# **Major Cycleways**

**Activity Management Plan** 

Long Term Plan 2015–2025
As amended through the Annual Plan 2017/18

1 July 2017



# **Quality Assurance Statement**

Christchurch City Council Civic Offices 53 Hereford Street PO Box 73015 Christchurch 8154 Tel: 03 941 8999

Version	V5 1 <sup>st</sup> July 2017		
Status			
Portfolio Councillor:			
Activity Manager: Chris Gregory			
Chief / Director: Chris Gregory			
Asset Manager:			
Finance Manager:			

# **Table of Contents**

1	Key 1.1	Issues for the Cycleways Activity	
	1.2	Effects of growth, demand and sustainability	1
	1.2.1	Population Growth and Demand:	1
	1.2.2 1.3	Sustainability	
2	Pro	posed changes to activity	4
3	Acti 3.1	vity description  Focusing on what we want to achieve	
	3.2	How we will know we are achieving the outcomes	5
	3.3	What services we provide	5
	3.4	Benefits and Funding Sources	6
	3.5	Key legislation and Council strategies	6
4	Lev	els of service and performance measures	7
5	Rev	view of cost effectiveness - regulatory functions and service delivery	10
6	Lon 6.1	g Term Infrastructure StrategySignificant projects	
7	Rev	view of cost-effectiveness - infrastructure delivery	12
8	Sigr 8.1	nificant Effects	
9	Risk	k Management	14
1	0 lı	mprovement Plan	15
1	1 C	Operations, Maintenance and Renewals Strategy Operations and Maintenance	16 16
	11.2	Renewals	16
1:	2 k	Key Projects	17
1	3 5	Summary of Cost for Activity	18

## 1 Key Issues for the Major Cycleways Activity

This plan includes the provision and maintenance of Major Cycleway networks and end user facilities. It has been produced to support the major cycle network capital programme for the delivery of 13 major routes throughout the city.

This activity does not include provision and maintenance of the current on-street and off-street network which is included under 'Roads and Footpaths'.

A key direction for the City's recovery and long term direction for transport is efficient use of the network. The Christchurch Transport Strategic Plan (CTSP) recognises that the development of an effective cycle network is a key component to achieve an efficient multimodal transport network.

Council has committed to building a network of major cycle routes across the city to support ongoing modal changes required under the CTSP. This aims to help ease congestion levels on the road network. There are also wider benefits to promoting cycling; these are outlined in the CTSP.

The successful development of cycleways across the city is interrelated to a number of other transport activities such as transport education, roads and footpaths, parking, transport operations, transport policy and planning. It is important that these activities have a strong emphasis towards cycling and cycleways if Council's investment in developing the cycleway network is to be fully utilised.

#### 1.1 Community Outcomes

The effective management of cycleways for Christchurch means achieving the following community outcomes:

- An increased proportion of journeys is made by active travel and public transport
- · Transport safety is improved
- · There is a range of travel options that meet the needs of the community
- The transport system provides people with access to economic, social and cultural activities
- Christchurch's infrastructure supports sustainable economic growth
- Energy is used more efficiently
- · Christchurch is prepared for the future challenges and opportunities of climate change

Section 4 shows how these outcomes flow down into and influence the Council's activities and levels of service in relation to cycleways.

#### 1.2 Effects of growth, demand and sustainability

#### 1.2.1 Population Growth and Demand:

The Canterbury earthquakes have caused significant population movement, particularly away from the eastern suburbs and the city centre towards the north and southwest neighbouring districts. Much of this movement of business and residential is temporary and changing. The transport system needs to be flexible enough to deal with the constantly changing travel patterns and volumes in the short to medium term without committing Council to significant expenditure on assets that will only have a short term of value, or risk oversupply.

The Land Use Recovery Plan (LURP) has set out a pattern of future land use to the north and southwest including intensification in the central city and existing urban areas, and has actions to ensure a multi model transport network is maintained to support growth.

This situation of a transient city with increasing congestion has resulted in an uptake in the number of people cycling. The 2014 Household Travel Survey data has shown a doubling of cycling in the city compared with 2010 data<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> http://www.transport.govt.nz/research/travelsurvey/data-and-spreadsheets-household-travel-survey/

There has also been an increased number of people advocating for better cycling infrastructure, further highlighting the increased demand for cycling in the city. The Share an Idea event attracted over 3,500 comments on cycling. Both the Christchurch Transport Strategic Plan and 2014 Annual Plan both received a considerable amount of submissions in favour of improving cycling facilities in the city.

#### 1.2.2 Sustainability

The Local Government Act 2002 requires local authorities to take a sustainable development approach while conducting its business. The development of cycleway across the city provides a sustainable approach by providing for an environmentally friendly transport mode.

Cycleways provide for a more resilient city by future proofing the city against peak oil as well as providing for greater reliability in the transport network.

Cycling infrastructure projects often have high economic benefits meaning that investment in cycling infrastructure makes economic sense.

Because cycling is a cheap, cost effective way to travel then investing in cycleways helps to achieve a more equitable society and a number of beneficial community outcomes.

All of these factors ensure that Council is taking a sustainable approach in relation to the development of cycleways.

#### 1.3 Key Challenges and Opportunities for Cycleways

In working towards the community outcomes and influenced by population growth and demand, Council faces the challenge of making decisions that prioritise resources to deliver the best mix of services at the right level and in a sustainable way. The key challenges and opportunities that have been priorities by Council are below in Table 1-1.

Table 1-1

Key Issue	Discussion
Cyclist safety	In order to achieve the community outcomes related to transport safety and increasing the proportion of trips made by active transport then it is important that cycling safety is improved. Cycling safety, both perceived and actual, is proven to be the most significant barrier to stopping the majority of people taking up cycling. It is important that the cycleway network (as well as other initiatives from other activity management plans) promotes cycling safety.  For cycleways it is important for the infrastructure to have a high level of safety across the network. It is important that this infrastructure not only reducing the number of accidents but also makes people feel safer on the cycle network.
Increasing public demand for cycling infrastructure	There has also been an increased number of people advocating for better cycling infrastructure, further highlighting the increased demand for cycling in the city. The Share an Idea event attracted over 3,500 comments on cycling. Both the Christchurch Transport Strategic Plan and 2014 Annual Plan both received a considerable amount of submissions in favour of improving cycling facilities in the city.
Delivery of the Major Cycleway project	The Council has committed to delivering 13 major cycleways in the City by 2018. Although this is considered a positive step to achieve community outcomes, the delivering of the project within such a tight timeframe and within the original budget is a challenging proposition for Council.  The major cycleways offer a new standard of cycling infrastructure which is safe and convenient for people to use. Many of the types of infrastructure required to deliver the major cycleways are new to New Zealand therefore there are limited design standards associated with them. For this reason designing and implementing these 13 routes within such a tight timeframe will be difficult.

Key Issue	Discussion
Majory Cycleway Maintenance	It is important that major cycleways are appropriately maintained. Given the substantial investment that Council is putting toward improving provision for cycling across the city then it is important the new assets are maintained to good standard. Good maintenance of cycling infrastructure is generally of greater importance than the maintenance of other transport assets, the reasons for this are:  - Cycling infrastructure is primarily at the lowest point of the carriageway where debris accumulates quickest, for this reason it is important that maintenance and sweeping is carried on a more regular basis than general carriageway maintenance.  - The nature of the major cycleway infrastructure (separated and off the road) requires that new maintenance equipment is acquired.  - Poor maintenance levels can also lead it increased likelihood of damage to bicycles. Not having cycleways swept regularly can result in an increased accumulation of glass and other sharp objects which may cause punctures. This threat is more prolific for bikes than any other vehicle due to the nature of bicycle tyres.  Maintenance of the road network is to ensure that the asset remains operational however, the major cycleways are used as a tool to encourage people to cycle rather than them simply remaining operational. In order for them to be used as a promotional and encouragement for cycling then it is important that they are well maintained.
Major cycleway project requires associated services i.e education al and promotion to be successful project	In order for the major cycleways project to be as successful as possible then additional services are required to support the delivery of the infrastructure. Ensuring that people are aware of the infrastructure once it's been built is important to encourage its use. It is also important that people are educated in cycling safety as the major cycleways are delivered, this will be targeted in the areas through which the major cycleways pass.  The promotional aspect of the major cycleways will also extend to delivering a targeted travel plan programme to businesses in the catch areas of the cycleways, as they're delivered.  Additional resources will be needed to achieve this.
Cycle parking/facilities are sufficient to cater for people needs	In order to deliver on the Council's aim of making Christchurch a cycling city then a key component to achieve this is ensuring that the end user facilities across the city are adequate to achieve this. It is important that an adequate provision of cycle parking is supplied in order to make cycling an attractive transport mode. It is also important there is not a significant oversupply of cycle parking provided as this will cost Council to maintain and take up unnecessary room on the street. Currently Council does not monitor where cycle parking across the city is located or how adequate the level of provision is. In order to ensure that a Christchurch is providing a sufficient level of cycling parking then it is important this is monitored in the future.
Carriageway space constraints & Public Consultation	In order to accommodate cycling infrastructure on existing roads then a reallocation of carriageway space is often required. Christchurch has traditionally had wide carriageways meaning that, in most instances, it is possible to deliver cycling infrastructure by altering the vehicle lane width.  However, there are instances where there is insufficient vehicle lane width to accommodate cycleways. In these instances alternative options for how to accommodate the cycling infrastructure are required. This can often result in having to remove on-street car parking, re-allocate berm space, land acquisition or narrowing vehicle lanes below prescribed minimum widths. These options often have political and/or cost implications associated with them. As a result, installing cycling infrastructure can sometimes be a precarious decision and will need a significant consultation process to resolve these issues.

# 2 Proposed changes to activity

Table 2-1 summarises the proposed changes for the management of the Cycleways activity since the Three Year Plan 2013-16 Activity Management Plan.

Table 2-1 Proposed changes to activity

Key Change	Reason	Level of significance? What investigations are needed?	Options for consultation and engagement
Major cycleways has it's own activity management plan, previously it had been combined with active transport	Council has significantly increased its emphasis and funding on cycleways. The New Christchurch Transport Strategic Plan places an increased importance on cycling as an effective transport mode for moving people round the city and help combat congestion. It was considered that in order to give a clearer understanding of how cycleway will be managed then a separate activity management plan should be created to articulate this.	Level of Significance – LOW	
Inclusion of the major cycleway programme	In the Three Year Plan and LTP Council committed funding to deliver the 13 major cycleways. This is a significant investment which will be delivered during the period of the LTP. The major cycleways is a new initiative for Council, the previous activity management plan had nothing of a similar scale for cycling. this reason it is important that this activity management plan reflects this new project	Level of Significance – MEDIUM	
Inclusion of a level of service ensuring that Major cycleways are maintained.	Ensuring that cycleways are safe and useable is vital to using that Christchurch is a cycle friendly city. Having cycleways that have debris in them results in cycling being an unsafe and unpleasant experience. Certain items may also pose a safety issue, either causing cyclists to swerve into the vehicle lane to avoid items or items such as glass may result in a puncture and accident.	Level of Significance – MEDIUM	

## 3 Activity description

## 3.1 Focusing on what we want to achieve

Council undertakes activities in order to deliver on the community outcomes for Christchurch. The outcomes that relate most directly to the management of the city's cycleways are:

- · An increased proportion of journeys is made by cycling
- · Transport safety is improved
- · There is a range of travel options that meet the needs of the community
- · The transport system provides people with access to economic, social and cultural activities
- Christchurch's infrastructure supports sustainable economic growth
- · Energy is used more efficiently
- · Christchurch is prepared for the future challenges and opportunities of climate change

## 3.2 How we will know we are achieving the outcomes

We will know we are achieving the above outcomes when we see the following results:

- · People have the knowledge, skills and confidence to cycle.
- · Good quality cycling facilities are built and maintained.
- · Travel time reliability.
- · The road environment encourages safer behaviour.
- · All members of the community have access to transport

The activities that follow in section 4 and the levels of service within them are all linked to the above results to ensure Councils stays focused on moving towards the community outcomes. This link aims to confirm why we are doing the activities – that they will realistically move us closer to our goals – and that service delivery remains relevant to strategic direction. Some of the outcomes specified above do not fall under this activity management plan and are instead listed in another activity management plan however, the services they provide are vital to achieve the aims of the cycleways, for these reasons they have been included as part of this activity management plan's description.

## 3.3 What services we provide

This activity includes the planning, provision and maintenance of cycleways, including:

- Provision and Maintenance of the Major cycle networks
- Provision and Maintenance of end user cycling facilities (cycle stands, lockers).

### 3.4 Benefits and Funding Sources

#### 3.4.1 Who Benefits?

Who benefits?					
Individual	Some				
Identifiable part of the community	Majority				
Whole community	Some				

### **Explanatory Comments:**

 Cycleways and facilities will directly benefit members of the community who cycle both individually and as a collective group of cyclists.

Customers include the community at large, but specifically people who cycle and other road users. Providing cycleways that are safe and convenient to use and will encourage people to cycle will directly benefit people who already cycle by making it safer and quicker to cycle.

 Cycleways will help to regenerate areas through which they pass directly impacting on residents and business owners of these areas, even if they don't cycle.

The impact of the improving cycleway connections to business areas will have positive implication for businesses, particularly those close to major cycleways. Research from New York has shown that business areas which have been transformed into cycling friendly environments have seen a significant improvement in retail spending. This is potentially for two reasons, it makes the businesses more accessible to people and cyclists are proven to consistently spend more money in an area than drivers.

• The whole community will benefit from an easing of congestion as a result an increased number of people cycling

The major cycleway project is seeking to encourage more people to take up cycling, this will result in less people travelling by other transport modes. Having less people travelling in private vehicles will help ease congestion levels across the city resulting in benefits for all road users.

#### 3.4.2 Who pays?

Funding - Fees / User Charges	Other revenue Grants & Subsidies	General rate	Targeted rate
0%	14%	0%	86%
	Some		Majority

Note, Funding Split % is derived from the 'Summary of Cost for Activity' ( section 13).

Does this Activity generate surplus funds that can be applied to other areas? **No** 

## 3.5 Key legislation and Council strategies

Local Government Act, Regional Land Transport Strategy, Land Use Recovery Plan, Greater Christchurch Transport Statement, Christchurch Transport Strategic Plan, Christchurch City Plan, Safer Journeys Strategy, NZ Transport Strategy 2008, Land Transport Management Act 2003

## 4 Levels of service and performance measures

Table 4-1 summarises the levels of service and performance measures for the Major Cycleways activity. Shaded rows are the levels of service and performance measures to be included in the Long Term Plan. Non-shaded rows are non-LTP management level measures, agreed with and reported to Council but not included as part of the community consulted document.

Table 4-1

				Future	Future				
Perfo	rmance Standards Levels of Service	Results	Method of Measurement	Current Performance	Benchmarks	Year 1	Year 2	Year 3	Performance (targets) by Year 10
						2015/16	2016/17	2017/18	2024/25
Major a	and local cycleways								
10.5.3	Increase the number of cycling trips	Modal shift	•	Establish baseline	-	≥2%	≥3%	≥5% Discontinued	≥30% Discontinued
10.5.2	Improve the perception that Christchurch is a cycling friendly city	Customer satisfaction	Annual Resident satisfaction survey conducted in March each year	11/12 - 42% 12/13 - 38% 13/14 - 26%	-	≥26%	≥28%	≥35%	≥60% Agree or strongly agree
10.5.1	Reduce the number of fatal and serious crashes on the network	Safety	Number of crashes involving cyclists	13/14 45 serious 2 fatal	Ministry of Transport 2012 statistics (national) 798 serious, 8 fatal	≥5% reduction per annum	≥5% reduction per annum	≥5% reduction per annum	≥5% reduction per annum

					Future	Future			
Perfo	ormance Standards Levels of Service	Results	Method of Measurement	Current Performance	Benchmarks	Year 1	Year 2	Year 3	Performance (targets) by Year 10
						2015/16	2016/17	2017/18	2024/25
10.5.4	Reduce risk to cyclists using the network via a targeted programme of safety improvements at high risk locations	Safety	The number of sites delivered per year	Establish baseline	-	Top 5 sites p.a identified through risk assessment	Top 5 sites p.a identified through risk assessment	Top 5 sites p.a identified through risk assessment Discontinued	Top 5 sites p.a identified through risk assessment Discontinued
10.5.5	Cycleways remain operational and maintained to a high standard	Safety	Action time to safety related issues and maintenance contract performance	Establish baseline	<48hr if safety related  Maintenance Contract KPIs are achieved.	≥80% within 48hr ≥95%	≥85% within 48hr ≥95%	≥90% within 48hr ≥95%	≥95% within 48hr ≥95%
10.5.6	Support shared bike schemes	Mode shift	Number of people engaged with	≥6 organisation (workplace travel planning)	-	≥6 new targeted organisations (workplace travel planning)	≥6 new targeted organisations (workplace travel planning)	≥6 new targeted organisations (workplace travel planning)	Review programme and set target accordingly
End Us	se Facilities	1							
10.5.7	Improve the customer satisfaction with cycle parking facilities	Customer satisfaction	Annual residents satisfaction survey (targeted users)	Establish baseline	-	≥5% improvement per annum	≥5% improvement per annum	≥5% improvement per annum	≥5% improvement per annum

						Future	Performance (	(targets)	Future Performance
Perfo	rmance Standards Levels of Service	Results	Method of Measurement	Current Performance	Benchmarks	Year 1	Year 2	Year 3	(targets) by Year
						2015/16	2016/17	2017/18	2024/25
10.7.6 (ex 3.2.2)	Provide school 'Cycle Safe' education programme	Mode shift due to improve actual and perceived cycle safety in Christchurch	Number of (year 5-8) students educated.	2012 - 2,985 students 2013 - 3,096 students 2013 census totals 11,892 students age 10-12	12/13 Auckland 40 students Tauranga 3,000 students	≥3,000 students per year (25%)	≥3,000 students per year	≥3,000 students per year	≥3,000 students per year
10.7.7 (ex 3.2.3)	Maintain a high level of satisfaction with school 'Cycle Safe' education programme	Good school stakeholder and participant engagement with programme	Conduct survey of staff and students involved	>95% satisfied	-	≥95% satisfied	≥95% satisfied	≥95% satisfied	≥95% satisfied

# 5 Review of cost effectiveness - regulatory functions and service delivery

The Local Government Act requires local authorities to review the cost effectiveness of current arrangements for delivering its services and regulatory functions

## 6 Long Term Infrastructure Strategy

The priorities for the Transport Activities (including cycling) are:

- Maintenance and renewal of assets: Through optimal use of available funds for maintenance activities and asset renewals. Effective asset management and funding of this area is needed to ensure the network does not deteriorate further and affect the levels of service provided and future funding requirements.
- Improving the safety of the network: Safety is enhanced by maintaining the existing asset base, as
  above, but also includes safety improvements to the road corridor to reduce crashes, with priority
  focussed on reducing the occurrence of fatal and serious injury crashes on the network.
- Support the redevelopment, recovery and growth of the city: This includes work to resolve current level of service issues as well as supporting central city recovery, population movement, new developments and Roads of National Significance projects. In the first instance this will be through a network management and optimisation approach, and managing congestion and providing travel choices through investment in public transport, walking and cycling. Upgrading roading infrastructure and constructing new infrastructure will only be undertaken as a last resort after the above hierarchy of interventions has been exhausted.

#### 6.1 Significant projects

There are several key projects included within the expenditure profile including:

- Development of the local cycleway network The local cycleways are an integral part of the cycle network, they provide links to the major cycleway network and also provide direct routes across the city. Development of the local cycleways will help to secure the greatest utilisation of Council's investment in the major cycleway network. Particular emphasis will be placed on routes which link to the major cycleways.
- Improvements to major cycleway network The major cycleway network is scheduled to be completed by 2018 however a more realistic timeframe is 2022. In order to ensure these key routes remain as functional as possible it is important the infrastructure is tweaked over time to meet the changing needs of the city's cyclists. Although the major cycleways are being designed for a high level of safety and to a high standard, given that this cycling infrastructure is new for Christchurch and New Zealand then it is inevitable that small alterations/improvements could be made to ensure the routes remain as reliable and safe as possible.
  - Although the 13 major cycleways cover a large proportion of the city, going forward there is potential to further increase the coverage of major cycleways in some locations. This would result in comparatively minor additions to the network.
- City-wide cycle hire scheme City wide cycle hire schemes have become an integral part of many cycle friendly cities across the world. They act as a strong promotional tool for encouraging cycling, they provide a good first step for people to gain confidence on a bike before they commit to buying a bike and decide to cycle regularly. They are also functional for people cycling across the city, particularly for people who come into the city by bus or private vehicle. A cycle hire scheme for Christchurch would help achieve a number of community outcomes and strategic aims. Any such scheme would support the major cycleways, once completed.
- Park and Bike facility At strategic locations facilities where commuters can park their vehicles and then cycle the remainder of their journey will help ease parking and congestion problems for key locations/routes. These facilities should link in with major cycleways and be provided on routes with congestion or service areas which have parking issues.

# 7 Review of cost-effectiveness - infrastructure delivery

The Local Government Act requires local authorities to review the cost effectiveness of current arrangements for delivering infrastructure. The same criteria and options as defined in section 5 above apply (*Review of cost effectiveness - regulatory functions and service delivery*).

# 8 Significant Effects

The significant negative and significant positive effects are listed below in Tables 7-1 and 7-2 respectively.

**Table 8-1 Significant Negative Effects** 

Effect	Council's Mitigation Measure
Potential to impact upon vehicle safety through the narrowing of vehicle lanes to accommodate cycleways	Ensuring that any carriageway changes are well publicised and highlighted when they occur. Ensure that if any cycleway separation is installed then it is clearly visible to all road users.
Removal of some on-street car parking to accommodate cycleways	Consultation with public and business owners relating to any car park removal to ensure that any effects can be mitigated. In instances where parking is critically needs then establish alternative parking arrangements.

**Table 8-2 Significant Positive Effects** 

Effect	Description
Economic development	Planning for an efficient cycling network that allows for the safe movement to key hubs and markets, therefore allowing economic growth and prosperity
Safety and personal security	Planning to improve the safety of the cycle network will lead to improving people's safety and personal security.
Public health	Planning for increasing cycling numbers can lead to enhancements in people's health and well-being.
Environmental	A greater number of people cycling will result in the transport system having a reduced environmental impact.
Transport efficiency	Encouraging more people to cycle results in less people using private vehicles, contributing to elevating congestion in the city.

## 8.1 Assumptions

Council has made a number of assumptions in preparing the Activity Management Plan. Table 8-3 lists the most significant assumptions and uncertainties that underline the approach taken for this activity.

**Table 8-3 Major Assumptions** 

Assumption Type	Assumption	Discussion
Financial assumptions	That all expenditure is based on inflation being at similar levels to what has occurred in recent years	There could be an impact on the affordability of the activity if inflation is higher than what has occurred in recent years, but Council is using the best information practically available on predictions on future inflation levels.
Changes in legislation and policy, and financial assistance	That there will be no major changes in legislation and government policy, and financial assistance	The risk of changes legislation and policy, and financial assistance is high due to the changing nature of government and politics. However major changes are less likely. If major changes occur it is likely to have an impact on the activity. Council has not mitigated the effect of this.

# 9 Risk Management

**Table 9-1 Significant Risks and Control Measures** 

Risk	Impact	Priority	Risk Strategy	Risk Response / Mitigation
Unable to deliver major cycleway programme within specified timeframe (8 years)	Unable to meet agreed timeframe for major cycleways programme. Programme has high political and public exposure.	Very High	Mitigate	Review staffing levels and seek to prioritise programme
Cycleways are not well maintained	Impact upon the safety and attractiveness of cycling in city. MCR's would fail to meet their objectives.	High	Mitigate	Ensure that cycleways are built to a standard that requires low maintenance. Review maintenance budget for cycleways. New standards will be written into contracts.
Funding is not available to build adequate cycle parking facilities in line with new developments	Success of MCR's may be limited due to lack of end user facilities. Opportunities to integrate end user facilities into anchor projects are reduced without funding	High	Mitigate	Review funding priorities. Explore PPP opportunities for more extensive 'bike hub' facilities. Work with Major employers to ensure facilities are provided to encourage cycling.
Major cycleways are not safe for people to access via the local cycleway network.	Success of the MCR's may be limited as connections to the MCR's do not provide adequate level of safety. This may make people apprehensive about using the MCR's if they don't feel safe getting to or from them.	High	Mitigate	Look for opportunities for improvements through the rebuild are encouraged on local connections to major cycleways. Develop cost-effective programme for investing in local cycleways.

# 10 Improvement Plan

To date this document has not been reviewed. An external review for compliance with the requirements of relevant legislation, especially the LGA 2002 is proposed as the primary improvement item. The findings and suggestions from this review will be assessed and prioritised by the asset management team and either implemented for the final version of the document or added to the Improvement Plan. It is intended that the Improvement Plan will be continually updated and monitored as a live document.

## 11 Operations, Maintenance and Renewals Strategy

#### 11.1 Operations and Maintenance

Planned maintenance includes condition monitoring, planned corrective maintenance, servicing (cyclic maintenance such as sweeping, litter and vegetation control, and preventative maintenance. Unplanned maintenance include priority repairs, modification or redesign and responding to requests.

As the assets in this portfolio are yet to be constructed there are no current operational or maintenance requirements.

As they are constructed over the next 8 years, operational and maintenance plans will be developed and incorporated into Council's processes and maintenance contracts.

#### 11.2 Renewals

Renewals replace or rehabilitate existing assets such that they are restored to their original condition and capacity.

The expected life of assets in this portfolio is of the order of 25 years.

As they are constructed over the next 8 years the planned renewals of these assets will be incorporated into Council's Asset Management Plan.

# **12 Key Projects**

For details of the capital works relating to this activity refer to the draft Capital Programme, draft Long Term Plan, volume 1.

# 13 Summary of Cost for Activity

## Figure 13-1 Total Expenditure

TRANSPORT - MAJOR CYCLEWAYS	Funding Caps in 2015/16 Dollars			Funding splits exclude EQ Costs from all calculations									
	2014/15 Annual Plan	2015/16	2016/17	2017/18		Funding - User Charges	Other revenue	General rate Targ	geted rate	Period of Benefit (years)	Comments		
		000's											
Operational Budget Cycling Networks and Facilities	490	556	532	525									
Activity Costs before Overheads	490	556	532	525									
Earthquake Response Costs			_										
Corporate Overhead	36	44	53	61									
Depreciation	178	307	509	731									
Interest	34	79	167	280									
Total Activity Cost	737	986	1,262	1,597		0%	14% Some		86% Some				
Funded By:							Some	iviajority	Some				
Fees and Charges	_	4	4	4									
Grants and Subsidies	102	134	135	136									
Earthquake Recoveries		-	-	-									
Total Operational Revenue	102	138	139	140									
Net Cost of Service	636	848	1,123	1,457									
Funded by:													
Rates	636	848	1,123	1,457									
Earthquake Borrowing	-	-	-,0	.,									
	636	848	1,123	1,457									
Capital Expenditure Earthquake Rebuild Renewals and Replacements Improved Levels of Service Additional Demand													

