the private car, there is still a need to invest in roads. The programme in this RLTP addresses congestion on the arterial road network, supporting the movement of freight including access to key freight locations, the port and Auckland Airport, and enabling public transport to support housing and development.

Safety

Reversing the current increase in Auckland road DSI is a significant challenge and requires fundamental changes in the approach to road safety. Best performing jurisdictions have implemented the Safe System/Vision Zero approach which asserts that road trauma is both predictable and preventable, and that no loss of life is acceptable.

The Vision Zero approach acknowledges that people make mistakes and are vulnerable to crash forces, and seeks a paradigm shift in responsibility from the people using the roads to the people designing and operating them. Road network managers share responsibility to correct hazards in the transport system, and all parts of the system must be strengthened together to ensure if one part fails people will still be protected.

The five elements or pillars of the road system are roads and roadsides, vehicles and technology, speeds, users, and post-crash care. These layers work together to prevent death and serious injury when inevitable errors occur.



The Government has announced the development of a new road safety strategy, which will investigate setting a target of zero road deaths.⁷ The development of a new road safety strategy will be ready for implementation in 2020.

Auckland Road Safety partners (AT, the Transport Agency, NZ Police, ACC) have identified a number of actions to improve Auckland road safety outcomes in the short term including:

- Improved Safe System road safety governance structures and knowledge transfer
- Speed management, technology and enforcement of safe driving behaviours
- Safety engineering investments at high-risk intersections and road corridors
- Mass action safety improvements for vulnerable road users
- Ensuring Safe System design improvements through Capital, Maintenance and Renewals programmes
- Support for increased Auckland Road Policing activities and further investment in technology.

The existing road safety challenge will take some time to turn around and require strong leadership and greater understanding of the Safe System/Vision Zero approach. As a lead agency for road safety in the region, Auckland Transport is exploring with its partners the adoption of a vision of zero deaths and serious injuries on the road network, and adapting the evidence-based Safe System/Vision Zero approach to all elements of the wider transport network. This will be guided by an Auckland Road Safety strategy, with three local Road Safety Action Plans.

The transport programme in this RLTP includes:

- Rural Road Safety Programme to address the highest risk rural roads and intersections
- Urban Road Safety Programme to address the highest risk urban roads and intersections
- Safer Communities and Speed Management Programme to address safety and operational deficiencies and implement speed management across Auckland's road network
- Safety and Red Light Cameras – delivery of cameras and monitoring of high risk areas
- Road safety education and awareness programmes targeting high-risk behaviours.

⁷ No loss of life acceptable, Hon. Julie Anne Genter, Associate Minister of Transport 9 April 2018.



Access

Easy access to employment, education, shopping, business, recreation and other activities is a critical part of ensuring that Auckland is a prosperous and attractive place to live. Improving access to enhance the well-being of people and the environment by prioritising investment in public transport is at the core of the transport programme in this RLTP.

The Northern Busway and the Auckland rail network currently form the backbone of the Auckland public transport system, providing for high volumes of travel to major employment centres, particularly into the city centre. This public transport spine enables frequent, high capacity services to operate in their own dedicated corridors, offering mass transit that is at least partially separated from private vehicles and is less affected by road congestion.

The programme in this RLTP provides for public transport to play an increasing role in meeting the city's travel requirements over the next decade. The goal is for the Auckland public transport network to be a single, connected service network across all modes (rail, light rail, bus, ferry, emerging mode technologies) easily accessed by the customer.

By providing a comprehensive and accessible network, public transport will play a much greater role in addressing congestion, supporting new housing development and urban development, and helping to reduce the impact of transport on the environment. Acceleration of the development of the RTN will also enable and foster growth.

Major initiatives already underway will expand the capacity and coverage of the public transport network. The largest of these is the CRL, a \$3.4 billion investment jointly funded by Auckland Council and the Crown. The CRL will provide a second access point to the city centre from Mt Eden.

Construction of the CRL, which is being delivered by CRRL (a Crown entity owned by the Crown and Auckland Council), is expected to be completed by 2024. This underground rail line will provide benefits to rail passengers through improved access to the city centre and reductions in travel times, particularly from the west.

The CRL will add capacity and resilience to the rail network by removing the current bottleneck at Britomart train station, improve access to the city centre and substantially reduce journey times from the west in particular. Other public transport improvements included in the transport programme in this RLTP are described below.

Rapid Transit and Buses

Extending the strategic public transport network through the provision of high capacity, quality public transport services running in dedicated rights of way, such as



light rail or busways, is a high priority for the programme of investment for the next decade. Provision of rapid transit has the potential to improve public transport mode share, help to reduce congestion and support urban redevelopment.

Buses are, and will remain, the most heavily used mode of public transport, currently accounting for around 70 per cent of public transport trips. Major new initiatives proposed for the next 10 years are designed to strengthen the public transport network spine, and provide improvements across the bus network.

The transport programme in this RLTP includes:

- Light rail on two major rapid transit corridors over the next decade to enable growth and shape Auckland's urban form:
 - Auckland Airport to City – to alleviate bus capacity constraints in the city centre, improve access to growing employment areas, unlock significant growth potential along the corridor, and provide an attractive and reliable one seat journey between the city centre and Auckland Airport.
 - North west – to support substantial growth along the corridor and in the broader north west, address the projected decline in employment access, provide a travel alternative to congestion on State Highway 16, and improve public transport mode share
- Eastern Busway – completion from Panmure to Pakuranga, including the Reeves Road flyover and Pakuranga Bus Station, and through to Botany, including Botany interchange. The Eastern Busway will improve transport options by making public transport, walking and cycling realistic and safe choices, and improve connections between the area and the rest of Auckland
- Whole of Bus Route Priority Phase 1 – implementation of bus priority measures along the Frequent Service Network to improve capacity and speed. Immediate routes prioritised for implementation are Sandringham Road, New North Road, Mt Eden Road, Remuera Road, and Manukau Road
- Extension of the Northern Busway to Albany Park & Ride, running in both directions alongside the motorway, and building on the existing busway from Constellation Drive to the city centre. A new station will be added at Rosedale
- Investigation, design and route protection for a new rapid transit route from Auckland Airport to Botany via Manukau City Centre, including Puhinui
- New and expanded park & ride facilities, including at Papakura.



Ferries

Ferries currently play an important role in Auckland's public transport system. Ferries carried 6.1 million public transport passengers in the year to December 2017, making up 6.8 per cent of total public transport patronage. While the share of total patronage is relatively small, ferry services provide a key alternative to the private car for communities such as Devonport, Bayswater, Gulf Harbour and Half Moon Bay. Ferries also provide the only practical link for Waiheke residents to access Auckland city, and freight and passenger ferries are critical for Waiheke and Great Barrier Island.

Ferries have the potential to play a significantly increased role during the next decade, to assist with addressing Auckland's growth and improving the resilience of the transport system.

Activities in the transport programme include:

- Completion of the Future Ferry Strategy for Auckland to identify future demand, infrastructure and fleet requirements, and an implementation pathway
- Downtown Ferry Terminal - redevelopment and construction of a new terminal
- Replacement of piers 3 and 4 to Queen's Wharf West in time for the America's Cup
- Matiatia (Waiheke) park & ride – replacement and expansion of existing facilities to cater for increased demand.

Rail

Auckland's rail network forms a key part of the city's strategic public transport system and freight network. Investment in rail over the past 15 years has resulted in substantial growth in rail passenger boardings, reaching over 20 million trips in the year to December 2017. The rail network also plays a key role in the movement of freight, especially to and from the Ports of Auckland, and the Port of Tauranga.

Strong growth in passenger rail boardings and rail freight are expected to continue into the future. Meeting this growing demand will require more passenger and freight trains on the rail network, increasing conflict between services unless ongoing investment occurs. More intensive use of the rail network will also require investment to increase capacity, improve network resilience and maintain safety.

The transport programme in this RLTP includes:

- New electric trains to provide for growth and reduce crowding that would otherwise occur. Fifteen new trains have been ordered to provide additional capacity in advance of the opening of the CRL.



- A further order of new trains is planned for later in the decade to provide additional capacity, improve train frequencies and to cater for the growth that is expected to follow the opening of the CRL. Provision for stabling, cleaning, and maintenance facilities is also included.
- Electrification of the line from Papakura to Pukekohe. Electrification will allow the current old diesel fleet to be replaced by electric trains, and will remove the need for passengers to change trains at Papakura
- Provision of a third main between Westfield and Wiri and upgrade of Westfield rail junction to provide better separation of passenger and freight services, enabling higher frequencies and improved reliability.
- Programme of works to improve the resilience and performance of the Auckland rail network, including crossovers, line speed improvements, track, formation and drainage works, and provision of an Auckland Train Control and Rail Management Centre
- Upgrade of the Onehunga Line to accommodate higher frequency services and longer trains
- Progressive improvement and removal of road/rail level crossings to better manage safety risks and address road congestion.

Walking and Cycling

There is a significant opportunity for walking and cycling to play a more substantial role in improving access and contributing to a more effective transport system for Auckland.

The opportunity for increased cycling in Auckland is to:

- Play an increased role for short to medium distance commuting trips, with particular value where it can move trips from congested networks
- Provide connectivity to Auckland's developing strategic public transport network, increasing its catchment and improving accessibility to jobs and other opportunities
- Improve transport accessibility for groups with lower levels of transport choice by providing a low-cost, convenient transport option for children and young people, and other people with poor access to public transport or private vehicles
- Provide a convenient transport choice for everyday household trips, taking pressure off networks serving key metropolitan and town centres.

The programme set out in this RLTP seeks to increase cycling mode share and reduce DSI among cyclists through the provision of safe and attractive cycling infrastructure. Infrastructure investment will be supported by a range of behaviour change activities, together with bicycle parking facilities, speed management and innovations such as cycle share.



Auckland's city centre is continually undergoing changes to the street environment to create a world-class city centre for people. This includes shared spaces, more and improved pedestrian crossings, signal phasing that prioritises pedestrians, and high-quality paving and seating facilities. Other projects around the region support increased walking through the provision of good quality footpaths, increasing the width of footpaths, more and improved pedestrian crossings and safer traffic speeds.

The Safer Communities programme is a key mechanism used for increasing walking in selected neighbourhoods. Priority areas are chosen based on safety risks, the high number of people living there, and a large number of trip generators like town centres, schools and recreational facilities. The programme seeks to increase walking by making it safer and easier to walk by:

- Creating streets that give greater priority to pedestrians
- Reducing traffic speeds
- Improving the ability to cross the road safely and easily
- Creating streets that support more compliant and alert driving behaviours
- Footpath improvements
- High-quality education to increase active modes and tailor improvements to community needs.

Walking and cycling activities in this RLTP include:

- Urban Cycleways Programme to complete the programme which commenced in 2015 (for example completion of Glen Innes to Tamaki Drive)
- Walking and cycling programme – to achieve maximum impact for short trips to the City Centre, public transport interchanges, schools, and local and metropolitan centres
- Seapath – shared path between Esmonde Road and the Auckland Harbour Bridge
- Skypath – shared path across the Auckland Harbour Bridge
- Manukau Harbour Crossing – dedicated shared path crossing between Onehunga and Mangere Bridge
- New footpaths regional programme - to construct new and widened footpaths.

In addition, a number of major projects incorporate walking and cycling components as part of their design.



City Centre

The city centre and surrounding area is projected to be one of the fastest growing employment areas in Auckland over the next 30 years. The city centre is also important for the visitor economy, playing host to significant events, including the America's Cup and APEC summit in 2021.

Strong growth is expected to continue in the city centre, accompanied by a substantial increase in population, tertiary students and visitors. The city centre is the economic powerhouse of the region, accounting for 20 per cent of Auckland's GDP while only occupying 0.08 per cent of the region's land area.

Completion of the CRL, together with rapid transit initiatives and improvements to the bus network, will significantly improve access to the city centre and facilitate ongoing modal shift.

City centre upgrades in this RLTP include:

- City centre bus improvements - delivery of bus infrastructure in the city centre including bus priority along Wellesley Street, and a new Learning Quarter bus interchange
- Downtown bus improvements – delivery of new bus interchanges on Quay Street East and Lower Albert Street in conjunction with the CRL and Auckland Council's Downtown projects.

Auckland Airport

Auckland Airport is the international gateway to New Zealand and key to the tourism economy. It is a major and growing regional employment hub and a key freight destination, particularly for high-value and time sensitive goods. Auckland Airport handles around 17 million passengers per year and about 15 percent of New Zealand's foreign trade by value, making it the country's third largest port. Auckland Airport and businesses in the surrounding area currently employ over 30,000 people, and is projected to grow to approximately 90,000 by 2044.

Record levels of both freight and passenger air travel combined with general increases in traffic around the airport precinct have led to journey time unreliability and significant congestion. Daily trips to and from the area are expected to grow from 63,000 to 140,000 over the next 30 years.

Activities in this RLTP to improve access to and from Auckland Airport include:

- Provision of progressively enhanced rapid, high frequency bus services taking advantage of bus/high occupancy lanes on State Highway 20B
- Upgrade of Puhinui rail station to provide high quality connections between rail and buses serving Auckland Airport



- Implementation of bus priority measures between Auckland Airport and Botany
- Eastern Airport Access – upgrade to provide an additional lane in each direction between Puhinui and Auckland Airport to support bus, carpool, and freight movements, and an upgrade to the State Highway 20/State Highway 20B interchange.

These will complement developments undertaken by Auckland Airport to improve pedestrian facilities, bus lanes and stops, lighting and cycling facilities within the Airport precinct.

Meeting the Needs of Visitors to Auckland

On average, there are 30,000 visitors to the Auckland region at any one time. The visitor economy is one of the largest contributors to the regional economy. A well-connected transport system is key to enabling visitors to experience the best of what Auckland has to offer and facilitate visitor spend at key attractions, and on accommodation and other services. This is reflected in the Destination Auckland Strategy to 2025 prepared by Auckland Tourism, Events and Economic Development (ATEED) with industry participants.

Initiatives in this RLTP will support positive destination outcomes for visitors to the region and a number of projects and programmes, such as improved access to Auckland Airport and city centre and downtown improvements, will lead to a better customer experience for all users of the transport network including visitors.

Placemaking

Transport investment and renewal can facilitate the creation of better public spaces and amenity for the people of Auckland and visitors to the region. Better public spaces can facilitate safer journeys, greater use of active modes and contribute to addressing the congestion challenge.

Significant improvements have been made over the past 15 years, including development of the Britomart Precinct, Wynyard Quarter, Manukau bus and rail station, and the Panmure Interchange. However, in aspiring to enable a greater sense of place, it is important to acknowledge the difficulties in increasing the capacity of limited road corridors through reallocation of road space for more bus priority measures, T2 and T3 priority lanes, and walking and cycling. Delivering bus priority as end-to-end routes will enable best design solutions across movement and place outcomes.

This RLTP will further encourage placemaking through recognising the role of Local Boards, together with an increase in the proposed funding for Local Board initiatives to support this.



Network Capacity and Performance Improvements

Auckland has an extensive transport network and, within the existing urban area, there are few opportunities remaining to build new corridors or to expand existing corridors without community and environmental impacts. As a result, the major part of Auckland's future growth in travel demand will need to be accommodated by existing routes.

Auckland needs to make better use of its existing transport system increasing the number of people who can travel through key routes and corridors. Auckland also needs to ensure that the operation of existing transport infrastructure and services are optimised so that new investment is made only when all existing capacity has been fully utilised.

There are substantial opportunities for improvement across the transport system, including roads and the public transport network. These include improving connectivity to key public transport hubs and interchanges, improving the efficiency and coordination of traffic signals to improve throughput and reduce delays, using dynamic traffic lanes to improve peak traffic flows, and providing priority for freight on key freight connections.

New and emerging technologies provide opportunities to influence travel demand, including moving toward the use of pricing to manage congestion as well as initiatives to encourage higher vehicle occupancy.

A further element of demand management is encouraging higher vehicle occupancy, given the significant proportion of single occupant vehicle on the Auckland transport network. While public transport has a key role to play in encouraging drivers to leave their cars at home, initiatives to encourage higher vehicle occupancy are also important, including priority lanes for high-occupancy vehicles, carpooling applications and ride-share parking spots at public transport hubs. Existing programmes such as travel planning, walking school buses and travel management initiatives with businesses also help to manage demand.

While innovation in ridesharing may in general be led by the private sector, public sector agencies have a key role to play in encouraging progress through reducing regulatory barriers, promoting pilot schemes, ensuring open access to data and exploring opportunities to reallocate road space where it increases overall throughput. Public sector agencies also have a key role in assuring the safety and security of service users.

An investigation into the feasibility of introducing congestion pricing to improve network performance and reduce congestion is currently underway. The study will inform decisions on whether or not to proceed with introducing such pricing in Auckland. The potential impact of introducing congestion pricing has not been taken into account in this RLTP.



Activities in this RLTP include:

- Auckland Transport Operations Centre integration to provide a single transport operations centre with the capacity to effectively manage incidents and emergencies and reduce disruption and delay
- Intelligent Transport Systems Programme to utilise emerging technologies to better manage congestion, improve safety and influence travel demand
- Network Optimisation Programme providing a package of targeted small to medium scale infrastructure projects to optimise routes through synchronisation of traffic signals, optimising road layout, dynamic traffic lanes and managing traffic restrictions
- On-demand services
- T2/T3 priority lanes.

Technology and Information

Technology improvements such as the AT HOP card and real-time travel information have made a significant contribution to current rapid increase in public transport use. Ongoing investment in technology will enable further improvements to real time information displays, Wi-Fi, and mobile applications to enhance customer information.

Developing transport technologies also provide new opportunities to better plan, integrate and manage travel demand. These developments will be particularly beneficial in areas where household and employment density is too low to support frequent public transport services.

Mobility as a service (MaaS) provides the opportunity to integrate public transport, demand-responsive services, ride-sharing, and active modes into a single, connected, personalised transport system. Payment for these various modes of transport, parking and other transport related services can be via a single national gateway and personal account.

While each mode on its own is unlikely to fully meet individual mobility needs, in combination MaaS can potentially provide an alternative to owning or using a private vehicle. Collaboration will be key in the delivery of MaaS, in particular how public sector can work with and enable private sector initiatives in this.

Information gathered by AT and other agencies is increasingly important in delivering improvements for customers. For information to be used effectively, it needs to be incorporated into planning and managed through its life cycle. Improvements in information management will enable better decision making and planning, support optimisation of transport networks and safety improvements, and provide a better understanding of customer needs.



Technology and information activities in this RLTP include:

- Integrated Ticketing – to extend, enhance and replace AT HOP equipment and systems with a new national system. Payment by bar codes and mobile phones, and a move to an account-based system to support MaaS will be investigated
- Metro business technology – improvements to support public transport customer experience and operations, including extending the real time system to ferries, and the addition of customer personalised travel planning and alerts. Enabling integrated real time management of all modes of transport, including disruptions, will be extended
- Core technology upgrades – to support and enhance systems such as Journey Planner, web and mobile applications, asset management, CCTV and network upgrades to improve performance, resilience and safety of customers
- Transport planning – collection of real time data from a range of new sensors including CCTV, Bluetooth, Google and other sources will enable enhanced planning across the network
- Predictive analytics - to optimise transport network timetable and reliability, and extension of the AT Data Lake with a wide range of sensors and other transport data to enable new insights and mobile applications
- Communications – infrastructure to vehicle communications will be trialled, including for the commercial vehicle fleet, together with upgrades to the traffic lights system to improve resilience and environmental outcomes and complement traffic management.

Environment

Improved land-use and transport integration, enhanced operations and maintenance practices, low emission transport modes, improved design standards for projects, and new technologies all provide opportunities to meet the challenges presented by the environmental impacts of the transport network.

For example, rail electrification enabled a reduction in greenhouse gas emissions of 85 per cent per passenger kilometre. Street sweeping practices prevented approximately 6,000 tonnes of material entering waterways and harbours in the year to June 2017.

Many of the activities included in this RLTP, such as the CRL, replacing diesel trains with electric units, and investment in walking and cycling, will contribute to reducing greenhouse gas emissions and environmental harm.

The RLTP also includes:



- Rollout of LED street lighting across the Auckland region to reduce energy use
- Tetrataps – installation of catchpit pollutant traps in the city centre, industrial areas, and marine sensitive areas to protect from road stormwater discharge
- Inclusion of water sensitive design as part of infrastructure development
- Tamaki Drive resilience – investigation to determine how to address the impacts of sea level rise
- Investigating how to reduce emissions from marine transport including ferries
- Ensuring maintenance and operational practices minimise impacts on the environment
- Improving waste practices across infrastructure construction and facilities management
- Facilitating the increased uptake of electric vehicles, including enabling the private sector to invest in and expand charging infrastructure.

Supporting Growth

Accommodating Auckland's rapid population growth requires accelerating the construction of housing and business development. Opening up rural land for development, or facilitating redevelopment of existing urban areas to higher densities, is frequently dependent upon the provision of new transport infrastructure and services.

Around two-thirds of Auckland's future growth is expected to occur through the redevelopment of existing urban areas to higher densities. About 15,000 hectares of greenfield (mainly rural) land has been identified for development in the Unitary Plan. This includes areas zoned Future Urban (rural land identified for future urban development), as well rural land that has been 'live zoned' (zoned for immediate urban development). Major new greenfield growth areas will occur in the south, northwest, north and Warkworth. Over the next decade, this growth will mostly occur around Wainui in the north, Red Hills and Whenuapai in the northwest, and Pukekohe/Paerata and Drury West in the south.

Auckland Council's Future Urban Land Supply Strategy (FULSS) identifies a programme to sequence when future urban land will be development ready. In the first decade, the proposed development ready land will enable 64,800 new homes to be delivered.⁸

Greenfield areas need substantial investment before significant development can occur. Some investment is needed to open up land for development, alongside larger scale improvements needed to connect these areas to the rest of Auckland,

⁸ Auckland Future Urban Land Supply Strategy July 2017



and to address the impact of increased travel demands to and from these new urban areas. New construction and protecting routes for longer-term projects are required.

Also important is working closely with developers to ensure that greenfield developments and urban intensification projects are designed to reduce reliance on private vehicles, and encourages the use of public transport, walking and cycling. An appropriate balance between private and public transport investment for new development is also needed.

A transport network plan, known as the Supporting Growth Programme, has been developed to support these future urban areas. This identifies a preferred network which enables the sequence of land release specified in the FULSS, and improves access to places where people live and work.

This RLTP provides for:

- \$275 million fund for high priority greenfield areas, including Trig Road and a new Redhills arterial connection
- Wainui transport infrastructure.

It is anticipated that CIP will assist in the delivery of transport infrastructure in the Drury/Pukekohe/Paerata and Wainui East/Silverdale/Dairy Flat growth areas.

The Local Residential Growth Fund (LRGF) provides funding for transport infrastructure for residential growth. Current committed projects include the replacement of Lucas Creek Bridge, and a new road link connecting Gills Road to Oteha Valley Road. Other projects to be supported by the LRGF have yet to be confirmed.

Corridor Improvements

Auckland's arterial roads, together with State Highways, form the backbone of the road network. They provide for a wide variety of travel and the highest traffic volumes, link major parts of Auckland and the rest of New Zealand, carry the heaviest freight volumes and provide access to the Ports of Auckland, Auckland Airport and inter-regional connections. Efficient movement of people and goods is the primary consideration.

Congestion on the arterial network, at peak times and increasingly in inter-peak periods is a significant concern. It is important to limit the growth in congestion on the freight network, particularly in the inter-peak, to support productivity and efficient connections to major freight hubs, including the Ports of Auckland and Auckland Airport. The completion of the Western Ring Route through the Waterview Connection demonstrates the benefits that can arise from the completion of gaps in the strategic road network. Investment in infrastructure needs to be supported with better analysis and planning for freight, along with making the best use of new technologies.



The approach to corridor improvement is to add capacity primarily on the outer parts of the network, to improve access to the Ports of Auckland and Auckland Airport, provide new corridors in greenfield growth areas and improve connections to existing urban areas, and to improve the efficiency of existing urban corridors.

The transport programme in this RLTP includes:

- Mill Road Stage 1 - targeted improvements along the corridor including:
 - improved intersections to address the most severe congestion
 - improved northern section to address the most severe safety issues
 - construction of new sections to support housing development as these develop
 - construction of the new Drury South interchange
 - route protection and land purchase of the southern section.
- Penlink – provision of a new tolled connection between the Northern motorway and the Whangaparaoa Peninsula to:
 - bypass the constrained Silverdale interchange
 - support growth and major planned development around the Silverdale interchange
 - provide significant time savings.
- Northern Corridor improvements – completion of the final section of the Western Ring Route providing a new continuous motorway link between the Northern and Upper Harbour motorways
- Southern Corridor improvements – completion of the widening of the Southern motorway between Manukau and Papakura, with the addition of a third lane in each direction between Papakura and Drury to support growth
- Puhoi to Warkworth – an 18 kilometre extension of the Northern Motorway to improve travel time reliability, safety and provide a bypass of Warkworth
- Glenvar Road/East Coast Road improvements – improvements including road widening and upgrading intersections to support the Long Bay Development area
- Matakana Link Road – road connection between Matakana and State Highway 1 north of Warkworth
- Lincoln Road – improvements to accommodate additional transit/bus lanes, intersection and safety improvements, and footpath widening
- Lake Road, Devonport/Takapuna – improvements to Lake Road and Esmonde Road to improve journey time reliability
- Additional seal extensions – acceleration of the seal extension programme in rural areas.



06. Maintaining and Renewing Existing Assets

Auckland Transport Asset Maintenance and Renewals

AT is responsible for road network assets with a replacement value of \$12 billion⁹, including the roads themselves, footpaths and cycleways, streetlights and traffic systems. The local road network carried 8.3 billion kilometres of vehicle travel in 2016/17, 18 per cent of all vehicle travel in NZ.¹⁰

AT's public transport assets have a replacement value of \$1.4 billion.⁸ This includes 57 electric trains and 42 active rail stations as well as busway stations, bus shelters and ferry wharves.

AT's asset base is continuing to increase as Auckland grows and new assets are added to the network. Analysis of recent trends indicates that 40 kilometres of new roads are likely to be added to the local road network each year, and traffic will grow by 2.4 per cent each year.

For this RLTP, AT has undertaken a comprehensive review of its asset renewals programme to ensure that it is delivering a fit for purpose level of service and achieving value for money. The Asset Management Programme (AMP) provided for within this RLTP emphasises the importance of making best use of the existing transport network as the essential foundation for improving transport outcomes.

It incorporates the recommendations of the One Network Road Classification (ONRC) framework, developed jointly by the Transport Agency and Local Government New Zealand.¹¹

The AMP reflects the objectives of the Auckland Plan, the GPS and ATAP. The key principles underpinning the AMP are:

- Deliver fit for purpose levels of service aligned with ONRC
- Manage risk: avoid failure of critical transport assets, adopt a proactive approach to asset maintenance and renewals, and manage risk at acceptable levels
- Whole of life approach: including reprioritisation of maintenance to reduce the need for costlier renewals
- Clarify the costs of growth: including assessing the impacts of growth on asset deterioration in particular on the rural road network.

⁹ Auckland Transport Annual Report 2016/17.

¹⁰ NZ Transport Agency – Data and Tools (www.nzta.govt.nz)

¹¹ NZ Transport Agency One Network Road Classification (www.nzta.govt.nz)

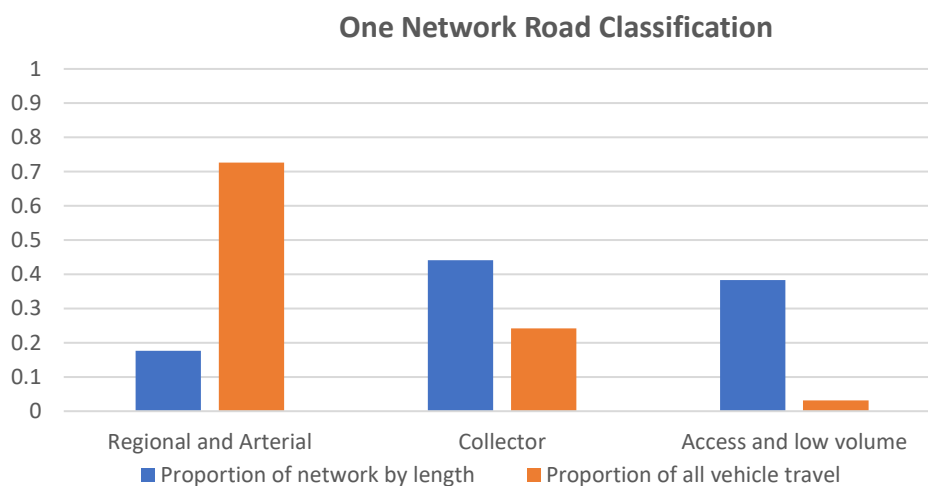


The asset management programme will ensure the overall condition of the network will be maintained in a stable state over the 10 years of the RLTP. The programme identifies levels of service, issues and problems, and the proposed strategic response and actions in the following key areas:

- Safety
- Resilience
- Amenity
- Accessibility
- Travel time reliability
- Value for money
- Lifecycle asset management
- Sustainability.

One Network Road Classification Framework (ONRC)

Applying the ONRC framework has shown that regional and arterial roads, which make up only 18 per cent of Auckland’s network by length, carry 73 per cent of local road traffic. By comparison, access and low volume roads make up 38 per cent of the network by length but carry three per cent of local road traffic.



Source: Auckland Transport

In this RLTP, 40 per cent of carriageway renewals investment is directed to regional and arterial roads. This will enable AT to continue to deliver a high level of service on these busy roads. Conversely, the level of renewals investment in access and low-volume roads is reduced.

The renewals programme will also support the growing use of public transport by keeping pace with increases in renewals that will occur with the expansion of the public transport system. Where appropriate, AT integrates its renewals programme



with new capital projects including minor improvements, safety upgrades and network optimisation.

State Highway Maintenance and Renewals

Auckland's State Highway system, which includes the motorway network, provided for 5 billion kilometres of vehicle travel in 2016/17, 38 per cent¹² of all vehicle travel in the region.

The Transport Agency's Maintenance and Renewals programme aims to support a safe, reliable and resilient network that ensures people and goods can get to where they need to be.¹³

¹² NZ Transport Agency website, all data and tools

¹³ NZ Transport Agency Draft 2018-29 Transport Agency Investment Proposal

07. Inter-Regional Priorities

Inter-regional connectivity

Providing a strong inter-modal network that supports economic growth and investor confidence is critical for New Zealand. Auckland's inter-regional transport connections to Northland, Waikato and Bay of Plenty are of particular importance to the national economy, with the Upper North Island being home to more than 50 per cent of New Zealand's population.

Major inter-regional transport challenges in the Upper North Island include:

- constraints on the strategic road and rail network where they intersect with local traffic in urban areas
- conflict between commuter and freight rail services, particularly during peak periods
- a lack of integrated strategic land use and transport planning across different regions.

Addressing these challenges will require a focus on:

- ensuring a safe and reliable corridor on State Highway 1 between Auckland and Whangarei
- ensuring strong strategic road connections between Drury and Tauranga via the Waikato Region
- upgrading the rail network to provide greater capacity for freight and passenger movement into and out of the Auckland region
- addressing the challenges of growth not only in Auckland, but also in Hamilton and Tauranga.

Specific initiatives to improve connections between the Auckland and Northland regions include the upgrading of State Highway 1 between Puhoi and Warkworth and from Warkworth to Wellsford to improve safety, resilience, throughput and travel time reliability, as well as various state highway initiatives in Northland. To the south, the Waikato Expressway will be complemented by on-going improvements on Auckland's Southern Motorway that are intended to increase vehicle throughput.

Inter-regional rail services

Provision of inter-regional rail services has historically been outside the scope of the RLTP. However, changes in policy in response to growth pressures in Auckland and the Upper North Island mean that provision of inter-regional rail is now under consideration.



The Government has signalled its intention to introduce inter-regional rail services between Auckland, Hamilton and Tauranga as a means of supporting growth, and housing, and reducing congestion on the southern motorway.¹⁴

Investment in Auckland's rail network to meet forecast growth in metro and freight services, and provide for faster services in the south, is a prerequisite for the provision of comprehensive inter-regional services. In the short term, investigations are underway into an interim rail service between Hamilton and Auckland.

¹⁴ Study shows need for rail investment, Hon. Phil Twyford, 27 November 2017



08. Measuring outcomes

Measuring outcomes

This chapter sets out the performance measures and targets to track progress in addressing Auckland’s challenges and achieving outcomes over the 10 years of this RLTP.

Access

Area	Measure	Information source	2027/28 target
Cycling	Number of cycle movements past selected count sites	Collected monthly by AT	5.653 million
Public Transport	Total public transport boardings	Collected monthly by AT	149.7 million
	Total annual boardings on rapid or frequent public transport networks	Collected monthly by AT	Increase at faster rate than total boardings
Arterial and motorway productivity	Average morning peak period lane productivity across 30 monitored arterial routes	Collected monthly by AT	24,000
	Average morning peak period lane productivity across the Auckland motorway network	Collected monthly by the Transport Agency	Measure to create baseline and future targets
Freight network congestion	Proportion of the freight network operating at Level of Service C or better during the inter-peak	Collected monthly by AT	85 per cent
Commuting active and sustainable mode share	Active and sustainable mode share for morning peak commuters where a Travelwise Choices programme is implemented	Calculated annually by AT	45 per cent



Area	Measure	Information source	2027/28 target
School active and sustainable mode share	Active and sustainable mode share at schools where Travelwise programme is implemented	Calculated annually by AT	45 per cent

Safety

Area	Measure	Information source	2027/28 target
Deaths and serious injuries (DSI)	DSI on Auckland's transport network	Collected monthly by AT and the Transport Agency	No more than 325 per year
	DSI on the Auckland local road network	Collected monthly by AT from the Transport Agency's Crash Database	No more than 277 per year
	DSI on the Auckland State Highway network	Collected monthly by the Transport Agency	No more than 49 per year

Value for money

Area	Measure	Information source	2027/28 target
Public transport subsidy	Public transport farebox recovery	Calculated monthly by AT	47-50 per cent
Achievement of project KPIs	Proportion of major project KPIs that have been achieved	Utilising results from post implementation reviews completed by AT and the Transport Agency	Measure to create baseline and future targets

Environment

Area	Measure	Information source	2027/28 target
Greenhouse gas emissions	Auckland greenhouse gas emissions (for land transport purposes)	Calculated monthly by AT based on regional fuel sales	Reduced emissions per capita
Water quality	Sediment removed from the transport system by street sweeping and catchpit cleaning	Collected annually by AT and the Transport Agency from maintenance contractors	Measure to create baseline and future targets

09. Funding and Expenditure

Funding Sources

Over the past 15 years, transport investment in Auckland has increased four-fold, from around \$500 million in 2000 to around \$2 billion in 2016/17. Transport is Auckland Council's largest and central government's fourth-largest area of investment.

The transport programme set out in this RLTP is funded from a combination of:

- The NLTF for State Highways, local roads, public transport, walking and cycling, traffic policing, and other transport activities approved for funding through the National Land Transport Programme (NLTP). The NLTF is sourced from fuel excise duties, road user charges, registration and licensing fees and is administered by the Transport Agency
- Funding from Auckland Council, sourced from rates, targeted rates, development contributions, and RFT
- AT's third-party revenue, including public transport fares, advertising, income from land held for future transport needs, and parking and enforcement revenue
- Direct investment from central government into the CRL.

Auckland Council and Government are also exploring new models of funding transport and other infrastructure. The Housing Infrastructure Fund (HIF) will make \$1 billion available in loans to assist high growth councils to advance infrastructure projects important to increasing housing supply. Around \$300 million has been allocated to Auckland for transport in greenfield areas and for Three Waters bulk infrastructure in the northwest of Auckland.

CIP is expected to fund and deliver around \$360 million of growth projects in the Drury/Pukekohe/Paerata and Wainui East/Silverdale/Dairy Flat growth areas.

Funding Assumptions

Transport Agency Funding

ATAP was established in 2015 to improve local and central government collaboration on transport planning and funding for Auckland. Revision of the ATAP work was commenced earlier this year and a final report was released by the Minister of Transport and the Mayor of Auckland on 26 April 2018.



The ATAP report included a \$28 billion funded programme of investment in transport activities for Auckland. The ATAP report included NLTF funding of \$16.3 billion of which \$8.1 billion is to support the activities of AT (both capital and operating expenditure).

This level of support is significantly higher than has historically been provided to local government in Auckland, and higher than would be provided under existing funding arrangements. The ATAP report identified that delivery would require changes to current funding arrangements, including a more flexible approach to GPS activity class limits and funding assistance rates (FARs). To advance this the report identified areas for further work, including considering what changes may be required to transport planning and funding process and project evaluation tools to achieve the Government and Council's direction for transport in Auckland.

Subsidy levels for different activity classes can vary and are set by the Transport Agency. Individual projects are assessed for subsidy through a business case process. This RLTP assumes that funding from the NLTF will be made up of \$3.1 billion of operating subsidies and \$5 billion of capital subsidies.

This RLTP also assumes that the Transport Agency will be responsible for funding rapid transit projects. It also assumes that there is no local share for investment from the Transitional Rail Activity class.

Funding and Expenditure

This summarises the expected revenue and expenditure for each delivery agency for the period of this RLTP.

AT Operating Revenue and Expenditure

Table 1 below shows gross operating revenue and expenditure for AT for this RLTP.

Table 1: Auckland Transport Operating Revenue and Expenditure

Project Type	Category	2018/19 \$000	2019/20 \$000	2020/21 \$000	2021/22 - 2027/28 \$000
Funding	Auckland Council Funding	288,358	299,797	307,236	2,358,640
	Transport Agency Subsidy	266,800	279,201	287,301	2,212,312
	Other Operating Revenue	311,140	327,098	345,219	2,872,060
Operational expenditure	Roads and footpaths	163,199	166,341	168,038	1,244,345
	Public Transport	696,976	733,343	764,808	6,136,923
Principal repayments for EMUs		6,123	6,412	6,910	61,743



Transport Planning

Robust transport planning will be needed to support the delivery of the 10-year programme set out in this RLTP.

Table 1 above includes, as part of the Roads and Footpaths and Public Transport operating costs, the cost of planning for future improvements. In addition, a number of plans, for example the Asset Management Plan, Regional Public Transport Plan, and the RLTP itself will require review within the period of this RLTP, including to provide input into Auckland Council's 2021-31 LTP and the 2021-24 NLTP.

The Government has also signalled that a second stage GPS is likely to be released in 2019 to ensure that its intentions can be fully realised, in particular those relating to rail, road safety and climate change. This may require review of some of the key transport plans in advance of 2021.

AT Capital Revenue and Expenditure

Table 2 shows AT's capital funding and expenditure for this RLTP. Detail of the programme is provided in Appendix 1.

Included in Table 2 are three separate funds. The Local Board Initiatives Fund (LBI Fund) of \$242 million is available for local boards to fund projects in their communities. The LRGF of around \$391 million is available for transport projects to meet the demand arising from housing growth. There is also funding of \$275 million for transport infrastructure in greenfield growth areas.

Table 2: Auckland Transport Capital Revenue and Expenditure

Project Type	Category	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)	2021/22 - 2027/28 (\$000)
Capital Funding	Auckland Council Funding	385,076	429,720	429,909	3,747,725
	NLTF, Housing Infrastructure Fund and other Government Funding	359,268	473,508	475,319	3,738,958
		2018-28 (\$000)			
Capital expenditure	Capital projects	6,077,303			
	Renewals	3,053,642			
	Local Board Initiatives	242,485			
	Local Residential Growth Fund	391,050			
	Greenfield Transport Infrastructure	275,000			

The dollars in the RLTP tables for the capital programme are for the whole organisation, including activities not eligible for NLTF funding.



New Zealand Transport Agency Investment Programme

Table 3 below sets out the Transport Agency's investment programme for this RLTP. Detail of the programme is provided in Appendix 2.

Table 3: Transport Agency Investment Programme

Project Type	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)	2021/22 – 2027/28 (\$000)
State Highway operations, maintenance and renewals	127,000	143,000	140,000	1,065,000
Rapid Transit, State Highway, walking and cycling and other improvements	744,776	691,024	990,450	3,631,154

City Rail Link Limited

The Government and Auckland Council have agreed to share the costs of constructing the CRL. Estimated costs are shown in Table 4 below.

Table 4: City Rail Link

Project Type	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)	2021/22 – 2027/28 (\$000)
Auckland Council funding	236,251	256,724	361,060	640,459
Government funding	236,574	256,497	360,727	585,161
NLTF Revenue				55,298
Other revenue	323			110,596
Total	473,149	513,221	721,786	1,391,515
Operating Expenditure (including depreciation)	7,740	4,922	3,509	301,396
Capital Expenditure	465,408	508,299	718,277	1,160,221
Total	473,149	513,221	721,786	1,461,617

The costs above relate to the construction of the CRL. CRL's estimate of the costs of operating the stations and running the services after completion is also included. Responsibility for these activities is assumed to transfer to AT once the CRL is opened.



Rail Infrastructure

Rail infrastructure expenditure is shown in Table 5 below. Detail of the programme is provided in Appendix 3.

Table 5: Rail infrastructure improvements

Project Type	2018/19 (\$000)	2019/20 (\$000)	2020/21 (\$000)	2021/22 – 2027/28 (\$000)
Rail infrastructure improvements	35,707	143,415	170,747	640,090

Department of Conservation

Table 6 below shows the Department of Conservation (DOC) activities for special purpose roads included in this RLTP. Detail of the programme is provided in Appendix 4. Funding for these activities will come from DOC and the NLTF.

Table 6: Department of Conservation Costs

Project Type	Category	2018/19 \$000	2019/20 \$000	2020/21 \$000	2021/22- 2027/28 (\$000)
Operational expenditure	Local road maintenance	17	17	19	0
Capital Expenditure	Local road improvements			100	0



Appendix 1 – Auckland Transport Capital Programme



Appendix 2 – New Zealand Transport Agency Investment Programme



Appendix 3 – Rail Infrastructure Capital Programme



Appendix 4 – Department of Conservation Programme



Appendix 5 – Significance Policy

Purpose

The purpose of this Significance Policy is to determine **significance** in respect of various matters in relation to the Auckland RLTP.

Section 106(2) of the Land Transport Management Act (LTMA) 2003 requires, for Auckland, the Regional Transport Committee to adopt a policy that determines significance in respect of:

- a) variations made to the regional land transport plan under section 18D; and
- b) the activities that are included in the regional land transport plan under section 16.

This policy sets out how to:

- a) determine the significance of variations to the Auckland RLTP under section 18D of the LTMA 2003.
- b) determine what is a **significant activity** for the purpose of section 16 of the LTMA 2003.

Significance of variations to the Regional Land Transport Plan

Legislation provides for an RLTP to remain in force for six years. However, the Regional Transport Committee may prepare a variation to the RLTP either following a review under section 18CA, or where good reason exists. In accordance with section 18D of the Act, consultation will be required on a variation if the variation is significant.

The following variations are considered to be significant:

- a) The addition or removal of an improvement activity or group of activities that the AT Board considers to be of strategic importance. These are activities that either have a significant effect on the objectives in the RLTP or have significant network, economic or land use implications or impact on other regions.
- b) A new AT activity, or a change to the scope of an existing AT activity, which the AT Board considers to represent a 30 per cent or greater increase or decrease in AT's total gross operating or capital expenditure in any one year
- c) A new Transport Agency activity or a change to the scope of an existing Transport Agency activity, which the AT Board considers would increase expenditure by more than 30 per cent of the Transport Agency's total gross expenditure in Auckland in any one year



- d) Any variation that is defined as significant in the Auckland Council's Significance Policy as it applies to AT
- e) A variation to the RLTP that results in a significant variation to the Regional Public Transport Plan.

The following variations will generally not be significant:

- a) A change to the duration and/or order of priority of an activity or project that does not substantially change the balance of the programme.
- b) Replacement of an activity or project by another activity or project of the same or substantially similar type.
- c) Cost or timing changes that do not affect the scope of an activity or project.
- d) A scope change for a project that does not significantly alter its original objectives.
- e) An activity that has previously been consulted on.
- f) A decision to progress emergency works.

If a variation to the RLTP is not considered significant, or the variation arises from the declaration or revocation of a State Highway, then the variation can be made by the AT Board.

Significant activities for the Regional Land Transport Plan

Under the LTMA, an **activity** means a land transport output or capital project, and includes any combination of activities. An **activity class** means a grouping of similar activities.

An activity will be considered to be significant, and therefore needs to be shown in the order of priority in this RLTP in accordance with section 16(3)(d), if it is a large new improvement project that:

- a) The AT Board considers to be of strategic importance i.e. activities that either have significant effect on the objectives in this RLTP or have significant network, economic or land use implications or impact on other regions; or
- b) Has a total capital cost of \$20 million or more.

For the purposes of identifying what is a large new improvement project, such a project excludes:

- a) Committed activities (existing commitments arising from approved activities)
- b) Business as usual activities:
 - a. Local road and state highway maintenance and renewals
 - b. Local road and state highway minor capital works



- c. Existing public transport services
- d. On-going operational programmes such as minor road safety projects and programmes
- e. Transport studies.

Activities with inter-regional significance for the Regional Land Transport Plan

An activity will be considered to have inter-regional significance, and therefore needs to be shown in the RLTP in accordance with section 16(2) (d), if it is a **significant activity** and it has implications for connectivity with other regions and/or for which cooperation with other regions is required.



Appendix 6 – Glossary

AC	Auckland Council
AT	Auckland Transport
CIP	Crown Infrastructure Partners
CRL	City Rail Link
CRL	City Rail Link Limited
FTN	Frequent Transit Network (key bus and ferry routes)
FARS	Financial Assistance Rates
GPS	Government Policy Statement on land transport funding
KPIs	Key performance indicators
LGA	Local Government Act 2002
LRGF	Local Residential Growth Fund
LTMA	Land Transport Management Act 2003
NLTF	National Land Transport Fund
NLTP	National Land Transport Programme
NZTA	NZ Transport Agency
RFT	Regional Fuel Tax
RLTP	Regional Land Transport Plan
RTN	Rapid Transit Network
SH	State Highway