

# Waitematā Greenways

July 2013





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# 1.0 Introduction

Waitematā Greenways

## 1.1 Purpose of the document

### 1.1.1 Purpose

This document defines the long-term 'Greenways Plan' (often termed 'Greenways network') for the Waitemata Local Board area. This is a visionary and guiding document intended for use by elected members, Council and CCO officers, community and volunteer groups, private developers and other interested parties.

### 1.1.2 Visionary document

Greenways plans similar to this have been developed throughout the world, with Portland, Oregon being one of the most successful. More recently, London developed a Greenways strategy, which was partially implemented in time for the 2012 Olympic Games. Auckland's Greenways plans are a series of linked, visionary plans being driven from the 'ground up' by Local Boards with the long-term aim of greatly improving walking, cycling and ecological connections across the region.

### 1.1.3 Guiding document

Following from the Greenways plans, Council's Community and Cultural Policy unit will develop Open Space Network Plans for each of the Board areas. Each Greenways plan will ultimately become one 'chapter' of the Open Space Network Plans. The network plans will sit under the Open Space Strategy, providing high level direction for improvements to the open space network, specific to each Board area.

## 1.2 Strategic fit

### 1.2.1 Links to the Auckland Plan

The Auckland Plan sets Council's long-term strategic direction, and sets out a vision to create the world's most liveable city. It provides an opportunity for integrated planning to significantly improve transport, environmental protection, land uses, housing growth and economic development, with the benefits of one authority responsible for all coordination.

The Waitemata Greenways Plan implements priorities and directives in a number of chapters in the Auckland Plan, including:

#### Chapter 5: Auckland's Recreation & Sport

Priority 1: *Encourage all Aucklanders, particularly children and young people to participate in recreation and sport*

#### Chapter 7: Auckland's Environment

Priority 1: *Value our natural heritage*

Priority 2: *Sustainably manage natural resources*

Priority 3: *Treasure our coastlines, harbours, islands and marine areas*

#### Chapter 12: Auckland's Physical & Social Infrastructure

Priority 2: *Protect, enable, align, integrate and provide social and community infrastructure for present and future generations.*

Directive 12.8: *Maintain and extend the public open space network, sporting facilities, swimming pools, walkways and trails and recreational boating facilities in line with growth needs.*

#### Chapter 13: Auckland's Transport

Priority 3: *Prioritise and optimise investment across transport modes.*

### 1.2.2 Links to other initiatives

In developing this Greenways plan, a number of related Council and non-Council initiatives have been investigated and - where possible - included in the network:

- former 'Auckland City Council' plans and initiatives such as 'Auckland City Heritage Walks - Auckland's Original Foreshore';
- Auckland Council documents such as the 'City Centre Master Plan' (CCMP)
- Waterfront Auckland's 'Waterfront Plan' ;
- New Zealand Transport Authority (NZTA) proposals such as the Grafton Gully Cycleway;
- local stormwater improvement/stream restoration projects as identified in various local Stormwater Catchment Management Plans and by Watercare or the former Auckland Regional Council (ARC);
- the Auckland Cycleway Network (ACN), prepared by Auckland Transport (AT);
- the National Walkway (Te Araroa) and cycleway routes, as well as the 'Coast to Coast Walkway';
- individual reserve management plans;
- walking school bus routes (supplied by participating schools); and
- initiatives proposed by the 'Greenways Project' community group.

### 1.2.3 Local Board aspirations

Each Local Board plan is a reflection of what elected members have heard from their community. Feedback gained both formally and informally has been instrumental in shaping these plans, and they provide a touchstone for the aspirations of each area's community.

High-performing Greenways have potential to fulfil a number of the aspirations set out in the 2011 Waitemata Local Board Plan, including those set out in the overall vision statement:

*"We value our beautiful natural environments and the buildings and streetscapes that reflect our heritage and shape our identities. We will ensure that these environments are protected and enhanced for future generations to enjoy...we advocate for a sustainable city with connected transport options including public transport that is easy to access and increased cycleways and walkways. We will promote the health and safety of our communities as key factors in transport decisions"*

Beneath the over-arching vision, the Board Plan sets out a number of more tangible objectives to guide its delivery. The following objectives (in blue) are supported by this Greenways plan:

- **Places for people:** We will provide high-quality and varied parks, open spaces and community facilities for our people to enjoy.

*"We will ensure people get to enjoy the parks and beaches in our area by developing and connecting walkways...we want to develop 'green links' connecting our parks and urban bush. This creates more attractive and safer connections linking neighbourhoods, and encourages corridors for increased birdlife in our area"*

- **Respecting and enhancing natural environments:** We will protect and enhance the beautiful natural environments of Waitemata and be responsible global citizens.

*"We will encourage the use of swales (natural filtration systems), earth sinks, green roofs, green walls, grey water tanks and tree planting around streams."*

- **Connected, healthy transport options:** Our communities will have effective, integrated transport options that are safe and people-centred.

*"We want cycleways with eight to eighty year olds in mind, to make them safe, accessible and enjoyable for everyone. We want dedicated and connected cycleways and quality road design that rebalances the priority of road uses to all modes of travel (including cyclists, pedestrians, skaters and mobility scooter users)"*

*"We support innovative approaches to reduce traffic congestion and enable walking and cycling"*

- **Strong, vibrant, engaged communities:**

*"We will support and develop an environment that is accessible for people of all abilities, ages and cultures to enjoy and participate in"*

*"We want to encourage active communities that can participate in organised sport, informal physical activities and use active transport methods. Active communities are healthier, better connected and less vulnerable to lifestyle-related illnesses including obesity and diabetes"*



**"We want dedicated and connected cycleways and quality road design that rebalances the priority of road uses to all modes of travel - including cyclists, pedestrians, skaters and mobility scooter users"**

- Waitemata Local Board Plan (2011)

## 1.3 What is a 'Greenways Plan'

### 1.3.1 Definition

The aim of the Greenways Plan is to provide cycling and walking connections which are safe and pleasant, while also improving local ecology and access to recreational opportunities. To achieve this, Greenways may cross existing areas of parkland, and follow street connections between parks. The network typically follows natural landforms such as streams and coastlines as well as man made features such as streets and motorways.

Implementation of the Greenways Plan will better connect Waitemata to the neighbouring Kaipatiki, Orakei, Albert-Eden Local Board areas and connect to regional walking/cycling proposals for the greater Auckland region. The adjoining map shows other Greenways Plans either under development or adopted by participating local boards. Each board sets their own Greenways definition for their respective areas, based around a common aim.

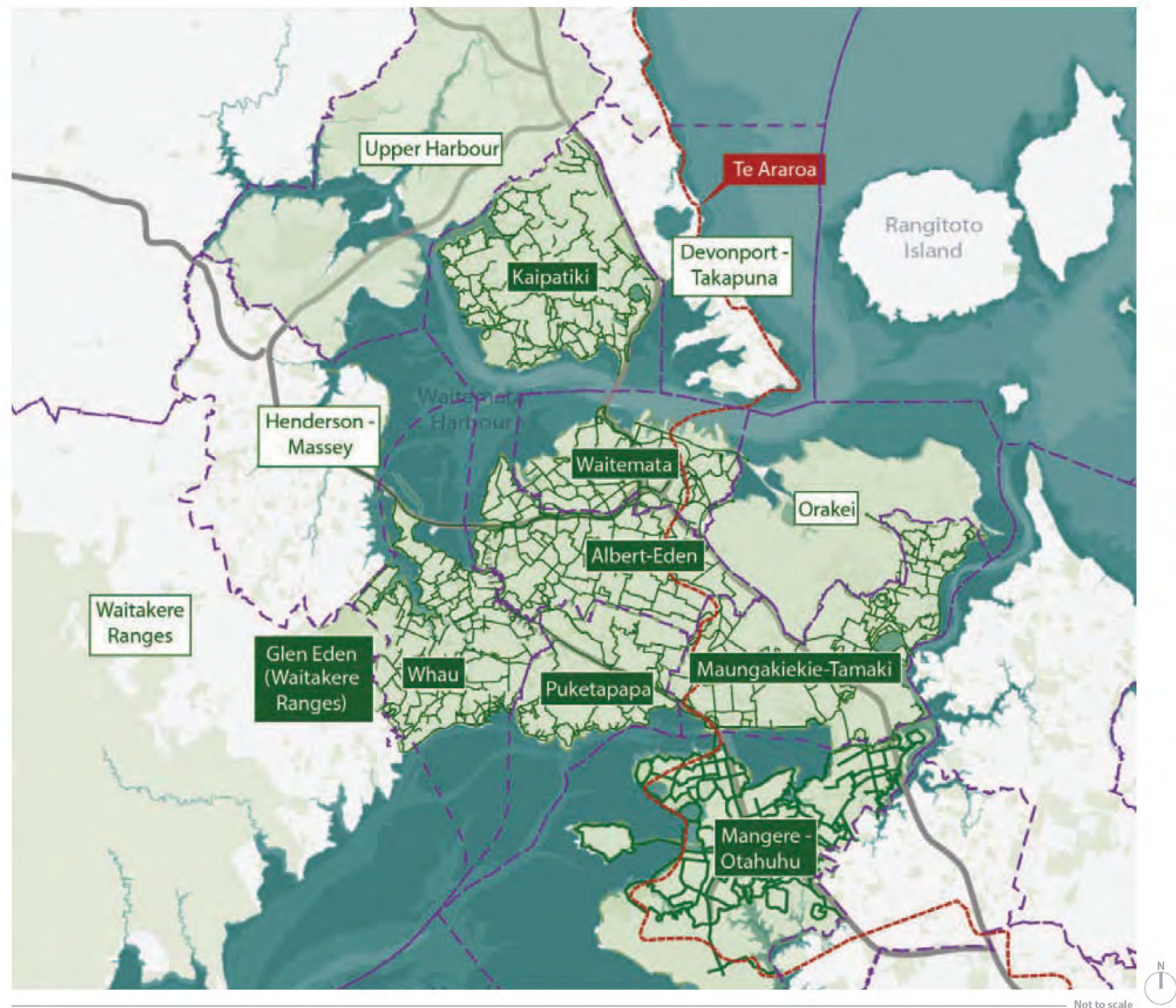
The Waitemata Local Board have set four linked outcomes to define a Greenway in the local area:

- Safe, high amenity walking connections
- Safe, high amenity cycling connections
- Improved ecological and stormwater outcomes, including expanded habitats, movement corridors and food sources for native fauna
- The ability to increase recreational opportunities, both by improving links between neighbourhoods and open space facilities, and also by improving the ability for local streets to function as slow speed environments where the community can gather and play

### 1.3.2 Benefits of a greenway

There are many benefits from developing greenways, including:

- Recreation - Improving people's access to outdoor recreation and enjoyment close to their home
- Environmental – reducing our reliance on fossil fuels by providing attractive and safe alternative transport choices, improving stormwater quality and reducing flooding events through low impact design (LID) measures, and by enhancing ecosystems, habitat sources and ecological niches;
- Social – providing improved opportunities for people to get out of their cars and meet their neighbours, to be engaged with a diverse range of communities and to be connected with local community facilities;
- Health – providing improved opportunities for activity and fitness;
- Education – Providing opportunities to learn about the vegetation, wildlife, ecology, history and people of the landscapes that they pass through; and
- Economic – High-performing greenways can increase local employment as areas become more desirable for businesses and shoppers. Greenways can also provide a tourist destination for international and national visitors. Research has also shown that residential property values can be positively influenced by access to Greenways corridors and open spaces.



Legend:

- Local Boards with a 'Greenways Plan'
- Local Boards - currently no 'Greenways Plan'
- Te Araroa Walkway (national walkway)
- Local Board Boundaries

Not to scale





### 1.3.4 What the greenways might look like

The appearance of the network will vary dependent on its location, for instance, a connection that runs through parkland may look and function quite differently to a connection adjacent to a road or in a built-up urban environment. The adjacent images show what the network could look like in a variety of settings, including:

- parks and reserves and connecting to bush tracks
- coastal areas or alongside streams / estuaries
- adjacent industrial land or residential properties
- connecting to busy urban town centres and/or the ACN's 'cycle highways' or 'connectors'
- adjacent to a minor road and/or the ACN's 'feeder' routes

The surface treatment will vary depending on site specific aspects such as the location of the path, slope gradient and the existing character of an area.

The illustrations on pages 10-11 show a range of potential retrofits which could be carried out to create the 'on road' portions of the greenways network.



Legend:  
 Figure 3-6 Twins Streams Walk / Cycleway, West Auckland  
 Figure 7 Western Springs, Auckland.  
 Figure 8 Road and walk / cycleway junction at the Twin Streams Walk / Cycleway, West Auckland.  
 Figure 9 Cyclelanes, Sydney, Australia.  
 Figure 10 On-road cycling on a minor road, Sydney, Australia.  
 Figure 11 Cyclelanes in the city of Vancouver, Canada.  
 Figure 12 Raingarden alongside road network, Gardner Reserve, New Lynn.  
 Figure 13 Textured surface at intersections to slow cyclists, Twin Streams, West Auckland.  
 Figure 13 Permeable paving on Twin Streams Walk / Cycleway, West Auckland.  
 Figure 15 On-road cycling, local street, Vancouver, Canada.  
 Figure 16 Swales alongside road network, Totara Avenue, New Lynn, West Auckland.  
 Figure 17 Wetland Swale information board, Botanical Gardens, Manurewa.  
 Figure 18 Visualisation of Nelson Street redundant SH1 off-ramp, featured in the CCMP.

3	4	5	6
7	8	9	10
11	12	13	14
15	16	17	18

### 1.3.4 Conceptual imagery for 'minor' road connections (ACN 'feeders')

#### Minor retrofit

##### Potential alterations:

- rain gardens set into parking zone, designed around catchpit locations
- branding 'Greenways' along streets - to highlight the network
- tree planting
- lobby for power undergrounding (if required)

##### Benefits:

- reduction of traffic speed as road is pinched
- slower traffic speed creates a safer environment for pedestrians and cyclists
- improved stormwater quality and reduced flooding events through low impact design measures
- additional planting contributes to the enhancement of ecosystems and biodiversity
- improved street amenity and greater legibility for greenways route

#### Partial retrofit

##### Potential alterations:

- increase one existing footpath to shared path width
- planted swales / rain gardens to one side of the road
- narrower carriageway achieved by reduced speed limits, with parking used as edge friction to slow traffic speeds
- branding and tree planting as per minor retrofit

##### Benefits:

- reduced legal traffic speed creates a safer environment for pedestrians and cyclists
- wider footpath allows for a greater number of users
- stormwater quality, flood event reduction, habitat, amenity and legibility benefits as per minor retrofit, but all to a greater degree.

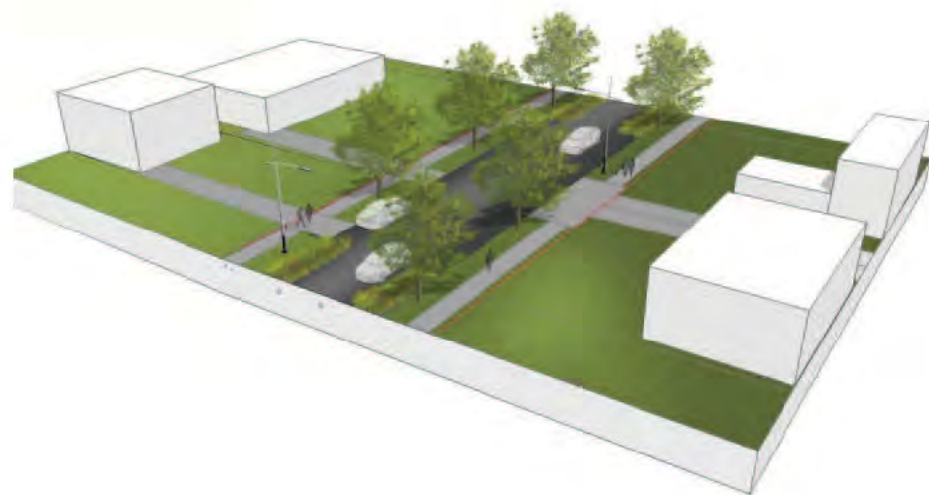
#### Complete retrofit

##### Alterations:

- increase both footpaths to shared path width
- planted swales on both sides of the road
- narrower carriageway achieved by reduced speed limits, with parking used as edge friction to slow traffic speeds
- branding and tree planting as per minor retrofit

##### Benefits:

- As per partial retrofit, but to the maximum extent possible
- Street becomes a genuinely slow speed environment, making it a pleasant place for community interaction and recreation opportunities to occur.



These are visionary diagrams developed by Auckland Council's Parks team for discussion purposes only. Any specific project would be carefully planned with cost, parking, traffic flows and affected parties needs taken into consideration - ideally these works would be phased with other planned upgrade works, and be delivered by Auckland Transport.

### 1.3.5 Conceptual imagery for 'arterial' road connections (ACN 'connectors')

#### Partial retrofit

##### Alterations:

- designate 2.5-3m of footpath as shared path
- rain gardens adjacent to the road created via kerb cuts. Maintain narrow paved strip for access to parked cars as required
- provide foot traffic crossing points within the rain gardens
- provide 'Greenways' signage to highlight the network

##### Benefits:

- rain gardens act as a buffer between traffic and pedestrians / cyclists
- improved stormwater quality and reduced flooding events through low impact design measures
- additional planting contributes to the enhancement of ecosystems and biodiversity
- improved amenity and legibility of greenways



#### Cycleways and retrofit of road median

##### Alterations:

- designate off road 'one way' cycleways adjacent to each side of the road, with swales/rain gardens separating cyclists and pedestrians
- provide footpath adjacent to property boundary
- planter beds in the median (if space and turning movements allow)
- provide 'Greenways' signage to highlight the network

##### Benefits:

- As per partial retrofit (but to a greater degree) plus:
- planted medians create higher amenity crossing points for pedestrians / cyclists
- Separation of pedestrians and cyclists reduces potential conflicts
- Movement of cyclists away from properties reduces potential conflict with vehicles backing out of driveways



#### Retrofit via adjacent properties

##### Alterations:

- designate shared path adjacent to road as for walking and cycling
- rain gardens/swales along boundary and in adjacent lot where possible
- provide 'Greenways' signage to highlight the network

##### Benefits:

- This is a less desirable outcome from a pedestrian/cyclist amenity perspective, and generates some potentially difficult access and maintenance discussions, requiring buy-in from private landowners.
- It does however offer an alternative where other options may not be possible due to space, underground services or other constraints.



These are visionary diagrams developed by Auckland Council's Parks team for discussion purposes only. Any specific project would be carefully planned with cost, parking, traffic flows and affected parties needs taken into consideration - ideally these works would be phased with other planned upgrade works, and be delivered by Auckland Transport.



Image 19: Aerial photo looking over Wynyard Quarter and Victoria Park towards Auckland CBD.

### 1.3.3 Auckland context



scale 1:500000 @ A3



This map shows Waitemata Local Board area in its wider context within the Auckland Isthmus, taking in many of the older inner city suburbs, and flanked to the north by the Waitemata Harbour. The Board area is bordered by the Orakei and Albert-Eden Boards to the south, and connected to the Kaipatiki and Devonport-Takapuna Board areas across the harbour via the Harbour Bridge and ferry services. Waitemata is home to Auckland's central business district, and is the city's most densely populated urban area.

#### Broader transport connections

Waitemata, and in particular the CBD acts as a destination for many north and south-bound commuters. It is bisected by motorways which cradle the CBD and stretch north, south, east and west across the board area. A north-west and south-east rail connection is available to Waitemata commuters. From a Greenways perspective, the motorway and railway corridors present both opportunities and challenges; on one hand bisecting communities, but also offering transport choices, and presenting walking/cycling opportunities in their own right. The CBD offers all major bus services within and out of Auckland. Due to its harbour-edge location, Waitemata offers primary ferry connections for nearby islands like Waiheke and Rangitoto as well as other coastal areas, including Devonport and Birkenhead to the north, Hobsonville to the west and Bucklands Beach in the east.

#### Broader walking and cycling connections

The proposed 'Te Araroa' national walkway seeks to connect the greater Auckland area with Northland and Waikato, ultimately becoming a continuous route that traverses the length of the country. Within the Waitemata area, Te Araroa follows the existing 'Coast to Coast Walkway'. This walk enters Waitemata from the north at the Quay St Ferry Terminal, and proceeds through the eastern fringe of the CBD and the Auckland Domain, before heading south into the Albert-Eden Local Board area. As yet, the walkway is not clearly defined on the ground, however maps and GPS data can guide the pedestrian or cyclist. The mapping in this document is intended to utilise these walkways and similar predetermined routes, to inform future Greenways connections.

To the north, in addition to the ferry services, the 'SkyPath' concept (a proposed walking/cycling path under the Harbour Bridge), would greatly increase 'active transport options between Waitemata and Kaipatiki. This is highly desirable from a Greenways perspective.



Image 20: Aerial photo looking over Westhaven Marina towards Auckland CBD.

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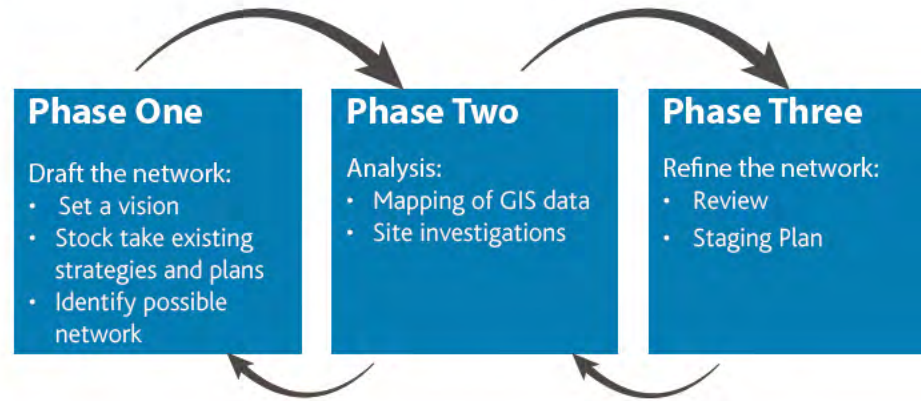
## 2.0 Methodology

Waitematā Greenways

## 2.1 The process

### 2.1.1 Introduction

The Waitematā Greenways Plan was developed via an iterative three-stage process, with feedback loops, as outlined below:



### 2.1.2 Phase one - draft network

As a first step, previous studies and planning documents relevant to the area were collected and reviewed. The Waitematā Local Board Plan was reviewed to gain an understanding of both the strategic vision of the community, and also their planned projects. After this, a definition for the Waitematā Greenways was discussed and agreed with the Board, and a 'working party' set up, which met regularly to review the Plan as it developed.

Next, a desktop study was carried out to map a draft 'high-level' network to provide walking and cycling connections between existing parks, open spaces, reserves and streets. Potential ecological improvements were also considered looking at linking areas of existing vegetation, existing significant vegetation, and streams/rivers. These desktop studies gave an understanding of the broad landscape patterns within the Waitematā area, and were used to guide phase two of the process, where the network was 'ground-truthed'.

This 'desktop' network plan was taken to the working party for review prior to undertaking site investigations, to ensure that it was aligned with the Board's aspirations and objectives for the project.

During this phase, discussions were held with Auckland Transport and other Council officers to inform them of the project, and to understand linked policies or projects that would affect the Greenways Plan.

### 2.1.3 Phase two - analysis

The draft network plan was next assessed on site to be 'ground truthed'. This process involved an analysis of the existing site conditions - including topography, vegetation cover, existing asset condition, CPTED (Crime Prevention through Environmental Design) principles, utility service locations and the layout of roading corridors.

All connections were sighted and evaluated, and a photo-record taken. Some connections were found to be inappropriate (where there wasn't enough space for a connection, the connection was unsafe, the terrain was too steep, or a higher amenity alternative was found) and the draft network was updated accordingly.

Following this ground-truthing the route was overlaid with other GIS data to ensure that the network made appropriate connections to all existing facilities, such as schools, community facilities and transport nodes.





## 2.1 The process

### 2.1.4 Phase three - refine the network

Following the analysis phase, the Waitematā Local Board and Council officers from Parks Sports and Recreation and Community and Cultural Policy units, as well as Auckland Transport reviewed the proposed Greenways routes in detail, and a wider audience of stakeholders were notified of the draft plans, including those listed below:

- Various Council officers from the Stormwater, Area Spatial Planning Biodiversity and City Transformation Projects teams
- Waterfront Auckland
- Watercare
- Auckland Transport
- Transport organisations; New Zealand Transport Authority and Kiwirail
- Albert Eden and Orakei Local Boards
- Iwi - Ngati Whatua and Ngati Paoa
- Recreational groups; Walk Auckland, Cycle Action Auckland, Auckland Mountain Bike Club and local skaters
- Local Business Associations
- Local Residents Associations
- Schools and Universities
- Local Sports Clubs
- Parnell Trust and Parnell Community Committee
- 'Friends of' and advisory groups; Friends of Cox's Bay, Grey Lynn Park Advisory Group  
Civic Trust, Grey Lynn 2030, Sustainable Coastlines, Mainline Steam Heritage Trust
- Auckland Tourism, Events and Economic Development
- Regional Facilities Auckland and associations; Auckland Museum, MOTAT and Auckland Zoo
- Automobile Association (AA)
- Local residents

The draft maps were then uploaded to the Waitematā Local Board website where the public could view and complete a online feedback form. Around the same time, a public event 'Green for Go' was held (February 2013) to generate public interest in the Waitematā Greenways and gain further feedback on the draft routes.

As the Waitematā Greenways is a long-term project, to be developed over the next ten years, the Board has identified priority sections. These priority sections are based on their costs, benefits, constraints and opportunities, often driven by other local projects - including those by Auckland Council, Council Controlled Organisations and external stakeholders, such as NZTA and Kiwirail.

The Priority sections can be viewed in Appendix Section C of this document.





Image 24: Aerial photo looking over Point Resolution and Judges Bay towards Parnell.