Road Operations

Activity Management Plan

Long Term Plan 2015 – 2025

As amended through the Annual Plan 2017/18

1 July 2017

Christchurch City Council

Quality Assurance Statement

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	Status	
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1 Key Issues for the Road Operations Activity

This Activity Management Plan replaces the existing Activity 10.0 Road Network and Includes:

- Traffic Operations
- Transport Safety
- Christchurch Transport Operations Centre (CTOC)
- Provision of Real-Time Operations (Traffic Systems including Signals)
- Temporary Traffic Management
- Traveller Information

1.1 Community Outcomes

The effective management of Transport Operations for Christchurch supports achieving community outcomes including:

- 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
- An increased proportion of journeys is made by active travel and public transport
- Transport safety is improved
- Christchurch's infrastructure supports sustainable economic growth
- City assets, financial resources and infrastructure are well-managed, now and in the future

1.2 Effects of growth, demand and sustainability

1.2.1 Population Growth and Demand

The Canterbury earthquakes have caused significant disruption to business and residential areas in Christchurch and nearby towns. Christchurch city has seen significant population movement, particularly away from the eastern suburbs and the city centre towards the north and southwest and into neighbouring districts. Land use recovery has set out a pattern of land use with Greenfields to the North and Southwest and intensification in the central city and existing urban areas. The current and ongoing land use shift has implications for how close people are to employment opportunities, social facilities, entertainment and recreation and as a result has significant impacts on the transport network.

The population for the area is expected to continue to grow and the make-up of the population will continue to change in future. There will be an increase in the demand for the transport network, an increase in the proportion of older people (in line with the national trend) and fluid medium term population as workers continue to come to the area to assist with the rebuild or choosing to live in the new Christchurch. Such changes will result in changing demands on the transport network.

Freight volumes through Christchurch are expected to at least double by 2041. This will result in a corresponding growth in heavy goods vehicles travelling on the network. This freight growth will be largely positive for the Christchurch economy but will also have a higher impact on the road network, and increasing traffic volumes may affect the efficiency of freight movement. Likewise, general traffic volume growth will also have a negative effect on the efficiency of the freight network. Road operations will need to address this issue by catering appropriately for all modes on the relevant modal networks outlined in the Christchurch Transport Strategic Plan.

Through Council's and ECan's joint investment in public transport provision then it is important that the public transport network operates as effectively and as reliably as possible. This is important if the public transport network is to be fit for purpose to service the changing population demographics, changing land uses and increasing population.

The younger population are choosing to drive less and use more environmentally friendly modes of transport, to cater for these emerging demographic trends, as well as wider reasons it is important that the transport network is operated in a way that adequately caters for active transport users. The Christchurch Transport Strategic Plan places equal emphasis on all transport modes across the transport network. It is important that the operation of the network reflects these priorities

1.2.2 Sustainability:

Road Operations contributes to sustainability by supporting access to economic, cultural and social opportunities and maintaining and enhancing the quality of the environment.

The Christchurch Transport Strategic Plan sets out modal networks on which the different transport modes will be given priority while the Network Management Plan (NMP) provides guidance on how the road network should be operated to deliver these modal priorities. Operating the network in line with the NMP will make these modal networks safer and more efficient, meaning viable travel choices, such as walking, cycling and public transport, are available and that travel demand, journey time reliability, user safety and regulatory requirements are met. This includes supporting economic sustainability by delivering the safe and efficient operation of the freight network, particularly to and from the port.

A key way of achieving this is by optimising the use of existing infrastructure (avoiding unnecessary infrastructure development). Optimisation supports sustainability in three key ways: fewer physical resources (such as bitumen, aggregate, and fossil fuels) are consumed in and on the road network, the economic burden of financing new infrastructure is minimised, and the liveability of the city is enhanced by avoiding severance of communities and negative effects on connectivity and amenity.

Optimisation of the network and achieving safety and efficiency for all modes also enhances environmental outcomes by reducing greenhouse gas emissions and other negative environmental effects of the transport network (such as reducing contaminant run-off from roads), it also contributes to increased resilience by reducing dependence on fossil fuels.

1.3 Key Challenges and Opportunities for Road Operations Travel

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 prioritised by Council are below in Table 1-1.

Table 1-1

Key Issue	Discussion
Achieving consistent journey times on a dynamic network	Reliable journey times provide the traveller with a level of confidence that is important for decisions concerning route and/or modal choice during particular times of the day and night.
Ensuring the network is performing optimally and is resilient and responsive to changes (planned and unplanned)	The optimal performance of the network in the “real-time” is a function delivered by CTOC. The horizontal and vertical rebuild programmes result in parts of the network becoming unavailable and/or compromised. The ability to adapt and respond to these changes is a key operational issue.
Ensuring customers are informed about network condition and availability to inform route and modal choices	This is predominantly a CTOC function. By providing travellers with up to date information to make informed decisions concerning route and mode of travel can significantly influence the travel patterns on the network and mitigate the need for physically responsive measures (Temporary Traffic Management) at the constraint point.
Encouraging active travel modes and public transport	This will remain a key issue to achieving many community outcomes
Ensuring continual reduction in crashes on the network	The social and economic costs of road crashes are significant and strong communities are built on safe environments.
Ensuring existing transport infrastructure is fully utilised	In order of Council to achieve the maximum benefits from its existing transport infrastructure then it is important that it is managed as effectively as possible. On congested parts of the network there are often solutions to easing congestion through more effective corridor management i.e. adjusting signal timings. Implementing these optimisation measures can delay or negate the need for more costly solutions.

2 Proposed changes to activity

Table 2-1 summarises the proposed changes for the management of the Road Operations 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
Previously Road Operations was part of the Road Network Activity. This has now been split into the Roads and Footpaths and Road Operations Activities.	Better alignment with the Local Government Act.	Minor.	Not required.
Due to the 2013 amendments to the Local Government Act, a number of non-financial performance measures are mandatory for Local Authorities. A measure relating to crash statistics is this activity.	Legal requirement	Minor, as it overlaps with previous work.	Not required.
The Performance Measure targets for the safety related Levels of service have been adjusted. For vulnerable users – pedestrians, cyclists and motorcyclists the target is zero fatal crashes per year.	These targets are achievable and better reflect Council policy.	Minor.	Not required.
Previously we measured the journey time along a virtual 10km of travel time on the network as an indicator of congestion. The new plan will measure actual journey time along specific routes, and provide a more accurate measure of journey reliability.	The previous measure had very limited application, was measured only once a year and gave no indication of where congestion remediation should be targeted. Journey time along actual routes, measured in real-time, will enable a measure of journey reliability and will directly inform congestion mitigation.	Requires Bluetooth technology and software applications. There are annual operational costs associated with this.	Actual and virtual (through www.transportforchristchurch.co.nz) VMS provides travellers with real-time information on journey times

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 Road Operations network are that:

- 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.

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:

- Safer speeds and conflicts between road users are reduced and vulnerable users are protected.
- Road environment encourages safer behaviour.
- Land use is well integrated with the transport system.
- Travel time reliability.

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.

3.3 What services we provide

This activity includes the following services:

- Safety improvements.
- Monitoring, managing, optimising, informing customer and future planning about the transport network.
- Christchurch Transport Operations Centre (CTOC).

3.4 Benefits and Funding Sources

3.4.1 Who Benefits?

Who benefits?	
Individual	
Identifiable part of the community	
Whole community	Full

Key:
Full
Majority
Some

Explanatory Comments:

All members of the Community use the Transport Network and gain benefit from it.

3.4.2 Who pays?

Funding - Fees / User Charges	Other revenue Grants & Subsidies	General rate	Targeted rate
13%	7%	80%	0%
Some	Some	Majority	

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

Key:		Typically
Full	*All or almost all the cost is funded from that source. If the comment is made in the general or targeted rate columns it does not preclude making minor charges for the service but indicates that the charges are a negligible part of the fund.*	*95%+*
Majority	*The majority of the activity is funded from this source.*	*50%+*
Some	*Some revenue is derived from this source.*	*<50%*

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

Explanatory Comments:

Funding is generated via Activities on Street; however this is used to fund the Activity

3.5 Our Key Customers

Customers include the community at large, but specifically the full range of road users including private, business, visitors to the city, public transport and utility operators, and emergency services. Cyclists and pedestrians also benefit from measures that enable them to have safe and convenient access along and across the road network. We work with our strategic partners, the New Zealand Transport Agency, Environment Canterbury and the New Zealand Police.

3.6 Key legislation and Council strategies

Local Government Act, Regional Land Transport Strategy, Greater Christchurch Transport Statement, Christchurch Transport Plan, Christchurch City Plan, Safer Journeys Strategy, NZ Transport Strategy 2008, Land Transport Management Act 2003, and the Land Transport Amendment Act 2013.

4 Levels of service and performance measures

Table 4-1 summarises the levels of service and performance measures for the Road Operations 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

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Bench-marks	Future Performance (targets) Year 1 2015/16	Year 2 2016/17	Year 3 2017/18	Future Performance (targets) by Year 10 2024/25
Safety improvements									
10.0.6	Improve Road Safety: Reduce the number of reported crashes on the network by 5% per year *(Department of Internal Affairs mandatory non-financial performance measure number 1)*	*Safety*	Capture the change in number of people involved in fatalities and serious injury crashes on the local road network, the number from the previous financial year. Target a percentage reduction of fatal and serious injury crashes per annum.	*2013/14 stats* *3,890 total* *366 serious* *15 fatal*	*Ministry of Transport 2012 statistics* *9,337 serious* *267 fatal*	10.0.6.1 Report the change in number of fatalities and serious injury crashes on the local road network (from the previous financial year, expressed as a number). 10.0.6.2 ≥5% Reduction from previous yr	10.0.6.1 Report the change in number of fatalities and serious injury crashes on the local road network (from the previous financial year, expressed as a number). 10.0.6.2 ≥5% Reduction from previous yr	10.0.6.1 Report the change in number of fatalities and serious injury crashes on the local road network (from the previous financial year, expressed as a number). 10.0.6.2 ≥5% Reduction from previous yr	10.0.6.1 Report the change in number of fatalities and serious injury crashes on the local road network (from the previous financial year, expressed as a number). 10.0.6.2 ≥5% Reduction from previous yr
10.0.37	Protect vulnerable users – minimise the number of fatal crashes involving pedestrians and cyclists	*Safety*	The number of fatal crashes per year involving pedestrians or cyclists	*2013/14* *3 fatal*	-	0	0	0	0

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Bench-marks	Future Performance (targets)			Future Performance (targets) by Year 10
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	2024/25
10.0.32	Assess risks on the network	*Safety*	Risk based safety assessments carried out on strategic/High risk routes using KiwiRAP system annually	*Establish baseline*	-	*100% of Strategic Routes*	*100% of high Risk Routes*	*~~100% of high Risk Routes~~*	*100% of high Risk Routes*
10.0.33	Reduce risk to customers 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*	*At least five sites reduced to a low or moderate risk*	*Top 5 sites p.a identified through risk assessment*
10.0.34	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*	*At least five sites reduced to a low or moderate risk*	*Top 5 sites p.a identified through risk assessment*
Monitoring, managing, optimising, informing customers and future planning									
10.0.1	Provide journey reliability on specific strategic routes	*Reliable journeys*	Measure journey time on specific strategic routes – Airport to City, Barrington St to Innes Rd, Hornby to City and Belfast to City	*Establish baseline*	-	*Establish baseline*	*25 mins peak* *15 mins inter peak* *10 mins off peak*	*25 mins peak* *15 mins inter peak* *10 mins off peak*	*25 mins peak* *15 mins inter peak* *10 mins off peak*
10.0.35	Promote modal shift Increase the percentage share of walking trips	*Modal share*	The percentage share of walking trips measured through annual surveys	*10/11 21.2%* *11/12 15.8%* *12/13 15.8%* *13/14 16.5%*	*09/11 average* *Auckland 14.4%* *Wellington 25.8%*	≥16.8%	≥17.1%	≥17.4%	≥20.0%

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Bench-marks	Future Performance (targets)			Future Performance (targets) by Year 10
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	2024/25
10.0.36	Promote modal shift Increase the percentage share of cycling trips	*Modal share*	The percentage share of cycling trips measured through annual surveys	*10/11 4.0%* *11/12 3.5%* *12/13 3.1%* *13/14 3.2%*	*09/11 average* *Auckland 0.9%* *Wellington 0.9%*	≥3.3%	≥3.4%	≥3.5%	≥5.0%
10.0.37	Promote modal shift Contribute to increasing the percentage share of public transport trips	*Modal share*	The percentage share of public transport trips measured through ECAN passenger number data	*10/11 2.8%* *11/12 2.1%* *12/13 3.2%* *13/14 3.3%*	*09/11 average* *Auckland 3.4%* *Wellington 5.3%*	≥3.4%	≥3.5%	≥3.6%	≥5.0%
10.0.2	Promote modal shift Decrease the percentage share of car trips	*Modal share*	The percentage share of car trips measured through annual survey	*10/11 72.1%* *11/12 78.5%* *12/13 77.9%* *13/14 76.9%*	*09/11 average* *Auckland 80.6%* *Wellington 66.9%*	≤76.5%	≤76.0%	≤75.5%	≤70.0%
Christchurch Transport Operations Centre (CTOC)									
10.0.22	The temporary traffic management system supports the city rebuild whilst minimising impact on the transport network	*Efficient travel*	Lead time between TMP application & Delivery ≥ 2 Weeks Approval rate of submitted TMP's	*Establish baseline*	-	>95%	>95%	>95%	>95%

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Bench-marks	Future Performance (targets)			Future Performance (targets) by Year 10
						Year 1	Year 2	Year 3	
						2015/16	2016/17	2017/18	2024/25
10.0.27	Traveller information is sufficient and delivered in a timely fashion to allow travellers to make travel choices	*Efficient travel*	≤ 5 minutes for Unplanned events ≥ 1 week for planned events	*Establish baseline*	-	10.0.27.1 >95% 10.0.27.2 >95%	10.0.27.1 >95% 10.0.27.2 >95%	10.0.27.1 >95% 10.0.27.2 >95%	10.0.27.1 >95% 10.0.27.2 >95%

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. The review below is in regard to operational expenditure (OPEX).

The majority of service delivery for the transport Operations Activity is undertaken by Council staff. A number of key programmes are developed for each year, and they are as follows:

- Minor Safety/ Blackspots / Crash Reduction
- School, Pedestrian and Cycle Safety
- Disabled Road Users
- Intersection Improvements, Controls and Calming
- Parking Restrictions including Resolutions
- Advanced Directional and Other Signage
- New Roadmarkings
- Traffic Surveys (e.g. counts, speed etc) and Route Audits (including safety)
- Capital Projects Input / Advice
- Speed Limit Reviews
- Traffic Behaviour (boy racers, restricted times)
- Heavy Transport
- Managing White Crosses
- Road Name Changes, Paper Roads and Bylaws
- Traffic Signal Operation and Maintenance (and renewals)

In addition to this support is sometimes required in specialist fields where Council has no in house capability. In this situation professional services are obtained via external Consultants. When required these services are competitively tendered on an as needs basis in accordance with Councils Procurement Policy to ensure cost effective delivery of service. Further to this there are several specific maintenance contracts related to the assets in this Activity and these are also awarded through a competitive tendering process.

Table 5-1 Professional Services and Maintenance Contracts

Contract Type	Term of Contract	Assets Maintained	Annual Operational Expenditure	Activity Area managing contract
Traffic Systems maintenance	Sept 2013-Sept 2016	Traffic signals and poles	$0.7M	Traffic Operations

In addition to this Council's real time services, temporary traffic management and traveller information services are delivered via the Christchurch Transport Operations Centre (CTOC). This is a separated entity to Council that has been set up in partnership between Council, Environment Canterbury and the NZ Transport Agency with the mission statement being to assist with the efficient operation of the Christchurch Transport Network, including local roads, state highways and public transport.

Staff from NZTA and Council have been seconded to CTOC and are co-located in Council's Hereford Street office to make best use of available systems. CTOC has an independent board made up of representatives from each of the partnership Organisations, with an agreed business plan which outlines goals, agreed funding, and is reviewed annually.

6 Long Term Infrastructure Strategy

The priorities for roads and footpaths are:

- **Maintenance and renewal of existing 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.

As discussed in Chapter 3 the Road Operations Activity is focused on monitoring, managing, optimising, informing customers and future planning and the functional delivery of this is discussed in Chapter 5.

In regard to strategic guidance this is provided by the Christchurch Transport Strategic Plan, which is the 30 year vision for Christchurch. The operations focused elements of this has been further developed in Christchurch Network Management Plan, which has been developed as per the process in Figure 6-1 below.

The Network Management Plan contains direction regarding network operational outcomes that guides the short term changes that can be made to enhance network operations. These changes are the most appropriate and cost effective to manage network efficiency in the short term and into the longer term and will help to mitigate the need for expensive infrastructure to improve the network.

On that basis this suite of strategies and documents guide the Operations Team and CTOC in their day to day activities.

7 Review of cost-effectiveness - infrastructure delivery

The primary infrastructure that is delivered by this Activity is safety improvement works. These works are prioritised within Council's Capital Works Programme and are designed to resolve safety issues on the network. This programme of work is managed and delivered by the Asset Delivery Team and is part of the Assets and Networks Activity.

These works are tendered competitively following Councils procurement policy to ensure rigour and cost effectiveness.

8 Significant Effects

Clause 2(1)(c) of Schedule 10 to the Local Government Act 2002 requires that each Long Term Plan in relation to each group of activities of the local authority must:

> *"Outline any significant negative effects that any activity within the group of activities may have on the social, economic, environmental, or cultural well-being of the local community."*

The Council recognizes the following potential negative effects of providing, operating and managing its Transport assets.

Table 8-1 Significant Negative Effects

Effect	Council's Mitigation Measure
User safety issues.	Manage / implement safety strategies/standards and provide designs that allow maximum separation of user groups and a hierarchy of users to allocate road space.

In balancing the above effects, the table below outlines the significant positive effects that the Transport system provides, and which of those aspects apply to this activity.

Table 8-2 Significant Positive Effects

Effect	Description
Safety and personal security	Planning to improve the safety of the transportation network for all modes of travel will lead to improving people's safety and personal security.
Access and mobility	Integrating land use with transport can improve access and mobility

8.1 Assumptions

Table 8-3 Major Assumptions

Assumption Type	Assumption	Discussion
Growth forecasts.	That the district will grow as forecast in the LURP and Growth Demand and Supply Model.	If the growth is very different it will have a moderate impact. If higher, Council may need to advance capital projects. If it is lower, Council may have to defer planned works.
Timing of capital projects and accuracy of cost estimates	That capital projects will be undertaken when planned and cost estimates are sufficiently accurate enough to determine the required funding level.	The risk of the timing of projects changing is high due to factors like resource consents, funding and land purchase. Council tries to mitigate these issues by undertaking the consultation, investigation and design phases sufficiently in advance of the construction phase. If delays are to occur, it could have significant effects on the level of service. The risk of large under estimation is low; however the importance is moderate as Council may not be able to afford the true cost of the projects. Council tries to reduce the risk by including a standard contingency based on the projects lifecycle.

9 Risk Management

Table 9-1 Significant Risks and Control Measures

Risk	Impact	Priority	Risk Strategy	Risk Response / Mitigation
The network fails to be reliable	High Impact, High probability - Journey times are erratic resulting in uncertainty and ultimately adding cost to the economy by increased journey time margins	H	Journey times will be monitored over several key routes	Changes to the network take cognisance of journey reliability factors and congestion relief is appropriately funded.
The network is not responsive to change	High Impact, High probability - Service levels drop creating unnecessary congestion and suboptimal utilisation.	H	To be responsive through CTOC TMP and incident response processes and changes to ITS	The network performance is monitored Planned changes to the network are appropriately considered and unplanned changes are responded to effectively and public kept informed through TC. Collaborative working with key rebuild agencies and the external market.
The network is unsafe or is perceived to be unsafe	High Impact, High probability - The network becomes underutilised by active modes in particular resulting in disenfranchised communities	H	Increase actual and perceived safety	Prioritised investment in road safety
The network is not resilient	High Impact, High probability - Parts of the network fail and don't recover quick enough to prevent congestion.	M	Increase resilience through traveller information, increasing capacity on alternate routes	The network performance is monitored
The network does not encourage active travel and public transport	High Impact, High probability - The network becomes unsustainable with demand for capacity to accommodate motor-vehicles exceeding supply leading to increased congestion and environmental and health costs	M	Encouraging active travel modes and Passenger Transport	MCR investment, PT priority.

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.

As this Activity Management Plan is developed further it will be reviewed on a 3 yearly basis as part of the LTP programme. The table below outlines improvements that are to be incorporated over the next 3 years.

Table 10-1 Improvements to be incorporated into this Activity by 2018

Item	Description

11 Operations, Maintenance and Renewals Strategy

11.1 Operations and Maintenance

Maintenance of the road network is primarily undertaken and delivered as part of the Roads and Footpaths Activity, as it concerns itself most with the physical assets that make up the Transport Network.

The only infrastructure assets that are owned by this Activity are traffic systems related – traffic signals and control hardware. The lifecycle for these assets is less than 30 years and the need for renewals is governed by either condition or obsolescence. The current value of these assets is $30M and the cost of depreciation is $1.2M per year.

For the purposes of long term planning this has been allowed for over the 30 year period, with allowance for growth.

11.2 Renewals

The core infrastructure programme can be seen in the CPMS CAPEX 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 - ROAD OPERATIONS

Funding splits exclude EQ Costs from all calculations

	2014/15 Annual Plan	Funding Caps in 2015/16 Dollars 2015/16	2016/17	2017/18	Funding - User Charges	Other revenue	General rate	Targeted rate	Period of Benefit (years)	Comments
		000's								
Operational Budget										
Traffic Operations	2,557	2,560	2,417	2,383						
ChCh Transport Operations (CTOC)	3,672	2,596	2,569	2,533						
CTOC Real Time Services	-	-	-	-						
CTOC Temporary Traffic Management	-	-	-	-						
CTOC Traveller Information	-	-	-	-						
Activity Costs before Overheads	6,229	5,157	4,986	4,917						
Earthquake Response Costs	-	-	-	-						
Corporate Overhead	415	351	344	327						
Depreciation	1,564	1,680	1,735	1,792						
Interest	299	431	568	688						
Total Activity Cost	**8,507**	**7,619**	**7,633**	**7,722**	13% Some	7%	79% Majority			
Funded By:										
Fees and Charges	1,191	1,023	1,052	1,095						
Grants and Subsidies	1,451	570	575	580						
Earthquake Recoveries	-	-	-	-						
Total Operational Revenue	**2,642**	**1,593**	**1,627**	**1,675**						
Net Cost of Service	**5,865**	**6,026**	**6,006**	**6,047**						
Funded by:										
Rates	**5,865**	**6,026**	**6,006**	**6,047**						
Earthquake Borrowing	**-**	**-**	**-**	**-**						
	5,865	**6,026**	**6,006**	**6,047**						
Capital Expenditure										
Earthquake Rebuild										
Renewals and Replacements										
Improved Levels of Service										
Additional Demand										

Figure 13-2 Operating Expenditure