AUCKLAND CYCLING
An Investment Programme
Proposed 2018-2028
Auckland Snapshot

THE CURRENT INVESTMENT PROGRAMME IS PROVING EFFECTIVE AND AUCKLANDERS SUPPORT CONTINUED INVESTMENT IN CYCLING:

248%
Increase in cycle trips into the city via Upper Queen Street, since 2013.

45,600
New cyclists in 2016, enough to fill Mt Smart Stadium.

BECAUSE WE’VE JUST BUILT 27KM OF NEW CYCLEWAYS:

27km of new cycleways.

New connections in the cycle network has created a

44%
increase in people on bikes using the Northwestern Cycleway.

39%
of Aucklanders are positive about the state of cycling, compared with 22% in 2015.
Auckland’s Cycling Opportunity

Many people would cycle short distances if the conditions were right. Overall, Auckland has good weather and lots of flat areas and with the popularity of e-bikes, hills are no longer such an issue.

**CASE STUDY: VANCOUVER**

The typography, size and climate of Vancouver are similar to Auckland. Over the past five years the city has had a similar sized investment to Auckland in neighbourhood greenways and city connections which has resulted in a shift in mode share for bikes from 1% to 5%.

**OVER 50% OF AUCKLANDERS WOULD RIDE BIKES**

- **73%** of Auckland streets have a slope less than **3%**.
- **54%** of people would consider cycling if the conditions were right.
- **230,000** Aucklanders live within a 30 minute bike ride to the city.
- **31%** of Aucklanders ride bikes at least monthly.

**AUCKLANDERS DO LIKE CYCLING AND HAVE RIDDEN MUCH MORE IN THE PAST**

- **20%** of Auckland intermediate school children cycled to school in the late 1970s.
- Today that number is: **3.9%**.

**RAIN ISN’T A BARRIER**

- **Annual precipitation (mm)**: 
  - Munich: 732
  - Bristol: 592
  - Tokyo: 1771
  - Vancouver: 455
  - Auckland: 817

- **Mean annual sunshine (hours)**: 
  - Munich: 1700
  - Bristol: 1925
  - Tokyo: 484
  - Vancouver: 1240
  - Auckland: 1240

1% of the cities cycling mode share.
Where Cycling Can Play A Significant Role in Auckland’s Transport Network

Over 230,000 people live within a short 30 minute bike ride of the city centre, so each day there are many short trips taken by car or public transport that could be taken by bike. This is especially so for certain areas of Auckland, such as the city centre where there is limited opportunity to add space on existing roads and several years before much needed capacity on public transport can be added.

Auckland is investing heavily in its public transport network and patronage is growing exponentially as a result. 736,000 people live within a 15 minute bike ride of a station or ferry terminal so improving cycling connections to stations will maximise that investment and make stations easily accessible to many more people.
Auckland Cycling: An Investment Programme

Process

This programme focuses on specific cycling projects being delivered by Auckland Transport and the NZ Transport Agency. Other cycling investments are being delivered through the Supporting Growth, AMETI and the Auckland Airport business cases, and therefore are not included in this programme.

Further investments will also be made through local boards, and as part of the Heartland Rides routes by the Transport Agency. This programme prioritises areas for investment and provides partner agencies with direction about co-investment opportunities.

The Integrated Transport Programme calculator is used to determine the ranking of all transport programmes which are seeking funding for delivery. Cycling is one programme and will be ranked according to the criteria in the calculator against other programmes like public transport or growth related proposals.

Auckland Transport business units work together during planning phases to, where possible, co-deliver programmes of work to make the most efficient use of funding and minimise disruption to road users.
Programme Overview

We estimate that the proposed programme would be an investment of $635 million and have prioritised the most strategic areas to start first. If we maintain our current investment levels this will take 10 years to deliver.

The funding process will establish how long it will take to deliver the programme which consists of approximately $600 million of new cycleways and $35 million of complementary initiatives.

Complementary initiatives help to maximise the potential of new cycleways and include initiatives such as bike share, speed management and cycleway and way-finding signage.

**RECOMMENDED INVESTMENT**
*Funded by AT and the NZ Transport Agency*

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<tr>
<th>$35m</th>
<th>Complementary initiatives</th>
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| $600m | Construction of cycling network |

150km & 4% mode share increase

Early construction

Later construction
Problems

There are three main problems that the Programme addresses:

**CYCLING FEELS UNSAFE**

60% would cycle with better infrastructure.

**CONDITIONS FOR CYCLING ARE UNSAFE**

Cyclists are involved in 10x as many serious crashes as motorists (by mode share).

**AND THERE ARE SERIOUS IMPACTS FOR SOCIETY**

Annually, transport emissions cause:

- 5x as many premature adult deaths as the regional road toll, and costing society $466m from mortality and morbidity.
- 38% of Auckland's greenhouse gas emissions come from transport.

NZ has the 3rd most obese population in the world.
How We Came Up with the Programme

The analysis presented below has undergone a robust process to determine the areas for investment. The city centre ranks highly for increasing trips and reducing congestion but addressing projected declines in access to jobs in large parts of the west and some parts of the south means they also score highly. We have used economic modelling to come up with benefit cost ratios as shown on page 12. Within the range of options the health and environment benefits are between $468m - $760m and the safety benefits are between $18m - $20m.

1. We analysed numerous data sets:

   - Cycle commute mode share
   - School enrolment
   - Jobs
   - Deprivation score
   - Number of people age 0-19
   - Poor PT access
   - Population
   - Commute trip length
   - Road crashes
   - Health Outcomes

2. We consulted with key stakeholders:

   - NZTA
   - AT
   - AC

3. The combined analysis showed the best areas for investment:

   - Alb. East Cas.
   - One/ MtW. Mang.
   - Papa/ Ota. Manu.
   - Takan.
   - Paku.

Total scores
Higher scores are the focus areas for investment:

- 60-100
- 50-60
- 40-50
- 30-40
- 20-30
- 10-20
Who we are building for

The programme targets practical trips and journeys where mode shift to cycling would benefit the wider transport system. This is about targeting congestion and improving access to jobs and study across Auckland.

Liz
Place activator
Enjoys her short commute into work from Grey Lynn.

Mat
Planner
Rides his bike to Birkenhead and then takes the ferry to the office.

Maliu
School kid
Maliu joins up with his friends on the cycleways to school in the morning.

Angie
Mum of three
Angie loves her daily rides to pick up supplies for her family.
Types of Cycleways

The type of cycleway we build depends on a number of factors such as who is using it and what the street environment is like.

We know the many more Aucklanders would go by bike if they felt safer and didn’t have the stress of driving with fast, heavy traffic.

High quality cycleways that form a connected network maximise the investment in cycling as they attract the most users and have the most impact on congestion.

In some areas we are trialling innovation and flexible solutions to extend the cycleway network, such as flexi posts and rubber curbs. These could be temporary until separated cycle ways are built as part of corridor upgrades.

“I love the freedom of riding along the pink Lightpath, crossing the North Wharf Bridge and then the Quay Street Cycleway.”

Ayisha
Complementary Initiatives

Complementary initiatives support the success of new cycleways:

- **Public cycle parking**: Potential to install approx. 5,000 additional short-stay parking spaces. Further investigation of long-stay parking at public transport stations.

- **Public bike share**: Feasibility study of a cycle share scheme for Auckland's city centre is underway.

- **Bikes on buses**: Investigate feasibility and benefits. Initial trial on two suburban bus routes.

- **Speed management**: Incorporate cycle route priorities on the urban network into AT’s Speed Management Implementation Plan.

- **NZ Police enforcement**: Work with Police on speed enforcement at high-risk locations, areas of increased cycling including schools, town centres and commuting routes.

- **Cycle lane enforcement**: AT to deliver ongoing enforcement of vehicle use of on-street dedicated cycle lanes. Opportunities for integration with parking enforcement.

- **Marketing and events**: Continue promotion, community engagement and events that support cycling.

- **Travel behaviour change**: Continue schools and business travel behaviour change programmes.

- **Cycle training**: Expand the cycle training programme to target key communities.

- **Cycle way-finding, signage and maps**: Easy to understand signage and maps.
What Investment Looks Like

Te Ara Mua, Future Streets Mangere has delivered improvements to six streets around the Māngere Town Centre including protected cycleways and new crossings on busier roads, as well as traffic calming on local streets and new paths through parks. Significant local engagement including a Bikes in Schools programme and training and events has meant more people walking and going by bike and slower streets and a safer environment for the people of Māngere. This project has been so successful because the whole network of streets have been addressed, rather than a few alterations made to the environment.

Auckland Transport and the NZ Transport Agency worked with the Mangere-Otahuhu Local Board and Mackie Research and Consulting to deliver the project.
What Success Looks Like

The benefits of the programme have been derived using our cycle demand model and the NZ Transport Agency economic evaluation manual. Getting more Aucklanders on bikes will see the programme deliver:

**INCREASED BENEFITS**

- **$1** invested in cycling
- **$2-4** in benefits for society

**FEWER INJURIES**

A 10-20% reduction in cycling related incidents would correspond with:

- **40-80** FEWER SERIOUS INJURIES
- **1-2** LESS DEATHS over the 10-year period 2018-2028

**INCREASED SPACE**

- **4,500** PEOPLE BY BIKE
- **4,500** PEOPLE BY CAR

4,500 people are expected to travel to the city by bike (in the AM peak). This is the equivalent of three lanes of traffic.

**LESS POLLUTION**

9,000

Reducing carbon emissions by more than **13** tonnes per day.

**FEWER HOUSEHOLD COSTS**

Families using one fewer car could save, on average:

**$10,200** every year

**FEWER HEALTH COSTS**

Saving society **$1,410** in health costs per year per person cycling regularly.

**INCREASED BENEFITS**

**WHAT SUCCESS LOOKS LIKE**

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**THE BENEFITS OF THE PROGRAMME HAVE BEEN DERIVED USING OUR CYCLE DEMAND MODEL AND THE NZ TRANSPORT AGENCY ECONOMIC EVALUATION MANUAL. GETTING MORE AUCKLANDERS ON BIKES WILL SEE THE PROGRAMME DELIVER:**

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Next Steps:

There are a number of projects from the 2015-18 programme that will be completed in 2018/19 and will require additional capital investment in that year.

The level of investment made available for this strategy will be determined through AT’s Integrated Transport Programme, the National Land Transport Programme and the Auckland Council’s Long-Term Plan.

We will develop indicative business cases for the first priority areas to ensure effective delivery of the programme in 2018-21.