DRAFT Auckland Regional Land Transport Plan 2021-2031
The draft Regional Land Transport Strategy 2021-2031 sets out the land transport objectives, policies and measures for the Auckland region over the next 10 years. It includes the land transport activities of Auckland Transport, Waka Kotahi NZ Transport Agency, KiwiRail, City Rail Link Limited and other agencies.
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The Regional Transport Committee is asking for your feedback by 2 May 2021. Have your say at AT.govt.nz/haveyoursay
Auckland, Tāmaki Makaurau, is home to 1.7 million people – one third of all New Zealanders – and is forecast to grow by another 260,000 over the next decade, reaching around 2.4 million by 2050. This rapid population growth presents a number of challenges in our quest to be a liveable, climate-friendly and productive city.

Growth represents opportunity but when combined with Auckland’s challenging natural setting and urban form the outcome has been increased congestion and limited connectivity. When we add in housing affordability, a global climate emergency and the Covid-19 health pandemic, Auckland has a lot to contend with.

Over the past 20 years, Auckland’s civic leaders and Central Government have significantly boosted investment in transport and significant effort has gone into providing Aucklanders with more choices about how they travel around the region. A committed effort has been made to improve bus, train and ferry services and develop better infrastructure for those who walk and want to use a bike.

Evidence tells us that Aucklanders like the improved experience, particularly on rapid and frequent bus and train services where the number of trips has almost doubled in 10 years.

In 2019, Tāmaki Makaurau achieved a milestone with more than 100 million public transport boardings made – the first time that number had been achieved since the early 1950s, but we need many more Aucklanders to access better transport choices to reduce congestion, Greenhouse Gas (GHG) emissions and deaths and serious injuries (DSI) on our roads.

More than a third of Aucklanders live within 500 metres of a frequent public transport service, yet the majority of us still choose to use our private motor vehicle for most of our trips.

Auckland needs a well-coordinated and integrated approach to help people and freight get around quickly and safely – one that significantly reduces harm to the environment and where there are multiple transport choices.

This draft Auckland Regional Land Transport Plan 2021-2031 (2021 RLTP) outlines our proposed response to these challenges over the next 10 years.
The big picture – what has changed since the last RLTP

While it’s only been three years, a lot has happened that makes updating the Auckland Regional Land Transport Plan 2018-2028 (2018 RLTP) necessary.

The 2018 RLTP represented a step-change in transport investment for Aucklanders, with a transformational programme to tackle existing and future transport problems. The introduction of a Regional Fuel Tax (RFT) and a $28 billion package to deliver 14 large-scale infrastructure projects provided the region with certainty and sparked accelerated momentum.

Focus on climate

Late 2019 Auckland Council declared a climate emergency, with strong pledges to introduce improved fuel emissions standards and accelerate the decarbonisation of Auckland’s public transport bus fleet. In July 2020 the council unanimously passed the Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan, which boldly aims to halve Auckland’s GHGs by 2030. The plan’s main transport actions are to encourage mode switch to public transport and active modes, decarbonise AT-contracted buses, and advocate to Central Government for policies to support lower and zero-emission vehicles.

Recently, the Climate Change Commission issued the 2021 Draft Advice for Consultation. Transport features strongly with advice to decarbonise the light vehicle fleet, step up to challenging growth targets for public transport, walking and cycling, and reduce the need to travel through remote working practices.

In 2019, an additional 16,600 cars (330 per week) were registered in Auckland, adding to congestion, contributing to increased emissions, clogging freight movements and costing time and money.

The road transport system contributes to 38.5 percent of Auckland’s emissions and the final advice and Central Government’s response to it is critical to tackling climate change.

Aucklanders tell us they are supportive of tackling climate change yet the way to successfully execute the transition is both complex and unclear. It must be tackled using both a systems and evidence-based approach, and result in equitable outcomes.
The Impact of Covid-19

The team of five million has done a great job to date managing the risks of Covid-19. As a result the economic impacts have been less than many initially anticipated. The transport response has also been very good when compared internationally1 and as a consequence use of buses, trains and ferries has been much better than almost all other international cities.2

But Covid-19 has changed the way we work. The rise of office meeting software such as ‘Zoom’ and ‘Teams’, has significantly impacted transport in Auckland, with major structural shifts in the need to travel for work purposes. People travel on buses, trains and ferries less frequently, with some have returned to the perceived ‘safety’ of private motor vehicles.3 As a result, Covid-19 has severely impacted key cash revenue streams. Auckland Transport (AT) has had to rely on greater funding support from Auckland Council, and the Covid-19 Response and Recovery Fund to maintain services and top-up reduced capital expenditure through the Government ‘shovel-ready’ programme.

Covid-19 has also impacted some parts of our community harder raising social equity issues. It’s raised the need for a continued focus on sustainable procurement practices and a heightened response to Māori, Pasifika and low income communities.

Transport through the provision of supporting services can be an enabler of more housing supply and help shape the type of housing that is built. In 2021 housing affordability, and funding to provide roads for light vehicles, freight, buses and people on bikes, as well as train and ferry services to support housing growth at the scale required, remain challenges to be solved.

Review of Auckland Council Controlled Organisations

In 2020 the Independent Review of Auckland Council Controlled Organisations (CCOs) highlighted opportunities to improve responsiveness as well as the delivery of minor projects. A key recommendation was that Auckland Council and AT work with the MoT and Waka Kotahi NZ Transport Agency (Waka Kotahi) to streamline funding processes. This goes to the heart of delivering the transport system Auckland needs at a greater pace.

Transport system progress

Safety

Consultation on the draft 2018 RLTP attracted 18,091 submissions and showed that Aucklanders were firmly behind greater investment to make the roading network safer. While much more needs to be done, this investment has helped to reduce the number of DSI across Auckland’s transport system.

In 2017, 813 people died or were seriously injured on Auckland roads. Provisional numbers for 2020 show a continued decline since then, with 539 DSI for the year ending 31 December 2020. This represents a 33.7 percent reduction, minimising the burden of road trauma on whanau and saving hundreds of millions of dollars in socio-economic costs to New Zealand. But we can do better.

Auckland continues to have one of the highest rates of pedestrian, cyclist and motorcyclist road deaths in the world and, following the second Covid-19 lockdown in Tāmaki Makaurau with less traffic on our roads, we saw the average speeds at which people travel in their cars increase, along with a significant uplift in DSI. Eleven people died during the last two months of 2020 and a further seven people died on Auckland’s road network in February 2021 alone.

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1 AT’s Covid-19 Response: A Review, January 2021, Draft for Discussion – An independent review completed by PwC
2 Covid-19 Ridership Evolution, March 17, 2021 prepared by UITP
3 AT RLTP Public Preferences Study, January 2021
Rapid and frequent train and bus services

Aucklanders have voted with their feet since the Britomart Train Station opened in 2003 and the Northern Busway opened in 2008. Use of these rapid transit networks has substantially increased, indicating that rapid and frequent public transport is critical to helping people move around the city. Annual train patronage increased 755 percent between 2003 to 2019 (2.5 million to 21.4 million) and annual bus patronage grew from 43.6 million in 2008 to 73.1 million in 2019.

As a result of broad scale effort, over $7.5 billion of new rapid transit projects are now either in construction or are in detailed design.

Since 2018, more electric trains have been delivered and more pieces of the Rapid Transit Network (RTN) are progressing including construction of the transformational City Rail Link (CRL), Eastern Busway, Puhinui Interchange to Auckland International Airport rapid bus services and Northern Busway extensions, as well as the design of the Northwest Bus Improvements along SH16 and electrification of the rail network from Papakura to Pukekohe.

A third track between Wiri and Westfield is also progressing. This will allow express train services between the south and the City Centre and unlock more freight capacity from the Ports of Auckland to distribution centres throughout Auckland and other regions.

Changes to rail legislation will also benefit Auckland by aiming to address longstanding rail funding issues and arrest the ‘managed decline’ of rail infrastructure.
**The bus and ferry network**

Auckland's modern bus fleet does the heavy-lifting in terms of public transport services. Coupled with the rollout of more dedicated bus and transit lanes that have increased productivity of key arterial roads, a regionwide new bus network was rolled out in 2018, doubling the number of Aucklanders who have nearby access to frequent bus services.

Early steps have been taken to decarbonise the bus fleet. Battery electric buses have been trialled and new electric fleets have been commissioned on Waiheke Island, on services between Puhinui and the Airport, and soon to be introduced on City Link services running between Karangahape Road and Wynyard Quarter.

A smaller but still important transport task is undertaken by ferries. The new ferry basin being built in Downtown Auckland will be the jewel in the crown of the ferry network. In the mid to longer-term we believe further improvements for ferry customers are an important part of Auckland's transport future.

**Fare initiatives and promotions**

Investment in new infrastructure and services has been supported by new public transport fare initiatives such as Child Fare Free Weekends, discounted off-peak fares and ferry fare integration.

AT's ‘Home Free’ promotion held on the last Friday evening before Christmas 2018, promoted public transport and, with the support of the New Zealand Police, discouraged drink-driving. This initiative was repeated in 2019 and 2020.

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**Safe cycleway infrastructure and shared paths**

New safe cycleway infrastructure and shared paths have been built and progress is being made on the remaining elements of the Urban Cycleway Programme such as Te Ara Ki Uta Ki Tai (Glen Innes to Tāmaki Shared Path).

The following projects are currently progressing:

| 2020/21 Completed | Herne Bay to Westhaven Cycleway
|                   | Victoria Street Cycleway
|                   | Murphys Road Corridor Improvements
| 2020/21 To be completed: | Northcote Safe Routes Cycleway - Bridge section
|                   | Karangahape Road Streetscapes Upgrade
|                   | Tāmaki Drive Cycleway and Flood Resilience Project - Separable Portion 1
| 2021/22 Planned | Eastern Busway Stage 1 Shared Path
|                   | New Lynn to Avondale Shared User Path
|                   | Glen Innes to Tāmaki Drive Shared Path - Section 2 (delivered by Waka Kotahi)
|                   | Links to Glen Innes Cycleway - Package 1
|                   | Tāmaki Drive Cycleway - Separable Portion 2
| 2022/23 Planned | Waitematā Safe Routes Cycleway - Section 1
|                   | Great North Road Cycleway
|                   | Links to Glen Innes Cycleway - Package 2a
|                   | Glen Innes to Tāmaki Drive Shared Path - Section 4
| 2023/24 Planned | Waitematā Safe Routes Cycleway - Section 2
|                   | Links to Glen Innes Cycleway
|                   | Point Chevalier to Westmere Cycleway

There has been a 16 percent increase in trips on bikes since 2016 and this will accelerate once the Urban Cycleways Programme (from the inner west to Glen Innes, and the Northern Pathway cycling project from Westhaven to Akoranga, near Takapuna) is completed.
Over the past three years there has been significant capacity improvements on our state highways to the northwest and south of Auckland. Similar improvements are underway between Puhoi and Warkworth. Roading optimisation projects including the introduction of transit and dynamic lanes on Whangaparāoa Road and Redoubt Road have reduced travel times for locals and boosted productivity, and multi-modal roading projects such as Murphys Road, Medallion Drive Link and Matakana Link Road are helping to unlock housing developments.

Congestion in some parts of the region is affecting the productivity of the arterial roading network, which impacts freight movements and private journeys. Intersection improvements have been made at Great South Road/Church Street, Ti Rakau Drive/Gossamer Drive, and Favona Road/Savill Drive.

In early 2020, Central Government announced the transfer of some RFT-funded projects and other projects to the New Zealand Upgrade Programme (NZUP). The programme brings large-scale investment forward through Waka Kotahi in multi-modal roading projects such as the Mill Road corridor in the south (to provide resilience and enable housing development) and Penlink on the Whangaparāoa Peninsula, as well as the Northern Pathway and new train stations in Franklin.

There has been a significant escalation in programme costs. As well as land costs, real effort has been made to ensure workers, such as bus drivers, enjoy wages and conditions which make the industry attractive to work in. The demand for more services over time will mean more front-line staff are required to make our transport system work.

Over the last three years parts of the construction industry have struggled. It’s clear that New Zealand needs a construction industry which is financially sustainable and safe. Auckland is just one of a cluster of cities in Australasia investing heavily in transport, and the way we procure, share risk and partner with industry is crucial to bringing this RLTP to life.
Looking to the future

The experience we give customers, whether making a trip in a car, in a truck, on a bike, bus, train, ferry or on foot, are at the heart of a successful transport system. An efficient, safe, connected transport network is critical to shape land use, get everyone where they want to go, deal with freight and encourage more sustainable transport choices, and serve as a catalyst for a more compact city.

For the last 15 years transport agencies have worked to maintain a growing stock of existing and new infrastructure. There is still more to come including additional Waitematā Harbour connections and rapid transit, but funding is limited and decisions are required in terms of priority projects.

New Zealanders are beginning to see the consequences of existing infrastructure failing and are quickly understanding it needs to be looked after. The 2020 closure of the Auckland Harbour Bridge (which led to significant reductions in lane capacity for close to three weeks), rail track problems, and issues with water infrastructure have all highlighted the impact and disruption that can occur when assets are damaged by weather or inadequate maintenance and renewals.

We must look after transport assets on behalf of the region. Auckland does not have the same economies of scale as some other like-minded cities so a focus on innovation, technology, value for money and integrated planning is key to deliver what people want.

This draft RLTP builds on the 2018 plan, but seeks to speed up progress. It has a greater emphasis on looking after the region’s transport assets, safety and climate change.

The need for sustained investment in transport infrastructure, built as soon as possible, is a top priority. As underpinned by Central Government in its Covid-19 response, there is an opportunity for infrastructure works to generate jobs and help New Zealand recover while providing safe travel choices for residents and visitors, and better accommodating our daily lives and special events.

Transport in Auckland over the next 10 years might be viewed as a decade of two halves. In the first half we plan to finish what is already underway. Some very big construction projects are underway – CRL, the Eastern Busway, Northern Busway extension, Puhinui to the airport, Matakana Link Road and the Urban Cycleway Programme. KiwiRail is advancing with electrification of rail services between Papakura and Pukekohe, and a little further behind are interim bus improvements to the northwest, the Urban Cycleway Programme and the Northern Pathway.

In the second half of the period under this RLTP, a range of new programmes will gather momentum: projects and programmes such as Connected Communities, service-led improvements on the Airport to Botany rapid transit route, and investment in renewals will really come into focus.

The link between technology and transport is more and more obvious. Covid-19 highlighted the value of previous investments in AT HOP and the AT Mobile app and we are increasingly seeing the role technology can play in making our roads safer through the likes of red light cameras and more productive dynamic laning. E-scooters and e-bikes for hire and car-sharing schemes are further evidence of how technology is enabling changes in the way we travel. Ongoing investment in technology with a focus on transport customers is an important piece of the puzzle when it comes to delivering a better transport system.

Now more than ever, we need all those involved in setting the policy and regulatory framework, whether at a Central Government or local government level, to step up to the significant challenges of delivering an effective and efficient transport system in the public interest. This needs to be done in a way which recognises that the transport system of Tāmaki Makaurau serves a diverse range of communities in what is New Zealand’s largest and fastest growing region. What works in rural New Zealand may not be fit for purpose in Auckland and vice-versa.

There are a number of opportunities to bring transport policy and regulation in line with the needs of Auckland’s transport system. Whether it be safety outcomes to improve the deterrence framework, roading productivity outcomes and the existing ways in which Aucklanders pay to use their roads, parking or climate change, our future transport regime must look different. These outcomes from the 2021 RLTP are covered in Section 6.
For the first time this draft RLTP includes a programme of activities targeted at policy and regulatory interventions which will provide Aucklanders with better outcomes from their transport system.

Population growth and the reliance Aucklanders have on their motor vehicles means it’s essential to have conversations with other agencies about potential interventions to contribute to meeting Auckland and New Zealand’s climate change targets. We are already investing in low-emission buses, electric trains, completing scheduled cycle, bus and rail projects, creating low-emission vehicle zones, introducing charging stations for electric vehicles (EVs), and promoting cycling and walking. However there is the potential to achieve so much more with financial incentives to purchase EVs, the increased use of biofuels, and improved vehicle fuel-efficiency standard regulations.

There have been clear recent signals that Central Government is considering some of these changes.

Road pricing (or congestion pricing) is another important area of regulatory change. The current way Aucklanders pay for using their roads does not incentivise them to be used in the most productive way, or support climate change outcomes. A better transport system depends upon regulation and policy, and this draft RLTP outlines a proposed plan for policy advocacy and policy change. In many cases such change requires political assent, and so the plan is clear about where change must be driven from and the outcomes sought. It’s crucial that the full range of tools is being used to deliver value for money for ratepayers and taxpayers.

The primary purpose of this draft RLTP is to inform Aucklanders about the intended programme of activities and seek feedback on whether it best meets current needs and future aspirations in the context of the resources available, according to objectives defined in ATAP 2021 by Central Government and Auckland Council. Should the results of consultation suggest the draft RLTP needs to be changed in a substantial way then we would need to discuss this with Auckland Council and Central Government.

The $31.4 billion ATAP 2021 investment programme for Auckland is historically significant and substantial in the Covid-19 impact context. So much, like CRL or the Eastern Busway, is already underway or core to keeping Auckland moving. Having so much already in construction or well advanced in project development is a good thing – it’s a sign of progress. On the downside it leaves limited room for new or additional investments.

After operations, maintenance, renewals, committed and essential capital works, $2.1 billion is available for new investments to deliver the transport outcomes Aucklanders want. Any new investment can only be progressed late in the decade when the funding demands of big transformational projects (such as CRL and the Eastern Busway) ease off, or if additional funding above and beyond that signalled in ATAP becomes available.
The Regional Land Transport Plan

The statutory purpose of the RLTP is to set out the Auckland region’s land transport objectives, policies and monitoring measures for the next ten years. It includes the land transport activities of Auckland Transport (AT), Waka Kotahi, KiwiRail, City Rail Link Limited (CRLL) and other agencies, and must be prepared every six years in accordance with the Land Transport Management Act 2003 (LTMA).

The RLTP must be consistent with the GPS and take into account a range of other matters, including likely funding from any source and any relevant national and regional policy statements. RLTP development is also expected to align with guidance provided by Waka Kotaki, which includes setting out specific problem statements, challenges, expected outcomes and funding priorities.

The vast majority of 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, Waka Kotahi, and the New Zealand (NZ) 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 and ride facilities
- Footpaths, shared paths and cycleways
- Management and improvement of rail track infrastructure by KiwiRail and CRLL
- Parking provision and enforcement activities
- Travel demand management.

The RLTP does not cover transport activities carried out by private entities, such as private developers or Auckland International Airport Ltd (AIAL) or, for example, the important role that NZ Police play in keeping our roads safe.

The Regional Transport Committee (RTC), which comprises the AT Board and representatives of Waka Kotahi and KiwiRail, is required to prepare a new RLTP every six years, and to review it during the six months prior to the end of the third year of the plan to ensure it is relevant, aligned with the strategic context, and responds to the Government Policy Statement on land transport (GPS).

Additional steps are being taken in the development and approval of this RLTP to reflect the Review of Auckland Council’s Council Controlled Organisations (CCOs) which recommends:

AT and the council jointly prepare the regional land transport plan, the draft of which the council endorses before going to the CCO’s board for approval.4

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Policy context

The figure above provides an overview of how the RLTP interacts and aligns with strategic policy documents, and Central Government and Auckland Council investment programmes.

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

**The 2021 Auckland Transport Alignment Project**

In 2015, the New Zealand Government and Auckland Council joined up to address Auckland’s transport challenges and ensure the opportunities of a growing and diverse region are maximised. This strategic approach to transport was agreed through the Auckland Transport Alignment Project (ATAP).

ATAP includes a cross-agency partnership including the MoT, Waka Kotahi, KiwiRail, the Treasury, Auckland Council, AT and the State Services Commission, and decision-making with respect to ATAP rests with the New Zealand Government and Auckland Council.

Since 2015, ATAP has delivered a series of strategic reports and develops an indicative ten-year package of transport investments for Auckland (the ‘ATAP package’) on a regular basis. This package informs statutory processes including the National Land Transport Programme (NLTP) and this draft RLTP.

In 2020, Central Government and Auckland Council requested that the ATAP 2018 package be updated to reflect:

- The impacts of Covid-19, including the impacts on Council and government revenue
- The New Zealand Upgrade Programme (NZUP) of transport investment in Auckland
- Climate change and mode shift as increasingly significant policy considerations
- The need to provide direction to the upcoming round of statutory planning processes including the RLTP, the Auckland LTP, the GPS and the NLTP
- Emerging priorities for urban development (such as housing) in Auckland.
Purpose and scope cont.

Central Government and Auckland Council also agreed a revised set of objectives for the ATAP 2021:

- Enabling and supporting Auckland’s growth, focusing on intensification in brownfield areas, and with some managed expansion into emerging greenfield areas.
- Providing and accelerating better travel choices for Aucklanders
- Better connecting people, places, goods and services
- Improving the resilience and sustainability of the transport system, significantly reducing the GHG emissions the system generates
- Making Auckland’s transport system safe by eliminating harm to people
- Ensuring value for money across Auckland’s transport system through well-targeted investment choices.

One particular benefit of ATAP for Aucklanders is a dramatic increase in the funding available for transport investment. Because of the lead times for new infrastructure projects the noticeable benefits of this will become more apparent over the next three to four years.

For more information on ATAP 2021 visit www.transport.govt.nz/area-of-interest/auckland/auckland-transport-alignment-project

ATAP and the RLTP

The terms of reference for ATAP 2021 were explicitly intended to provide direction for the RLTP, along with other relevant statutory documents. In line with that direction, the ATAP process involved a detailed and extensive technical assessment of potential investment options and has provided a solid foundation for the development of this draft RLTP.

The agreed ATAP objectives, funding assumptions and investment programme underpin this draft RLTP.

The ATAP agreed objectives reflect the GPS and Auckland Plan.

This RLTP has been developed on the basis that the ATAP partners will continue to work together to realise the funding required to deliver the ATAP 2021 package, and make policy initiatives set out in the ATAP report. Specifically, that will mean making changes to the way current funding rules are applied. As discussed in later sections, this is critical to realising the full ATAP programme.

ATAP 2021, which has been agreed by Cabinet and Auckland Council, is seen as delivering the best possible outcomes, so long as it is accompanied by the policy changes identified in this draft RLTP.
The Auckland Plan 2050

The Auckland Plan 2050 is a long-term strategy for managing Auckland’s growth and development over the next 30 years. It considers how we will address the key challenges of high population growth and environmental degradation, and how we can ensure shared prosperity for all Aucklanders.

The first Auckland Plan was produced in 2012 and included a highly detailed series of objectives and targets. The Auckland Plan 2050, adopted in June 2018, is a more streamlined spatial plan with a simple structure and clear links between outcomes, directions (how to achieve the outcomes) and focus areas (how this can be done).

The plan aims to achieve the following outcomes:

- 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’.

Aucklanders will be able to get where they want to go, more easily, safely and sustainably.
Future Connect 2021–2031

Future Connect is a ten-year system planning tool for Auckland’s integrated transport system. It sets out strategic networks for each transport mode, outlines the deficiencies and opportunities expected in the next decade, and identifies Indicative Focus Areas for further investigation as future projects. The Strategic Case summarises the problems facing Auckland’s transport system, system objectives and performance measures.

Future Connect has been developed by AT in partnership with Waka Kotahi and Auckland Council in collaboration with Mana Whenua, and in consultation with MoT, KiwiRail and Kāinga Ora and major stakeholder groups such as the Freight Reference Group, Tāmaki Makaurau Road Safety Governance Group, Bike Auckland, NZ Automobile Association and Living Streets Aotearoa.

Other relevant documents

The Land Transport Management Act 2003 sets out the planning, funding and operating framework for New Zealand’s land transport infrastructure and services, including roading, public transport, the rail network and traffic safety.

The Government Policy Statement on land transport (GPS) sets out the government’s National Land Transport Fund (NLTF) expenditure priorities over the next 10 years. The GPS 2021-2031 is guided by four strategic priorities: Better Travel Options, Safety, Improving Freight Connections, and Climate Change.

The National Land Transport Programme (NLTP) is a three-year programme that sets out how Waka Kotahi invests land transport funding on behalf of the Crown to create a safer, more accessible, better connected and more resilient transport system.

The Regional Public Transport Plan 2018-28 (RPTP) sets out AT’s policies, guidelines and activities for the delivery of Auckland public transport focused over a three-year period with a ten-year horizon.

The Auckland Long-Term Plan (LTP) underpins AT’s RLTP programme by providing committed funding and enabling AT to secure support from Waka Kotahi.

Te Tāruke-ā-Tāwhiri: The Auckland Climate Plan sets a pathway to rapidly reduce GHG emissions (50 percent reduction by 2030) and help prepare Auckland for the impacts of climate change. Transport is one of eight priorities, and road transport accounts for about 38.5 percent of Auckland’s total emissions in 2018, of which about 86 percent relates to travel by road.
The Climate Change Response (Zero Carbon) Amendment Act 2019 provides a framework by which New Zealand can develop and implement clear and stable climate change policies that ensure New Zealand has net-zero GHG emissions by 2050 and prepare for, and adapt to, the effects of climate change.

Vision Zero for Tāmaki Makaurau is a transport safety strategy and action plan to eliminate deaths and serious injuries (DSI) on Auckland’s transport network by 2050. It is a partnership between AT, Auckland Council, NZ Police, Waka Kotahi, ACC, Auckland Regional Public Health Services and the MoT.

The National Policy Statement on Urban Development 2020 (NPS-UD) seeks to ensure that new development capacity enabled by councils is of a form and in locations, that meet the diverse needs of communities and encourage well-functioning, liveable urban environments.

The draft NZ Rail Plan 2019 is a non-statutory planning document to guide investment in the rail system over the longer-term. It sets out the Government’s strategic vision and investment priorities and describes the changes made to the Land Transport Management Act to enable KiwiRail to access the NLTP. It also identifies the two investment priorities for a resilient and reliable network, both of which are relevant to Auckland: Investing in the national rail network to restore rail freight and provide a platform for future investments for growth; and investing in metropolitan rail to support growth in our largest cities.

The Rail Network Investment Programme (RNIP) is a three-year investment programme and a ten-year forecast for the rail network, developed by KiwiRail. The draft NZ Rail Plan and the GPS guide the development of the RNIP, which needs to be reflected in the RLTP. The RNIP will be funded from the Rail Network activity class and the Public Transport Infrastructure activity class for metropolitan rail activities, supported by Crown funding.

Arataki 2020 is Waka Kotahi’s ten-year view of what is needed to deliver the government’s current priorities and long-term objectives for the land transport system.

The Auckland Freight Plan 2020 identifies the critical challenges for freight movement, desired outcomes, and includes an action plan to achieve them. It has been developed by AT in partnership with Auckland Council, Waka Kotahi and key freight stakeholders, including MoT, KiwiRail, Ports of Auckland, Auckland Airport, the Automobile Association, the National Road Carriers Association, Mainfreight and the Road Transport Association NZ.

The AT Māori Responsiveness Plan (MRP) outlines operational-level actions to enable AT to fulfil its responsibilities under Te Tiriti o Waitangi – the Treaty of Waitangi – and its broader legal obligations in being more responsible and effective to Māori.

Auckland Council Local Board Plans are developed by the 21 local boards across Auckland. Each local board plan includes outcomes related to transport and specific actions the relevant local board wishes to see progressed.
03. Transport funding

Over the last three years Auckland Council and Central Government have invested more in transport than ever before in an effort to address Auckland’s infrastructure deficit.

Auckland faces significant challenges in funding its critical infrastructure, including its transport network. The city’s population has grown on average by 1.8 percent annually over the past 10 years and is expected to increase a further 260,000 (1.5 percent each year) by 2031.

Growth at this level requires additional capacity on the transport network. Where the growth is in greenfield areas (future urban areas), new roads, new stations, public transport, walking and cycling infrastructure and new services are required. In brownfield areas (existing urban areas), population growth puts pressure on the roading network, adding to congestion, as well as creating capacity constraints on the public transport network. In addition, population growth increases the rate of deterioration of roads and other transport assets, which increases the cost of maintenance and renewals.

How transport is funded in Auckland

Transport activities in Auckland are traditionally funded by Auckland Council (rates, development contributions and debt), Central Government (through funding from the NLTF other Crown allocations for rail projects including the CRL) and user pays service charges (e.g. parking fees and public transport fares).

The level of future transport investment required for Auckland to meet its strategic transport objectives has meant a need to move beyond these funding arrangements.

One significant new source of funding has been the Regional Fuel Tax (RFT). From 1 July 2018, a 10-cent per litre tax on petrol and diesel has applied in Auckland through the Land Transport Management (Regional Fuel Tax Scheme – Auckland) Order 2018. The collection of the RFT allows Auckland Council to fund transport projects with positive economic, social, environmental and safety impacts.

By the end of January 2021, approximately $220 million of money collected through RFT had been invested in transport projects. Combined with other funding from Auckland Council and Central Government (such as Waka Kotahi’s NLTF), the RFT has enabled over $565 million in investments that would not otherwise have got underway, for example, the Downtown ferry terminal redevelopment, Puhinui Interchange and safety projects.
The timing of RFT collection does not align with when it is spent. This was not unexpected and reflects the fact that at the time it was created the RFT could only be applied to new projects (as opposed to projects already progressing), additional funding from matching funds (Auckland Council contribution and the NLTF) and the need to support the scale and pace of expenditure of many projects once they moved into construction.

The following graph sets out the expected timing of collection and expenditure and the total transport investment enabled by RFT.

In January 2020, the Government announced the New Zealand Upgrade Programme (NZUP), which included a $3.48 billion package of investments for Auckland that allows earlier delivery of already planned road, rail, public transport and walking and cycling infrastructure. The NZUP is currently undergoing a ‘re-baselining’, to better understand the cost and strategic objectives of these major investments. This work may result in changes to the scope, cost and timing of these projects.

In July 2020 as part of its Covid response, the Government announced its ‘Shovel Ready’ initiatives, which provided funding for a number of transport projects that might otherwise have struggled to be completed (such as Puhinui Interchange and the Downtown Ferry Terminal) or be started quickly, creating jobs and benefitting the region. The Northwest Bus Improvements will see faster and more reliable bus services along SH16 with improved station and stop facilities at Westgate, Lincoln Road and Te Atatu.

The Government has also provided special purpose vehicles (SPVs) to allow funding of specific new growth-related projects, such as infrastructure for the Milldale development at Wainui. It’s likely more of this funding approach will be required in the future.
Planned transport funding for Auckland

The ATAP 2021 Agreement between Auckland Council and the Government signals $31.4 billion of funding for a programme of specified transport investments in Auckland over the next 10 years, endorsed by Cabinet and Auckland Council. This is an increase of $3.4 billion when compared with that signalled in the 2018 RLTP.

A further $4.6 billion of direct user pays fees, such as parking revenue and public transport fares, supports the investment being made in day-to-day transport services delivered by AT.

Consistent with the ATAP Agreement, the RLTP assumes that the NLTF will provide $16.3 billion between 2021 and 2031. The delivery of the programme in this RLTP depends on the availability of the funding set out in ATAP 2021 and, critically, ensuring that it is allocated according to the agreed ATAP programme. This is most important for AT’s elements of the ATAP / RLTP programme, which depends on financial assistance from Waka Kotahi.

ATAP has identified around $11.4 billion of capital projects that would be delivered by AT. Of these, AT considers that around $400 million – relating to level crossings, school speed management, and Hill Street Intersection Improvements – should be fully funded from the NLTF, although the funding arrangements for these are not finalised. Implementation of the ‘Community Connect’ Public Transport Concession Card Trial will be fully funded by the Crown.

This leaves an AT capital programme of around $11 billion to be co-funded by Auckland Council and the NLTF. Auckland Council has committed $5.5 billion in its LTP and has assumed an average 50:50 funding split to reach the $11 billion figure. In practice, the matching co-funding from Waka Kotahi can vary, as individual projects are assessed for subsidy through a business case process. The share of AT’s capital funding from the NLTF over the past three years has been less than 50 percent.

### Funding sources by broad category

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland Council for AT Operations</td>
<td>$3.4 billion</td>
</tr>
<tr>
<td>Auckland Council for AT Capital</td>
<td>$5.5 billion</td>
</tr>
<tr>
<td>Auckland Council for CRL</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>National Land Transport Fund</td>
<td>$16.3 billion</td>
</tr>
<tr>
<td>Crown funding for CRL</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>Crown funded NZ Upgrade Programme</td>
<td>$3.5 billion</td>
</tr>
<tr>
<td>Crown funded COVID-19 Response and Recovery Fund</td>
<td>$0.1 billion</td>
</tr>
<tr>
<td>Subtotal: ATAP Agreed Funding</td>
<td>$31.4 billion</td>
</tr>
<tr>
<td>AT User Pays Fees (PT fares, parking fees)</td>
<td>$4.6 billion</td>
</tr>
<tr>
<td><strong>Total Transport Funding 2021-2031</strong></td>
<td><strong>$36.0 billion</strong></td>
</tr>
</tbody>
</table>
The ATAP Parties have agreed to re-examine the funding arrangements for AT, as without a change to these arrangements, AT will not be able to deliver the programme set out by ATAP and presented in this RLTP. However, changes take time to implement, and still may not achieve the level of co-funding assumed in this RLTP. We have decided, therefore, to present the implications of these different co-funding scenarios in the draft 2021 RLTP.

Depending on the funding scenarios above, we will prioritise according to the categories below.

**Category One (Committed and Essential)**
This scenario is based on the assumption that AT continues to receive the NLTP subsidy at past rates across its capital programme, historically around a 59:41 funding split between Auckland Council and the NLT. This would provide a capital funding envelope for AT projects of around $9.3 billion which is $1.7 billion less than the preferred allocation to AT in the agreed ATAP programme.

Category One projects reflect the highest priorities and are included in the ATAP Recommended Programme’s Committed and Essential category.

**Category Two (Prioritised)**
This scenario is based on the assumption that all AT eligible projects and programmes receive the full 51 percent NTLF financial assistance rate at the cost levels included in this RLTP. Historically, this has not always occurred. Under this scenario, the expected level of funding for AT’s capital programme increases to around $10.4 billion.

Category Two projects reflect the second highest priority within the programme. RFT projects in Category Two will be the highest priority.

**Category Three (Requires funding)**
This scenario assumes that Waka Kotahi is able to use discretion within its funding rules to enable the full funding of the AT programme included in ATAP, for example, by applying a higher financial assistance rate for nationally significant rapid transit projects being delivered by AT (such as the Eastern Busway). Under this scenario, the expected level of funding for AT’s programme would be $11 billion. This would result in an average funding split of 50:50 between Auckland Council and the NTLF, which is the same funding split that Auckland Council has assumed in its draft LTP.5

Category Three projects, although still very important, are the lowest priority in the programme, and will be the first to be deferred if assumed funding levels are not achieved.

Although changes to Waka Kotahi funding approaches are needed to deliver the total ATAP programme, including AT projects, the overall Waka Kotahi funding allocation remains within the $16.3 billion signalled for Auckland within the GPS.

As part of the ATAP Agreement, it is expected that the allocation to the Local Road Maintenance Activity Class in the 2024 GPS will need to be increased in the context of broader trade-offs and affordability. This is to ensure sufficient funding is available to cover the increase in renewals included within this programme.

**Funding for operations**
In addition to the above, there are challenges around the availability of operational funding. AT has an operating budget of $7.4 billion, not including user pays fees such as public transport fares.

AT estimates that around $7.9 billion is needed to implement the planned bus and ferry services over 10 years. The likely impacts on public transport services of not receiving this additional funding of $500 million are discussed later in this document under Train, Bus and Ferry Services. AT is discussing its operational funding with the Council, which will make its final decisions on funding when it has completed its consultation on the 2021 LTP.

**Relationship with Auckland Council’s Long Term Plan**
This draft RLTP has been developed while Auckland Council is consulting on its draft LTP. The funding amounts detailed here are based upon assumptions provided to us which are subject to change up until the LTP itself has been approved – likely to be in May or June 2021.

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5 Although it is important to note that the funding level would be reached by some AT projects receiving a higher than normal financial assistance rate to compensate for projects that do not receive any subsidy. There is no expectation of a 50:50 funding subsidy on every project.
Auckland faces significant transport challenges now and into the future. These reflect the region’s substantial ongoing population growth, a challenging natural setting and historical approach to land use, along with a legacy of under-investment (particularly in public transport and cycling), ageing roads and transport facilities, and global threats like Covid-19 and climate change.

A key part of developing this draft RLTP has been the upfront effort that has gone into defining the problems that need to be solved.

Auckland’s transport challenges

04.

FOUR KEY PROBLEM STATEMENTS HAVE BEEN IDENTIFIED:

- **Climate change and the environment** – Emissions and other consequences of transport are harming the environment and contributing to the transport system becoming increasingly susceptible to the impacts of climate change.

- **Travel options** – A lack of competitive travel options and high car dependency as the city grows is limiting the ability to achieve the quality compact urban approach for Auckland.

- **Safety** – The transport system has become increasingly harmful and does not support better health outcomes.

- **Access and connectivity** – Existing deficiency in the transport system and an inability to keep pace with increasing travel demand is limiting improved and equitable access to employment and social opportunities.
Climate change and the environment

Emissions and other consequences of transport are harming the environment and contributing to the transport system becoming increasingly susceptible to the impacts of climate change

Climate change and GHG emissions

There is a growing global, national and local need to urgently address the threats posed by climate change through reducing Greenhouse Gas (GHG) emissions. The scientific evidence is compelling. In New Zealand the Climate Change Response (Zero-Carbon) Act was enacted in 2019, which requires national GHG emissions to be net-zero6 by 2050. In June 2019 Auckland Council declared a climate emergency, followed by the endorsement in July 2020 of Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan, which aims to halve Auckland’s GHG’s by 2030.

Tackling climate change will require a very significant change to the way we travel around our region although the timing and the detail of how this change might unfold are still to become obvious.

Climate change targets

Development of the RLTP through ATAP occurred with a strong awareness of Central Government climate change legislation and Auckland Council climate change targets. Auckland Council through its C40 obligations7 and the Auckland Climate Plan has committed to a 50 percent reduction in emissions by 2030 – the amount required to keep the planet within 1.5°C of warming by 2100.

The Auckland Climate Action Plan outlines an indicative scenario of how that might be achieved (which assumes a 64 percent reduction in transport emissions) and a series of actions.

2030 Climate targets

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>TARGET FOR</th>
<th>TARGET EMISSION REDUCTION</th>
<th>REDUCTION RELATIVE TO....</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ALL</td>
<td>TRANSPORT SCENARIO</td>
</tr>
<tr>
<td>Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan</td>
<td>Auckland</td>
<td>− 50%</td>
<td>− 64%</td>
</tr>
<tr>
<td>Climate Change Commission 2021 Draft Advice for Consultation</td>
<td>New Zealand</td>
<td>− 18%</td>
<td>− 19%</td>
</tr>
</tbody>
</table>

6 Net zero emissions, also known as “carbon neutrality”, is where the all GHG emissions produced by an entity (such as a country, city, or organisation) are fully sequestered or absorbed (typically by trees). That is, the amount emitted equals the amount absorbed.

7 C40 is a network of the world’s mega-cities committed to addressing climate change.

The Zero Carbon Act has a 2050 target of net-zero emissions. The Climate Change Commission 2021 Draft Advice for Consultation provides a 2030 target of reducing New Zealand’s total emissions by 18 percent, which assumes a 19 percent reduction of transport emissions.

Auckland’s emissions and road transport

The scale of the challenge presented by achieving either the Auckland Council or legislative targets is large and in Auckland the challenge is far greater than the scale of the change required for the rest of New Zealand. In 2018, Auckland’s total emissions were 11,500 kilo- tonnes which is around 15 percent of New Zealand’s total emissions. Auckland’s road transport is around 5.5 percent of NZs total emissions.

Given the scale of Auckland’s contribution to New Zealand’s transport emissions, failure to make substantial emissions reductions in Auckland will severely limit New Zealand’s ability to meet it’s climate change targets.

Road transport has consistently been Auckland’s largest single source of GHG emissions at 38.5 percent in 2018. The overwhelming majority of these emissions (80 percent) come from private motor vehicles and light commercial vehicles. Heavy vehicles (or freight and buses) account for 20 percent of land transport emissions.
Auckland’s transport challenges cont.

Auckland’s total GHG and road transport emissions grew seven percent and 11 percent respectively between 2009 and 2018. These increases occurred over a period when public transport ridership increased by 75 percent. However a combination of the number of trips made and the length of the trips meant that the Vehicle Kilometres Travelled (VKT) by private motor vehicles, light commercial vehicles and heavy vehicles also increased by 28 percent (2009 to 2019).

Essentially, increased demand for travel around the region generated by an increased population and improved economic growth has more than offset vehicle fleet efficiency improvements and increasing per capita public transport patronage.

What drives transport emissions

Understanding the transport emission challenge

Road transport emissions are driven by two key factors:

\[ \text{Vehicle Kilometres Travelled (VKT) } \times \text{average vehicle CO}_2 \text{e per km} = \text{Total CO}_2 \text{e} \]

In simple terms this can also be described as ‘the length and number of trips we make in vehicles multiplied by the average carbon emissions of Auckland’s private and public vehicle fleet.

The amount of kilometres travelled in vehicles is primarily driven by the demand for private vehicle travel, which is in turn influenced by the attractiveness of travel alternatives, trip purpose and length.

Vehicle emissions are influenced by the overall make-up and efficiency of the vehicle fleet (in terms of fossil fuel consumption), the type of fuel being used (diesel emits more than petrol) and travel speed.

Critically, as the amount of kilometres we travel in vehicles is one of the two key factors in emissions, it is total distance travelled on a weekly or (more accurately) annual basis that is key.

The proportion of distance travelled in private vehicles on a weekly basis (around 90 percent) is significantly higher than what we see during the traditional peak period journey to work commute. This is because trips outside peak periods are for a different purpose. They are often social, business and personal trips, are more distributed, generally involve multiple locations, passengers or moving goods, and on average, are longer. They are also less affected by congestion or parking and are harder to serve with public transport.

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This means that the traditional transport planning, investment and monitoring focus on peak period trips (typically with congestion in mind) must be broadened to tackle distance travelled across the day and week and year.

It’s estimated the proportion of kilometres travelled in the non-peak periods make up 67 percent of all kilometres travelled on the Auckland roading network.

Looking forward

Without action, population growth will drive up emissions

Reducing transport GHGs by reducing the weekly distance travelled by private vehicles in Auckland is extremely challenging. The projected reductions that can be achieved by investing in infrastructure and services alone are very modest due to the difficulty in encouraging changes in the way Aucklanders travel outside peak periods.

Auckland’s population growth will continue, making the hill that needs to be climbed much steeper. The population is forecast to increase by 22 percent between 2016 and 2031, and we can expect a similar increase in private vehicle travel and therefore emissions.

Significantly reducing transport GHGs will require investment in projects, programmes and services that encourage Aucklanders to switch to sustainable travel modes and reduce the increase in private vehicle travel associated with population growth. However, at best, an investment-only approach could only hope to hold private vehicle travel to today’s levels, leaving the problem of existing travel and emissions.

Consequently, to achieve significant reductions in Auckland’s transport GHG emissions, we must also implement measures that move the private vehicle fleet towards low or zero emissions options as it is renewed. Unfortunately, current projections for ‘decarbonising’ the average private vehicle owned by New Zealanders do not see significant reductions in GHG emissions until 2035. Without some catalyst for change, the impacts of decarbonisation will take time to generate results, so additional measures must be introduced more rapidly if significant GHG emission reductions are to be achieved by 2030.
Auckland’s transport challenges cont.

Climate change impacts on the transport system

In addition to reducing emissions, Auckland needs to focus on managing the current and future impacts of climate change on the transport network. Climate changes are expected to generate sea level rises, more frequent and intense storms and longer, hotter, dry periods. Significant investment will be required to ensure the network remains resilient and adaptable as these changes are magnified.

Roughly five percent of Auckland’s road and rail strategic networks are found in areas susceptible to coastal inundation, including parts of the state highway network which are crucial links for freight movements and access to key regional destinations. A further 250km of the road network are within 1-in-100-year flood plain areas. AT is currently identifying and prioritising the risks of climate change to the transport system (assets, services, customers and staff) to permit a more strategic approach to designing and managing our assets in the future.

The increasing frequency and severity of rain events is also causing damage to Auckland’s transport infrastructure by creating slips, flooding road corridors and impacting seawalls that require expensive remediation. The increased frequency of these events increases the likelihood of service disruptions. Lifting the lower lying sections of Tāmaki Drive is an example of the work AT is currently doing in response to climate change.

Heat stress and drought increasingly impact the transport network with melted bitumen, low soil moisture content affecting street trees and buckling railway tracks that slow train travel.

Climate change adaptation looks at how AT can design and build the region’s transport network to provide greater resilience. Changes include more green infrastructure, using natural systems to provide shade, and improved connections to stormwater.

Contaminants, stormwater and ecosystems

As Auckland grows, so does the impact on the environment that we live in. We need to provide infrastructure and services that reduce our impact on the environment and conserve and enhance it for future generations.

Protecting, improving, enhancing and restoring the mauri of our harbours and streams will improve the quality of life for all Aucklanders. Opportunities for green infrastructure to be incorporated into the road network include rain gardens to filter road runoff before it discharges to the harbour, and trees to provide shade, reduce runoff volumes and provide habitat and pollination pathways for insects and wildlife.
“My local bus connects with the Northern Express and gets me to work faster than my car. It’s cheaper, easier and better for the planet.”

Maree, North Shore
Auckland’s transport challenges cont.

Travel options

A lack of competitive travel options and high car dependency as the city grows, is limiting the ability to achieve the quality compact urban approach for Auckland

Public transport

The public transport network has transformed since its low point in the 1990s, but more is needed to deliver the requirements of Auckland’s transport strategy and achieve a quality compact urban form. The network effectively supports the City Centre and fringe, enabling this area to grow without an increase in peak period car travel.

Outside of the central area (which only accounts for around a quarter of employment), public transport attracts a lower share of commuting trips, even after an extensive reorganisation of the bus network to improve frequency, reliability and coverage. Following the rollout of the New Bus Network, approximately 39 percent of Aucklanders currently served by public transport live within 500 metres of a rapid or frequent public transport stop.

The rapid transit network (RTN) is the part of the network most likely to act as a catalyst for more intensified development. However, it is currently limited to the rail network and Northern Busway, which provides walk-up access for just over 300,000 Aucklanders. Although there is evidence of greater housing intensification around the RTN (which will be enhanced by changes to land use regulation) it is not enough to carry compact city objectives on its own.

Much of Auckland’s public transport network is simply not fast enough to compete with private car travel, even during the peak periods. This is particularly the case for much of the frequent bus network, which operates on the same congested roads as general traffic.

At present, Aucklanders can access around three times as many job opportunities within 30 minutes by car as they can by public transport in 45 minutes. Between 2013 and 2018 around 60 percent of Auckland’s growth in commuting trips, and 50 percent of its employment growth, occurred in outer urban communities which are heavily reliant on private vehicles.

Looking forward

Public transport needs to be faster and more reliable if it is to absorb a greater share of future trips and act as a catalyst for intensive development in centres. Rapid and frequent services need to extend more widely across the region.

For the public transport network to fulfil its role, further investment is required to:

• Continue improving the public transport customer experience making it simpler and easier to use
• Continue to serve the growth of the City Centre as an employment destination
• Extend the catchment of the RTN across Auckland’s urban area and developing greenfield areas
• Effectively serve a wider range of key destinations beyond the City Centre
• Improve the coverage of the FTN by increasing investment in services
• Increase the speed and reliability of bus services by moving more of them into dedicated bus and transit lanes, separated from general traffic
• Continue improving the resilience and reliability of the rail network through the catch-up renewal programmes
• Replace ageing ferries required to deliver existing ferry services.
Active transport

There is significant potential for walking and cycling to play a much greater role in meeting Auckland’s transport needs. Past urban development patterns, and a lack of investment in safe environments or facilities, has created barriers to Aucklanders walking and cycling more.

A very small proportion of people have access to a completed cycling network that will take them safely and comfortably to their destination. Investment has been made in recent years to extend the Auckland cycle network, however progress has been slower than anticipated. Nevertheless, there have been significant increases in trips taken by bike associated with the opening of new and improved facilities. Auckland’s highest monthly total of recorded cycling trips was recorded in February 2020, just prior to the Covid-19 lockdown.

The emergence of e-bikes and micromobility is rapidly making active transport more attractive to people who previously may not have considered it a viable mode. The distances people are able to travel is about 50 percent more than on a normal bike or scooter, and the travel time is reduced. Shared micro-mobility devices can increase the range of the public transport network as many people utilise shared mobility for first and last leg journeys to public transport.

Walking also has the potential to play a much greater role in how Aucklanders move around the region, in particular for shorter journeys by people who live close to the city, near public transport, for trips to and from schools, and within local neighbourhoods. However the time taken, and the quality of the pedestrian environment is a key barrier to increasing the number of walking trips.

Looking forward

For active transport to increase across Auckland, further investment is required to:

• Continue the delivery of the Urban Cycleway Programme to progress development of the cycle network
• Deliver cycleways in areas associated with the Cycling Investment Programme
• Deliver important travel behaviour change programmes such as Safe Schools and Travelwise to encourage more people to use active transport
• Continue to develop and improve safe cycling infrastructure on the cycle and micromobility strategic network
• Increase the comfort and safety of people on bikes across the wider transport system
• Make some historical cycling infrastructure fit-for-purpose and consistent with customer requirements.
The transport system has become increasingly harmful and does not support better health outcomes

Auckland’s Vision Zero goal is to have no deaths or serious injuries on the transport system by 2050. This approach puts people first, and recognises that humans are vulnerable and will make mistakes. The transport system therefore needs to ensure that when those mistakes happen, no-one is killed or seriously injured.

Good progress has been made since 2017, with the increasing trend in DSI stopped and numbers dropping from the peak of 813 in 2017 to a provisional number of 539 in 2020. While this recent trend is encouraging, the results are still significantly above Auckland’s Vision Zero goal. In addition, we have since seen a significant upturn in DSI following the second Covid-19 lockdown in August 2020.

The following table shows the key contributing causes of DSI, and death only, on the Auckland network.9

<table>
<thead>
<tr>
<th>IMPORTANCE OF CONTRIBUTING CAUSE</th>
<th>DEATH AND SERIOUS INJURIES (DSI)</th>
<th>DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Excess speed (22.2%)</td>
<td>Alcohol/other drugs (38.6%)</td>
</tr>
<tr>
<td>2nd</td>
<td>Alcohol/other drugs (18.5%)</td>
<td>Excess speed (36%)</td>
</tr>
<tr>
<td>3rd</td>
<td>Distraction (7.7%)</td>
<td>Non-restraint (seatbelt) use (23.3%)</td>
</tr>
<tr>
<td>4th</td>
<td>Non-restraint (seatbelt) use (6.1%)</td>
<td>Distraction (6%)</td>
</tr>
</tbody>
</table>

The above analysis highlights the importance of road safety education, ensuring speed limits on Auckland’s roads are safe and appropriate, and compliance and enforcement with respect to alcohol and drugs, speed, and the wearing of seat belt restraints.

9 Drawn from Waka Kotahi Crash Analysis System data: Five-year average 2015-2019
Air and noise pollution

The transport system is a significant contributor of harmful emissions, such as nitrogen oxides (NOx) and airbourne particulate matter (fine particles in exhausts). Vehicle emissions are the largest contributors to poor air quality in Auckland. Human-made airbourne particular matter is associated with premature deaths, cardiac hospitalisations, respiratory hospitalisations and time away from work.

As the ageing vehicle fleet in Auckland is replaced with newer vehicles, the emissions from exhausts are reduced and air quality is improved. The introduction of EVs, particularly heavy vehicles like electric buses and trains, contribute significantly to improving the quality of the air we breathe along our busy roads and streets.

The transport system also creates significant levels of noise pollution, in particular for properties closest to state highway and arterial networks. Negative effects of noise pollution on humans include sleep disturbance, cardiovascular and physiological effects, mental health, and adverse impacts on the ability to perform cognitive tasks and memory.

Human health

An unsafe transport system limits the range of realistic travel options available to Aucklanders. With insufficient physical activity being a key risk factor for conditions such as cardiovascular disease, cancer and diabetes, removing barriers to walking and cycling provides a genuine opportunity to support Aucklanders to living longer and healthier lives.
Auckland’s transport challenges cont.

Access and connectivity

Existing deficiency in the transport system and an inability to keep pace with increasing travel demand is limiting improved and equitable access to employment and social opportunities

Auckland has enjoyed a period of major investment in its public transport and motorway networks since 2005.

The public transport network has been transformed with increased public transport frequency across key corridors, the completion of the Northern Busway, the upgrade of trains, double tracking of the western rail line, investment in rail stations and electrification of the rail network. The bus network has been successfully re-organised with a significant increase in services using a modern bus fleet.

It’s now easier to use buses, trains and ferries with the AT HOP Card (used for approximately 95 percent of all trips on public transport in 2019) and the AT Mobile app (used regularly by over 300,000 Aucklanders in 2019). Access and payment for AT’s parking facilities has been simplified using the AT Park app.

The capacity of the motorway network and its connections have substantially increased, with improvements made to the central motorway junction near the completion of the western ring route including the Waterview Connection, improved access to the Auckland airport precinct and widening of the southern motorway.

Making it easier for Aucklanders to use multiple transport modes to complete a trip – in cars and bus, car and train, bike and bus, or bike and train – is also important. As a result there are now just over 6,000 car parks at park and ride sites (10 percent added in the last three years), and more bike facilities at public transport interchanges and in off-street car parks (such as in the Toka Puia car park in Takapuna). More of these improvements are planned at targeted locations across Tāmaki Makaurau.

As a result of these initiatives, there has been a renaissance in public transport with annual boardings reaching 103 million by November 2019 – before the impacts of Covid-19. More recently, an investment in cycleway has led to a rapid increase in the number of people on bikes in areas where safe infrastructure is available.

However, strong population growth, particularly from around 2013, has continued to put pressure on Auckland’s transport network. This growth, combined with positive economic conditions, saw a major increase in per-capita car ownership and the distance travelled by Auckland’s private motor vehicle fleet continuing to 2019. There has been an increase in congestion in both the peak and interpeak periods that was only eased with the opening of the Waterview Connection and SH16 improvements in 2017. Since then, congestion has held relatively steady at a regional level.

Substantial parts of the strategic bus and road networks are heavily congested, which impacts the everyday travel of public transport customers, and also for freight operators, who report worsening conditions impacting their business.
“As someone who takes the train all the way from Pukekohe to the city, I can’t wait for the Pukekohe to Papakura part of the line to be electrified. This will make my journey so much easier... I won’t need to change trains at Papakura and the journey will be a lot more convenient. I like to have the laptop out while I’m travelling, so being able to stay on the same train all the way to work will make a huge difference.”

Natalie, Pukekohe
Auckland’s transport challenges cont.

The following figures show deficiencies in travel time reliability of buses and general traffic.

Looking forward

Auckland’s population growth is projected to continue at a similar rate for the next 30 years. This presents the opportunity to harness benefits of scale as the region develops and becomes more compact, and public transport becomes faster, has increasing geographic coverage and becomes more competitive.

Meanwhile, the number of jobs able to be accessed within a reasonable travel time by private vehicle will remain critical to Auckland’s economy, particularly for those parts of Auckland where people are dependent on vehicles.

Greater equity in access to opportunities is also important if the benefits of growth are to be spread more evenly across Auckland.

Access to the transport network goes beyond how close transport services or facilities are to a person’s home or place of work. Access is also about how affordable the transport choices are that Aucklanders have.

To achieve the benefits of scale, Auckland’s transport strategy to avoid congestion increasing is to absorb future growth in travel demand by improving the public transport and active mode networks and encouraging more Aucklanders to change the way they travel. Targeted improvements to the road network to address key small-scale choke points also need to be delivered.

Without these improvements, changes in travel behaviour will not occur, congestion will increase, inequitable access to jobs and education will remain embedded, and Auckland will not see the full benefits of its ongoing growth.
Accommodating growth

Over 1.7 million people now call Auckland home, and the region is forecast to grow substantially in the coming decades, exacerbating housing shortages.

The Auckland Plan 2050 provides Auckland’s 30-year development strategy, which shows that Auckland will grow through a combination of ‘brownfields’ (building up) infill development and ‘greenfields’ (building out) future urban areas.

Auckland Council and Central Government have identified a number of spatial priority areas where they expect concentrated growth to occur. As these large developments will concentrate demand, specific transport infrastructure is required to support sustainable travel outcomes and minimise the effects of congestion.

Supporting spatial priority areas requires both public and private investment. Generally speaking, the local private infrastructure required for growth is delivered by developers, for example, new local roads and footpaths inside subdivisions. Accompanying public investment can take the form of wider network improvements, for example, arterial upgrades and the delivery of complementary public transport, walking and cycling networks. This last set of initiatives is important, as it enables growth to occur in a way that does not create future car-dependent communities.

Maintaining and renewing the network

AT is the regional guardian of $21.1 billion of publicly-owned assets. This includes 7,638km of arterial and local roads, 7,431km of footpaths, 348km of cycleways, a growing fleet of electric trains, rail and busway stations, bus shelters, ferry wharves and two airfields on the Gulf Islands. In addition, Waka Kotahi manages transport assets valued at around $15.9 billion which includes state highways, bridges, road tunnels and other structures.

Maintaining and renewing these assets is a significant undertaking. The temporary closure of the Auckland Harbour Bridge last year (due to an accident caused by freak wind gusts) and ongoing issues encountered with the rail network clearly demonstrate the importance of ensuring the resilience and reliability of our infrastructure.

Since the last RLTP, a number of factors have placed increased pressure on the local road and asset network:

• Auckland’s increasing population and demand for travel, leading to faster deterioration of road pavements
• Increasing numbers of heavy vehicles operating on the network including growth-related construction, service-related (e.g. waste collection) traffic and heavier axle weights from double decker buses
• An increasing local network asset base, which is growing by around 1.5 percent every year through the delivery of new transport infrastructure (e.g. roads in new subdivisions, new transport facilities)
• Significant increases in construction costs and the cost of renewals, in particular road rehabilitation which makes up the largest share of AT’s renewal spend
• Low renewal expenditure over the 2018-2021 period (including due to budget impacts from Covid-19) which has created a renewal backlog
• Increased renewal requirements relating to climate resilience, seismic retrofit and slip remediation.

Without action to address the impact of these factors, the local network asset base will fall below standard leading to increased reliability issues and higher costs to resolve over the long-term.
05. Responding to Auckland’s transport challenges

The proposed pathway forward
This section describes the proposed transport programme to respond to the challenges outlined in the previous section.

- **Travel choices** – Accelerating better travel choices for Aucklanders
- **Climate change and the environment** – Improving the resilience and sustainability of the transport system and significantly reducing the GHG emissions it generates
- **Access and connectivity** – Better connecting people, places, goods and services
- **Safety** – Making the transport system safe by eliminating harm to people
- **Growth** – Enabling Auckland’s growth through a focus on intensification in brownfield areas and with some managed expansion into emerging greenfield areas
- **Asset management** – Sound management of transport assets
- **Other items** – Local Board programmes, technology and organisational improvement initiatives

The proposed responses reflect the direction set out in ATAP approved by Central Government (Cabinet) and Auckland Council (Planning Committee).

The proposed programme is built off the landmark programme included in the 2018 RLTP. Most of the 2018 investment programme will remain, which is expected noting that we are in year three of the ten-year investment programme.

A significant amount of the total RLTP programme is required to keep the existing transport network functioning effectively, renew the existing asset base, and complete committed and essential capital works.

This draft RLTP is focused on completing transport projects that are already underway (such as the Eastern Busway), investing in new electric trains and infrastructure to meet the expected patronage boost from the $4.4 billion CRL, and maintaining momentum on core priorities like reducing DSI on the transport network.

Committed and Essential items account for over 90 percent of the $31.4 billion programme presented in this RLTP. They include $3.5 billion government-nominated and funded upgrade projects in the NZUP, and a further $1.8 billion of government seed funding for the City Centre to Mangere (CC2M) and Northwest Rapid Transit projects.

This leaves $2.1 billion over 10 years – less than 10 percent of the programme for new investments. This is applied to further address the issues of existing congestion, encourage alternative modes, ensure equity of access, provide infrastructure for growth, complement other climate change policies, and respond the requirements of local communities.
Twenty billion dollars of potential projects and initiatives competed for the allocation of the remaining ‘discretionary’ funding. Prioritisation of projects and initiatives was done using a range of inputs and utilising different methods, including:

- Future Connect assessments
- The Portfolio Investment Approach tool (PIA)
- The Urban Growth Assessment Framework
- Business case and project information and advice
- Assessment and advice from AT, Waka Kotahi and KiwiRail on a number of programmes and projects
- Information on the Auckland Housing Programme.

A short-list of prospective projects was evaluated using the PIA tool. These projects included existing projects not categorised as Committed or Essential, and new projects. The evaluation was based on Future Connect problem statements and ATAP objectives.

Multiple options or packages of investment were then developed to illustrate potential investment choices and trade-offs based on the ATAP objectives. The different packages were based on:

- a climate change option,
- a spatial response,
- a modeshift (PT) focused response,
- a modeshift (active modes) focused response,
- a Drury-focused response, and
- two blended packages.

Each option had the same base programme which accounts for $29.3 billion of the $31.4 billion funding available. The alternative package options focus on the potential investment choices and trade-offs for the $2.1 billion of discretionary funds. Not surprisingly, given the limited amount of discretionary funding, there was limited difference between the packages.

The programme presented here is heavily weighted towards core expenditure on the maintenance and renewal of existing transport assets and to public transport services and other operating items. Together these make up around 41 percent ($12.8 billion) of the total programme. Of the remaining investment in new projects and programmes, the focus is on public transport and active modes, which make up around 56 percent of the remaining package.

A full listing of the proposed programmes and projects, organised by delivery organisation, is provided in the Appendices.
Responding to Auckland’s transport challenges

The proposed programme will enable significant progress and contribute to making Auckland an even better place to live. However, even with a programme of this scale – a record level of funding – Auckland’s transport challenges will not be solved in 10 years. Quite aside from funding, issues such as construction industry capacity and the community’s tolerance for much greater levels of construction are likely to limit what is required to be delivered over the next 25 years.

The need for policy change

For Auckland to successfully meet its challenges and realise its full potential over the longer term, investment in infrastructure and services must run alongside some significant policy and regulatory changes. This draft RLTP proposes a number of policy responses, many of which would require significant advocacy from Auckland Inc to Central Government to progress. These are discussed in more detail as part of an integrated approach in Section 6.

Policy responses proposed by the 2021 RLTP

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>POLICY RESPONSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significantly reduce climate change emissions</td>
<td>Accelerate EV uptake with purchase incentives</td>
</tr>
<tr>
<td></td>
<td>Change current road pricing mechanisms to better manage travel demand</td>
</tr>
<tr>
<td></td>
<td>Motor fuel taxes (including the Emissions Trading Scheme)</td>
</tr>
<tr>
<td></td>
<td>Greater use of biofuels for powering vehicles and vessels</td>
</tr>
<tr>
<td></td>
<td>Improve vehicle fuel efficiency standards</td>
</tr>
<tr>
<td></td>
<td>Employee remote working</td>
</tr>
<tr>
<td></td>
<td>Remove the Fringe Benefit Tax (FBT) for public transport subsidies made by employers for employees</td>
</tr>
<tr>
<td>Accelerate better travel choices for Aucklanders</td>
<td>Implement ‘Community Connect’ (Public Transport Concession Card Trial) which provides a 50% discount on public transport fares for Community Services Card holders</td>
</tr>
<tr>
<td></td>
<td>Increase discounts for interpeak fares on eligible bus, train and ferry services</td>
</tr>
<tr>
<td></td>
<td>Continue to offer the ‘Child Fare Free Weekend’ initiative on eligible bus, train and ferry services</td>
</tr>
<tr>
<td>Make the transport system safe by eliminating harm to people</td>
<td>Higher penalties for speed, distraction, impairment and restraint offences</td>
</tr>
<tr>
<td></td>
<td>Enhance enforcement of drug driving</td>
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<tr>
<td></td>
<td>Improve the safety of heavy vehicles for vulnerable road users</td>
</tr>
<tr>
<td></td>
<td>Introduce alco-locks for drink-driving offenders</td>
</tr>
<tr>
<td></td>
<td>Ongoing implementation of speed limit reviews on high risk roads to ensure they are safe and appropriate</td>
</tr>
<tr>
<td>Better connect people, places, goods and services</td>
<td>Continue to develop an alternative road pricing scheme encompassing demand management to allow for more productive use of the roading network</td>
</tr>
<tr>
<td></td>
<td>Continue to rollout automated enforcement of transit and bus lanes to ensure higher network productivity and improved safety</td>
</tr>
<tr>
<td></td>
<td>Continue to rollout residential parking schemes in relevant suburbs</td>
</tr>
<tr>
<td>Enable Auckland’s growth</td>
<td>Increase urban density and provide new funding tools</td>
</tr>
</tbody>
</table>
Travel choices

Accelerating better travel choices for Aucklanders

The 2021 RLTP focuses strongly on providing Aucklanders with better travel choices to enable more sustainable and economically productive transport options. The goal is to reduce the number of single occupant vehicles, and particularly single occupant ‘fossil-fuel’ powered vehicles on our roads.

In the first half of the decade covered by this draft RLTP, extensions of the existing rapid transit network will be completed along with CRL, a critical link in the existing rapid transit network. Significant improvements will be delivered to other parts of the rail network and the urban cycleway programme will be completed.

By the end of the decade there will also be ongoing improvements to the underlying bus and ferry networks, separation of key FTN bus routes from general traffic lanes with a network of whole-of-route bus and transit lanes, and expansions and improvements to walking and safe cycling infrastructure across the region.

Rapid transit extensions

The RTN is a key investment priority and forms the largest category of capital investment in this RLTP.

Running free of congestion in dedicated lanes or corridors as much as possible, the RTN offers high capacity, high frequency services that are often faster than comparable private vehicle trips. The advantages offered, particularly in terms of access to the City Centre and fringe, also make the RTN a key component when supporting the compact city strategy by encouraging high-quality intensive development alongside the network.

The proposed transport programme in this RLTP will deliver a step-change in the coverage and performance of the RTN over the next 10 years. This RLTP will also see the RTN continue to diversify away from the City Centre, providing high quality links to other key Auckland centres such as Botany, Pakuranga, Pukekohe, Drury, Albany, and Westgate.

Significant projects include:

- **Light rail**: Seed funding to progress new rapid transit lines from the City Centre to Mt Roskill and Mangere (CC2M) and along the northwest corridor. In the near-term this project will focus on investigation, design, route protection and other pre-implementation activities.

  This RLTP does not include completion of full light rail links from the City Centre to Mangere and Auckland Airport, or to the northwest (as assumed in the 2018 RLTP). This reflects a revised view of the ‘additional funding sources’ that were assumed to be available for these projects in 2018.

- **Eastern Busway**: Completion of the Eastern Busway, providing a new rapid transit connection from Panmure to Pakuranga and Botany. This includes the Reeves Road flyover and new bus interchanges at Pakuranga and Botany. This project will improve travel choices by making public transport, walking and cycling realistic and safe options, and improve connections within the area and to the rest of Auckland.

  The Eastern Busway is expected to carry more than 30,000 people per day between the rapidly growing south-eastern suburbs and the rail network in Panmure. This project will make journeys faster and more convenient, reducing travel time between Botany and Britomart. It will also help reduce traffic congestion and vehicle emissions.

- **Northern Busway** (part of Northern Corridor Improvements): The Northern Busway is currently being extended northwards to Albany with a new Rosedale Station added between Constellation and Albany Stations. This project will reduce journey times and improve bus reliability, with the Rosedale Station improving busway accessibility and reducing pressure on the existing Constellation and Albany Stations.

- **Northern Busway Enhancements**: A further $62 million has been provided to deliver other improvements that enhance the capacity of the Northern Busway to meet current and projected demand (e.g. improvements at stations to increase the throughput and flow of buses).

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Centre to Mangere &amp; Northwest Rapid Transit (CC2M)</td>
<td>Waka Kotahi</td>
<td>1,800</td>
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<td>Eastern Busway</td>
<td>AT</td>
<td>874</td>
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<tr>
<td>Northern Busway Enhancements</td>
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<td>62</td>
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<tr>
<td>Rosedale and Constellation Bus Stations</td>
<td>AT</td>
<td>59</td>
</tr>
<tr>
<td>SH18 Rapid Transit</td>
<td>Waka Kotahi</td>
<td>3</td>
</tr>
</tbody>
</table>
Responding to Auckland’s transport challenges cont.

Rail network improvements

Auckland’s rail network forms a key part of the city’s rapid transit and freight networks. Recent investments in rail have resulted in substantial growth in rail passenger boardings, which reached 21.9 million trips in 2019 (before Covid-19 started to impact public transport use).

The rail network also plays an important role in the movement of freight, especially to and from the Ports of Auckland and Port of Tauranga. However, a step-change in use for freight and passenger rail needs over the last decade has also resulted in increased wear on the track. During 2020, KiwiRail started a significant track replacement programme which included temporary track closures and speed restrictions.

This RLTP will see a radical improvement in the performance and capacity of the rail network, particularly for accessing new areas of the City Centre and fringe as CRL comes into service in 2024. A key priority has been ensuring that the full suite of projects necessary to support CRL is available, while simultaneously continuing to invest in maintenance and renewals.

Significant projects include:

- **City Rail Link, new trains and supporting infrastructure**

  CRL will be transformational, delivering benefits across the region. It allows for significantly improved travel times to the City Centre and across the entire rail network, doubling capacity and providing of a direct south to west link. It will also benefit road users, as making public transport a better travel choice option will ease pressure on roads for those who need to use them.

  The completed project provides a connection between Britomart Station and the western line at Mt Eden via a 3.45km twin tunnel underground rail link below the City Centre. It will increase the capacity of the Auckland passenger rail network by transforming the downtown Britomart Transport Centre into a two-way through-station and provide significantly enhanced access to the City Centre via two new underground stations at Aotea and Karangahape.

  Over $400 million will be invested in new trains, stabling and associated infrastructure to provide increased rail capacity. These trains will allow increased train frequencies and provide additional capacity to cater for the expected growth in patronage following the opening of CRL.

  $320 million will be invested in level crossing and pedestrian crossing improvements in two groups, with the first group required for the increased train frequencies associated with CRL.

  CRL is being future-proofed to cater for significantly more trains than currently operate on the rail network. Investment in this RLTP will enable trains on the three main lines (Western, Southern and Eastern) to operate more frequently both during peak times and throughout the day.

  Timetables for Day One of CRL’s operation are still being developed and are expected to be outlined in the 2021 Regional Public Transport Plan (RPTP). However, it is expected that the new Day One timetable will increase the number of people who can access the City Centre by train from a pre-CRL capacity limit of 15,000 per hour to 22,500 per hour post-CRL. This is a capacity increase of 7,500 people per hour.
• **Papakura to Pukekohe Electrification**

Electrification of the rail network will be extended from Papakura to Pukekohe. This will allow the current old diesel fleet to be replaced by electric trains, reducing GHG emissions, enabling faster and more frequent services, and removing the need for customers to change trains at Papakura.

New, high-quality rail stations will be built at Drury and Paerata to support Auckland’s southern growth area. These stations will provide bus interchange, walking and cycling, and park and ride facilities to provide people with a range of choices on how best to access the rail network.

An improved park and ride facility at the Papakura Station will improve access to the rail network.

• **Wiri to Quay Park**

This project will ease congestion between freight and passenger rail services on the busiest parts of the network, and allow for increased services in the future to meet growing passenger and freight demand from the Ports of Auckland by better separating freight and passenger trains. Improvements will be delivered at Westfield and Wiri junctions, at Quay Park, and via a new third main track to be built between Middlemore and Wiri.

# 2021-31 figures in this table are less than the ATAP 2021 published values as KiwiRail has subsequently brought forward some spend into 2020/21.
Responding to Auckland’s transport challenges cont.

**Bus, ferry and multimodal improvements**

While the RTN operates at the top of Auckland’s public transport hierarchy, the majority of boardings are on the frequent, connector and local bus and ferry networks. This RLTP contains a range of projects that will improve the reliability, capacity and attractiveness of these bus and ferry networks.

**Significant projects include:**

- **Downtown Crossover Bus Facilities**: Bus priority improvements along Customs Street and potential new bus facilities to the east and west of the City Centre.

- **Midtown Bus Improvements** to enable an increasing number of buses to operate effectively there in the future. This project will deliver bus priority improvements along Wellesley Street and a new Learning Quarter/Grafton Gully bus facility.

- **SH16 Northwest Bus Improvements**: This project (part-funded by the Covid-19 Response and Recovery Fund) will deliver infrastructure to allow a new Northwest Express bus service to operate along SH16, connecting Northwest Auckland with the City Centre.

  There will be interim bus interchange facilities delivered at Westgate, Lincoln Road and Te Atatu, with improved bus shoulder lanes along the Northwestern Motorway. A long-term rapid transit solution for the northwest corridor is expected to follow in the future.

- **Airport to Botany (A2B)**: This rapid transit programme will improve travel choices and journey times for people in south and east Auckland.

  Stage one of this project has delivered a new bus-rail interchange at Puhinui, bus and transit lanes between Manukau and the Auckland Airport precinct, and a new high frequency electric AirportLink bus.

  The next stages to be delivered under this RLTP involve protecting the future A2B rapid transit corridor, between Auckland Airport and Botany via Manukau, and extending the new AirportLink bus to Botany via Te Irirangi Drive.

  Extending the AirportLink bus to Botany will be supported by bus interchanges and priority improvements along Te Irirangi Drive, with a move toward a rapid transit corridor in future decades.

- Over $50 million to deliver new and extended **park and ride facilities** across the region, including in locations that support Auckland’s growth.

- A new $40 million programme to deliver **accessibility improvements** to public transport facilities across the region.

- Improvements to the landside transport infrastructure at **Matiatia Wharf** on Waiheke Island.

- **Other Public Transport Minor Improvements**: Almost $200 million will deliver the ongoing programme of small but important public transport improvements across the bus, train and ferry networks. This includes new and improved bus stops, bus priority lanes, public information display signs (PIDs), rail station security and ticket control gates, double decker mitigation, Rosedale Bus corridor, and new neighbourhood bus interchanges.
<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Crossover Bus Facilities</td>
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<tr>
<td>Public Transport Safety, Security and Amenity</td>
<td>AT</td>
<td>154</td>
</tr>
<tr>
<td>Midtown Bus Improvements</td>
<td>AT</td>
<td>132</td>
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<tr>
<td>Northwest Bus Improvements</td>
<td>AT/Waka Kotahi</td>
<td>100</td>
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<td>Airport to Botany Rapid Transit Route Protection</td>
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<tr>
<td>Airport to Botany Stage 2 Bus Improvements</td>
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<td>Carrington Road Improvements</td>
<td>AT</td>
<td>55</td>
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<tr>
<td>Park and Ride Programme</td>
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<td>Accessibility Improvement Project</td>
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<tr>
<td>Decarbonisation of the Ferry Fleet Stage 1</td>
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<td>Double Decker Mitigation</td>
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<td>Matiatia Park and Ride</td>
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<tr>
<td>20Connect (SH20B) Route Protection</td>
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<td>Sylvia Park Bus Improvements</td>
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<td>Albert and Vincent Street Bus Priority Improvements</td>
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<td>Rosedale Road Corridor</td>
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<tr>
<td>Neighbourhood Interchanges</td>
<td>AT</td>
<td>6</td>
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<tr>
<td>Community Connect (Public Transport Concession Card Trial)</td>
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<td>4</td>
</tr>
<tr>
<td>Downtown Ferry Basin Redevelopment</td>
<td>AT</td>
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</tbody>
</table>
Responding to Auckland’s transport challenges cont.

**Rapid transit and the National Policy Statement on Urban Development (NPS-UD)**

An implication of the NPS-UD requirements is that investment identified in this, or future RLTP’s may necessitate changes to the Auckland Unitary Plan.

**The purpose of this section is to outline the status of Auckland’s RTN following the investment identified in this RLTP.**

It also reflects the frequency of services described in the current Regional Public Transport Plan 2018-2028 (RPTP).

Auckland’s RTN will continue to develop over time. While some projects in this RLTP will improve the service characteristics of routes to the degree that they meet the criteria to be considered part of Auckland’s RTN, other projects are a stepping stone on the way to achieving this status in following decades.

Auckland’s existing RTN consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines.¹⁰ Within the ten-year timeframe of this RLTP, the network will be expanded to include the Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

The figure below shows:

- Existing and planned rapid transit routes (i.e. the RTN that will be in place at the end of the ten-year timeframe of the RLTP)
- Future rapid transit routes (as outlined in the Auckland Plan 2050) for which some investment is identified in this RLTP but will not meet the standard of rapid transit within the ten-year timeframe of this RLTP
- Parts of the transit network that do not meet the definition of rapid transit now or in the future, but are important to support the operation of the RTN, for example, the Onehunga branch line and Northern Busway section along SH1. These parts of the network are shown as ‘supplementary network’.

The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the Resource Management Act). AT and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD’s requirements.

¹⁰ Some of these routes do not currently meet the frequency requirements for rapid transit; however they are proposed to do so by 2028 in the RLTP.
Connected Communities

The geography of Tāmaki Makaurau means that key strategic arterial roading corridors, mostly on the isthmus in Mt Eden, Mt Roskill, Remuera, Sandringham, Ponsonby, Grafton, Ellerslie, Panmure, Pakuranga and Manukau can become choked at certain times of day resulting in reduced productivity and impacting on the mental and physical wellbeing of Aucklanders.

A key driver for AT’s Connected Communities programme is separating buses on frequent transit routes from general traffic lanes with a network of whole-of-route bus or transit lanes, thereby creating more capacity in the remaining general traffic lanes for those who have no choice but to use private motor vehicles.

This project also pioneers AT’s ‘dig once’ philosophy to minimise disruption in local communities, incorporating and delivering 15km to 20km of safe cycling environments (and safety and walking improvements) along a number of key arterials. Notably 25 percent of DSIs on strategic roading corridors are targeted by the programme.

Priority corridors for investment include:

- Symonds Street
- New North Road
- Sandringham Road
- Great North Road
- Ponsonby Road
- Mt Eden Road
- Manukau Road
- Ellerslie Panmure Highway
- Pakuranga Road.

Programmes for train, bus and ferry services and asset maintenance

AT’s current funding for train, bus and ferry services and asset maintenance is set at around $7.4 billion. This is earmarked to meet the additional costs of CRL (such as more frequent services and station operation costs), low-emission buses (to meet climate change and public health objectives) and increased asset maintenance.

AT has a strong desire to increase both the coverage and frequency of bus, train and ferry services over the next ten years, with a focus on:

- Providing services to support new public transport infrastructure
- Implementing the services promised in the RPTP, especially for the frequent routes/corridors
- Continuing to improve the frequency and hours of operations in the existing urban areas
- Providing services as early as possible to Greenfield areas to minimise car-centric travel behaviour
- Ensuring that there are competitive public transport services to the larger rural settlements.

However, the ability to increase service levels beyond current levels depends upon securing a significant increase in funding – estimated at around $500 million over 10 years. If this deficit is not addressed, some of the planned services that may not be able to be delivered include:

- Services to support the new Rosedale Bus Station, Whangaparāoa via Penlink, and the new Drury rail stations;
- New services from Manukau to Botany as a precursor to a full new RTN service; and
- New services to greenfields areas such as Milldale, Albany Heights, Millwater, and the Northwest.

The impact will also extend to ferry services, with very little ability to fund the replacement of the ageing ferry fleet, start decarbonising the ferry fleet or expand ferry services.
Responding to Auckland’s transport challenges cont.

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 in Auckland. Both walking and cycling support efforts to tackle climate change, bring significant public health benefits and make the network more productive.

The programme set out in this RLTP aims to increase active transport mode share by delivering safe and more integrated walking and cycling infrastructure, supported by a range of behaviour change activities, together with bicycle parking facilities and network-wide safety improvements like speed management.

In total, this programme is expected to deliver 200km of new and upgraded cycleways and shared paths across the region by 2031, the majority of which is included as part of the strategic cycling network. Between 100km-125km of new cycleways will be generated from AT, 15km from Auckland Council and 59km from Waka Kotahi. Some existing cycle lanes will also be retrofitted with appropriate safety barriers.

Significant projects include:

- The **Northern Pathway**, a significant new regional walking and cycling connection between Westhaven in the City Centre and Akoranga on the North Shore. This will provide a critical missing link in Auckland’s cycle network.
- Over $300 million is allocated to delivering AT’s **On-going Cycling Programme**, which is intended to follow the completion of the Urban Cycleways Programme early in the RLTP period. This is in addition to the allocation to cycling included in the Connected Communities programme.

With a significant increase in the cost and complexity to deliver cycleways, this programme is unlikely to be able to deliver the coverage expected in the 2018 RLTP. However, the investment strategy for this is being reviewed to ensure coordination with Waka Kotahi investment, and seek faster, more flexible and lower-cost solutions. The significant investment in cycling in Manukau and Mangere East identified by the 2017 Cycling Programme Business Case remains a priority.

- The completion of the **Urban Cycleways Programme** including projects such as the Glen Innes to Tamaki Drive cycleway and the New Lynn to Avondale shared path.
- $49 million to continue delivering new footpaths in high priority locations.
- A $30 million Central Government contribution, through the Covid-19 Response and Recovery Fund, towards delivering the **Te Whau Pathway**.
- $30 million to allow some introductory works under the **City Centre Masterplan Access for Everyone initiative**.
- A new $30 million programme for minor improvements for cycling and micromobility. A key element of this package will be delivering ‘pop up cycleways’ which will retrofit a range of existing painted cycle lanes with appropriate safety barriers. This programme will also address other issues on the existing cycling network to improve useability and enhance safety.
- Ongoing funding for a programme of tactical urbanism initiatives such as those brought to life through Waka Kotahi’s **Innovating Streets Programme**.
- Operational funding to continue delivery of the **Travelwise Programme**, an innovative schools-based programme that aims to improve road safety and reduce the number of vehicles driving to and from school at peak times to help reduce congestion.
• Operational funding to continue the **Walking School Bus programme** which aims to reduce road congestion, make our environment safer and cleaner, and provide exercise for children in a fun and social way.

• Operational funding for the ongoing delivery of the **Bike Safe programme** which teaches primary, intermediate and secondary school children how to ride their bike safely.

• Continued investment in the AT **Community Bike Fund** which supports communities and groups delivering activities, events and projects that encourage more people to ride bikes more often in Auckland, especially new riders.

• Ongoing operational funding for programmes which support employers who want to encourage their people to use more sustainable modes of transport.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Pathway (Westhaven to Akoranga)</td>
<td>Waka Kotahi</td>
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<tr>
<td>On-going Cycling Programme</td>
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<tr>
<td>Urban Cycleways Programme</td>
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<tr>
<td>Glen Innes to Tāmaki cycleway</td>
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<td>New Footpaths Regional Programme</td>
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<td>Minor Cycling and Micromobility</td>
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<td>22</td>
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<tr>
<td>Old Mangere Bridge Pedestrian &amp; Cycling Link</td>
<td>Waka Kotahi</td>
<td>13</td>
</tr>
<tr>
<td>Mangere Cycleways (Airport Access)</td>
<td>AT</td>
<td>12</td>
</tr>
<tr>
<td>Tāmaki Drive/ Ngapipi Road Safety Improvements</td>
<td>AT</td>
<td>7</td>
</tr>
<tr>
<td>Walking and cycling – Low Cost, Low Risk</td>
<td>Waka Kotahi</td>
<td>6</td>
</tr>
</tbody>
</table>
Responding to Auckland’s transport challenges cont.

Climate change and the environment

Improving the resilience and sustainability of the transport system and significantly reducing the GHG emissions it generates

The Climate Change Commission’s released its 2021 Draft Advice for Consultation states:

“In Aotearoa we need to change the way we build and plan our towns and cities and the way people and products move around. This includes making walking and cycling easier with good cycleways and footpaths. It means moving freight off the road and onto rail and shipping. It means reliable and affordable public and shared transport systems. And it means an electric or low emissions fleet.”

The approach set out in this draft RLTP takes an approach broadly consistent with these themes but notes far more needs to be done to reach Auckland Council’s climate change emissions targets.

The key contribution to climate change in the RLTP is the extensive investment in network infrastructure and services, designed to encourage mode shift away from private vehicles and towards lower emission public and active transport options. Over $9.6 billion, or 56 percent of the total capital improvement programme proposed to be made over the next 10 years, is invested in public transport or walking and cycling.

The programme will also make significant progress towards decarbonising Auckland’s public transport fleet by:

- Electrifying the rail line to Pukekohe (covered under the rail section above), enabling disposal of Auckland’s remaining diesel passenger trains
- Funding acceleration of the Low Emissions Bus Roadmap to ensure half of Auckland’s bus fleet is low emissions by 2031 (this is captured under Operational Funding).

It’s anticipated that the investment in low emissions buses and replacement of the diesel trains operating between Pukekohe and Papakura will see a 65.1 percent reduction in emissions from the public transport fleet by 2030.

Emissions from ferries make up a disproportionately high amount (19 percent) of total emissions from the public transport fleet. Noting that technology is less mature in the development of low emissions ferries, this draft RLTP allocates $30 million to start decarbonisation of the ferry fleet and reduce diesel emissions covered under bus, ferry and multimodal improvements.

Work is also underway to determine how transport emissions from AT owned assets and infrastructure, such as parking buildings, street lights, and public transport facilities can be further reduced. A promising start has been made with the change-out of street lights across Auckland. Further activities will see AT meet it’s Board endorsed objective of reducing emissions from it’s own corporate activities by 50 percent by 2030.

This RLTP investment programme is only one component of a comprehensive set of measures needed to reduce transport GHG emissions. The RLTP does not exist to set government policy, and additional measures are needed that are beyond its scope to implement.

The intervention with the greatest potential to reduce emissions is the accelerated uptake of EVs.

This was identified by the MoTr in 2018, reiterated by the Productivity Commission, the Climate Change Commission in 2021, and has been reinforced by modelling work. New Zealand is also in a uniquely favourable position to benefit from EV technology as we have an electricity source that is 82 percent renewable.

Current published projections by the MoTr and Waka Kotahi show EVs and other zero emission vehicles starting to enter the New Zealand fleet in large numbers toward 2030, leading to a rapid reduction in average light vehicle fleet emissions from 2031. This would result in a 70 percent reduction in average light vehicle emissions per kilometre by 2048.

Heavy vehicles will be slower to change, reflecting the significant technical challenges with zero emissions freight vehicles. Although encouraging, these trends are not enough to achieve zero emissions generated from the transport sector by 2050.

The accelerated uptake of EVs is vital to reduce road transport emissions. But to meet the 2050 target, at least for the light vehicle fleet, the entry of light vehicles into the fleet needs to be accelerated by five to 10 years. In other words, it needs to ramp up right now.

Supporting the uptake of electric vehicles and low emission vehicles

Materially reducing emissions requires immediate and rapid electrification of the vehicle fleet, so it is essential to address the primary purchase barrier of affordability through purchase incentives. Pairing purchase incentives with convenience interventions that make using an EV easier and cheaper to use (with increased awareness) can potentially support a swifter uptake.

Common intervention types suitable to Auckland are parking benefits, supporting additional public chargers, public charger navigation, charging benefits, and infrastructure use and access benefits. The following table describes these intervention areas and actions taken in Auckland.

Proposed actions and responsibilities

<table>
<thead>
<tr>
<th>INTERVENTIONS</th>
<th>ACTIONS TAKEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking benefits such as exemptions or reductions on parking fees or time limits, preferential parking access, and wait-list priority on long-term parking</td>
<td>AT (2018-): 48 dedicated EV parking spaces (with chargers)</td>
</tr>
<tr>
<td>Support additional public chargers such as the provision of public chargers or making land available for public chargers</td>
<td>AT (2018-): 50 public EV chargers Other (as at August 2020): ~80 public EV chargers</td>
</tr>
<tr>
<td>Public charger navigation such as physical signage or digital tools to locate public chargers</td>
<td>AT (2020): limited information on AT public chargers</td>
</tr>
<tr>
<td>Charging benefits such as free or reduced fees for public charging, monthly flat-rate charging for heavy users, including car-sharing, ride-share, and taxi companies</td>
<td>AT (2018-): free charging at 50 chargers AT (2020): providing electricity supply infrastructure for 21 car-share chargers</td>
</tr>
<tr>
<td>Infrastructure use and access benefits such as access to bus and other restricted lanes, reductions or exemptions on road tolls and congestion charges</td>
<td>Waka Kotahi (2017-2018): Access to bus lanes at selected State Highway 1 on-ramps AT (2030): Zero-emission Queen Street Zone (within Access for Everyone programme)</td>
</tr>
</tbody>
</table>

To tackle these barriers $34 million has been allocated to support the uptake of EVs by Aucklanders, which is expected to complement Central Government initiatives.

Given the current actions taken in Auckland, there is scope for AT to implement further interventions, however they are unlikely to be effective on their own.

The NZ Government has a long-running EV awareness campaign provided by the Energy Efficiency and Conservation Authority (EECA), and a range of government interventions are being planned to lower the emissions of vehicles entering the fleet. These include the recently announced clean car standard for new and used light vehicles, and consideration of a mandate for lower-emitting biofuels.
Responding to Auckland’s transport challenges cont.

Towards a comprehensive approach

Domestic and international research shows that following the accelerated uptake of EVs, the following supporting interventions are effective: road pricing, fuel taxes, greater use of biofuels, improved vehicle efficiency, providing alternatives to private vehicle use and increasing urban density to reduce sprawl.

A recent study found that without purchase incentives, local interventions to support EVs had minimal impact on increasing their uptake. European cities with the highest EV uptake (Amsterdam, Bergen, Oslo, and Stockholm) have policies addressing purchase price, awareness and convenience.

As part of developing a plan to achieve Auckland Council’s commitments to a 50 percent total emissions reduction by 2030, the Auckland Forecasting Centre considered how this goal might be achieved. It highlighted, much as the Climate Change Commission have done in their work to date, that a suite of interventions is required. This will require an integrated approach by multiple organisations with the ability and mandate to take action.

How Auckland’s transport contribution to a 50% total emissions reduction might be achieved


13 The Auckland Forecasting Centre is a joint venture between Waka Kotahi, Auckland Council and AT with experts in transport forecasting with over 150 years collective experience.
The full suite of potential key actions, and the party with the responsibility for delivery, is set out in the following table.

**Proposed actions and responsibilities**

<table>
<thead>
<tr>
<th>INTERVENTIONS</th>
<th>RESPONSIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerate EV uptake with purchase incentives</td>
<td>Government: To design the incentive and provide funding</td>
</tr>
</tbody>
</table>
| Road pricing[^1] | Government: Legislation required to implement, and owner of state highways  
AT: Owner of local roads where pricing would be applied  
Council: Co-decision-maker in road pricing |
| Motor fuel taxes (including the Emission Trading Scheme) | Government: Responsible for fuel tax regime |
| Greater use of biofuels | Government: Sets fuel specifications |
| Improve vehicle fuel efficiency standards | Government: Sets vehicle specifications |
| Provide alternatives to private vehicles with public transport, cycling and walking | AT and Waka Kotahi: Responsible for infrastructure provision and public transport services |
| Introduce employee remote working (one day per week) | Industry: Implement workplace policies |
| Increase urban density and reduce sprawl | Auckland Council |

Tackling the emissions challenge is both complex and requires a systems-based approach taking account of a number of factors, including technology maturity and supply chains, equity and behaviour change. In the context of this challenge, Auckland needs a Climate Plan for its transport system which sets out the preferred pathway to meeting Auckland Council’s emissions targets.

[^1]: Road pricing options recommended by The Congestion Question have focussed primarily on reducing peak congestion levels. Wider and more expensive road pricing options will likely be required to achieve substantial reductions in regional transport emissions.
Activities to be delivered under this RLTP include:

- Trialling green infrastructure initiatives to reduce heat stress and improve biodiversity
- Improving unsealed roads to reduce sediment run-off and improve stormwater quality
- Including water sensitive design as part of infrastructure development
- Ensuring maintenance and operational practices minimise impacts on the environment
- Improving waste practices across infrastructure construction and facilities management, including the consideration of using low impact materials during construction (e.g. recycled materials)
- Reducing the use of potable water for non-potable activities like dust-supression
- Trialling on-site renewable technologies
- Embedding sustainability requirements into procurement practices.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting Electric Vehicles</td>
<td>AT</td>
<td>34</td>
</tr>
<tr>
<td>Environmental sustainability infrastructure</td>
<td>AT</td>
<td>20</td>
</tr>
<tr>
<td>Electric Bus Trial Roadmap</td>
<td>AT</td>
<td>9</td>
</tr>
</tbody>
</table>

Water quality and other sustainability initiatives

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

Responding to Auckland’s transport challenges cont.
Safety

Making the transport system safe by eliminating harm to people

The investment programme in this RLTP will build on recent progress in reducing DSIs on Auckland roads, and aims to deliver on the Vision Zero for Tāmaki Makaurau transport safety strategy adopted in 2019.

The ultimate goal and vision of this strategy is that there will be no DSI on our transport system by 2050. The strategy is based on the ‘safe system’ approach to improving road safety. In short, the programme aims to provide safe roads, safe drivers, safe speeds and safe vehicles.

Significant projects include:

• Over $650 million of AT investment to deliver the AT Safety Programme, which will deliver improvements targeted towards speed management, high risk intersections, high risk corridors and vulnerable road users.

• $100 million for minor improvements across the network

• $193 million of Waka Kotahi investment to deliver the state highway Safer Networks Programme

• SH16 Brigham Creek-Waimauku: This project will deliver a range of safety and access improvements between Waimauku and the end of the Northwestern Motorway at Brigham Creek Road. Components include new safety barriers, turning bays, flush medians, a new roundabout at the Coatesville-Riverhead Highway intersection, upgrading the corridor to four traffic lanes from Brigham Creek Road to the Taupaki Roundabout, and potentially a new dedicated walking and cycling shared path from Brigham Creek Road to Kumeu.

• $75 million for a new School Speed Management Programme focussed on making the roading environment for young people around schools safer

• $13 million to Marae and Papakainga safety improvements

• Continued delivery of the ‘Te Ara Haepapa’ Programme – a programme co-designed with Māori to improve road safety outcomes for Māori

• Ongoing road safety education, such as online newborn and child restraint courses, courses targeted at ‘rangatahi’ (young people) and awareness programmes targeting high-risk behaviours.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Programme</td>
<td>AT</td>
<td>657</td>
</tr>
<tr>
<td>Safer Networks Programme</td>
<td>Waka Kotahi</td>
<td>193</td>
</tr>
<tr>
<td>SH16 Brigham Creek-Waimauku</td>
<td>Waka Kotahi</td>
<td>137</td>
</tr>
<tr>
<td>Minor Improvements</td>
<td>AT</td>
<td>100</td>
</tr>
<tr>
<td>School Speed Management</td>
<td>AT</td>
<td>75</td>
</tr>
<tr>
<td>Dome Valley Safety Improvements</td>
<td>Waka Kotahi</td>
<td>30</td>
</tr>
<tr>
<td>Marae and Papakainga (Turnouts) safety programme</td>
<td>AT</td>
<td>13</td>
</tr>
<tr>
<td>Community Safety Fund</td>
<td>AT</td>
<td>10</td>
</tr>
</tbody>
</table>
Responding to Auckland’s transport challenges cont.

Policy initiatives to further accelerate a reduction in DSI

Outside of this capital programme, a relentless focus on delivering safety improvements is needed over the next 10 years to meet Auckland’s 2050 Vision Zero goal. This will require a range of operating and capital improvements funded under this RLTP, and consideration of wider policy changes that would need to be implemented by Central Government.

A number of policy changes proven to be successful in similar overseas cities, regions and countries were highlighted in the 2018 Road Safety Business Improvement Review commissioned by the AT Board of Directors and undertaken by global expert Eric Howard. They include:

- Higher penalties (fines and demerit points) for speed, distraction, impairment and restraint offences
- Demerit points for all safety camera generated offences
- A review of road policing in Auckland with a view to achieving best practice levels of enforcement, and meeting current national targets identified through the road safety partnership
- Enhanced enforcement of drug driving and progressing the Land Transport (Drug Driving) Amendment Bill
- Policies to improve the safety of heavy vehicles for vulnerable road users, such as truck side under-run protection and other safety technology to improve visibility and communication between drivers and vulnerable road users
- Simplified processes for the setting of speed limits including cycle changes under the proposed ppeed management plan approach
- Higher speed penalties for heavy vehicle drivers and more restrictive alcohol limits for drivers of heavy vehicles and public transport vehicles (including buses and taxis)
- Removing the capacity for courts to award a work-related licence for a drink driving offender.

It should be noted that policy changes such as the speeding up of EV transition are likely to bring road safety benefits, as an increased number of these vehicles on our roads would have a higher safety (ANCAP) rating in the case of a crash the likelihood of DSI would reduce.

Access and connectivity

Better connecting people, places, goods and services

Strategic and local multi-modal roads

Auckland’s state highways and arterial roads form the backbone of Auckland’s road network. They provide for a wide variety of travel, carry the heaviest freight volumes, provide access to key destinations (such as the Ports of Auckland, Auckland Airport and other freight and business hubs), and connect Auckland to the rest of New Zealand through northern and southern inter-regional connections.

Congestion on the general traffic strategic network, at peak times and increasingly in inter-peak periods, negatively affects the region’s productivity, and increases the cost of doing business as well as affecting Aucklanders’ quality of life.

Over the past 10 years, productivity improvements to counteract population increases, and the increased number of trips and kilometres driven on Auckland’s key corridors, has been achieved by introducing bus and transit lanes or accompanying safe cycling infrastructure, as well as building a small number of new corridors (such as the Waterview Project).

While there are a small number of opportunities to build new corridors or expand existing ones, the majority of Auckland’s traffic growth will need to be accommodated within existing corridors.

Making best use of existing corridors will be achieved by projects that encourage greater use of buses and walking and cycling. Initiatives like Connected Communities, which will improve safety, productivity and carrying capacity on a number of existing urban corridors and through a range of smaller investments which optimise existing corridors.

In keeping with modern worldwide approaches to transport planning, most of these corridors, especially within the urban area, are multi-modal projects delivering upgrades to public transport, cycling and safety along with general traffic.
In terms of new or improved corridors, significant investments within this RLTP include:

- **Mill Road Corridor**: This project, funded through the NZUP, will provide a new 21.5km four-lane corridor with separated walking and cycling facilities from Manukau to Drury South. Part of the Supporting Growth Programme, it involves upgrading the existing Mill Road and building a new corridor through growth areas in Drury, Opaheke and Papakura. This project will also facilitate growth in South Auckland, and provide an additional north-south corridor to add network resilience and help reduce some of the burden of high demand on the SH1 Southern Motorway.

- **Puhoi to Warkworth motorway extension**: This project, currently under construction, extends the existing four-lane SH1 Northern Motorway 18.5km from the Johnstones Hills Tunnels to just north of Warkworth. It will provide improved access, a much safer corridor, as well as faster and more reliable travel times to and from Northland, Warkworth and northeast Rodney.

- **SH1 Papakura to Drury South improvements**: Like Penlink and Mill Road, this project is funded by the NZUP and is part of Auckland’s Supporting Growth Programme. It will follow on from the recent widening of SH1 between Manukau and Papakura, and widen the Southern Motorway to six lanes (three each direction) from Papakura to a new interchange at Drury South, where it will meet the Mill Road Corridor. The project will also provide a separated shared walking and cycling path.

- **Penlink**: Provision of a new tolled connection, funded through the NZUP, between the Northern Motorway and Whangaparāoa Peninsula. The project will relieve pressure on the constrained SH1 Silverdale Interchange, support development in Auckland’s northern growth area, and provide significant time savings for people living on the Whangaparāoa Peninsula.

- **Northern Corridor (includes busway extension)**: Currently under construction, this project will complete the Western Ring Route. It involves upgrading the northern end of SH18 to motorway standard, delivers a new SH18-SH1 motorway-to-motorway connection, widens SH1 between Constellation Drive and Oteha Valley Road, extends the Northern Busway from Constellation Drive to Albany, and provides new walking and cycling shared paths along the upgraded parts of SH1 and SH18.

- **Lincoln Road**: Improvements between Te Pai Place and the Northwestern Motorway to accommodate additional transit lanes, intersection and safety improvements, and upgraded walking and cycling facilities.

- **Glenvar Road/East Coast Road improvements**: New transit lanes along East Coast Road, intersection upgrades, and new and improved walking and cycling facilities to support the Long Bay Development area, improve network productivity and improve safety.

- **Lake and Esmonde Road improvements**: New transit lanes and walking and cycling facilities to improve journey time reliability, network productivity and improve safety.

- **A new $14 million AT Core Operational Capital Programme**: This will provide funding for the purchase of small operational assets required to support provision of services to the public (e.g. Harbourmaster assets).

- **Property and investigation for several Waka Kotahi projects**, such as Additional Waitematā Harbour Connections, the East West Link, Warkworth to Wellsford designation, SH1 Drury South to Bombay, and Grafton Gully.

This RLTP also includes a suite of ongoing programmes that will provide a range of smaller improvements to unsealed roads, signage and state highways across the region.
### Responding to Auckland’s transport challenges cont.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Road Corridor</td>
<td>Waka Kotahi</td>
<td>1,354</td>
</tr>
<tr>
<td>Puhoi-Warkworth</td>
<td>Waka Kotahi</td>
<td>846</td>
</tr>
<tr>
<td>State Highway 1 Papakura to Drury South</td>
<td>Waka Kotahi</td>
<td>423</td>
</tr>
<tr>
<td>Penlink</td>
<td>Waka Kotahi</td>
<td>411</td>
</tr>
<tr>
<td>Southern Corridor Improvements (Manukau-Papakura) [Debt repayment]</td>
<td>Waka Kotahi</td>
<td>241</td>
</tr>
<tr>
<td>Northern Corridor (includes busway extension)</td>
<td>Waka Kotahi</td>
<td>128</td>
</tr>
<tr>
<td>Lincoln Road Corridor Improvements</td>
<td>AT</td>
<td>106</td>
</tr>
<tr>
<td>Regional Improvement Projects</td>
<td>AT</td>
<td>62</td>
</tr>
<tr>
<td>Glenvar Road/East Coast Road intersection and corridor improvements</td>
<td>AT</td>
<td>57</td>
</tr>
<tr>
<td>Parking Programme</td>
<td>AT</td>
<td>49</td>
</tr>
<tr>
<td>Lake Road/Esmonde Road Improvements</td>
<td>AT</td>
<td>48</td>
</tr>
<tr>
<td>SH20A to Airport (Debt Repayment)</td>
<td>Waka Kotahi</td>
<td>48</td>
</tr>
<tr>
<td>Wynyard Quarter Integrated Road Programme</td>
<td>AT</td>
<td>46</td>
</tr>
<tr>
<td>Unsealed Road Improvements</td>
<td>AT</td>
<td>40</td>
</tr>
<tr>
<td>Minor State Highway Improvements (Low Cost Low Risk)</td>
<td>Waka Kotahi</td>
<td>28</td>
</tr>
<tr>
<td>Smales Allens Road Widening and Intersection Upgrade</td>
<td>AT</td>
<td>23</td>
</tr>
<tr>
<td>Hill Street Intersection Improvement</td>
<td>AT</td>
<td>19</td>
</tr>
<tr>
<td>Resolution of Encroachments and Legacy Land Purchase Arrangements</td>
<td>AT</td>
<td>17</td>
</tr>
<tr>
<td>Ormiston Town Centre Link</td>
<td>AT</td>
<td>17</td>
</tr>
<tr>
<td>Noise wall upgrade programme</td>
<td>Waka Kotahi</td>
<td>15</td>
</tr>
<tr>
<td>Core Capital Operational Programme</td>
<td>AT</td>
<td>14</td>
</tr>
<tr>
<td>Improvements Complementing Developments</td>
<td>AT</td>
<td>12</td>
</tr>
<tr>
<td>Medallion Drive Link</td>
<td>AT</td>
<td>12</td>
</tr>
<tr>
<td>SH1 Additional Waitemata Harbour Connections (Business Case, Designations and Property)</td>
<td>Waka Kotahi</td>
<td>60</td>
</tr>
<tr>
<td>East West Link (Property)</td>
<td>Waka Kotahi</td>
<td>31</td>
</tr>
<tr>
<td>Warkworth to Wellsford (Designation)</td>
<td>Waka Kotahi</td>
<td>21</td>
</tr>
<tr>
<td>SH1 Drury South to Bombay (Route Protection)</td>
<td>Waka Kotahi</td>
<td>18</td>
</tr>
<tr>
<td>Grafton Gully Improvement Business Case</td>
<td>Waka Kotahi</td>
<td>15</td>
</tr>
</tbody>
</table>

A number of corridor projects that were included in the 2018 RLTP are not proposed to be included in this RTLP. These include the full East West Link, Dairy Flat Highway and Gills Road Link. Transport asset renewals, public transport and cycling projects, and support for housing development were given priority.
Optimisation programmes

The major part of Auckland’s future growth in travel demand will need to be accommodated by existing transport corridors. To achieve this Auckland needs to make better use of its existing transport system, and increase the number of people and freight that can travel through key routes and corridors.

Reconfiguring or ‘sweating’ our existing transport network harder to increase overall productivity involves 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.

Optimisation activities in this RLTP include:

- $168 million of investment in AT’s Network Performance programme, which delivers a range of targeted small to medium scale infrastructure projects to optimise routes. Initiatives to be delivered include removing ‘pain points’ along corridors for walking and cycling, public transport and private vehicles, synchronising traffic signals, optimising road layout, dynamic traffic lanes and managing traffic restrictions. A dedicated allocation for freight improvements is also included.

- Over $120 million of Waka Kotahi investment in Intelligent Transport Systems and optimisation activities.

- $52 million of AT investment in Intelligent Transport Systems to utilise emerging technologies to better manage congestion, improve safety and influence travel demand.

An investigation into the feasibility of introducing congestion pricing to improve network performance and reduce congestion is currently underway. The Congestion Question (TCQ) will inform decisions on whether or not to proceed with introducing such pricing in Auckland. At this stage however, the cost of implementing congestion pricing has not been included in this RLTP.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Performance (including Freight Network Improvements)</td>
<td>AT</td>
<td>168</td>
</tr>
<tr>
<td>ITS Programme &amp; State Highway Optimisation Programme (Optimisation PBC state highway component)</td>
<td>Waka Kotahi</td>
<td>122</td>
</tr>
<tr>
<td>Intelligent Transport Systems</td>
<td>AT</td>
<td>52</td>
</tr>
</tbody>
</table>
Policy initiatives – The Congestion Question

Aucklanders currently pay for use of the roading network through Petrol Excise Duty (PED) and Road User Charges (RUC) and, as set out previously, the Auckland RFT. The rates of PED and RUC are specified in legislation and all money raised goes into the NLTF, which helps fund the improvement, operation and maintenance of our land transport network. PED is around 70 cents per litre of petrol and the rates of RUC vary depending on the weight and the configuration of the vehicle.

While the current road charging mechanisms are well known and have supported land transport in New Zealand, over the longer term they will need to change as more New Zealanders transition to EVs.

A further limitation of current pricing mechanisms is that they have almost no influence on the decision Aucklanders make as to when they might take a car trip, whether they should make the trip at all, whether they might substitute a car trip for a public transport trip or a trip on foot or cycle, and what route they might take.

An investigation into the feasibility of introducing a demand management based pricing scheme to improve network performance and reduce congestion is progressing. Further, more detailed design of the technical concept study (called The Congestion Question – see below) and engagement with Aucklanders will inform decisions on whether or not to proceed with introducing such pricing in Auckland.

TCQ is an investigation by the Government and Auckland Council to consider whether there is a case for introducing a congestion pricing scheme for Auckland. The Government has not made a decision to implement congestion charging in Auckland, but road pricing has the significant potential to be a key part of the ATAP program.

With the right design, supported by improved public transport services and a mitigation programme to assist vulnerable road users, the opportunity exists for Auckland to benefit from a sustainable eight percent to 12 percent improvement in network performance once a full scheme becomes operational.

This is similar to traffic conditions observed during the school holidays and would deliver productivity benefits for the freight industry and travel time benefits for those needing to travel by motor vehicle, particularly at peak times.

The introduction of an Auckland congestion pricing scheme also has the potential to support an improvement in local air quality and reduce GHG emissions alongside other supporting interventions.

The TCQ investigation has recommended that a potential congestion pricing scheme in Auckland be introduced in stages, with the first phase based around the City Centre area, introduced to coincide with the opening of CRL.

Over time, congestion pricing would be introduced along congested corridors, with the implementation timetable informed by the RLTP.

Work to date was most recently endorsed by the AT Board of Directors in December 2020 and Auckland Council’s Planning Committee has approved moving to the next phase of work.

At this stage however, neither the cost of implementing congestion pricing or the benefits that would accrue from its implementation have been included in this RLTP.

Operational funding will allow ongoing investigation work.

Growth

Enabling Auckland’s growth through a focus on intensification in brownfield areas and with some managed expansion into emerging greenfield areas

Accommodating Auckland’s population growth requires further acceleration of the construction of housing and business development. Much of this development is supported by the broad investment programme outlined above, along with the infrastructure provided by developers themselves. Auckland Council and Government are, however, seeking to encourage growth in a number of spatial priority areas in brownfields and greenfields areas, where the availability of land or links to public transport or other infrastructure provides advantages.

The ATAP process identified support for brownfields development as the highest priority for growth investment. This RLTP therefore allocates around $400 million of new investment towards brownfields developments in Mangere, Mt Roskill, Oranga, Northcote and Tāmaki, with Central Government contributing a further $100 million. This will support construction of up to 17,000 new homes along with encouraging more use of public transport and active modes while minimising congestion.

Greenfield areas often need substantial investment before significant development can occur. Much of this investment will typically come from developers who provide the base roading networks. Nevertheless, additional large-scale investment is often needed to connect these areas to the network in a way that encourages more sustainable transport behaviour and minimises congestion impacts. With limited funding available, the priority has been on route protection, property purchase and infrastructure to support the effective operation of rapid transit and bus links for these areas, rather than additional road capacity.

A transport network plan, known as the Supporting Growth Programme, has been developed to support Auckland’s Warkworth, Northern, NorthWest and Southern greenfield growth areas. The identified desirable transport infrastructure exceeds the funding available, so only the highest priority items are included within this RLTP. The ATAP work identified the Northwest, followed by Drury and Pareata as the highest priorities for new greenfield investment to support growth.

In terms of specific projects, this RLTP includes funding for:

- $401 million, with a further $100 million to come direct from Central Government, to support the Auckland Housing Programme in brownfield areas. This will provide for public transport and walking and cycling infrastructure in these areas to encourage sustainable transport behaviour, along with intersection upgrades to minimise impact on the operation of the surrounding road network.
- $328 million for greenfield transport infrastructure projects in the Northwest, which targets key infrastructure to support future bus operations along with route protection and property acquisitions for bus access along prospective transport corridors.
- $243 million for local road improvements to support the urban development of Drury including access to new rail stations. This is in addition to the new stations themselves, the Mill Road Corridor, SH1 widening to Drury South, and new SH1 Drury South Interchange funded through NZUP and covered in the sections above.
- Funding to continue the Supporting Growth Alliance, which is progressing investigation and route protection activities for the transport networks required to support Auckland’s Warkworth, Northern, NorthWest and Southern growth areas.
- SH18 Squadron Drive Interchange upgrade: New west-bound on and off-ramps to complete the interchange (only east-bound ramps are currently provided) and support the Hobsonville and Whenuapai growth areas.
- Delivery of specific projects to support and enable growth in Warkworth (Matakana Link Road), Wainui, Huapai, and Hobsonville (Scott Point).
Responding to Auckland’s transport challenges

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects supporting Auckland Housing Programme (additional Central Government investment anticipated)</td>
<td>AT</td>
<td>401</td>
</tr>
<tr>
<td>Drury Local Road Improvements</td>
<td>AT</td>
<td>243</td>
</tr>
<tr>
<td>Northwest Growth Improvements</td>
<td>AT</td>
<td>186</td>
</tr>
<tr>
<td>Greenfield transport infrastructure – Northwest</td>
<td>AT</td>
<td>142</td>
</tr>
<tr>
<td>SH18 Squadron Drive interchange upgrade</td>
<td>Waka Kotahi</td>
<td>68</td>
</tr>
<tr>
<td>Greenfield Transport Infrastructure Supporting Growth Post Lodgement and Property</td>
<td>AT</td>
<td>64</td>
</tr>
<tr>
<td>Supporting Growth Route Protection Programme</td>
<td>Waka Kotahi</td>
<td>44</td>
</tr>
<tr>
<td>Tāmaki Regeneration</td>
<td>AT</td>
<td>41</td>
</tr>
<tr>
<td>Supporting Growth - Investigation for Growth Projects</td>
<td>AT</td>
<td>28</td>
</tr>
<tr>
<td>Matakana Link Road</td>
<td>AT</td>
<td>26</td>
</tr>
<tr>
<td>Wainui Improvements</td>
<td>AT</td>
<td>23</td>
</tr>
<tr>
<td>Strategic Business Cases</td>
<td>AT</td>
<td>20</td>
</tr>
<tr>
<td>Huapai Improvements</td>
<td>AT</td>
<td>18</td>
</tr>
<tr>
<td>Western Link Road Route Protection</td>
<td>AT</td>
<td>6</td>
</tr>
<tr>
<td>Scott Point Repayment</td>
<td>AT</td>
<td>5</td>
</tr>
</tbody>
</table>

Over the past 10 years all of the transport agencies have supported Auckland Council to accelerate consenting for new housing developments to address the housing shortage. As recently as January 2021, over 17,100 new dwellings were consented in the preceding 12 months. This represents a 14 percent increase over the previous 12 months and is the highest level of consenting Auckland has seen for decades. This now takes current levels of home building above what is required to keep up with population growth, and, with limited immigration likely over the next 12 months, presents the opportunity to close at least some of the gap between housing demand and supply.15

Asset management

Sound management of transport assets

Auckland Transport

AT is the regional guardian of $21.1 billion of publicly-owned transport assets, including 7,638km of arterial and local roads, 7,431km of footpaths, 348km of cycleways, and public transport assets including a growing fleet of electric trains, rail and busway stations, bus shelters, ferry wharves and two airfields on the Gulf Islands.

Maintaining and renewing these assets is a significant undertaking. AT has completed a comprehensive review of its asset renewals programme for this RLTP to ensure that it is delivering fit-for-purpose levels of service and achieving value for money. It is critical to invest appropriately in asset renewals to ensure public safety, reduce the risk of asset failure, and to maintain adequate levels of service.

Increasingly, in a very different Auckland than even 20 years ago, a number of assets not only need to be renewed but improved to meet current objectives. Where practicable, and funds exist to complement renewals funding, the work that occurs will take account of the future needs of the network.

A ten-year investment of $3.93 billion has been included in this RLTP to cover the cost of renewing AT’s asset base. This RLTP has $900 million more in AT renewals than the $3.05 billion included in the 2018 RLTP.

Waka Kotahi

Waka Kotahi is responsible for developing, operating and maintaining the state highway network, including Auckland’s motorway system. It’s Auckland assets are valued at around $15.9 billion.

This RLTP allocates $1.86 billion for state highway renewals, maintenance and operations over the 2021-2031 period to ensure the network remains safe, reliable and resilient.

KiwiRail

KiwiRail is responsible for developing, maintaining and operating the rail network in the Auckland Region, which is funded by KiwiRail and AT through the Auckland Network Access Agreement (ANAA).

This RLTP includes $293 million to cover KiwiRail renewals, and $52 million for the CRL Day One Resilience and Asset Maintenance Programme (included in Rail Network Improvements). These represent KiwiRail’s share of the costs. AT’s share of costs is included in its operating budget. The final allocation of costs between KiwiRail and AT is determined in accordance with the arrangements in the ANAA.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland Transport Renewals</td>
<td>AT</td>
<td>3,931</td>
</tr>
<tr>
<td>State Highway Maintenance, Operations &amp; Renewals</td>
<td>Waka Kotahi</td>
<td>1,862</td>
</tr>
<tr>
<td>Rail Network Maintenance, Operations and Renewals</td>
<td>KiwiRail</td>
<td>293</td>
</tr>
<tr>
<td>Seismic Strengthening Programme</td>
<td>AT</td>
<td>25</td>
</tr>
<tr>
<td>Street Lighting Improvements</td>
<td>AT</td>
<td>17</td>
</tr>
<tr>
<td>Wolverton Culverts</td>
<td>AT</td>
<td>10</td>
</tr>
</tbody>
</table>
Responding to Auckland’s transport challenges cont.

Other items

Local Board programmes, planning for the future, technology and organisational improvement initiatives.

Local board-led programmes

This RLTP includes a $200 million Local Board Initiatives fund to be split between Auckland’s 21 local boards, and provide for an ongoing programme of smaller-scale local transport improvements. Each local board decides on its own investment priorities.

In 2018 the Rodney Local Board decided to establish a Rodney Transport Targeted Rate to fund additional transport improvements – bus services, park and rides and footpaths – not otherwise included in the RLTP. The ongoing implementation of this targeted rate has been included within this RLTP.

In 2020 AT worked with the Waiheke Local Board to define the transport priorities for Waiheke over the next 10 years. This draft plan includes $10 million to begin implementing priority initiatives.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Board Initiatives</td>
<td>AT</td>
<td>200</td>
</tr>
<tr>
<td>Projects funded by Rodney Transport Targeted Rate</td>
<td>AT</td>
<td>22</td>
</tr>
<tr>
<td>Waiheke 10-year Transport Plan</td>
<td>AT</td>
<td>10</td>
</tr>
</tbody>
</table>

Customer experience, technology and organisational improvements

Technology improvements such as the AT HOP card and real-time travel information have made a significant contribution to recent rapid increases in public transport use. The programme includes provision for further improvements to the AT HOP system and preparation for the new generation public transport ticketing system. Ongoing investment in technology will also enable further improvements to the public transport customer experience, including improvements to real time information such as audio announcements in both English and Te Reo Māori on buses.

Technology also provides transport organisations with the opportunity to deliver their services in more efficient and effective ways. For example, AT is increasingly using technology including CCTV and car mounted cameras to support its parking and enforcement activities. AT is also introducing a new Enterprise Asset Management and project management systems to deliver value for money.

The programmes included within this RLTP reflect AT’s ongoing investment in technology to support improved customer experience and complete activities to close-out recommendations in the review of Auckland CCOs.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
<th>TEN 10-YEAR CAPITAL EXPENDITURE ($MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer and Business Technology</td>
<td>AT</td>
<td>353</td>
</tr>
<tr>
<td>Core Technology</td>
<td>AT</td>
<td>57</td>
</tr>
<tr>
<td>Transport Demand Forecasting Models Update</td>
<td>AT</td>
<td>6</td>
</tr>
</tbody>
</table>
“Sometimes environmentally friendly products are more expensive and we need to make the most positive impact as fast as possible”

Travel survey recipient
Measuring outcomes

This section outlines the expected results from implementing the draft RLTP, alongside what’s considered needed but requires additional funding or policy tools. Results are reported using AT’s Future Connect Indicators of Success.

The forecasts and targets outlined in the tables below have been developed using a range of modelled and real world data sources. Where modelling results have been used, these have come from Auckland Forecasting Centre’s Macro Strategic Model (MSM).

### Travel choices

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
<th>WHAT’S NEEDED BUT REQUIRES ADDITIONAL POLICY AND / OR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RESULTS FROM THIS RLTP</td>
<td></td>
</tr>
<tr>
<td><strong>Accelerate better travel choices for Aucklanders</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Indicator:</strong> Share of Auckland growth in trips taken up by public and active modes (morning peak)</td>
<td>64%</td>
<td>100%</td>
</tr>
<tr>
<td>Total Auckland public transport boardings</td>
<td>142m</td>
<td>200m</td>
</tr>
<tr>
<td>Number of Auckland cycle movements past selected count sites</td>
<td>6.94m</td>
<td>8.11m</td>
</tr>
<tr>
<td>Overall Vehicle Kilometres Travelled (VKT) for Auckland</td>
<td>Increasing in line with population growth</td>
<td>Holding steady at 2018 baseline (15.4 annual billion-kilometre)</td>
</tr>
</tbody>
</table>
Public and active transport

The significant investment in public transport and active modes outlined in the RLTP is forecast by our transport model to increase the combined AM peak mode share from 23 percent in 2016 to 29 percent in 2031. This change means that active and public transport will effectively absorb around 64 percent of the growth in morning peak trips between 2016 and 2031.

By 2031, public transport boardings are expected to reach 142 million per annum, which represents a 40 percent increase on the 103.6 million achieved in February 2020. Within this, rail patronage will double to around 40 million passengers per year as a result of the opening of CRL, Papakura to Pukekohe electrification, new Drury stations, increased train frequencies and more passenger capacity. The more modest increase for the bus and ferry networks reflects the constrained operating funding environment which will severely limit the number of new services that AT can deliver over the next decade.

AT estimates that the $500 million increase in funding for public transport services identified earlier in this RLTP would enable annual boardings to reach 175 million by 2031.

The take-up of cycling is expected to continue increasing as a result of the rollout of new and improved cycling infrastructure. Major new walking and cycling corridors planned in this RLTP include the Northern Pathway, Glen Innes to Tāmaki Drive Shared Path, completion of the Urban Cycleways Programme and new arterial cycleways delivered through the Connected Communities programme. By 2031, it is expected that 6.94 million cyclists will be passing AT’s nominated cycle count sites each year. This represents growth of 90 percent over the 3.7 million figure recorded during 2020.

Vehicle Kilometres Travelled (VKT)

The RLTP investment package is forecast to see public transport’s share of motorised distance travelled increase from 12 percent to 20 percent in the morning peak, and from 5 percent to 10 percent in the inter-peak period. Nevertheless, private vehicle trips are still forecast to increase and, when combined with an increase in average vehicle trip distance, total VKT between 2016 and 2031 increases roughly in line with the expected 22 percent increase in population.

---

16 This forecast is less than 2031 boardings result estimated by the MSM regional strategic model. The 142 million boardings forecast identified here has been developed using real world information and better reflects factors such as budget limitations, public transport network development, and the effect of unexpected events such as Covid-19.
Measuring outcomes cont.

Climate change and the environment

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RESULTS FROM THIS RLTP</td>
</tr>
<tr>
<td>Improve environmental resilience and sustainability of the transport system, and significantly reduce the greenhouse emissions it generates</td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Indicator:</strong> Auckland GHG emissions (for land transport purposes)</td>
<td>1% – 12% reduction in emission compared to 2016 when additional policy initiatives are included</td>
</tr>
<tr>
<td>GHG emissions from AT’s corporate activities, facilities and trains</td>
<td>50% reduction from 2018 baseline</td>
</tr>
<tr>
<td>Proportion of AT buses that are electric</td>
<td>50%</td>
</tr>
<tr>
<td>Runoff from the busiest local roads impacting high quality receiving environments</td>
<td>Runoff from 30% of the busiest roads in Auckland is treated</td>
</tr>
</tbody>
</table>

**GHG emissions**

Our transport modelling forecasts that Auckland’s per capita transport emissions will reduce by 13 percent between 2016 and 2031. However, the 22 percent increase in population over the same period means that the region’s total emissions are expected to increase by six percent between 2016 and 2031.

**The impact of wider policy settings**

The above projection does not take the following two additional policy interventions into account:

- Government policy interventions including the Clean Car policy and a shift to biofuels. These are expected to yield a cumulative reduction of 1-2 megatonnes of CO2, which are indicatively estimated to result in a further annual transport emissions reduction in the order of seven percent in 2031 compared to the RLTP outcome.
- The Climate Change Commission’s proposed measures to accelerate the take up of EVs, which if implemented and based on the Commission’s figures, are estimated to result in a further annual transport emissions reduction of up to 12 percent in 2031.

Assuming these are implemented in conjunction with the RLTP, Auckland’s total transport emissions in 2031 could reduce by up to 12 percent compared to 2016. This occurs despite the significant increase in demand associated with population growth. However, it is critical to emphasise that the rate of reduction in emissions depends in particular on measures to accelerate the take up of EVs within the fleet.

This does not meet Auckland Council’s Climate Action Plan target for 2031, which requires a 50 percent reduction in regional emissions.

Beyond 2031, the reduction in emissions is expected to accelerate significantly as more of the vehicle fleet transitions to EVs.

17 This is based on the middle of the range of the 1-2 megatonne range
Additional investment and measures to achieve the Climate Change Commission and Auckland Council’s emission reduction targets

The Climate Change Commission’s 2021 Draft Advice for Consultation has set out the mode shift changes needed as part of its proposed route to transport emissions reduction. These are:

- A 25 percent increase in the share of distance travelled by walking
- A 95 percent increase in the share of distance travelled by cycling
- A 120 percent increase in the share of distance travelled by public transport.

Our modelling and estimates indicate the RLTP package is likely to broadly achieve the level of change the Climate Change Commission proposes for walking and cycling. However, the 80 percent increase in the share of distance travelled by public transport is less than the 120 percent increase proposed by the Climate Change Commission. Achieving this level of impact would require a substantial acceleration of investment in rapid transit projects across Auckland, including bringing forward completion of the CC2M project, the full A2B project and the final Northwest Rapid Transit project. A significant increase in public transport services would also be required.

Meanwhile, meeting Auckland Council’s target of a 50 percent reduction in transport emissions by 2031 is much more challenging than the Climate Change Commission’s mode shift changes. Because the adoption of EVs cannot happen quickly enough to deliver the required reductions by 2031, meeting the Council’s target would require very strong interventions to reduce demand for private vehicle travel. Potential examples include road pricing schemes that would dramatically increase the cost of driving. While such an approach would achieve climate outcomes, perverse social, cultural and economic outcomes would also be expected under settings this strong.

Stormwater runoff

In addition to GHG emissions, the transport system also produces harmful pollutants that collect on road surfaces and are washed away in stormwater. AT has a goal of treating run off on 30 percent of Auckland’s busiest roads by 2031.
Measuring outcomes cont.

Safety

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RESULTS FROM THIS RLTP</td>
</tr>
<tr>
<td><strong>Make the transport system safe by eliminating harm to people</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic indicator:</strong></td>
<td></td>
</tr>
<tr>
<td>Deaths and serious injuries (DSI) on the Auckland transport network</td>
<td>67% reduction (baseline 2016-18 average annual DSI)</td>
</tr>
<tr>
<td>DSI of people walking, riding a bike or motorcycle on the Auckland transport network</td>
<td>67% reduction or no more than 106 vulnerable road user DSI (baseline 2016-18 annual average)</td>
</tr>
</tbody>
</table>

The Safety Programme delivered under this RLTP is expected to prevent over 1,760 DSI during the next 10 years and deliver a 67 percent reduction in annual DSI by 2031. This result is in line with the Vision Zero for Tāmaki Makaurau Transport Safety Strategy.

The safety programme will upgrade large parts of the network, including high-risk corridors and intersections. There will be a focus on vulnerable road users, including pedestrians, cyclists and motorcyclists, to ensure their safety is equally improved as part of the programme.
Access and connectivity

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESULTS FROM THIS RLTP</td>
<td>WHAT'S NEEDED BUT REQUIRES ADDITIONAL POLICY AND / OR FUNDING</td>
</tr>
<tr>
<td><strong>Better connect people, places, goods and services</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Indicator:</strong> Number of jobs Aucklanders can connect to within an acceptable time (30 min by car, 45 min by public transport)*</td>
<td>*Proxy for connections to other activities</td>
</tr>
<tr>
<td>Car: Connections to jobs increase by 14%</td>
<td>Car: Connections to jobs increase in line with growth in labour force (18%)</td>
</tr>
<tr>
<td>PT: Connections to jobs increase by 60%</td>
<td>PT: Double the number of jobs available (100%)</td>
</tr>
<tr>
<td>S/W/Rural: Connections increase at roughly the same rate as the rest of the region</td>
<td>S/W/Rural: Connections from these areas increase at a faster rate than average</td>
</tr>
<tr>
<td>90%</td>
<td>100%</td>
</tr>
<tr>
<td>36% morning</td>
<td>Hold to 2016 levels:</td>
</tr>
<tr>
<td>10% inter-peak</td>
<td>32% morning</td>
</tr>
<tr>
<td>39 km/h</td>
<td>6% inter-peak</td>
</tr>
<tr>
<td>45 km/h</td>
<td></td>
</tr>
</tbody>
</table>

Access to jobs

One of the benefits of living in a large and growing city is having access to an increasing number of jobs within a reasonable commuting distance from home. Similarly, for businesses there are benefits from having ready access to an increasing number of potential employees close to their place of business.

This is measured by the estimating the average number of jobs accessible to Aucklanders in the morning peak within a 30 minute car trip, or 45 minute public transport trip.

- Accessibility by car: in 2016 the average Aucklander had access to 234,000 jobs within a 30 minute car trip. This is forecast to increase by 14 percent to 266,000 by 2031 under this RLTP.
- Accessibility by public transport: in 2016 the average Aucklander had access to 68,000 jobs within a 45 minute public transport trip. This is forecast to increase by 60 percent to 108,000 by 2031 under this RLTP.

Levels of service and congestion

A key challenge for Auckland is holding congestion steady while the city grows, enabling freight and business travel to continue without facing additional delay and disruption. Transport modelling indicates that with this RLTP, we would expect to see the time spent in congestion during the morning peak increase by around 10 percent between 2016 and 2031, from 32.5 percent to 35.7 percent. During the interpeak, the increase is from 6 percent to 10 percent. Within this, congestion is projected to increase more rapidly on the motorway network while staying relatively constant on the arterial network.

Policy initiatives – The Congestion Question

Further improvements in congestion, accessibility and travel speeds could be delivered via the introduction of a congestion pricing scheme in Auckland. The Congestion Question project (TCQ), has found that the opportunity exists for Auckland to benefit from a sustainable eight percent to 12 percent improvement in network performance once a full congestion pricing scheme becomes operational.
Growth

Enable Auckland’s growth through a focus on intensification in brownfield areas, with some managed expansion into emerging greenfield areas

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
<th>RESULTS FROM THIS RLTP</th>
<th>WHAT’S NEEDED BUT REQUIRES ADDITIONAL POLICY AND / OR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic indicator: Proportion of Auckland population serviced by public transport within 500m of rapid and/or frequent network stops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auckland Spatial Priority Areas (greenfield and brownfield) are provided with adequate infrastructure* to support the development of the land</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid and frequent network coverage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spatial Priority Areas</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Strategic indicator:**
Proportion of Auckland population serviced by public transport within 500m of rapid and/or frequent network stops

<table>
<thead>
<tr>
<th></th>
<th>2031 INDICATORS OF SUCCESS</th>
<th>RESULTS FROM THIS RLTP</th>
<th>WHAT’S NEEDED BUT REQUIRES ADDITIONAL POLICY AND / OR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>42%</td>
<td>55%</td>
<td></td>
</tr>
</tbody>
</table>

*A to support form and function whilst encouraging sustainable travel behaviour and minimising potential negative impacts on wider transport system

**Rapid and frequent network coverage**
Thirty nine percent of Aucklanders who are currently served by the public transport system live within 500m of a stop on the rapid or frequent public transport networks. This is expected to grow to 42 percent in 2031 under this RLTP.

Further increases depend on the provision of additional operating funding so that frequencies can be improved and additional services can be added to the network, or the delivery of additional infrastructure (such as CC2M light rail).

**Spatial Priority Areas**
Transport also has a critical role in supporting and enabling regional growth. Growth is occurring across the region, and there is pressure to invest simultaneously in a number of different locations.

Auckland’s highest spatial priorities for transport growth investment have been identified through the cross-agency ATAP process. The RLTP supports development in the following nine priority areas:

- Northwest
- Northcote
- City Centre
- CRL Stations
- Mount Roskill
- Oranga
- Tāmaki
- Mangere
- Drury.
### Asset management

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>2031 INDICATORS OF SUCCESS</th>
<th>RESULTS FROM THIS RLTP</th>
<th>WHAT’S NEEDED BUT REQUIRES ADDITIONAL POLICY AND / OR FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sound asset management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of overall road assets in acceptable condition</td>
<td>95%</td>
<td>97%</td>
<td></td>
</tr>
</tbody>
</table>
| Road maintenance standards (ride quality) as measured by smooth travel exposure for urban and rural roads | • 92% rural  
• 81% urban  
• NB. At 2018 RLTP funding | • 96% rural  
• 90% urban  
• NB. At higher funding | |
| Average age of road pavement base rehabilitated | • <60 yr arterials  
• <90 yr collectors  
• >200 yr locals* | • 40 yr (expected useful life) arterials/Strategic Networks  
• <90 yr collectors  
• >200 yr locals* | |
| Average age of road pavement surface resealed | • 15 yr arterials  
• 19 yr collectors  
• 22 yr locals | • 15 yr arterials/Strategic Networks  
• 18 yr collectors  
• 18 yr locals | |
| Proportion of footpaths in acceptable condition | 95% very good* to moderate | 98% very good* to moderate | |

*Very good condition: As new condition or sound physical condition. Asset lively to perform adequately without major work for 10-15 years or more. No physical maintenance required. Visually excellent.

This RLTP proposes a significantly enhanced renewal programme compared to 2018.

The recommended programme ensures that network condition remains stable over the next 10 years, with the vast majority of assets remaining in very good, good and moderate condition. A minimal amount of assets will be allowed to fall into poor or very poor condition before being renewed or replaced. Reductions in maintenance and renewal spend result in lower levels of service (e.g. more potholes and cracked footpaths), longer timeframes before assets are renewed and ultimately increase the risk of assets failing. The recommended investment programme is designed to ensure that assets are managed in a way that promote public safety, reduce the risk of asset failure, and maintain adequate levels of service.
07. Inter-regional priorities

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 particularly important to the national economy, with the Upper North Island accommodating more than 50 percent of New Zealand’s population.

The Upper North Island Strategic Alliance (UNISA) brings together the Auckland Council, Bay of Plenty Regional Council, Northland Regional Council, Waikato Regional Council, Hamilton City Council, Tauranga City Council and Whangārei District Council to collaborate on a range of inter-regional and inter-metropolitan issues. The following statement prepared for UNISA outlines the issues and priorities for transport for the Upper North Island.

Why the Upper North Island is important

The Upper North Island (UNI) is critical to the social and economic success of New Zealand.

The Auckland, Northland, Waikato and Bay of Plenty regions are responsible for generating more than half of New Zealand’s GDP, housing more than half of New Zealand’s population and providing for the movement of more than half of New Zealand’s freight.

Growth in the UNI has increased more rapidly than for the rest of the country and that is predicted to continue. This growth has many benefits for the country, but it brings with it a range of challenges that local and central government agencies need to work on together to resolve.

The role of transport

Transport is an important enabler of social, economic and environmental outcomes. The UNI contains vital transport networks and acts as New Zealand’s gateway to the world, with the Ports of Auckland, Tauranga and Northport exporting and importing the majority of New Zealand’s goods. These ports are served by a developing network of inter-modal inland ports and freight hubs, which support the efficient transfer of goods between producers and consumers.
Wider road and rail infrastructure networks connect key growth areas, ports and freight hubs, and support the majority of national economic activity. These networks not only provide for the movement of people, and exchange of goods and services, they also facilitate improvements in accessibility, both inter-regionally, regionally and sub-regionally.

Ensuring a safe, efficient and sustainable transport network is critical for the Upper North Island to achieve the desired social and economic outcomes, and for New Zealand to continue to compete internationally.

**Why collaboration is important**

The inter-dependencies between regions, most evident in shared transport networks, means that the ongoing success of the UNI requires key decision-makers to work together, sharing and coordinating information and understanding wider strategic priorities in planning and investment processes. A collaborative, forward-thinking approach to infrastructure planning and investment across the UNI is required to ensure freight supply chains, and strategic road and rail corridors continue to perform well into the future.
Inter-regional priorities cont.

Shared priorities

In developing the respective UNI Regional Land Transport Plans, the regions have collaborated to better understand the UNI strategic context, issues and opportunities relevant to the transport network, and identified the following shared priority areas of focus:

- Managing the transport implications of population growth and land use change
- Improving the efficiency and reliability of freight movements
- Improving the safety of road users across the network, particularly in high-risk areas.

These areas benefit the most from an aligned UNI approach as they require multi-agency attention, have a prevalence of cross-boundary journeys, and are key contributors to the significance of the UNI to New Zealand. While the shared priorities are developed at a UNI scale, sub-regional and regional priorities continue to provide specific areas of focus for regions within the UNI, for example the importance of ensuring a resilient transport network within areas prone to disruption.

A shared priority work programme is helping to improve and better coordinate the regional delivery and response to UNI significant issues, determined through RLTPs. It is essential that this commitment to collaboration continues and develops even further to maximise UNI social and economic outcomes.
Strategic areas of focus for the Upper North Island 2021-2031

<table>
<thead>
<tr>
<th>Area</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whangārei to Auckland (SH1 and Rail)</td>
<td>Strategic road and rail corridors to deliver safe and reliable journeys between Auckland and Whangārei. This includes delivering SH1 Whangārei to Port Marsden project through the NZUP and to consider further options to increase transport choice between Whangārei and Northport and investigate opportunities for additional improvements between Port Marsden Highway and Te Hana.</td>
</tr>
<tr>
<td>Auckland Urban Road</td>
<td>Support inter-regional movement of people and goods to key hubs, through improved journey time reliability into and through urban Auckland, supported by mode shift and delivery of the ATAP and the NZUP.</td>
</tr>
<tr>
<td>Auckland Urban Rail</td>
<td>Enable an increased role for rail in and through Auckland to support the movement of freight across the UNI, and personal travel between Waikato and Auckland. This includes delivering the Rail Network Investment Programme (RNIP), NZUP (e.g. the third main and the extension of the Auckland Metro electrified rail network from Papakura to Pukekohe) and considering further potential investments subject to revised growth triggers.</td>
</tr>
<tr>
<td>Auckland to Tauranga (SH2)</td>
<td>The focus is on improving safety and maximising use of existing infrastructure, including travel demand management and transport choice initiatives to help manage peak demand. Improvements include delivering the Takatimu North Link and Te Puna to Omokoroa projects through the NZUP.</td>
</tr>
<tr>
<td>Hamilton to Tauranga (SH1/29 and Rail)</td>
<td>Provide safe and reliable journeys for people and freight on this nationally strategic corridor, including SH1/29 improvements through NZUP and strategic rail network improvements.</td>
</tr>
<tr>
<td>Hamilton to Auckland (SH1 and Rail)</td>
<td>Support delivery of growth initiatives through the Hamilton-Auckland Corridor project for both people and freight with multi-modal transport choices along the corridor and within communities and businesses. The initiatives include the Auckland to Hamilton Rapid Rail business case and Hamilton-Waikato Metro Spatial Plan Transport PBC. Improvements to road and rail corridors include completion of the Waikato Expressway and Auckland Southern Corridor improvements.</td>
</tr>
</tbody>
</table>
Inter-regional priorities cont.

Activities of inter-regional significance

The activities within the Auckland region that contribute to the strategic areas of inter-regional significance and focus are listed below.

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>RESPONSIBLE AGENCY</th>
</tr>
</thead>
</table>
| Ensuring a safe and reliable corridor on SH1 between Auckland and Whangārei  
  • Puhoi – Warkworth  
  • Dome Valley Safety Improvements | Waka Kotahi |
| Support inter-regional movement of people and goods to key hubs into and through urban Auckland  
  • Southern Corridor Improvements (Manukau to Papakura) [Debt Repayment]  
  • State Highway 1 Papakura to Drury South  
  • SH1 Drury South to Bombay (Route Protection)  
  • Mill Road Corridor | Waka Kotahi |
| Enable an increased role for rail in and through Auckland to support the movement of freight across the Upper North Island, and personal travel between Waikato and Auckland  
  • Wiri to Quay Park Third Main  
  • Papakura to Pupekeoe electrification  
  • Drury Stations | KiwiRail |

AT currently runs two bus services that cross the Auckland boundary:  
• 398 – Pukekohe to Tuakau  
• 399 – Pukekohe to Port Waikato

In July 2021, the 398-bus service will be removed as it is now duplicated by a new one provided entirely by the Waikato Regional Council (route 44 – Pokeno to Pupekohe).

AT and the Waikato Regional Council have agreed to a five-year trial service for the Te Huia passenger rail service between Hamilton and Papakura Station. This service will be funded by the Waikato Regional Council.
Providing a strong inter-modal network that supports economic growth and investor confidence is critical for New Zealand.
08. Funding and expenditure

ATAP 2021 confirms the commitment of Auckland Council and Central Government to improve the transport outcomes for Auckland. It sets out a $31.4 billion transport investment programme for state highways, local roads, public transport, footpath, cycleways and rail, with sufficient funding from Auckland Council and Government to deliver the programme.

This section sets out the financial forecasts for the RLTP programme, including a summary of the funding sources and the financial forecast of the anticipated revenue and expenditure by each delivery agency on activities for the 10 years from 2021/22 to 2030/31.

Funding sources

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

- Funding from Auckland Council – sourced from rates, targeted rates, development contributions, and RFT
- The NLTF for State Highways, local roads, public transport, walking and cycling, traffic policing, rail infrastructure and other transport activities approved for funding through the NLTP. The NLTF is sourced from fuel excise duties, road user charges, registration and licensing fees and is administered by Waka Kotahi
- 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, including the NZUP, the Covid-19 Response and Recovery Fund and investment for the CRL.

The share of funding, as set out in ATAP 2021, is shown in the table below.

<table>
<thead>
<tr>
<th>SOURCES OF FUNDING</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auckland Council</td>
<td></td>
</tr>
<tr>
<td>• For Auckland Transport</td>
<td>$8.9 billion</td>
</tr>
<tr>
<td>• For City Rail Link Limited</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>Central Government</td>
<td></td>
</tr>
<tr>
<td>• For City Rail Link Limited</td>
<td>$1.3 billion</td>
</tr>
<tr>
<td>• NZ Upgrade Programme (NZUP)</td>
<td>$3.5 billion</td>
</tr>
<tr>
<td>• Covid-19 Response and Recovery Fund</td>
<td>$0.1 billion</td>
</tr>
<tr>
<td>• National Land Transport Fund (NLFT)</td>
<td>$16.3 billion</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$31.4 billion</td>
</tr>
</tbody>
</table>
Funding and expenditure by agency

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

**Auckland Transport**

The table below includes the cost of planning for future improvements. 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 providing input into Auckland Council’s 2024-34 LTP and the 2024-27 NLTP. It also includes the cost of new bus, rail and ferry services, including costs relating to new services for CRL, the low emission bus programme, and the costs of implementing the ‘Community Connect’ Public Transport Concession Card Trial.

**AUCKLAND TRANSPORT OPERATING REVENUE AND EXPENDITURE**

<table>
<thead>
<tr>
<th>AT</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auckland Council Funding</td>
<td>374</td>
<td>379</td>
<td>384</td>
<td>2,806</td>
<td>3,943</td>
<td></td>
</tr>
<tr>
<td>Waka Kotahi Subsidy</td>
<td>378</td>
<td>375</td>
<td>361</td>
<td>2,729</td>
<td>3,843</td>
<td></td>
</tr>
<tr>
<td>Other Operating Revenue</td>
<td>332</td>
<td>353</td>
<td>403</td>
<td>3,541</td>
<td>4,630</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL FUNDING</strong></td>
<td></td>
<td><strong>1,084</strong></td>
<td><strong>1,108</strong></td>
<td><strong>1,148</strong></td>
<td><strong>9,076</strong></td>
<td><strong>12,415</strong></td>
</tr>
<tr>
<td>Operational expenditure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads and footpaths</td>
<td>166</td>
<td>174</td>
<td>183</td>
<td>1,478</td>
<td>2,001</td>
<td></td>
</tr>
<tr>
<td>Public Transport</td>
<td>882</td>
<td>898</td>
<td>928</td>
<td>7,344</td>
<td>10,052</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL EXPENDITURE</strong></td>
<td></td>
<td><strong>1,048</strong></td>
<td><strong>1,072</strong></td>
<td><strong>1,111</strong></td>
<td><strong>8,822</strong></td>
<td><strong>12,053</strong></td>
</tr>
<tr>
<td>Interest and Principal Repayments for EMUs</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>254</td>
<td>362</td>
<td></td>
</tr>
</tbody>
</table>
AT capital revenue and expenditure

The table below shows AT’s capital funding and expenditure for this RLTP. Programme detail is provided in Appendix 1.

<table>
<thead>
<tr>
<th>AT</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding</strong></td>
<td><strong>sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auckland Council</td>
<td></td>
<td>450</td>
<td>475</td>
<td>550</td>
<td>3,975</td>
<td>5,450</td>
</tr>
<tr>
<td>NLTTF</td>
<td></td>
<td>486</td>
<td>527</td>
<td>615</td>
<td>4,282</td>
<td>5,910</td>
</tr>
<tr>
<td>Covid-19 Response and Recovery Fund</td>
<td></td>
<td>20</td>
<td>23</td>
<td>–</td>
<td>–</td>
<td>43</td>
</tr>
<tr>
<td><strong>TOTAL FUNDING</strong></td>
<td></td>
<td>956</td>
<td>1,025</td>
<td>1,165</td>
<td>8,257</td>
<td>11,403</td>
</tr>
<tr>
<td><strong>Capital</strong></td>
<td><strong>expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renewals</td>
<td></td>
<td>234</td>
<td>253</td>
<td>322</td>
<td>3,122</td>
<td>3,931</td>
</tr>
<tr>
<td>Capital improvements – Base</td>
<td></td>
<td>691</td>
<td>738</td>
<td>804</td>
<td>4,790</td>
<td>7,024</td>
</tr>
<tr>
<td>Capital improvements – Full Funding sought from NLTTF</td>
<td></td>
<td>16</td>
<td>30</td>
<td>65</td>
<td>307</td>
<td>418</td>
</tr>
<tr>
<td><strong>TOTAL EXPENDITURE</strong></td>
<td></td>
<td>941</td>
<td>1,021</td>
<td>1,192</td>
<td>8,219</td>
<td>11,373</td>
</tr>
</tbody>
</table>

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

Other projects in ATAP in addition to AT’s capital programme

ATAP has included five projects that would be delivered partly or fully by AT, but where funding sources are still to be determined. These projects are shown in the Appendix and are for rail level crossings closures, including level crossings needed to support the increased rail frequency resulting from CRL, School Speed Management, implementation of Community Connect and improvements to the Hill Street intersection in Warkworth. Level crossings will be delivered in partnership with KiwiRail.

The assumption made for this RLTP is that these projects are fully funded from the NLTTF or other sources within Central Government.

AT is discussing an agreed forward funding mechanism with the Government for the investment required to support the Auckland Housing Programme (AHP). If this forward funding is available, AT will be able to accelerate the programme from the timing that is shown in this RLTP. Also, the Government has signalled that it will contribute $100 million for transport works to support the AHP, in addition to the $401 million shown in this RLTP.

Finally, AT plans to deliver a number of critical projects, such as the Eastern Busway and infrastructure supporting CRL, by 2025/26. However, delivering these projects, whilst maintaining the delivery of its other core programmes such as asset renewals and its safety programme, cannot be done within the funding levels for 2024/25 and 2025/26 signalled by Auckland Council. AT and Auckland Council will continue to discuss options to ensure funding is available for these core programmes.
AT’s priorities for delivery in 2021-2024

AT will prioritise the following projects for delivery in the first three years of this RLTP:

- Projects that are under construction, are committed or have tagged funding, which determine the timing of these projects in the first three years of the RLTP.

- Projects that are required to maintain existing levels of service and appropriately maintain existing assets, for example, AT’s asset renewals programme.

- Projects that are necessary to get the full benefit from existing or committed new investments, for example, electric trains to successfully operate the rail timetable once the CRL is open.

- Projects and programmes that have commenced but have not been delivered in full. Examples are the Connected Communities and Urban Cycleway programmes.

- Key programmes that provide a reasonable ‘baseline’ level of investment. Base levels of investment in safety, bus priority, cycling and optimisation programmes have been determined through business case processes and were considered unlikely to change, regardless of the weight placed on different ATAP objectives.

In most cases, these projects are judged by ATAP to be ‘Committed or Essential’, with very limited discretion to be removed from the programme.

Three-year priorities if funding does not materialise

As described above, AT’s capital programme within this RLTP is based on the assumption that it can be funded by Auckland Council and NLTF on a 50:50 co-funding mix. AT’s capital programme also assumes that level crossings and a number of other projects to be delivered by AT are fully funded from the NLTF.

However, there are risks around the level of funding from both Auckland Council and Waka Kotahi. If funding was lower in the 2021-2024 period than that planned here, the following sets out the approach that AT would take to prioritise its programme:

- Category Three projects (those judged by ATAP to be discretionary) would be deferred first. AT’s intention would be to deliver these projects within the ten-year period if sufficient funding becomes available.

- If required due to even lower capital funding, AT would then consider deferring Category Two projects. Again, AT would try to defer these projects until later in the ten-year period, and would seek to deliver them when sufficient funding becomes available. The RFT-enabled projects in Category Two would be still be delivered by 2028 according to the requirements of the RFT Scheme.

- If funding was so low within the three-year period as to require AT to defer Category One projects (those considered Committed or Essential by ATAP) AT would look to defer any project or element of a programme that had discretion around its timing, with the intention that it was still delivered within the ten-year RLTP period.
Waka Kotahi NZ Transport Agency

The table below sets out Waka Kotahi’s investment programme for this RLTP. Programme detail is provided in Appendix 2.

<table>
<thead>
<tr>
<th>WAKA KOTAHI</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NLTF</td>
<td>630</td>
<td>585</td>
<td>510</td>
<td>4,074</td>
<td>5,799</td>
<td></td>
</tr>
<tr>
<td>NZUP</td>
<td></td>
<td></td>
<td></td>
<td>2,548</td>
<td>2,548</td>
<td></td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance, Operations and Renewals</td>
<td>199</td>
<td>203</td>
<td>206</td>
<td>1,254</td>
<td>1,862</td>
<td></td>
</tr>
<tr>
<td>Other State Highway Projects</td>
<td>430</td>
<td>383</td>
<td>304</td>
<td>2,820</td>
<td>3,937</td>
<td></td>
</tr>
<tr>
<td>Projects funded from NZUP</td>
<td></td>
<td></td>
<td></td>
<td>2,548</td>
<td>2,548</td>
<td></td>
</tr>
</tbody>
</table>

KiwiRail

KiwiRail’s expenditure and funding are is shown in the table below. Capital programme detail is provided in Appendix 3.

KiwiRail has been receiving funding, via AT, from the transitional rail activity class for a programme of catch-up renewals. As the transitional rail activity class will cease at the end of the current NLTP period, this project will be moved to the new public transport activity class.

The improvement projects KiwiRail will include in the RNIP, and seek funding for from the public transport activity class, have been included in the Appendix.

The existing funding mechanisms for determining and apportioning the maintenance and operational costs for the Auckland rail network using the network access agreement has not changed. The network access agreement process involves negotiating:

- The level of access for metro services to the Auckland network
- The level of maintenance and renewals of the network
- How costs associated with the networks are apportioned.

KiwiRail will meet its share of this cost of maintenance through the RNIP from the rail network activity class, while AT will continue to meet its share from Auckland Council funding, fares, and the NLTP.

<table>
<thead>
<tr>
<th>KIWIRAIL</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funding sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NLTF</td>
<td>108</td>
<td>91</td>
<td>100</td>
<td>178</td>
<td>478</td>
<td></td>
</tr>
<tr>
<td>NZUP</td>
<td>324</td>
<td>253</td>
<td>155</td>
<td>732</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL FUNDING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail infrastructure projects</td>
<td>432</td>
<td>344</td>
<td>255</td>
<td>178</td>
<td>1,210</td>
<td></td>
</tr>
</tbody>
</table>

Funding of $933 million has been allocated from NZUP for the Papakura to Pukekohe Electrification, Wiri to Quay Park and Drury Stations. KiwiRail anticipates incurring $201 million expenditure in 2020/21, leaving $732 million to be incurred from July 2021.
City Rail Link Limited

City Rail Link Limited (CRL) is funded jointly by Auckland Council and Central Government to deliver CRL. The funding and expenditure is set out in the table below.

<table>
<thead>
<tr>
<th>CRLL</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding sources</td>
<td>Auckland Council</td>
<td>572</td>
<td>476</td>
<td>162</td>
<td>95</td>
<td>1,305</td>
</tr>
<tr>
<td></td>
<td>Central Government</td>
<td>585</td>
<td>439</td>
<td>183</td>
<td>89</td>
<td>1,295</td>
</tr>
<tr>
<td></td>
<td>TOTAL FUNDING</td>
<td>1,157</td>
<td>915</td>
<td>345</td>
<td>184</td>
<td>2,600</td>
</tr>
<tr>
<td>Expenditure</td>
<td>City Rail Link</td>
<td>1,157</td>
<td>915</td>
<td>345</td>
<td>184</td>
<td>2,600</td>
</tr>
</tbody>
</table>

The costs above relate to the construction of the CRL. Responsibility for operating the stations and running the services after completion is transfers to AT once the CRL is opened. Revenues and costs for these are included in AT’s forecasts.

Department of Conservation

The table below shows the Department of Conservation (DOC) activities for special purpose roads included in this RLTP. Programme detail is provided in Appendix 4. Funding for these activities will come from DOC and the NLTF.

<table>
<thead>
<tr>
<th>DOC</th>
<th>CATEGORY</th>
<th>2021/22 ($ THOUSAND)</th>
<th>2022/23 ($ THOUSAND)</th>
<th>2023/24 ($ THOUSAND)</th>
<th>2024/25 – 2030/31 ($ THOUSAND)</th>
<th>TOTAL ($ THOUSAND)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding sources</td>
<td>NLTFT</td>
<td>26</td>
<td>26</td>
<td>126</td>
<td>534</td>
<td>711</td>
</tr>
<tr>
<td>Expenditure</td>
<td>Local Road Maintenance and Improvements</td>
<td>26</td>
<td>26</td>
<td>126</td>
<td>534</td>
<td>711</td>
</tr>
</tbody>
</table>

Auckland Council

Auckland Council will receive funding from the Covid-19 Response and Recovery Fund for the Te Whau Pathway, as set out in the table below.

<table>
<thead>
<tr>
<th>AUCKLAND COUNCIL</th>
<th>CATEGORY</th>
<th>2021/22 ($ MILLION)</th>
<th>2022/23 ($ MILLION)</th>
<th>2023/24 ($ MILLION)</th>
<th>2024/25 – 2030/31 ($ MILLION)</th>
<th>TOTAL ($ MILLION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding sources</td>
<td>Covid-19 Response and Recovery Fund</td>
<td>14</td>
<td>12</td>
<td>4</td>
<td>–</td>
<td>30</td>
</tr>
<tr>
<td>Expenditure</td>
<td>Te Whau Pathway</td>
<td>14</td>
<td>12</td>
<td>4</td>
<td>–</td>
<td>30</td>
</tr>
</tbody>
</table>

Funding of $35 million has been allocated from the Covid-19 Response and Recovery Fund. Auckland Council anticipates incurring some expenditure in 2020/21, leaving $30 million to be incurred from 2021 onwards.
There was support for more public transport services and roading infrastructure in areas experiencing population growth and new housing developments. Survey recipients also supported increasing the capacity of existing roads through initiatives such as dynamic lanes, and ensuring existing roading and infrastructure are well maintained.

While respondents were supportive of initiatives that improved safety on Auckland roads, the environment and ensured the efficient movement of freight, they were regarded as less important than other issues.

Aucklanders most supported solutions that would help them get around more easily and accommodate the changing transport needs of Auckland as it grows:

- More infrastructure to support increased housing supply and affordable housing
- A faster, more efficient public transport system to manage congestion
- Investment in rapid transit for more travel choice and faster travel
- Reducing DSI on Auckland roads
- More efficient use of existing roads
- Commitment to the efficient movement of freight
- Building a sustainable region by lessening the environmental impact of transport
- Connected cycleways and shared paths

Looking at immediate priorities, the survey results told us that Aucklanders want to see a focus on long-term solutions that address the key ‘pain points’ experienced when getting around the region, gets traffic flowing and future-proofs the growing city. They want the focus to be on solutions that benefit all Aucklanders, not just small groups of people.
“Roading is rarely environmentally friendly, it may start off that way, beautifully planted etc but there is no money for maintaining it and before too long its a mess.”

Travel survey recipient.
Consultation and feedback cont.

Have your say

Please take the time to let us know what you think of the draft RLTP 2021. Your feedback is very important.

- Have we correctly identified the most important transport challenges facing Auckland?
- Have we allocated available funding to the highest priorities?
- Are there other projects that you think should be included? If so, which project(s) would you remove in order to include any new project(s)?
- Your views on some policy changes that would help to further improve the safety of our roads, reduce congestion and tackle climate change. For example, do you support further detailed investigation into demand-based road pricing to tackle congestion?

This 2021 RLTP consultation is being run in conjunction with Auckland Council’s consultation on the Regional Fuel Tax Proposal.

We will ensure that all feedback is considered by the appropriate agency and taken into account in the development of the final RLTP and RTC Proposal.

How decisions will be made

All views and ideas on the RLTP, including at local consultation events, will be summarised and presented to the RTC.

Following consultation, the RTC will consider the feedback received and recommend the final RLTP to the AT Board for approval.

To supplement the insights that we receive through consultation, further research may be carried out to ensure the RTC and AT Board are well informed.

Decisions will be publicly available via the AT website in late-June 2021 and the full final document will be made available as soon as possible after adoption.

ATAP and consultation on the RLTP

Central Government and Auckland Council recognise that the ATAP package will not replace statutory responsibilities when developing the RLTP, and this includes the obligation to consult and engage with Aucklanders on the content of the draft RLTP.

While the draft RLTP has been informed by the ATAP ten-year package as a draft for consultation, it does not mean it is set in stone when it comes to our ability to respond to views expressed through the consultation and engagement process.

Should Aucklanders tell us through the consultation and engagement process that we need to consider substantial changes away from the key elements of the agreed ATAP package, then this a conversation we would need to have with Auckland Council and Central Government.
On the 10-year plan for Auckland’s transport network

Draft Regional Land Transport Plan (2021-2031)

To learn more, provide feedback and view the Statement of Proposal, please go to: AT.govt.nz/haveyoursay and click on ‘Regional Land Transport Plan’.

You can also speak to us, or provide feedback, in person:
- Attend one of our drop-in sessions or webinars (see website for event information).
- If you would like to present your views in person or via an audio/visual link, please email ATengagement@AT.govt.nz or call 09 355 3553 to book a time slot. The hearings will be held on 28/30 April 2021 at 20 Viaduct Harbour Avenue, Auckland.

If you’re unable to access our website or need assistance completing the form, please call us on 09 355 3553 and our contact centre staff will fill in the feedback form with you over the phone.