

Transport and Access

Aucklanders will be able to get where they want to go, more easily, safely and sustainably.

DIRECTION	FOCUS AREA
<p>Direction 1</p> <p>Better connect people, places, goods and services</p>	<p>Focus Area 1</p> <p>Make better use of existing transport networks</p>
<p>Direction 2</p> <p>Increase genuine travel choices for a healthy, vibrant and equitable Auckland</p>	<p>Focus Area 2</p> <p>Target new transport investment to the most significant challenges</p>
<p>Direction 3</p> <p>Maximise safety and environmental protection</p>	<p>Focus Area 3</p> <p>Maximise the benefits from transport technology</p>
	<p>Focus Area 4</p> <p>Make walking, cycling and public transport preferred choices for many more Aucklanders</p>
	<p>Focus Area 5</p> <p>Better integrate land-use and transport</p>
	<p>Focus Area 6</p> <p>Move to a safe transport network, free from death and serious injury</p>
	<p>Focus Area 7</p> <p>Develop a sustainable and resilient transport system</p>



Transport and Access explained

Why Transport and Access is important

To lead successful and enjoyable lives, it is vital that people can easily, safely and sustainably reach the things that matter most to them, such as work, school, friends, recreation and healthcare.

To achieve this we need efficient ways for people, goods and services to move within and across Auckland, throughout New Zealand and across the world.

For Auckland to be a truly accessible city we also need to make sure that people of all ages and abilities, including people with reduced mobility levels, can go about their daily lives and get from one place to another easily, affordably and safely.

This means tailoring the way infrastructure and services are provided so they meet the wide range of Aucklanders' needs.

Find out more by visiting the Universal Design website¹²⁴ and the Office for Disability issues website.¹²⁵

Transport and Access in the past

Our transport system is key to making Auckland more accessible, and for us all to benefit from growth. While great improvements have been made over the past 20 years, historic under-investment, combined with rapid population growth, means we still face big challenges.

Past decisions shaped Auckland into a relatively low-density city where private vehicles were the only viable option for almost all trips.

Auckland's continued population growth and a concentration of job growth in a few key locations have put this car-focused transport system under significant strain. Congestion has led to delays and highly variable travel times that adds cost and undermines our quality of life. Reducing the impact of congestion on people's lives is a key component of improving accessibility. However, there is now widespread recognition that we cannot simply build our way out of congestion. This means making progress requires a combination of:

- additional investment
- rebalancing effort to other forms of mobility that can avoid congestion
- focusing on changing our travel behaviour.

A big increase in transport investment over the last two decades has mostly completed the motorway network and started to develop a quality public transport system. That makes it possible for people to avoid congestion when they travel by bus, train or ferry. Auckland's rapid transit network barely existed a decade ago, but investment in the rail network and construction of the Northern Busway mean this network now carries over 26 million passengers a year, with use continuing to grow strongly.

Over the last few years there has also been increased investment in cycle ways. Read about how we're making Auckland more cycle friendly.

In some areas there have been improvements for pedestrians as well, such as the Te Ara Mua Future Streets¹²⁶ project in Māngere, ranging from how traffic is managed, to better paving, lighting and safety.

However, the legacy of past decisions is still felt today. Many projects that were first planned decades ago, such as the City Rail Link, are only now being built. This makes it difficult to address today's problems, let alone prepare ourselves for future growth. Read more on the City Rail Link website.¹²⁷

As a consequence, people living in large parts of Auckland still don't have many choices in the way they travel. Major chokepoints and bottlenecks also remain on many main roads.

How we can improve Transport and Access

An integrated strategy

Improving Transport and Access in Auckland requires an integrated approach and is a partnership between Auckland Council and central government. The Auckland Transport Alignment Project (ATAP) developed a long-term strategic approach to address Auckland's transport challenges.

This work emphasised the need to focus on:

- getting much more out of existing infrastructure
- maximising new opportunities to influence travel demand
- ensuring investment is targeted to the greatest challenges.

For more information visit the Auckland Transport Alignment Project website.¹²⁸

Increased funding

ATAP confirms a major increase to transport funding in Auckland and enables a \$28 billion ten year transport programme. This programme will make major improvements to Transport and Access, and help to support Auckland's growth.

ATAP also identifies key priorities for further investment and signals the need for ongoing funding and financing work, including exploring new funding tools. This recognises that traditional funding sources such as rates, fuel excise duty and road-user charges are not enough to fully meet the needs of such a fast growing area.

Alongside this ongoing investigation into increasing transport funding, we also need to ensure:

- funding is prioritised by need rather than transport mode
- the cost of projects is allocated fairly and consistently between central government, Auckland Council and the private sector

Adapting to an uncertain future

We can predict some changes to the transport system, but the further into the future we look, the more unknowns there are.

What we can confidently expect is that physical travel will be very different. The things we travel in or on may be very different than now, and the networks or infrastructure that support these ways of travelling may also be very different.

This change may be gradual, but is highly likely. The plans we make and the transport infrastructure we build must be as adaptable to the future as possible. Read more about Transport and Access in Auckland, 2050.

How we track progress

We will track progress against a set of measures.

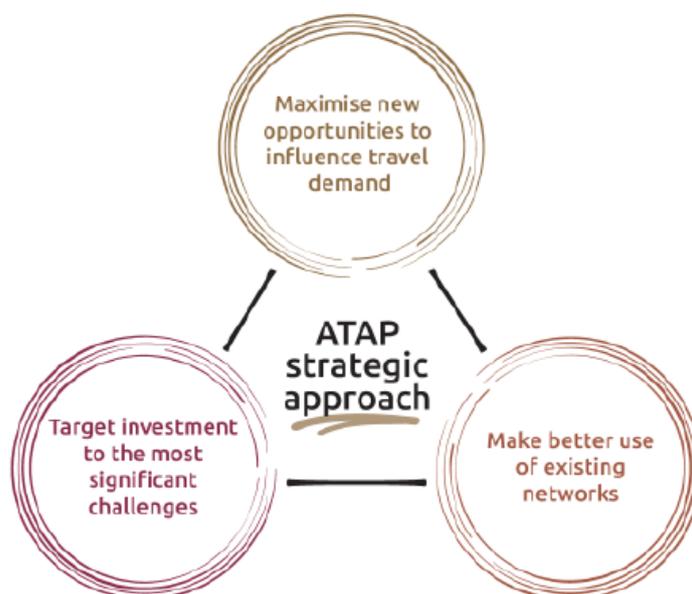
The measures for this outcome are:

- access to jobs
- delays from congestion
- use of public transport, walking and cycling
- household transport costs
- transport related deaths and injuries

How we can implement the plan

Aucklanders have a shared responsibility for implementing the plan. Read more about implementation later in this section.

Auckland Transport Alignment Project Strategic Approach



Better connect people, places, goods and services

Auckland's size and scale supports many economic, cultural, educational and recreational opportunities. These will increase as Auckland grows, but will only be realised if everyone can easily get to them when they need to.

Improving access depends on the entire transport system being managed and developed as an integrated whole, across the different networks (arterial roads, light and heavy rail, motorways, local streets, ferries) and different modes (private vehicle, public transport, walking and cycling).

See Figure 23 - Auckland's future strategic transport network

The system must also cater for the different places where people live and work, from high density urban centres to local suburbs and rural areas.

Making it easier and more affordable for people to get to work, school or training is particularly important for increasing economic productivity and everyone's prosperity.

A transport system that offers reasonable commuting times to a wide range of jobs has multiple benefits:

- it enhances the ability of employers to find suitable workers
- it boosts job satisfaction and business productivity
- it reduces the vulnerability of workers to long-term unemployment in the event of (unforeseen) employment change or job loss.

The efficient movement of goods and services is also essential to prosperity. The Ports of Auckland and Auckland Airport are New Zealand's main international gateways, so Auckland has a significant role in the distribution of freight within Auckland, to neighbouring regions as well as to the rest of New Zealand.

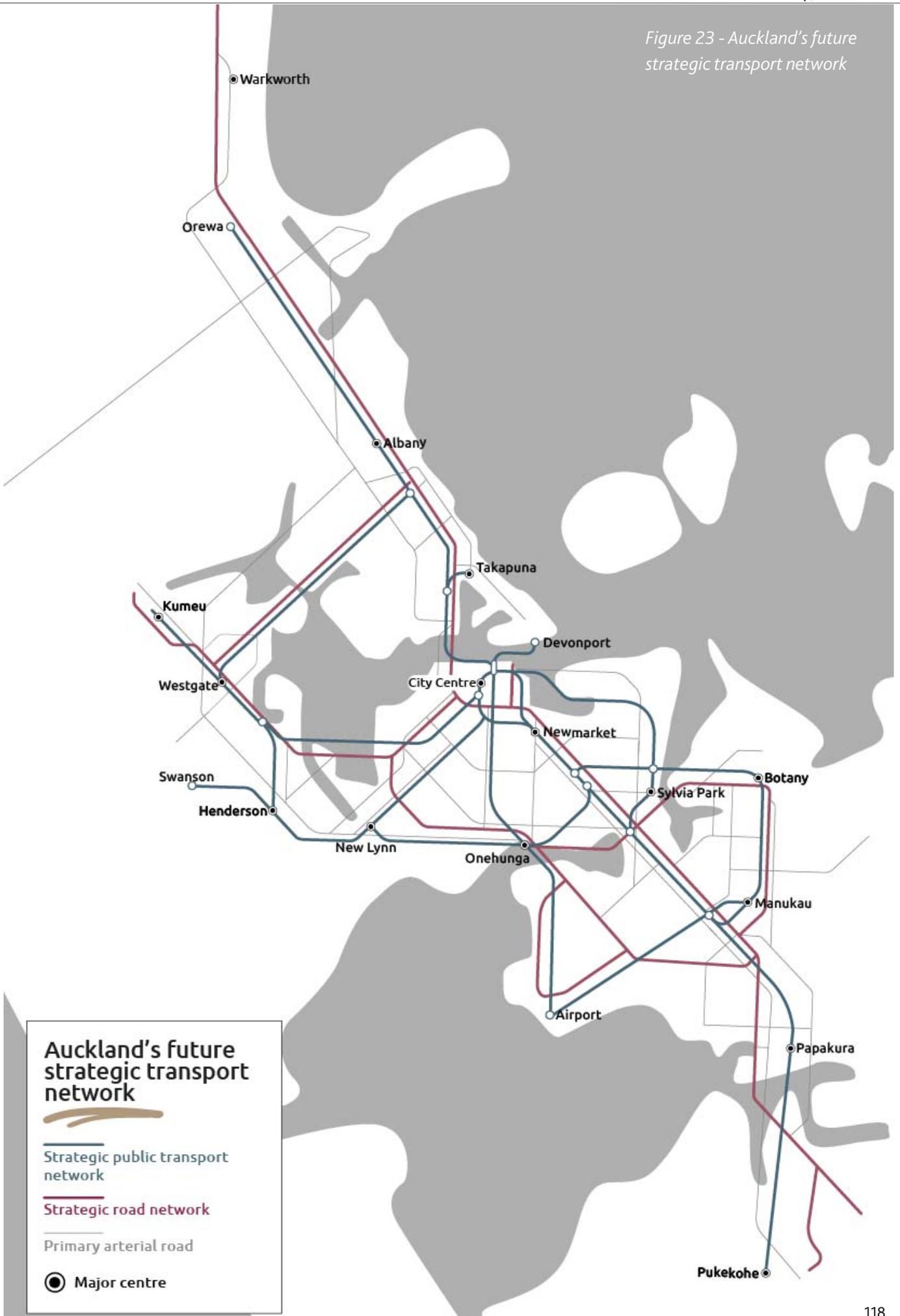
While major upgrades to State Highway 1 to the north and south of Auckland are planned or underway, these improvements may have to be complemented by future upgrades to the rail network to better connect the upper North Island.

Read about Passenger rail transport between Auckland, Hamilton and Tauranga later in this section

The vast bulk of freight and commercial travel in Auckland is by medium and small size vehicles distributing goods to retailers or to homes, and by service workers such as plumbers or electricians. Travel delays and uncertainty about trip times from congestion create real and substantial costs to businesses. This increases costs for everyone.

An integrated approach will improve our ability to ensure consistent service provision, an effective network and affordable travel choices.

Figure 23 - Auckland's future strategic transport network



Increase genuine travel choices for a healthy, vibrant and equitable Auckland

Many of us lack reliable, safe and affordable choices about how we travel. This means we often depend on using private vehicles for most trips.

A lack of travel choice is often a particular problem for lower income households and in rural areas. Transport costs can be a large and unaffordable part of the household budget, making financial pressures worse.

Giving people more travel choices enables them to travel in a way that best suits their particular needs.

See Figure 24 - Graph of the morning peak travel into the city centre from 2001 to 2016 projected for 2046

A lack of choice also means that travel is often long and unreliable, with Aucklanders unable to avoid congestion that wastes precious time and reduces life quality.

By developing Auckland’s rapid transit network and separating public transport from general traffic, as described on The Rapid Transit Network page, we can reduce the impact of congestion on people’s lives and provide more certainty about how long a trip will take.

As Auckland grows it is essential that more people walk, cycle or travel by public transport. This will reduce pressure on our roads and free up room for freight and commercial trips, which are reliant on road travel and make major contributions to Auckland’s economic prosperity. More walking and cycling will also have significant health benefits through increased physical

activity. See more on the Healthy Auckland website.¹²⁹

People-oriented streets are fundamental to the quality of experiences people have in our urban areas. We must therefore also transform how we design the transport network, so it’s about people and places, not just moving vehicles.

Streets are used for a number of purposes, and should be attractive, suitable and enjoyable public spaces for residents, workers and visitors, particularly when travelling by foot.

Achieving this will require a change in the way we design, manage and operate our streets and transport networks.

Our streets need to better reflect the role they play in making up a large part of our public space and in shaping Auckland’s character and the way we live.

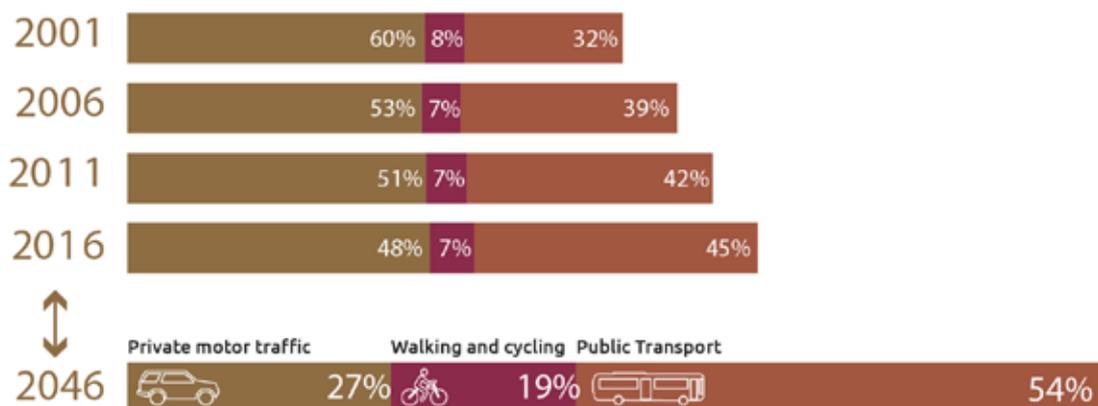
At the same time, it’s important to acknowledge that moving a large numbers of people, goods and services along some key corridors is important for Auckland’s economic success. This means a good balance must be struck between transport and place functions.

Allocating space for vehicles, cyclists, pedestrians, and amenities such as street furniture and trees, is a challenge. This challenge will increase as our population grows.

Figure 24 - Graph of the morning peak travel into the city centre from 2001 to 2016 projected for 2046. Source: Auckland Transport

Morning peak travel into city centre

2001 - 2016 (2046 Projected)



Maximise safety and environmental protection

Our transport system creates unacceptable levels of harm to people and the environment.

Progress has been made in some areas, particularly through cleaner and safer vehicle technology, but much more needs to be done.

There has been a noticeable annual increase in traffic-related deaths and serious injuries since 2012 after many decades of decline.

Reversing this trend requires new approaches to safety. We should be guided by the 'Vision Zero' movement, which aims to eliminate transport-related deaths and serious injuries.

This approach accepts that people make mistakes, and seeks to minimise the harm from any mistakes.

Find out more on the Vision Zero Network website.¹³⁰

See Figure 25 - Graph of the number of road deaths and serious injuries in Auckland from 1981 to 2017

In addition, our approach to transport safety needs to be in line with health and safety legislation which gives people the highest level of protection against harm.

Priorities are to:

- improve the safety for those walking, cycling or riding motorcycles
- address safety issues for people crossing roads and railways.
- improve personal safety and security while travelling.

Overall, to make progress we need to give safety a higher priority in our decision-making than it has at the moment.

We must also do more to minimise the harmful environmental and health impacts of the transport system. It is therefore fundamental that the use of fossil fuels is reduced, and harmful pollutants are prevented from entering Auckland's waterways and atmosphere.

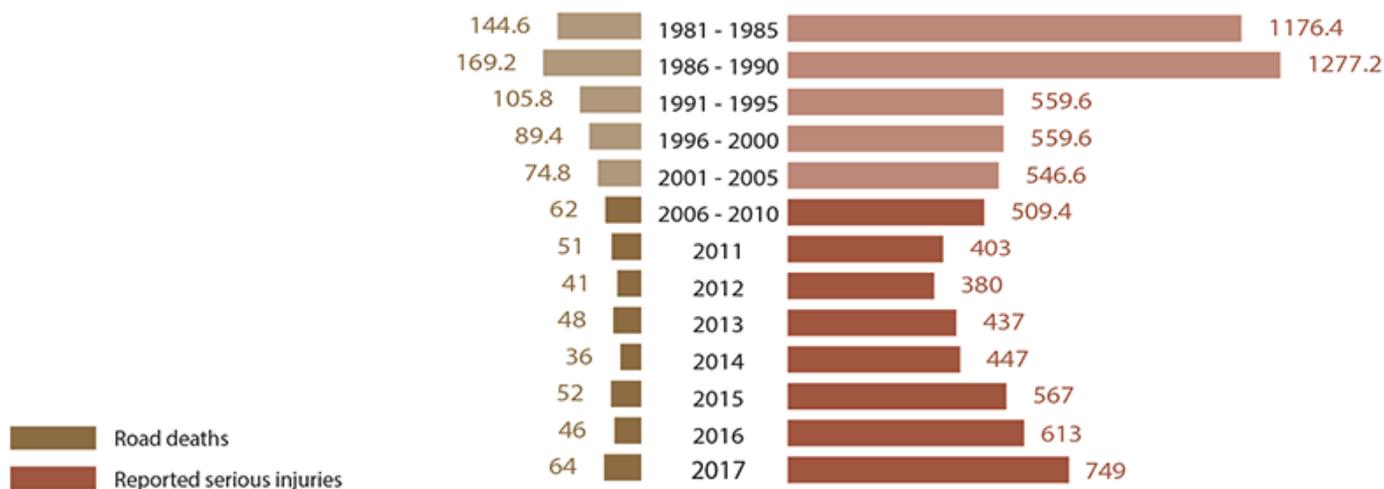
Pollutants and particulate emissions from vehicles and road dust reduce air quality and harm people's health, particularly those who have fragile respiratory systems or who live close to busy roads.

Petrol and diesel vehicles are the largest contributors to Auckland's emissions, which means transport is critical to reducing Auckland's overall greenhouse gas emissions. Making substantial progress on reducing Auckland's greenhouse gas emissions from transport will require a major reduction in the use of fossil fuels.

Figure 25 - Graph of the number of road deaths and serious injuries in Auckland from 1981 to 2017, the statistics are a 5 year average from 1981 to 2011. Source: NZTA

Road deaths and serious injuries

in Auckland 1981 - 2017 (5 year average until 2011)





Paved and sealed surfaces that form part of the transport system, including roads, streets and parking lots, also have negative environmental impacts. Copper, zinc and sediment runoff pollutes waterways.

Impermeable surfaces prevent rainwater from recharging groundwater reserves, add to local flooding, and increase the amount of water that needs to be treated as stormwater.

Make better use of existing transport networks

Adding new roads to Auckland's transport network or widening existing ones is increasingly expensive and difficult. While investment in new infrastructure is required, existing transport corridors will need to accommodate much of the increase in travel as Auckland's population grows.

Making the best use of our existing roads, rail, footpaths, cycle ways, ferries, ports and airports is therefore essential. This will require:

- increased investment in small-scale improvements that help to optimise the existing transport network
- ongoing support for initiatives that best allocate street space between competing uses
- a coordinated approach to freight planning
- robust asset management processes to ensure we look after existing infrastructure.

Our transport system is not used as efficiently as it could be. Most infrastructure is under-utilised outside peak periods, or used inefficiently by vehicles carrying a single person. To improve this, we need to change the demand we put on the transport system.

This means better balancing our need to travel with the capacity of the transport system.

It is likely there will always be some level of congestion at times of peak demand. However to limit the increase in congestion and reduce the need for valuable land to be used as parking, we need to encourage:

- greater use of public transport, walking and cycling
- an increase in the number of people travelling in each vehicle
- taking non-essential trips outside peak times.

Travel planning, parking policies and more flexible working hours will help support these changes. However, to make a 'step change' improvement we need to provide a direct incentive to encourage people to travel more efficiently. This means moving away from the current 'flat-rate' way of charging people to use the transport system – through fuel taxes, road user charges etc. – to a system that varies the charge according to the time and location of each journey.

Before implementing this change, central government and Auckland Council will need to fully understand what effect this will have on people's travel costs so that issues of equity and affordability are understood and addressed.

How this can be done

We will make better use of existing networks by:

- identifying key routes for the movement of people, goods and services around Auckland and ensuring they operate as efficiently as possible
- increased investment into network optimisation initiatives that can deliver significant improvements through small-scale interventions, such as dynamic lanes and intersection upgrades
- progressively shifting to smarter transport pricing. Find out more at the Congestion Question¹³¹ for information about using existing roads efficiently
- continuing to improve the way Auckland's existing transport assets are maintained, and renewed, including better co-ordinating planned maintenance with improvements. Find out more about Auckland Transport Asset management.¹³²

Target new transport investment to the most significant challenges

While it's not possible to solely build our way out of our transport challenges, population growth means we need to continue to expand and upgrade our transport networks. An increase in funding from recent levels will be required to make genuine progress.

The very large scale of investment required across the whole network means that funding needs to be targeted, strategic and effective. Fixing all of Auckland's transport challenges at once is unaffordable, which means we need to focus first on the most severe challenges.

Joint strategic planning and integrated priority setting are essential for deciding when, where and how investment in new infrastructure should be made.

Working together, regionally and nationally, will help to ensure that new investments deliver best value for money, focus on the most appropriate travel mode and are made at the right time and the right scale.

The future is uncertain, so it's important to trial small-scale interventions and test decisions against a variety of futures.

The Development Strategy has detail on the key transport investments that will be needed to support development across Auckland.

How this can be done

Investment in new infrastructure and services must:

- upgrade and expand Auckland's strategic road, rail and other public transport networks to ensure they operate effectively and efficiently as the population grows
- improve Auckland's inter-regional and international road, rail, port and airport connections, as described on the Ports of Auckland page, which are critical to New Zealand's economic and social success
- use the most suitable travel mode to address the problem and ensure the different parts of our transport network operate as an integrated whole
- move to a "scenarios-based" approach to planning and decision-making, where strategies and major investments are assessed against a range of potential futures
- address disparities in access to opportunities, particularly where this exacerbates existing inequities of travel choice and cost. Find out more in The Equitable transport access across Auckland later in this section.

Maximise the benefits from transport technology

Transport technology is developing quickly and has the potential to help provide new and better travel options.

In the short-term, technology changes are likely to make real time travel information more readily available.

This will help us plan our travel more easily, help avoid the worst impacts of congestion, and help deliver improved and real time solutions (for example, dynamic traffic light sequencing, faster responses to incidents, or changing the allocation of street space between uses).

In the medium to longer-term, developing technologies like connected and autonomous vehicles (including public transport) especially when combined with ride-sharing, have the potential to fundamentally reshape the way transport is used and provided, blurring the boundaries between private and public transport.

These developments could create a number of benefits, including:

- increasing the number of vehicles that can travel on a road at the same time (particularly on motorways), lowering congestion and reducing the need for road widening
- reducing deaths and serious injuries from traffic incidents
- more efficient provision of public transport services
- new travel choices for everyone, regardless of age and ability, and to parts of Auckland difficult to efficiently serve with traditional public transport (e.g. rural areas).

There is also a risk that these technology advances could create negative effects, particularly if they lead to large-scale growth in vehicle travel or poorer quality street environments. Ongoing monitoring and regulation may be required to minimise these risks.

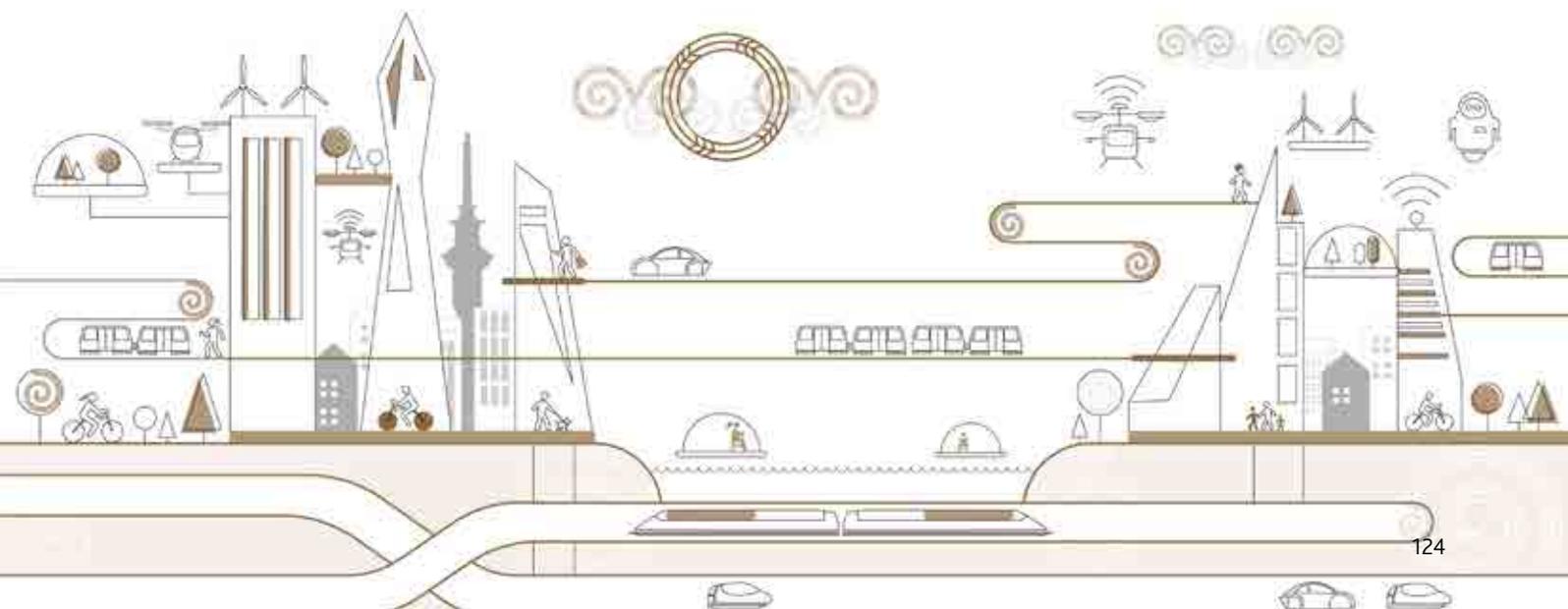
While rapid technological progress is anticipated, it's hard to know which developments will be successful or when we will be able to use them.

Realising benefits from technology will require us to focus on trials, safety, enabling regulation and supporting infrastructure.

How this can be done

Efforts to maximise the benefits of transport technologies must:

- encourage innovation and support a 'fail fast' culture where a wide variety of new transport ideas can be tested, adapted, developed or discarded
- boost the use of big data and open data to improve travel information for Aucklanders, support better network management decisions, and provide effective demand management tools
- encourage the uptake of new technologies such as more intelligent network management, connected and autonomous vehicles, and vehicle sharing. Find out more about Auckland Transport Technology Strategy.¹³³



Make walking, cycling and public transport preferred choices for many more Aucklanders

More Aucklanders will walk, cycle and use public transport if it is accessible, efficient, affordable, reliable, safe, and attractive.

Substantial progress has been made in recent years. However, many parts of Auckland, particularly outer suburban and rural areas, still lack good access to these options.

To make public transport a preferred travel choice, we need an integrated system that consists of:

- a rapid transit network that provides fast, frequent and reliable travel between major parts of Auckland
- frequent, connector and local public transport services, often running in dedicated bus or transit lanes, that focus on more local trips and provide access to rapid transit
- walking, cycling and park and ride facilities that make it easy for people to access public transport.

Further detail on our approach to public transport is outlined in the Regional Public Transport Plan.¹³⁴

While improvements are required across Auckland, a key focus of investment must remain on trips to busy locations like the city centre, metropolitan centres and other major employment areas (e.g. Auckland Airport). Large numbers of people travelling by car to these locations creates widespread congestion and requires a lot of valuable land to be used for parking, instead of more productive uses like homes and businesses.

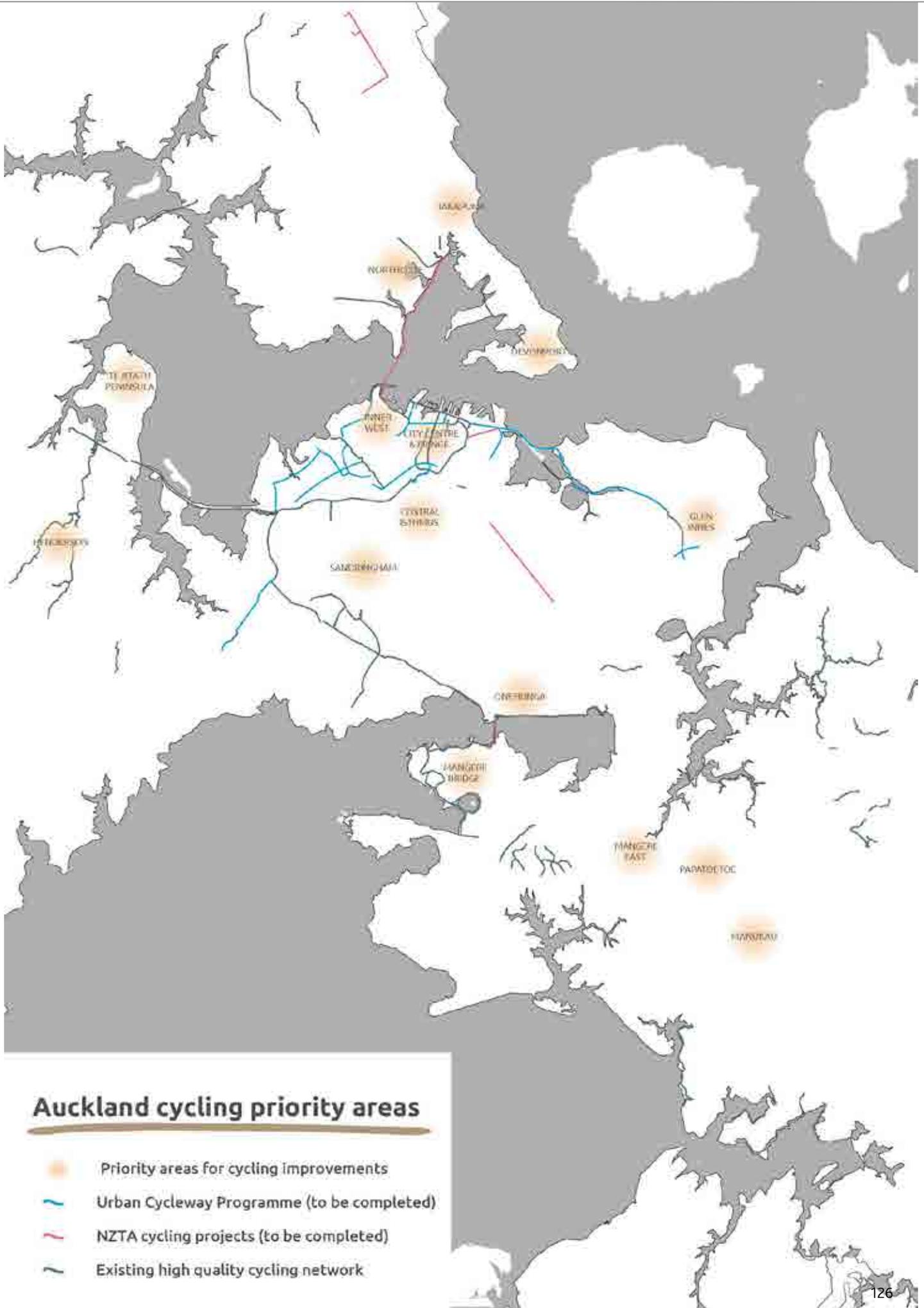
The safe cycling network is still in the early stages of its development. There has recently been a significant increase in investment, generating unprecedented growth in the number of cyclists where improvements have been made. Read more on the Making Auckland more cycle friendly page.

It is essential that walking and cycling accounts for a greater share of short- and medium-distance trips as Auckland grows to reduce pressure on the road and public transport networks, and for their inherent health and environmental benefits. This will require sustained effort and investment into safe and attractive cycling routes across Auckland.

How this can be done

We will make walking, cycling and public transport attractive travel choices by:

- continuing to implement initiatives such as dedicated bus lanes¹³⁵ and cycle ways¹³⁶ that enable faster, safer and more reliable travel, particularly where a lot of people live and work and along highly congested routes
- designing and managing streets¹³⁷ in a way that prioritises walking, cycling and quality urban spaces, including speed management and safe crossing opportunities
- making frequent, efficient, affordable and reliable public transport more widely available
- improving access to public transport through walking and cycling upgrades, feeder services, and park and ride facilities¹³⁸
- implementing the universal design approach and embedding accessibility into all parts of the journey, to make it easier for people of any age and ability to move around. For more information visit the Universal Design website.¹³⁹



Better integrate land-use and transport

Transport infrastructure and services are important for enabling and supporting population and housing growth in new and existing urban areas, while the location of growth affects how well the transport system performs. Because transport and land use are so strongly connected, all decisions need to consider their impact on the other.

Inefficient land use patterns lead to longer trip lengths and travel times. To address this challenge, we need to encourage housing and employment growth to areas with better travel options.

Encouraging growth into areas with better travel choices will result in more use of public transport, walking and cycling. This will ease some of the pressure growth places on our transport system.

Integrating land use and transport is particularly important for rapid transit. The speed and reliability of rapid transit improves the accessibility of an area, making it more attractive for redevelopment.

Unlocking growth around rapid transit corridors and stations is essential to address Auckland's housing and transport challenges. It will also maximise the benefits from the large investment required to build and operate rapid transit.

Integrating land use and transport is also required at the street level, particularly as Auckland grows and competition for street space increases. The planning and design of our streets must support quality, vibrant urban amenity and good living environments.

This means we need to find the right balance between a street's transport function and how the street space also caters for other uses, such as pedestrians and general place making.

Auckland Transport's Roads and Streets Framework¹⁴⁰ outlines how this will be done.

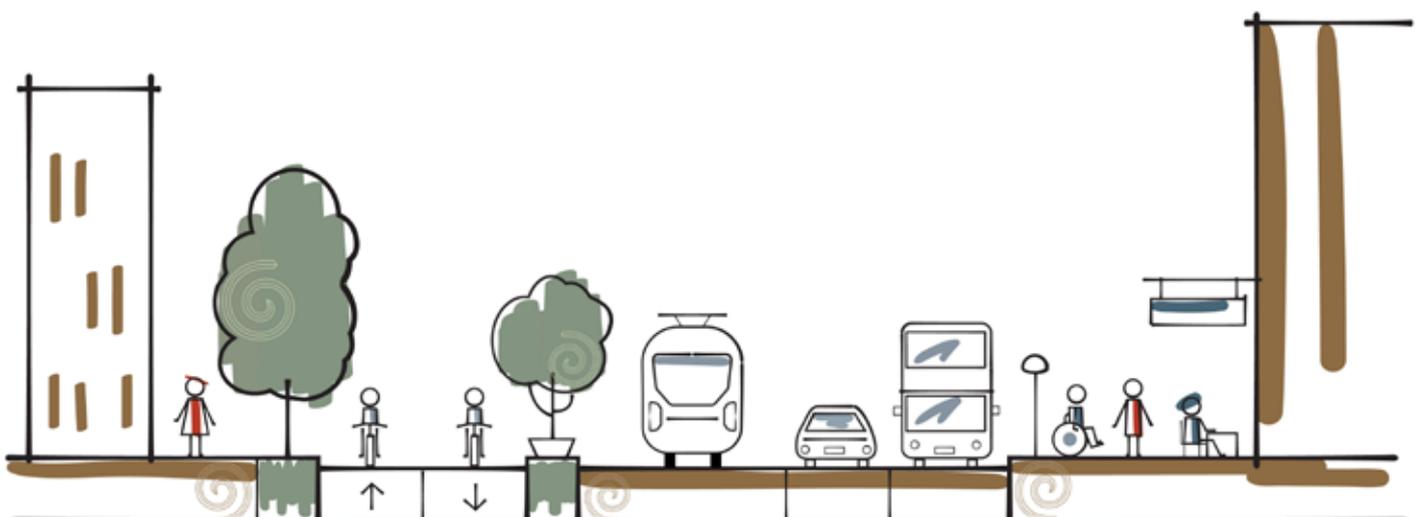
Auckland's Transport Design Manual¹⁴¹ provides design and technical specifications that support this framework.

Designing streets and transport facilities to reflect Māori culture, through the use of Te Aranga design principles will help affirm Auckland's unique point of difference. Find out more about these principles on the Auckland Design Manual website.¹⁴²

How this can be done

Better integration of land use and transport to support quality urban living will include:

- prioritising transport investment that supports intensification in the existing urban area, supports growth in new urban areas and improves connections between these newly developing areas and the rest of Auckland. Find out more about the Supporting Growth Project¹⁴³
- encouraging housing and employment growth in areas with better transport connections
- designing and managing streets¹⁴⁴ in a way that creates vibrant and inclusive places, reflects local character and our Māori identity, and uses good design to manage any trade-offs between vehicle movement and place making functions.



Move to a safe transport network free from death and serious injury

There have been substantial reductions in road-related deaths and serious injury for most of the past 30 years, despite a growing population and an increase in total travel.

However, since 2012, these trends have reversed, with pedestrians, cyclists and motorcyclists facing the greatest safety risk.

This increase suggests previous initiatives are no longer as effective and a new approach to safety, with solutions that make a real difference, is needed.

While eliminating all deaths and serious injuries may be challenging, the starting point must always be that they are unacceptable. This starting point must influence all transport decisions, including project design, regulations, enforcement and investment choices.

Moving to a truly safe transport network will require a greater emphasis on safety in decision-making. Compared to the way we have done things in the past, we will:

- allocate a greater part of the transport budget to dedicated safety projects
- change the way we evaluate potential transport investments
- place greater emphasis on safety in the design of new or upgraded infrastructure
- make necessary regulatory changes to promote safety, such as targeted speed limit reductions
- seek to improve travel behaviour by placing greater emphasis on enforcement, and through public awareness campaigns.

Real and perceived safety and security concerns discourage many people (particularly women, seniors and children) from using public transport, walking and cycling, especially after dark. Ensuring these travel options feel safe to all Aucklanders will help encourage their greater use.

How this can be done

Efforts to achieve a safer transport network must:

- increase investment into dedicated safety projects targeted to the highest risk locations (including intersections, high risk routes and road/rail level crossings). Find out more about the Regional Land Transport Plan¹⁴⁵.
- ensure that safety and accessibility for people of all ages or ability is central to the design of transport infrastructure, as described on the Universal Design website¹⁴⁶.
- introduce appropriate speed limits in high-risk locations, particularly residential streets, rural roads and areas with high numbers of pedestrians and cyclists
- upgrade rural roads, especially where urbanisation is likely to result in increased demand.
- use Crime Prevention through Environmental Design principles to improve real and perceived safety. Find out more about creating safer places¹⁴⁷.

Develop a sustainable and resilient transport system

To make our transport system more sustainable it needs to:

- be more resilient in the face of increasing change
- minimise negative impacts on the environment.

Increasing the sustainability of our transport system will:

- improve Auckland's air quality
- reduce its vulnerability to future oil shocks
- reduce run-off from the road network into our waterways
- mitigate climate change - read more about climate change on the Low Carbon Auckland¹⁴⁸.

Improving the resilience of our transport system in response to potential long or short-term disruption is also crucial. We face a number of potential challenges in this regard, including:

- the impacts of weather events
- long-term impacts of climate change
- disruptions arising from accidents, damage or incidents on the network
- fuel shocks
- impacts from new technologies.

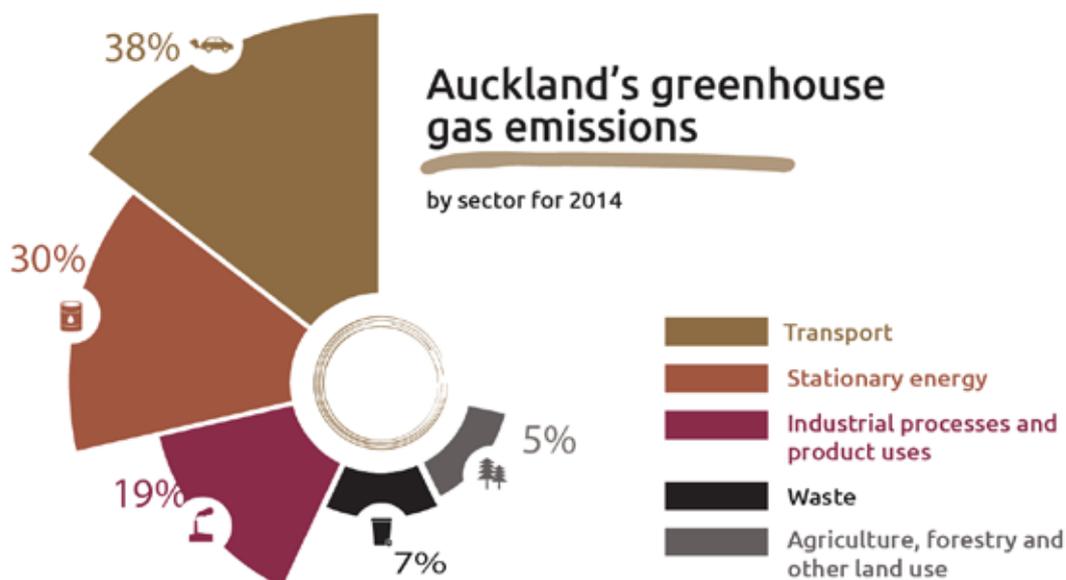
Decisions must also be made in a way that reduces the risk of investments being 'caught out' by rapid change, whether arising from climatic conditions, technological developments or other forms of change.

How this can be done

Efforts to develop a more resilient and environmentally responsible transport system must:

- progressively eliminate transport greenhouse gas emissions by reducing the need to travel, improving fuel efficiency, encouraging the uptake of electric vehicles and improving travel options (particularly walking, cycling and public transport). Find out more at Low Carbon Auckland¹⁴⁹
- identify parts of the transport network where disruption would have significant and widespread impacts, and develop appropriate strategies to improve their resilience
- progressively reduce the harmful pollutants that enter our waterways and atmosphere
- reduce the impact of non-permeable surfaces on runoff and the creation of urban heat islands.

Figure 26 - Graph of Auckland's greenhouse gas emissions by sector for 2014. Source: Auckland Council



Implementing the Transport and Access outcome

Implementation partners

The New Zealand Transport Agency, Auckland Transport and KiwiRail are the main planning and delivery agencies that will develop and improve the Auckland transport network to achieve the Auckland Plan.

Auckland Airport and the Auckland ports provide key connections between Auckland and the rest of the world.

The future of the sea port on the city centre's waterfront is being considered. Any future change in location is likely to fall outside the timeframe of this plan; if any concrete decisions are made they will be reflected in the plan.

Advocacy groups play important roles in influencing how Aucklanders and businesses make transport choices.

Auckland Council will develop an implementation approach for this outcome working alongside our key partners and stakeholders. This will be built on existing programmes and ensure all new elements introduced in the Auckland Plan 2050 are planned for.

Mechanisms used to work together

Joint planning and prioritisation processes are crucial to provide the best transport solutions to support Auckland's growth.

Auckland Council and central government reached broad agreement on a long term strategic approach to developing Auckland's transport system through the Auckland Transport Alignment Project.¹⁵⁰

The agreed approach is converted into action through the three-yearly Regional Land Transport Plan (RLTP)¹⁵¹ which sets out the optimal timing and sequencing of projects given available funding.

Reliance on traditional funding tools is becoming increasingly inadequate to meet Auckland's transport investment needs.

Continued efforts will be needed to assess options for increasing transport funding and how to spread these costs across central and local government, users and non-users, in a fair and equitable way.

Supporting strategies and plans

Auckland Transport Alignment Project (ATAP)

ATAP is a strategic exercise to align the transport priorities of central government and Auckland Council. In 2018, ATAP was updated to place a greater weight on public transport (especially rapid transit), walking and cycling, improving safety, and realising environmental, health and growth outcomes.

Visit the ATAP website¹⁵² for more information.

Auckland Regional Land Transport Plan (RLTP)

This is a plan to respond to growth and the other challenges facing Auckland. The Government Policy Statement on transport and the Auckland Plan set the strategic direction for the RLTP. Funding for the RLTP is provided through the Auckland Council's Long-term Plan, the National Land Transport Programme and through other central government budgets.

Low Carbon Auckland

This plan identifies the way we travel as one of five key areas of transformation to achieve a sustainable, energy resilient, low carbon future. See Low Carbon Auckland¹⁵³ for more information.

Transport safety strategies

Visit the Safer Journeys website¹⁵⁴ to read about the government's current strategy to guide improvements in road safety.

Auckland Transport also has a number of initiatives to support safer communities, particularly partnerships with national agencies on improving road safety and reducing the number of people killed or injured on Auckland's roads. Read about these initiatives on the Auckland Transport website.¹⁵⁵

The Congestion Question

Similar to ATAP, the Congestion Question is a joint project involving the Auckland Council, the Ministry of Transport, Auckland Transport, the NZ Transport Agency, the Treasury and the State Services Commission.

The project will investigate different pricing options and test whether these could improve congestion results, taking into account the impact of these options on affected households and businesses.

Visit the Congestion Question website¹⁵⁶ for more information.

How to get involved

- Get inspired about places to ride, run and walk in Auckland by visiting the Auckland Transport website¹⁵⁷
- Consider taking more trips by public transport. Find out more on the Auckland Transport website.¹⁵⁸

Supporting information

Transport and Access in Auckland, 2050

Rapid Transit Network

Making Auckland more cycle friendly

Passenger rail transport between Auckland, Hamilton and Tauranga

Equitable transport access across Auckland

Rapid Transit Network

Rapid transit forms the backbone of Auckland's public transport network.

It provides fast, frequent and high capacity services along corridors separated from general traffic and is therefore not affected by road congestion.

Auckland's rapid transit network barely existed a decade ago, but now carries over 26 million passengers a year, with use continuing to grow strongly.

This is a result of investment in:

- rail electrification and new trains
- track and station upgrades
- construction of the Northern Busway.

The rapid transit network will need to play a central role in meeting the travel needs of a fast-growing region, as well as supporting and shaping Auckland's growth and urban form.

In particular, only rapid transit can:

- efficiently move large numbers of people to intensely developed places like the city centre and other major centres
- dramatically increase the number of people able to travel between major parts of Auckland (north, central, west and south)
- provide a fast and reliable travel option that encourages people out of their cars for longer-distance journeys
- deliver long-lasting access improvements to areas near rapid transit stations, which improves their attractiveness for redevelopment.

Major improvements to Auckland's rapid transit network are necessary for it to meet these requirements. In particular, large parts of Auckland are still not served by rapid transit, while existing parts of the network will need to be upgraded to meet future demand.

We may expand or upgrade the rapid transit network through bus improvements, light rail, heavy rail or frequent ferry services.

This will depend on forecast levels of demand, integration with the existing network and cost-effectiveness.

The map below provides an indication of the location and likely mode of Auckland's future rapid transit network:

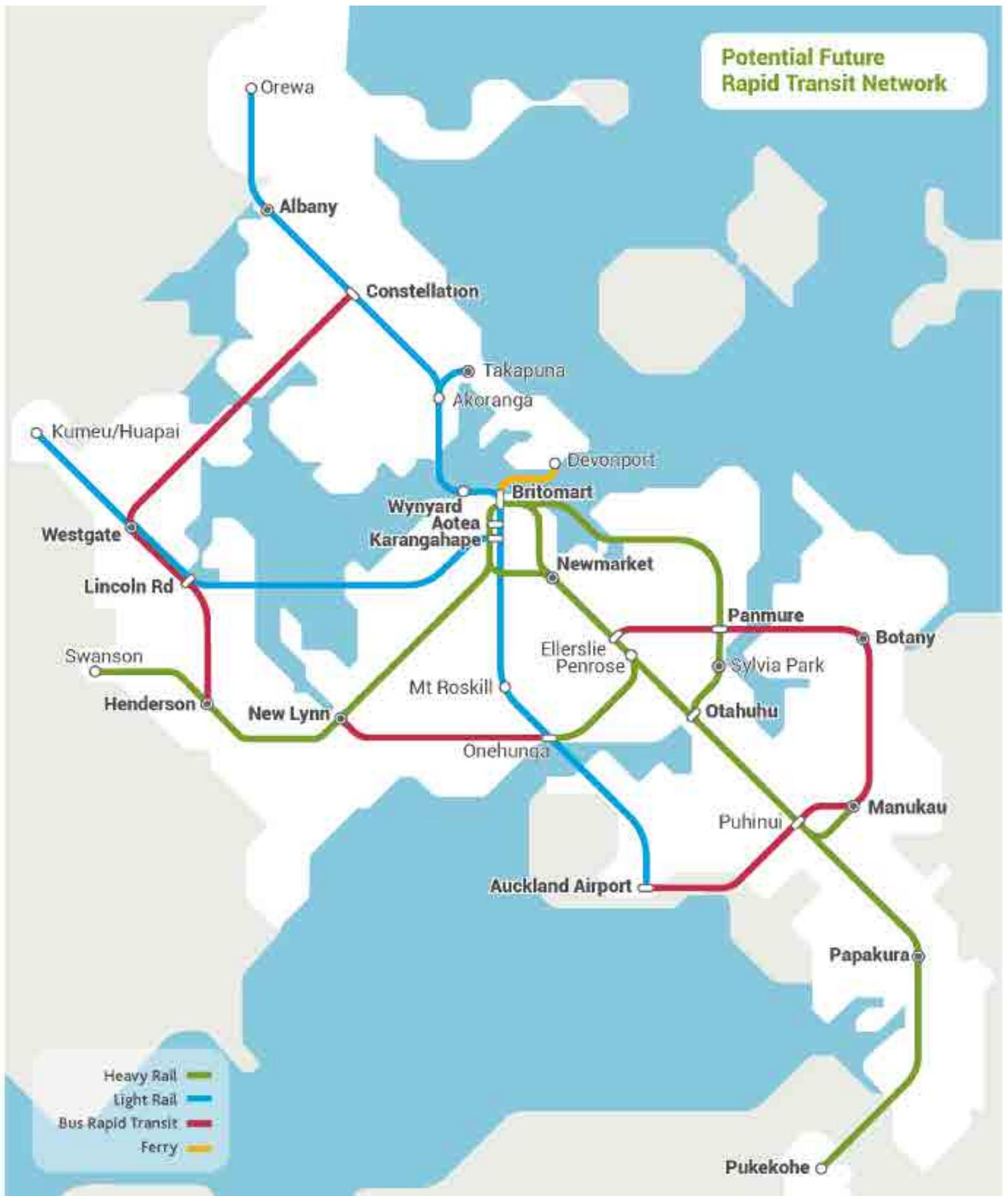
See *Figure 27 - Rapid Transit Network Map*.

Robust analysis will be required on a case-by-case basis to confirm the exact timing, alignment and technical specifications of each corridor.

Making the most of the rapid transit network will need complementary initiatives, including:

- improving access to rapid transit stops and stations through walking and cycling improvements, feeder bus services and appropriately placed park and rides
- providing frequent, reliable and attractive services that are intuitive and easy for everyone to use
- providing supportive land use policies that enable and encourage growth into areas within walking distance of rapid transit stations and stops.

Figure 27 - Rapid Transit Network Map. Source: Auckland Transport Alignment Project ¹⁵⁹



Making Auckland more cycle friendly

Cycling is often not a safe or easy way to travel for many Aucklanders. Not many people use their bikes to travel to work, school, shopping or many other daily activities.

Getting more people to cycle will help:

- ease congestion by reducing the number of people in cars, trains and buses - especially for shorter trips in busier areas
- increase people's travel choices, particularly for those living in lower income households where travel makes up a significant part of their household budget
- reduce the environmental impact of travel
- improve the health of people who cycle.

What other cities are doing

Auckland has much to learn from other cities about how to dramatically increase the number of people cycling.

For example, up to a third of all travel in Amsterdam and Copenhagen is by bike. Only 20 to 30 years ago these places had much lower levels of cycling.

In younger cities, such as Vancouver, Portland and Seattle, sustained effort into separated cycle routes has substantially increased the share of travel by bike.

What Auckland is doing

Between 2015 and 2018, central government and Auckland Council invested around \$200 million in cycling. This investment was the first step towards developing complete cycle networks in and around the city centre. It included improvements such as separated cycle lanes and painted arrows on quiet residential streets.

This approach:

- improves safety for people who already cycle as their main way of getting around.
- aims to get more people to take up cycling.

The recent investment has added an additional 27 km of cycleways in central parts of Auckland and is already increasing the number of people cycling.

Focusing our efforts

While this recent investment has taken the first steps towards making cycling a safer and more attractive travel option, we need to maintain efforts to join up incomplete networks and extend this across more of Auckland. Efforts need to be targeted to the areas of greatest need and opportunity.

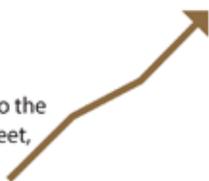
The following factors have influenced where efforts will be focused over the next decade as:

- short to medium average trip length
- high socio-economic deprivation
- concentrations of young people
- locations with poor transport choices
- high employment and education activity
- number of crashes.

The Auckland Transport Alignment Project (ATAP)¹⁶⁰ includes around \$650 million of funding for cycling over the next decade, enabling recent progress to be continued. ATAP also signals that cycling is a high priority for additional investment if extra funding becomes available.

248%

Increase in cycle trips into the city via Upper Queen Street, since 2013.



45,600

New cyclists in 2016, enough to fill Mt Smart Stadium.



New connections in the cycle network has created a

44%

increase in people on bikes using the Northwestern Cycleway.

Because we've just built 27km of new cycleways:



27km of new cycleways.

39%

of Aucklanders are positive about the state of cycling, compared with 22% in 2015.

Passenger rail transport between Auckland, Hamilton and Tauranga

Auckland, the Waikato and the Bay of Plenty are home to just under 50 per cent of all New Zealanders (as at the 2013 Census).

Combined, these areas:

- account for half of New Zealand's gross domestic product and
- are likely to account for more than 70 per cent of New Zealand's population growth over the next 30 years.

Recent improvements to road transport between Auckland and Hamilton, in particular progress towards completing the Waikato Expressway, have created substantial travel time and safety improvements. However, at peak times journeys are likely to remain long and relatively unreliable, largely because of congestion on Auckland's southern motorway.

Fast and frequent passenger rail services between Auckland, Hamilton and Tauranga would offer a congestion-free alternative to road travel. This would also complement the upgraded road network and therefore provide a better road travel experience for those who continue to drive.

Inter-regional passenger rail has the potential to reduce travel times between Auckland and Hamilton to just over an hour, and reduce times between Tauranga and Auckland to around two hours.

Travel time improvements of this scale would be transformational for this inter-regional corridor by:

- improving economic integration between the Auckland, Waikato and Bay of Plenty regions
- supporting substantial housing and employment opportunities along the rail line as a result of inter-regional commuting becoming a more attractive travel option
- creating vibrant, affordable and successful urban areas in southern Auckland and the North Waikato.

The services would also:

- provide an express rail service within Auckland, which would reduce travel times between Auckland city centre and Auckland Airport (via connection at Puhinui Station) as well as to southern growth areas
- make better use of the existing rail network

- improve the resilience of the transport network
- reduce congestion, transport related emissions and deaths and injuries occurring on the road network.
- reduce the conflict between freight and passenger rail services within Auckland.

Past proposals for improving passenger rail services have not provided sufficiently attractive travel times and frequencies to encourage use.

This is because they have been based on the use of slow trains, limited track upgrades and have not been able to reach Britomart Station because of its capacity constraints.

For rail to be successful, it will require a substantial investment programme that includes:

- new, faster trains
- completion of the City Rail Link to enable use of Britomart Station by regional trains
- track upgrades within Auckland (including a third or fourth main line on busy sections of track) to separate fast inter-regional trains from commuter trains
- rail electrification to (and potentially beyond) Pukekohe
- track and station upgrades outside Auckland.

A high level investigation into inter-city passenger rail is under way.

See Figure 28 - Rapid regional rail network proposed by central government

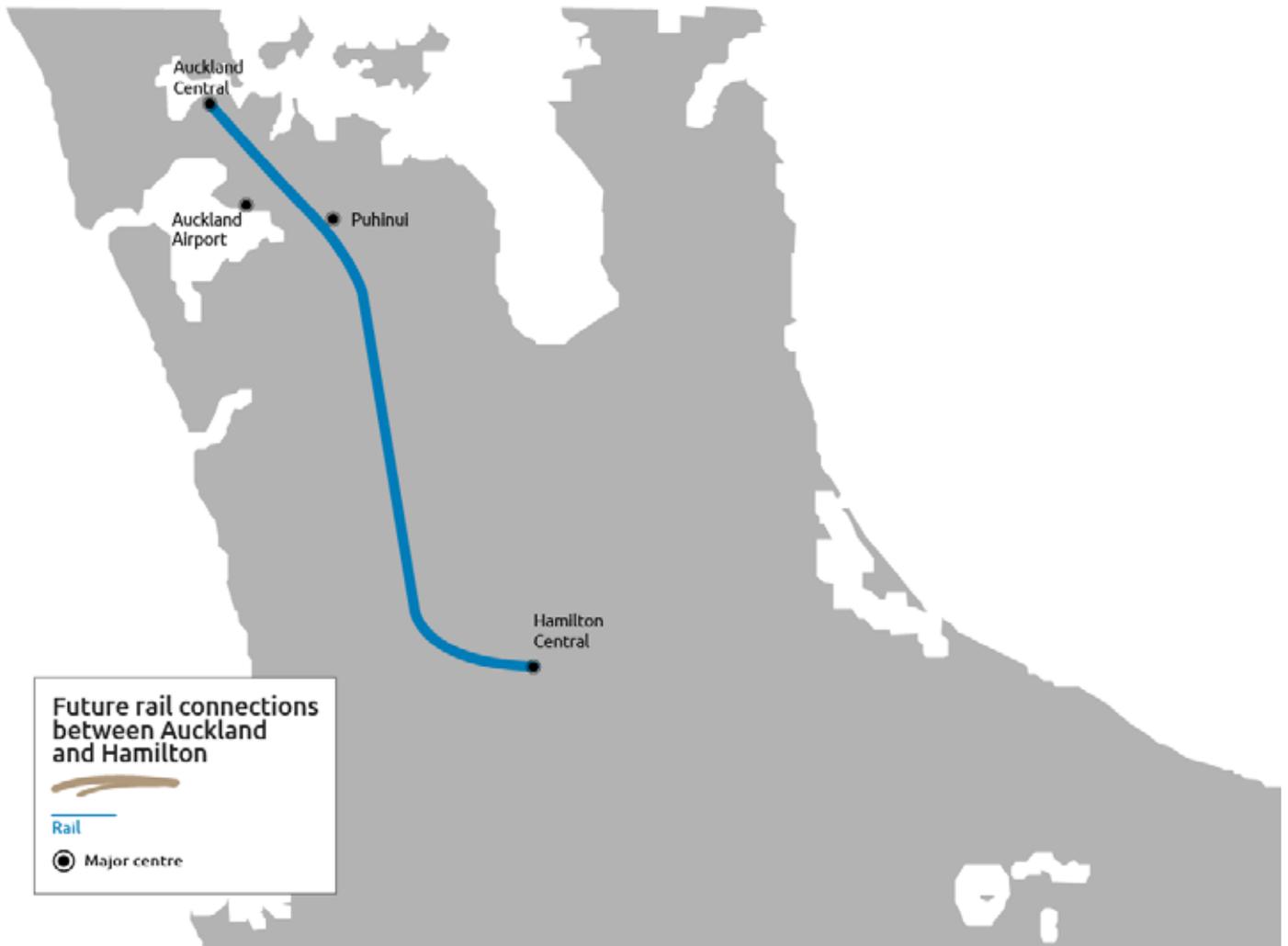
Data sources

Statistics New Zealand. (2013). 2013 census data¹⁶¹ accessed 31 October 2017

Statistics New Zealand. (2016). Regional gross domestic product: year ended March 2016,¹⁶² accessed 31 October 2017

Statistics New Zealand. (2016). Subnational population projections 2013 base to 2043 update (released 2016),¹⁶³ accessed 31 October 2017

Figure 28 - Rapid regional rail network proposed by central government



Equitable transport access across Auckland

Auckland's growth is forecast to create major challenges in getting around, especially commuting to and from work. For many people, work will be a long distance away from home, meaning long journeys.

Housing growth is expected to take place across Auckland, including in new greenfield areas on the urban periphery. At the same time, the ongoing evolution of Auckland's economy means job growth is expected to cluster in major centres.

What this means

Without major intervention, the way Auckland is expected to grow means many people (particularly those in the south and the west) may need to travel further to reach their jobs. This will put additional pressure on our transport networks and ultimately limit or reduce the number of jobs that can be reached within a reasonable commute time.

Improving access to employment is a key way of improving prosperity and lifting people out of poverty. So it is particularly concerning that the areas facing the greatest challenges in accessing employment are also some of the most economically deprived communities in Auckland.

Addressing this challenge will need to be an ongoing focus of transport and growth planning in Auckland.

What we can do about it

We need to focus on both improving the transport system and shaping the way Auckland grows. This includes:

- encouraging much stronger business growth and employment opportunities around Albany, Westgate and Manukau, so that people have more options to work or study close to where they live
- encouraging substantial housing growth in inner areas and along main transport routes
- making better use of existing transport networks, which includes increasing the share of travel by walking, cycling and public transport
- increasing opportunities to walk and cycle as low-cost travel options, particularly in areas of high socioeconomic deprivation
- targeting investment in new transport infrastructure to help ensure employment access improves over time.

See Map 8 - Access to Jobs (via Public Transport within 45 minutes) and Map 9 - Access to Jobs (via Car with 30 minutes)

