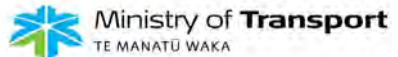


# Auckland Transport Alignment Project

2021-2031







# Foreword



I welcome the ATAP 2021-31 programme which builds on the transport infrastructure delivered under this governments' previous term and allows for record transport investment in partnership with Auckland Council to meet the long-term challenges of climate change and housing in Auckland.

The Auckland Transport Alignment Project (ATAP) 2021-31 programme invests \$31 billion into critical transport infrastructure and services across Auckland and focusses on developing a rapid transit network, walking and cycling, safety and unlocking growth. There are a number of projects in this programme that will also help with our economic recovery.

The ATAP programme invests significantly in projects that support reducing emissions. Emissions per capita will decrease by 13 per cent by 2031 and public transport trips increase by 91% as a result of these investments.

I do recognise however that the climate challenge that Auckland and New Zealand is facing requires wider policy interventions and therefore it is important that we also get on with our recently announced policies to reduce transport emissions. These include bus decarbonisation, clean car discounts and incentives to move the private car fleet to alternative fuels. ATAP is a good first step, but we know we have to do more.

The projects in ATAP will also be integrated with this Governments' work on alternative funding and financing tools which will better enable Auckland to pay for the infrastructure it needs.

To meet Auckland's projected population growth, ATAP 2021-31 provides transport infrastructure to bring forward the building of 17,000 new homes in areas of the city that are being regenerated.

I am pleased that we have been able to allocate funding through this ATAP to help build key infrastructure to support the Auckland Housing Programme.

ATAP will support the delivery of over 17,000 Kāinga Ora homes across Tāmaki, Mt Roskill, Oranga and Mangere that would not be able to happen without this investment. This includes intersection upgrades, bus priority measures, walking and cycling bridges over SH20, additional bus lanes in Mangere, and upgrading Middlemore Station.

A first for this ATAP is the introduction of a Community Connect concession pilot to reduce public transport fares by 50 per cent for community services card holders. This will mean around 2.7 million more public transport trips in Auckland in its first year, helping to ease congestion and reduce emissions.

ATAP demonstrates a strong partnership between the Government and Auckland Council which enables us to move forward with agreed transport planning and funding for Auckland. I look forward to working with the transport agencies and stakeholders to ensure we build a transport system in Auckland that is able to meet the challenges ahead.

A handwritten signature in dark ink, appearing to read "M. Wood". The signature is fluid and cursive, written on a light-colored background.

Hon Michael Wood  
Minister of Transport

## Auckland Transport Alignment Project



A record level of investment of \$31 billion into Auckland's transport network over the next decade by council and government is a welcome step forward to address our city's transport needs.

For too long, we have underinvested in vital transport infrastructure, resulting in increasing problems with congestion. With the increasing threat posed by climate change, we also need to reduce carbon emissions.

To address both of these problems, the Auckland Transport Alignment Project (ATAP) places greater emphasis than ever before on public transport and walking and cycling as alternative modes of getting around and taking pressure off roads clogged with private cars. Public transport trips will increase over the period to over 150 million per year and the percentage of morning peak hour trips by bus, train and cycles will increase from 23 per cent to 29 per cent.

ATAP also targets more than 200,000 low-income earners under a scheme called 'Community Connect', which will offer bus and train fares at a 50 per cent discounted rate. This will not only promote the use of public transport to cut congestion and emissions but will give real assistance to those needing it most and help achieve council's goal of a city which is inclusive.

ATAP also focuses on improving road safety through better engineered roads, intersections and pedestrian crossings together with other measures to cut our road toll. These measures are projected to cut deaths and serious injuries on Auckland roads by nearly two-thirds, with 1760 fewer deaths and serious injuries over the decade.

Emphasis on providing transport infrastructure to facilitate housing growth to tackle Auckland's housing shortage is another feature of ATAP. In particular, greater funding has been provided for infrastructure to allow regeneration of older housing areas, with more intensive housing. A more compact and quality urban form will also reduce carbon emissions. The package will help bring forward construction of a further 17,000 houses in these areas.

ATAP 2021 highlights the benefits of Auckland Council and central government working together to benefit the city and help deliver the 21st Century transport network that Auckland needs to be world-class.

It provides a sound platform from which we can build further initiatives to create an accessible, sustainable and efficient system to allow people to move more easily around our city.

A handwritten signature in blue ink that reads "Phil Goff". The signature is fluid and cursive, with the first name "Phil" and the last name "Goff" clearly legible.

Phil Goff  
Mayor of Auckland

## Contents

<b>Foreword</b> .....	<b>4</b>
<b>Executive Summary</b> .....	<b>8</b>
<b>1. Introduction</b> .....	<b>12</b>
<b>2. Auckland Transport Alignment Project 2021 Investment Package</b> .....	<b>14</b>
<b>3. Auckland Transport Alignment Project 2021 Package Detail</b> .....	<b>18</b>
Rapid transit.....	18
Strategic and local road network.....	25
Supporting spatial priority areas.....	32
Safety programmes.....	36
Walking, cycling and Local Board priorities.....	38
Bus and ferry improvements.....	42
Network optimisation and technology.....	45
Planning for the future .....	47
Operational costs .....	48
Asset renewals.....	50
<b>4. Expected Outcomes</b> .....	<b>52</b>
<b>5. Policy Priorities</b> .....	<b>53</b>
<b>6. Next Steps</b> .....	<b>58</b>
<b>Appendix A – Future Connect Strategic Case</b> .....	<b>60</b>
<b>Appendix B – Funding Assumptions</b> .....	<b>61</b>
<b>Appendix C – Infrastructure Funding and Financing Act 2020</b> .....	<b>63</b>



# Executive Summary

## Context

The Auckland Transport Alignment Project (ATAP) brings together the Government and Auckland Council to strategically align transport objectives and investment priorities for Auckland. An important part of this work is to agree an indicative ten-year investment package that guides statutory funding plans like Auckland's Regional Land Transport Plan and the National Land Transport Programme.

Over the past five years, ATAP has enabled significant progress on improving transport in Auckland. Record investment levels have supported mode shift to public transport, a reduction in deaths and serious injuries since 2017, and holding congestion levels steady despite rapid population growth. The certainty ATAP provides for Auckland's transport programme supports more effective planning and delivery, though many key challenges remain.

The Auckland Plan 2050 and the Government Policy Statement on Land Transport 2021 provide overall strategic direction to ATAP 2021, which has been guided by terms of reference agreed at a political level by the Government and Auckland Council. Climate change, mode-shift, spatial priorities and the Covid-19 economic shock have been particular considerations for work on ATAP 2021. The package also reflects a continuation of the 2018-2028 investment priorities given the momentum in delivering many of these projects.

## ATAP Indicative Investment Package 2021-31

The ATAP indicative investment package for 2021-31 (ATAP 2021) outlines an investment of approximately \$31.4 billion from existing Government and Council plans over the next decade. This is comprised of:

- The Government's Policy Statement on Land Transport, which sets an expectation of funding from the National Land Transport Fund of \$16.3 billion
- Auckland Council's draft 2021-31 Long Term Plan budget proposes \$10.2 billion for transport (including funding from the Regional Fuel Tax)
- Government funding of around \$4.9 billion has been allocated to Auckland from the New Zealand Upgrade Programme, the Covid Response and Recovery Fund and for the Government's share of City Rail Link.

This funding is allocated across operational costs, asset renewals and new infrastructure.

---

<sup>1</sup> The New Zealand Upgrade Programme is currently undergoing a 're-baselining' process that may result in changes to the cost, scope and timing of these projects.



Investment Area		Cost (inflated to year of spend) <sup>2</sup>
Operational costs, including maintenance (net of revenue)		\$9.1 billion
Asset renewals		\$4.5 billion
New infrastructure	Rapid transit (busway, rail & light rail)	\$7.6 billion
	Strategic & local road network	\$4.2 billion
	Spatial priorities	\$1.3 billion
	Safety programmes	\$1.1 billion
	Walking, cycling & local board priorities	\$1.5 billion
	Bus & ferry improvements	\$1.2 billion
	Optimisation & technology	\$0.7 billion
	Planning for the future	\$0.3 billion
<b>Total</b>		<b>\$31.4 billion</b>

ATAP 2021 balances several constraints and the numbers outlined in this report are subject to change as further work is undertaken. On the revenue side, funding levels over the ten-year period from the National Land Transport Fund and Auckland Council have largely remained the same, while construction and operating costs have generally increased as compared to ATAP 2018. Covid-19 has had a significant impact on revenue at both the local and national levels. These factors, together with the investment tied up in projects already underway and key essential programmes (e.g. safety, minor improvements, network optimisation, walking and cycling) meant there was little room to move in developing ATAP 2021.

## Package Details

ATAP 2021 includes \$13.6 billion of investment in operating, maintaining and renewing existing infrastructure and services and \$17.8 billion for new infrastructure. The table below identifies key projects in ATAP 2021.

ATAP 2021-31 Key Projects	
<ul style="list-style-type: none"> <li>• City Rail Link and associated wider network improvements</li> <li>• Auckland Light Rail</li> <li>• Eastern Busway (Panmure to Botany)</li> <li>• Rail electrification to Pukekohe and delivery of third main rail line (Westfield to Wiri)</li> <li>• New electric trains</li> <li>• City centre bus improvements</li> <li>• Northwest interim bus improvements</li> <li>• Puhoi to Warkworth motorway</li> <li>• Northern Corridor Improvements (including busway extension to Albany)</li> </ul>	<ul style="list-style-type: none"> <li>• Papakura to Drury South motorway upgrade</li> <li>• Mill Road</li> <li>• Penlink</li> <li>• Northern Pathway (Westhaven to Akoranga)</li> <li>• Significant programme of safety improvements</li> <li>• Connected Communities programme of bus priority, cycling &amp; safety improvements</li> <li>• Walking and cycling programme</li> <li>• Network optimisation and technology programme</li> <li>• 'Community Connect' pilot</li> </ul>

<sup>2</sup> Note that numbers may not add up due to rounding.

A major focus is encouraging mode shift away from the private car through investment in public transport, walking and cycling. Developing Auckland's rapid transit network is critical to improving the attractiveness of public transport and makes up the largest area of investment in new infrastructure. Important programmes to improve bus priority, walking and cycling will also help support mode shift. In total, around 200 kilometres of cycleways and shared paths will be delivered by ATAP 2021.

Investment into strategic and local roads is highly targeted to projects that deliver critical safety and efficiency benefits. Most investment is focused on completing existing projects and delivering parts of the NZ Upgrade Programme.

Key safety, network optimisation and technology programmes are included in ATAP 2021 to continue the momentum of ATAP 2018. Important progress has been made in reducing deaths and serious injuries on Auckland's roads over the past three years, which needs to continue.

The need to appropriately maintain and renew rail and road infrastructure has become increasingly apparent in recent years and ATAP 2021 includes a significant increase in investment for this. More investment in operating expenditure is also required to run the public transport system and maintain the road network.

To help improve transport equity in Auckland, ATAP 2021 includes an allocation of funding to enable a pilot for a public transport concession for Community Service Card holders (the Community Connect pilot). This will enable a 50 per cent discount on public transport for up to 300,000 Auckland residents.

Enabling and supporting Auckland's growth, including increased housing supply, is also a key focus of investment across ATAP 2021. An example of this through expanding and upgrading the rapid transit network. In addition, specific areas have been prioritised for investment in ATAP due to their scale of expected growth. These are:

- The Auckland Housing Programme (AHP) areas of Tāmaki, Mt Roskill, Oranga and Māngere
- Drury/Paerata, where further investments are needed to support investment in the New Zealand Upgrade Programme
- The north west of Auckland, where growth is currently putting pressure on existing infrastructure.

Ongoing population growth is projected in Auckland, with the region expected to make up a growing share of New Zealand's population and economy. This growth places significant pressure on traditional funding sources for infrastructure construction and service delivery. There remains an ongoing need for collective new thinking on funding and financing options, in addition to traditional sources. The Infrastructure, Funding and Financing Act (2020) provides new funding and financing opportunities that could enable progress to be achieved more quickly.

## Outcomes and Required Policy Initiatives

ATAP 2021 will deliver significant benefits to Auckland.

- Mode shift from cars to public transport, walking and cycling. These modes are forecast to absorb approximately 64 per cent of increased peak time trip demand, leading to a small reduction in per capita travel by private vehicle
- A significant 60 per cent forecast increase in the number of jobs accessible to the average Aucklanders by a 45-minute public transport journey and a 14 per cent forecast increase in the number of jobs accessible by a 30-minute car journey at peak times
- Congestion is reduced for bus passengers and held steady on arterial roads, but increases on parts of the motorway network at peak times. The ATAP work recognises that implementing congestion pricing in Auckland would complement investments and help reduce congestion levels
- Significantly improved safety outcomes across the Auckland region, with an expected reduction in deaths and serious injury of 67 per cent by 2031.

## Auckland Transport Alignment Project

Despite these major benefits, further work is needed to complement ATAP 2021 to fully deliver the transport outcomes and objectives sought by the Government and Auckland Council.

In particular, decarbonising Auckland's transport system is a major challenge requiring a holistic strategy across investment, policy and regulation. Modelling of the ATAP 2021-31 investment package forecasts that even though per capita emissions are projected to reduce by 13 per cent (from a combination of mode shift and vehicle fleet improvements), this is outweighed by 22 per cent population growth. This means that, without further investment or regulation, a small increase in total emissions is projected over the next decade.

The ability of ATAP to reallocate funding to further reduce emissions was limited, as a large proportion of the package goes towards committed projects, maintaining and operating the transport system, and on critical programmes like safety. Achieving more significant progress towards national and regional emissions reduction goals will therefore require additional investment and major regulatory/policy changes, especially to the private vehicle fleet.

Progress is already underway on wider initiatives to reduce emissions. The Government has committed to the introduction of a vehicle fuel efficiency standard for light vehicle imports by 2025 (the Clean Car Standard), the introduction of a biofuel mandate in principle, policy to decarbonise the public transport bus fleet by 2035, and to reduce the fleet size and emissions of the Government's own vehicles by 2025. Auckland Council is progressing plans to electrify the bus and ferry fleet. The Papakura-to-Pukekohe electrification project sees the end of diesel passenger trains in Auckland.

A combination of these initiatives is projected to reduce emissions, although further work remains necessary to achieve the scale of reductions envisaged by national and regional goals.

Other key areas where policy initiatives are required to complement ATAP 2021 in achieving important outcomes for Auckland are safety, better integrating land-use and transport, and managing demand.

### Next Steps

The ATAP 2021-2031 programme continues the transformation of transport in Auckland set out in ATAP 2018. Work will now begin on implementing ATAP through various statutory transport plans and developing an investment programme for subsequent decades (2031-2051). As part of this work, the collective ATAP agencies will:

- work more with Mana Whenua and Mataawaka to identify transport related outcomes for Māori living in Auckland
- consider how equity can be improved in Auckland's transport system
- continue to progress decarbonisation of the transport system.

# 1. Introduction

## The Auckland Context

Over 1.7 million people now call Auckland home and the region makes up a growing proportion of New Zealand's population and economy. Despite the impacts of Covid-19, indications are that Auckland will continue to grow substantially over time to reach 2.4 million around 2050. This growth brings great opportunities as Auckland evolves into a modern, world-class city. But it also brings great challenges – especially as we face the ongoing impacts of the Covid-19 pandemic and tackle the global threat of climate change.

It is now over a decade since the creation of Auckland Council and good progress has been made in addressing many long-standing challenges, through a sustained increase in transport investment and a willingness of Aucklanders to change the way they live and travel. Before the Covid-19 pandemic, annual public transport ridership had surpassed 100 million boardings for the first time since the 1950s and was growing faster than most comparable cities around the world.<sup>3</sup> Housing construction in Auckland has also ramped up in recent years, with 16,290 dwellings consented in the year to November 2020 – and more than half of consented dwellings in November 2020 were apartments, terraced houses, townhouses or retirement village units.<sup>4</sup>

A record level of transport investment in Auckland over the past three years has enabled solid progress against key metrics, especially before the impacts of Covid-19.

- Public transport boardings had exceeded 100 million per annum in the year to February 2020, an increase of around nine per cent on the previous year.
- A 16 per cent increase in cycling since 2016.
- Congestion has been held steady since 2017 despite strong population growth in the Auckland region.
- The number of deaths and serious injuries on Auckland's roads has declined by around a third from a peak of 813 in 2017 to 539 in 2020.

Despite this progress, Auckland continues to face significant transport challenges now and into the future. These reflect a legacy of under-investment (particularly in public transport and cycling), the region's rapid ongoing population growth, a challenging natural setting and urban form to provide efficient travel options, and global issues like Covid-19 and climate change.

More detailed evidence about the location, severity and nature of the key challenges Auckland's transport system faces is outlined in **Appendix A**.

<sup>3</sup> <https://www.greeterauckland.org.nz/2019/06/21/100-million-trips-how-does-it-compare/>

<sup>4</sup> <https://knowledgeauckland.org.nz/publications/auckland-monthly-housing-update-january-2021/>

## The Auckland Transport Alignment Project

The Government and Auckland Council both recognise the critical role of transport in delivering a successful Auckland. They also recognise that transport investment decisions must deliver broad economic, social, environmental and cultural benefits to Auckland and New Zealand by providing safe, reliable and sustainable access to opportunities. This means working towards the following transport objectives:

- 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 greenhouse gas emissions the system generates
- making Auckland's transport system **safe** by eliminating harm to people.

The scale, complexity and national significance of addressing Auckland transport challenges means it is essential for the Government and Auckland Council to work closely together and maintain an aligned transport strategy for Auckland through ATAP. This strategy includes a long-term strategic approach as well as an aligned view of 10-year investment priorities (known as an 'indicative package'). The 2018 indicative package was the starting point for the work outlined in this report.

This work also drew upon the Auckland mode shift plan 'Better Travel Choices' developed by ATAP partners in 2019.<sup>5</sup> A mode shift to public transport, walking and cycling is critical to ensuring strong population growth over the next decade does not translate into more congestion, reduced accessibility and a poorer quality city.

---

<sup>5</sup> <https://www.transport.govt.nz/assets/Uploads/Report/ATAPBetterTravelChoices.pdf>

# 2. Auckland Transport Alignment Project 2021 Investment Package

## Introduction

In early 2020 the Government and Auckland Council agreed to update ATAP to ensure transport investment in Auckland over the next decade reflected several key considerations.

- The impacts of Covid-19, including the impacts on Government and Auckland Council revenue streams
- The Government's Covid-19 Response and Recovery Fund economic stimulus package
- The New Zealand Upgrade Programme (NZUP) transport investment in Auckland
- Climate change and mode shift as increasingly significant policy considerations for both the Government and Auckland Council
- The need to provide direction for the upcoming round of statutory planning processes including the Regional Land Transport Programme (RLTP), Auckland Council's Long-term Plan (LTP), the Government Policy Statement on Land Transport (GPS), and the National Land Transport Programme (NLTP)
- Emerging spatial priorities.

The project's terms of reference directed the development of a ten-year investment package that contributes to the objectives identified in the previous section, as well as considering mode shift, climate change, emerging brownfield and greenfield spatial priorities, and transport investments in light of the Covid-19 economic shock.

## Package Development Process

The project's key task was to translate the aligned direction of the Government and Auckland Council into an updated investment package for the next ten years. ATAP 2018 was used as the starting point for the analysis.

Key steps in the package development process were:

- confirming available funding
- confirming non-discretionary committed and essential investments
- collating and assessing discretionary investments
- developing and assessing package options
- developing and refining a draft package
- agreeing the final package.

## Funding Assumptions

As per ATAP 2018, the indicative package includes the mix of investments within expected funding levels that makes the most significant contribution to achieving the ATAP objectives over the next decade. The expected funding levels are those set out in plans such as the GPS 2021, the draft Auckland LTP, and agreed Crown funding.

Around \$31.4 billion of planned and assumed funding from the following public sources is expected to be available for transport investment in Auckland over the next decade. This does not include private contributions like public transport fares, parking revenue or the direct construction of transport assets by developers. Parking, enforcement and public transport fare revenue is 'netted off' against operational expenditure.

Funding Source		Funding Amount
Auckland Council	Operational funding for Auckland Transport	\$3.415 billion
	Capital funding for Auckland Transport (including funding from the Auckland Regional Fuel Tax)	\$5.45 billion
	Contribution to City Rail Link	\$1.3 billion
Government	National Land Transport Fund	\$16.3 billion
	Crown contribution to City Rail Link	\$1.3 billion
	Crown funded New Zealand Upgrade Programme	\$3.5 billion
	Crown funding from Covid-19 response and recovery fund	\$85 million
<b>Total</b>		<b>\$31.4 billion</b>

This revenue is around \$3.4 billion more than what was available in ATAP 2018. Funding contributions from the National Land Transport Fund (NLTF) and Auckland Council are similar to ATAP 2018, meaning most of the increase is due to Crown contributions – which are specifically tagged to particular projects.

The Crown funded NZUP provides \$3.5 billion to accelerate Auckland projects identified as key investment priorities. It 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.

Various funding assumptions underpin the indicative package, especially in relation to the share of investment between Auckland Council and the Government for different activities. More detailed funding assumptions are outlined in **Appendix B** and further work is required to change some current funding settings to ensure the package can be fully delivered.

## ATAP 2021 Package Summary

ATAP 2021 represents the mix of investment, within current funding levels for Auckland over the next decade, which best meets the ATAP objectives relating to growth, connectivity, travel choice, resilience and sustainability, and safety. It is aimed at delivering broad benefits to Auckland and New Zealand by providing safe, reliable and sustainable access to opportunities.

The ATAP Indicative Package		
Investment Area		Cost (inflated to year of spend) <sup>6</sup>
Operational costs, including maintenance (net of revenue)		\$9.1 billion
Asset renewals		\$4.5 billion
New infrastructure	Rapid transit (busway, rail & light rail)	\$7.6 billion
	Strategic & local road network	\$4.2 billion
	Spatial priorities	\$1.3 billion
	Safety programmes	\$1.1 billion
	Walking, cycling & local board priorities	\$1.5 billion
	Bus & ferry improvements	\$1.2 billion
	Optimisation & technology	\$0.7 billion
	Planning for the future	\$0.3 billion
	<b>Total</b>	

A map of projects funded in ATAP 2021 is shown below.

PDF of this map can be found online [our.auckland.aucklandcouncil.govt.nz/media/39070/atap-map-2021-2031.pdf](https://our.auckland.aucklandcouncil.govt.nz/media/39070/atap-map-2021-2031.pdf)

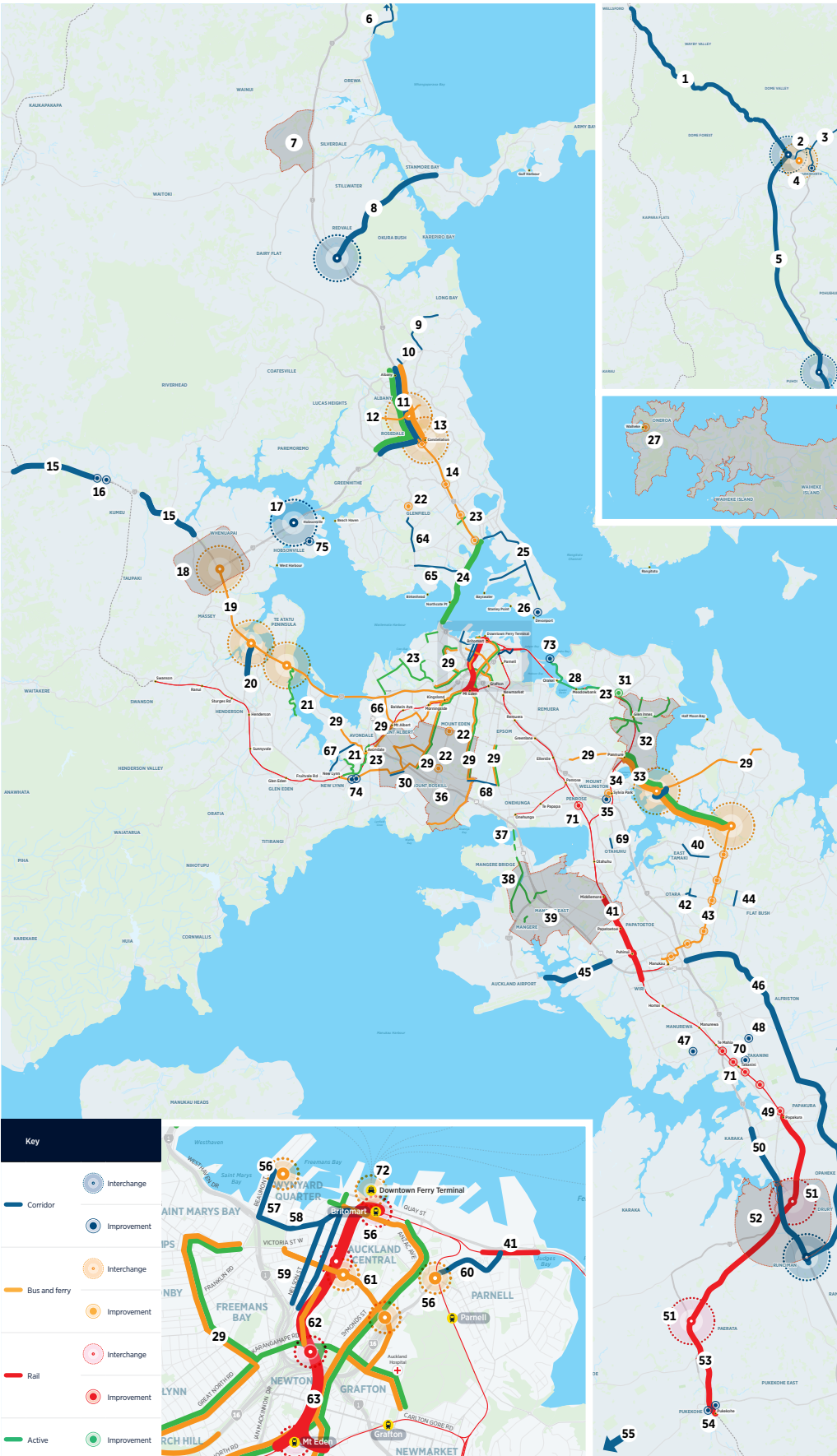
Over time the cost information for investments outlined in this report will change, as further investigative work is undertaken and delivery progresses. The numbers used are current as of February 2021.

While the investment package above is critical to making progress against the ATAP objectives, it needs to be complemented by a series of other planning, policy and regulatory interventions. These complementary changes are particularly important to achieve progress in tackling climate change, improving safety, aligning growth and transport, and managing demand. Details of key policy initiatives required to further support ATAP 2021 are outlined in section 5 of this document.

<sup>6</sup> Figures may not add up due to rounding.



# Projects planned for delivery 2021-2031



**Key**

- Corridor
- Interchange
- Improvement
- Interchange
- Improvement
- Bus and ferry
- Improvement
- Interchange
- Improvement
- Rail
- Interchange
- Improvement
- Active
- Improvement

- 1 Dome Valley Safety Improvements (Waka Kotahi)
- 2 Matakana Link Road (AT)
- 3 Safety Programme - Matakana Road (Helmwood Drive to Green Road) (AT)
- 4 Rodney Targeted Rate - Warkworth Community Transport Hub (AT)
- 5 Puhai-Warkworth (Waka Kotahi)
- 6 Safety Programme - Hibiscus Coast Highway (Hatfields Bridge to Walwera Road) (AT)
- 7 Wainui Improvements (AT)
- 8 Penlink (Waka Kotahi / NZUP)
- 9 Glenvar Road / East Coast Road Intersection and corridor improvements (AT)
- 10 Medallion Drive Link (AT)
- 11 Northern Corridor (includes busway extension) (Waka Kotahi)
- 12 Rosedale Road Corridor (AT)
- 13 Rosedale and Constellation Bus Stations (AT)
- 14 Northern Busway Enhancements (AT)
- 15 SH15 Brigham Creek-Waimauku (Waka Kotahi)
- 16 Huapai Improvements (AT)
- 17 SH18 Squadron Drive Interchange Upgrade (Waka Kotahi)
- 18 Greenfield transport Infrastructure - Northwest (AT) and Northwest Growth Improvements (AT)
- 19 Northwest Interim Bus Improvements (AT)/CRRP
- 20 Lincoln Road Corridor Improvements (AT)
- 21 Te Whau Pathway (Auckland Council)
- 22 Public Transport Minor Capital Improvements - Neighbourhood Interchanges (AT)
- 23 Urban Cycleways Programme (AT)
- 24 Northern Pathway (Waka Kotahi/NZUP) (Westhaven to Akoranga)
- 25 Lake Road/Esmonde Road Improvements (AT)
- 26 Safety Programme - Devonport Town Centre (AT)
- 27 Matakia Park and Ride (AT)
- 28 Glen Innes to Tamaki cycleway (AT/Waka Kotahi)
- 29 Connected Communities (AT)
- 30 Network Performance - Maloro Street Dynamic Bus Lane (AT)
- 31 Meadowbank Kohimarama Connectivity Project (AT)
- 32 Projects Supporting Auckland Housing Programme (Tamaki) (AT) and Tamaki Regeneration (AT)
- 33 Eastern Busway (AT)
- 34 Sylvia Park Bus Improvements (AT)
- 35 Network Performance - Mount Wellington Highway/SH1 Southbound Onramp (AT)
- 36 Projects Supporting Auckland Housing Programme (Roskill) (AT)
- 37 Old Mangere Bridge Pedestrian & Cycling Link (Waka Kotahi)
- 38 Mangere Cycleway (Airport Access) (AT)
- 39 Projects Supporting Auckland Housing Programme (Mangere) (AT)
- 40 Smales Allens Road Widening and Intersection Upgrade (AT)
- 41 Wiri to Quay Park (KiwiRail/NZUP)
- 42 Network Performance - East Tamaki Road (Ormsiston Road/Preston Road) (AT)
- 43 Airport to Botany Interim Bus Improvements (AT)
- 44 Ormsiston Town Centre Link (AT)
- 45 SH208 Improvements (Waka Kotahi)
- 46 Mill Road Corridor (Waka Kotahi/NZUP)
- 47 Safety Programme - Manurewa (Coxshaw Quadrant) (AT)
- 48 Safety Programme - Popes Porchester Intersection (AT)
- 49 Papakura Rail Station Park and Ride (AT)
- 50 State Highway 1 Papakura to Drury South (Waka Kotahi/NZUP)
- 51 Drury Stations (KiwiRail / NZUP)
- 52 Drury Local Road Improvements (AT)
- 53 Papakura to Pukekohe Electrification (KiwiRail/NZUP)
- 54 Network Performance - Pukekohe Dual Signals (Manukau / Massey / King / Stadium and East / Stadium) (AT)
- 55 Safety Programme - Waiuku Road corridor (Colombo Road to Domain Road) (AT)
- 56 Downtown Crossover Bus Facilities (AT)
- 57 Wynyard Quarter Integrated Road Programme (AT)
- 58 Safety Programme - Fanshawe Street (AT)
- 59 Safety Programme - Hobson Street / Nelson Street (AT)
- 60 Optimisation Programme - The Strand Special Vehicle Lane (Waka Kotahi)
- 61 Midtown Bus Improvements (AT)
- 62 Albert and Vincent Street Bus Priority Improvements (AT)
- 63 City Rail Link (CRL) and CRL Road Side Projects (AT)
- 64 Safety Programme - Glenfield Road (AT)
- 65 Safety Programme - Onewa Road (AT)
- 66 Carrington Road Improvements (AT)
- 67 Safety Programme - Ash Street and Rata Street (AT)
- 68 Safety Programme - Mt Albert Road (AT)
- 69 Safety Programme - Atkinson Avenue (AT)
- 70 Safety Programme - Takahiri School Road / Manurewa Road Intersection (AT)
- 71 Level Crossing Removal - Group 1 (AT)
- 72 Downtown Ferry Basin Redevelopment (AT)
- 73 Tamaki Drive / Ngapipi Road safety Improvements (AT)
- 74 Wolverson Culverts (AT)
- 75 Scott Point Repayment (AT)

# 3. Auckland Transport Alignment Project 2021 Package Detail

## Rapid transit

Funding allocated in ATAP 2021

\$7.6 billion

### Introduction

Rapid transit forms the backbone of Auckland's public transport network, providing fast, frequent, high capacity services along corridors that are separated from general traffic and therefore unaffected by road congestion.

Rapid transit plays an increasingly critical role in efficiently moving people around Auckland, particularly to major and growing employment centres, and in supporting and shaping the city's growth and development. The speed and reliability of rapid transit delivers a long-lasting step-change in the accessibility of places close to stations, making them more attractive to live in, work in and visit. The recently released National Policy Statement on Urban Development (NPS-UD)<sup>7</sup> aims to support the rapid transit network by enabling higher density developments within walking distance of rapid transit stops and stations.

Sustained investment in Auckland's rapid transit network over the past decade has increased annual boardings on the Northern Busway and the rail network from 6.8 million in 2008 to 26 million in 2019 (before impacts of the Covid-19 pandemic). However, major parts of Auckland are still not served by the rapid transit network (e.g. northwest, southeast and central isthmus), while existing parts of the network will need substantial capacity improvements to meet future demand, especially on the rail network and in the city centre.

Rapid transit formed the largest part of the ATAP 2018 package, making up around half the total investment in capital projects. Many of the rapid transit projects in the 2018 package have made substantial progress since 2018, such as:

- ongoing construction of City Rail Link and the Northern Busway extension to Albany
- construction commencing on the Eastern Busway and the Puhinui bus/rail interchange
- important planning and design work on light-rail, Airport to Botany, North Shore, rail network upgrades and future rapid transit corridors in future urban areas.

Additional funding for rapid transit has also been provided:

- extra Crown and Auckland Council funding has enabled City Rail Link to have an enhanced Karangahape Road station and be future-proofed for 9-car trains

<sup>7</sup> <https://www.mfe.govt.nz/publications/towns-and-cities/national-policy-statement-urban-development-2020>

## Auckland Transport Alignment Project

- NZUP funding allows the third track (Westfield-Wiri), Pukekohe electrification and new Drury Stations to be delivered earlier.
- the Covid Response and Recovery Fund (CRRF) has provided \$50 million to support interim bus improvements along the Northwestern Motorway.

Developing Auckland’s rapid transit network will be the most significant transport investment in the region over the coming decades and needs to be well planned at a network level, rather than project-by-project. Integrating rapid transit with the wider public transport system and urban growth plans will be essential to maximising the benefits from this very large investment.

Work is progressing on developing an Auckland Rapid Transit Network Plan. This plan will provide a long-term view about the location, mode and sequencing of upgrades and expansions to Auckland’s rapid transit network, allowing project business cases to be developed with confidence about how individual corridors link together to create an effective overall network. The Auckland Rapid Transit Network Plan will be a key input to future ATAP work.

## Funding Allocation

A summary of the rapid transit funding allocation in ATAP 2021 is outlined below:

Project Name	ATAP 2021 funding allocation
Rail network improvements, including: <ul style="list-style-type: none"> <li>• City Rail Link</li> <li>• Papakura to Pukekohe electrification</li> <li>• Wiri to Westfield third track</li> <li>• Critical level crossing removals</li> <li>• Catch up renewals and network resilience improvements</li> <li>• Additional power supply</li> <li>• New electric trains</li> <li>• Drury/Paerata stations</li> <li>• Papakura park &amp; ride</li> </ul>	\$4.6 billion
City Centre to Māngere & Northwest corridors, including: <ul style="list-style-type: none"> <li>• Interim northwest bus improvements</li> <li>• Seed funding for City Centre to Māngere and Northwest rapid transit corridors</li> </ul>	\$1.9 billion
Eastern Busway (Panmure-Botany)	\$880 million
North Shore improvements, including: <ul style="list-style-type: none"> <li>• Busway extension from Constellation to Albany (including a new Rosedale station)</li> <li>• Initial further enhancements to Northern Busway, such as station upgrades or city centre optimisation</li> <li>• Planning, design and route protection of a longer-term rail-based additional rapid transit connection (funding allocated in ‘planning for the future’ section)</li> </ul>	

Project Name	ATAP 2021 funding allocation
Airport to Botany: <ul style="list-style-type: none"> <li>• Completion of initial bus improvements along SH20B, Puhinui station upgrade, and extension of improved services with minor infrastructure upgrades through to Botany</li> <li>• Route protection and initial land acquisition for longer-term rapid transit corridor</li> </ul>	\$76 million

## Rail Network Improvements

Rail makes up the majority of Auckland's current rapid transit network and plays a key role in moving large numbers of people, especially at peak times to the city centre, as well as being a critical part of the national freight network. Investment over the past 20 years in Britomart station, double-tracking, station upgrades, electrification and new electric trains, has transformed the rail network. However, the legacy from many decades of under-investment means there remains a need for investment in catch-up renewals and ongoing network resilience improvements.

The rail network will become even more important in meeting growing travel demand and shaping urban form in the future. City Rail Link (CRL) will have a further transformational impact on the rail network by removing the key city centre bottleneck to the rail system. This will enable, with significant accompanying investment over time, an increase in the rail system's capacity from 15,000 people per hour today to 54,000 people per hour. CRL also opens up much more of the city centre to the rail network by constructing two new stations (Aotea and Karangahape Road), as well as shortening travel times – especially from the west.

Fully realising the benefits of CRL is a key focus for ATAP 2021. Planning and design work in recent years has given a better indication of the investments required over time that complement CRL. Accelerated growth in the south has also resulted in some updates to the package of rail network investments.

Rail planning work has led to the development of three key steps that will take Auckland's rail network from its current state to one where the system fully realises the capacity of CRL to move 54,000 people per hour – the equivalent of more than 20 lanes of motorway traffic.

	Key investments	Outcomes
Step One – \$4.6 billion (included in ATAP 2021)	<ul style="list-style-type: none"> <li>• City Rail Link</li> <li>• 23 new electric trains &amp; additional stabling</li> <li>• Electrification to Pukekohe</li> <li>• Westfield to Wiri third track</li> <li>• New stations in Drury</li> <li>• Papakura park &amp; ride</li> <li>• Catch up renewals</li> <li>• Removing highest priority level crossings</li> <li>• Network resilience improvements</li> </ul>	<ul style="list-style-type: none"> <li>• 50 per cent increase in number of trains accessing city centre at peak times</li> <li>• Significant reduction in travel times, especially from west</li> <li>• Network capacity increased from 15,000 people per hour to 22,500</li> <li>• High quality train service expanded to southern growth area</li> <li>• Passenger/freight train conflicts reduced</li> <li>• Safety and congestion benefits from level crossings being removed</li> <li>• Track quality brought up to standard</li> </ul>

	Key investments	Outcomes
Step Two – \$4.1 billion (future decades)	<ul style="list-style-type: none"> <li>• 24 new electric trains &amp; additional/upgraded depot and stabling</li> <li>• Fourth main between Westfield and Wiri</li> <li>• Signalling upgrade</li> <li>• Onehunga Line upgrade</li> <li>• Removal of all level crossings on southern &amp; western lines</li> </ul>	<ul style="list-style-type: none"> <li>• Network capacity increased from 22,500 people per hour to around 40,000</li> <li>• Limited stops/express passenger services enabled on southern line.</li> <li>• Improved frequencies across rail network</li> <li>• Longer and more frequent trains enabled on Onehunga Line.</li> <li>• Safety and congestion benefits from level crossing removals</li> </ul>
Step Three – \$2.6 billion+ (future decades)	<ul style="list-style-type: none"> <li>• Third and fourth track between Wiri and Papakura</li> <li>• Further additional trains</li> <li>• Station platform lengthening for 9 car trains</li> </ul>	<ul style="list-style-type: none"> <li>• Network capacity increased to 54,000 people per hour, maximising capacity of CRL</li> <li>• 9-car trains provide significant capacity boost across network</li> <li>• Improved limited stops/express passenger services on southern line.</li> <li>• Express train paths enabled for intercity trains</li> <li>• Further reduction in passenger/freight conflicts</li> </ul>

Fully implementing step one in the table above is critical to realising the benefits of CRL and is therefore included in ATAP 2021.

KiwiRail, Auckland Transport and Waka Kotahi are working together to better understand the timing and sequencing of steps two and three, including the implications of any medium-longer term impacts of Covid-19 on ridership levels.

### City Centre to Māngere and Northwest

ATAP 2018 proposed light rail on two major rapid transit corridors:

- City Centre to Māngere (CC2M)
- Northwest (City Centre to Kumeu/Huapai)

Both corridors are essential parts of Auckland’s future rapid transit network and will play extremely important roles in shaping and supporting the city’s future urban form, and meeting growth in travel demand.

Planning and design work has progressed on the CC2M corridor over the past three years, while for the northwest corridor work has largely focused on interim bus improvements. These bus improvements have been allocated \$100 million in ATAP 2021 to allow their early progression.

## City Centre to Māngere corridor

In 2019, an outcomes framework was agreed by ATAP partners to guide work on the City Centre to Māngere corridor. The key outcomes expected from rapid transit on the corridor are:

- improved access to opportunities through enhancing Auckland’s rapid transit network and integration with Auckland’s current and future transport network
- enabling and supporting quality integrated urban communities, especially around Māngere, Onehunga and Mt Roskill
- optimised environmental quality and embedded sustainable practices
- a high-quality service that is attractive to users, with high levels of patronage.

## Northwest

The Northwest rapid transit corridor has been identified in several iterations of ATAP as an urgent priority to complete. ATAP 2018 aimed to complete this corridor within the next decade, using part of the \$1.8 billion seed fund for light-rail, supplemented by other funding sources. Completion of this rapid transit corridor aims to:

- support substantial growth along the corridor and in the broader northwest part of Auckland
- address the projected decline in employment access in the west
- provide an opportunity for travellers to avoid projected congestion along State Highway 16 and to improve the productivity of this corridor
- improve the poor public transport in this part of Auckland
- support a more efficient overall public transport system in this part of Auckland.

Investigation work in recent years has focused on interim bus improvements. While these improvements will deliver some important benefits, they are not a long-term solution and there remains an urgent need to progress towards delivery of a proper rapid transit solution in this corridor.

Decisions on the mode, sequencing and project design of the corridor need to be made in a way that integrates with other key rapid transit corridors, especially City Centre to Māngere and the North Shore. The Auckland Rapid Transit Network Plan discussed earlier in this section will provide key strategic guidance for this work, while the next phase of investigation should commence as soon as possible.

ATAP 2021’s \$1.8 billion allocation to CC2M and the Northwest corridor should be used to progress further project development (business case, consenting and property acquisition), noting that CC2M is a Government priority. Substantial additional funding would be required to fully deliver the Northwest rapid transit corridor within the next decade.

## Eastern Busway (Panmure to Botany)

The Eastern Busway is a long-planned project that expands Auckland’s rapid transit network from Panmure to Botany. This will improve travel choices in a part of Auckland that is highly dependent on private vehicles.

The provision of an urban busway that allows buses to avoid congestion will improve travel times, reliability and corridor throughput along Ti Rakau Drive, through Pakuranga town centre and then over a new Panmure bridge. The busway also provides an excellent opportunity to unlock significant growth potential, particularly at Botany (a metropolitan centre in the Auckland Unitary Plan), Pakuranga and Panmure (both town centres with significant growth potential).

Construction of the Panmure to Pakuranga section is well advanced and procurement of the Pakuranga to Botany section is now underway.

## North Shore Rapid Transit Corridor

The Northern Busway is New Zealand's busiest bus corridor, with around 30,000 bus passengers crossing the Auckland Harbour Bridge each day in 2019. The harbour bridge and its approaches have been congested for cars at peak times for many decades, meaning that cross-harbour access is extremely reliant on the busway continuing to operate effectively.

While the busway has been highly successful in driving increased ridership and mode shift since opening in 2008, it is not a full rapid transit corridor along its entire length. This means that, unlike the rail network, buses cannot fully avoid road congestion when making their journeys. These 'gaps' in the busway, combined with the pressure of meeting growing demand, mean that without further investment the current high-quality service levels will degrade over time.

The first phase of improving the busway is its extension northwards to Albany and the addition of a new station at Rosedale Road. These improvements are under construction and will be progressively opened over the next two years.

Significant investigation into further rapid transit improvements on the North Shore has been undertaken by Waka Kotahi, Auckland Transport and Auckland Council over the past two years – through the Additional Waitemata Harbour Connections (AWHC) business case. There has also been substantial planning work undertaken on potential future rapid transit alignments north of Albany.

A key finding from the AWHC business case was that both an upgraded busway and an additional rail-based rapid transit connection would be required over time to meet future demand. Consistent with the general approach of optimising existing networks first, the busway enhancements were identified as a priority for completion within the next decade. Depending on the extent of the busway enhancements, the AWHC business case concluded that an additional rail-based rapid transit connection could be needed within the next 15-20 years. Further work to finalise the mode, alignment, timing and network integration of the additional rapid transit connection will commence shortly.

Funding in ATAP 2021 focuses on completing the current improvements, making priority enhancements to the busway (station and city centre improvements) and developing a clear plan for how this rapid transit corridor develops over time. This includes funding for strategic land acquisition.

## Airport to Botany via Manukau

Rapid transit from the airport to Manukau, and on to Botany, links together southern and eastern Auckland and will provide an important connection to the rail network at Puhinui.

A fast, frequent and reliable rapid transit service would deliver the following benefits:

- improve access to southern Auckland's two major employment areas (Manukau and the airport)
- provide a link for air passengers to the city centre and the south via a transfer to rail at Puhinui
- improve transport options for the highly car dependent southeast Auckland
- support major growth opportunities at key locations along the route, particularly around Manukau, Puhinui and Botany.

Planning work has progressed on this corridor over the past two years, leading to the development of a phased programme that integrates delivery of the rapid transit corridor with planned road improvements to State Highway 20B. As part of this work, heavy rail options between Puhinui and the airport have been investigated, but these were discounted due to their high cost, a mismatch of capacity and demand, and creating extra transfers for people using the Botany-Manukau section of the corridor to get to the airport.

Delivery of the first phase of improvements, which includes the Puhinui bus/rail interchange and new transit lanes between Puhinui and the airport, is nearing completion. This investment will need to be complemented by upgrades to the transport network within the airport (which is owned and operated by Auckland International Airport Ltd.) to fully realise its benefits. The next step for the programme is acquiring necessary consents and designations for the longer-term programme, which is estimated to cost around \$22 million.

The next phase, which is funded in ATAP 2021, will deliver bus service improvements and targeted bus priority at key locations along the route. Funding to acquire the most critical property for future sections is allocated in the 'Planning for the Future' section.

## Future Priorities

As part of developing ATAP 2021, the following key priorities for rapid transit investment were identified if additional funding was available.

- Northwest rapid transit corridor – delivery of major 'phase 2' improvements (potentially a busway between Te Atatu and Lincoln Road interchanges) and to fully complete planning route protection work for this corridor if this is not otherwise funded through the \$1.8 billion light-rail allocation
- Northern Busway enhancements – complete the busway upgrade that gets confirmed through the business case process
- Heavy rail – start to implement 'step two', with first focus on additional trains to ease pressure on Southern Line services and more level crossing removals.

The development of Auckland's rapid transit network is a long-term project, with key details around exact routes, corridor design and sequencing evolving over time as more detailed work progresses. ATAP 2018 illustrated how the rapid transit network may develop over time, showing the location of key corridors and their indicative mode. As discussed earlier, the Auckland Rapid Transit Network Plan is currently reviewing this network and an updated plan will be included in future ATAP work.



# Strategic and local road network

Funding allocated in ATAP 2021

\$4.2 billion

## Introduction

Auckland's motorway construction programme over the past 15-20 years has largely completed the strategic road network. Major projects under construction focus on finishing and optimising the Western Ring Route or extending the motorway further north.

Further expansions to the strategic roading network are increasingly difficult and costly, as long-protected corridors have mostly been used by projects like the Western Ring Route. Many key routes still face congestion at peak times – and some at interpeak times too. Longer and less reliable travel times can ultimately reduce access to opportunities, as well as impose additional costs for freight and service vehicles that are ultimately borne by us all.

There are few locations where providing additional road capacity is a feasible and effective solution to Auckland's congestion challenge – as well as a growing risk that it simply leads to more traffic, congestion and emissions. This means more emphasis will need to be placed on optimising the existing network and reducing the extent of traffic growth through supportive land-use planning and ongoing mode shift to public transport, walking and cycling.

Future investment in the strategic road network will need to be particularly well targeted, focusing on:

- improving the safety and efficiency of existing corridors.
- targeting key bottlenecks, especially for freight and public transport traffic, to optimise reliability.
- improving network resilience and inter-regional freight movements.
- supporting greenfield growth areas by diverting through traffic away from town centres and local roads to improve their amenity and development.

Investment choices are also limited because substantial debt repayment and public private partnership (PPP) payments are required over the next decade for projects that have been recently completed (Manukau-Papakura motorway upgrade and the Kirkbride Road interchange) or will soon be finished (Puhoi-Warkworth motorway).

Crown funding from NZUP has enabled Penlink, Mill Road and Papakura to Drury South to be accelerated. These investments play an important role in supporting major growth nodes in the north and south. A 're-baselining' of NZUP is currently underway to better understand project costs and details. This may result in the scope and timing of some projects being updated.

For smaller-scale local roading improvements, the focus is on addressing the most severe existing safety and efficiency deficiencies, supporting mode shift through changes to street space allocation, and integrating with strategic roading projects to unlock their full value.

## Funding Allocation

A summary of the strategic and local funding allocation in ATAP 2021 is outlined below.

Project Name	ATAP 2021 funding allocation
New Zealand Upgrade Programme: <ul style="list-style-type: none"> <li>• Mill Road corridor</li> <li>• Papakura-Drury South motorway widening</li> <li>• Penlink</li> </ul>	\$2.2 billion
Ara Tūhono Puhoi-Warkworth motorway (PPP payments):	\$830 million
Northern Corridor Improvements (state highway portion)	\$107 million
Debt repayments for completed projects: <ul style="list-style-type: none"> <li>• Southern corridor (Manukau-Papakura widening)</li> <li>• State Highway 20A airport access improvements</li> </ul>	\$289 million
Northwest State highway improvements: <ul style="list-style-type: none"> <li>• State Highway 16 Waimauku to Brigham Creek Road upgrade</li> <li>• Squadron Drive west-facing ramps</li> </ul>	\$205 million
Local road improvements, including: <ul style="list-style-type: none"> <li>• Ormiston town centre main street link</li> <li>• Lincoln Road corridor upgrade</li> <li>• Regional improvement projects (minor improvements)</li> <li>• Road sealing programme</li> <li>• Lake Road and Esmonde Road improvements</li> <li>• Smales Road / Allens Road intersection upgrade</li> <li>• Glenvar Road upgrade</li> <li>• Rosedale Road upgrade</li> <li>• Wynyard Quarter integrated roads programme</li> <li>• AT Parking Programme &amp; other minor programmes</li> <li>• Minor state highway improvements</li> </ul>	\$579 million
Additional Waitemata Harbour Connections <ul style="list-style-type: none"> <li>• Completion of business case</li> <li>• Strategic property acquisition</li> </ul>	Funding allocated in 'planning for the future'
Grafton Gully / Port Access improvements	Funding allocated in 'planning for the future'
East West Link (property acquisition)	Funding allocated in 'planning for the future'
Noise Wall Upgrade Programme	\$15 million

## Mill Road (NZUP)

This project is a 21.5-kilometre-long strategic north-south corridor for southern Auckland, connecting Manukau and Drury to the east of the Southern Motorway. It upgrades Mill Road and Redoubt Road to four lanes between Manukau and Papakura, as well as providing a new connection through future urban areas between Papakura and Drury. The project includes an interchange at Drury South to connect with the Southern Motorway.

Even with significant investment in the southern part of Auckland's rail network and widening of the Southern Motorway, major forecast increases in car travel are expected to create chokepoints on roads around Papakura and Drury unless there is investment in the Mill Road corridor.

Added capacity along the Mill Road corridor to serve local and 'suburb to suburb' trips also helps other key routes in this part of Auckland, such as:

- less pressure on the Southern Motorway allows it to be the key route for inter-regional freight movements and other longer trips
- less pressure on Great South Road assists plans to reallocate existing road space to bus lanes
- added resilience to the transport network in southern Auckland.

ATAP 2018 allocated \$500 million to this corridor, enabling its partial completion over the next decade. Additional funding from NZUP means delivery can be accelerated, with construction expected to start in late 2022.

## Papakura to Drury South (NZUP)

Widening the Southern Motorway between Papakura and Drury South is one of few locations where additional capacity will generate enduring benefits. The upgrade passes through a large greenfield growth area and will help ensure Auckland's key link with the Waikato can continue to function effectively as this area urbanises and travel demand on the Southern Motorway increases.

This project includes:

- building a third lane in each direction along eight kilometres of the existing highway between Papakura and Drury South
- upgrading the existing Drury interchange and adding a new Drury South motorway interchange (as part of the Mill Road project)
- replacing four bridges to accommodate the extra traffic lanes
- building a new shared walking and cycling path adjacent to the highway, linking with shared paths on the Mill Road corridor and further north on the Manukau-Papakura section.

Funding from NZUP means this project will soon commence construction and be completed by late 2025.

## Penlink (NZUP)

The Penlink project provides a new connection between the Northern Motorway and the Whangaparāoa Peninsula, bypassing Silverdale town centre and the constrained Silverdale interchange. It was brought into the first decade in ATAP 2018 and is now able to be further accelerated through funding from NZUP.

The seven-kilometre-long two-lane road will also include a shared walking and cycling path adjacent to the road corridor, which will improve travel choice for residents of the Whangaparāoa Peninsula. The project is suitable to tolling to help fund its construction, maintenance and operation, as it provides significant time savings for users and an alternative route exists.

Penlink will play a relatively minor role in Auckland's public transport network, with most services continuing to use State Highway 1 between Albany and Silverdale. However, it will provide a much shorter journey for bus trips to and from the Whangaparāoa Peninsula. Penlink's design and designation mean bus priority measures could be added in the future if required, while the proposal to toll Penlink will also keep buses moving quickly and reliably by managing traffic levels.

Significant planning and design work on Penlink has already occurred, meaning construction is expected to commence by late 2021 and be completed by late 2025.

### **Ara Tūhono Pūhoi-Warkworth (PPP payments)**

Ara Tūhono extends the Northern Motorway by 18 kilometres to just north of Warkworth, bypassing major bottlenecks and improving travel reliability and safety. This project is well under construction and currently projected to open by mid-2022. It is being delivered as a public-private partnership (PPP), meaning funding requirements are spread over time and largely begin once construction is complete. Therefore, around \$830 million of investment will be required over the next decade.

A further extension to beyond Wellsford is a longer-term priority which will be considered in future ATAP work. Some funding has been allocated to enable the completion of consenting processes for this extension.

### **Northern Corridor Improvements**

Construction on a suite of improvements to connections between State Highway 18 and State Highway 1 is well advanced and due for completion by the end of 2022. This project completes the final section of the Western Ring Route by providing a new, continuous motorway route between the Northern Motorway and the Upper Harbour Motorway. This will remove through-traffic from local roads in the North Harbour industrial estate area.

A shared walking and cycling path adjacent to the motorway is also being built, as well as the Northern Busway's extension to Albany (as discussed in the rapid transit section).

### **Southern Corridor & Airport Access Improvements (debt repayments)**

Construction of these two completed projects was brought forward through a Crown loan to Waka Kotahi. Repayment of that loan has commenced and around \$300 million of further repayments are required, mostly over the next three years.

The Southern Corridor project optimises the southern end of the Western Ring Route by addressing a major bottleneck where the Southwestern Motorway (SH20) meets the Southern Motorway (SH1). It has also upgraded the Takanini interchange and provided a shared walking and cycling path adjacent to the motorway.

The Airport Access Improvements extended the motorway to the airport boundary from the north and created a new grade separated motorway interchange with Kirkbride Road, addressing a key bottleneck.

### **Northwest State Highway Improvements**

Significant growth in Auckland's northwest is forecast over the next 30 years, exceeding what was forecast when the area's strategic transport network was planned around 15 years ago. A series of upgrades will be required over time to ensure the state highway network can continue to operate effectively and to take traffic off important local routes like Hobsonville Road and Brigham Creek Road – which will be fully urbanised and play important roles in local public transport, walking and cycling networks.

## Auckland Transport Alignment Project

These upgrades include:

- completing all motorway-to-motorway links between the Northwestern (SH16) and Upper Harbour (SH18) motorways
- new south-facing motorway ramps at Northside Drive
- new and upgraded motorway interchanges at both ends of Brigham Creek Road
- new west-facing ramps at Squadron Drive
- safety and capacity improvements to State Highway 16 between Waimauku and Brigham Creek Road
- a major realignment of State Highway 16 to the south of Kumeu/Huapai
- shared walking and cycling paths adjacent to the motorway network
- bus rapid transit adjacent to State Highway 18

The Northwest rapid transit corridor, discussed in the previous section, also has a key role to play in meeting future travel demand from this part of Auckland.

The most urgent investments in the northwest are the safety and capacity improvements to State Highway 16 between Waimauku and Brigham Creek Rd and the west-facing ramps at Squadron Drive. These upgrades address key existing issues and make best use of existing infrastructure by enabling both State Highway 16 and State Highway 18 to take pressure off local roads. These investments have been included in ATAP 2021, with the Waimauku to Brigham Creek Rd project already under construction.

The timing of further investments is strongly linked with the timing of overall growth in the northwest.

### East West Link

The East West Link project focuses on providing better connections along the northern side of the Māngere Inlet between State Highway 20 in Onehunga and State Highway 1 at the Mt Wellington interchange. It is located in Auckland's industrial heartland, an area with high freight volumes and key road/rail freight transfer facilities.

Previous planning work identified a very large investment in this area, and in 2017 the Government requested a review of the project to ensure it focused on addressing the most significant congestion and freight access problems in the area in a way that better optimises existing infrastructure. This work can now be completed, as a High Court appeal in relation to consenting has recently been resolved.

Until there is more clarity about the future form and function of this project, ATAP 2021 has set aside some funding for essential land acquisition arising from the current consenting process.

### Additional Waitematā Harbour Connections

ATAP 2018 highlighted the need to provide more certainty about the optimal timing, function, configuration and operation of future cross-harbour improvements. As discussed in the rapid transit section, this work has been progressed by Waka Kotahi, Auckland Transport and Auckland Council through a programme-level business case.

This business case confirmed a recommended way forward that provides a comprehensive and long-lasting response. This includes:

- busway enhancements and additional rapid transit connection (as discussed in the rapid transit section)
- further investigation of options to optimise existing infrastructure
- road connectivity improvements to address resilience issues and growing all-day congestion.

Funding has been allocated to enable completion of more detailed investigation on the additional rapid transit connection and the road improvements. This funding also covers the potential need for strategic property purchases that will protect the ability for the future investments to be progressed.

### **Improved Grafton Gully / Port Access**

Access to the Port of Auckland through Grafton Gully is significantly constrained, leading to delays and poor reliability for this critical corridor. ATAP 2021 allocates some funding for targeted improvements that should:

- provide increased reliability for freight movement
- improve safety and access to adjoining property.

In addition, wider rail network upgrades will support a higher share of freight travelling to and from the Port by rail, easing pressure on this road corridor. A more substantial upgrade of road access to the Port will be a challenging project as it passes through a geographically constrained part of the city. Any major roading upgrade also needs to be informed by decisions around the long-term location of the Port.

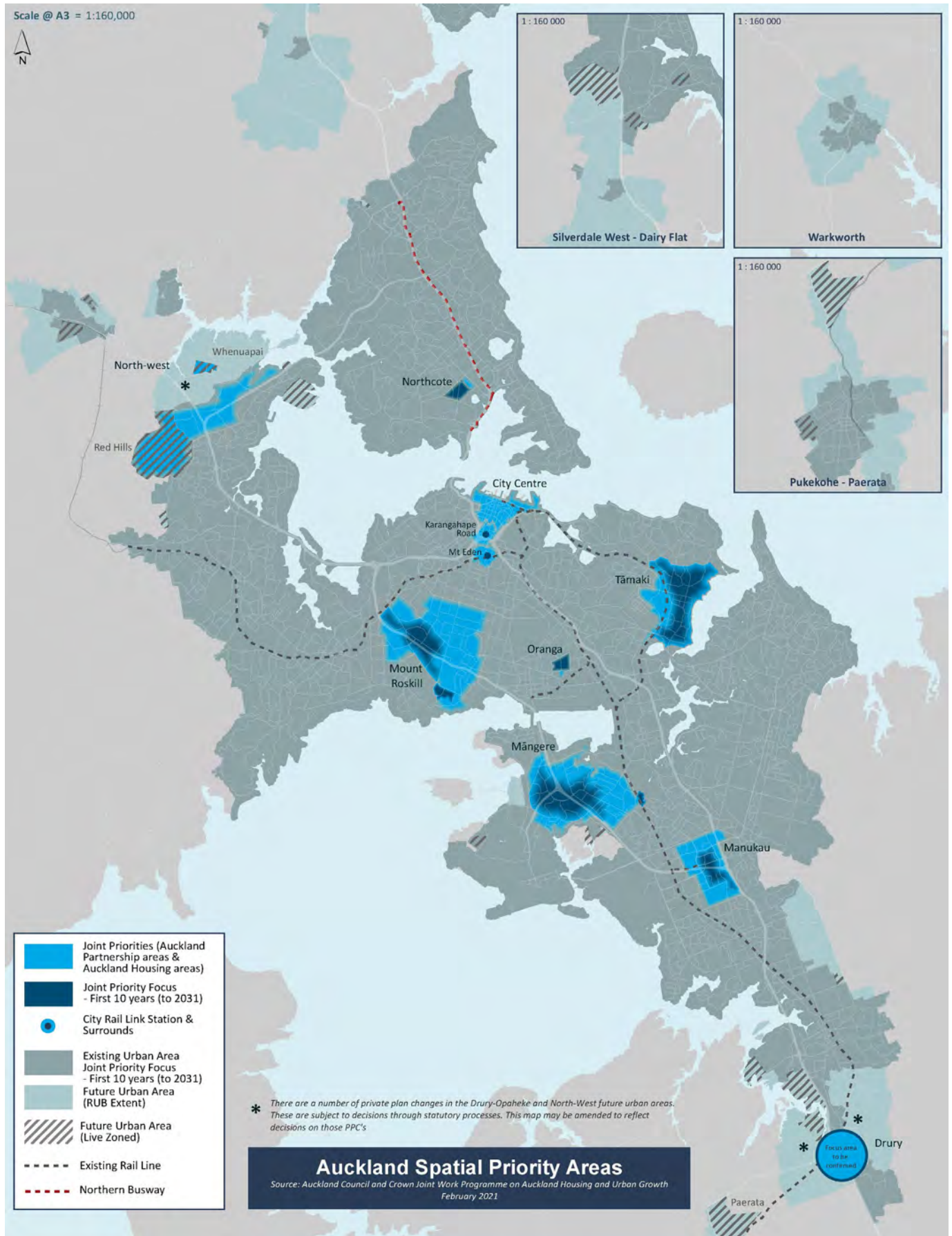
### **Local Road Improvements**

Several smaller-scale road improvement projects are also included in ATAP 2021. These projects are targeted to safety and efficiency issues and deliver strongly against the ATAP objectives. Key projects are:

- Lincoln Road corridor upgrade
- Ormiston town centre main street link
- Lake Road and Esmonde Road improvements
- Smales Road and Allans Road upgrade
- Unsealed corridor improvements
- Glenvar Road and East Coast Road upgrade
- Rosedale Road upgrade
- Wynyard Quarter integrated roads programme.

### **Noise Wall Upgrade Programme**

A small allocation has been made in ATAP 2021 to enable the completion of noise walls on sections of the Southern Motorway between Manukau and Papakura. This is the highest priority location for noise wall upgrades.



# Supporting spatial priority areas

Funding allocated in ATAP 2021

\$1.3 billion

## Introduction

Auckland's population is projected to grow by around 260,000 over the next decade, increasing travel demand and requiring the delivery of new infrastructure and services. Most urban growth is relatively distributed across the region, with the wider transport programme (as described in other sections) catering for transport issues arising from this growth.

Developing Auckland's rapid transit network, the largest area of investment in ATAP 2021, is especially critical to supporting urban growth. This is because rapid transit delivers long-lasting access improvements for the areas it serves, encouraging people to live in, work in, and visit, these locations. It also meets an important share of travel demand arising from this growth.

In some parts of the city, the pace and scale of growth means that additional investment is required to enable and support development, encourage the use of public transport and active modes, and to provide a good level of service to current and future residents. This occurs in both existing (brownfield) urban areas and new (greenfield) urban areas.

- Significant growth in existing (brownfield) urban areas often means that existing infrastructure and services are no longer fit for purpose. These large-scale redevelopments provide a major opportunity to achieve key outcomes like mode shift and improved safety through transformational changes to existing streets. Costs will be shared between developers (including Kāinga Ora) and the wider public.
- Large greenfield growth areas require new roads, public transport services and active mode infrastructure, as well as significant upgrades of existing roads. Local roads are built and paid for by developers, while the cost of arterial roads is shared between developers and the wider public.

As well as investment through the programme to support growth across Auckland, specific joint spatial priority areas have been agreed by the Government and Auckland Council as locations where there is higher certainty around growth over the next 5-10 years. The agreed priority areas are:

- the Auckland Housing Programme (Mt Roskill, Tāmaki, Oranga and Māngere)
- Drury
- the Northwest

The identification of these spatial priorities enables effort and investment to be co-ordinated across multiple agencies and infrastructure providers, as well as providing clear direction to landowners and developers about where growth is being enabled and encouraged. This approach is key to cost-effectively achieving high quality growth outcomes.

## Auckland Spatial Priority Areas

The detailed investment needed for each spatial priority area is likely to evolve over time, as development plans become clearer. This means a level of flexibility is required, so that funding can be allocated efficiently. It is also important to note that these areas require spend on multiple types of infrastructure (for example water and wastewater and social infrastructure spend) to realise their growth potential.

Consistent with the approach in ATAP 2018, funding provided for spatial priority areas in ATAP 2021 is not sufficient to fully support all projects required in these areas. This reflects overall affordability constraints, as well as the need for equitable funding shares between developers and the wider public. Additional developer funding or the use of other



funding and financing mechanisms (such as the Infrastructure Funding and Finance Act described further below) will therefore be required.

### Infrastructure Funding and Financing Act 2020

Working closely with Auckland Council and other high-growth councils, the Government has developed a new alternative funding and finance tool so private capital can be accessed more easily to get infrastructure built sooner than would otherwise be the case, without putting pressure on council balance sheets.

Within the context of ATAP 2021-31 this tool could play a significant role for Auckland, enabling access to more funding over the next 10 years to start viable projects sooner.

The Infrastructure Funding and Financing Act 2020 (the Act) established the new funding and financing tool to enable private capital to support the provision of new infrastructure for transport, housing, and urban development. The Act provides opportunities for local councils, Māori and developers to partner and deliver infrastructure, free of the council's debt limits or from charging high upfront costs to developers.

By setting a levy on development land, a Special Purpose Vehicle (SPV) can establish a long-term revenue stream that can service upfront financing to pay for infrastructure costs that enable development. This also helps make the cost of new infrastructure more transparent while allowing the allocation of costs to fall primarily on those who benefit from the development, including over time.

Water and transport infrastructure (including cycleways, roads and public transport infrastructure) could be funded using the tool, as well as certain community facilities, and environmental resilience infrastructure, such as flood protection.

More detail can be found in **Appendix D**.

## Funding Allocation

A summary of the spatial priority funding allocation in ATAP 2021 is outlined below.

Project Name	ATAP 2021 funding allocation
<b>Joint Auckland Council-Government spatial priority areas</b>	
Brownfield priority growth areas: <ul style="list-style-type: none"> <li>• Mt Roskill</li> <li>• Māngere</li> <li>• Tāmaki</li> <li>• Oranga</li> </ul>	\$442 million
Drury/Paerata: <ul style="list-style-type: none"> <li>• Waihoehoe Road west construction</li> <li>• SH22 intersection upgrades at Great South Road and Jesmond Road</li> <li>• Collector road extension of Jesmond Road to Drury West station</li> <li>• Route protection for future rail corridor and station improvements</li> <li>• Route protection for Jesmond Road and Bremner Road upgrades</li> </ul>	\$243 million

Project Name	ATAP 2021 funding allocation
Northwest: <ul style="list-style-type: none"> <li>• Housing Infrastructure Fund (HIF) repayments</li> <li>• Upgrades to Fred Taylor Drive and Maki Road</li> <li>• Scott Point</li> <li>• Property acquisition</li> <li>• Huapai Special Housing Area</li> </ul>	\$351 million
<b>Other key growth projects</b>	
Warkworth & Silverdale/Dairy Flat <ul style="list-style-type: none"> <li>• Matakana Link Road</li> <li>• Route protection for northern end of Warkworth western link road</li> <li>• Wainui Improvements</li> </ul>	\$56 million
Supporting Growth Programme (planning future networks in greenfield areas) <ul style="list-style-type: none"> <li>• Investigation for growth projects</li> <li>• Post lodgement and property acquisition</li> </ul>	\$136 million

## Brownfield priority growth areas

This investment is directed at enabling substantial growth in spatial priority areas centred around the Government's Auckland Housing Program (AHP). The AHP is a comprehensive urban renewal programme focused in Northcote, Mt Roskill, Māngere, Oranga and Tāmaki. It redevelops existing Crown-owned housing to increase the number of state houses, provide affordable housing options, and increase the market supply of housing. The programme also aims to encourage private redevelopment in these areas.

Kāinga Ora expects that in the AHP areas their developments, along with private sector developments, will deliver up to 17,000 new homes between 2018 and 2031. This includes replacement of existing dwellings as well as the development of additional dwellings. Mt Roskill, Māngere, Oranga and Tāmaki are the highest priority locations requiring investment over and above what is provided by developers (including Kāinga Ora) or by other parts of ATAP 2021. Investment in these locations, generally to support smaller-scale bus priority, walking and cycling improvements, intersection upgrades or improved access to the rapid transit network, will help their redevelopment deliver important transport outcomes like mode shift and safety. Business case work is underway to identify the detailed nature and timing of investments in these areas.

## Drury/Paerata

Drury/Paerata is joint Auckland Council and Government priority growth area in the southern part of Auckland that is anticipated to grow by up to 10,000 households over the next decade. Parts of the area are already zoned for development (Auranga and Paerata Rise), but most of the land remains zoned Future Urban in the Auckland Unitary Plan. There is significant private sector interest in bringing forward urban development in this area. The Crown is supporting the area's growth through investing in strategic transport infrastructure as part of NZUP, but further investment at a more local level is required to support urbanisation.

## Auckland Transport Alignment Project

Joint work between the Government and Auckland Council identified that between \$5.3 and \$6.6 billion of investment in the transport system would be required over time to fully support growth in the Drury/Paerata area. NZUP provides around \$2.4 billion of this total, while other major strategic projects (e.g. four-tracking the rail network) are scheduled for delivery in later decades.

In addition to NZ Upgrade Programme projects, ATAP 2021 allocates \$243 million to the following projects:

- Waihoehoe Road west construction
- State Highway 22 intersection upgrades at Great South Road and Jesmond Road
- collector road extension of Jesmond Road to Drury West station
- route protection for future rail corridor and station improvements
- property acquisition for Jesmond Road and Bremner Road upgrades.

### Northwest

The Northwest growth area includes the Redhills live zoned area located adjacent to Westgate, as well as the neighbouring areas of Whenuapai, West Harbour and Hobsonville. Construction is underway in several live-zoned areas.

More than 8,000 new households and 4,000 jobs are anticipated in the Redhills and Whenuapai areas between 2018 and 2031. Nearby Hobsonville/Scott Point and parts of Kumeu/Huapai are also undergoing substantial growth.

Strategic projects included in ATAP 2021 and discussed in previous sections – including an upgrade to State Highway 16 between Brigham Creek and Waimauku, west-facing ramps at Squadron Drive motorway interchange and interim northwest bus improvements – all support growth in the northwest. At a local level, ATAP 2021 allocates \$350 million for the following investments:

- housing infrastructure fund repayments for an upgrade of Trig Road near Westgate and new Redhills connections with appropriate public transport and active mode provision
- upgrades to Fred Taylor Drive and Maki Road
- Scott Point improvements
- property acquisition for future network improvements
- Huapai Special Housing Area.

### Warkworth & Dairy Flat/Silverdale

Significant future urban development is planned in northern Auckland over the next 30 years, focused around Warkworth and Dairy Flat/Silverdale. Some of this growth is underway, particularly around Milldale near Silverdale, as well as various small-scale developments around Warkworth.

Completion of the Puhoi-Warkworth motorway and the Matakana Link Road will help support Warkworth's growth over the next decade, particularly in Warkworth North. The Matakana Link Road delivers a new 1.4-kilometre-long connection between Matakana Road and State Highway 1. Alongside the Puhoi-Warkworth motorway, it is key to reducing pressure on the Hill Street intersection bottleneck in Warkworth, as well as facilitating urban development in the northern part of Warkworth. The road includes a new stream crossing, up to four-lanes of capacity and walking and cycling facilities. Construction is underway and due for completion by late 2022, to align with the opening date of the Puhoi-Warkworth motorway.

There is no substantial housing growth planned over the next decade in Dairy Flat/Silverdale. The development of business land in Silverdale West is expected to take pressure off the transport system, rather than add to it. ATAP includes a small additional allocation for land purchase to enable the future delivery of a western link road, as well as a small allocation to complete projects in Wainui (north of Silverdale).

# Safety programmes

Funding allocated in ATAP 2021

\$1.1 billion

## Introduction

Between 2012 and 2017 there was a near-doubling in deaths and serious injuries on Auckland's transport network from 421 to 813. This far outweighed growth in population or vehicle kilometres travelled over the same period and was well above the 30 per cent increase across New Zealand. The 2012-2017 period also represented a substantial reversal of what had previously been a long-term improvement in road safety and meant that 2017 was the worst year for road safety in Auckland since 1996.

Since 2017 there has been a much greater focus on improving road safety. The Government has adopted a new 'Road to Zero' safety strategy, which sets out a vision where no one is killed or seriously injured in road crashes. Auckland Transport has also adopted the 'Vision Zero' approach, aiming to eliminate deaths and serious injuries through a holistic systems approach. This increased focus extends across all elements of the transport system, including:

- the planning and design of projects
- increased investment in dedicated road safety programmes
- regulatory changes, like reducing speed limits
- enhanced enforcement

Auckland Transport completed a programme business case in 2019 to help guide safety interventions holistically. Waka Kotahi has also developed its 'Safer Networks Programme' to implement the 'Road to Zero' safety strategy by accelerating the development and delivery of road safety improvements. This recent planning work provides a solid evidence-base to guide the implementation of safety improvements.

While progress has been made since 2017, with the number of deaths and serious injuries falling by a third, the renewed focus on road safety needs to be maintained over time. The ultimate goal of both national and Auckland road safety strategies is to eliminate deaths and serious injuries on our transport system by 2050.

## Funding Allocation

A summary of the funding allocation for safety programmes in ATAP 2021 is outlined below:

Project Name	ATAP 2021 funding allocation
Auckland Transport safety programmes:	\$842 million
<ul style="list-style-type: none"> <li>• corridor safety programme</li> <li>• intersection safety programme</li> <li>• speed management programme</li> <li>• vulnerable road user safety programme</li> <li>• minor safety improvements</li> <li>• community safety fund</li> <li>• school speed management programme</li> </ul>	
Waka Kotahi safety networks programme	\$193 million

Project Name	ATAP 2021 funding allocation
Connected Communities (safety component)	\$33 million
Marae and Papakainga safety programme	\$13 million
Safety projects: <ul style="list-style-type: none"> <li>• Dome Valley safety improvements</li> <li>• Tāmaki Drive / Ngapipi Road safety improvements</li> </ul>	\$37 million

## Auckland Transport safety programmes and projects

Auckland Transport’s safety programme is guided by a programme business case that was completed in August 2019.<sup>8</sup> Alongside contributing to a 65 per cent reduction in deaths and serious injuries on Auckland’s roads over the next decade, Auckland Transport’s safety programme delivers the following key outcomes:

- over the next 40 years (the economic evaluation period for the investment), the programme could prevent over 10,000 deaths and serious injuries on Auckland roads
- upgrade 1,900km of road with speed management treatments
- transform 60 high risk intersections and 34 kilometres of high-risk corridors
- support mode shift to active modes and public transport, including reduced congestion and wider health benefits from increased activity, reduced emissions.

Other key Auckland Transport safety programmes provide a greater level of flexibility to respond to issues identified by the community.

- A \$100 million minor improvements programme enables small changes to the road network that improve safety, including pedestrian crossings, traffic calming, signage and road markings.
- A \$10 million community safety fund provides funding for small localised safety improvements.
- A \$75 million school speed management programme funds targeted safety improvements around schools.

## Waka Kotahi safety programmes and projects

Auckland’s State highway network also faces considerable safety challenges, especially on rural highways that are not of motorway standard. Waka Kotahi’s ‘Safer Networks Programme’ focuses on making infrastructure improvements to unsafe roads, so that minor mistakes do not lead to major tragedies.<sup>9</sup> The ‘Safer Networks Programme’ is a key part of the Government’s wider ‘Road to Zero’ safety strategy.<sup>10</sup>

ATAP 2021 allocates \$193 million to Waka Kotahi’s ‘Safer Networks Programme’ over the next decade, as well as substantial funding to key safety projects like the Dome Valley safety improvements (on State Highway 1 between Warkworth and Wellsford) and the State Highway 16 Brigham Creek to Waimauku upgrade in northwest Auckland (funding for this project is allocated in strategic and local roads section of ATAP).

<sup>8</sup> <https://at.govt.nz/media/1980866/item-911-road-safety-programme-business-case-att-2-at.pdf>

<sup>9</sup> <https://www.nzta.govt.nz/safety/what-waka-kotahi-is-doing/nz-road-safety-strategy/speed-and-infrastructure/safe-network-programme/>

<sup>10</sup> <https://www.transport.govt.nz/area-of-interest/safety/road-to-zero/>

# Walking, cycling and Local Board priorities

Funding allocated in ATAP 2021

\$1.5 billion

## Introduction

Active modes, including walking, cycling and a growing variety of new technologies like e-scooters, need to play a growing role in meeting Aucklanders' travel needs. Around half of all peak time trips are under six kilometres (a 25-minute bike ride), and over half of Aucklanders live within a 15-minute bike ride of the rapid transit network.

While some progress has been made in recent years, transformational change is still required to improve the safety and attractiveness of active modes.

- A variable quality and frequently unsafe pedestrian environment, especially at road crossings, is the key barrier to increasing the number of walking trips.
- Auckland's safe cycling network remains undeveloped and disconnected and will take sustained investment and effort to be completed. New technologies like e-scooters do not mix well with pedestrians or vehicles but are suited to cycle lanes – increasing the need to provide these networks.

In addition, ATAP 2021 allocates \$40 million for an 'Accessibility Improvement Programme' that aims to ensure people of all ages and abilities can use Auckland's transport system.

## Funding Allocation

A summary of the funding allocation for walking, cycling and local board priorities in ATAP 2021 is outlined below.

Project Name	ATAP 2021 funding allocation
Northern Pathway: Westhaven to Akoranga (NZUP)	\$360 million
Completion of Urban Cycleways Programme	\$138 million
Auckland Transport Walking & Cycling Programme <ul style="list-style-type: none"> <li>• Henderson</li> <li>• Māngere East</li> <li>• Manukau</li> <li>• Te Atatu peninsula</li> <li>• Devonport</li> <li>• Glen Innes</li> </ul>	\$306 million
Connected Communities Programme (cycling component) <ul style="list-style-type: none"> <li>• City centre</li> <li>• Central isthmus</li> <li>• Priority corridors</li> </ul>	\$188 million



Project Name	ATAP 2021 funding allocation
Completion of walking & cycling projects: <ul style="list-style-type: none"> <li>• Old Māngere Bridge pedestrian and cycling link</li> <li>• Glen Innes to Tāmaki cycleway</li> <li>• Te Whau pathway</li> <li>• Meadowbank-Kohimarama connectivity project</li> <li>• Waka Kotahi minor improvements</li> </ul>	\$125 million
Local Board priorities	\$200 million
Accessibility improvement project	\$40 million
Minor cycling & micromobility programme (including pop-up cycleways)	\$30 million
City Centre Master Plan – Access for Everyone	\$30 million
Regional programme for new footpaths	\$49 million

## Cycling

Auckland’s cycling network will be delivered over time through a combination of standalone walking and cycling projects, cycling infrastructure delivered as part of other projects (e.g. shared paths adjacent to new roads) and more comprehensive cycle network programmes.

The initial priority is completing projects that formed part of the ‘Urban Cycleway Programme’. This programme is largely focused on inner parts of the city where new connections can help unlock value from upgrades made over recent years. The main remaining investments are New Lynn to Avondale, links to Glen Innes, Waitemata Safe Routes, and Great North Road.

Several strategic cycling connections are also included in ATAP 2021, including:

- the Northern Pathway between Westhaven and Akoranga that will enable people to cross the Waitemata Harbour without needing to use a vehicle and fill the most significant missing link in Auckland’s active mode networks
- a new walking and cycling crossing of the Manukau Harbour between Onehunga and Māngere Bridge
- the Te Whau pathway along the Whau River in West Auckland
- the Glen Innes to Tāmaki Drive cycleway in East Auckland.

Just over \$300 million has been allocated to progress the walking and cycling programme identified in the 2017 Cycling Programme Business Case.<sup>11</sup> With a significant increase in the cost and complexity of cycleway delivery, this programme will not deliver the scale of comprehensive improvements previously envisaged. Further work is underway to ensure the planning and delivery of cycling improvements can be achieved in a faster, more flexible and lower cost way.

<sup>11</sup> <https://at.govt.nz/media/1974191/item114-auckland-cycling-programme-for-investmentfinal.pdf>



The following locations remain key priorities for comprehensive cycling improvements (noting priorities may be updated as part of business case work that is underway):

- Henderson
- Māngere East
- Manukau
- Te Atatu peninsula
- Devonport
- Glen Innes

The Connected Communities Programme (see “Bus and Ferry” section for more detail) also includes around \$188 million for cycling improvements. These improvements are focused in the central isthmus where there are significant gaps in existing cycling infrastructure. Finally, \$30 million has been allocated to minor cycling and micromobility improvements – which will largely focus on the upgrade of existing painted on-street cycle lanes to higher quality protected infrastructure.

Overall, around \$1.15 billion of investment in cycling infrastructure has been included in ATAP 2021, a significant increase from the \$640 million that was included in ATAP 2018.

Business case work also suggests additional investment in cycling continues to provide strong value for money and is worth progressing if affordability and deliverability challenges can be overcome.

## Walking

While a relatively modest dedicated budget for walking improvements is included in ATAP 2021, the greatest opportunity to make walking safer and more attractive comes from the redesign of our streets through:

- safety programmes (e.g. raised pedestrian crossings)
- minor upgrades and network optimisation
- design and delivery of new streets
- maintenance and renewal programmes.

These programmes are guided by street design guides that provide detailed information about street layouts, operations and design standards.<sup>12</sup> Recent updates to Auckland Transport’s street design guides have placed greater emphasis on walking, creating a significant opportunity to improve the attractiveness of this travel option through the various programmes listed above.

Specific funding allocations targeted to walking included in ATAP 2021 are:

- around \$50 million for a dedicated footpaths programme. This programme is used to fill gaps in the footpath network to ensure people can walk safely in their local communities
- \$30 million to begin implementation of the ‘Access for Everyone’ concept in the City Centre Master Plan. Additional funding will be required over time to fully deliver ‘Access for Everyone’ in the city centre.

## Local Board Priorities

ATAP 2021 includes around \$200 million of investment over ten years for Local Board priorities. The projects to be funded by this investment are determined by Auckland Council’s 21 Local Boards, who work with Auckland Transport to develop and implement their priorities. Historically most of this funding has been used for walking, cycling and safety improvements.

<sup>12</sup> <https://at.govt.nz/media/1980686/urban-street-and-road-design-guide.pdf>

## Bus and ferry improvements

Funding allocated in ATAP 2021

\$1.2 billion

### Introduction

Continuing to improve Auckland's public transport system over the next decade is critical to achieving many of the ATAP objectives, especially travel choice, mode shift and reducing emissions. The largest proportion of public transport investment relates to the upgrade and expansion of Auckland's rapid transit network – which has been discussed in a previous section. However, the bulk of public transport journeys are taken on the rest of the network, meaning there is an ongoing need to continue to improve Auckland's buses and ferries.

Planning work in recent years provides clear direction about what bus infrastructure improvements need to be made to enable and support growing use of the bus network, especially in the city centre and along key corridors. Auckland Transport is also progressing longer-term ferry planning, including how to decarbonise the ferry fleet.

### Funding Allocation

A summary of bus and ferry funding allocation in ATAP 2021 is outlined below

Project Name	ATAP 2021 funding allocation
City centre bus improvements, including: <ul style="list-style-type: none"> <li>• Wellesley Street bus priority</li> <li>• Grafton Gully bus interchange</li> <li>• Downtown bus improvements</li> <li>• Albert and Vincent Street bus improvements</li> </ul>	\$352 million
Connected Communities Programme (bus component) <ul style="list-style-type: none"> <li>• Symonds Street</li> <li>• New North Road</li> <li>• Sandringham Road</li> <li>• Great North Road</li> <li>• Ponsonby Road</li> <li>• Mt Eden Road</li> <li>• Manukau Road</li> <li>• Ellerslie Panmure Highway</li> <li>• Pakuranga Road</li> </ul>	\$368 million
Other public transport improvements: <ul style="list-style-type: none"> <li>• Airport access improvements</li> <li>• Safety, security and other minor upgrades</li> <li>• Sylvia Park bus improvements</li> <li>• Carrington Road bus improvements</li> <li>• Neighbourhood interchanges programme</li> </ul>	\$278 million

Project Name	ATAP 2021 funding allocation
Park and ride <ul style="list-style-type: none"> <li>• Matiatia Park &amp; Ride (Waiheke Island)</li> <li>• Auckland Transport Park &amp; Ride Programme</li> </ul>	\$79 million
Integrated ticketing	\$60 million
Funding to support ferry decarbonisation	\$30 million

## City Centre Bus Improvements

The city centre is by far the most important destination for public transport services. As public transport ridership recovers from the impact of Covid-19, City Rail Link is completed, and pedestrian/amenity improvements are rolled out in the city centre, there will be a growing need to facilitate increased bus volumes on key city centre bus corridors, provide better facilities for passengers at key stops, and support more efficient operations at the end of journeys. Key investments in ATAP 2021 are:

- significantly improved bus priority along Customs Street and Wellesley Street
- new bus facilities at Quay Park, Wynyard Quarter and Learning Quarter / Grafton Gully
- improved bus priority along Albert and Vincent streets, the key city centre streets for bus services to west and northwest Auckland.

The detailed location and design of these improvements is still underway.

## Connected Communities Programme

This is an integrated programme across arterial road corridors in central and southern Auckland that seeks to improve their safety, bus performance and cycling facilities.

The Connected Communities programme focuses on delivering solutions within the current road corridor, through reallocating space. It draws on detailed safety, cycling, network optimisation and bus priority investigations undertaken in recent years. Full delivery of the programme is forecast to generate substantial benefits:

- a 64 per cent reduction in deaths and serious injuries along these corridors, many of which are the highest risk corridors in Auckland
- a 19 per cent increase in bus ridership
- 10,000 additional daily work-related cycling trips
- an overall benefit-cost ratio of 3.2.

ATAP 2021 allocates \$589 million the highest priority corridors in the Connected Communities programme. These are New North Road, Sandringham Road, Great North Road, Ponsonby Road, Mt Eden Road, Manukau Road, Ellerslie-Panmure Highway and Pakuranga Road. Funding for the safety and walking and cycling components of the Connected Communities programme is allocated in those respective sections.

## Other Investments

A variety of other small and medium-scale improvements to bus and ferry networks are included in ATAP 2021. Key investments are:

- ongoing programmes of minor public transport improvements across the bus, train and ferry networks, delivering new and improved bus stops, rail station security and ticket control gates and improvements at ferry wharves
- investment in New Zealand's next generation public transport ticketing system, which will replace Auckland Transport's HOP Card
- new and/or expanded park and rides to provide access to public transport from areas where walking, cycling or feeder buses are less viable
- significant bus improvements at Sylvia Park and along Carrington Road
- implementation of key neighbourhood bus interchanges to enable more convenient transfers between bus routes at seven locations
- infrastructure to help decarbonise the ferry fleet.

# Network optimisation and technology

Funding allocated in ATAP 2021

\$0.7 billion

## Introduction

Making better use of existing networks is critical in meeting the transport needs of a fast-growing city and is a key component of the long-term ATAP strategic approach. A combination of high land costs and severe community impacts make large-scale corridor widening less feasible to meet growing travel demand.

Previous versions of ATAP have strongly signalled the need for a greater focus on network optimisation and the use of technology to increase the number of people who can travel through key routes and corridors.

There are substantial opportunities for further improvements across the existing transport system. These include initiatives such as:

- 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
- implementing T2/T3 lanes to encourage higher vehicle occupancy
- providing priority for heavy vehicles on key freight routes.

## Funding Allocation

A summary of optimisation and technology funding allocation in ATAP 2021 is outlined below.

Project Name	ATAP 2021 funding allocation
Auckland Transport network performance optimisation improvements (includes increased freight allocation)	\$168 million
Waka Kotahi Intelligent Transport Systems and State highway optimisation programme	\$122 million
Auckland Transport Intelligent Transport Systems improvements	\$52 million
Auckland Transport Customer and Corporate Technology Programme, including an update to transport demand forecasting models	\$356 million
Auckland Transport core operational capital programme	\$10 million
Supporting electric vehicles	\$34 million

## Network Optimisation

Waka Kotahi and Auckland Transport have jointly developed a programme business case (PBC) in recent years to guide investment in network optimisation.<sup>13</sup> The PBC examined a range of options before recommending a programme that focuses on improving travel choice. In this programme, optimisation investment is directed to provide more travel choices and change travel behaviour to higher occupancy modes, while maintaining levels of service for freight and general traffic. More detailed work is now underway to guide implementation of this programme.

Optimisation programmes by both Auckland Transport and Waka Kotahi will deliver a range of targeted small to medium scale infrastructure projects, including removing pain points along corridors for walking and cycling, public transport and private vehicles (including freight), synchronisation of traffic signals, optimising road layout, dynamic traffic lanes and managing traffic restrictions. ATAP 2021 allocates additional funding to freight improvements to reflect the freight priority in GPS 2021 and enable progress in this important area.

## Technology

Maximising the benefits of new and emerging technologies has the potential to generate significant improvements to the performance of Auckland's transport system. However there remains substantial uncertainty about the timing, nature and full effects of these changes.

In the short term, technology can play an important role in using existing assets and services more efficiently, through:

- improvements to customer experience, including improvements to real time information such as audio announcements on buses that make it easier and more attractive for people to use existing services
- more efficiently delivering existing services, such as increasingly using CCTV and car-mounted cameras for parking and enforcement activities.

The uptake of electric vehicles is critical to reducing emissions. ATAP 2021 directly supports this through investment in additional charging infrastructure and promotional activities.

---

<sup>13</sup> <https://at.govt.nz/media/1982542/item-104-closed-1-april-2020-auckland-network-optimisation-business-case.pdf>

## Planning for the future

Funding allocated in ATAP 2021

\$0.3 billion

### Introduction

Major transport investments can take years, even decades, to progress from initial ideas to implementation. It is important to secure corridors for future projects and adequately fund their planning and design, so that they can progress in a timely, efficient and cost-effective manner.

For projects that will be implemented within the next decade, their planning, design and property acquisition costs have been included as part of that project's overall cost. Therefore, the allocations in this section relate entirely to planning work and property acquisition for investments that are not currently forecast to begin construction in the next decade. More detailed discussion of some future projects (e.g. Additional Waitematā Harbour Crossing and East West Link) has been included in earlier sections.

### Funding Allocation

A summary of the planning for the future funding allocation in ATAP 2021 is outlined below:

Project Name	ATAP 2021 funding allocation
Waka Kotahi Strategic Future Planning for: <ul style="list-style-type: none"> <li>• Rapid transit network development</li> <li>• Additional Waitemata Harbour Crossing</li> <li>• 20Connect (airport access improvements)</li> <li>• Grafton Gully improvements</li> <li>• Revocation of State Highway 1 between Puhoi and Warkworth</li> <li>• Warkworth to Wellsford designation</li> </ul>	\$105 million
Waka Kotahi Property Acquisition for: <ul style="list-style-type: none"> <li>• Additional Waitematā Harbour Crossing, East West Link and State Highway 1 Drury South to Bombay</li> </ul>	\$89 million
Auckland Transport Strategic Future Planning for: <ul style="list-style-type: none"> <li>• Business cases for future projects</li> <li>• Tāmaki Drive resilience investigations</li> <li>• Low Emissions bus roadmap</li> </ul>	\$31 million
KiwiRail Strategic Future Planning for: <ul style="list-style-type: none"> <li>• Network planning</li> <li>• Business cases for third and fourth track on Southern Line</li> </ul>	\$52 million

## Operational costs

Funding allocated in ATAP 2021

\$9.1 billion

### Introduction

Significant investment is required to operate Auckland's transport system each and every day. This includes running public transport services, maintaining roads and operating the transport system more generally (e.g. responding to incidents). Key cost drivers are:

- the level of public transport service provided (especially at peak times) and the cost of delivering each hour of service
- the extent to which public transport fares and other charges (e.g. parking charges) cover the cost of providing services
- the size of the overall asset base and desired service levels (which determines maintenance costs over time).

Various fees and charges, like public transport fares, parking charges and enforcement revenue, helps to offset the costs of operating the transport system. Funding in ATAP 2021 covers the net costs to Auckland Council and the Government of operating the transport system.

### Funding Allocation

A summary of the operations funding allocation (net of revenue) in ATAP 2021 is outlined below.

Project Name	ATAP 2021 funding allocation
Auckland Transport operations <ul style="list-style-type: none"> <li>• public transport service delivery</li> <li>• road and footpath maintenance</li> <li>• parking and enforcement</li> <li>• internal support</li> <li>• 'Community Connect' pilot</li> </ul>	\$7.67 billion
State highway operations and maintenance	\$1.44 billion

### Auckland Transport Operations

Auckland Transport delivers four core operational activities.

1. *Public transport* makes up the around two-thirds of Auckland Transport's operating expenditure and is associated with delivering bus, rail and ferry services across Auckland. It also covers operations and maintenance of public transport facilities and infrastructure like rail stations and bus interchanges, park and rides, wharves and terminal buildings.
2. *Roading and footpaths* covers costs associated with maintenance of the roading network and associated infrastructure such as footpaths and cycleways. This covers pavement and pothole repairs, with more major rehabilitation undertaken by renewals programmes.



3. *Parking and enforcement* covers the costs associated with the various car parking buildings and at-grade sites around Auckland, along with on-street parking activities and enforcement of parking and bus lanes.
4. *Internal support* refers to all the internal activities required to support the delivery of services and operations associated with Auckland's transport network. This covers staff costs, technology costs, professional services (not associated with delivery of capital projects) and property and corporate accommodation costs.

ATAP 2021 supports continued delivery of these services, as well as the following targeted service improvements in key areas:

- rail service improvements associated with opening City Rail Link
- ongoing targeted bus and ferry service improvements
- maintaining and operating new bus and rail facilities completed over the next decade (e.g. Puhinui interchange, Eastern Busway)
- electrification of the bus fleet
- implementation of the 'Community Connect' pilot, which will provide half-price public transport fares for those with a Community Services Card.

## State Highway Maintenance and Operations

Investment into State highway maintenance and operations involves:

- funding the 'Auckland System Management' alliance that maintains and operates the motorway network
- maintaining and operating other parts of the State highway network (i.e. non-motorway State highways in rural parts of Auckland)
- funding the Auckland Transport Operations Centre (ATOC)
- specific funding to operate the Waterview tunnels
- corporate costs.

As size and complexity of Auckland's State highway network grows there is an increase in the scope of:

- network and asset maintenance and operations
- traffic management facilities (e.g. weigh right stations)
- transport operations centres to maintain service levels.

As new projects are completed (especially complex ones involving tunnels or major structures) this results in increased costs of operating and maintaining the network.

## Asset renewals

Funding allocated in ATAP 2021

\$4.5 billion

### Introduction

Auckland Transport operations and manages \$21.1 billion of publicly owned assets including 7,580 kilometres of arterial and local roads, 7,364 kilometres of footpaths, 334 kilometres 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.<sup>14</sup>

Waka Kotahi owns, operates and manages just under 600 kilometres of State highways in the Auckland region, including 355 bridges, over 7,000 streetlights and five tunnels. Most of the country's busiest sections of State highway are in Auckland, as well as critical and complex assets like the Auckland Harbour Bridge and the Waterview tunnel.

KiwiRail owns, operates and manages Auckland's heavy rail network as part of a national network of 3,700 kilometres of track, 3,100 signals, 1,500 public level crossings, 106 tunnels and 1,344 bridges. In 2019 over 21 million commuter rail journeys were taken on the Auckland rail network, which also contains many of the busiest sections of track for freight trains in the country.

Renewing these assets is a significant undertaking. Comprehensive and detailed asset management planning helps guide the level of investment into renewals, as well as where this investment should be targeted. 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. Asset renewals are also an opportunity to improve safety and other outcomes (e.g. creating streets that better support walking and cycling) through ensuring infrastructure is rebuilt in a way that meets modern design standards.

Project Name	ATAP 2021 funding allocation
Auckland Transport Renewals Programme, including: <ul style="list-style-type: none"> <li>Seismic strengthening programme</li> <li>Street lighting improvements</li> </ul>	\$3.97 billion
State Highways renewals programme	\$445 million
KiwiRail renewals programme	\$73 million

### Auckland Transport Renewals

A ten-year investment of just under \$4 billion is required to appropriately renew Auckland Transport's asset base. This amount has increased by around \$1 billion from what was included in ATAP 2018, due to:

- Auckland's growing population leading to more rapid deterioration of road pavements in some areas
- increasing numbers of heavy vehicles operating on the network, including growth related construction traffic and heavier axle weights from double decker buses
- the growing asset base, which is increasing by around 1.5 per cent every year through Auckland Transport and developer delivered new infrastructure (e.g. roads in new subdivisions)

<sup>14</sup> Auckland Transport 2020 Annual Report

- significant increases in costs, especially road rehabilitation, which makes up the largest share of Auckland Transport'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 that needs to be addressed in the future
- increased renewal requirements relating to climate resilience, seismic retrofit and slip remediation.

This scale of investment will ensure the network's overall condition is maintained in a stable state over the next 10 years. Auckland Transport and Waka Kotahi have worked together collaboratively in the development of Auckland Transport's Asset Management Plan, which informs investment needs.

### **State Highway Renewals**

The size and complexity of Auckland's State highway network has grown substantially in recent years. Use of the network, especially by heavy vehicles, has also increased, placing extra pressure on pavements and structures.

Furthermore, some of the long-life structural motorway pavements first constructed in the 1960s and 1970s are approaching the end of their service lives. It is often difficult to predict precisely when a pavement asset will need renewing and decisions will continue to be made according to asset condition monitoring.

The level of investment included in ATAP 2021 is estimated to be what is required to maintain existing service levels. As further analysis occurs it may be necessary to revise investment levels.

### **Rail Network Renewals**

ATAP 2021 includes around \$70 million of dedicated funding to lift the level of maintenance and renewals in Auckland's rail network, to ensure reliable operation as passenger and freight services continue to increase. This expenditure is above that currently provided by KiwiRail and Auckland Transport through the Auckland Network Access Agreement.

# 4. Expected Outcomes

ATAP 2021 will deliver a substantial improvement to Auckland’s transport system over the next decade.

Outcome area	Key Observations
<b>Maintaining existing assets</b>	<ul style="list-style-type: none"> <li>• A substantial increase (around 30 per cent) in investment in maintenance and renewals programmes enables existing assets to be maintained at an appropriate level</li> </ul>
<b>Access &amp; connectivity</b>	<ul style="list-style-type: none"> <li>• Access to employment generally improves across the region from continued employment growth</li> <li>• Projected increases in peak time state highway congestion mean some areas (northwest and parts of south Auckland) see a reduction in access to employment by private vehicle</li> <li>• Access improvements are not equitably spread across the region and some areas of high deprivation and higher proportion of Māori are projected to see access reductions</li> </ul>
<b>Travel choice &amp; mode shift</b>	<ul style="list-style-type: none"> <li>• A modelled increase in public transport and active mode share in the morning peak from 23 per cent in 2016 to 29 per cent in 2031</li> <li>• 64 per cent of growth in trip-making in the morning peak by public transport and active modes</li> <li>• Increase in jobs accessible to the average Aucklanders by a 45-minute public transport commute during the morning peak from 68,000 in 2016 to 108,000 in 2031</li> <li>• Delivery of around 200 kilometres of cycleways and shared paths, a slower expansion of cycling network (compared to ATAP 2018) due to cost increases in delivering these projects</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>• Safety targets (67 per cent reduction in deaths and serious injuries) projected to be met through delivery of Auckland Transport and Waka Kotahi safety programmes</li> </ul>
<b>Growth in spatial priority areas</b>	<ul style="list-style-type: none"> <li>• More significant allocation to brownfield spatial priority areas will encourage significant growth in these locations, and for growth to occur in a way that supports key outcomes</li> <li>• Limited investment in greenfield spatial priority areas, enabling route protection and some initial project implementation in Drury and the Northwest</li> </ul>
<b>Environment &amp; climate change</b>	<ul style="list-style-type: none"> <li>• Small reduction in vehicle kilometres travelled (VKT) per capita, partly driven by mode shift, is more than offset by population growth and forecast changes to motorised trip lengths, meaning that overall VKT is projected to increase</li> <li>• Engine efficiency improvements and mode shift mean CO2 emissions per capita reduce by around 13 per cent, but this is more than offset by population growth meaning a small overall increase in emissions</li> </ul>

# 5. Policy Priorities

## Introduction

ATAP 2021 provides an agreed investment programme in Auckland over the next decade and helps achieve important outcomes for Auckland and New Zealand, as discussed in the previous section. However, investment in transport infrastructure and services is only one component of the necessary broad approach to achieving key objectives. Other policies and interventions are required to achieve improvements to key outcomes, or increase the efficiency of programme delivery.

Areas of focus are:

- climate change
- aligning growth and transport planning
- demand management
- safety regulatory settings

The policy interventions suggested by officials are at different stages of development and are not yet agreed Government or Auckland Council policy.

## Climate change

A bold, holistic strategy is required to achieve the regional and national emissions reductions goals set out in the Climate Change Response (Zero Carbon) Amendment Act and Te Tāruke-ā-Tāwhiri, Auckland's Climate Plan.

The 'avoid shift improve' framework, shown below, is key to reducing emissions from the transport system.



The ATAP investment package focuses on the 'shift' part of this framework, by providing improved travel options that support mode shift to public transport, walking and cycling.

High level modelling of ATAP 2021 suggests it makes an important but modest contribution to addressing transport emissions in Auckland. However, fundamental change to Auckland's transport system is necessary to achieve our climate change commitments.

- ‘Te Tāruke-ā-Tāwhiri, Auckland’s Climate Plan’ outlines that transport emissions need to reduce by 64 per cent between 2016 to 2030, if Auckland’s overall emissions are to be halved by this date.
- Draft advice from the Climate Change Commission outlines that transport emissions across New Zealand need to reduce by around 47 per cent between 2018 and 2035.

The gap between the scale of emissions reductions needed to achieve regional and national targets and what is delivered by ATAP 2021 highlights that a wide variety of policy initiatives are required. Key policy initiatives are needed to substantially reduce private motorised travel and the carbon-intensity of the vehicle fleet. The table below outlines a number of necessary measures:

Reducing Vehicle Travel	Reducing Emissions from the Vehicle Fleet
<ul style="list-style-type: none"> <li>• Changes to the direct cost of vehicle travel (e.g. road pricing)</li> <li>• Planning for growth in areas with good travel options and where average journey distances are shorter</li> <li>• Ensuring street design standards promote walking and cycling</li> <li>• Ensure the full environmental costs of vehicle fossil fuel combustion are reflected in fuel pricing</li> <li>• Implement parking policies to encourage mode shift by reducing parking availability or increasing price</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase incentives for electric vehicles (purchase price is the primary barrier to electric vehicle purchase)</li> <li>• Supporting biofuels through regulatory requirements</li> <li>• Setting higher vehicle fuel efficiency standards</li> </ul>

Under current policy settings (which the modelling results in the previous section are based upon), it is projected that electric and other zero emission vehicles will begin to enter the New Zealand fleet in large numbers towards the end of the decade, leading to a relatively rapid reduction in average light vehicle fleet emissions from 2031 onwards. The heavy vehicle fleet is projected to change more, due to greater technical challenges.

Implementing the policy changes above has the potential to accelerate emissions reduction through reducing vehicle travel and reducing emissions from the vehicle fleet.

### ***Aligning growth and transport planning***

There are two key strategic policy issues relating to how growth is enabled and supported through ATAP.

- Planning documents are becoming increasingly enabling of growth, in both existing urban areas and future greenfield areas. Meanwhile, there are growing constraints on the amount of investment available to respond to Auckland’s growth. Addressing this growing tension in a way that allows robust investment decisions to be made, while also continuing to enable growth and increase housing supply, is a key issue to be addressed.
- Current infrastructure funding and financing policies and rules do not appear to support a fair and equitable allocation of costs between private landowners and the public. They also potentially incentivise inefficient development patterns and poor long-term outcomes.

There are several areas of reform that could be progressed, including:

- investigate the current and impending changes to the legislation underpinning land use planning in Auckland (e.g. Resource Management Act reform) and assess how this could address the issues outlined above



- implementing the National Policy Statement on Urban Development to align where growth occurs to where better travel options are available or planned
- complete the work on seeking alignment on future spatial priority areas, including more detailed guidance about what spatial prioritisation means in relation to funding priorities
- investigate how the public cost and private cost of infrastructure provision become better aligned and what is a fair contribution to expect from developers for transport infrastructure.

Some of this work is already underway (e.g. the Infrastructure Funding and Finance Act and reform of the resource management system).

### ***Demand Management***

Travel demand varies significantly across different routes, modes of transport and hours of the day. This means while parts of the transport system become highly congested or overcrowded at certain times of day other parts of the transport system have spare capacity or are under-utilised at other times.

Demand management is the application of various initiatives that seek to encourage people to adjust the mode, time or route they travel (or whether they need to travel at all) so travel demand better matches with available capacity in the transport system, or encourages more sustainable travel choices. A growing focus on managing demand was a key element of the long-term ATAP strategic approach agreed in 2016 and is a critical element of best practice transport planning.

Much of the ATAP investment package supports demand management, by providing better travel options to encourage a shift in travel mode (e.g. from driving to using public transport, walking or cycling). Key policy initiatives can also be very effective in managing demand, especially those that create financial incentives for people to change the way they travel.

Two key initiatives that have been investigated in recent years are congestion pricing and time-variable public transport fares.

### ***Congestion Pricing***

In recent years officials have progressed an investigation into whether congestion pricing is appropriate for Auckland. Significant technical work has been completed and there is a credible technical case for congestion pricing for Auckland.<sup>15</sup>

The preferred scheme identified by this technical work is a region-wide strategic corridors scheme that applies to main arterial roads and motorways, targeting the most congested corridors. Its implementation could be phased through time, starting with corridors into the city centre and timed to align with key improvements to the public transport system (e.g. opening of City Rail Link).

The opportunity exists for Auckland to benefit from a sustainable 8-12 per cent reduction in congestion (roughly the same as the improvement seen in the school holidays) once the full scheme is implemented.

Even a small improvement in network performance has the potential to generate a meaningful lift in transport and economic productivity, while pricing signals can also reduce emissions by encouraging mode shift and shorter journeys. While demand management, rather than raising revenue is the key driver of congestion pricing, the revenue raised could further improve the transport system or offset existing revenue sources.

### ***Time-variable public transport fares***

<sup>15</sup> <https://www.transport.govt.nz/area-of-interest/auckland/the-congestion-question/>



Public transport demand is often highly ‘peaked’, requiring significantly more vehicles and drivers at peak times than at other times of day. This makes providing additional peak time capacity extremely expensive and can also mean off-peak services have considerable spare capacity.

Creating a difference in fares between peak and off-peak times is a way of incentivising those who can travel outside peak hours to do so, thereby ‘smoothing’ demand and supporting a more efficient overall public transport system. In early 2021 Auckland Transport introduced a 10 per cent price differential between peak and off-peak fares. Increasing this differential would help create a meaningful incentive for people to travel outside peak hours if they can.

### Safety Regulatory Settings

The effectiveness of investment in safety programmes could be enhanced through a series of complementary policy changes. Key areas of policy change are outlined in ‘Vision Zero for Tāmaki Makaurau – a transport safety strategy and action plan’.<sup>16</sup>

Enhanced Enforcement	Process Improvements
<ul style="list-style-type: none"> <li>Higher penalties for dangerous behaviour</li> <li>Ongoing review of road policing levels to ensure they are appropriate</li> <li>Policies to improve safety of heavy vehicles for vulnerable road users (e.g. truck side under-run protection and other safety technology to improve visibility and communication between drivers and vulnerable road user)</li> </ul>	<ul style="list-style-type: none"> <li>Simplified processes for setting of speed limits including out of cycle changes under the proposed speed management plan approach</li> </ul>

Work on many of these initiatives is already underway, such as a review of road safety penalties and a new regulatory framework for setting speed limits.

<sup>16</sup> <https://at.govt.nz/media/1980910/vision-zero-for-tamaki-makaurau-compressed.pdf>

# 6. Next Steps

## Statutory Funding Plans

ATAP 2021 provides a clear direction for transport investment in Auckland over the next decade. The 2021 Auckland RLTP and NLTP are the two key statutory funding plans that will give effect to ATAP.

The RLTP builds on ATAP 2021 to provide a more detailed programme of investment for Auckland over the next decade, including how investment will be sequenced over time. The RLTP also highlights, consistent with the work done through ATAP, the next priorities for investment should additional funding become available. The RLTP includes rail network investments identified in the Rail Network Investment Programme.

The NLTP, which is led by Waka Kotahi and undertaken nationally, will confirm three year investment into Auckland from the National Land Transport Fund (NLTF) between 2021 and 2024. The GPS requires Waka Kotahi to set a three-year investment target for implementing ATAP. It will be important for this target to reflect meaningful progress towards delivering ATAP 2021.

The Auckland LTP will confirm Auckland Council's contribution to transport funding required to deliver ATAP 2021.

## Monitoring and Reporting

Regular monitoring reports have been prepared since 2018 to track progress on implementing ATAP 2021. These reports have focused in two areas:

- providing an update on project-level progress and any related funding issues
- tracking progress against key ATAP outcomes and measures, to understand the impact of ATAP 2021 as it is implemented. The Covid-19 pandemic has had a severe impact on many key measures (e.g. public transport ridership), but before the pandemic measures were generally tracking positively.

It is important for this monitoring and reporting to continue, especially to help inform future updates to ATAP. Public reporting of progress is also important, to help illustrate the impact of delivering ATAP 2021 on key metrics.

## Updating and Refining ATAP

Over time ATAP will need to be refined and updated to reflect the following:

- new direction from ATAP parties
- major changes to the timing, cost or detailed delivery (scope) of an ATAP package initiative (including capital projects, maintenance, renewals, operations, services)
- new investments that emerge as priorities through ongoing transport and spatial planning work
- emerging policy priorities from ATAP organisations
- changes to projected funding levels or arrangements from ATAP assumptions.

Key principles to guide the process for updating ATAP are:

- supporting ongoing alignment and coordination between central and local government on key transport issues in Auckland
- allowing transparent and efficient decision-making, and recognising the specific individual roles and responsibilities of agencies within their respective statutory frameworks
- maintaining an appropriate balance between political and non-political decision-making
- remaining consistent with the statutory framework for transport planning in Auckland and New Zealand.

The key distinction between these updates is the scale of change and whether the change has a material effect on the intent of ATAP or not:

- minor refinements (e.g. a change in cost that is less than 20 per cent of the estimate used in ATAP and not greater than \$30 million) should be undertaken through standard processes (e.g. Board decisions) and regularly reported through to ATAP Governance groups
- more significant changes such as a more substantial project cost change, major change in timing for a key investment, or addition/deletion of a substantial investment from ATAP 2021 should be agreed by the ATAP Governance Group, and referred to the ATAP political sponsors if required
- major new policy direction, or very substantial changes to revenue forecasts, is likely to trigger the need for an ATAP update, guided by an agreed terms of reference.

### **Joint workstreams between the Government and Auckland Council**

The following areas of further work also need to be progressed:

- developing an aligned indicative investment programme for 2031-2051
- ongoing joint planning and policy work to identify and develop interventions needed to achieve better results against key outcome areas
- working with Mana Whenua and Mataawaka to identify transport related outcomes for Māori living in Auckland, to help inform future investment
- progressing funding setting changes to enable full delivery of ATAP 2021, including any required changes to funding assistance rates, clarifying the lead agency for future projects, and any required changes to GPS activity classes
- continuing to explore funding and financing options to increase available revenue for transport investment in Auckland, including consideration of the Infrastructure Funding and Financing Act and wider funding sources
- communicating progress of delivering ATAP 2021 and key outcomes.

# Appendix A – Future Connect Strategic Case

See separate document

# Appendix B – Funding Assumptions

## Introduction

Around \$31.4 billion of public funding is assumed to be available for investment in Auckland’s transport system over the next decade

Funding Source		Funding amount
Auckland Council	Operational funding for Auckland Transport	\$3.415 billion
	Capital funding for Auckland Transport (including Regional Fuel Tax)	\$5.45 billion
	Contribution to City Rail Link	\$1.3 billion
Government	National Land Transport Fund	\$16.3 billion
	Crown contribution to City Rail Link	\$1.3 billion
	Crown funded NZ Upgrade Programme	\$3.5 billion
	Crown funding from Covid response and recovery fund	\$85 million
<b>Total</b>		<b>\$31.4 billion</b>

## National Land Transport Fund Assumptions

The \$16.3 billion expected NLTF allocation reflects the funding expectation outlined in GPS 2021. While the GPS 2021 funding expectation relates to the 2018-28 period, it was agreed this amount should continue to be used for 2021-31.

The \$16.3 billion assumption was calculated as an estimate of the on-merit funding Auckland would be likely to receive from the NLTF. This involves understanding the key drivers for investment in the different activity classes (e.g. projected population growth to inform need for new infrastructure, share of asset base and use of asset to inform maintenance expenditure). This resulted in the \$16.3 billion figure and represented around 37 per cent of total NLTF revenue, reflecting Auckland’s population and economic contribution, as well its status as a high growth area with high transport investment needs. The assumption includes Auckland receiving 37 per cent of NLTF funding freed up due to Crown investment in NZUP.

## Auckland Council Assumptions

The funding assumption for Auckland Council aligns with the budgets contained within the consultation document for the 10-year Budget 2021-2031 (the Auckland Council LTP). This draft budget reflects the ongoing impacts of Covid-19 disruption of council revenues, but proposes additional savings, asset sales, higher borrowings and higher rates increases to ensure it can maintain appropriate levels of investment across Auckland.

The split of operating funding and capital funding reflects the constraints of different funding sources such as development contributions and Regional Fuel Tax, and the long-term requirement to fund operating expenditure only from operating revenues.

## Cost Sharing

Alongside the total amount of available revenue, there are also important assumptions that need to be made about cost-sharing of different projects between the Government and Auckland Council. These assumptions are based around achieving the following key principles:

- enabling the best possible mix of investments for Auckland within available funding levels
- maintaining national equity and consistency
- better supporting mode neutrality
- ensuring the right incentives and accountabilities
- supporting consistent and efficient decision-making.

Key funding assumptions that underpin ATAP 2021 are:

- NLTF co-funding for all eligible Auckland Transport projects (including all eligible parts of the Auckland Transport renewals programme)
- a higher share of Government funding for rapid transit projects, to reflect their national significance. This includes:
  - » exploring the potential transfer of some rapid transit projects from Auckland Transport to Waka Kotahi for delivery and full NLTF funding
  - » full NLTF funding for road/rail level crossing removals
  - » higher funding assistance rate for rapid transit projects that continue to be delivered by Auckland Transport (including rail rolling stock).

Decisions will need to be made over time to realise these funding assumptions, including:

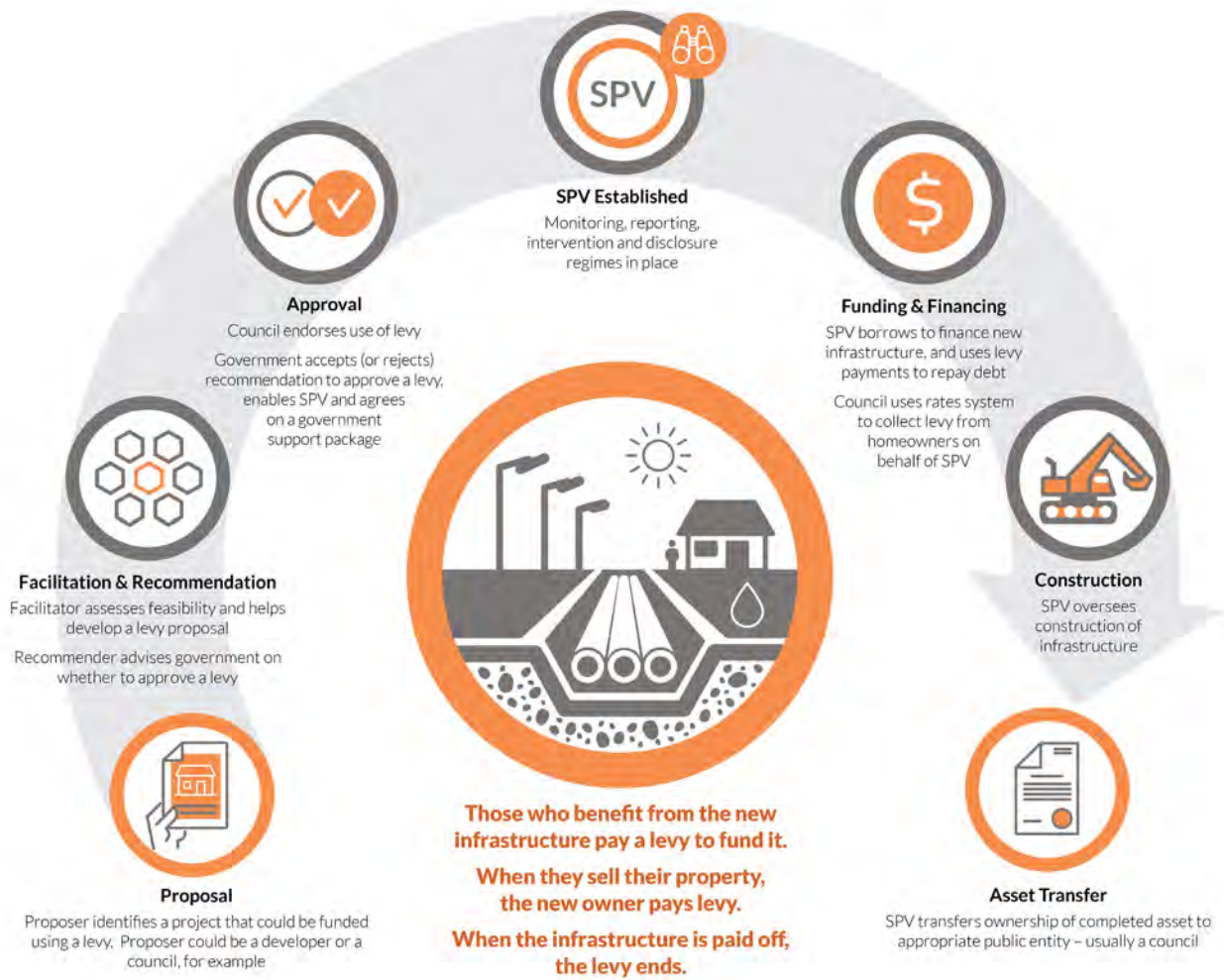
- agreeing the funding arrangements for road/rail level crossing removals
- increasing the 'Local Road Maintenance' activity class in GPS 2024 to accommodate significant growth in the Auckland Transport renewals programme. This decision will be made in the context of overall affordability of the GPS 2024 when a clearer understanding of trade-offs is available
- negotiation and agreement between Waka Kotahi and Auckland Transport for any potential transfer of key rapid transit projects to Waka Kotahi
- agreement on a higher funding assistance rate for well advanced rapid transit projects that should remain with Auckland Transport.

If any issues around funding arrangements arise in the delivery of ATAP, it will be important for the principles above to be applied and for key decisions to be made jointly between the Government and Auckland Council (and their respective transport agencies).

# Appendix C – Infrastructure Funding and Financing Act 2020

## How It Works

The diagram below sets out a high-level description of how the new tool is designed to allow funding and financing of infrastructure to enable transport, housing and urban development infrastructure projects.



## Developing Levy Proposals

Local councils, developers, Māori, or any other person may propose that an infrastructure project be funded using the tool. The proposer of a project will need to develop a levy proposal containing information about the proposed levy and Special Purpose Vehicle (SPV).

Crown Infrastructure Partners (CIP) are acting in a facilitation role for projects that want to utilise the SPV model. CIP will assess the feasibility of potential projects and assist project proposers, contractors and financiers in developing proposals. CIP will use their commercial expertise in structuring and raising finance for projects.

Project proposers can work with CIP to develop or progress proposals and prepare them for submission to the recommender. However, proposers are not required to work with CIP to develop levy proposals and can submit levy proposals directly to the recommender.

## Proposals are Recommended to the Government for Approval

SPVs do not automatically have powers to charge a levy. Levies must be authorised on a case-by-case basis via an 'Order in Council' approved by the Government, following a recommendation by the Minister responsible for the Act.

Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development (HUD) has been appointed to the recommender role established by the Act. As the recommender, HUD will provide advice to support the responsible Minister's consideration of levy proposals.

A successful recommended proposal will require endorsement by the local council. To ensure there is limited financial recourse to local authorities a Government Support Package will be required for each project. Typically, the Government Support Package will cover construction cost overruns, contractor failure, and risks relating to re-financing, natural disaster and force majeure.

The Minister is required to consider several factors before recommending a proposal, including the affordability for levy-payers, both existing and future. This will take into account the existing level of rates and ensures a levy is not prohibitively unaffordable.

## Special Purpose Vehicle, construction, asset transfer and ongoing levy collection

Once the levy is approved, an SPV can be established with the appropriate monitoring and intervention regimes in place. The SPV arranges financing to cover upfront infrastructure costs with the levy revenue used to service the financing over time. The relevant council uses its rating collection systems to collect the levy from landowners on behalf of the SPV.

The Act created a monitoring, reporting and disclosure regime to ensure SPVs are accountable and act appropriately. HUD has been appointed as the monitor.

Once construction of the infrastructure is complete, the assets are vested to the appropriate final owners, for example a local authority or public body. The levy continues to be collected to service the financing established by the SPV over a period of several years. The duration of levy payments will depend on number of factors such as the size, duration and risk of different proposals, and decisions about how the levy is allocated across the beneficiaries of the infrastructure that is being built.



Find out more:  
[transport.govt.nz/atap](https://transport.govt.nz/atap)  
[aucklandcouncil.govt.nz/atap](https://aucklandcouncil.govt.nz/atap)