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Wellington City Council

# Cycling Framework 2015

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Absolutely Positively  
Wellington City Council  
Me Heke Ki Pōneke

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## Introduction

### **We're building a cycling network because smart cities cycle**

Wellington's transport network plays an important role in the region's economy – helping people to connect with each other and bringing goods to market. An efficient transport network is also important for health and wellbeing and for the environment. Investing in cycling makes good economic and environmental sense. Cycling is a cheap and healthy transport choice and it helps to reduce traffic congestion. Being able to get around by bike makes our city a more attractive place to live, work and visit.

#### ***Liveable city***

Giving people better transport choices makes Wellington a more liveable city – keeping the people who already live here happy, and attracting more people. Bringing more people into our city grows our economy.

#### ***Economic activity***

Cycleways make it easier to make short trips to local shops. Following the installation of cycleways in San Francisco, 60 percent of retailers reported seeing more residents shopping locally and 40 percent experienced an increase in sales as a result.<sup>1</sup>

#### ***Efficient transport network***

Making cycling a real transport choice means our roads run more efficiently for all users. In New York, the introduction of cycleways also saw car and taxi journey times stabilise and decrease<sup>2</sup>.

#### ***Wellbeing***

Choosing active transport makes it easier to include exercise as a part of your daily routine. The Ministry of Health recommends 30 minutes a day to increase your quality of life and your sense of wellbeing.

#### ***Safety***

International research clearly shows a significantly lower risk of injuries for all road users when cycleways are installed. In New York City, protected bike lanes have reduced injury risk for road users by 40 percent.

### **We're building cycle lanes for you, your family, and your friends.**

In a recent survey, 76 percent of Wellingtonians told us they would like to bike but do not feel safe doing so on busy roads<sup>3</sup>. We are creating a new network of routes for people who want to bike at their own pace, in their everyday clothes, and away from most traffic. We want to change how people view cycling and encourage more women, children, and older people to bike.

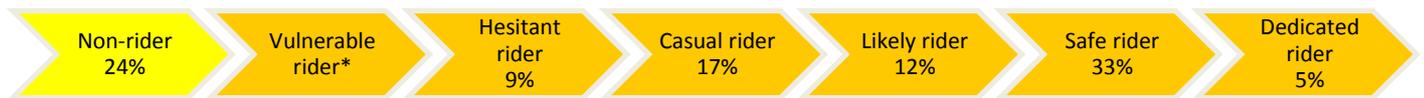
We're planning our network around motivating people to get out and have a go so they can become more confident riders who can start biking recreationally, casually, and eventually to and from work and school.

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<sup>1</sup> Mission District of San Francisco  
*Economic Effects of Traffic Calming on Urban Small Businesses*  
E. Drennen 2003

<sup>2</sup> New York City Department of Transport Protected Bike Lane Analysis

<sup>3</sup> Cycling Demand Analysis 2014



\* We estimate there is a group of riders who could be considered as vulnerable including the elderly, people with disabilities, and young people (who were not included in the Cycling Demand Analysis).

Cycleways make it easier for everyone to share the road by ensuring there's enough space given to people on bikes, on foot, or in cars or public transport.

## We're looking at the best way to implement our cycling network.

We're investigating the best way to move forward, from what type of cycleway goes where to which cycleway will be built first.

The **cycling framework** outlines how decisions about the implementation of a cycling network will be made (what, where, when, how).

The **cycling network plan** will be developed based on the framework and will show where cycling lanes and infrastructure will be provided over the next 10 years. It will demonstrate how the network will connect across the city with the aim of increasing the number of people who choose to get around by bike.

## The Cycling Framework in action

### *Phase 1 – Strategy development*

We are creating a cycling network to reduce barriers to cycling and to connect people with the places they want to go. The cycling network will be based on how many people can be reached in each area, and in way that will reduce the barriers they currently face when it comes to cycling. This will mean the cycling network will help as many people as possible decide to ride their bikes recreationally, casually, or to and from work and school.

The aim of the framework is to clearly show how the network can be developed. It will provide clarity and consistence, and help us to decide the order in which we create different parts.

The framework outlines the following:

- overall network plan (what we are trying to connect from where)
- the types of cycleways we want to create
- who we are trying to attract
- the design principles for the type of cycleway we choose to use
- the decision principles for how these are applied to real locations
- the limits for decisions that we will make within the scope of the policy and for decisions that will require further Councillor input

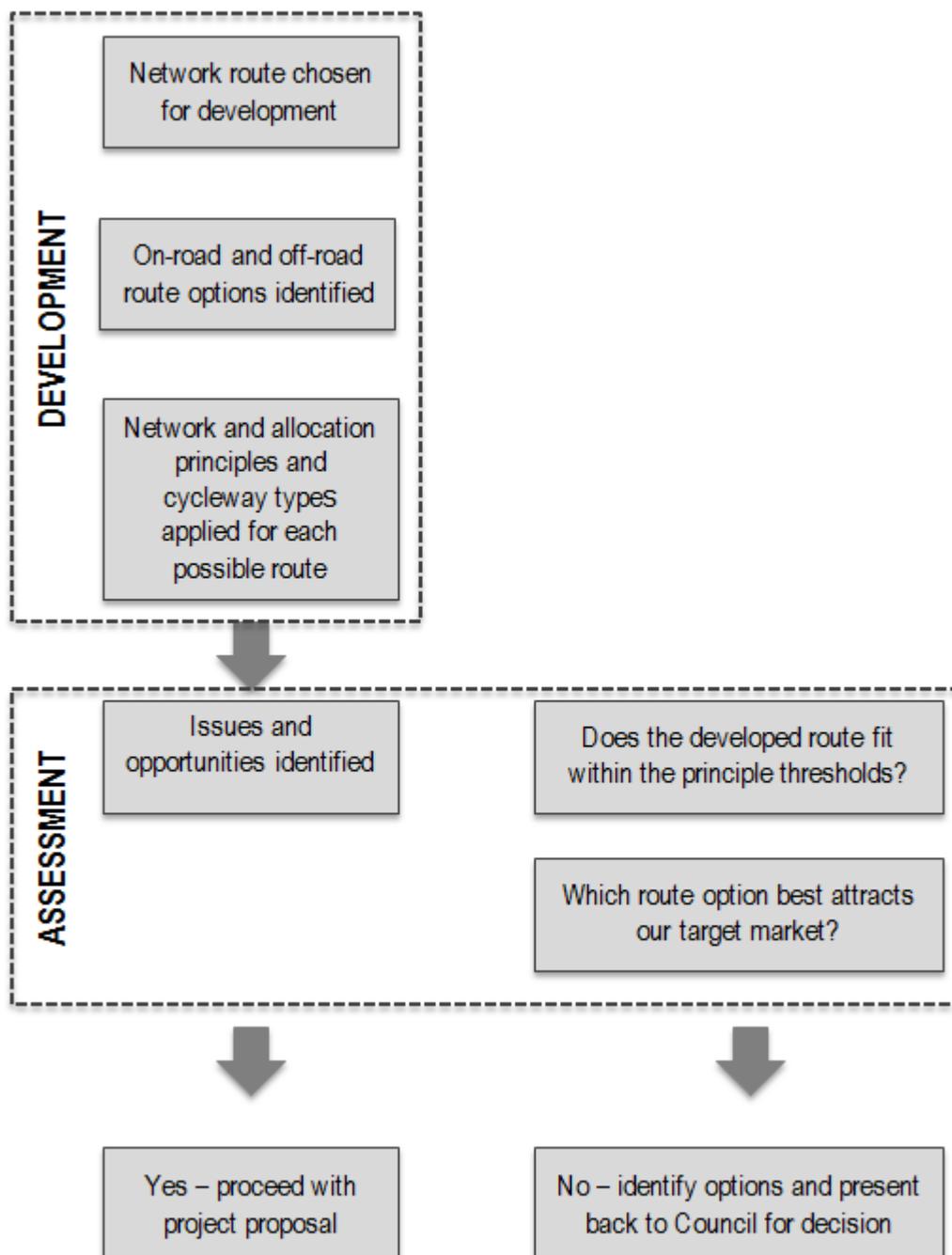
The framework principles and network plan must be agreed before we can move on to further development of specific routes.

## Phase 2 – Optimisation and packaging

Following the agreement to the Cycling Framework, officers will take the network plan and apply the cycleway types and framework principles to each of the routes. Each corridor (north, east, south, west and CBD) is made up of different routes – making a route package. These will form the basis for implementation.

In most cases we will be able to find solutions by applying the framework principles. When we identify areas in a route where we can't find a way through using the principles, Council will decide how to proceed.

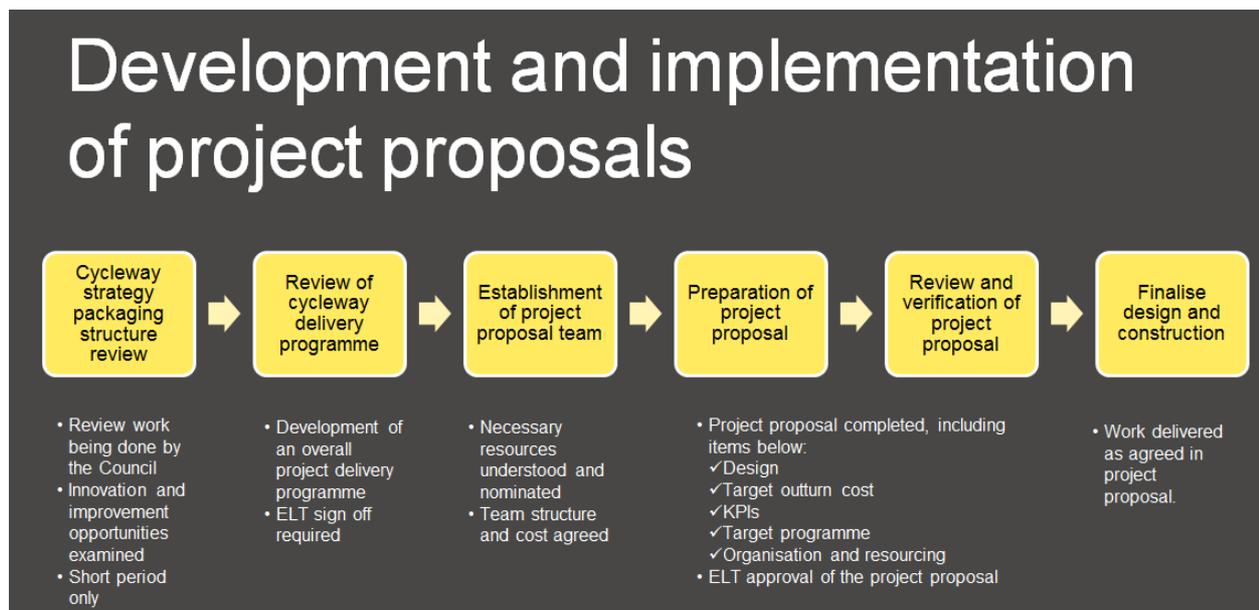
This is how decisions will be made:



## Phase 3 – Design and delivery

After that, we will move into the delivery phase. We will decide on the best project delivery model to implement cycleways. The Cycling Framework and the route packages will determine the draft network delivery programme, on which the first round of project proposals will be based.

Project proposals will outline the individual projects to be implemented. As part of the development of these they will be designed, priced and programmed accurately. The development of project proposals is outlined below:



Project proposals will be developed through the delivery model that we have in place. By having the ‘package’ approach in place we will ensure benchmarking, improvement of cost and non-cost performance and efficiency of delivery increases over time.

## Network plan

### ***We're building cycle lanes that work for Wellington.***

We're creating a plan for a connected cycling network that will cover the whole city over the next 10 years. It will join the dots by choosing routes that best connect suburbs to the central city.

We have the opportunity to join up:

- 53 schools attended by 25,000 kids
- 20,000 businesses with 200,000 residents
- Porirua and the Hutt Valley with the central city
- visitors and residents to national recreation infrastructure such as the Rimutaka Cycle Trail
- health workers to seven hospitals
- existing cycling infrastructure
- substantial funding from central government.

Building cycleways in Wellington has its challenges because we are retrofitting them into established streets. We have developed a range of solutions to address different requirements and circumstances.

Some of the routes will be major commuter routes and will require separated cycleways, most likely on the road. However, many of the routes will be quiet local routes that may result in a slightly longer travel time but provide a more comfortable cycling experience. These alternative routes may go through Wellington's parks, reserves and other spaces. Although the types of cycleway may vary, the safety of all road users will not be compromised.

We want to create a connected, safe, comprehensive network that caters for the experienced rider as well as those who lack confidence. We want to address existing concerns and barriers to cycling by investing in cycling infrastructure as and where needed.

The type of routes we create will have a positive impact on local shopping areas and quieter residential streets by calming traffic. They will be places that not only people on bikes will enjoy but the general public as well by making the spaces easier to move around.

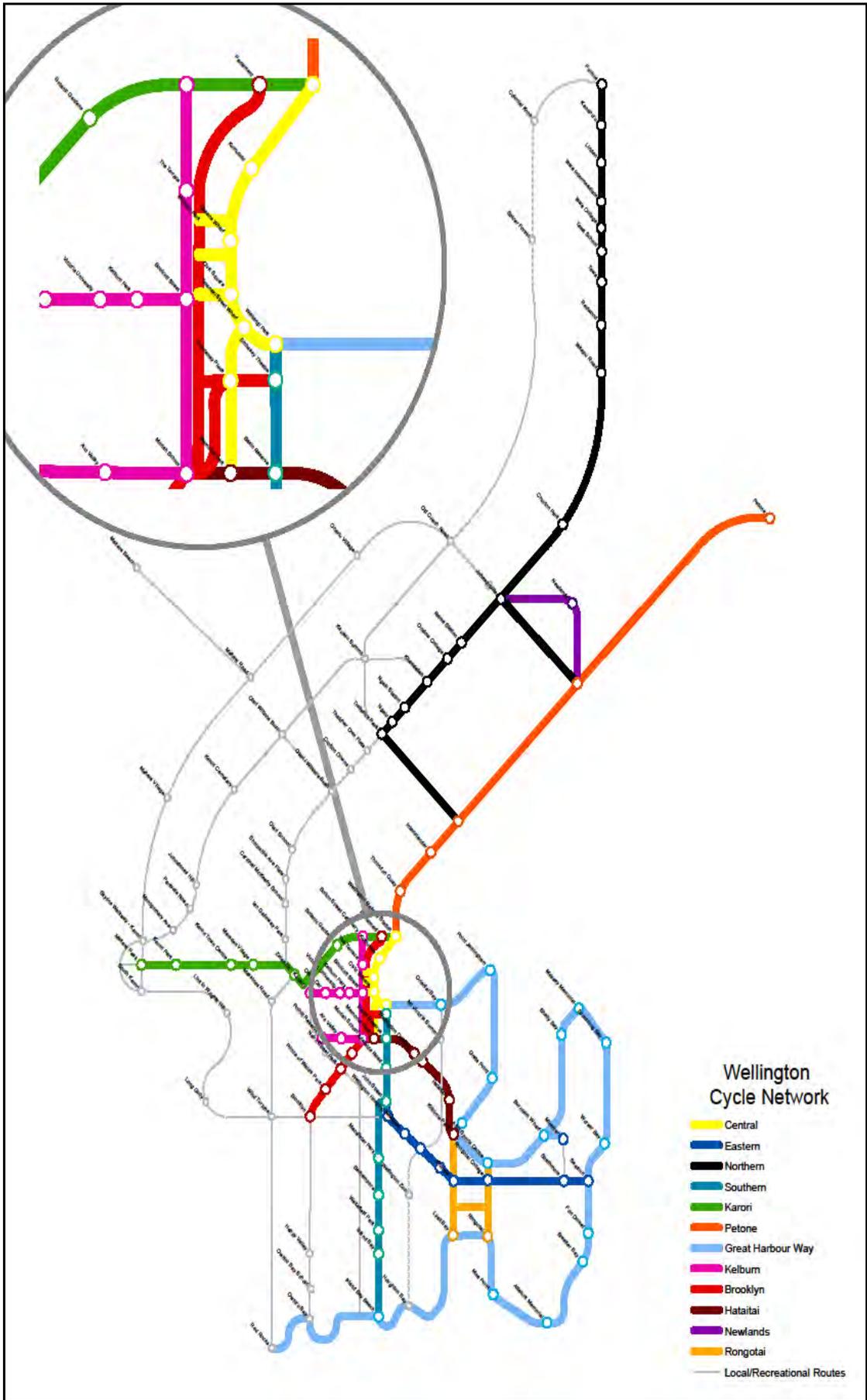


Figure 1 – Wellington Cycle Network (See Appendix B for A3 copy)

# The types of cycleways we will create

See Appendix C for standard design guidelines.

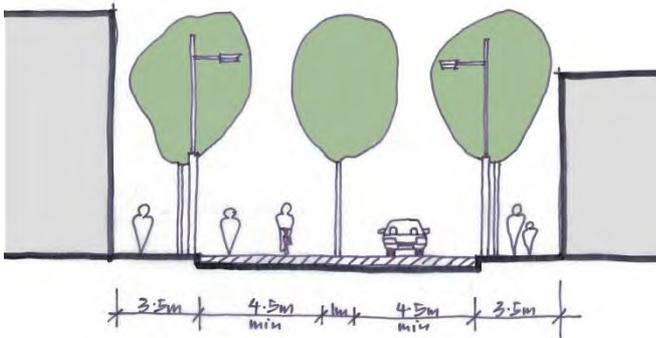
## Quiet routes



## Description

These routes would be along less busy suburban streets rather than on main roads. It's likely some minor modifications will be needed to make them fit-for-purpose. They may pass through cul-de-sacs or existing routes through land acquisition. These would work in areas of low speed and low volume. People on bikes must take the traffic lane. There would need to be careful intersection and side-road design.

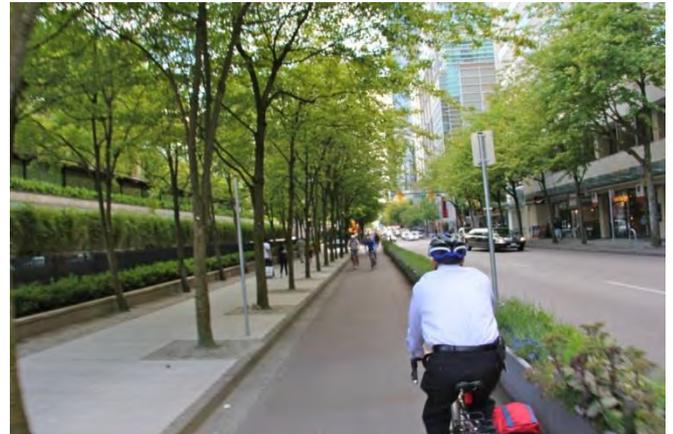
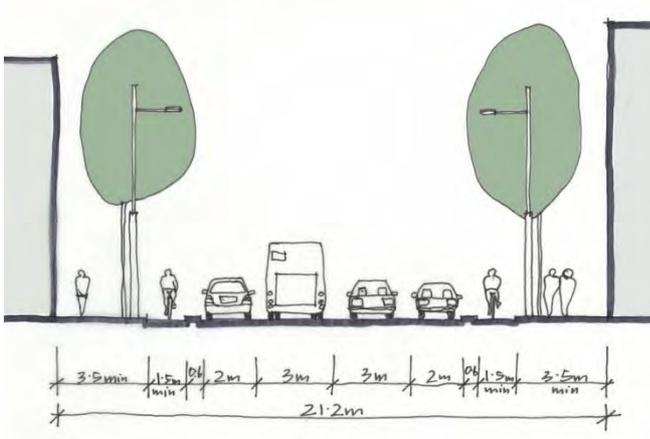
## Shared vehicle/bike zones



### Description

Shared zones would be used in busy commercial areas, where there is limited space and lots of people walking along and across the street. Businesses in these areas may need convenient parking for their customers. Because of the high volume of traffic, these zones will need low speed limits (30km/h or less). They are only appropriate over short lengths. People on bikes must take the traffic lane.

## Protected bike lanes

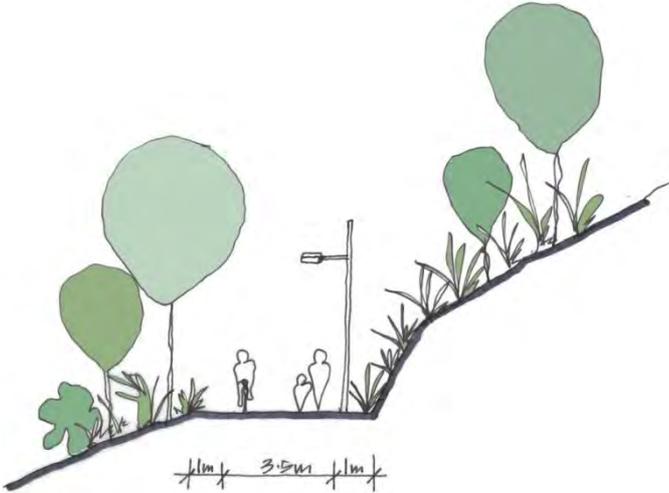


### Description

Protected bike lanes are along main routes, where we would expect to see the most commuters. These are the routes where parking may need to be removed, with replacement or alternative parking being provided as appropriate.

Protected bike lanes can be worked into overall streetscape upgrades like in the photograph above. They will be used on routes where there are higher speed limits and heavy traffic.

## Alternative bike paths



### Description

Alternative bike paths would be placed through parks and reserves and along coastal areas. They will mainly be used when space is constrained in the road corridors and there is an opportunity for use by commuters and recreational riders. These are off-road but related to the wider network. These are not mountain biking tracks, but high quality routes that will be designed to fit in with the natural environment around them. Issues that will need to be considered when designing these routes include personal safety and intersections with other routes.

## Target markets

We are creating a new network of routes for people who want to cycle slowly, in their everyday clothes, away from heavy traffic. We want to change the culture of cycling and encourage more women, children, and older people to cycle.

Our Cycling Demand Analysis research suggests that, given the right conditions, more people aged between 10 and 80 would consider cycling distances less than 10km. The numbers within this group are high with around 70 percent, or over 130,000 of our residents aged between 10 and 80 living within eight kilometres of the town centre. Survey data suggests that 22 percent of residents over 18 would prefer to be able to cycle to work.

We understand that within this broad group there are different concerns, skill levels, and needs. To motivate each of these groups to cycle more often, different interventions will be required.

Our plan is to develop a cycling network that allows the beginner rider to have a go on some of the safer recreational cycleways. This will help them become a more confident rider who may ultimately start using cycling as their primary mode of transport for getting to work or school

## Cycling framework principles and thresholds

These principles provide clarity for the community, Councillors, and officers around how decisions about building a cycling network will be made. They will also outline what thresholds will be applied to projects to determine whether a matter needs to be referred back to Council for a decision.

**Where any element in a proposal exceeds the agreed threshold, it will be referred to Councillors for a decision. Elements that do not go above the limits will not need to be referred. Where a proposal includes one or more elements that exceed agreed limits, only those elements will be referred for decision—not the entire proposal. For example if a project complies in every respect except that alternative parking is more than 2 minutes' walk then it is only the variance from the parking threshold that would be discussed.**

The framework includes principles for the design of the cycle network as well as space allocation within the network. It covers route selection as well as the impacts on pedestrians, public transport, private vehicles, parking (CBD and suburban), intersections and acquisition of property.

A full copy of the cycling framework principles and limits can be found in Appendix C.

### ***Cycle network design principles***

The network design principles ensure any decisions made will make our transport network safer, more efficient, and sustainable for all modes.

The cycle network will be made up of key cycleways and local routes that “join the dots”, connect residential areas to other residential areas and the central city, and provide valuable links within communities to local centres, schools, and other facilities. The goal is to create a mix of routes across the network (including recreational routes) that cater for the varying levels of confidence and types of riders. Consideration will also be given to safety, directness, comfort, coherence, attractiveness, and adaptability. Safety solutions will be applied through the design of the cycleway types and a focus will be put on building routes that maximise funding opportunities from third parties.

Where there are viable routes within the existing road space, protected cycle lanes will be built. We will aim to keep cycle lanes away from corridors that are already under considerable space pressure, particularly where there is an overlap with busy public transport routes. For constrained corridors on main routes, viable off-road or alternative routes

will be sought in order to avoid changes in busy transport corridors and ensure a safer and more enjoyable cycling experience.

We will be innovative and adaptable in building a cycle network that best fits Wellington. Cycling will become part of a long-term corridor solution taking account of strategic aims and public transport developments.

When decisions about route selection are made, options will be presented that compare times, distances, and destinations between the proposed route and the most direct current legal route.

We will measure and report on how many people start biking and how often they use the improved cycle network in order to ascertain its value to the city, and to better understand which design types and routes work best for Wellington.

## ***Space allocation principles***

The principles relating to space allocation within corridors will ensure any decisions made will take into account other users of the corridor. These could include people on bikes, on foot, in private vehicles or on public transport, as well as parking in the suburbs and central city.

We will make sure that cycling infrastructure contributes to safe environments for pedestrians. There should be no significant negative impact on pedestrians as a result of implementing the cycle network and pedestrians will benefit from a reduction in the number of riders using footpaths.

There should be no adverse effect on core bus corridors and routes and no more than minor adverse effects on other bus services. Public transport journey times may increase slightly, due to traffic lights and reduced speed limits to accommodate people on bikes, but travel times will remain predictable on key city corridors. Through our corridor improvement proposals we will aim to improve public transport journey times and increase service reliability. We want to make it easier to cycle in conjunction with public transport and will support Greater Wellington's trial of bike racks on buses and improvements to bike parking at railway stations. We will also give consideration to implementing bike parking facilities at major bus stops.

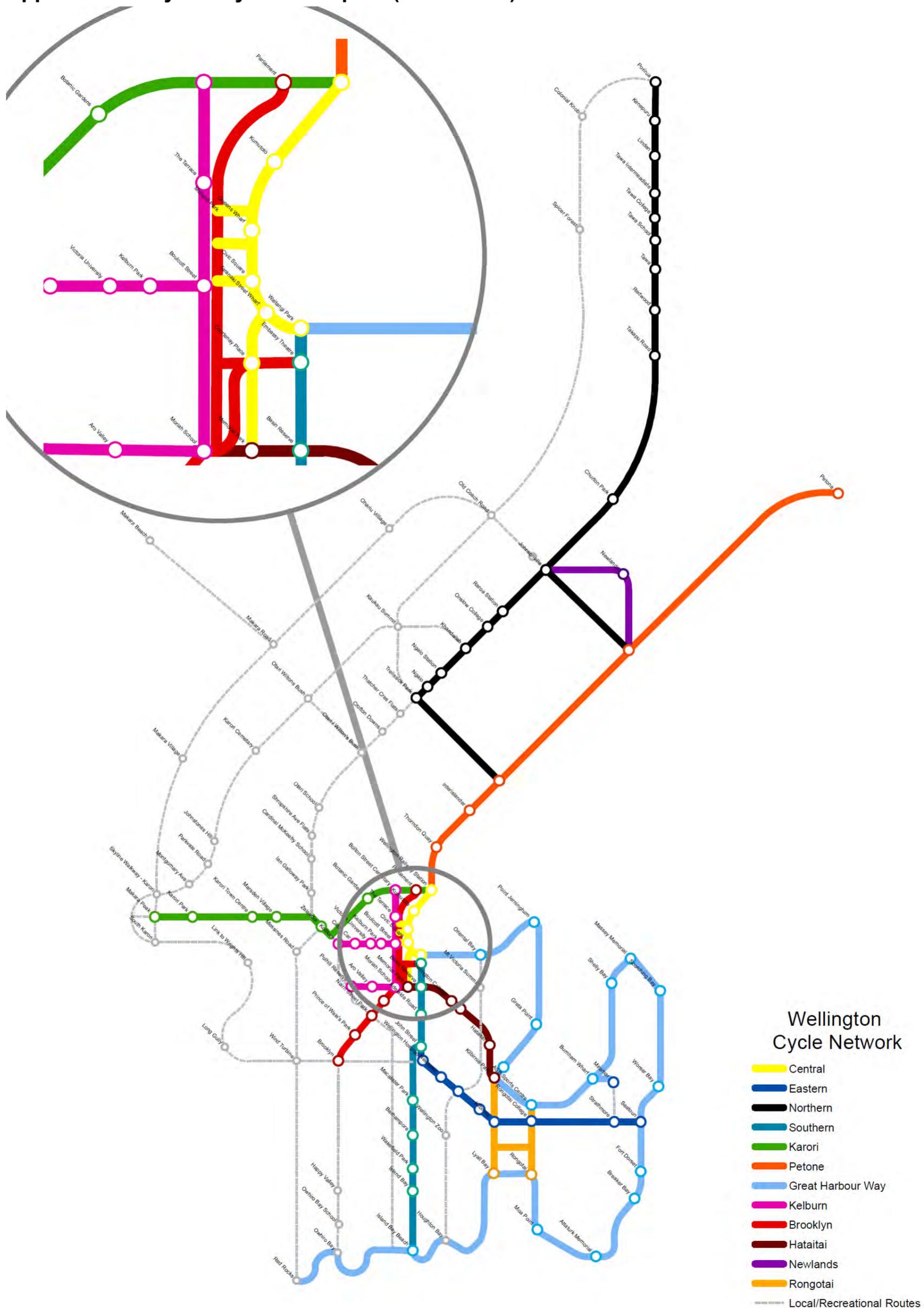
There should be no more than minor adverse effects on private vehicles. Travel times may increase but we will aim to ensure that travel time predictability is retained. Private vehicles include cars, trucks, vans, taxis, and motorcycles. Transport modelling will be used to assess travel time impacts of any proposals.

On-street parking will be removed in some locations to make space for the proposed cycle network. The loss of on-street parking is a common occurrence when new walking and cycling facilities are built. When determining how to use a transport corridor, the Wellington City Council gives priority to safety, pedestrians, cycling facilities, bus stops, bus lanes and traffic flow over other uses.

Where there is on-street parking that needs to be removed in order to implement network improvements, we will assess how current parking is used and the number of spaces available. Public residential parking in the suburbs will still be available but proximity and volume may change. Commuter car parking (ie more than three hours) may be restricted to provide for Residents Parking or time-limited for retail parking. In some cases, commuter parking may be removed altogether. We will not look to replace car parks that are primarily used for people commuting by car. We will seek to minimise the impact of cycleways on town centre businesses, with particular regard given to short-term parking supply for high transaction volume businesses (eg dairies) and businesses that are dependent on car parking. Streets in the central city will be made most effective for walking, cycling, public transport and moving traffic. The movement of traffic will take priority over on-street parking.

How intersections are controlled (eg with the replacement of a roundabout) may be changed in order to ensure the safety of people on bikes. There may be some instances where property needs to be acquired so that network improvements can continue.

# Appendix A – Cycleway network plan (A3 version)



## Appendix B – Cycleway standard design guidelines and design principles

### Quiet routes

#### 1. Level of Service

Level of Service	Number of vehicle movements/day	Operating speed
B	Up to 1000	22 km/h
C	1000 – 10,000	30 km/h
D	11,000	30 km/h

2. We will use physical design elements to make sure that the maximum operating speed for vehicles on these streets is 30 km/h or less. This will include traffic calming measures and may include regulatory speed limits.
3. We will design intersections carefully to ensure that the Level of Service remains at junctions. This will be most important where a quiet route meets a busy route.
4. We will use single-lane roundabouts where traffic volumes are low.
5. We will avoid using angle parking.
6. We will make sure good visibility is available for busy driveways.
7. We will use signposting as a key element to raise awareness. We will design these to encourage cyclists to ride in the middle of the lane.
8. We will keep streets similar in look and feel as they are now, with minor improvements to lighting and other elements.

### Shared vehicle/bike zones

#### 1. Level of Service

Level of Service	Number of vehicle movements/day	Operating speed
B	Up to 1000	22 km/h
C	1000 – 10,000	30 km/h
D	11,000	30 km/h

2. We will use physical design elements to make sure that the maximum operating speed for vehicles on these streets is 30 km/h or less. This will include traffic calming measures and may include regulatory speed limits.
3. We will use design elements such as seating, lighting and trees.
4. We are likely to use signals at intersections. We will use single-lane roundabouts where traffic volumes are low.
5. We will use the principles for shared zones to provide safer merge zones for cyclists and cars.

6. We will make sure good visibility is available for busy driveways.
7. We will avoid using angle parking.
8. We will use signposting as a key element to raise awareness. We will design these to encourage cyclists to ride in the middle of the lane.
9. We will make pedestrian footpaths by the shared zone.

## ***Protected bike lanes***

1. Level of Service – A-B depending on design.
2. We will provide a minimum of 1.5m wide for one direction, 2.2m wide is normally ideal.
3. For a two-directional lane, we will provide a minimum width of 2.5m.
4. We will most likely locate protected bike lanes by the kerbside, but separate from the footpath.
5. We will separate the bike lanes from moving traffic with some physical element (whether parking, planting, low kerb, hatched flush median with safe hit posts). This buffer space will be at least 0.6m wide and ideally 1.0-1.2m wide next to parking.
6. The operating speed for adjacent road may vary.
7. We are likely to use signals at intersections.
8. We will not use roundabouts on busy routes.
9. We will design side roads carefully to make sure people on bikes are safe from vehicle turning movements across protected lanes.
10. We will make sure good visibility is available for busy driveways.
11. We will provide bus stop bypasses where there are more than 4-6 buses per hour.
12. For two-way protected bike lanes on hills, we will provide greater separation between the directional lanes.

## ***Alternative bike paths***

1. Level of Service – A-B depending on design.
2. We will build these to a high design standard (these will be paved paths not dirt tracks).
3. We will give priority at intersections (may change where quiet routes meet major routes).
4. Improvements depend on location and site context.
5. We will make it clear where pedestrians and cyclists are expected to be, marking spaces for each where appropriate.
6. We will consider personal security. If a path has expected use at night, we will include lighting.
7. We will use careful design where the path meets other routes.
8. We will consider gradients and safety as requiring key attention.
9. We will need to address any loss of amenity and vegetation.
10. We will consider pedestrian volumes when determining widths of paths.

## Appendix C – Cycleway framework principles and thresholds

The principles provide clarity for the community, councillors and officers around how decisions will be made regarding the implementation of a cycling network and what thresholds are to be applied to projects to determine whether a matter needs to be referred back to Council for a decision. Key cycleway projects will be designed in accordance with the principles. Where project proposals exceed the agreed thresholds, those elements would be referred to Councillors for decision. Where proposals fall below the agreed thresholds, those elements would not need to be referred to Councillors.

### Network design principles

We will make our transport network safer, more efficient and sustainable for all modes. For people on bikes, this means addressing:

- Poor uptake due to perceptions that cycling is unsafe and inconvenient. This means cycling is not fulfilling its potential contribution to the broader transport system.
- Unforgiving infrastructure and poor road user behaviour. This is resulting in significantly higher than average rates of harm to people on bikes.
- Unappealing riding environment for people on bikes. This is reducing transport and recreation choices for Wellingtonians.

Principle	Considerations	Thresholds for Council decisions	Commentary
<p><b>We will choose routes which “join the dots”</b></p> <p><b>Key cycleways</b> will connect residential areas to the CBD and to other residential areas.</p> <p><b>Local cycle routes</b> will connect to the key cycleways and provide links within communities to local centres, schools and other facilities. These may not be to the same standard as key cycleways.</p>	<p><b>Safety</b> – Quality infrastructure should help make cycling safer and also address negative perceptions about safety particularly when it comes to moving through junctions.</p> <p><b>Directness</b> – Routes must be logical and continuous, without unnecessary obstacles delays and diversions, and planned holistically as part of a network. For Wellington directness includes consideration of grades.</p> <p><b>Comfort</b> – Riding surfaces for cyclists and transitions from one area to another should be fit for purpose, smooth, well-constructed and well maintained.</p> <p><b>Coherence</b> – Infrastructure should be legible, intuitive, consistent, joined-up and inclusive. All users should be able to use and understand the infrastructure.</p> <p><b>Attractiveness</b> – Infrastructure should not be unsightly or add unnecessarily to street clutter. Well-designed cycling infrastructure should enhance the city. For Wellington this means designs which are consistent with good urban design practices.</p> <p><b>Adaptability</b> – Cycling infrastructure should be designed to accommodate all types of bicycle and an increasing number of users over time.</p>	<p>Any key cycleway project proposal that is less safe than the current situation.</p> <p>Any key cycleway project proposal that is more than 40%<sup>4</sup> longer in time than the most practical direct route.</p> <p>Any key cycleway project proposal for unsealed surfaces.</p> <p>Any key cycleway project proposal that effect any significant trees, heritage buildings or objects as scheduled in the District Plan; or which significantly negatively affect significant landscape amenity (e.g. coastal marine areas).</p> <p>Any key cycleway project proposal to exclude a particular type of cyclist (e.g. fast electric bikes from narrow shared areas).</p>	<p>When we make the route selection decisions we will present the options for routes with the time, distances and destinations comparisons between the proposed and the most direct current legal route.</p> <p>We will implement a mix of routes across the network that caters for the varying levels of confidence and the types of cyclists. These will include recreational routes.</p> <p>Where consistent with the wider network plan, we will implement routes that enable us to maximise the funding opportunities from third parties.</p> <p>Safety solutions will be applied through the design of the cycleway types.</p> <p>We will only implement cycleways if they are safer than what we have now. Safety considerations include:</p> <ul style="list-style-type: none"> <li>• Speed and mass differentials between modes</li> <li>• Minimum requirements</li> <li>• Crash history</li> <li>• Perceived safety barriers</li> <li>• How safety affects uptake of cycling.</li> </ul> <p>The standard design guidelines in Appendix Two outline the minimum requirements for each type of cycleway being considered. These will have to be adapted to suit different contexts. Where we need to deviate from these guidelines significantly Council will have to make specific decisions.</p>

<sup>4</sup> Dutch guidance states “Data from the Bicycle Balance project shows that the 5 and 95 percentile values for the detour factor are 1.24 and 1.50, respectively” (CROW 2007, page 60). London guidance suggests deviations greater than 40% are ‘basic’, 20-40% are ‘good’ and less than 20% are best. (London Cycling Design Standards 2014, chapter 2, page 7).

Principle	Considerations	Thresholds for Council decisions	Commentary
<p><b>We will choose the right route</b></p> <p>Where there are viable routes within the existing road space, we will implement protected bike lanes.</p> <p>For constrained corridors on busy arterial routes we will look for viable off-road or alternative routes (e.g. waterfront, reserves or other space) to make a more attractive space for cycling and avoid changes in busy transport corridors.</p>	<p>Fit with the design considerations: safety, directness, comfort, coherence, attractiveness, and adaptability.</p> <p>Proposals for off-road routes must be consistent with current reserve management plans (e.g. Town Belt Management Plan, Suburban Reserves Management Plan, Northern Reserves Management Plan, Botanic Gardens Management Plan, and others) or other Council policy.</p>	<p>Any key cycleway project proposal where there is no space to implement protected bike lanes due to constraints of the corridor on a busy route and / or when all alternative route designs fall outside all or some of the network design considerations.</p> <p>Any key cycleway project proposal which is outside established management plans. Note: proposals to change a management plan developed under the Reserves Act must follow amendment processes under that act.</p> <p>Any property requirement must be approved by Council in accordance with the provisions of the Local Government Act.</p>	<p>Cycling will be part of a long term, multi-modal corridor solution taking account of strategic aims and public transport developments.</p> <p>Strategic assessments of projects will detail how proposed cycling provisions fit with the strategic vision for that space.</p> <p>Where there are viable routes within the existing road space we will implement protected cycle lanes. Where corridors are constrained on busy arterial routes we will look for off-road alternatives in order to maximise the cycling experience. We will aim to keep the cycle lanes away from corridors that are already under considerable space pressure - particularly where there is an overlap with busy public transport routes. We will integrate the 'look and feel' of any off-road routes with the surrounding environment.</p> <p>We will present off-road solutions with assessments of safety, directness, gradient and travel time both for the off-road route and the constrained corridor being bypassed.</p>
<p><b>We will design for Wellington's needs</b></p> <p>We will adapt and develop innovative ideas to build a cycle network that best fits Wellington.</p>	<p>Proposals will feature bespoke designs to fit local conditions and take account of best practice.</p> <p>In the short to medium term we will favour solutions that minimise initial cost of implementation.</p> <p>Parking replacement cost.</p>	<p>When all designs fall outside all or some of the network design considerations.</p> <p>Any key cycleway project proposal with an estimated cost outside of approved annual plan budgets.</p> <p>Any key cycleway project proposal with over 30% of project cost or \$1,000,000 per project for parking replacement.</p>	<p>The standard design guidelines for each type of cycleway outline the minimum requirements for each type. These will have to be adapted to suit different contexts. Where we need to significantly deviate from these guidelines we will require Council decisions.</p>
<p><b>We will measure and report on outcomes</b></p> <p>We will measure and report on uptake and usage on our improved cycle network.</p>	<p>Safety outcomes.</p> <p>Usage.</p>	<p>Schemes which create unsafe outcomes or fail to grow use will be reported to Council with recommendations for improvements.</p>	<p>Measuring and understanding the use of our cycleways is important for working out their value to the city and understanding which design types and routes work for Wellington. We will measure the use of our key cycleways to:</p> <ul style="list-style-type: none"> <li>• Establish how many people are using them</li> <li>• Establish the patterns of use</li> <li>• Establish the effects of the cycleway on surrounding land use.</li> </ul> <p>These results will be provided as guides for subsequent investment.</p>

## Space allocation within corridors

Principle	Considerations	Thresholds for Council decisions	Commentary
<p><b>Pedestrians</b></p> <p>We will ensure that pedestrian infrastructure is safe and fit for purpose. Where we plan to create paths that pedestrians may also wish to use, or share footpaths with cyclists, we will clearly sign/label these to ensure there is legibility.</p>	<p>There should be no significant negative effects on pedestrians.</p> <p>We will consider opportunities to improve provisions for pedestrians to cross busy roads.</p>	<p>Any key cycleway project proposal below accepted guidelines.</p> <p>All proposals to establish or change shared pedestrian/cycle space on roads require specific decisions under the Wellington Consolidated Bylaw 2008.</p> <p>All proposals to establish or change zebra crossings on roads require specific decisions under the Wellington Consolidated Bylaw 2008.</p>	<p>There should be no significant negative impact on pedestrians as a result of implementing the cycle network. We expect that when a new cycle network is in place pedestrians will benefit by a reduction in the number of cyclists using footpaths.</p> <p>We will prepare assessments of pedestrian amenity at the route selection and the detailed design stages.</p> <p>We will present proposed routes to the Accessibility Advisory Group during selection to scope potential issues and again at the detailed design phase.</p>
<p><b>Public Transport</b></p> <p>There should be no adverse effect on core bus corridors and routes<sup>5</sup> and no more than minor adverse effects on other bus services.</p>	<p>There should be improved public transport journey times on core bus corridors and routes.</p> <p>There should be careful design of bus stops and road corridors to ensure safe interactions between people on foot, people on bikes and buses.</p> <p>We will work with GWRC to consider opportunities to remove closely spaced bus stops improve service reliability and reduce conflicts with cyclists.</p>	<p>Any key cycleway project proposal that increases public transport journey times by more than 5% compared to the existing situation.</p> <p>Any proposals which compromise pedestrian or bus operating space.</p> <p>Any proposal to establish or relocate bus stops on roads requires specific decisions under the Wellington Consolidated Bylaw 2008. Bus shelters require specific processes to be followed under the Local Government Act and Resource Consents may be required under provisions in the District Plan.</p>	<p>Through our corridor improvement proposals, we will aim to reduce public transport journey times and increase reliability. We want to make it easier to cycle in conjunction with public transport and we will support Greater Wellington's trial of bike racks on buses. We will give consideration to bike parking facilities at major bus stops and support Greater Wellington's plans to improve bike parking at rail stations.</p> <p>The main impact on some bus routes will be that the journey takes slightly longer. This will be due to traffic lights and reduced speed limits that improve safety for all road users. Journey times will remain predictable.</p>
<p><b>Private vehicles (includes cars, trucks, vans, taxis and motorcycles)</b></p> <p>There should be no significant adverse effects on private vehicle travel time or reliability.</p>	<p>While travel times for private vehicles may increase we will aim to ensure that travel time predictability is retained.</p> <p>There will be no negative effects on the movement of freight on key movement routes such as State Highways.</p> <p>We will consider lowering speed limits to improve safety for all road users.</p>	<p>Any key cycleway project proposal that increases vehicle travel time along a route increases by more than 10% at peak times.</p> <p>Any proposal for removal of any traffic lanes or clearways.</p> <p>Any proposal to change speed limits on roads requires specific decisions under the Wellington Consolidated Bylaw 2008.</p>	<p>Transport modelling will be used to assess travel time impacts of proposals.</p>

<sup>5</sup> As defined in Figure 20 on page 77 of the Regional Land Transport Plan 2015.

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<p><b>Parking in the suburbs</b></p> <p>Public residential parking will be available in a neighbourhood but proximity and volume may change.</p> <p>On-street commuter car parking may not be replaced.</p>	<p>For any scheme alternate residential parking to be available within a reasonably short distance of the current situation.</p> <p>There may be some loss of commuter parking.</p>	<p>Any key cycleways proposal that results in residential parking occupancy within 100 meters of a key cycleway being above 95% of observed residential parking demand.</p> <p>Any parking proposal resulting in walks of more than about 160 metres (approximately 2 minutes) compared to current provisions.</p> <p>Any proposal to establish or change parking restrictions on roads requires specific decisions under the Wellington Consolidated Bylaw 2008.</p> <p>No threshold required. Note: Any proposal to establish or change parking restrictions on roads requires specific decisions under the Wellington Consolidated Bylaw 2008.</p>	<p>We will prioritise moving vehicles and active modes of transport (such as walking and cycling) over parking. We will make sure that there is on or off-street parking located within 160 metres of a property.</p> <p>Where there is on-street parking that needs to be removed in order to implement network improvements we will assess the usage of current parking and the number of spaces available. We will ensure that there is adequate parking available but the proximity to individual properties may increase.</p> <p>Scheme proposals will report on:</p> <ul style="list-style-type: none"> <li>• The current quantity of on-street parking</li> <li>• The occupancy or demand of those spaces</li> <li>• The types of local uses and the people who use them</li> <li>• The number of parks that may be lost</li> <li>• The proximity of alternate parks</li> <li>• The cost of parking replacement proposals.</li> </ul> <p>Commuter car parking is long term parking (i.e. more than three hours) that allows for someone travelling by car from their home to their place of work to park for the day. In some cases existing commuter parking may be restricted to provide for residents parking or time limited for retail parking. In some cases it may be removed altogether. We will not replace carparks which are primarily used for people commuting by car.</p>
<p><b>Parking in suburban centres</b></p> <p>We will seek to minimise the impact of cycleways on town centre businesses and community facilities.</p>	<p>There may be a minor loss of suburban parking.</p> <p>Servicing and loading spaces will be reviewed and provided for as is reasonably necessary. This may mean part time restrictions are used to allow flexible use of the space.</p>	<p>Any proposal resulting in more than 10% loss of on-street parking spaces within 100 metres of a key cycleway.</p> <p>Any proposal resulting in walks of more than about 160 metres (approximately 2 minutes) compared to current provisions.</p> <p>Any proposal resulting in any loss of on-street servicing or loading spaces.</p> <p>Note: any proposal to establish or change parking restrictions on roads requires specific decisions under the Wellington Consolidated Bylaw 2008.</p>	<p>We will not reduce short term parking supply for high transaction volume businesses (such as dairies) or for businesses dependent on car-parking unless it is necessary to relocate them for safety reasons. Where the businesses are 'destination' or bulky item based we will work with businesses to identify where parking can be relocated to if necessary.</p> <p>We will provide options for parking replacement or other mitigation.</p>
<p><b>Parking in the CBD</b></p> <p>Streets will be optimised for walking, public transport, cycling and moving traffic. On-street parking will be secondary to all movement.</p>	<p>There may be a minor loss of on-street parking in the CBD.</p> <p>Servicing and loading spaces will be reviewed and provided for as is reasonably necessary in the CBD. This may mean part time restrictions are used to allow flexible use of the space.</p>	<p>Any proposal resulting in more than 10% loss of on-street parking spaces within 100 metres of a key cycleway.</p> <p>Any proposal resulting in walks of more than about 400 metres (approximately 5 minutes) compared to current provisions.</p> <p>Any proposal resulting in any loss of on-street loading spaces.</p> <p>Note: any proposal to establish or change parking restrictions on roads requires specific decisions under the Wellington Consolidated Bylaw 2008.</p>	<p>There is a significant amount of parking available within the central area located both on-street and off-street. This parking is valuable as it provides easy access to business and services. Nevertheless the priority for limited public space must be for the movement of people and goods rather than car parking. Network improvement proposals will be presented to Council as part of a wider street improvement plan. Where this cannot take place, primarily for timing reasons, a strategic fit to future upgrades will be presented.</p>

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<p><b>Intersections</b></p> <p>Safe provisions for people on bikes may require changes to intersection controls (e.g. the replacement of a roundabout).</p>	<p>Proposals may change intersection controls.</p>	<p>Any proposal to establish or change traffic restrictions requires specific decisions under the Wellington Consolidated Bylaw 2008.</p>	
<p><b>Acquisition of property</b></p> <p>There may be some instances where we need to acquire property to enable network improvements to be built.</p>	<p>There may be some need to acquire property.</p>	<p>Any property acquirement must be approved by Council in accordance with the provisions of the Local Government Act and Public Works Act.</p>	<p>As we assess route options land acquisitions will be considered if:</p> <ul style="list-style-type: none"> <li>• We can create an alternative route to a constrained corridor</li> <li>• We consider more road space is necessary to provide for the safe and efficient movement of people and goods</li> <li>• We need to mitigate parking loss in extremely difficult circumstances.</li> </ul>