

Wellington City Cycle Network Strategic Case

Part 1: Strategic Assessment Strategic Context

August 2015

EXECUTIVE SUMMARY

The Wellington City Cycle Network Strategic Case outlines the strategic context for investment in the Wellington cycle network, the case for change and the need for investment.

The underlying problem is that cycling is perceived as unsafe so people who would prefer to cycle don't. Evidence demonstrates that Wellington has higher than average rates of harm for people travelling on bikes. Perception and increased relative risk means that Wellington residents do not view cycling as a viable travel choice for work or recreation. This misses an opportunity to reduce congestion by reducing the number of car trips occurring on the Wellington City network.

A facilitated Investment Logic Mapping (ILM) exercise was held in March 2015 with representatives from WCC, NZTA, Cycle Aware Wellington, the Automobile Association and Wellington Employers' Chamber of Commerce. The group identified three underlying problems:

1. Poor uptake due to the perception that cycling is unsafe and inconvenient is reducing cycling's contribution to the transport system.
2. Unforgiving infrastructure and poor road user behaviour is resulting in significantly higher than average rates of harm to people on bikes.
3. An unappealing environment for people on bikes is reducing transport and recreation choices for Wellingtonians.

These problems are current issues that will be exacerbated by Wellington City's forecast population growth, from the current 200,000 to approximately 250,000 over the next 30 years.

During the ILM, the group identified three significant benefits from an investment in safe cycling infrastructure:

1. Greater transport network efficiency, effectiveness and resilience
2. Wellington is a more sustainable, liveable and attractive city
3. Improved safety for people on bikes.

The Council's Cycle Way Programme contributes directly to the government's land transport objectives in relation to economic growth and productivity, safety, environmental mitigation and the provision of transport choice. Cycling is a low-carbon, healthy and sustainable mode of transport, ideal for short to medium distance trips which will also increase the resilience of the city's transport system. The Cycle Way Programme will also support the objectives of Wellington City Council and Greater Wellington Regional Council (GWRC) of economic growth, urban regeneration and improved accessibility. The strategic case has been given a high indicative profile for strategic fit and effectiveness by the stakeholder partners.

Investment in cycling will:

- reduce risk and improve safety for cyclists
- increase transport choice
- mitigate the effects of vehicles on the environment by reducing the number of vehicles on the road
- reduce traffic congestion that causes long and unreliable travel times leading to sub-optimal network performance
- improve city liveability

Over the next three years there is also a unique opportunity for the Council to maximise co-investment with central government through the National Land Transport Fund (NLTF) and Urban Cycleway Fund. Three Wellington packages are included in the Urban Cycleways Programme that are aimed at accelerating cycling facilities on the eastern and CBD corridors in Wellington City, as well as on the route between Melling and Wellington CBD.

1. PURPOSE OF THIS DOCUMENT

This Strategic Case outlines the strategic context and case for investment in the Wellington cycle network.

The Strategic Case:

- outlines the strategic context and fit for the proposed investment
- identifies the key problem or rationale for investing, and
- identifies the potential benefits of investing.

This Strategic Case is provided in support of an application for funding to develop a Programme Business Case for the Wellington City Cycle Network.

2. PARTNERS AND KEY STAKEHOLDERS

This section identifies the partners and key stakeholders who are involved in the development of Wellington City Cycle Network.

2.1 Partners

The delivery of cycling in Wellington is a collaborative exercise across Wellington City Council, the GWRC and the NZ Transport Agency. The link with GWRC is important because of the necessary integration of public transport alongside cycleways in relation to road space allocation as well as broader transport planning across all modes.

Wellington City Council

Wellington City Council is the Road Controlling Authority for the majority of the roads forming the cycling corridor and has responsibility for planning, operations, management and maintenance of these roads.

Wellington City Council is also responsible for land-use planning in Wellington City. It prepares and updates various area plans, to give effect to the relevant strategic directions for transport planning for the city.

The Council has established a dedicated planning and development team which will be resourced to ensure delivery of the Wellington City cycleways. The team includes planning and design officers who work closely with the existing road network management team to ensure integrated solutions for all modes are developed and delivered. The team also engages with GWRC public transport planners and various Transport Agency project managers as required. Responsibility for the behaviour change initiatives also sits with the team along with assisting with the design and funding of the 'Bikes in Schools' programme.

New Zealand Transport Agency

The Transport Agency is the crown entity responsible for planning and investing in land transport networks, managing the state highway network and providing access to, and use of, the land transport system.

With some of the cycling packages crossing State Highway boundaries there will need to be full integration with the Transport Agency's Highways Networks and Operations division who will be closely involved in planning with Wellington City Council.

In addition to having responsibility for the allocation of funding under the National Land Transport Programme (NLTP), the Transport Agency also administers Government investment in cycling via the Urban Cycleways Programme.

Greater Wellington Regional Council

GWRC is the organisation primarily responsible for overall regional planning and PT planning. GWRC is also responsible for the PT network and delivering PT services across Wellington. It undertakes asset management planning, including for new works, manages the operation of the network, is responsible for arranging funding and contracts for service delivery.

GWRC hosts a cycling and walking journey planner on its website which is supported by Wellington City Council and other territorial authorities in the region.

2.2 Community and key stakeholders

The Wellington public have demonstrated a strong interest in cycling at both a strategic and local level. It is Council's intention to work closely with the public, and directly affected residents, in relation to planning and delivery of the Wellington cycle network.

There are a number of key stakeholders who will likely have an influence on the project outcomes. These include:

- Cycle Aware Wellington
- Cycle Advocates Network
- Wellington Employers' Chambers of Commerce
- Wellington Residents Associations
- Automobile Association

3. STRATEGIC ASSESSMENT – THE CASE FOR INVESTMENT

This section sets out the case for investment in the Wellington cycleway network. It considers the nature of the problem, the benefits of investing in cycling infrastructure, and the merits of investing now.

The underlying problem is that cycling is perceived as unsafe so people who would prefer to cycle don't. Evidence demonstrates that Wellington has higher than average rates of harm for people travelling on bikes. Perception and increased relative risk means that Wellington residents do not view cycling as a viable travel choice for work or recreation. This misses an opportunity to reduce congestion by reducing the number of car trips occurring on the Wellington City network.

3.1 What needs to change – identified problems

A facilitated Investment Logic Mapping (ILM) exercise was held in March 2015 with representatives from WCC, NZTA, Cycle Aware Wellington, the Automobile Association and Wellington Employers' Chamber of Commerce.

The Investment Logic Map is attached as Appendix A. The group identified the following three underlying problems:

1. Poor uptake due to the perception that cycling is unsafe and inconvenient is reducing cycling's contribution to the transport system.
2. Unforgiving infrastructure and poor road user behaviour is resulting in significantly higher than average rates of harm to people on bikes.
3. An unappealing environment for people on bikes is reducing transport and recreation choices for Wellingtonians.

These problems are current issues that will be exacerbated by Wellington City's forecast population growth, from the current 200,000 to approximately 250,000 over the next 30 years.

Problem 1: Poor uptake due to the perception that cycling is unsafe and inconvenient is reducing cycling's contribution to the transport system

Poor uptake due to perception that cycling unsafe and inconvenient

In Wellington, cycling accounts for only 4.3 percent of journey to work trips. This is low relative to other urban centres such as Christchurch.

Wellington has experienced strong growth in cycling mode share¹ for journey to work (73 percent over the period 2006 to 2013). This is from a very low base, and only reflects a 1.8% change in overall mode share (from 2.5% in 2006 to 4.3% in 2013).

Figure 3 presents the results of a GWRC survey of perceptions of level of service by mode for travel in Wellington City in 2012. It shows that only 45 percent of respondents report that facilities for biking are adequate or better. This compares very poorly to 93 percent satisfaction for walking and 92 percent for driving.

¹ Census.

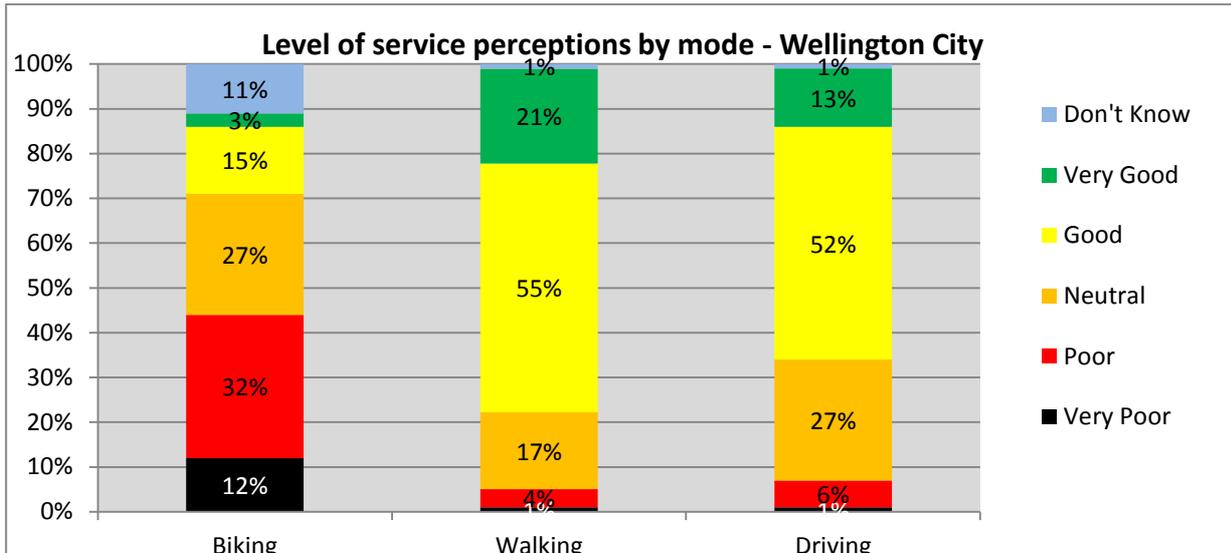


Figure 3 - Source: GWRC, Transport Perceptions Survey 2012, Wellington City data

This result is consistent with previous results of GWRC’s research, which has been carried out since 2003. GWRC’s Transport Perception Surveys have consistently found few people reporting a high degree of satisfaction with cycling infrastructure.

Problem 2: Unforgiving infrastructure and poor road user behaviour is resulting in significantly higher than average rates of harm to people on bikes

Increased use of the road corridor, combined with motorised vehicles and the current numbers of on-street car parking, as well as the lack of dedicated space for cyclists, means there is ongoing conflict between vulnerable road users and vehicles, which have greater speed and mass. The number of injuries is unacceptably high with nearly 70 people being hurt in traffic related cycle crashes every year.

Results for 2014 shown in Figure Four below record a total of 69 reported traffic crashes involving cyclists that resulted in one fatality, nine serious, and 59 minor, injuries. It is worth noting that many minor crashes involving cyclists do not get reported. This high incidence rate is similar to the rate of injuries in recent years, although not as high as the number of minor injuries in 2007 and 2008.

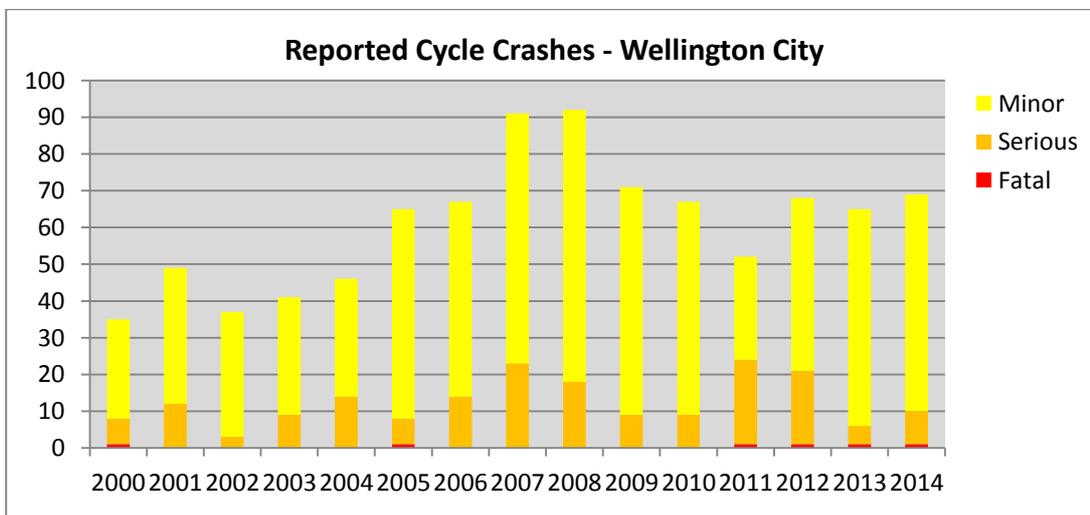


Figure 4 - Source: NZTA Crash Analysis System

Relative risk: comparing cities

Figure 5 demonstrates that Wellington’s crash risk for people on bikes over the last five year period (2009-2013) is eight times the national average. Wellington fares only slightly better than Christchurch. In 2014, six people were killed or seriously injured in Wellington per million hours travelled by bike. Wellington was the worst centre in the previous reporting period for crashes (2008-2012).

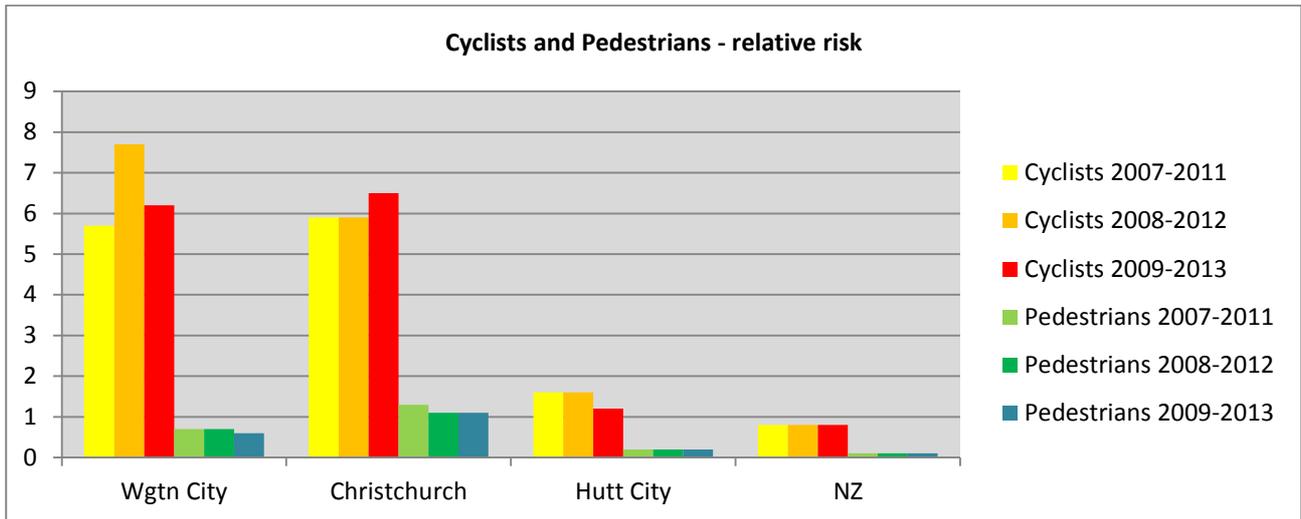


Figure 5 - Source: NZTA, Communities at Risk Register

While the relative risk to Wellington cyclists compared to cyclists in other New Zealand cities is poor, New Zealand as a whole has a much higher degree of risk for cyclists than many other countries. Figure 6 below demonstrates that New Zealand, whilst not the worst performer performs poorly (on a cyclist killed per billion km travelled basis) as compared to countries that have prioritised cycle infrastructure and have much higher cycling rates.

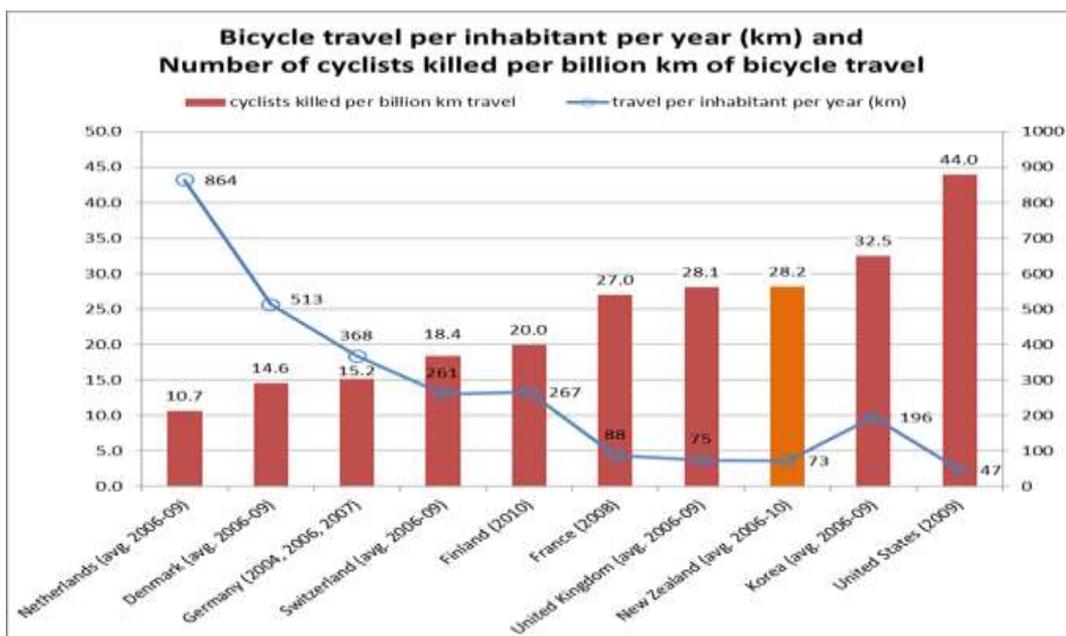


Figure [6] – Source: NZTA

Relative risk: comparing modes

Based on distance travelled, people on bikes are roughly 23 times more likely to be injured in road crashes compared to private vehicle occupants, and three times more likely than people walking. Based on time spent travelling, people on bikes are roughly seven times more likely to be injured in road crashes compared to other vehicle occupants and people walking.

Figure 7 shows the casualties per million km and hours respectively for the Wellington region. Wellington City accounts for 60% of these casualties.

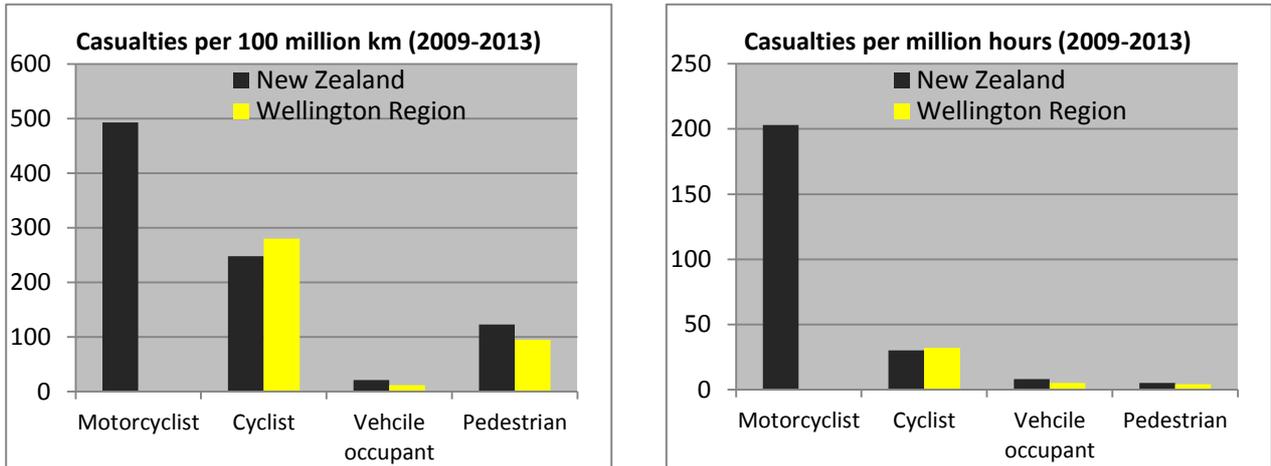


Figure 7 - Source: Ministry of Transport

Problem 3: Unappealing environment for people on bikes is reducing transport and recreation choices for Wellingtonians

Unappealing environment for people on bikes

Wellington City Council has undertaken a number of surveys to gain a better understanding of what needs to be done to improve the current conditions for people on bikes to create a truly 'bike-friendly' network. The results show the existing level of service for people on bikes is low and that there is a significant infrastructure deficit in terms of adequate service levels for people on bikes. Our research shows only a very small proportion of the city's key bike routes can currently be considered 'bike-friendly'.

Poor provision for people on bikes creates an unsafe and unappealing environment, in both perception and reality. This means many people shy away from biking as a realistic choice for their daily travel needs.

Evidence from the Wellington City Council Residents' Monitoring Survey 2014 suggests there is a significant latent demand for uptake of cycling, provided safe cycle ways are provided.

Public dissatisfaction with cycleway safety

Figure 8 below illustrates that the proportion of people satisfied with the safety of Wellington cycle ways dropped from 39 percent to 16 percent in 2014. This result is slightly worse than previous years. It is unclear what has led to such a significant drop in satisfaction – it may be that as more people are cycling they are becoming more aware of the current state of the city's cycle network.

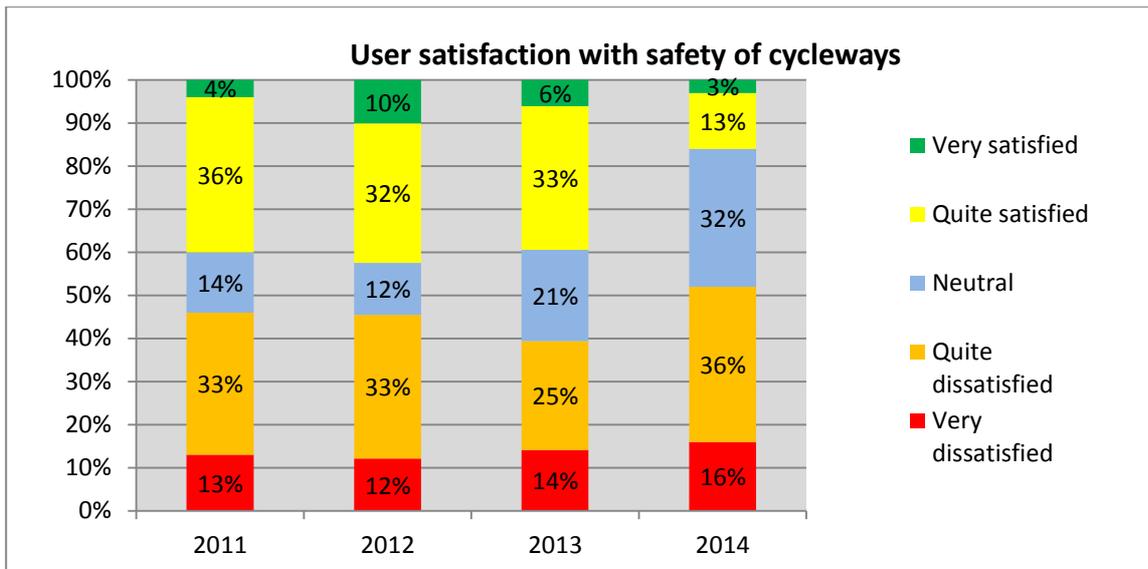


Figure 8 - Source: WCC, Residents Monitoring Surveys 2014

Cycling not a viable travel choice for many Wellingtonians

Many Wellington residents do not consider that cycling is currently a viable travel choice. The Council's 2014 survey identified that the chief barrier to cycling in Wellington is a lack of safe cycle infrastructure and concern about driver behaviour. Of the 603 people surveyed, 76% would consider cycling if safe and separated infrastructure was provided.

The 2014 survey also found that cycle ways that separate cyclists from other road users could potentially double cycling uptake growth rates.

The survey also identified:

- a preference for direct and relatively flat routes
- 75% of those surveyed support development of cycle ways, including many non-cyclists, depending on what trade-offs are proposed
- options including removing parking on one side of the road, more one-way streets, and using Wellington Town Belt space were well supported but most people opposed removing parking on both sides of the road
- while 42 percent of respondents drove, nonetheless there was a strong preference expressed for using other modes, particularly bikes. This suggests there could be as much as a three-fold increase in cycling once a safe network was in place (see Figure 9 below). It is also important to note there is often a hypothetical bias in stated preference surveys of this type – people may say that they would cycle more often but may not actually do so. There is also a need to understand that other infrastructure such as 'End of Trip' facilities are required to achieve significantly higher shifts to cycling.

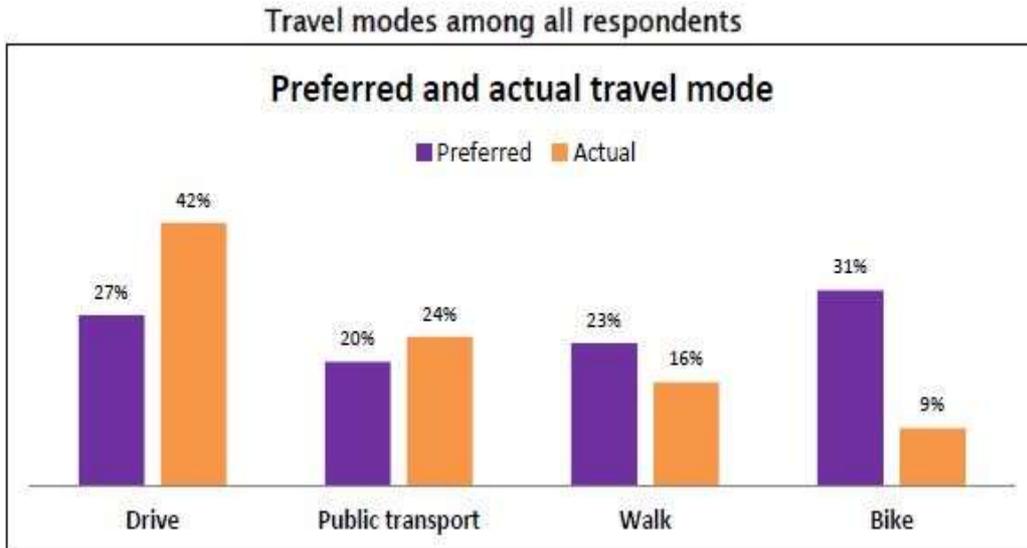


Figure 9 - Source: WCC, Cycling Demand Analysis 2014

3.2 Benefits of investing in cycling

During the ILM, the following significant benefits from an investment in safe cycling infrastructure were identified:

1. Greater transport network efficiency, effectiveness and resilience
2. Wellington is a more sustainable, liveable and attractive city
3. Improved safety for people on bikes.

The Benefits Map is shown in Appendix B.

Benefit 1: Greater transport network efficiency, effectiveness and resilience

There is evidence that an increase in cycling could potentially reduce traffic congestion that causes long and unreliable travel times leading to sub-optimal network performance. Initiatives that result in even a few people switching from using their cars to using other forms of transport can markedly reduce congestion. Current research suggests that on the congested 5km Petone to Ngauranga section of State Highway 2, for example, only 10-30 vehicles out of the 250-280 vehicles occupying this space at congested times are causing the congestion².

Bicycles are considered to impose 95 percent less traffic congestion than an average car³. A recent study on the benefits of cycling in the European Union, commissioned by the European Cyclists' Federation, found that the internal and external economic benefits of congestion-easing due to cycling in the EU at the 2010 mode share level was €24.2 billion per year. Early reports on

² Money, C., The Importance of Making Best Use of Existing Networks in Promoting Productivity, Hyder Consulting (NZ) Ltd, 2009.

³ Money, C., The Importance of Making Best Use of Existing Networks in Promoting Productivity, Hyder Consulting (NZ) Ltd, 2009.

the evaluation of Hastings' iWay' initiative, one of New Zealand's two cycling and walking model communities, indicate a 3.6% reduction in traffic volumes.

Studies suggest that having predictable and reliable journey times may be more important to people than saving time itself⁴. On congested roads, traffic flow and travel time reliability is dramatically decreased. Traffic conditions affect the speeds of people cycling less than they affect the speeds of people driving, so cycling is generally going to deliver more reliable travel times for people who cycle⁵. Network reliability for other users is also likely to be improved with a mode shift from cars to bicycles.

It is interesting to note that many people tend to overestimate travel times by bicycle, and when travel time is measured door to door, distances up to 5km on congested roads are often quicker on bicycle than in a motor vehicle⁶.

Benefit 2: Wellington is a more sustainable, liveable and attractive city

Investment in cycling is seen as providing both increased transport choice, including for those with limited access to a private vehicle, and improved city liveability. Through its overarching strategy *Wellington towards 2040: Smart Capital*, Wellington City Council is seeking to provide the infrastructure needed to ensure Wellington is a 'place where talent wants to live'. Wellington's compact urban form lends itself well to cycling and optimising this opportunity, and in conjunction with cycling improvements across the city's transport network, this will contribute significantly to the city's liveability.

Cycling is a low-carbon, healthy and sustainable mode of transport, ideal for short to medium distance trips. The Council's Cycle Way Programme contributes directly to the strategic priority set out in the Government Policy Statement (GPS) 2015, for "a land transport system that mitigates the effects of land transport on the environment".

Benefit 3: Improved safety for people on bikes

The idea of 'safety in numbers' is a well understood concept suggesting that an increase in people cycling directly reduces the rate of risk of serious injury and fatality per cyclist involving motor vehicles. This is due to a number of factors, including:

- greater expectation amongst drivers that cyclists will be present
- greater awareness of cyclists who are present
- more drivers knowing what it is like to be on a bicycle and behaving more safely around them
- drivers' attitudes improving.

There are also links between providing dedicated cycling infrastructure and improving cycle safety. In countries such as Denmark, Germany, and the Netherlands, where cycle networks are well established, more people cycle and there is a significantly lower fatality risk for cyclists. In New Zealand, a recent Canterbury University study⁷ found that the installation of simple painted cycle lanes along monitored streets resulted in an average 23 percent reduction in cycle crash rates.

⁴ Aldred R, 'Benefits of Investing in Cycling', British Cycling, http://www.britishcycling.org.uk/zuvvi/media/bc_files/campaigning/BENEFITS_OF_INVESTING_IN_CYCLING_DIGI_FIN AL.pdf

⁵ Ibid

⁶ From Australian Bicycle Council, *National Cycling Strategy 2011-2016: Gearing up for active and sustainable communities*, Austroads, p.8.

⁷ Assessing the impacts of on-road cycling facilities on cycle participation rates and user safety in Christchurch, Parsons J, 2012.

A local example is in Hastings where cycle crash rates have fallen to about one-third of what they were in only two years, despite early indications that there has been a 20 percent increase in cycle numbers.

3.3 Key performance attributes and measures

The Key Performance Indicators (KPIs) identified as part of the Benefits Investment Logic Mappign include (and are attached as Appendix B):

- increased contribution of cycling to network efficiency
- better facilities and infrastructure
- reduced actual deaths and serious injuries
- improved perception of cycling safety
- improved environment
- greater health and wellbeing
- improved economic performance.

Measures supporting these KPIs are also set out in Appendix B. These measures derive from a variety of sources including Wellington City Council surveys, Census Journey to Work data and Ministry of Transport statistics.

Both the KPIs and measures will be refined in subsequent analysis and business case phases, with reference to the Transport Agency Performance Measurement Framework.

3.4 Status of the existing evidence base

In general, the current problems and likely benefits of investing in the Wellington cycling network are well defined, and supported by a wealth of local, national, and international information and examples. The evidence on cycling in Wellington such as numbers of cyclists, safety issues and journey times is comprehensive including from GWRC's Transport Perceptions Survey 2012 which shows low levels of satisfaction with the current levels of service for cycling in Wellington.

The Transport Agency's most recent crash analysis shows high incidence rates for crashes involving cyclists, similar to rates of injuries in previous years. Evidence from the Transport Agency shows that Wellington's crash risk for people on bikes over the last five years is eight times higher than the national average, and that people on bikes are around seven times more likely to be injured in road crashes compared with other vehicle occupants and people walking, based on time spent travelling. Of the casualties per million kms for the Wellington region, Wellington city accounts for 60% of these casualties.

Wellington City Council has undertaken a number of surveys to gain a better understanding of what needs to be done to improve the current conditions for people on bikes to create a truly 'bike-friendly' network. The results show the existing level of service for people on bikes is low and that there is a significant infrastructure deficit in terms of adequate service levels for people on bikes. Our research shows only a very small proportion of the city's key bike routes can currently be considered 'bike-friendly'.

Evidence from the Wellington City Council Residents' Monitoring Survey 2014 found only 16 percent of people are satisfied with the safety of Wellington cycle ways and that few Wellington

residents see cycling as a viable travel choice. The 2014 survey identified that the chief barrier to cycling in Wellington is a lack of safe cycle infrastructure and concern about driver behaviour. Of the 603 people surveyed, 76% said they would consider cycling if safe and separated infrastructure was provided. This suggests there is a significant latent demand for uptake of cycling, provided safe cycle ways are provided.

The 2014 survey identified:

- a preference for direct and relatively flat routes
- 75% of those surveyed support development of cycle ways, including many non-cyclists, depending on what trade-offs are proposed
- that options including removing parking on one side of the road, more one-way streets, and using Wellington Town Belt space were well supported but most people opposed removing parking on both sides of the road
- a strong preference expressed for using other modes, particularly bikes despite the fact that 42 percent of respondents drove. This suggests there could be as much as a three-fold increase in cycling once a safe network was in place.

Sections 3.1 and 3.2 set out in full the evidence in support of the problem and the benefits of investing. Evidence to support this Strategic Case is also provided by the Transport Agency Strategic Case for Investment in Urban Cycleways, which sets out the wide range of benefits of investing in new Zealand's urban cycle network.

Initial assessment of benefit levels

To support the inclusion of a Wellington cycling activity within the RLTP, Wellington City Council undertook an initial programme level assessment of the transport related benefits of the proposed cycle ways (using a simplified methodology based on the Transport Agency's economic evaluation procedures). The summary results of this initial assessment were:

- health and environmental benefits – indicative value of \$247 million
- cycle safety benefits – rough estimate of \$46 million (although more thorough analysis may demonstrate higher safety benefits)

Traffic decongestion benefits have not yet been estimated, but are likely to be significant.

Evidence of community support

Wellington consulted on the proposed investment in the cycling network as part of its Long-Term Plan (LTP) 2015-25 process, resulting in cycling being the topic most commented on. It attracted 317 responses through the LTP website, 210 responses on the question about transport options and 500 email and paper submissions about cycling. Summaries of the responses are shown in Figure 10 below.

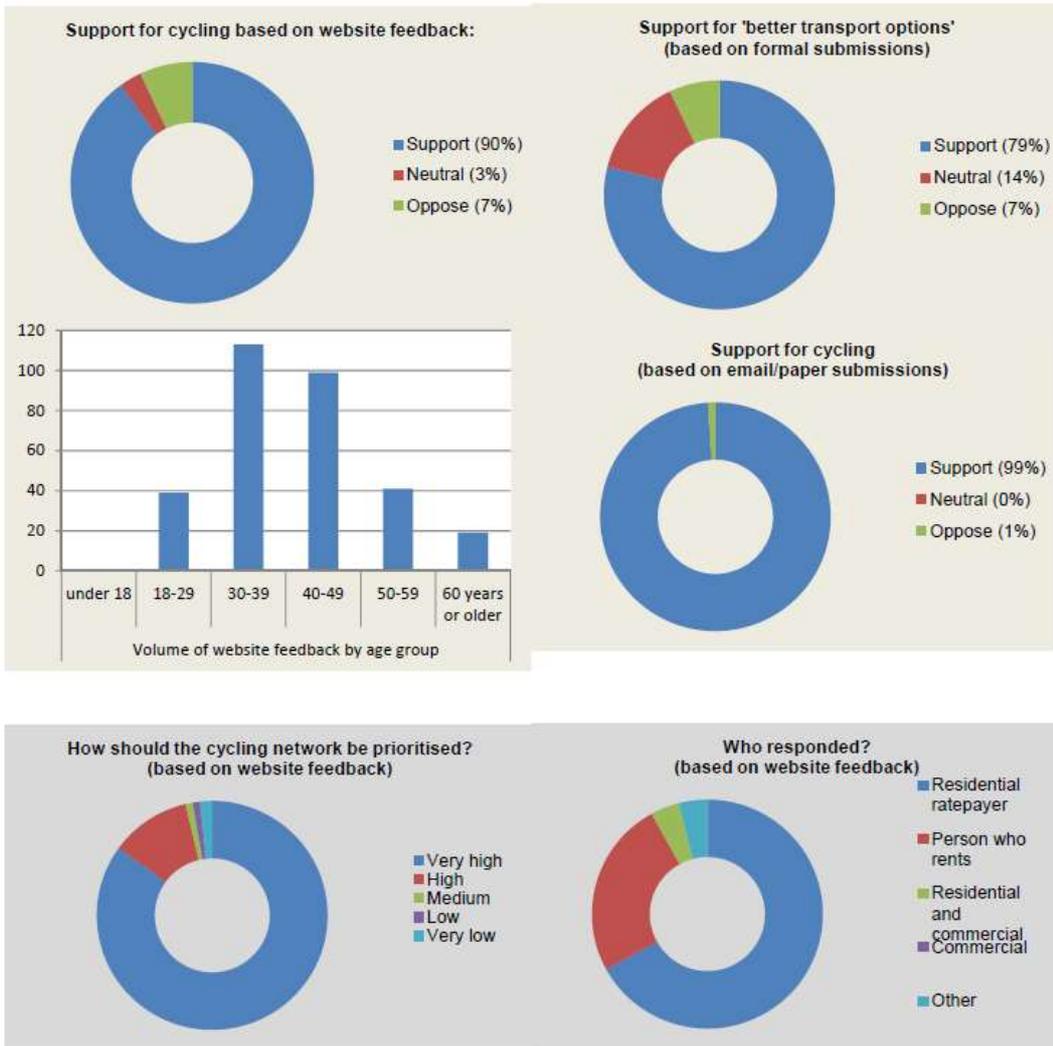


Figure 10 - Responses to the draft Long-Term Plan 2015-2025 (April 2015), Source: WCC

4. STRATEGIC CONTEXT

This section outlines how investment in cycling fits within the existing strategies and plans of Wellington City Council and its partner organisations.

Investment in the Wellington cycling network is well aligned to the high-level strategic direction of Central Government as outlined in the GPS. It will also support the objectives of Wellington City Council and Greater Wellington Regional Council of economic growth, urban regeneration and improved accessibility. Cycling is an important part of the suite of transport improvement projects currently being progressed within the Ngauranga to Wellington Airport corridor.

4.1 Alignment with organisational strategies and objectives

The alignment of potential investment in the Wellington cycling network to the relevant organisational strategic and planning documents is set out below.

4.1.1 Central Government & the Ministry of Transport

The GPS sets out the Government's high-level strategic direction for investment in the land transport network and priorities for expenditure from the NLTF over the next 10 years.

The 2015 GPS continues and reinforces the Government's focus on increasing economic growth and productivity as the primary objective for land transport expenditure.

The GPS also identifies, for the first time, a number of national objectives for a land transport system that:

- addresses current and future demand for access to economic and social opportunities
- provides appropriate transport choices
- is resilient
- is a safe system, increasingly free of death and serious injury
- mitigates the effects of land transport on the environment
- delivers the right infrastructure and services to the right level at the best cost.

Cycling is a key contributor to these national objectives. Investment in Wellington cycling infrastructure will improve the safety and reduce risk for cyclists. Given Wellington's crash risk for people on bikes is eight times the national average, investment is strongly aligned with the GPS strategic priority of a "safe land transport system, increasingly free of death and serious injury". Investment in cycling will also support the GPS objectives by directly mitigating the effects of vehicles on the environment by providing real mode choice for network users and reducing the number of vehicles on the road, and increasing the resilience of the city's transport system.

Over the next three years there is a unique opportunity for the Council to maximise co-investment with central government through the NLTF and Urban Cycleway Fund. The Prime Minister and the Minister of Transport announced 41 projects for 2015/16 to 2017/18 in June 2015 as part of the Urban Cycleways Programme. Three Wellington packages are included in the Programme. These are aimed at accelerating cycling facilities on the eastern and CBD corridors in Wellington City, as well as on the route between Melling and Wellington CBD.

4.1.2 New Zealand Transport Agency

The NZ Transport Agency is responsible for implementing the strategic direction set out in the GPS. It administers the NLTF, is responsible for planning and funding of the State Highway network and provides funding to local and regional authorities for approved transport projects.

Consistent with the GPS, the strategic focus of the Transport Agency (as set out in its Statement of Intent) is on delivering improved transport services that contribute to economic and productivity growth. It is also required to meet the objectives set out in the GPS, which relate to addressing current and future demand, providing transport choice, ensuring a reliable, resilient and safe transport system and mitigating the effects of land transport on the environment.

One of the Transport Agency's six short-term strategic priorities is "making urban cycling a safer and more attractive transport choice". Another priority is "making the most of urban network capacity", which is seen as an important step in making transport networks more efficient, for the benefit of the economy. Cycling improvements are an important part of achieving this priority.

4.1.3 Greater Wellington Regional Council

Economic development is the overarching objective of the Wellington Regional Strategy developed by GWRC in 2012. Improving the quality of infrastructure, including transport, are important enablers that will assist the region achieve its economic growth potential.

The RLTP is the region's blueprint for a network that will keep the Wellington region vibrant, on the move and enable it to grow and meet future needs. The RLTP identifies a number of regional pressures, including traffic congestion and network capacity constraints, reliability of the transport network and mode share. It also sets out a number of objectives for land transport including economic growth, consistent with the GPS direction, along with wider objectives such as improved safety, resilience and liveability.

The Ngauranga to Airport (N2A) Corridor Strategy is a chapter within the RLTP. Improving the Wellington cycling network is a key strategic response identified in this multi-modal strategy, and forms part of the N2A programme being managed in a collaborative manner by Wellington City Council, GWRC and the Transport Agency.

Improving PT journey times and reliability are key outcomes that GWRC is seeking to achieve over the next 30 years. Other key outcomes include reducing severe road congestion and improving land use and transport integration. Cycling and the provision of cycling infrastructure will directly contribute to meeting these goals.

The RLTP sets out the strategic direction for land transport in the Wellington region over the next 10-30 years and includes a Regional Cycling Network (see Figure 11 below), which includes a number of routes within Wellington City.

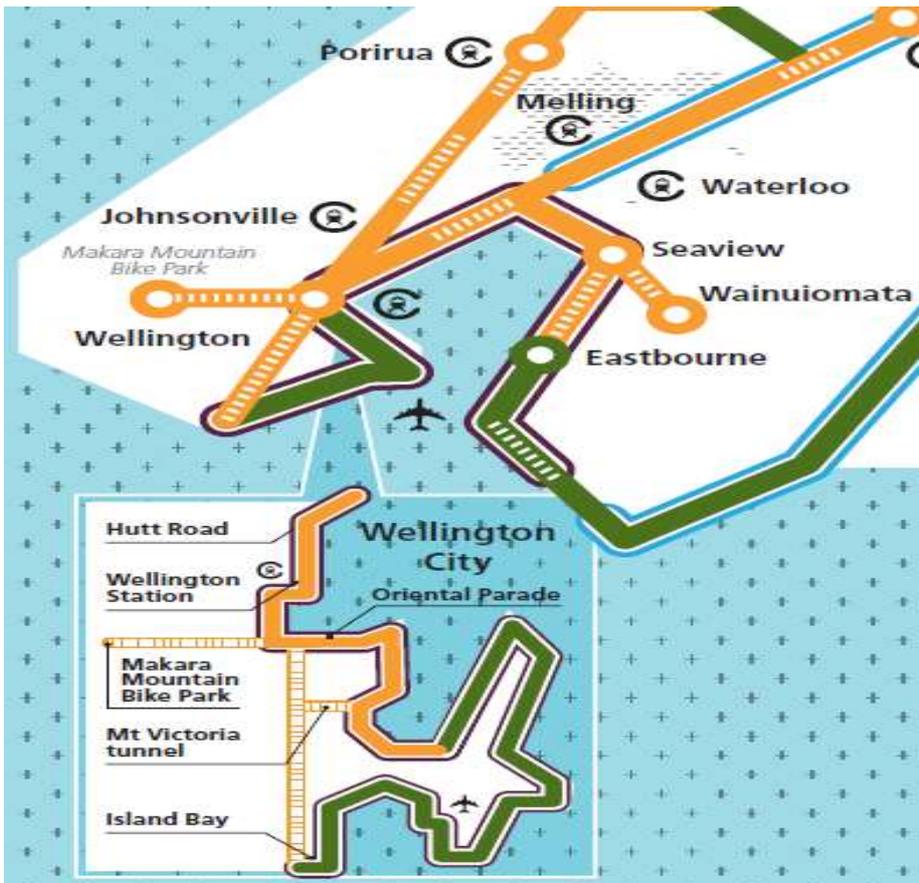


Figure 11: Wellington City's parts of the Region's Cycling Network (RLTP page 105), Source: GWRC, RLTP 2015

The RLTP includes a programme of all the land transport activities in the region requiring funding over the next six years. Wellington City Council's project 'Road Space Reallocation Corridor Programme', described below, is ranked ninth in the RLTP.

Managing the strategic road corridors in Wellington in order to cater for the competing demands of all modes and to consider specifically cycleway planning and bus priority improvements. The cycling programme element focuses on making the city's transport network safer and more reliable for all modes through improved road design.

4.1.4 Wellington City Council

Wellington City Council's vision for Wellington set out in its overarching strategy *Wellington towards 2040: Smart Capital*, revolves around building a smart, resilient Capital 'where talent wants to live'. To facilitate this, smart urban design that will contribute to Wellington's compact urban form and low carbon footprint, is encouraged.

This vision for Wellington is reflected in the *Urban Growth Plan 2014-2043*, which builds on, updates and replaces the existing urban development and transport strategies. It seeks to:

- maintain the city's liveability
- keep the city compact, walkable and supported by an efficient transport network
- protect the city's natural setting
- make the city more resilient to natural hazards such as earthquakes and the effects of climate change

The *Urban Growth Plan 2014-2043* sets out Wellington City Council's sustainable transport hierarchy that recognises in priority order: pedestrians, cyclists, public transport, moving freight

and private vehicles. To support this, the *Urban Growth Plan 2014-2043* includes a number of specific transport initiatives, including the provision of transport routes that provide real choice, with a plan to increase the proportion of people cycling supported by a comprehensive cycling network.

In June 2015, Wellington City Council adopted the Cycling Framework 2015. The Cycling Framework includes a network plan and principles that set out decision-making thresholds for the delivery of each aspect of the network. The cycle way investment programme has also been approved by Council and included in the Long-term Plan (LTP) 2015-25.

Cycling will help achieve a number of the Council's objectives – in particular, economic growth, urban regeneration and improved accessibility. Cycling will play an important city-shaping role to help the council achieve the redevelopment and land-use patterns that it envisages.

4.2 Integration of investment in cycling with related projects

There are a number of related projects that will require integration with investment in cycling in Wellington City. These include Bus Rapid Transit (BRT) and the Inner City RoNS projects.

Consideration of how best to incorporate cycling within the design of BRT is a key aspect of the work currently being undertaken by Wellington City Council and its BRT partners, GWRC and the Transport Agency under the N2A programme. This will need to consider both the allocation of road space across modes as well as priority at key intersections.

The design of the street layouts for BRT will need to assess the potential for upgrading cycling infrastructure at the same time as BRT implementation and allow for the implementation of additional cycling infrastructure at a later date.

There is potential for the first cycle way projects to be prioritised to ensure integration with the core bus network as it extends beyond the BRT/PT spine to Karori, Johnsonville and Island Bay. The fourth arm of the potentially expanded BRT routes to the eastern suburbs currently has a reasonable level of service for cycling that would be improved upon with the Transport Agency's proposed Mt Victoria Tunnel duplication and Ruahine Street and Wellington Road upgrades.

5. ANTICIPATED STRATEGIC FIT AND EFFECTIVENESS

An assessment of the anticipated Strategic Fit and Effectiveness has been undertaken in accordance with the Transport Agency Investment Assessment Framework. At the Strategic Case phase the assessment profile should be indicative for both Strategic Fit and Effectiveness.

The stakeholder partners to this strategic case have determined that the indicative profile is H/H/-.

Strategic Fit – High

An indicative 'high' rating for Strategic Fit is achieved as the identified problems (poor cycling uptake, higher than average rates of harm to people on bikes, reduced transport choices) occur on a corridor with a high walking and cycling crash rate. Investment in the Wellington cycling network to address these problems is consistent with the strategies and plans of the Wellington City Council and its transport partners.

Effectiveness – High

An indicative 'high' rating for Effectiveness is achieved on the basis the identified problems and potential investment meets the components of the criteria as follows:

Component	Explanation	Rating
outcomes focused	<ul style="list-style-type: none"> investment may be able to make a tangible change in addressing the problems of cyclist safety, as well as contribute to improved network resilience and economic productivity consistency with levels of service is not applicable at this phase, but will be considered in further phases 	H
integrated	<ul style="list-style-type: none"> the problem is consistent with current and future land use planning, and transport plans such as the RLTP, and the activities within this document, specifically those related to the Ngauranga to Airport corridor cycling is being progressing in an integrated way with an awareness of the potential trade-offs to be made across the network and working with key partners 	H
correctly scoped	<ul style="list-style-type: none"> the scope is appropriately broad at this phase but strategic interventions developed during the next phase will utilise an intervention hierarchy and consider a range of alternatives and options 	H
affordable	<ul style="list-style-type: none"> there is opportunity to leverage Urban Cycleway Programme funding an assessment of affordability is not required at this phase 	H
timely	<ul style="list-style-type: none"> benefits have been identified, these will be expanded as part of the benefits mapping process in subsequent phases parts of the potential cycleway programme are likely to be delivered within the timing envelope of the Urban Cycleway Programme 	H
confidence	<ul style="list-style-type: none"> the Council has good capability in place to monitor and manage risks 	H
Overall	<ul style="list-style-type: none"> Assessment based on lowest rating of all components 	H

6. NEXT STEPS

6.1 Conclusions

Wellingtonians who cycle are eight times more likely to be involved in a crash than the national average. This reality reinforces people's perceptions that cycling in Wellington is unsafe so people who would prefer to cycle don't. This misses an opportunity to lower congestion by reducing the number of car trips occurring on the Wellington City network.

Investment in cycling infrastructure in Wellington will reduce risk for cyclists and provide real transport choice. This will mitigate the effects of vehicles on the environment by reducing the number of vehicles on the road leading to improved city liveability.

Investment in cycling will contribute directly to the government's land transport objectives in relation to economic growth and productivity, safety, environmental mitigation and the provision of transport choice. There is evidence that an increase in cycling could potentially reduce traffic congestion that causes long and unreliable travel times leading to sub-optimal network performance. The strategic case has been given a high indicative profile for strategic fit and effectiveness by the stakeholder partners.

Cycling is a low-carbon, healthy and sustainable mode of transport, ideal for short to medium distance trips which will also increase the resilience of the city's transport system. The Cycle Way Programme supports the objectives of Wellington City Council and GWRC of economic growth, urban regeneration and improved accessibility.

Over the next three years there is also a unique opportunity for the Council to maximise co-investment with central government through the NLTF and Urban Cycleway Fund.

6.2 Next steps

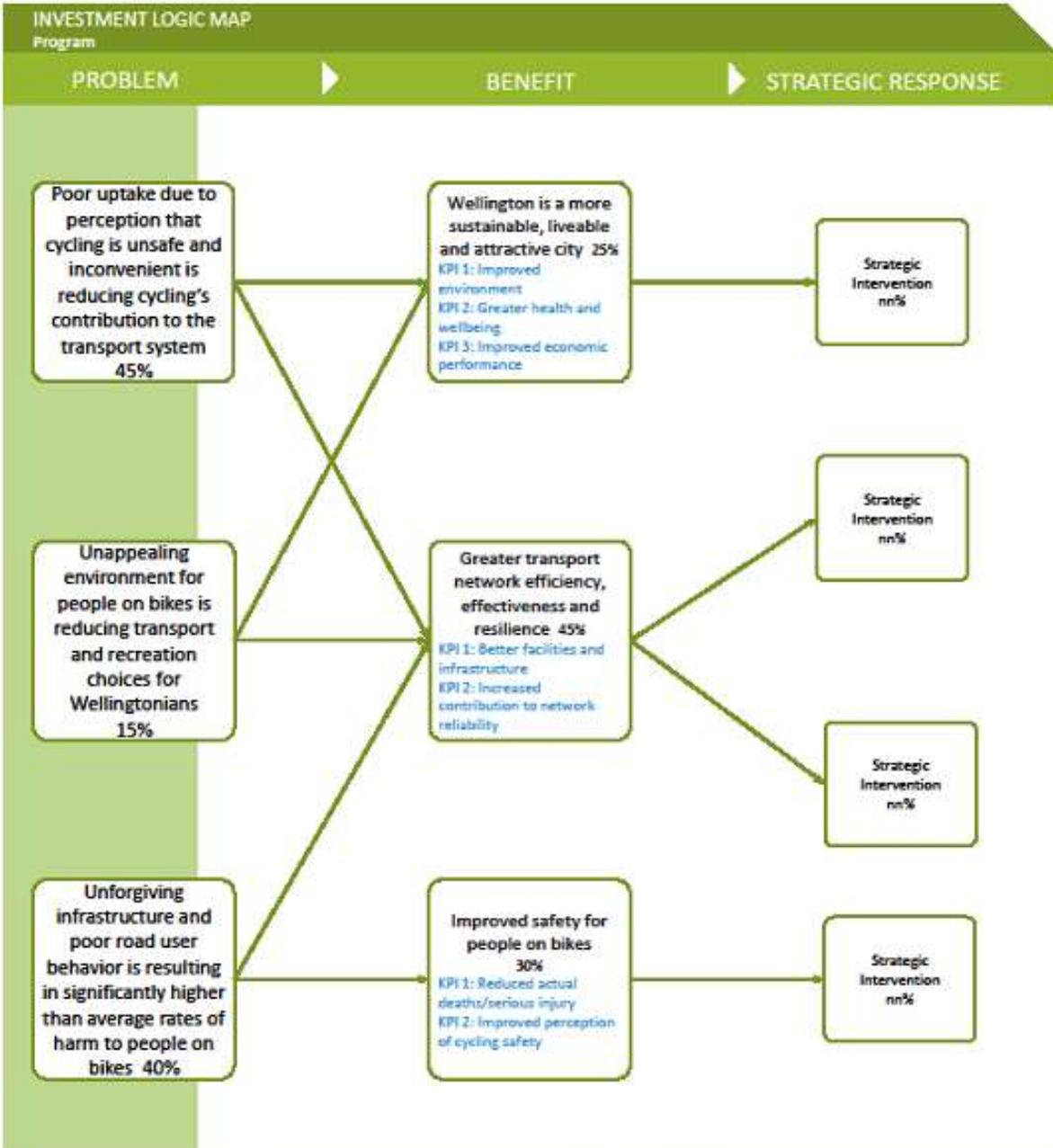
Significant planning for a programme of investment in cycling has already been undertaken by Wellington City Council. The next significant step for the Council will be development of a Master Plan for the Wellington cycle network. This will be developed as part of a Programme Business Case (PBC) phase for the Wellington cycle network (using the Transport Agency's business case approach). The Master Plan will identify priority packages and routes and will be akin to the 'preferred programme' identified in a PBC phase.

A funding application for the PBC phase is currently in preparation and will be lodged with the Transport Agency shortly, with this Strategic Case provided as supporting evidence.

Appendix A Investment Logic Map



Improving Cycling in Wellington Enabling transport choices by providing for people on bikes



Investor: Geoff Swainson
Facilitator: Sylvia Meakin
Accredited Facilitator: Yes

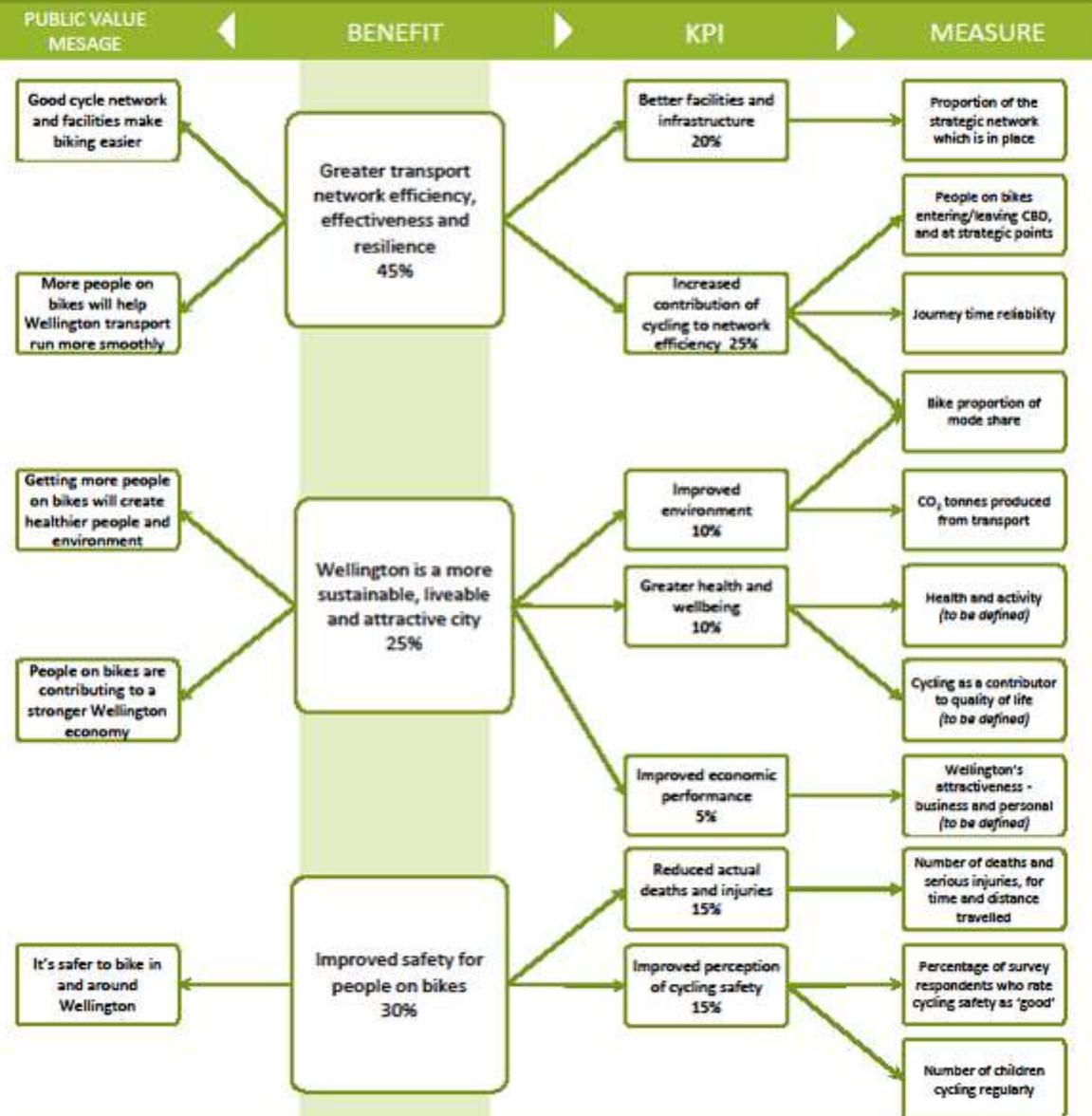
Version no: 2.0
Initial Workshop: 27/02/2015
Last modified by: Sylvia Meakin 13/03/2015
Template version: 3.0

Appendix B Investment Logic Map

WELLINGTON CITY COUNCIL

Improving Cycling in Wellington Enabling transport choices by providing for people on bikes

Benefit Map



RESPONSIBILITY FOR DELIVERING THE BENEFITS

Geoff Swainson Manager, Transport and Waste Operations 13/03/2015

Investor: Geoff Swainson
Facilitator: Sylvia Meakin
Accredited Facilitator: Yes

Version no: 1.0
Initial Workshop: 27/02/2015
Last modified by: Sylvia Meakin 13/03/2015
Template version: 3.0

Wellington City Cycle Network Strategic Case

Part Two: Funding Application to Proceed

August 2015

STRATEGIC CASE – FUNDING APPLICATION TO PROCEED

This funding application should be read in conjunction with the Wellington City Cycle Network Strategic Assessment and Strategic Context.

The Strategic Case sets out the case for change and provides evidence in support of the problems that have been identified in relation to cycling in Wellington. The funding application seeks funding to proceed to the next step to prepare a Programme Business Case for the Wellington City Cycle Network.

Programme Business Case Project Scope

The main focus of the Programme Business Case will be to work with stakeholders to develop the following components collaboratively:

1. A Communications Plan to assist in the engagement of Wellington City Council staff, stakeholders, elected members and the community.
2. The Investment Programme's (investment) objectives which will be derived from the problems and benefits identified in the Strategic Case.
3. A range of programme scenarios that will deliver the Level of Service options over a defined period of time (e.g. 20 years).
4. Cost profiles associated with the investment programme options.
5. Economic and multi-criteria assessment of the alternative investment programme options.
6. Recommendations to take forward to the indicative business case stage, for example a range of policy initiatives, individual projects and operational changes.

A number of Programme Scenarios (long list of options) for the Cycle Way Programme will be developed. These will consider the following:

- Available funding sources and potential levels of investment over an extended time period, say 20 years
- Ability to deliver the programme and specific routes within the NZTA's Urban Cycleways Programme 2015/16 to 2018/19
- Prioritisation and effectiveness of the programme and potential routes within the programme

Transport Modelling and Economics

In order to understand the likely quantifiable benefit streams for the Wellington Cycle Way Programme the proposal is to use the New Zealand Transport Agency's procedures SP11 in the Economic Evaluation Manual. These will be enhanced with the cycling demand analysis report to provide a robust estimation of cycle demand specific to the Wellington cycle corridors. This will quantify the travel time, health, environment and crash cost savings for each of the routes.

In addition to these benefit streams; it is proposed to use existing WTSM and SATURN modelling tools available in the Wellington region to understand the likely decongestion benefits of a mode shift away from private vehicles onto bikes. With quantifiable forecast mode shift, adjustments will be made to model the impact of reduced traffic levels on vehicle travel times. These traffic models will also be used to understand the likely traffic impacts of any changes in vehicle capacity due to road space and signal timing being

reallocated to cycle facilities. Where consultation with stakeholders is likely to be critical, microsimulation models will be used to understand more detailed traffic interactions, if required.

Environmental Planning and Approvals

An initial task will be to understand and review the potential consenting/environmental approvals that may be required to implement the programme, and the opportunities and problems associated with particular regulatory processes.

The environmental issues and constraints that may affect the programme will be identified. For example, consent applications or developments which may affect the project scope, sensitive areas of ecological, landscape or heritage importance and other environmental constraints.

Programme Scenarios (Investment Options) – Assessment Workshop

We will facilitate a workshop to undertake an assessment of the various projects within the proposed programme and potential programme scenarios (investment options). The workshop will capture, as a minimum, the following:

- Benefits of the individual options and ability to resolve identified problems
- Ability of options to achieve the desired level of service
- Interlinkages between cycle way routes, road hierarchy and public transport infrastructure
- Risks associated with various programme elements and programme scenarios

The outcome of this workshop is to have an agreed way forward for the programme with Wellington City Council and the Transport Agency.

Programme Business Case Draft and Final Reports

The Programme Business Case will inform the potential investors regarding the following:

- Stages and sequencing of planning, design, construction and commissioning
- Funding timeframes
- Communications and consultation strategy
- Interlinkages with programme elements and other projects

The Programme Business Case if approved and recommended for progression to the next stage will outline the scope for the Indicative Business Case and subsequent stages to implement the programme.

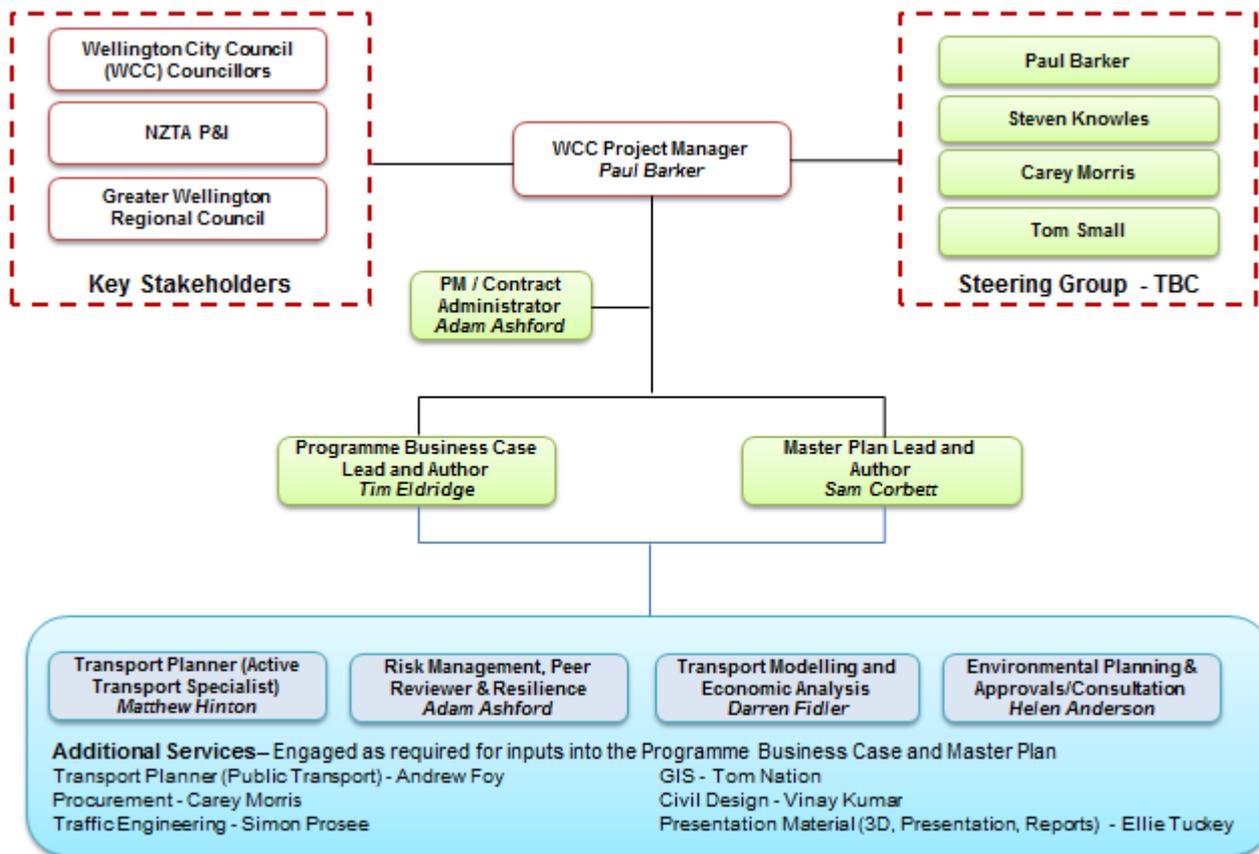
Project Team

A Project Team comprising a consortium of staff from AECOM, Jacobs and GHD is being established to develop the Programme Business Case and Master Plan, in conjunction with Wellington City Council.

The people involved have considerable experience and are committed to achieving the best possible outcome for Wellington City Council and the Wellington community. The proposed team and organisational structure have been developed to ensure the prompt and thorough development of the Programme Business Case and Master Plan for the Wellington Cycle Way Programme.

Through the team’s combined resources suitable back-ups for all team members will be provided should any team member be unavailable due to programme delays, or where the project needs to be accelerated to mitigate potential delays.

The following diagramme sets out the proposed team and organisational chart.



Detailed CVs of all staff are available if required. Although not specifically referred to in the diagramme, the expectation is that the team will also work with the Transport Agency’s HNO branch.

Proposed Budget

The costings provided by the Consortium are up to a total of \$200,000 for the development of the Programme Business Case.

Timeframe

The Transport & Urban Development Committee will be considering the draft Programme Business Case at a meeting scheduled for 9 September. The expectation is that the Programme Business Case will be submitted to the Transport Agency by the end of September 2015.