



# Access Hamilton

**STRATEGY**

**Ara Kootuitui Kirikiriroa**  
August 2022



**Hamilton  
City Council**  
Te kaunihera o Kirikiriroa





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# Foreword

## Mayor of Hamilton Kirikiriroa Paula Southgate

I am very proud to have been part of developing the Access Hamilton transport strategy. It signals fundamental and critical change is ahead for the way we move around our city. That is exciting and is something I personally welcome.

This is a very important piece of work on many levels. It has a very strong focus – as it should – on safety. It shines a spotlight on the responsibility we all have to provide genuine and inclusive travel choices. It also emphasises the role transport plays in helping to provide an enjoyable and safe city that all people can enjoy.

Access Hamilton aligns with other Hamilton City Council strategies, including those concerned with climate change and growth. Its focus is on a resilient and sustainable transport network which puts people at the heart of decision-making. That is how it should be.

It also reflects our aspirations for ensuring growth in our city continues to be well-managed. In that respect, Access Hamilton will take a key role in helping Council prioritise which projects to fund, not just immediately, but in the long-term. A long-term view of transport and transport networks is increasingly important as our city grows and develops.

Finally, this strategy has not been developed in isolation from other regional partners, or indeed from central government which has made its priorities around transport clear. Those priorities are shared, and Access Hamilton puts a stake in the ground to ensure we will work together to ensure our shared goals are realised.

I congratulate the staff involved in developing this transport strategy; it is an exemplary piece of work. It has been developed with the guidance and involvement of all Elected Members, led by Councillor Angela O’Leary. I thank all involved, including Hamiltonians, for their very active participation in bringing Access Hamilton to fruition.

### Paula Southgate

Mayor



## Infrastructure Operations Committee Chair Angela O’Leary

How we move people and ‘things’ around our city is a vital part of our way of life. It’s so embedded in our daily lifestyle that we rarely pay it much attention.

But as one of New Zealand’s fastest growing cities, we know that congestion is slowing down our morning commute to work, we know that finding a park near the sports fields for the kids on the weekend is getting harder, and that while lots of us like the idea of biking locally on a lovely summer day, we don’t feel that it’s safe enough yet.

This is why we have put people at the front of this strategy.

We want everyone to be able to move safely from their homes to work, and to all those special places in our city that we love to visit.

To achieve this, we need a transport network that everyone can access, and most importantly one where everyone is safe.

The challenge of increasing congestion and the lack of safe ways to travel, means travelling around our city is taking longer, so we need to include more choices for how we can move around, whether that be by car, or bike or bus or walking.

Our biggest opportunity is developing safe new ways for us to take that short trip. Whether that’s grabbing some tasty takeaways on a Friday night, or just popping in to see a friend, we want to provide other choices so that we don’t always have to rely on our car.

We know that if we can achieve safe and separated cycle lanes that more of us will choose to take the bike instead of the car for short trips. By widening our footpaths and improving the amenity along them that more of us are likely to walk. We know this because you’ve told us.

It’s also important to us to ensure that our roading network continues to operate efficiently for a growing city and that when we do need to take the car, we are able to travel on our local roads safely. We need to ensure that our businesses and economy can rely on the freight movements they need to do business well.

Hamilton is at an exciting time and the opportunities we have are vast to build a great transport network that will improve our lifestyle and add to the health and wellbeing of both our people and our environment.

This plan tells the story of where we are and the challenges we face. But more importantly, Access Hamilton tells us – as one of New Zealand’s fastest growing cities – where we want to go.

### **Councillor Angela O’Leary**

Chair – Infrastructure Operations Committee



# Vision

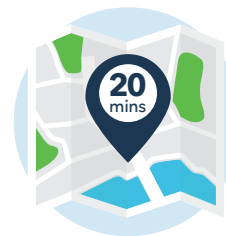
*"Our transport network  
enables everyone to  
connect to people and  
places in safe, accessible  
and smart ways"*



## The outcomes we want to achieve

- Everyone is safe and feels safe while using our streets and public spaces
- A low-emission transport system that is resilient against climate change
- Hamilton Kirikiriroa is a great place to live for everyone
- A healthy te awa o Waikato and natural sites which sustain abundant life and prosperous communities for all generations
- More people choose to travel on foot, by bike, by bus, or using micro-mobility devices such as scooters
- Hamilton Kirikiriroa is accessible for all because it has a city culture and heritage that is shared, protected and celebrated
- Hamilton Kirikiriroa is a great place for everyone to work and do business
- An adaptable, future-ready transport system that supports quality and compact urban form.

## The opportunities we have



**A 20-minute city**

**An easy walking and biking city**



**Parks and green spaces**

**Te awa o Waikato (the Waikato River)**

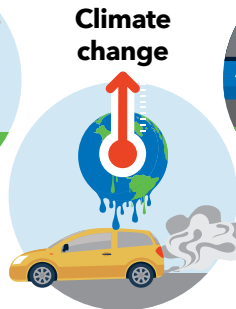


**Young population that embraces change**

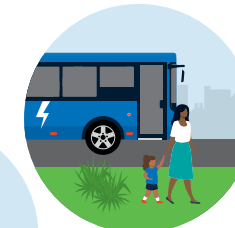
## The challenges we're facing



**Population growth**



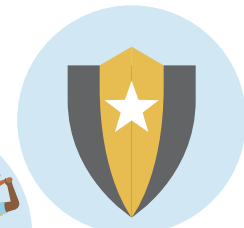
**Climate change**



**Limited travel choices**



**Inclusivity for all**



**Safety and perception of safety**

# Our Hamilton Kirikiriroa

the heart of the North Island

**4th**  
largest city in  
New Zealand

Part of the  
**golden triangle**  
of economy



Diverse with over  
**160 ethnic groups**



Youngest of  
all NZ cities

Young  
population  
with a median  
age of

**33**



Home to  
**179k**  
people



As a strategic logistics and distribution  
hub encompassing Auckland and  
Tauranga



**5k**

more people living  
in our metro area  
every year



Home to Waikato-Tainui for  
**over 700 years**



**The Waikato River**

a unique and beautiful treasure



A taonga (treasure) running through our city that  
provides a unique identity, cultural connection,  
and amenity for our people

**418k**

people are  
estimated to  
be living in the  
Hamilton-Waikato  
metro spatial area  
by 2051





### 3. Context

#### Painting the picture

Quality of life and ease of living is important to Hamiltonians, with the city's relaxed, enjoyable lifestyle attracting families in increasing numbers.

To be a successful city, Hamilton Kirikiriroa needs to provide opportunities for people to thrive socially and economically.

Hamilton Kirikiriroa has natural, open spaces to enable a healthy lifestyle and aspires to a green, sustainable future.

As an important service hub for surrounding agricultural production, our city is also a focal point for employment, education, health, governance, and recreation, as well as world-leading research, development, manufacturing and professional services institutions.

Being one of only a few inland cities in New Zealand Aotearoa, we are well-connected and have a significant role in the North Island's economy. Our city is a unique, vibrant, exciting, and rapidly growing place to live, work and visit.



**Public transport, walking and biking combined make up only 10% of all our journeys.**

**Between 2015-2019, 25 people died on our roads.**

### Getting around in the 'Tron'

Hamilton's rapid growth in population<sup>1</sup> has and will put pressure on the local transport system through:

- an increasing trend in the number of people being killed or seriously injured
- an increase in congestion and unreliable journey times
- an increasing need for infrastructure to unlock new growth areas.

The way we have designed our transport system until now has been focused on car travel, and as a result, most of our journeys are made by car.

Safety is the top priority for Council.

We have introduced safer speed zones around Hamilton Kirikiriroa and continue to expand and improve our biking network to reduce crashes. We want to ensure everyone gets to where they are going safely, and to feel safe and enjoy the experience.

### Your views

Council and its partner agencies have spoken to people about their views on Hamilton's transport system; here are a few perspectives.

**Hamiltonian A:** "Hamilton is a driving city. It's what people do."  
(HAMILTON-WAIKATO METRO AREA mode shift plan)

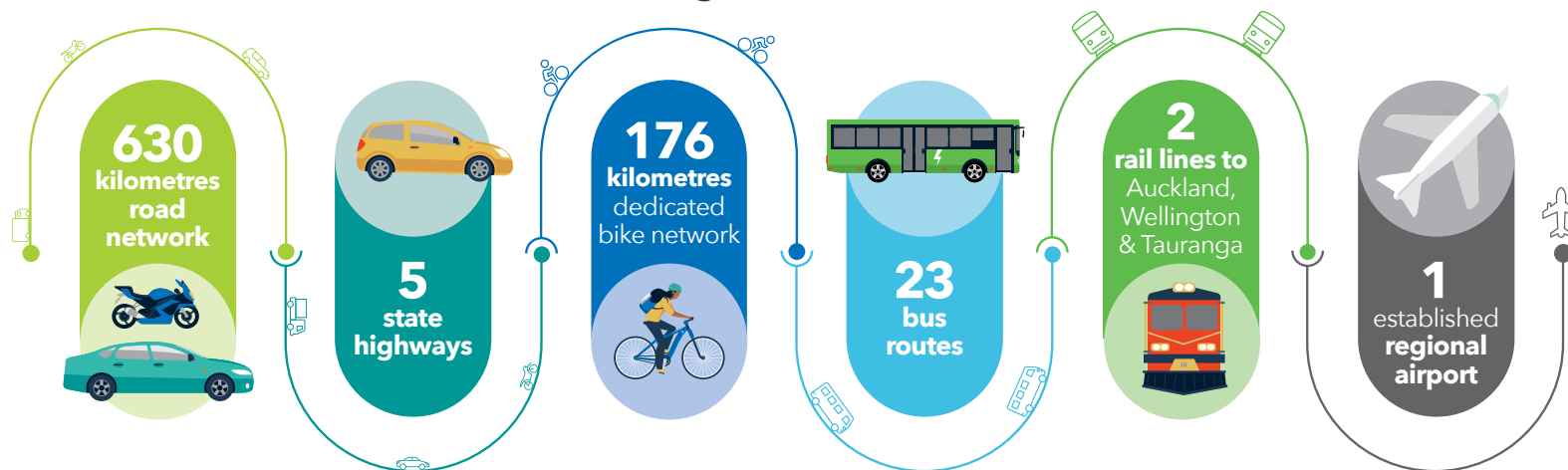
**Hamiltonian B:** "As a converted car commuter, I really enjoy my commute along the river path to and from work - I love the freedom and hassle-free aspect of riding in each day." (Bike Hamilton)

**Hamiltonian C:** "There are limited bike lanes and some of the existing ones are just painted roads, so you still have to share the space with a car, especially on the bridges. I just don't feel safe riding my bike on Hamilton roads." (Biking and Micro-mobility programme insights)

**Hamiltonian D:** "We need to connect places of work and play with where we live, just as we do by car and try to by bus." (Biking and Micro-mobility programme insights)

Right now, we have an opportunity to make Hamilton's transport better, safer, more sustainable, fun, and accessible for all.

### Lengths of network



### 3.1. Why do we need a transport strategy?

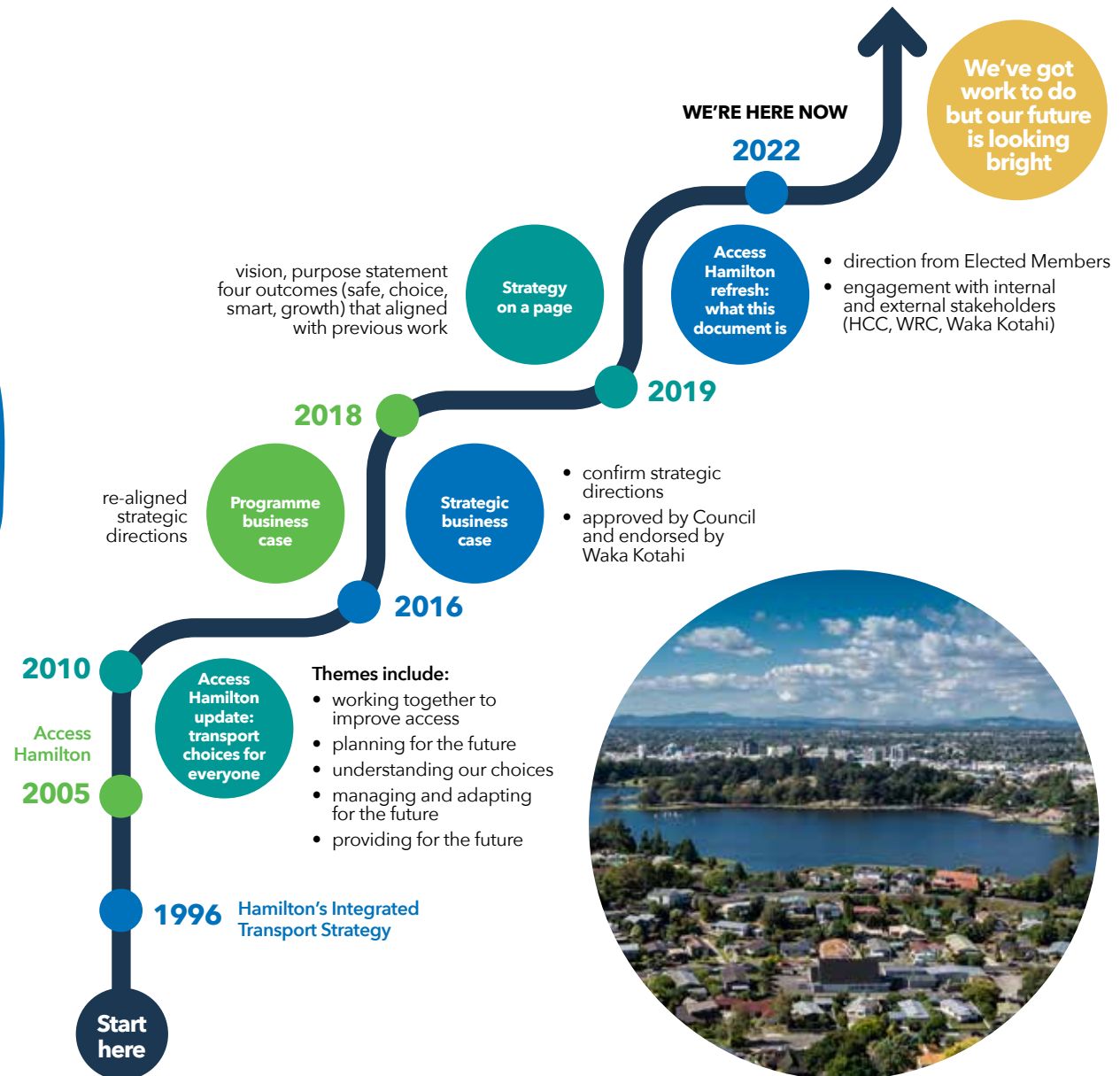
Making changes to the transport system takes time and can involve significant costs. We need to make sure we are doing the right thing at the right time and spending our money wisely.

***This strategy sets out what's important to us and guides our investment decisions through our Long-Term and Annual Plans.***

This transport strategy sets out what our transport system needs be like to serve our community's needs now and into the future and identifies where we need to focus our efforts to achieve it.

Things we need to consider are:

- planning for future growth
- balancing and coordinating different forms of transport
- improving transport equity
- enabling a liveable city
- securing funding for transport
- aligning with local, regional and national priorities





## 3.2. Who is responsible for what?

Providing quality transport for Hamiltonians is a team effort and Council works closely with a number of organisations to achieve this. Our transport partners have a shared vision for our city and our region's future, and we will work together to deliver the transport aspirations of Hamilton Kirikiriroa to achieve that vision.

**Hamilton City Council** is responsible for developing and maintaining local roads (including the footpaths, berms and bike facilities), public transport assets such as bus shelters and bus lanes, and regulation of the local network. Council manages on-street parking, as well as owning and managing off-street car parking in some locations. Importantly, Council is responsible for the District Plan which sets the rules for private development, including for example parking requirements and access to the network for new subdivisions.

**Waikato-Tainui** collaborates with Government authorities to co-create the vision and outcomes to generate a prosperous, healthy, culturally strong iwi that enables mana motuhake (self-determination) to enhance and protect natural resources as outlined in our He Pou Manawa Ora - Pillars of Wellbeing strategy.

**Waipaa District Council** and **Waikato District Council** are our neighbours, and have similar responsibilities as Hamilton City Council in their respective areas. They manage the public transport infrastructure in their districts connecting to Hamilton's central city.

**Waikato Regional Council** plans, contracts, funds and manages public transport services within Hamilton Kirikiriroa. Consequently, Waikato Regional Council works closely with Hamilton City Council as there is a need to co-ordinate public transport infrastructure and services. Waikato Regional Council has a lead role in delivering the Regional Land Transport Strategy and has a major role in environmental and transport policy and strategy.

**Waka Kotahi** is the government agency that maintains and operates the state highways to ensure safe, efficient and reliable travel on the strategic network. Waka Kotahi also co-funds most of Hamilton City Council's transport activities (including maintenance and new projects) as well as subsidising the Waikato Regional Council to provide public transport services.

**Ministry of Transport** sets out the government's strategic direction for investment in the land transport network. While it is not directly involved in delivering services, it sets the priorities that Central Government has for transport, and influences where funding is made available either directly or via Waka Kotahi.

**Kiwi Rail** maintains and delivers upgrades to the rail network. Kiwi Rail operates freight trains and facilities on a commercial basis and the Te Huia passenger service under contract to the Waikato Regional Council.

**Private parking providers** supply and operate most of the off-street parking facilities in Hamilton Kirikiriroa.

**Developers** influence the urban form, and therefore the travel demands of Hamilton Kirikiriroa through the type, density and form of new developments.





### 3.3. Hamilton Kirikiriroa as a 20-minute city

The Council aspires for Hamilton Kirikiriroa to be a “20-minute city”. This is defined as:

**“A 20-minute city of compact, connected and healthy neighbourhoods in Hamilton Kirikiriroa means that people can live locally by meeting most of their daily needs\* walking from their home, in pleasant surroundings and with safe, easy access to other parts of the city by biking, using micro-mobility or public transport.”\*\***

Being able to access essential services easily and quickly, means having them local. This is also good for the community and the environment as it means less time spent travelling and reduced need to drive. The concept of “20-minute city” is one that the Council is working on to provide more convenient, safer and more sustainable access to the facilities Hamiltonians need.

Rather than long commutes through congested streets, Hamiltonians can have access to the services they need to work, learn, play and thrive close to where they live and have these services easily accessible without using a car.

The climate crisis combined with COVID-19 pandemic has accelerated the consideration and planning of this idea. Many cities around the world are already embrace similar ideas including London, Paris, Singapore, Sydney and Melbourne.

Council’s strategy to introduce the 20-minute city concept will reduce unnecessary travel, reduce travel times and distances, reduce carbon emissions, and support community wellbeing and local businesses.

The concept is supported by the Access Hamilton strategy and has been adopted through other key Council strategies including the Climate Change strategy and the Hamilton Urban Growth Strategy (HUGS).

Living locally will help Hamiltonians to access various services – especially essential ones – close to home while not necessarily relying on a private vehicle. This means Hamiltonians can experience a higher quality of life.

\* daily needs may include access to the following in your compact, connected and healthy neighbourhood: Local shops and businesses (e.g. supermarket (small), butcher, grocer, bakery, café, shared workspaces), opportunities for play, open green spaces, early childhood facilities, primary schools, health services such as doctors, dentists, chemists and public transport stops.

\*\* This definition acknowledges that the 20-minute city is a concept. We will reflect this aspiration throughout our work with our partners and our strategies, plans and activities, however it is not intended to define a standard of service delivery.



### 3.4. Transport strategy influences

The transport vision for Access Hamilton is shaped by a range of influences, most importantly, the aspirations of our community.

In our document *Our vision for Hamilton Kirikiriroa* we asked Hamiltonians to contribute towards a vision that reflects the values of our city. In the document, the key focus areas are:

- a city that is connected and safe
- a liveable and sustainable city
- a city with affordable housing options
- easy access to essential services
- supporting community identity and spaces

These values have been taken into account in the development of the outcome areas for this strategy.

There are four key themes that dominate the influence from Central Government and the Waikato region:

**Safety:** the safety of Hamiltonians is foremost in all we do. Guided by Vision Zero, Road to Zero and our own Safer Roads for All campaign, we don't believe any loss of life on our streets and roads is acceptable. We also believe that all members of our community should feel safe and be safe using our transport system.

**Climate change:** climate change is the most significant challenge of our time and how we move people and goods around is a major contributor.

The Climate Change Response (Zero Carbon) Amendment Act 2019, has committed New Zealand Aotearoa to reducing net emissions of all greenhouse gases (except biogenic methane) to zero by 2050.

To play our part in this through our transport strategy, we are committed to developing a low-carbon transport system for Hamilton Kirikiriroa and a pathway for how we'll get there. We want to be a thriving, low-carbon city

**The Climate Change Response (Zero Carbon) Amendment Act 2019, has committed New Zealand Aotearoa to reducing net emissions of all greenhouse gases (except biogenic methane) to zero by 2050.**

that responds and adapts to climate change, as stated in our own Climate Change Strategy.

**Travel choice and mode shift:** In the past, our streets have been designed to focus on moving cars and trucks around efficiently. Travel choice means changing the way we design the system to provide viable options for people to move around.

It also means actively encouraging more people to travel easily, conveniently and intuitively using various options to help reduce our impact on the environment and improve accessibility to facilities for all. Guided by the cities moving - Hamilton-Waikato Metro Area Mode Shift Plan, we aim to make public transport, biking and walking more attractive for all Hamiltonians.

**Urban development:** Hamilton Kirikiriroa is growing fast, and to keep up, we require higher density urban development served by well-connected public transport and attractive living environments. Good planning and design are essential for people to live where they want, and easily access where they want to go for work, education, health or leisure. This is set out in the National Policy Statement on Urban Development and the Hamilton Waikato Metro Spatial Plan.

### 3.5. Joining the dots

Given our wide range of responsibilities, Council has a large number of concepts, plans, policies and strategies. These all provide Hamiltonians with certainty and visibility over what we intend to do. The transport network and how we move around is part of almost everything we do and enables the community to benefit from many things Council provides. If people can't access parks safely for example, the benefits of our city's excellent parks won't be realised.

A key role of Access Hamilton is to "join the dots" and deliver directly to Council's purpose of improving the wellbeing of Hamiltonians.

It is important that our strategy aligns with wider strategies, policies and plans to attract support and funding to enable programmes and projects to benefit our local communities.

- Safety
- Climate change
- Mode shift / change
- Enjoyable and liveable city
- Urban development and growth



# The challenges and opportunities of Hamilton Kirikiriroa

## *Ngaa wero, ngaa whakapuaretanga*

Every city has both a history and a current state that provides it with its own unique circumstances. In a transport context, these can be physical (the shape and form of a city and its network), demographic (populations, ages, habits), economic, or any other aspect of a city. Sometimes, these present a city with an opportunity and sometimes a challenge. It is important to acknowledge these circumstances as we need to make the most of our opportunities and form strategies to overcome our challenges and take advantage of our opportunities.



## 4.1 Opportunities Ngaa whakapuaretanga

### What's good in Hamilton Kirikiriroa and how can we use that to make transport easier?

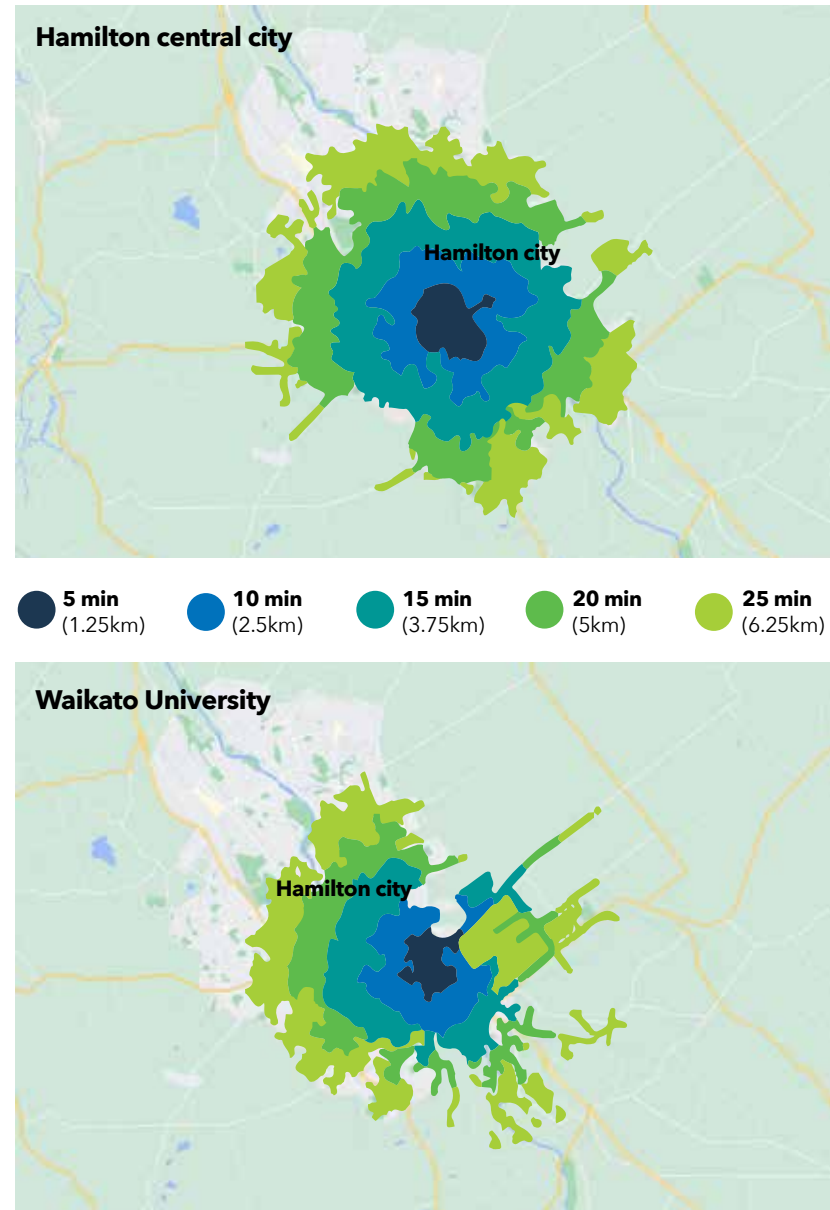
#### An easy walking and biking city.

Hamilton is a relatively compact size when we consider it as New Zealand's fourth largest city. From Horsham Downs in the north to Glenview in the south, Hamilton is 13km long and from Grandview Heights in the west to Silverdale in the east, the city is only 8km across. This means that most trips in Hamilton are likely to be a distance that is walkable or can be biked. Hamilton's roads are well connected which gives us a good base to provide walking and biking facilities between key social and economic areas. The reasonably flat landscape provides easy gradients and creates opportunities for Hamiltonians to walk and bike in comfort.

We are already seeing an increased uptake of walking and biking which helps reduce congestion. We need to act now and make the most of being an easy biking and walking city.

Here, we can see how far people can go by bike in 5 - 25 minutes.

***Most trips  
in Hamilton  
Kirikiriroa are a  
walking or biking  
distance.***



### **A young population that embrace change.**

Hamilton Kirikiriroa is home to New Zealand's youngest population. Young people are our future and have many choices ahead of them. They are generally concerned about their future and climate change<sup>2</sup> and are capable of being agents of change within the community if they are supported by the right strategies and actions by Council and its partners.

***We can use te awa o Waikato  
as a transport corridor for  
pedestrians and cyclists***

### **Te awa o Waikato (the Waikato River).**

The most significant natural feature of the city is te awa o Waikato (the Waikato River), which is New Zealand's longest awa (river). It plays an important role in the identity of the Waikato region and has significant cultural value to iwi and all Hamiltonians, and is the mauri (life force) of Tainui Waka and Ngāti Tūwharetoa<sup>3</sup>.

The health of te awa o Waikato supports the prosperous, living communities in the region. Te awa o Waikato has historically been a form of movement so there is an opportunity to use the riverside as a transport corridor for walking and biking so that Hamiltonians can actively engage with this taonga and enjoy a more sustainable journey.

### **Changing work and travel behaviour.**

COVID-19 has presented significant challenges locally and globally, but it also gives us an opportunity to think about the way we live, travel and enjoy the city.

Buying locally and accessing essential services close to home is not only convenient but reduces the need to travel by private vehicle. The effects of COVID-19 mean more people are working remotely and goods are more likely to be delivered which reduces travel demand.

A working from home culture and utilising more local facilities also encourages mode shift to more active travel such as walking or biking - shaping future travel behaviours to be less dependent on cars - and helps us to combat the climate crisis by enabling a more sustainable way of living. This culture aligns perfectly with the 20-minute city concept where people have access to the most essential things they need - work, shops, healthcare, leisure - within a short walk or bike trip.

### **Great parks and green spaces.**

Open spaces like parks and reserves can be excellent connectors to complement the street network. This allows people to take more enjoyable local trips, provided they are safe and facilities are of a good standard. Not all trips are work trips - and sometimes a local trip to visit friends or whaanau, to buy something, or an entertainment event can be a source of fun and relaxation.

These circumstances present opportunities to use open spaces as more than just passive areas in a community; they can also connect people to the things and places they need.

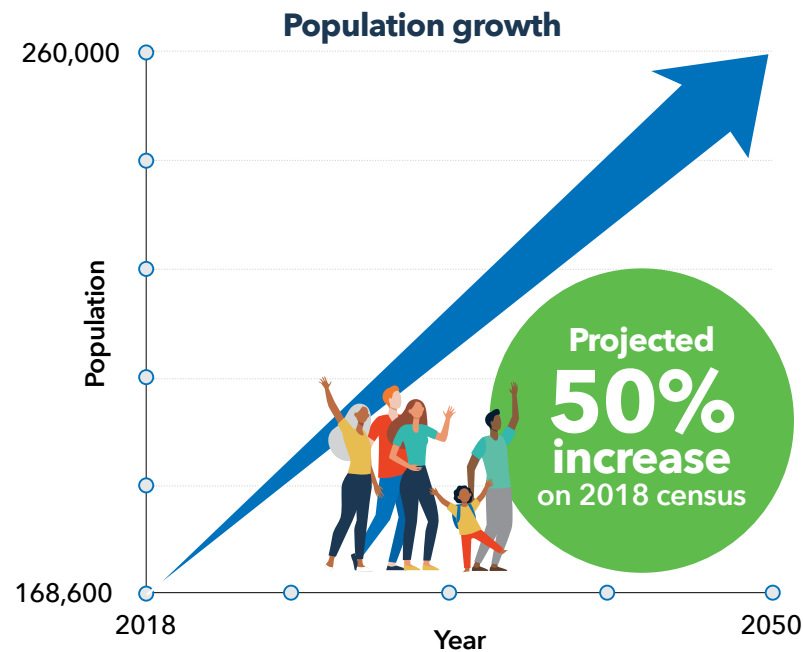
***Hamilton Kirikiriroa  
has excellent parks and  
reserves, with council  
managing over 1 100  
hectares of open space.***

## 4.2. Challenges Ngaa wero

### What do we need to overcome to make transport easier?

#### Accommodating future growth.

The role of transport is to connect all areas of the city together, make it an easy city to get around, to do business and to provide opportunities for a great quality of life. As a growing city, we need to understand the challenges our transport system might face to carry out this role and prioritise these challenges now to make the most of the funds available to us.



*12% of deaths or serious injuries from 2015-2019 involved cyclists.*



#### Safety and perception of safety.

In Hamilton Kirikiriroa the number of deaths or serious injury crashes increased by 11% in 2015-2019 (pre-COVID-19)<sup>4</sup> compared to the previous five years; 12% of these involving cyclists – which is much higher than cyclists as a percentage of total people movements. It is essential that safety is improved such that there is no loss of life on our transport system.

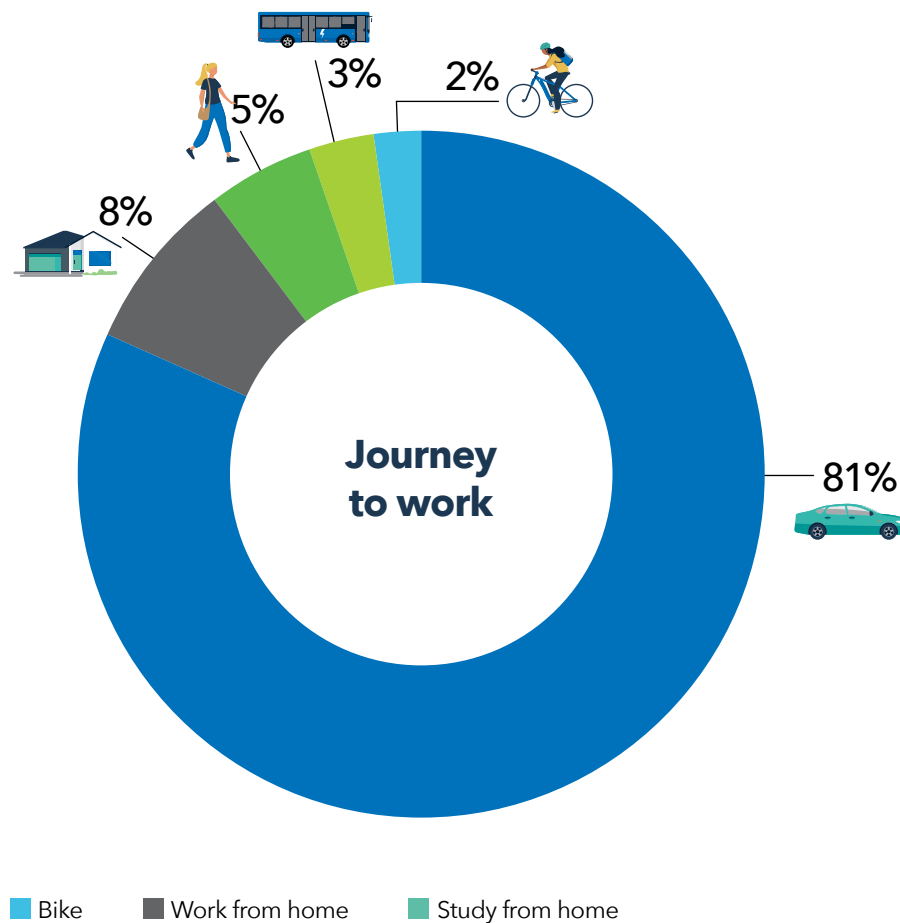
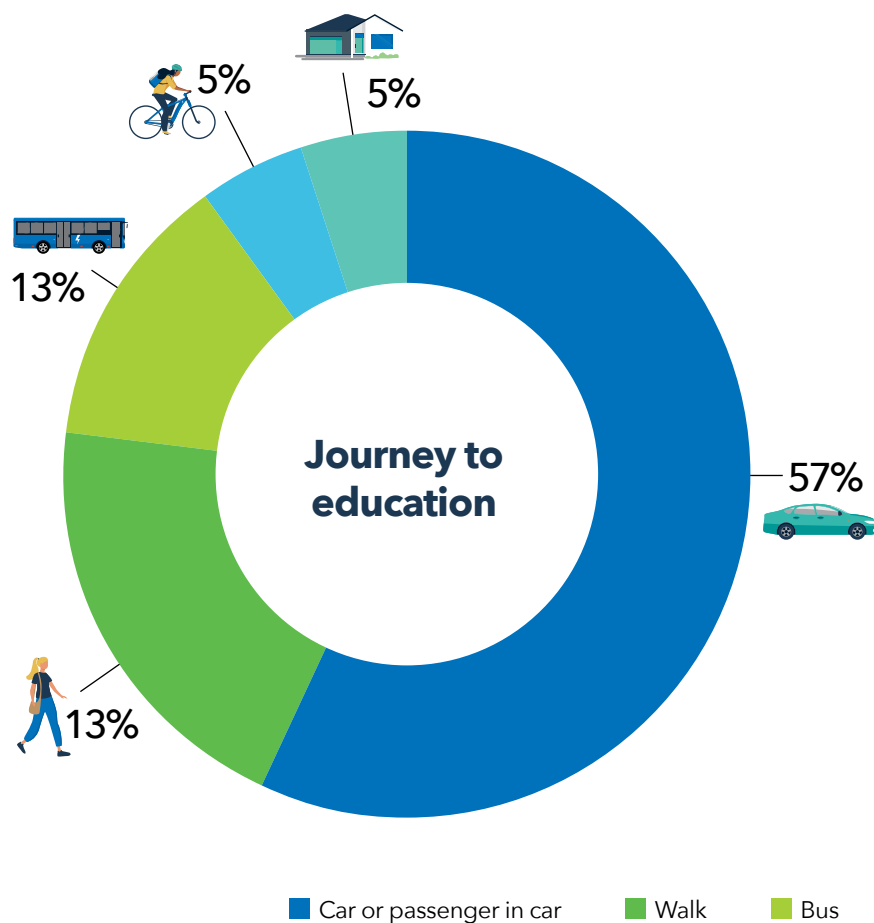
The perception of personal safety is just as important because the more unsafe people feel using a transport option, the less likely they are to choose it. Feedback from recent surveys show that 58% of people don't feel safe in the central city at night<sup>5</sup>.

We need make sure that people feel and actually are safer travelling in our city, particularly for people walking and biking and those using public transport, as they are potentially more exposed to incidents or crashes than car drivers.

## Cars dominate our roads but there are barriers when using other modes.

In Hamilton Kirikiriroa, there is a high reliance on cars for people to meet their travel needs. 81% of workers and 57% of students travel by car<sup>6</sup> - this imbalance is due to historically high focus and investment on roads designed for cars, and the lack of alternate transport options for

Hamiltonians. Travel by car has a high impact on the environment and takes up the most road space per person of any method of travel, contributing to congestion. We need our transport system to be more balanced and this requires other travel options to be better and easier to use.





## Climate change - reducing carbon emissions from transport.

In the Climate Change Response (Zero Carbon) Amendment Act 2019, Aotearoa has committed to reaching net zero emissions of long-lived greenhouse gases by 2050.

***Hamilton Kirikiriroa had 1 million tonnes of CO2 equivalent emissions in 2018/2019, of which 64% were from transport.***

The transportation sector is the highest contributor to emissions<sup>7</sup>.

This is a significant challenge, and we have work to do over the next few decades to achieve our own targets of a minimum reduction of 30% by 2030, and a minimum reduction of 82% by 2050. Achieving these goals means everyone doing their part and making significant changes in how we travel now and in the future.

## Our city is separated by rail lines.

Our city is separated by two rail lines - North Island Main Trunk between Auckland and Wellington, and East Coast Main Trunk to Tauranga. Building safe crossings to enable better access and movement not only could impact the relationship between te awa o Waikato and our community, it is also complex and costly for Council.

## Meeting the diverse needs for transport.

Transport equity and inclusivity means transport enables everyone to fully participate in all aspects of life, regardless of their background, socioeconomic status, age, ability, or gender. Hamilton Kirikiriroa is diverse and people's experiences in using the transport system are not equal.

Inclusive access is at the heart of a fairer society and the lack of genuine transport choices contributes to inequity<sup>8</sup>. The current reliance on private vehicles in Hamilton Kirikiriroa means that owning and regularly using a car has now become a pre-requisite to fully participate in society<sup>9</sup>. We want to consider the diverse individual needs of our people to ensure they can all get involved in what Hamilton Kirikiriroa has to offer.

Providing safe and easily accessible transport the most vulnerable people in Hamilton Kirikiriroa benefits us all in providing more easily accessible transport facilities.

## Intensification of parking and parking management.

In parallel with developing new areas, planned infill development within the city creates challenges for managing parking and street space. We need to manage our street space in a manner that is fair, preserves the urban amenity we enjoy, and ensures our transport connections can still function safely and reliably.

Recent studies show that parking supply influences car ownership, and parking management and parking pricing is an effective component of a vehicle travel reduction strategy.

We need to ensure that we provide sufficient parking for equitable access, particularly for people with mobility impairments and create a transport network with more travel options so there is a reduced dependency on private vehicles.

# Outcome areas

## *Ngaa hua*

This section describes the outcome areas we expect to achieve from implementing the Access Hamilton strategy; they describe our city's desired future state. These outcome areas were developed through a collaborative process by Council's Elected Members.



### A safe transport system

Safety and harm reduction is the top priority. Our outcome is that no one should be injured or killed while moving around Hamilton. Further, people should always feel safe using transport system - whether walking to a carpark, waiting for a bus or biking through a park.



### Climate change

Climate change is a major issue of our time and transport is a major contributor. Creating a low carbon transport system to support significant emissions reductions by 2030 and even less emission by 2050 will require early and sustained action.



### Enjoyable and liveable city

People's ability to enjoy life and thrive in the city they live in is important for their hauora (wellbeing) and their sense of belonging to the community. The way we move can contribute to this. Visitors to the city should also have good, clear transport choices.



### Environmental responsibility

Our transport system should lessen our negative impacts on the environment. There is also a need to protect our taonga and te awa o Waikato, so that it continues to sustain abundant life.



### Genuine travel choices

Providing a range of transport options gives people travel choices, whether private vehicle, taxi, public transport, scootering or active transport such as walking and biking. These choices mean that everyone can access various parts of the city when they want to by a range of modes, and support mode shift and the benefits this brings.



### Inclusivity

Providing a range of transport options to make access to and within the city available for all is important, if everyone in our city is to meet their needs and thrive. We want to promote a fair transport system that allows all residents and visitors to safely and reliably access their preferred destination based on their individual needs.



### Thriving business and economic growth

Hamilton has employment opportunities for young people, and strong business connections with the rest of the North Island. Creating a transport system that is efficient and supports these opportunities and connections through freight movements is important for economic growth in a thriving city.



### Supports quality growth and urban development

Hamilton is a rapidly growing city because it is an attractive place to live and work. This will need to be carefully managed to ensure this growth supports both the lifestyle we aspire to and the environmental outcomes we want to achieve.

## 5.1. A safe transport system

### He puunaha waka whai ora

#### Outcome area

**Safety and reducing harm is a top priority. Our outcome is that no one should be injured or killed while moving around Hamilton Kirikiriroa. Further, people should always feel safe using our transport system, whether walking to a carpark waiting for a bus or biking through a park.**

#### Context

Vision Zero is our ambitious safety vision where we don't accept any fatalities and serious injuries on Hamilton's transport system. We want to provide a more forgiving road system that considers human mistakes and vulnerability.

Further, we want people to feel safe in the city at any time of the day, whether they are walking, waiting for a bus, biking through a park, or just relaxing. How safe people feel is one of the major factors in how people choose to move around the city.

We want to see a future where people using our streets and public spaces feel safe and are safe.

Cities with comfortable and safe transport tend to have healthier populations, increased community bonds, and more equitable access to services.





## Key insights

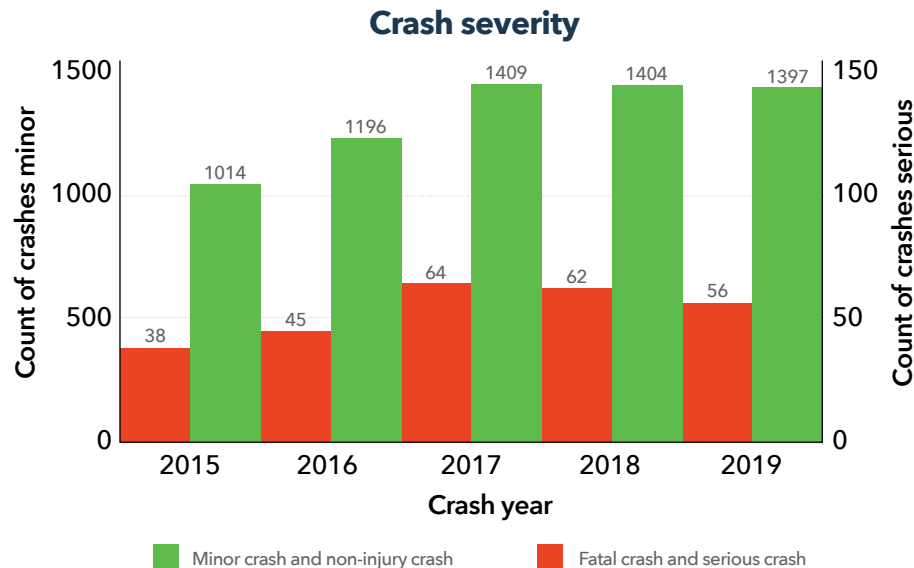
### Road injuries: we are working on it, but there is a long way to go to reduce road-related fatalities and injuries.

In 2015-2019 (pre-COVID-19), there were 265 incidents causing death or serious injury on our roads – a steady increase from previous years.

Top contributing factors to deaths and serious crashes include poor observation, alcohol, failure to give way, and driving too fast. Minor and non-injury incidents are also increasing.

We already have actions in place to address this, but it remains an ongoing challenge.

**In 2019, deaths and serious injury incidents cost us \$1.14 billion<sup>10</sup>.**



### Biking facilities: they are available, but the quality needs to be better.

Hamiltonians are the greatest supporters of biking out of the five largest New Zealand cities, with 78% most likely to consider improved facilities as a reason to bike<sup>11</sup>.

Hamiltonians' current perception of biking isn't that great. Over half (55%) of the people surveyed said they would ride a bike more often if it felt safer<sup>12</sup>. Reasons people don't feel safe include biking in the dark, and the speed of other drivers.

The mixed quality of the existing biking network with a lack of segregated facilities and safe intersections, also gives Hamiltonians a low perception of safety for biking. Not feeling safe while biking has been a consistent theme of community feedback and a barrier to uptake.

Providing connected, safer biking facilities (i.e., protected from motor vehicles, or in low traffic/low speed environments), we can encourage more Hamiltonians to bike.

**55% of people surveyed would bike home if the network felt safer.**

**Out of the five largest cities in New Zealand Aotearoa, Hamiltonians are the most supportive of biking.**

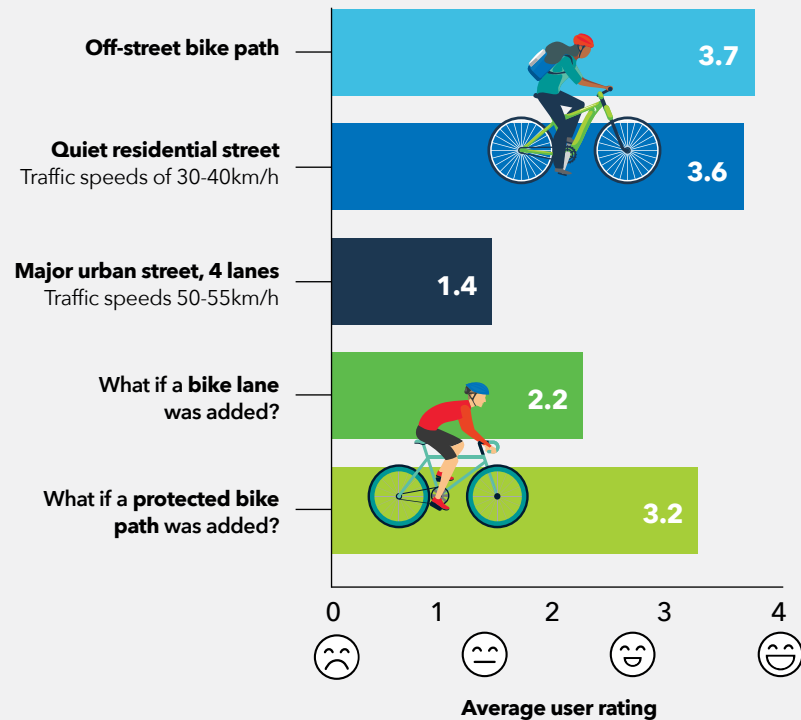


### Case study:

A North American research study<sup>13</sup> asked “interested but concerned” users – who heavily influence mode shift – to rate different bike facilities on their willingness to use them.

From this, we can see users feel most uncomfortable when bikes are mixed with general traffic, and we know that Hamilton Kirikiriroa has a lot of on-street non-segregated biking facilities.

### Attractiveness of different biking facilities



### Personal safety: many Hamiltonians don't feel safe using the network.

Some Hamiltonians don't feel safe travelling in the city. In a recent Hamilton central city safety survey<sup>14</sup>, 58% respondents from Hamilton Kirikiriroa feel unsafe in the city centre after dark, and 42% of respondents feel unsafe in their neighbourhood at night. People's perception of safety is important, as it affects their travel choices.

For public transport, only 61% of those surveyed agree that public transport is safe, and while this may seem like the majority, this proportion is significantly lower than the eight other cities surveyed.

How people feel and perceive things affects their decisions and preferences. We want Hamiltonians to feel safer while taking public transport around our city.

### Safer speeds: we need to continue our work in this area.

Historically, between 9-13% of crashes in Hamilton Kirikiriroa involve excessive speed. Council is and will continue to be active in speed management. Since the introduction of Safer Speed Areas, there has been a reduction in severe injury crashes<sup>15</sup>.

We need to continue our efforts to further reduce the number caused by excessive speed.

### Improving safety has other benefits.

Less environmentally friendly modes of transport such as private car use makes people feel less safe walking, biking and taking public transport. However, these other modes are the most environmentally friendly and use road space in the most efficient way.

## What do safety improvements look like?

### Everyone is safe and feels safe while using our streets and public spaces.

- Pedestrians are safe and feel safe in pedestrian friendly environments, with wide footpaths, great amenity, and a reduced risk of harm.
- People on bikes are in a connected, high-quality, safe bike network with inclusive infrastructure that is suitable for all ages and abilities. People feel safe and confident to bike around Hamilton Kirikiriroa.
- Public transport interchanges, stations and stops are clean, attractive, welcoming and have safe crossing points. Public transport journeys are high-quality, accessible, and safe for all.
- People are driving responsibly at safe and appropriate speeds, in safe vehicles.
- Children are safe to walk and bike on our streets and their parents feel their children are safe when travelling around their neighbourhood.
- People travel safely through our city and neighbourhoods at all times - both day and night.
- We have zero deaths and serious injuries on our roads, because we have safe streets, safe speed, safe vehicles, safe behaviours and many people have shifted to safer modes.

## Focus areas

- Deliver infrastructure improvements to make roads safer.
- Investigate and implement speed management within Hamilton.
- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Improve personal safety using the transport network via better lighting and surveillance.
- Invest in suitable technology for parking, red light and speed enforcement.
- Provide education to support safer behaviour on our public spaces and roads.
- Provide biking safety education programmes for kids and adults.
- Deliver wide, high-quality footpaths between key destinations.
- Provide adequate and safe delivery and service spaces for business and retail.
- Coordinate and add temporary traffic management to maintain good and safe access at all times.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Deaths and serious injuries (DSIs)</b> Number of deaths and serious injuries compared to five-year baseline	265 DSI crashes between 2015-2019 <ul style="list-style-type: none"> <li>• 32 DSI crashes involved people on bikes</li> <li>• 59 DSI crashes involved pedestrians</li> <li>• 3 DSI crashes involved bus</li> </ul> Source: Waka Kotahi CAS database	Reduced number of people sustaining serious injuries or being killed on Hamilton's roads
<b>Perception of safety of public transport, walking and biking</b> Hamiltonians' perception of safety on public transport, walking and biking	<ul style="list-style-type: none"> <li>• 58% respondents from Hamilton feel unsafe in the city centre after dark</li> <li>• 42% of respondents feels unsafe in their neighbourhood at night</li> <li>• 61% agree that public transport is safe</li> <li>• 40% of micro-mobility users feel that using this mode is high risk</li> <li>• 85% of survey respondents feel safe walking, and 69% of survey respondents feel safe biking</li> </ul> Sources: Central City Safety Perceptions Survey, Biking and Micro-mobility Survey, Quality of Life Survey, Waka Kotahi - understanding perceptions of walking and biking	Improvement in perception of safety for public transport, pedestrians and cyclists

## 5.2. Climate change

### Te aahuarangi

#### Outcome area

**Climate change is a major issue of our time and transport is a major contributor. Creating a low carbon transport system to support significant emissions reductions by 2030 - and even fewer emissions by 2050 - will require early and sustained action.**

#### Context

We know that transport is currently the greatest contributor of greenhouse gas emissions in Hamilton Kirikiriroa. At a global, national, and local scale, we must act now to reduce emissions and recognise that the impacts of climate change are already here. We must build our ability to plan and respond to these, so our transport system is resilient. We want to ensure that everyone is prepared for changes to our climate and increased likelihood and frequency of extreme weather events.

To become a low-carbon city, we need to challenge and change the way we grow, live and travel, so that future generations can still call Hamilton Kirikiriroa home. We as kaitiaki (caretakers) are committed to enhancing and protecting our awa (river) and taiao (environment) from the effects of climate change.





## Key insights

### Climate change is a global issue, and Council is committed to playing our part in the transition to a low-carbon future.

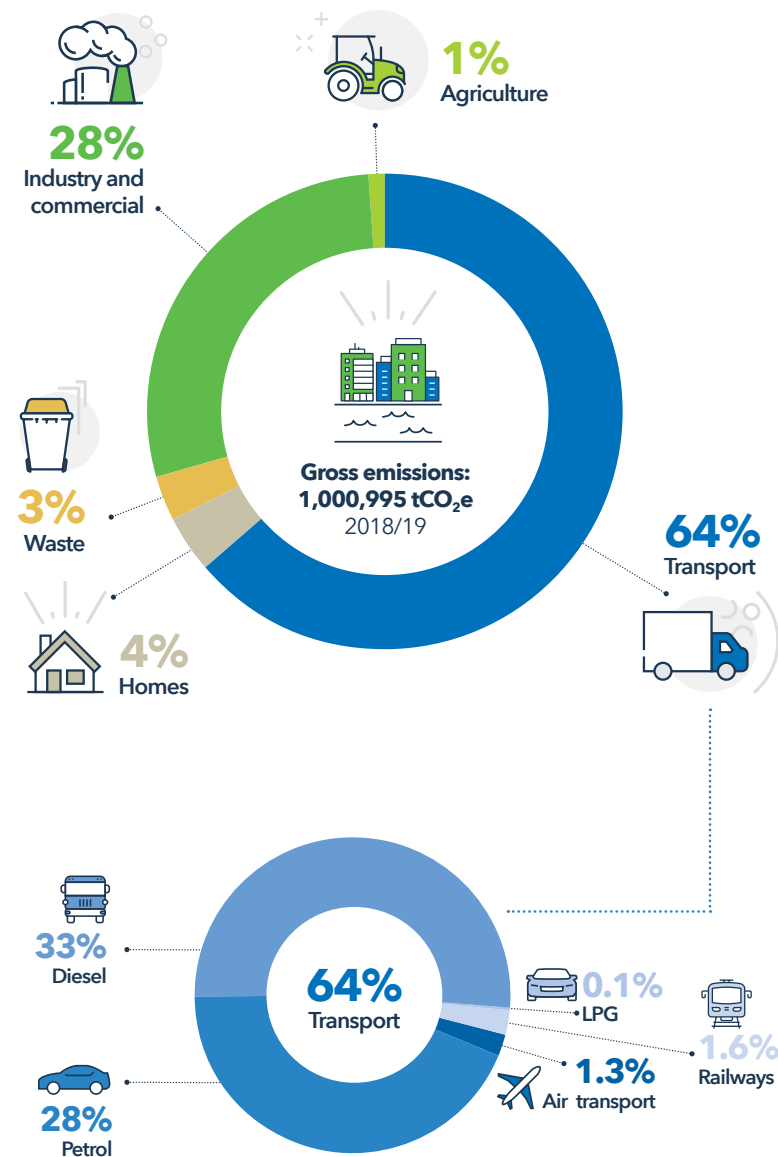
Climate change is one of the most significant global and national issues of our time. We, as Hamiltonians, must play our part in reducing our emissions and have committed to doing so through our climate change strategy, *Our Climate future: Te Pae Tawhiti o Kirikiriroa*. Through this strategy, we have the emissions targets of a minimum 30% reduction by 2030 and a minimum 82% reduction by 2050.

Due to climate change, it is predicted that Hamilton Kirikiriroa will likely experience an overall increase in temperatures, longer summers, and increases in extreme rainfall events. These changes could lead to transport infrastructure damage or reduced services, which hinders our efforts to move people to low-emissions travel. We need to provide regulations and policies to enable the development of infrastructure that supports Hamiltonians to make changes in the way they choose to travel.

**Transport is the greatest contributor to emissions in our city.**

Hamilton's gross (total) emissions in 2018/19 were just over 1 million tonnes of carbon dioxide equivalents (tCO<sub>2</sub>e). Transport is the greatest contributor, with 64% of our city's emissions in 2018/19<sup>16</sup> and so our transport sector must do the most work to achieve significant emission reductions in both the short and long term.

We have an opportunity to reduce carbon emissions from our transport system by encouraging more sustainable or low-carbon travel options such as walking, biking, public transport, and micro-mobility modes.



## **We, as Hamiltonians, can act to reduce emissions.**

As Hamiltonians, we know we have opportunities to reduce emissions:

- Hamilton's flat landscape and compact size creates significant opportunities for us to take up alternative transport comfortably, such as walking and biking.
- As a 20-minute city of compact, and connected neighbourhoods, Hamiltonians can easily access the essential things we need quickly by walking or biking instead of having to rely on private vehicles. We can encourage this by providing safe and attractive options for short trips and plan our land use better, so activities are closer together.
- Opportunity for public transport: we have an extensive public transport system and by improving coverage and ridership services, we can make public transport more attractive for Hamiltonians and visitors to reduce emissions. This is covered in more detail under the 'genuine travel choice' outcome area.
- Opportunities for more efficient rail freight: we know that on average, every tonne of freight moved by rail produces 66% fewer carbon emissions than road-based heavy freight movements. Increasing rail freight share in the Waikato is an opportunity to reduce emissions, while also increase efficiency<sup>17</sup>. Focusing on first and last-mile movements, we have the opportunity to significantly reduce our emissions.
- Carbon-neutral vehicles: we are supporting carbon-neutral vehicles. By partnering with WEL Networks (a local electronic distribution company), we are providing electric charging stations around Hamilton Kirikiriroa<sup>18</sup>. Having cleaner vehicles on our roads helps us to achieve our climate change targets.

We need to embrace, capitalise, and expand on these opportunities going into the future to help us achieve the vision for Hamilton Kirikiriroa and emissions reduction targets set out in our climate change strategy.

### **Case study:**

#### **solar powered biking paths in Cambridge, UK<sup>19</sup>**

Cambridge City Council in the United Kingdom has installed solar powered lighting for 900m of the Coe Fen shared footpath - a key commuter biking route into the city centre. The council had to ensure that installing the light would not change the natural landscape of Coe Fen and adversely affect local wildlife. Illuminating the shared use path has reduced public safety concerns and allowed for people on bikes and pedestrians to use the path all year round, with one in three Cambridge residents choosing to bike to work. The success of the path has meant the solar lighting has been extended a further 250m.



## What does low-emission, resilient transport look like?

### A low-emission transport system that is resilient against climate change.

- Hamilton's transport system supports the city to achieve the emissions reduction minimum target of 30% by 2030, and a minimum 82% reduction by 2050.
- There is a higher proportion of freight moved by rail.
- The transport system can adapt quickly and effectively to climate change, with minimal disruptions to services and access.
- The transport system is well-supported by strategies and policies which enable developments to make the transport network more resilient to climate change.

### Focus areas

- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Promote low and zero emissions vehicles.
- Discourage high-polluting vehicles on our roads to improve air quality, environment and reduce noise.
- Transition Hamilton City Council fleet to achieve a 44% emission reduction by 2030.

- Deliver wide, high-quality footpaths between key destinations.
- Deliver community and school programmes to encourage and support more people to walk, bike and use the bus.
- Deliver bike and micro-mobility parking in key destinations.
- Investigate zero emissions zones or congestion charge zone in central Hamilton.
- Coordinate climate change initiatives with Central Government to promote Hamilton's needs.
- Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.
- Work with Waikato Regional Council to improve public transport reliability and frequency.
- Support and require key employers to have workplace travel plans that encourage mode shift.
- Support uptake of local electric distribution technology for businesses and local deliveries.
- Provide high-quality, people-welcoming public transport centres to support mode shift.
- Support schools to have travel plans that encourage mode shift.
- Support integration of different modes across the region via seamless station access for key bus stations, high-quality end of journey facilities, and park and ride facilities.
- Support car share schemes and carpooling initiatives to decrease private car ownership.
- Support developers to invest in the community and incorporate sustainable elements into design and construction.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>CO2e emissions</b> Tonnes of CO2 equivalents emitted from transport, by <ul style="list-style-type: none"> <li>absolute value</li> <li>per capita</li> </ul>	<ul style="list-style-type: none"> <li>635,615 tonnes CO2e in 2018/2019</li> <li>3.7 tonnes CO2e per capita</li> <li>Population in 2019: 169,500</li> </ul> Source: Waikato regional greenhouse gas inventory	2030 target: minimum emissions reduction of 30% (city-wide) 2050 target: minimum emissions reduction of 82% (city-wide) Transport sector emissions reduction target TBC
<b>Vehicle kilometres travelled (VKT)</b> Vehicles kilometres travelled by cars and light vehicles	<ul style="list-style-type: none"> <li>Light VKT in Hamilton Kirikiriroa: 249,598,637 (2020/2021)</li> <li>Light/heavy not known VKT in Hamilton Kirikiriroa: 820,038,733 (2020/2021)</li> </ul> Source: Waka Kotahi Data and Tools VKT	Reduce VKT by cars and light vehicles
<b>Carbon neutral vehicles</b> Number of zero-emissions vehicles on Hamilton's roads	Source: Household Travel Survey, Census Data and other central government statistics, partner surveys	Increase number of zero-emissions vehicles on our roads
<b>Single occupant private vehicle</b> Overall single occupant private vehicle travel <ul style="list-style-type: none"> <li>three-year average</li> <li>per capita</li> </ul>	Source: Household Travel Survey, Census Data and other central government statistics, partner surveys	Decrease single occupant private vehicle trips

## 5.3. Enjoyable and liveable city

### He taaone ngahau e tau ai te noho

#### Outcome area

**People's ability to enjoy life and thrive in the city they live in is important for their hauora (wellbeing) and their sense of belonging to the community. The way we move can contribute to this. Visitors to the city should also have good, clear transport choices.**

#### Context

We want our transport system to not only let people access the many opportunities that Hamilton Kirikiriroa has to offer, but also provide an enjoyable journey along the way.

Public spaces are important for the long-term liveability and prosperity of the city. Streets with ample seating, greenery and public art will mean Hamiltonians and our visitors have pleasant places to relax, rest and enjoy the city.

An enjoyable and liveable city that is served by a connected, easily accessed and pleasant transport system is the key for Hamiltonians' wellbeing and overall quality of life.





## Key insights

### **Our young population is specifically vulnerable in Hamilton, and should have what they need to live a full life.**

Young people have a huge role to play. We are a city with talented and well-educated young people who have a lot to offer.

***Almost a quarter of our people are young - we are the most youthful city in New Zealand.***

Almost a quarter of Hamiltonians are 15-25 year olds<sup>20</sup> and our youth is an integral part of creating a transport culture that is more active, more fun and easier to navigate.

This could include shared transport spaces that are vehicle-free in the city centre, so we are able to enjoy the city without the risks associated with dangerous crossings or vehicles travelling nearby at high speeds.

We need to support our young population to live, stay and grow in Hamilton Kirikiriroa.

### **“Play” is about ‘physical fun and adventure wherever you are’.<sup>21</sup>**

In Hamilton Kirikiriroa, we have quite a broad definition of “play”. It could include involvement in competitive organised sports, riding bikes recreationally on a sunny day, having a space to hang out with friends, taking a walk in the park, or spontaneous play with our friends or neighbours.

This means the opportunity to play in Hamilton Kirikiriroa is vast, with destinations like Victoria on the River, Waikato Museum, Hamilton Gardens, Seddon Park, and our local parks and reserves.

With this broad and inclusive definition, we want more Hamiltonians to embrace the outdoors and engage in the range of activities that Hamilton Kirikiriroa has to offer.

### **Play improves people’s individual wellbeing, and this benefits the hauora (wellbeing) of the wider collective.**

Engaging in play across all stages of life has physical health and mental health benefits and contributes to improving individual and community wellbeing.

Play helps protect us against a range of physical ailments, including obesity, dementia and heart disease. Biking and walking can be a part of play and a UK study found that regular biking can reduce your risk of death from any cause by 41%<sup>22</sup>, while another study found that walking can reduce the risk by 39%.

Play is also found to improve self-confidence, self-esteem and physical self-perception in young people<sup>23</sup>. People can start conversations and form connections while they are playing in a sports field, or walking and biking on our streets. Play creates a stronger sense of belonging to our community.

Play is a vital part of what makes up a fulfilled life, and we need to ensure that our transport system supports Hamiltonians to engage in play in all stages of life that enhances health and wellbeing.

### **Walking and biking contribute to a greener and more liveable city.**

More people walking and biking on our streets would mean less noise, less congestion, less air pollution, and fewer emissions, making our city greener and more liveable. Through walking and biking, people can fully immerse themselves in the sound, smell, greenery and the culture that Hamilton Kirikiriroa has to offer.

We are working towards a climate change strategy, and creating a green, clean city that current and future generations of Hamiltonians can live in and enjoy.

### **Our transport system should include the healthy streets' approach.**

Putting Hamiltonians' health and experience at the heart of planning is what we want to do so we want to adopt the healthy streets approach<sup>24</sup>. This is a new type of thinking, adopted in the London Transport strategy, that uses indicators to assess our people's experience of using our streets.

## **What does an enjoyable, liveable city look like?**

### **Hamilton Kirikiriroa is a great place to live and work for everyone.**

- Hamiltonians love moving around the city and exploring new places to be physically active.
- Our streets, footpaths and public places are comfortable spaces for people to relax, rest and immerse in the city's art and culture.
- Our streets and footpaths are places where people can move, interact, and for young people to play safely.
- People can move seamlessly on foot or by bike between parks, schools, shops, work and across city, to explore the city with sense of joy and wonder.
- Our central city is vibrant as it is easily accessible for all Hamiltonians to come together to work, play and enjoy.
- Our transport system is built around the healthy streets indicators.

## **Focus areas**

- Deliver wide, high-quality footpaths between key destinations.
- Deliver community and school programmes to encourage and support more people to walk, bike and use the bus.
- Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.
- Work with Waikato Regional Council to improve public transport reliability and frequency.
- Use underutilised road space for amenities, greenery and cultural landmarks.
- Improve navigation around the city by providing accurate and timely wayfinding.
- Deliver high-quality urban realm for a vibrant central city.
- Protect the Waikato River through prioritising our blue/green network.
- Provide high-quality, people-welcoming public transport centres to support mode shift.
- Provide high-quality end-of-trip facilities.
- Support schools to have travel plans that encourage mode shift.
- Promote flexible and/or staggered working hours to reduce peak hour congestion and road conflicts.
- Optimise traffic signal timing to reduce delays for bus services, pedestrians and cyclists.
- Support integration of different modes across the region via seamless station access for key bus stations, high-quality end of journey facilities, and park and ride.
- Support car share schemes and carpool to decrease private car ownership.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Hamiltonians' rating experience of public transport, walking and biking</b> Hamiltonians' perception of their experience in public transport, walking and biking	<ul style="list-style-type: none"> <li>• 68% agree that public transport is easy to get to</li> <li>• 54% agree that public transport is frequent</li> <li>• 47% agree that public transport is reliable</li> <li>• 50% agree that public transport is affordable</li> <li>• 15% agree that going "anywhere on my bike safely" would encourage more regular biking and e-scooting</li> <li>• Only 6% of the biking network is perceived as safe<sup>25</sup></li> </ul> Source: Biking and Micro-mobility Survey, Waka Kotahi Perception of Walking, Quality of Life Survey	Improvement in perception rating for public transport, walking and biking
<b>Extent of walking and biking facilities</b> Network kilometres of walking and biking facilities delivered	321km of biking facilities: 43% on-road biking facilities, almost zero on-road segregated biking facilities, 24% off-road shared paths and 29% park shared paths.  Source: Hamilton City Council GIS	Increase in kilometres of walking and biking facilities
<b>Extent of greenery (plants, flowers, parks) on roads</b> Nature has a key role to play in our adaption response. In making our infrastructure more resilient we can incorporate nature-based solutions such as green roofs, natural waterways and trees; all which help reduce urban heat island effect and reduce run-off into our stormwater network	Source: The Nature in the City strategy	Tree canopy cover increases across the city  Native vegetation cover will increase by 10% by 2050, in alignment with our Nature in the City strategy



## 5.4. Environmental responsibility

### Ngaa haepapa moo te taiao

#### Outcome area

**The transport system should remove and mitigate negative impacts on the environment. There is also a need to protect our taonga (treasure) and te awa o Waikato, so that it continues to sustain abundant life.**

#### Context

We want to be a sustainable city, and this means challenging the way we grow and live within the city. We love our environment and we want to protect it so that future generations can still call Hamilton Kirikiriroa home.

We recognise and embrace our individual and collective roles as kaitiaki (caretakers) of our land, water and air. Together, we want to protect our taonga (treasures) like the Waikato River, so it continues to sustain abundant life. We need to plan well for a future where neighbourhoods and natural environment can co-exist in harmony. Trees and greenery in our streets are important for our environment and creating a sense of place. Our transport system and land use decisions should remove, reduce and mitigate impacts on the environment. We take personal responsibility for the city we live in by choosing to live more sustainably. This might look like walking to the shops if it's a quick grocery trip, using public transport to get to the next big rugby game, or jumping on a bike for slightly longer journeys for which you might normally use the car.



## Key insights

### Te awa o Waikato and its catchment should be protected as it is part of who we are.

The vision from Te Ture Waimano o Te Awa o Waikato (the Vision and Strategy for the Waikato River), is a future where “a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come”.

*We want a healthy awa for our kids and grandkids to enjoy as much, if not more, than we do.*

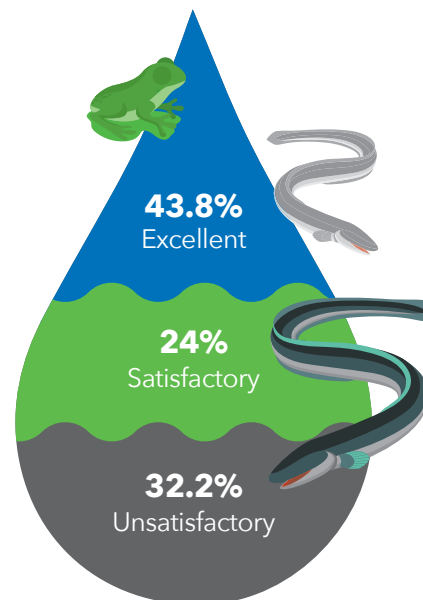
Unfortunately, the health of te awa o Waikato has been degrading in recent decades, due to land use changes. Water quality downstream of Hamilton Kirikiriroa is not always good enough for swimming or for ecological health.

Managing our transport system can play a part in preventing further degradation by ensuring that contaminated stormwater from our roads does not end up in our river.

We want to restore and protect te awa o Waikato and its relationship with our community through promoting improved access to the awa, to better to better enable sporting, recreational and cultural opportunities<sup>26</sup>.

### Water quality for ecological health

2015-2019

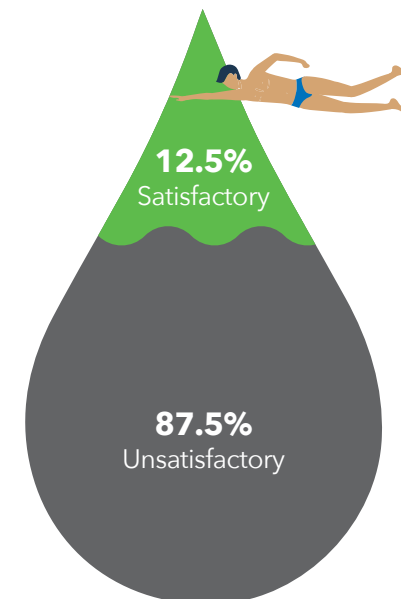


### Lower Waikato River water quality

- Excellent
- Satisfactory
- Unsatisfactory

### Water quality for swimming

2015-2019





### Air quality is good, but we need to prepare for the future.

Good outdoor air quality is fundamental to Hamiltonians' wellbeing. Air pollution caused by carcinogenic diesel emissions, high levels of nitrogen dioxide (NO<sub>2</sub>) and particulate matter (PM) will lead to health conditions such as respiratory diseases, heart attacks, and lung cancer, and shorten the lives of Hamiltonians.

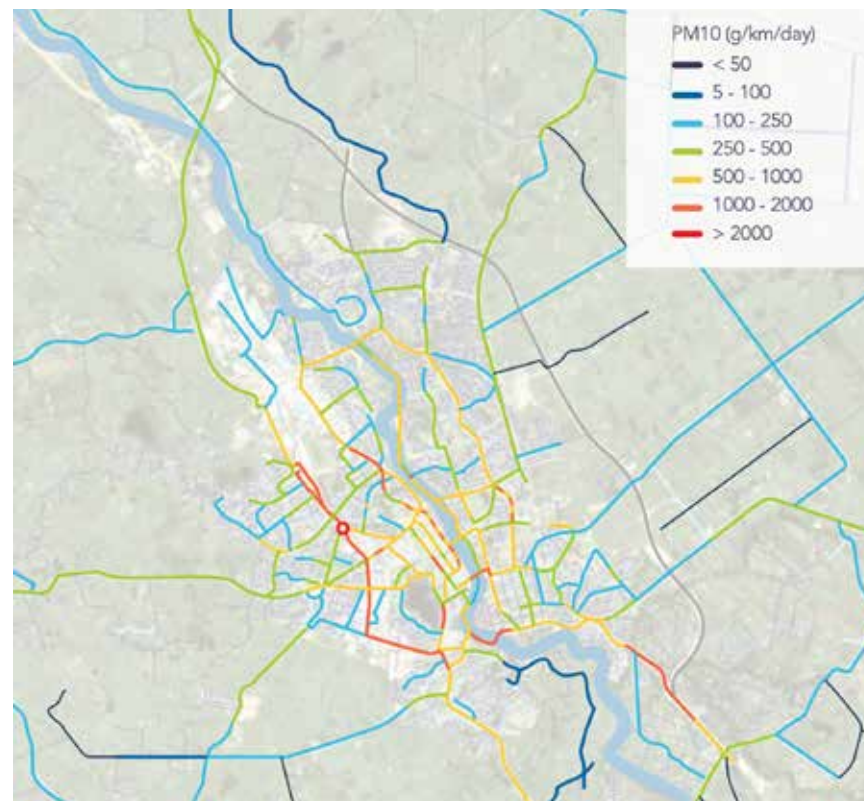
Right now in Hamilton Kirikiriroa, air quality is good with particulate matter (PM<sub>10</sub>) levels well under the guidelines. PM<sub>10</sub> is a measure of air quality and contains microscopic solid or liquid droplets that if inhaled, may cause serious health problems<sup>27</sup>.

However, with future growth in population, more residential housing on arterial roads, air quality may decrease. While the main source of poor air quality is from home heating using wood, traffic is a significant source of poor air quality (11% of PM<sub>10</sub>) especially near busy intersections<sup>28</sup>.

From transport's perspective, high traffic flows, congestion, heavy vehicle movements, and steeper roads lead to higher level of pollution concentrates and poor local air quality<sup>29</sup>.

Hamilton's transport network needs to contribute to good air quality levels. This will protect Hamiltonians' health, especially our children, and help us tackle climate change. More people choosing to walk, bike or bus will help. More trees and greenery around our streets, and cities will also help. There is also a need for vehicles to be clean and energy efficient as well, to continue reducing our carbon emissions in the long term.

### Vehicle emissions



## Noise pollution is low, but we need to prepare for the future.

Noise pollution is unwanted sound that negatively impacts the wellbeing of our people<sup>30</sup>. Noise pollution can lead to hearing loss, sleep disturbance, stress, anxiety, high blood pressure, poor mental health, poor work and school performance, and cognitive impairment in children.

The risk of cardiovascular disease increases when noise levels exceed 60 decibels, which is the case on some of our roads.

In 2019, on regional and arterial roads in Hamilton Kirikiriroa, approximately 101,179 people are exposed to category A levels of noise – below 64 decibels adjusted, while under 100 people are exposed to more than 67 decibels adjusted (category C levels)<sup>31</sup>. These are under the guideline of 85 decibels adjusted value<sup>32</sup>.

It is great to see that most people in Hamilton Kirikiriroa are not exposed to unhealthy levels of noise at the moment. Noise can also discourage people from walking, biking and spending time out on our streets.

It is important that the transport system, and construction of future interventions, maintains low noise levels. These may consider new approaches to noise management, reduced speeds, consideration of which surfaces we use on our roads, and encouraging usage of quieter electric vehicles. The land use planning system also has a role to play with supportive zoning patterns and planning and design rules that mitigate noise.

## What does environmental responsibility in transport look like?

A healthy te awa o Waikato and natural sites that sustain abundant life and prosperous communities for all generations.

- Te awa o Waikato is restored and protected from harm so that it continues to sustain abundant life and prosperous communities for all generations, in line with the vision in Te Ture Whaimana o Te Awa o Waikato<sup>33</sup>.
- The health of te awa o Waikato is improved as contaminants from our transport network are reduced.
- Hamiltonians have improved access to te awa o Waikato with better sporting, recreational and cultural opportunities.
- Hamiltonians choose to use low-emission transport options, such as walking, biking and public transport because it is sustainable, convenient and fun.
- Our streets are quieter, greener and more relaxing for Hamiltonians, with fewer, quieter cars and more greenery.
- Our air is cleaner, with lower levels of air pollution (PM10, PM2.5 and NO2).

## Focus areas

- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Promote low and zero-emissions vehicles.
- Discourage high-polluting vehicles on our roads to improve air quality, improve the environment, and reduce noise.
- Deliver wide, high-quality footpaths between key destinations.
- Deliver community and school programmes to encourage and support more people to walk, bike and use the bus.
- Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.
- Work with Waikato Regional Council to improve public transport reliability and frequency.
- Improve access to the River Path with better sporting, recreational and cultural opportunities.
- Enhance existing relationships with tangata whenua and continue to work closely with them as partners to deliver the aspirations of this strategy.
- Protect the Waikato River through prioritising our blue/green network.
- Support integration of different modes across the region via seamless station access for key bus stations, high-quality end-of-journey facilities, and park and ride facilities.
- Transition Hamilton City Council fleet to achieve a 44% emission reduction by 2030.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Ambient air quality - NO<sub>2</sub> &amp; PM<sub>10</sub></b> Concentration of nitrogen dioxide (NO <sub>2</sub> ) and particle matter (PM <sub>10</sub> ) in µg/m <sup>3</sup>	<ul style="list-style-type: none"> <li>• NO<sub>2</sub> at 42µg/m<sup>3</sup> (2019 annual mean at Killarney Rd/Greenwood St)</li> <li>• PM<sub>10</sub> at 13µg/m<sup>3</sup> (2021 annual mean at Claudelands)</li> </ul> Source: Stats NZ Nitrogen Dioxide Concentrations, Land Air Water Aotearoa (LAWA) Air Quality	Improvement in air quality
<b>Water quality - te awa o Waikato</b> Waikato River water quality for swimming and ecology	<ul style="list-style-type: none"> <li>• 2015 - 2019 water quality for ecological health: 43.8% excellent, 24% satisfactory, 32.2% unsatisfactory</li> <li>• 2015-2019 water quality for swimming: 12.5% satisfactory, 87.5% unsatisfactory</li> </ul> Source: Waikato Regional Council Water Quality Monitoring Data	Improvement/no further degradation in water quality due to reduced runoff from the road system

## 5.5. Genuine travel choice

### Ngaa whiringa haere

#### Outcome area

**Providing for a range of transport options gives people travel choices, whether private vehicle, taxi, public transport, scootering or active transport such as walking and biking. These choices mean that everyone can access various parts of the city when they want to by a range of modes, and supports mode shift and the benefits this brings.**

#### Context

We need to provide a range of genuine travel choices for Hamiltonians to change our way of travel easily and intuitively.

Hamilton Kirikiriroa has the highest car use rates for trip making in the country. We need to make significant changes and investment to provide Hamiltonians with attractive alternative transport options. These include wide footpaths with amenity for walking, comfortable and connected biking paths and welcoming, reliable and frequent public transport. We want to make Hamiltonians feel like they want to use a bike, scooter, skateboard or a bus pass instead of a car, as it's more convenient and efficient.

Increasing the share of travel by public transport, walking and biking means we are improving the wellbeing of Hamiltonians by shaping a more accessible and safe transport system. We are growing our city more sustainably with less congestion, cleaner air and we are on our way to achieve our emission reduction targets for 2030 and 2050.

*Hamilton Kirikiriroa has the highest car use rates in the country for trip-making.*





## Key insights

### **We're the fourth largest city in the country with opportunities for great biking and walking networks, but most of us are driving.**

A Hamiltonian once said, "Hamilton is a driving city. It's what people do".

Our high car use has been encouraged by historically high investment in our roads. With further population increases, it will mean more congestion, high carbon emissions, poor journey time reliability, low productivity and reduced amenity for walking and biking. In the long term, it may even encourage demand for further urban sprawl.

Shifting from private vehicles to more active modes is a priority for changing our transport network to be more reliable and sustainable.

**Over 81% of workers and 57% of students travel by car.**

### **We've got a comprehensive bus system, but it's not supported by infrastructure.**

The current public transport network in Hamilton Kirikiriroa city has good coverage (see current transport network map) but has long, indirect and unreliable routes.

**We have less than 1km of priority lanes for buses in Hamilton Kirikiriroa.**

There is a lack of investment in public transport infrastructure, with very limited bus priority measures, low quality shelter and seating and no real time information displays. The journey times by public transport to important places including hospital, schools, entertainment and shopping areas are incomparable to private vehicle trip times.

The perception of public transport also isn't great. 69% of those surveyed did not use public transport over the past year or could not access public transport. Based on surveys, the barriers<sup>34</sup> include that the perception that public transport is unsafe, and public transport is unreliable. This is a direct result of the lack of infrastructure and bus priority. In Hamilton Kirikiriroa, only 47% agree that public transport is reliable (meaning comes on time), which is the lowest of the eight cities surveyed<sup>35</sup>.

We need to provide better infrastructure to provide high-quality and reliable services to improve Hamiltonians' public transport experiences.

**Only 47% of Hamiltonians surveyed agree that public transport is reliable.**

### **Most of our bus routes lack frequency.**

While the coverage is great, with 95% of households in Hamilton Kirikiriroa being within 600m of a bus stop, there is a lack of rapid, frequent public transport services.

Infrequent services is one of the key barriers for people to take public transport.

Frequency is important because higher frequency means people don't have to wait for the service as long, and the overall travel time improves. Higher frequency also provides greater flexibility and the ability to "turn up and go" without worrying about a timetable.

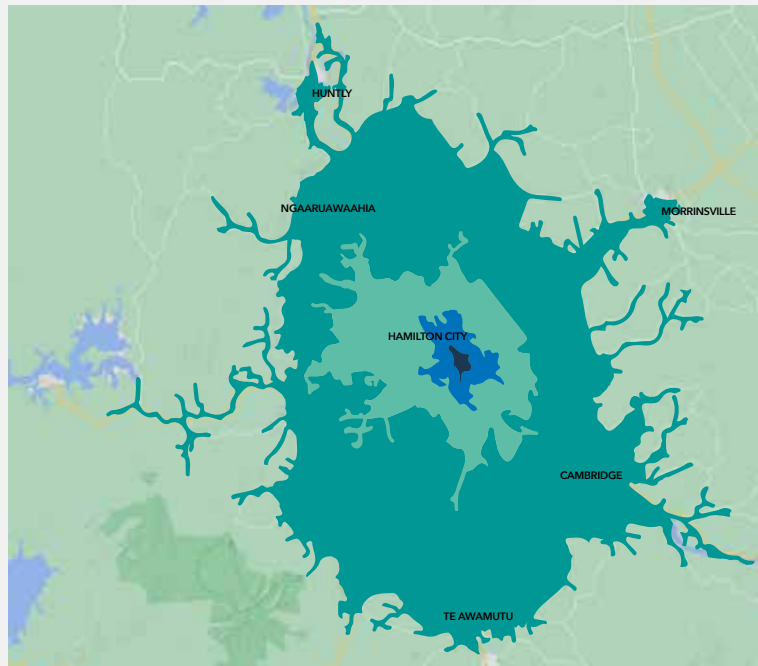
If we want more of our people in buses and out of cars, we need to provide more frequent and reliable services to reduce wait times.

There is a need for more flexible and extended public transport services to cater for shift workers and those with flexible work hours - especially post-COVID-19.



### Case study: taking a look at how far you can go in 15 and 30 minutes from Hamilton's city centre, compared to public transport

People can travel around Hamilton Kirikiriroa in a private vehicle a lot easier than they can by public transport. For example, currently 30 minutes in a car takes you significantly further than 30 minutes riding the bus. This significant difference makes it difficult to advocate for public transport use, as travelling in a private vehicle can be more convenient, is faster, and allows access to many more opportunities.



Public Transport

15 min

30 min



Car

15 min

30 min

### Our pedestrian and bike network has huge potential.

Although our biking network is relatively extensive, the facilities provided are mostly on-road and inconsistent - and therefore, less attractive.

Hamiltonians' perception of biking isn't great, and here's what they say:

- 55% say they would ride a bike more often if it felt safer<sup>37</sup>
- 37% of people don't feel safe biking in the dark<sup>38</sup>
- 38% don't feel safe because of the speed of other road users
- 38% don't feel safe because of how people drive

To increase the share of walking and biking across our transport network, we need to ensure the facilities are high-quality, safe and attractive.

### What do genuine travel choices look like?

More people choose to travel on foot, by bike, by bus or using micro-mobility devices such as scooters.

Hamiltonians choose to travel on foot or on a bike because safe, high-quality facilities and a welcoming environment make walking and biking an enjoyable experience.

- Hamiltonians choose to travel by bus due to its convenient, frequent and reliable service, and high-quality interchanges.
- Walking, biking, scootering, skateboarding, and public transport are accessible, safe, and viable options for all at any time of the day.
- A frequent, fast and reliable public transport network that provides travel time comparable to making the same trip using a private car.
- Pedestrian environments have wide footpaths, great amenities, high security, and a reduced risk of harm from vehicles.

## Focus areas

- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Provide biking safety education programmes for kids and adults.
- Deliver wide, high-quality footpaths between key destinations.
- Deliver community and school programmes to encourage and support more people to walk, bike and use the bus.
- Deliver bike and micro-mobility parking in key destinations.
- Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.
- Work with Waikato Regional Council to improve public transport reliability and frequency.
- Use underutilised road space for amenities, greenery and cultural landmarks.
- Support and require key employers to have workplace travel plans that encourage mode shift.
- Provide high-quality, people-welcoming public transport centres to support mode shift.
- Provide high-quality end-of-trip facilities.
- Support schools to have travel plans that encourage mode shift.
- Promote flexible and/or staggered working hours to reduce peak hour congestion and road conflicts.
- Optimise traffic signal timing to reduce delays for bus services, pedestrians and cyclists.
- Support integration of different modes across the region via seamless station access for key bus stations, high-quality end-of-journey facilities, and park and ride facilities.
- Support car share schemes and carpooling initiatives to decrease private car ownership.
- Identify people with transport disadvantages, and provide viable transport choices for these people.
- Implement accessibility and mobility improvements in Hamilton.
- Support developers to invest in the community and incorporate sustainable elements into design and construction.
- Trial technology to enable innovative solutions to understand and better manage transport usage.
- Identify and implement changes to kerbside spaces to optimise use of space and improve efficiency.



## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Mode share</b> Proportion of people using public transport, and active modes of travel	<ul style="list-style-type: none"> <li>Journey to work: 81% car or passenger in car, 5% walk, 3% bus, 2% bike</li> <li>Journey to education: 57% car or passenger in car, 20% walk, 13% bus, 5% bike</li> </ul> Source: Census	Improvement in the number and proportion of people who choose to use active modes and public transport  Refer to the Biking and Micro-mobility Programme for more targets
<b>Average travel time</b> Average travel time for key public transport routes	<ul style="list-style-type: none"> <li>Waikato University to The Base, AM peak: 45 minutes (via Orbiter)</li> <li>Te Awa to Hamilton, AM peak: 30 minutes (via Orbiter and Route 21)</li> <li>Hamilton to Ruakura, AM peak: 20 minutes (via Route 30)</li> </ul> Source: March 2019 Waikato Regional Council Actual Travel time, Google Travel Time	Improvement in public transport journey time on key routes
<b>Public Transport Patronage</b> Number of passengers using public transport: <ul style="list-style-type: none"> <li>total</li> <li>per head of population</li> </ul>	<ul style="list-style-type: none"> <li>3,691,352 boardings in Hamilton Kirikiriroa in 2019</li> <li>22 boardings in Hamilton Kirikiriroa in 2019 per head</li> <li>Hamiltons population in 2018 was 178,500</li> </ul> Source: Waikato Regional Council Pre-Card, and Bee Card Patronage Data	Improvement in patronage per head of population
<b>Cyclist numbers</b> Number of people biking in Hamilton Kirikiriroa: <ul style="list-style-type: none"> <li>total</li> <li>per head of population</li> </ul>	<ul style="list-style-type: none"> <li>Across all sites with a counter installed, an average daily count of 67 cyclists is recorded</li> <li>Most popular site is Wairere Drive northbound, with an average daily count of 149</li> <li>Second most popular site is the river path, with average daily count of 120</li> </ul> Source: bike counter	Improvement in number of cyclists per head of population  Refer to the Biking and Micro-mobility Programme for more specific targets
<b>See above sections for associated performance measures including:</b> <ul style="list-style-type: none"> <li>Hamiltonians' rating experience of public transport, walking and biking</li> <li>Extent of walking and biking facilities</li> </ul>		

## 5.6. Inclusivity

### Ngaa miro katoa

#### Outcome area

**Providing a range of transport options to make access to the city available to all is important if everyone in our city is to meet their needs and thrive. We want to promote a fair transport system that allows all residents and visitors to safely and reliably access their preferred destination based on their individual needs.**

#### Context

Providing a range of transport options would make access city more inclusive for all. Council wants to promote a fair transport system that allows all residents and visitors to access places safely and reliably regardless of their individual needs. These choices mean that everyone can access various parts of the city how and when they want to. Particularly for Hamilton Kirikiriroa with so many neighbouring towns, it is important that the transport system allows rural communities to feel connected to the city.

For a transport system to be truly inclusive, it needs to be usable and accessible for more vulnerable users such as the mobility impaired, older people, younger children, and other members of our community who may be marginalised and are often overlooked in public design.

Access to education, employment, family, friends and social activities is crucial to both wellbeing and the human experience. Transport is at the centre of this. If the network is inclusive and caters to the most vulnerable communities, then it is better for everyone.

Alongside a transport system that is accessible for everyone, it also needs to be inclusive of Hamilton's rich history and diversity. The transport network should reflect the narrative of how it became home to the Waikato-Tainui iwi over 700 years ago and acknowledge the people, events and stories since that time. We can incorporate storyboards, pavement design, and public spaces for the 160 cultures which call Hamilton Kirikiriroa home - and reflect on their journey to the city, and how they add to its richness and diversity.







## Key insights

### Meeting the diverse needs of users for more equitable transport.

Transport equity and inclusivity means that transport enables everyone to fully participate in all aspects of life, regardless of their background, socioeconomic status, financial situation, age, ability, or sexual orientation.

People's experiences in using the transport system are unequal and transport inequity affects many different groups. Hamilton Kirikiriroa is diverse, and we need to consider each individual's diverse needs to ensure equality, equity and inclusive access for all.

### Case study: the different needs of Hamiltonians

**Income and employment:** the median income in Hamilton Kirikiriroa is \$30,000 per year, which is lower than the New Zealand average.

***"Unemployment rates in Hamilton Kirikiriroa have been consistently higher than New Zealand average since 2001"<sup>39</sup>.***

Our transport network should be affordable for both people on lower incomes, as well as the unemployed. We want to ensure lower cost options, such as walking and biking are viable and accessible.

**Gender:** women often feel more unsafe than men in many situations. In the 2021 Hamilton Central City Safety Survey<sup>40</sup>, a staggering 64% of women said they felt unsafe, much worse than the safety perceptions of their male counterparts. Additionally, caregivers with additional responsibilities have more complex trip patterns than those who work full-time, as they move between various locations more frequently.

***64% of women feel unsafe in Hamilton Kirikiriroa central city after dark.***



**Rainbow community (LGBTQIA+):** in the Waikato region, 4% of the population belong to the rainbow community<sup>41</sup>. The rainbow community is twice as likely to report feeling anxious, nervous and worried compared to those who do not identify with its related groups<sup>42</sup>.

Our transport network should help all people to feel included and should not add to their concerns. This could include positive messaging, well-lit facilities and welcoming transport spaces – bus stops, train stations, biking paths – to ease the nerves of anxious and worried travellers.

**Age:** both older and younger people have far more limited options for moving around the city if they cannot drive, and complex intersections or busy roads are more difficult to navigate.

Older people need convenient access to social services, hospitals, and recreational spaces to engage with the community.

Along with children, young people and caregivers, older people also need a transport system that is safe and enjoyable to use.

Creating a transport network that caters to those of limited abilities whilst being a safe, fun experience for young people is crucial for all people to feel included.

**Disability and temporary impairments:** a disability is an impairment with long-term limiting effects that impacts on a person's ability to carry out daily activities.

*In 2013, one in four people in the Waikato region had some form of hearing, vision, physical, intellectual, psychological and/or other disability.*

"Without a transport system that is not only accessible...available, affordable and acceptable to them, disabled people are prevented from living a full and inclusive life, in contravention of their human rights."<sup>43</sup>

In addition to disability, we must also consider temporary impairments, including people with prams and small children, elderly, people with luggage, and injured people.

Our transport infrastructure and services should be easily accessible for everyone through their whole journey, regardless of their impairment.

**Ethnicity:** Hamilton Kirikiriroa is home to over 160 ethnic groups and has been home to Waikato-Tainui iwi for over 700 years.

Our transport network and public assets should reflect the stories and values of our Waikato-Tainui iwi, and represent the richness of culture from our 160 ethnic groups.

**Rural access:** Hamilton Kirikiriroa is surrounded by extensive and rich agricultural land, and this means rural families need access to Hamilton Kirikiriroa whether it be for jobs, education, healthcare, entertainment or social activities. Some are disadvantaged as they live in areas that are not well-served by public or alternative modes of transport.

Our transport network should be more connected so rural communities feel included and able to access to our city.

**People who don't own a car:** in central Hamilton Kirikiriroa, 22% of households do not own their own vehicle. This tells us that people might not need a car when they are well-served by public transport or live closer to their essential needs, but we also know not everyone can afford to buy or keep up with the running costs of a vehicle.

We need to provide for the people who can't afford a car, or can't or don't want to drive a car for various reasons.

*22% of households in Hamilton Kirikiriroa do not have a vehicle.*

## There is an opportunity for public transport, walking and biking to improve transport equity.

The cost of owning a car is significantly more than it costs to walk or bike. People with limited travel options travel less overall<sup>44</sup>, creating a barrier for accessing work, education, healthcare and sustain a vibrant social life.

Walking and biking are low cost, independent travel options. With improvements to walking and biking to make them safe, comfortable and inclusive, we create attractive access options for everyone, and this in turn reduces transport inequity within our community.

Through transport design, infrastructure, facilities, spaces, and pricing we can ensure that all Hamiltonians feel included and experience a sense of belonging to our community.

### Case study: Cambridge's disability cyclists

In the context of an ageing global population, mobility experts are increasingly seeing biking as a way to help people with disabilities move around cities independently. In Cambridge in the United Kingdom, improving biking infrastructure has allowed 26% of all commutes by disabled people to be made by bike<sup>45</sup>. This highlights that for many in the disabled community, biking can be a viable and attractive option.



## What does inclusive transport look like?

### Hamilton Kirikiriroa is accessible for all because it has a city culture and heritage that is shared, protected and celebrated.

- Te ao Maaori values are embedded in our transport aspirations for Hamilton Kirikiriroa and we acknowledge the Waikato-Tainui iwi who settled here over 700 years ago.
- Our transport network and public assets reflects the richness of the 160 cultures that call Hamilton Kirikiriroa home alongside Waikato-Tainui iwi.
- People of all cultures and abilities have equitable access to the infrastructure, services and support they need to thrive.
- The needs of the most vulnerable are prioritised, particularly older people, children, people with low income and disability and activity limitations, to provide safe and accessible options for all.
- Our transport network provides reasonable connections with rural communities, so there is less need for them to use private transport.

## Focus areas

- Deliver infrastructure improvements to make roads safer.
- Investigate and implement speed management within Hamilton.
- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Provide education to support safer behaviour on our public spaces and roads.
- Deliver wide, high-quality footpaths between key destinations.
- Deliver bike and micro-mobility parking in key destinations.
- Improve navigation around the city by providing accurate and timely wayfinding.
- Support and require key employers to have workplace travel plans that encourage mode shift.
- Improve access to Waikato River path with better sporting, recreational and cultural opportunities.
- Enhance existing relationships with tangata whenua and continue to work closely with them as partners to deliver the aspirations of this strategy.
- Identify people with transport disadvantages and provide viable transport choices for these people.
- Implement accessibility and mobility improvements in Hamilton.
- Understand and support expressions of Hamilton's cultures in transport corridors.
- Engage with our communities to understand their diverse and potentially changing needs.
- Encourage and support migrant education for biking, public transport and using electric vehicles.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Investment in inclusive infrastructure</b>	Source: Long term Plan , Disability Action Plan	<p>Increased level of investment targeting inclusive infrastructure</p> <p>Increased expression of Hamilton's culture in transport infrastructure</p> <p>Design of infrastructure in alignment with Maaori design principles - te aranga</p> <p>Audits undertaken for specific parts of the transport network that are particularly hazardous for vulnerable users</p>
<b>Ongoing engagements with tangata whenua and community groups</b>	Source: Adherence to He Pou Manawa Ora - Pillars of Wellbeing Strategy	Meaningful and successful application of the strategy focus areas

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Walking and biking network condition</b> Percentage travel on bike network classified as complying with defined level of service (facility type)	43% on-road biking facilities, almost zero on-road segregated biking facilities, 24% off-road shared paths and 29% park shared paths Source: HCC GIS biking network	Improvement in good quality and fit-for-purpose walking and biking infrastructure
<b>Access to key social destinations</b> Proportion of population living within 15 and 30 minutes of key social opportunities (including education, healthcare, supermarkets) by public transport, walking and biking	Source: GIS Analysis using GTFS and street network and Census data	Increased population living within 15 and 30 minutes of key social opportunities by public transport, walking and biking
<b>Spatial coverage of biking facilities</b> Number of people living within 500m of a high-quality biking facility	Source: GIS Analysis with biking network and Census data	Increase in population living with 500m of a high-quality biking facility
<b>Spatial coverage of public transport</b> Number of people within 500m of a bus stop or 1km from a rail or bus rapid transit station	Source: GIS Analysis with bus stops and Census data	Increase in population living within 500m of a bus stop or 1km from a bus rapid transit station

## 5.7. Thriving business and economic growth

### He oohanga puaawai, he tupunga rawa

#### Outcome area

**Hamilton Kirikiriroa has ample employment opportunities for young people, and strong business connections with the rest of the North Island. Creating a transport system that is efficient and supports these opportunities and connections through freight movements is important for economic growth in a thriving city.**

#### Context

Hamilton Kirikiriroa is a major hub for business and industry, providing significant employment opportunities for Hamiltonians to thrive. Hamilton Kirikiriroa is a strong servicing and delivery centre for the rest of the Waikato.

A dynamic, integrated transport network is key to enhancing this position by allowing people to access employment and businesses to connect to each other and their customers. The potential for growth means more job opportunities for Hamiltonians, either as employees or innovators in their own businesses.

Integrating freight movements and creating a transport system that is efficient and supports business is important for this growing city, especially because Hamilton Kirikiriroa is at the centre of the 'golden triangle' of New Zealand's economy, encompassing Auckland, Hamilton Kirikiriroa and Tauranga. The golden triangle is home to over half of New Zealand's population, and it's no surprise that it also contributes to the country's economic growth in a similar way<sup>46</sup>.

We have an exciting future ahead in creating this dynamic, integrated transport network to help our people, businesses and our city thrive.





## Key insights

### **Our city is at the centre of the golden triangle and it is important that we continue to thrive.**

The golden triangle is an integral part of economic growth for Hamilton Kirikiriroa and the wider Waikato region. The connections with neighbouring cities allow Hamilton Kirikiriroa to be a thriving business hub.

We need to continue to capitalise on the advantage that we have as the inland part of golden triangle to bring economic prosperity to Hamilton Kirikiriroa.



### **Freight vehicles and distribution play an important role for our city's economic growth and need to be effectively managed.**

Freight deliveries are essential for the city to function and thrive as an industrial city in the golden triangle.

Freight vehicles need to have easy access to the strategic road network without having to travel through residential neighbourhoods or community centres.

We need to embrace and explore new freight and logistic ideas and innovations, so our city can continue to grow and thrive in a sustainable way.

### **We're not capitalising on our rail opportunity as much as we could be.**

Currently, the majority of freight movements for Waikato is via roads. For the freight within the Waikato region, only 1% was moved by rail and for the freight from Bay of Plenty to Waikato only 4% was moved by rail. There are minimal rail freight movements between Auckland and the Waikato<sup>47</sup>.

***Only 1% of freight in the Waikato region is moved by rail - we should and can change this.***

Increasing rail freight share in Waikato is not only a great opportunity to reduce emissions, but it will also increase efficiency, throughput and further benefits from economies of scale. It will also remove trucks from our roads, creating capacity for other users.

## **We want a vibrant city centre where our people can come together to play, work and shop.**


Our city centre has the potential to be the vibrant heart of Hamilton Kirikiriroa, with things to do or see around every corner. We want our city to be alive with hustle and bustle, with people happily living and playing, and businesses prospering in the central city.

As the heart, our city centre can be the main hub for telling the story of our city.

The central city is the commercial, civic and social centre for the city and region, contributing to 12% of the city's GDP<sup>48</sup>. Our central city is currently home to over 1500 business and property owners<sup>49</sup>. We want to create space and use land wisely with good access, so that more local, national and international businesses can be part of our city centre.

Currently, our people tend to access the central city using a private vehicle and there are no safe routes for cyclists to travel through the area. Creating more pedestrian friendly places and reducing non-essential vehicles from central city's streets will free up valuable space to make our streets more attractive and efficient. We will have better amenity, less noise and fewer emissions in our central city for Hamiltonians.

We want to create a vibrant city centre that always has something going on for our diverse communities to come together to play, work and enjoy.



**Our central  
city is home to  
1500+ business  
and property  
owners.**

## **Case studies: alternative modes' contribution to economic productivity**

Research has shown the significant economic benefits of public transport and other alternative modes' contribution to economic productivity, and at times, above and beyond private vehicle.

Our central city should be accessible via different transport modes and enjoy easy access to our awa nearby, which is celebrated and treasured for the city taonga it is.

**Public transport:** public transport contributes directly to economic growth by providing easy, fast access between people's homes and where they work, play, study and access community services. Research shows that improved public transport increases productivity between 3% and 23% over other modes such as the private car<sup>50</sup>.

**Walkability:** walking connections are critical to support productivity and vibrant economy. Multiple studies suggest walkability is likely to make a positive contribution to economic productivity. An Auckland study<sup>51</sup> concludes that there is a significant positive association between walking, job density and labour productivity within the Auckland city centre.

A Melbourne study<sup>52</sup> found that a 10% reduction in the connectivity of the pedestrian network (e.g. through extended waiting at signals) would reduce the value of the Hoddle Grid (1-by-0.5-mile grid of streets in Melbourne CBD) economy in central Melbourne by \$2.1 billion (equivalent to a 6.6 per cent reduction in the value of the economy).

## We're a knowledge-led, tech-savvy city and we want to continue to be.

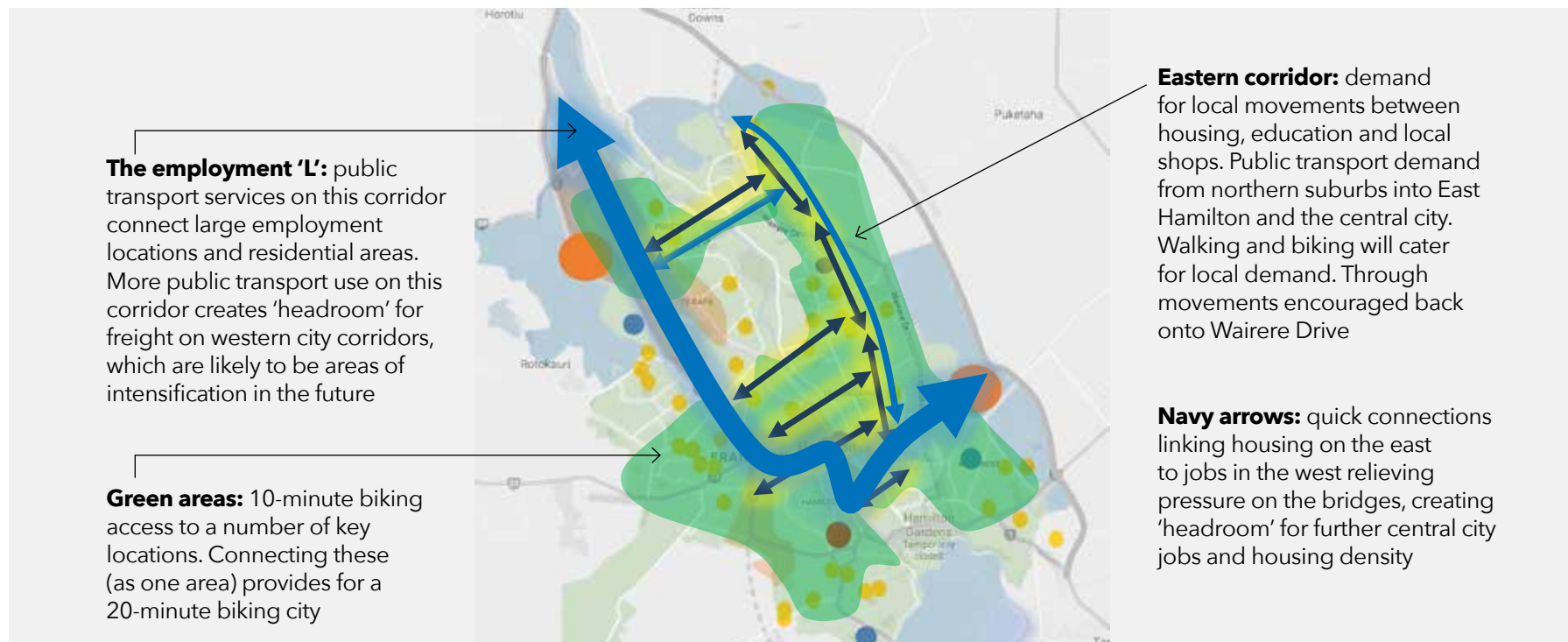
We are already home to world-class businesses across a range of sectors, bringing opportunities, jobs and investment. We are a tech-savvy city, with the digital know-how to deliver research and development on the world stage.

Global businesses like Fonterra, AFFCO, and highly valued education institutes including Waikato University, Waikato Institute of Technology (Wintec), Ruakura Research Centre (AgResearch), and Manaaki whenua – Landcare research thrive in our city. It is important that Hamiltonians can continue to access education, research and job opportunities to learn, grow and thrive. When Hamilton Kirikiriroa thrives, our wider region thrives.

We want Hamilton Kirikiriroa to continue to build on its growing reputation as a centre of excellence within innovation, training, smart and tech-sector industries. We need the transport infrastructure and support services in place to nurture and promote sustainable businesses that add value to our city.

## Our residential areas need to be well connected to the buzzing locations in our city.

There are several distinct areas in Hamilton Kirikiriroa where most jobs are located - Te Rapa and the city centre - and some large employers including the hospital and university, which are commonly referred to as the employment "L"<sup>53</sup>.



There are new residential developments in Rotokauri and Rototuna, and employment development at the airport business park.

It's important to connect existing and future residential areas to employment, and provide for commuter trips that are multimodal, reliable and frequent.

Reduced dependency on private vehicles can open the roads for essential trips, including freight deliveries.

Providing alternative modes of transport and encouraging alternatives to private vehicles mean less congestion on our roads and reduced pressure on the network. This would support our businesses by reducing the travel times of essential trips that must be made by car or truck, for freight, servicing, maintenance or delivery.

By reducing our dependency on cars, we can help improve the economic growth and productivity of local businesses.



## What does thriving business and economic growth from transport perspective look like?

### Hamilton Kirikiriroa is a great place for everyone to work and do business.

- Our businesses thrive and prosper as customers, employees and employers can conveniently access shops.
- We have sufficient spaces in key employment areas for businesses to conveniently load and unload supplies, access services, and maintain vehicles.
- We have an integrated freight network with a good balance of rail and road freight, and smaller carbon-neutral vehicles to ensure efficient and sustainable movements.
- Employment centres support employees shifting to alternative modes by providing safe facilities for micro-mobility and bike storage.

### Focus areas

- Support and require key employers to have workplace travel plans that encourage mode shift.
- Deliver a high-quality urban realm for a vibrant central city.
- Support uptake of local electric distribution technology for businesses and local deliveries.
- Support the future freight form, i.e. support interregional rail freight, freight distribution centres on our urban fringes, local electric/hydrogen distribution vehicles and infrastructure, system-wide planning, and reduce freight vehicle travel during peak hours.
- Provide adequate and safe delivery and service spaces for business and retail.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Rail freight mode share</b> Proportion of freight movements by rail	Source: MoT FIGS Rail Trends Data, National Freight Study	Increase rail freight mode share
<b>Access to key economic destination</b> Proportion of population living within 15 and 30 minutes of key economic opportunities (including work) by public transport, walking and biking	Source: GIS Analysis using GTFS and street network and Census data	Increase population living within 15 and 30 minutes of key economic opportunities by public transport, walking and biking



## 5.8. Supports quality growth and urban development

### Hei tautoko i te tupu kounga me ngaa whanaketanga aa-taaone

#### Outcome area

Hamilton Kirikiriroa is a rapidly growing city because it is an attractive place to live and work. This will need to be carefully managed to ensure this growth supports the lifestyle we aspire to and the environmental outcomes we want to achieve.

#### Context

Hamilton Kirikiriroa is a rapidly growing city because it is an attractive place for people to live and work and we are growing faster than expected.

The interaction between land use patterns, growth and transport provision are particularly important because these combined factors shape our future social, economic and environmental prosperity.

In the future, we aspire to be living in compact urban areas that are served by well-connected public transport and attractive living environments. This means reducing urban sprawl and creating a quality and sustainable city that future generations can enjoy.



## Key insights

### Hamilton Kirikiriroa is growing quickly - and this is a good thing.

Hamilton's population is expected to be over 260,000 people by 2050, being an increase of over 50% since the 2018 census. With more people moving to the city, we have the opportunity to shape land use to meet the changing needs of communities and support sustainable growth.

**Over the next 30 years, we expect 260,000 people will call our city home.**

We want to create compact urban environments that enable people to live close to employment opportunities, access good public transport facilities, businesses and community services.

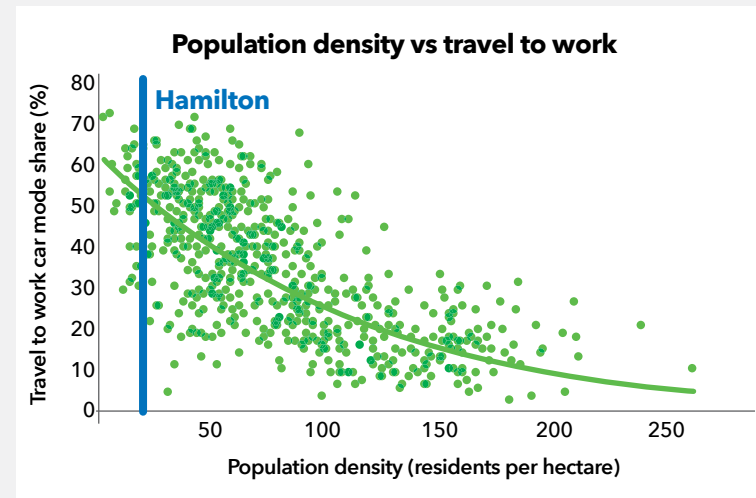
### Case study:

#### London's population density vs travel to work mode share

A higher population density is inversely proportional to commuter car use; that is, the more people living in the city, the less likely it is that people will use private vehicles to travel around<sup>54</sup>.

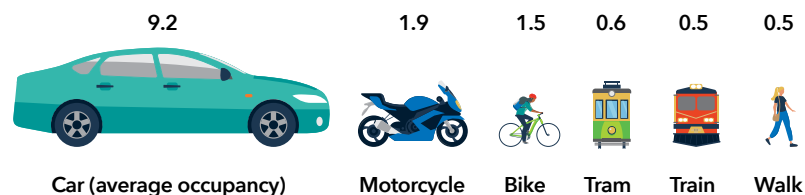
The existing relationship in Hamilton Kirikiriroa between proximity to the city centre and journey to work mode choice shows high active mode choice within 2 km of the city centre and higher public transport mode share within 3km are also a key considerations.

Currently, Hamilton Kirikiriroa has a population density of 16 residents per hectare. This means we sit at the lower end of the graph below. With a more compact urban form, we have the potential to be closer to the other side of the spectrum. With low commuter car share and correspondingly higher public transport, walking and biking mode share, we can achieve more sustainable living.



## Cars take up the most road space and this leads to congestion.

Cars take up the most space, making it the least space-efficient transport mode, with the largest space per person (m<sup>2</sup>)<sup>55</sup>. With high car use, our precious road space is used very inefficiently.



With population growth, congestion is expected to increase by 50% by 2040 during peak periods, particularly in the city centre, Hamilton East, Pukete Bridge and towards Waikato Hospital.

**Peak time congestion is expected to increase by 50% by 2040**

If there are no actions to encourage alternative modes of transport and no infrastructure to support this, in time, Hamilton Kirikiriroa will have heavy congestion.

Building our way out of congestion is not affordable nor effective. Using existing transport infrastructure better and encouraging modes that are more efficient (walking, biking, and public transport) will ease congestion, reduce travel times and create a desirable solution for the city<sup>56</sup>.

## Managing our parking effectively can help Hamilton Kirikiriroa grow in a sustainable way.

A Hamilton parking policy has been created with our people at the centre; it's about accommodating population growth, making the city more people-friendly, promoting wellbeing and supporting economic growth. We need to manage our parking effectively to support use by the intended users and drive sustainable outcomes for our city.

## We should plan our city layout to improve access to public transport.

Public transport in Hamilton Kirikiriroa is often less attractive and less convenient compared to private vehicles, limiting travel choices and access to opportunities for people.

We need to create a compact and sustainable urban form and integrate this with the planned rapid transit and biking and micro-mobility networks. We need to ensure that our multi-modal transport network is shaped around where and how our communities will grow.

Doing this will mean more Hamiltonians can go to where they want to go easily on public transport, or via walking and biking.

## We should plan our city layout to improve access to industrial areas for employment.

In many cities around the world, industrial centres have been set up a considerable distance from residential areas necessitating extensive car journeys. Hamilton is in the unique position that existing industrial areas are often within walking and biking distance of major residential areas.

To ensure our industrial areas are easily accessed by active modes, walking and biking facilities need to be designed as an integral element from day one in developing industrial areas.



### Case study: relationship between public transport and land use

There have been many studies around the relationship between public transport and land use, which identify the urban development potential around public transport stations<sup>57</sup>. Following a review of six international studies, we see that land use planning and public transport interventions influence one another and therefore, public transport investments can be used to leverage growth and developments in specific corridors and places, e.g. transport-oriented developments around key stations. This growth can be encouraged with good access to public transport, public policy, zoning and developments that are well-served by public transport.



## What does supporting quality growth and urban development through transport improvements look like?

### An adaptable, future-ready transport system that supports quality and compact urban form.

- Hamiltonians in compact urban areas are well-served by frequent public transport services, with high-quality and welcoming public transport interchanges.
- People can move seamlessly by foot or by bike between parks, schools, shops, work and across the city.
- Road space is allocated to provide the appropriate land use and transport infrastructure that is suitable for the right movement, place and time.
- Continued use of data and technology to understand our system performance, inform our decisions and evolve our transport system.
- The system is adaptable and future-proofed for changes, opportunities, and challenges.
- Our transport network continues to support Council's aspiration to be a 20-minute city with compact, connected and healthy neighbourhoods.

### Focus areas

- Investigate and deliver connected, separated, safe bike and walking facilities on key routes.
- Provide biking safety education programmes for kids and adults.
- Deliver wide, high-quality footpaths between key destinations.
- Deliver community and school programmes to encourage and support more people to walk, bike and use the bus.
- Deliver bike and micro-mobility parking in key destinations.

- Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.
- Work with Waikato Regional Council to improve public transport reliability and frequency.
- Use underutilised road space for amenities, greenery and cultural landmarks.
- Support and require key employers to have workplace travel plans that encourage mode shift.
- Provide high-quality, people-welcoming public transport centres to support mode shift.
- Provide high-quality end-of-trip facilities.
- Support schools to have travel plans that encourage mode shift.
- Promote flexible and/or staggered working hours to reduce peak hour congestion and road conflicts.
- Optimise traffic signal timing to reduce delays for bus services, pedestrians and cyclists.
- Support integration of different modes across the region via seamless station access for key bus stations, high-quality end-of-journey facilities, and park and ride facilities.
- Support car share schemes and carpooling initiatives to decrease private car ownership.
- Identify people with transport disadvantages and provide viable transport choices for these people.
- Support high-density developments through policy, zoning, and maximising access by active modes and public transport.
- Support developers to invest in the community and incorporate sustainable elements into design and construction.
- Trial technology to enable innovative solutions to understand and better manage transport usage.
- Coordinate and add temporary traffic management to maintain good and safe access at all times.
- Identify and implement changes to kerbside spaces to optimise use of space and improve efficiency.

## How we'll measure success

Performance measure	Baseline data and source	How we'll know we are successful
<b>Use of technology for road network optimisation and flexible travelling information</b>	Source: Long-Term plan technology initiatives	Increase use of data and technology so our transport network can respond quickly to change
<b>See above sections for associated performance measures including:</b> <ul style="list-style-type: none"> <li>• Access to key economic destinations</li> <li>• Spatial coverage of public transport</li> <li>• Freight mode share</li> <li>• Access to key social destination</li> <li>• Spatial coverage of biking</li> <li>• Patronage</li> </ul>		



# Making it happen

The success of this strategy is in its implementation – actually making it happen. The strategy will be used to inform our investment programme in collaboration with other transport agencies, particularly funders and service providers. This strategy is intended to be a live document, and it will be periodically reviewed to ensure outcomes are being achieved and the proposed actions are being implemented.

## 6.1. Partnerships and stakeholder relationships

We cannot deliver this strategy on our own and will work with a range of partners and stakeholders to achieve the vision and outcomes for Hamilton Kirikiriroa. This will include working in partnership with:

- Waka Kotahi
- Waikato Regional Council
- Waipaa District Council
- Waikato District Council
- tangata whenua
- Kiwi Rail
- property developers and the construction industry
- freight industry
- sports and leisure industry
- advocacy groups

In a constrained financial environment, we need to work efficiently and effectively through strong collaborative partnerships with other organisations.

Where existing governance structures or partnerships are not sufficient, we will consider establishing working parties related to specific issues over a specified time period, with relevant organisations involved. We will use international best practices as guide.

With strong working relationships with our partners and stakeholders, we can respond faster and more efficiently to our city's challenges and opportunities.

This transport strategy is one of a series of strategies and documents produced to guide Hamilton City Council decision-making. This includes He Pou Manawa Ora, Our Climate Future: Te Pae Tawhiti o Kirikiriroa Nature in the City, our Open Space Strategy, Play Strategy and Housing Strategy which together help us shape a vibrant Hamilton.

Access Hamilton: Ara Kootuitui has been guided by the principles of Te

Tiriti o Waitangi as well as our requirements to address climate change, protect the Waikato River and help shape a future that allows for quality growth within our city.

He Pou Manawa Ora – the Pillars of Wellbeing Strategy outlines the vision for a city that celebrates its whole history, including its unique Maaori heritage. The strategy recognises Maaori as key partners in determining Hamilton's future and aims to achieve better outcomes for Maaori and all Hamiltonians. The four pillars or 'pou' are history, unity, prosperity and restoration.

Using te ao Maatauranga Maaori as a frame of reference is crucial for the way we plan our future transport networks as much as it is for the developing our climate change response. The transport plans, projects and programmes that are prioritised based on Access Hamilton: Ara Kootuitui is be aligned with He Pou Manawa Ora and subject to the further engagement and discussions going forward.

## 6.2. Public engagement

As we plan projects to deliver to the strategy outcomes, we will continue to engage with our community to identify local issues and deliver the best results. This will include engagement with:

- city residents and community groups
- city businesses and institutes
- special interest groups

## 6.3. What will we focus on?

A summary set of focus areas proposed by the strategy and their alignment with outcomes are shown on the next page. Several of these focus areas address multiple outcomes.

We're working on many of them already and new ones will be added to our plans. These focus areas will be used to guide both Annual Plan and Long-Term Plan prioritisation.

Focus areas	Status	Outcomes							
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth	Supports quality growth and urban development
Deliver infrastructure improvements to make roads safer	Underway with Safety and Access Improvement Programme	✓		✓			✓		
Investigate and implement speed management within Hamilton	New	✓		✓			✓		
Investigate and deliver connected, separated, safe bike and walking facilities on key routes	Planned	✓	✓	✓	✓	✓	✓		✓
Improve personal safety using the transport network via better lighting and surveillance	New	✓		✓					
Invest in suitable technology for parking, red light and speed enforcement	New	✓							
Provide education to support safer behaviour on our public spaces and roads	Underway with Safety and Access Improvement Programme	✓		✓			✓		✓
Provide biking safety education programmes for kids and adults	Planned	✓		✓		✓			
Promote low and zero emissions vehicles	Planned		✓		✓				

Focus areas	Status	Outcomes							
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth	Supports quality growth and urban development
Discourage high polluting vehicles on our roads to improve air quality, environment and reduce noise	Planned		✓		✓				
Transition Hamilton City Council fleet to achieve a 44% emission reduction by 2030	Underway		✓		✓				
Deliver wide, high-quality footpaths between key destinations	Underway with Safety and Access Improvement Programme	✓	✓	✓	✓	✓	✓		✓
Deliver community and school programmes to encourage and support more people to walk, bike and use the bus	Underway		✓	✓	✓	✓			✓
Deliver bike and micro-mobility parking in key destinations	Underway with Biking and Micro-mobility Programme		✓			✓	✓		✓
Investigate zero emissions zones or congestion charge zone in central Hamilton	New		✓						
Coordinate climate change initiatives with central government to promote Hamilton's needs	Underway with Climate Change Strategy		✓						
Provide high-quality public transport priority infrastructure to improve public transport reliability and frequency.	Planned		✓	✓	✓	✓			✓

Focus areas	Status	Outcomes							
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth	Supports quality growth and urban development
Work with Waikato Regional Council to improve public transport reliability and frequency	Planned		✓	✓	✓	✓			✓
Use underutilised road space for amenities, greenery and cultural landmarks	Planned			✓	✓	✓			✓
Improve navigation around the city by providing accurate and timely wayfinding	Underway with various wayfinding projects			✓			✓		
Support and require key employers to have workplace travel plans that encourage mode shift	Underway with Biking and Micro-mobility Programme		✓			✓	✓	✓	✓
Deliver high-quality urban realm for a vibrant central city	Underway			✓					✓
Support uptake of local electric distribution technology for businesses and local deliveries	New		✓						✓
Support the future freight form, i.e. support interregional-rail freight, freight distribution centres on urban fringe, local electric/hydrogen distribution vehicles and infrastructure, system-wide planning, and reduce freight vehicle travel during peak hours	Planned								✓



Focus areas	Status	Outcomes						
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth
Provide adequate and safe delivery and service spaces for business and retail	<b>Underway with Parking Policy</b>	✓						✓
Improve access to Waikato River Path with better sporting, recreational and cultural opportunities	<b>New</b>				✓		✓	
Enhance existing relationships with Tangata whenua and continue to work closely with them as partners to deliver the aspirations of this strategy	<b>New</b>				✓		✓	
Protect the Waikato River through prioritising our blue/green network	<b>Planned</b>			✓	✓			
Provide high-quality, people-welcoming public transport centres to support mode shift	<b>Planned</b>		✓	✓		✓		✓
Provide high-quality end-of-trip facilities	<b>Underway with Biking and Micro-mobility Programme</b>			✓		✓		✓
Support schools to have travel plans that encourage mode shift	<b>Underway with Biking and Micro-mobility Programme</b>		✓	✓		✓		✓
Promote flexible and/or staggered working hours to reduce peak hour congestion and road conflicts	<b>New</b>			✓		✓		✓

Focus areas	Status	Outcomes						
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth
Optimise traffic signal timing to reduce delays for bus services, pedestrians and cyclists	Underway			✓		✓		✓
Support integration of different modes across the region via seamless station access for key bus stations, high-quality end of journey facilities, and park and ride	Planned		✓	✓	✓	✓		✓
Support car share schemes and carpool to decrease private car ownership	Planned		✓	✓		✓		✓
Identify people with transport disadvantaged and provide viable transport choices for these people	New					✓	✓	✓
Implement accessibility and mobility improvements in Hamilton	Underway with Biking and Micro-mobility Programme					✓	✓	
Understand and support expressions of Hamilton's cultures in transport corridors	Planned						✓	
Engage with our communities to understand their diverse and potentially changing needs	New						✓	

Focus areas	Status	Outcomes						
		A safe transport system	Climate change	Enjoyable and liveable city	Environment responsibility	Genuine travel choice	Inclusivity	Thriving business and economic growth
Encourage and support migrant education for biking, taking public transport and using electric vehicles	Planned						✓	
Support high density developments through policy, zoning, and maximising access by active modes and public transport	Underway via District Plan change							✓
Support developers for investing in the community and incorporating sustainable elements into design and construction	Planned		✓			✓		✓
Trial technology to enable innovative solutions to understand and better manage transport usage	Underway with various traffic operations projects					✓		✓
Coordinate and add temporary traffic management to maintain good and safe access at all times	Underway with various projects	✓						✓
Identify and implement changes to kerbside spaces to optimise use of space and improve efficiency	Underway with Parking Policy					✓		✓

## 6.4. How will we measure success?

Our success in implementing this strategy will be understood through the monitoring and evaluation process. Monitoring will identify if changes are needed in the priorities and actions to ensure that we are on track to meet the desired outcomes. The performance measures summarised below relate directly to various strategies and frameworks including Waka Kotahi Land Transport Benefits Framework, Keeping Cities Moving Plan, Waikato Regional Public Transport Plan, to ensure consistency across organisations and regions.



### A safe transport system

- deaths and serious injuries
- perception of safety of public transport, walking and biking



### Climate change

- CO2e emissions
- Vehicle kilometres traveled
- carbon neutral vehicles
- single occupant private vehicle



### Genuine travel choice

- mode share
- average travel time
- patronage
- cyclist numbers
- Hamiltonians' rating experience of public transport, walking and biking
- extent of walking and biking facilities

### Enjoyable and liveable city

- Hamiltonians' rating experience of public transport, walking and biking
- extent of walking and biking facilities
- extent of greenery in community places and on roads



### Environment responsibility

- ambient air quality – NO2 & PM10
- water quality – te awa o Waikato

### Supports quality growth and urban development

- use of technology for road network optimisation and flexible traveling information
- access to key economic destinations
- access to key social destination
- spatial coverage of public transport
- spatial coverage of biking
- patronage - number of people using public transport



### Thriving business and economic growth

- freight mode share
- access to key economic destinations
- freight throughput value



### Inclusivity

- investment in inclusive infrastructure
- number of engagement with tangata whenua and community groups
- walking and biking network condition
- access to key social destinations
- spatial coverage of biking facilities
- spatial coverage of public transport



## 7. What's next?

This strategy has been developed by Council's Elected Members in consultation with our stakeholders and partners.

Access Hamilton will guide the development of a series of programmes and projects that will make Hamilton's transport safe, sustainable, fun, and accessible for all.

The purpose of this strategy is to provide clarity on what Hamilton's transport future will look like and how we will get there.

We are already doing lots of great things to improve our transport networks in Hamilton. We will continue this work and reference this document when we make our funding decisions related to transport projects.

We will also update this document regularly, so we can make sure we continue to reflect the wishes of Hamiltonians in our transport future and meet the outcomes we have set ourselves.

Progress will be monitored to assess how we're moving towards providing for Hamilton's future transport to meet the needs of the community.

The initiatives that stem from this strategy allow us to work alongside our partners to deliver a Hamilton Kirikiriroa that can be enjoyed for generations.

We look forward to engaging with you, as part of our community, to shape the future of our transport together.





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