

Long Term Plan 2018-28

Service Plan for Roads & Footpaths

As at February 2018



Approvals		
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Table of Contents

What does the overall Group of Activities do and why do we do it?	4
1. What does this activity deliver?	4
2. Why do we deliver this activity?.....	6
3. Specify Levels of Service	7
4. What levels of service do we propose to change from the current LTP and why?	9
5. How will the assets be managed to deliver the services?	12
6. What financial resources are needed?	13
7. How much capital expenditure will be spent, on what category of asset, and what are the key capital projects for this activity?	16
8. Are there any significant negative effects that this activity will create?	18
9. Does this Service Plan need to change as a result of a service delivery review?	18

What does the overall Group of Activities do and why do we do it?

Christchurch City Council plans, manages and operates the local transport network in Christchurch. Many of the Council's activities in this role are undertaken in close collaboration with the New Zealand Transport Agency and Environment Canterbury.

The streets we manage provide a safe and efficient network that connect communities and facilitate the movement of people and goods around the District and to the adjoining region. These network facilities provide for choice in travel mode, promotion of active travel for healthy lifestyles and attractive, functional streetscapes. Council implements these services for the community in a number of ways, including network planning, day to day operations, asset maintenance, renewal of life expired infrastructure and improvements to the network.

For decision making clarity these elements are categorised into the following Service Plans: Roads and Footpaths, Active Travel, Parking, Public Transport and Traffic Safety & Efficiency. The objective for this group of Activities is to manage the network to ensure that it is safe, connected, integrated, affordable, sustainable and responsive to the needs of customers.

1. What does this activity deliver?

The objective of this activity is to ensure that the condition of the roading network is maintained at an appropriate level, for all parts of the Community. This is physically delivered by the following:

- Planned and reactive **maintenance** to remedy defects and **operation** of on-street facilities. This includes;
 - Repairing pot holes and other defects in the road carriageway including on-road cycle lanes and bus lanes.
 - Repairing defects in street footpaths
 - Repairing defects in bridges and retaining walls servicing public roads
 - Repairing defects in the central city tram lines
 - Repairing of defects in guardrails, safety fences and walls
 - Regular street sweeping to remove silt and other detritus from stormwater channels
 - Regular cleaning of road culverts, street drainage sumps and associated pipework
 - Sweeping of footpaths in retail and central city areas to remove litter
 - Rubbish removal from street litter bins
 - Rubbish removal from road verges
 - Graffiti removal from Council assets
 - Maintenance of on-street planted areas including street trees

- Rural verge mowing
- Maintenance of road signs and road markings
- Operation and repair of the street lighting network

- Repair or replacement (**renewal**) of assets that have reached the end of their life or are in substandard condition. This includes:
 - Resurfacing of road pavements and footpaths
 - Rehabilitation/renewal of road pavements
 - Rehabilitation/renewal of footpaths
 - Renewal of guardrails, safety fences and walls
 - Renewal of kerb and channel, sumps and associated drainage facilities
 - Renewal of bridges, culverts and retaining walls servicing public roads
 - Renewal of street signs
 - Renewal of street lighting
 - Renewal of on-street planting and street trees

The aim is to deliver the right balance of maintenance and renewals to minimise costs and disruption to the Community. How this is managed is outlined in Chapter 5 of this Service Plan, which includes Council's planning and programming functions.

2. Why do we deliver this activity?

The Transport network is an integral part of Council's infrastructure. It links people and places and enables people to undertake the activities that make up their lives. Council's role is to own and operate this infrastructure on behalf of citizens and manage it in such a way that it meets their needs now and into the future.

This Service Plan focuses on the road maintenance and repair actions that Council undertakes. These are important to residents as a poorly maintained road network will inhibit them getting to work and leisure activities, e.g. roads are closed or inaccessible. Furthermore it may burden road users with unnecessary maintenance costs.

Maintenance work is required to keep Council's assets functioning from day to day and protected from further damage. It covers planned and reactive elements of works that need to be undertaken on a regular basis to keep assets in a serviceable condition.

Over the long term all infrastructure deteriorates as it is used. Some assets last a long time such as bridges which are designed to last 100 years, and some are much shorter such as signs which last between 10 and 20 years. These design lives are only used as a guide for planning purposes and actual replacement is based upon condition. Repair or renewal works are planned to replace assets that have failed or are nearing failure. As an example road surfacing needs to be replaced every 8-12 years to maintain water proofing and provide a resilient surface for road users.

There are several key Acts of Parliament that determine Councils legal role in Transport. These include the Local Government Act 2002 and the Land Transport Management Act 2003. There are also a number of policies such as the Government Policy Statement on Land Transport and the Regional Land Transport Plan that guide regional priorities. These are taken account of as part of Council's Community Outcomes process whereby Council identifies and measures what is important to the local community through a process of consultation, planning and reporting.

Under this framework there are two Community Outcomes that relate directly to Transport and this Service Plan:

- A well connected and accessible city.
- Modern and robust city infrastructure and facilities network.

Council also has in place a number of strategic priorities, which relate directly to this Service Plan:

- Increasing active, public and shared transport opportunities and use.

3. Specify Levels of Service

Here are the specific Levels of Service and Performance Measures that apply to this Service Plan

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Benchmarks	Future Performance			
#	Description					Year 1 2018/19	Year 2 2019/20	Year 3 2020/21	Year 10 2027/28
Journeys are comfortable									
16.0.19	Maintain roadway condition, to an appropriate national standard		The average roughness of the sealed local road network measured along the longitudinal profile of the road (NAASRA roughness counts)	16/17 NAASRA 125		≤125	≤124	≤123	≤123
16.0.2			Calculate the average quality of the sealed local road network, measured by smooth travel exposure (STE)	16/17 STE 68.3%		≥69%	≥70%	≥71%	≥75%
16.0.1			The percentage of the sealed road network that is resurfaced each year	16/17 2.0%		≥2%	≥2%	≥2%	≥3%
16.0.8	Maintain the condition of footpaths		Condition rate the footpaths on a 1 to 5 (excellent to very poor) scale and confirm what percentage are rated as 3 or better.	16/17 74%		≥75%	≥76%	≥77%	≥80%
new	Maintain the condition of road carriageways		Reduce the number of customer service requests received for maintenance	5250		5150	4990	4815	4725
16.0.3	Improve resident satisfaction with road condition		Annual Resident satisfaction survey	16/17 37% satisfied		≥38%	≥39%	≥40%	≥50%
16.0.9	Improve resident satisfaction with footpath condition		Annual Resident satisfaction survey	16/17 51% satisfied		≥52%	≥53%	≥54%	≥60%

Performance Standards Levels of Service		Results	Method of Measurement	Current Performance	Benchmarks	Future Performance			
#	Description					Year 1 2018/19	Year 2 2019/20	Year 3 2020/21	Year 10 2027/28
Council is responsive to the needs of Customers									
new	Reduce the number of complaints received		The number of complaints received by Council Customer Services regarding road and footpaths services	308		295	285	275	230
16.0.13	Respond to customer service requests within appropriate timeframes		The percentage of customer service requests relating to roads and footpaths that are responded to within timeframes specified in maintenance contracts.	16/17 95%		≥95%	≥95%	≥95%	≥95%
new	Reduce the number of customer service requests relating to sweeping of the kerb and channel.		The number of customer service requests received for street sweeping.	4750		4500	4380	4250	3560
new	Reduce the number of customer service requests relating to litter bin clearing.		The number of customer service requests received for litter bin clearing.	250		240	230	220	190

Note that Performance Measures 16.0.1, 16.0.2, 16.0.8, and 16.0.13 are mandatory measures as per the 2010 amendment to the Local Government Act and the Department of Internal Affairs Non-Financial Performance Measures Rules 2013.

4. What levels of service do we propose to change from the current LTP and why?

The following is a summary of service changes.

Amended LTP 2016-25			LTP 2018-28			Rationale
LOS ID	LOS Description	Target (FY17/18)	LOS ID	LOS Description	Target (FY18/19)	
16.0.1 LTP	Deliver an appropriate level of sealed local road network renewals (Department of Internal Affairs mandatory non-financial performance measure number 3)	≥2%	combined LTP with 16.0.2 and 16.0.19	Maintain roadway condition, to an appropriate national standard	≥2%	To align with the medium modified capital scenario
16.0.2 LTP	Maintain roadway condition (Department of Internal Affairs mandatory non-financial performance measure number 2)	≥72%	combined LTP with 16.0.1 and 16.0.19	Maintain roadway condition, to an appropriate national standard	≥69%	To align with the medium modified capital scenario
16.0.3 LTP	Maintain resident satisfaction with roadway condition	≥27%	16.0.3 LTP	Improve resident satisfaction with road condition	≥38%	To align with the medium modified capital scenario
16.0.4 non-LTP	Bridges are fit for purpose for public and commercial use	Major arterial ≤3 Minor arterial ≤2 Collector ≤3 Local ≤23	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28 LTP.
16.0.5 non-LTP	Street lights to be operational at night	≥99%	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28 LTP.
16.0.6 non-LTP	Maintain road marking to required standards	TBA once baseline established	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28 LTP.
16.0.7 non-LTP	Undertake channel sweeping, rubbish & litter collection to agreed standards	≥5% reduction per annum	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28 LTP.
N/A	N/A	N/A	(new) LTP	Reduce the number of customer service requests	4500	

Amended LTP 2016-25			LTP 2018-28			Rationale
LOS ID	LOS Description	Target (FY17/18)	LOS ID	LOS Description	Target (FY18/19)	
				relating to sweeping of the kerb and channel.		
N/A	N/A	N/A	(new) LTP	Reduce the number of customer service requests relating to litter bin clearing.	240	
16.0.8 LTP	Maintain the condition of footpaths	≥59%	16.0.8 LTP	Maintain the condition of footpaths	≥75%	
16.0.9 LTP	Maintain resident satisfaction with footpath condition	≥47%	16.0.9 LTP	Maintain resident satisfaction with footpath condition	≥52%	
16.0.11 non-LTP	Maintain Street Trees	≥9,500	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
		≥100%	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.14 non-LTP	Maintain overhead Tram Lines	TBA once baseline established	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.15 non-LTP	Graffiti removal	≥95%	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.16 non-LTP	Response times for damaged regulatory signs	TBA once baseline established	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.17 non-LTP	Sumps inspected	TBA once baseline established	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.18 non-LTP	Work Programming coordinated with other organisations	TBA once baseline established	N/A	N/A	N/A	This Level of Service has been removed as part of the 2018-28LTP.
16.0.19 non-LTP	Maintain road infrastructure	The average roughness of the sealed local road network measured along the longitudinal profile of the road (NAASRA roughness counts): ≤125 for 2017/18	combined LTP with 16.0.1 and 16.0.2	Maintain roadway condition, to an appropriate national standard	≤125	To align with the medium modified capital scenario

Amended LTP 2016-25			LTP 2018-28			Rationale
LOS ID	LOS Description	Target (FY17/18)	LOS ID	LOS Description	Target (FY18/19)	
N/A	N/A	N/A	(new) LTP	Maintain the condition of road carriageways	5150	
N/A	N/A	N/A	(new) LTP	Reduce the number of complaints received	295	

Councils' Transport Group of Activities is an integrated service that provides a network for our customers. Council's goal is that this network is accessible, resilient, of an appropriate quality, efficient, provides travel time certainty and is safe. To ensure that Council delivers this for the Community the Level of Service statements have been re-written to be more customer focused:

- Journey times are reliable
- Journeys are safe
- Journeys are comfortable
- Council is responsive
- Customers have choices

This process has resulted in a whole-scale change to the 2015 LTP Levels of Service.

Levels of Service proposed to be removed:

- 16.0.13 The percentage of customer service requests relating to contract CSR responses to roads and footpaths that are responded to within contractually agreed timescales $\geq 95\%$
- 16.0.16 Percentage of signs responded within 48hrs
- 16.0.17 Percentage of sumps inspected every 6 months
- 16.0.6 Percentage of remarking completed each quarter

5. How will the assets be managed to deliver the services?

The objective for Council is to manage the Transport network to ensure that it is safe, integrated, affordable, and sustainable, as well as being responsive to the needs of customers. Council staff undertake planning work to determine what is required by the Community, what the options are, how the works should be prioritised and what is the best way to deliver them.

Maintenance works are either planned or reactive. The planned work is scoped and delivered by Council's maintenance contractors in accordance with the requirements of the specific contract, for example regular street sweeping. Reactive intervention is required when an issue is identified on the network either by way of inspection or when a customer service request is logged by the public. Inspection work is also undertaken by Council's maintenance contractor.

Repair or renewal work is identified as part of Council's planning processes. This includes analysing asset data, modelling long term financial implications of planned and reactive maintenance, and preparation of 10 year planned works programmes.

How are repair or renewal works identified and prioritised?

- Condition information is collected on a yearly basis, for example the roughness of roads is surveyed, kerb and channels are checked for defects, footpaths are checked for major crack and trip hazards and bridges and retaining walls are structurally inspected.
- Customer Service Requests are received and investigated.
- This is combined with relevant asset data including historic maintenance expenditure, asset age, network hierarchy and criticality. Each of these elements is attributed a weighting and each asset is then scored and the results are tabulated.
- The programme for the year is determined by how many of the highest scoring items are able to be remediated within the agreed budget.
- The nominated sites are then checked against other programmes for conflict and the resulting shortlist is physically inspected by Council staff and Contractors.
- The list is finalised, and agreed remedial actions are programmed and delivered within the financial year.

6. What financial resources are needed?

The Transport Group of Activities equates to approximately 25% of Councils total expenditure. This covers planning and staff costs, operations, maintenance, renewals and improvements interventions.

What is this spend on?

- The Transport Unit currently employs approximately 140 staff (permanent and contractors), and this equates to 120 full time equivalents. The budget for this is \$10.6 million per year.
- Road maintenance activities require \$30.2 million per year to undertake planned and reactive works.
- Renewals programmes are currently budgeted at \$33.5 million for the FY 2019. This budget is required to renew roading, footpath, signage and street lighting assets that have reached the end of their economic life and are starting to consume unsustainable levels of maintenance expenditure due to their poor condition.

What are the Options for Council?

Planned maintenance works predominately cover cyclic activities such as street cleaning and road marking. Reducing cycle frequency in such activities results in a lower level of service and can increase the safety risk. As an example reducing street sweeping frequency will not result in a significant saving because the largest cost component is material disposal. Going forward maintenance budgets are projected to increase to cater for network growth and higher quality facilities being constructed in the Central City.

The level of reactive maintenance work is determined by the condition of the network and the number of customer service requests received. Reduction in renewals expenditure will result in an increase in reactive maintenance as asset condition deteriorates.

Repairs or renewals are the mechanism by which the condition and asset value can be reinstated. If a pavement surface is renewed operational money will not be required to fix potholes reactively. In general terms Council currently has a backlog of roading renewal work which is impacting maintenance costs and customer satisfaction. The long term plan is to sustainably increase renewals to achieve a more cost effective balance between opex and capex expenditure.

The most significant component of expenditure on this activity is road resurfacing and pavement renewal. It is currently planned to return to an average road roughness across the District that is equivalent to other metropolitan authorities by 2038. Increased capital expenditure would reduce this timeframe.

How is this Funded?

Council primarily funds these Activities from rates and borrowing. Funding of around 30% of the programme is provided by the New Zealand Transport Agency via the National Land Transport Fund and National Land Transport Plan processes.

ROADS & FOOTPATHS- ROADS & FOOTPATHS				
	2017/18 Annual Plan	2018/19	2019/20	2020/21
	000's			
Road Infrastructure	42,467	42,213	43,852	44,516
EQ - Roads & Footpaths	407	506	526	535
Activity Costs before Overheads	42,875	42,719	44,377	45,050
Corporate Overhead	4,501	4,505	4,809	4,523
Depreciation	57,744	57,073	60,584	64,782
Interest	5,148	5,016	5,948	8,111
Total Activity Cost	110,268	109,313	115,718	122,465
Funded By:				
Fees and Charges	1,575	2,847	2,907	2,971
Grants and Subsidies	11,955	11,727	12,032	12,063
Total Operational Revenue	13,530	14,574	14,939	15,034
Net Cost of Service	96,737	94,739	100,779	107,431
Funding Percentages:				
Rates	87.7%	86.7%	87.1%	87.7%
Fees and Charges	1.4%	2.6%	2.5%	2.4%
Grants and Subsidies	10.8%	10.7%	10.4%	9.9%
Capital Expenditure				
Improved Levels of Service	13,729	21,765	30,889	20,022
Increased Demand	18,351	16,955	9,540	10,517
Renewals and Replacements	41,168	59,241	54,855	44,506
Total Activity Capital	73,247	97,961	95,284	75,045

At the time of the draft there was capital expenditure planned for Roads and Footpaths that will now be planned in Traffic Safety and Efficiency. This change is reflected in the capital expenditure section below, but not yet reflected in the finance table above. This will be updated for the final version.

7. How much capital expenditure will be spent, on what category of asset, and what are the key capital projects for this activity?

The capital programme as put forward in the Long Term Plan aims to achieve compliance to statutory obligations and meet customer expectations.

38 in Delivery
37 in Planning

Prioritised by

- Condition
- Risk
- Criticality

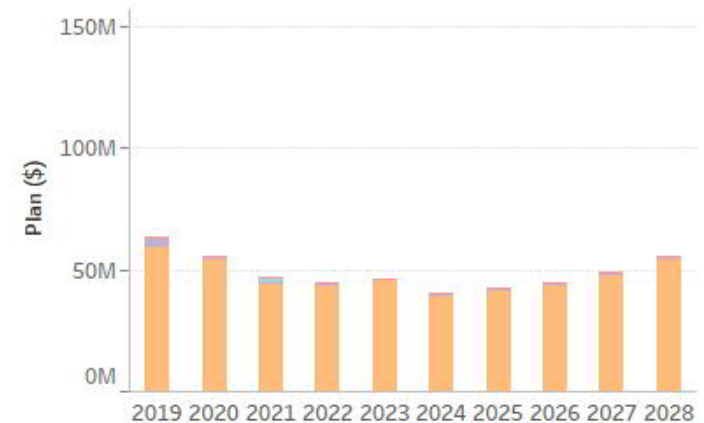
Key programmes

- Carriageway resurfacing
- Street renewals
- Footpath resurfacing

Legend

- New Service
- Improved level of Service
- Provision of infrastructure to support growth
- Renewal Of Assets

Plan by Financial Year



Changes to budgets from 2015-2025 LTP

- Carriageway related works, reduction of \$27.6M to 2025
- Street renewals, reduction of \$33.2M to 2025
- Footpath resurfacing, increase of \$7.4M to 2025
- LED streetlight upgrade, increase of \$19.2M to 2025

Programme	3 Years Plan FY19- 21 \$'000,000	10 Years Plan FY19-28 \$'000,000	Description	Drivers	Implications if delayed or not implemented
Carriageway sealing, Surfacing, smoothing and pavement rehab programmes	48.6	203.2	Repair of road surface and pavement layers	<ul style="list-style-type: none"> • Journey comfort • Customer satisfaction 	<ul style="list-style-type: none"> • Reduced journey comfort, increased road roughness and decreased customer satisfaction. • Likely increase in reactive maintenance activities and costs.
Street renewals	8.3	67.4	Boundary to boundary replacement of road, kerb and channel and footpath	<ul style="list-style-type: none"> • Customer satisfaction 	<ul style="list-style-type: none"> • Decreased customer satisfaction. • Risk of ponding on streets where kerb and channel is not draining properly.
Footpath resurfacing	13.5	57.7	Replacement of footpath surfacing	<ul style="list-style-type: none"> • Journey comfort • Customer satisfaction 	<ul style="list-style-type: none"> • Decreased customer satisfaction for footpaths.
LED streetlight upgrade	27.5	37.9	Conversion of whole street light portfolio to LED's	<ul style="list-style-type: none"> • Improve energy efficiency • Reduced maintenance costs • Reduce greenhouse gas emissions 	<ul style="list-style-type: none"> • Reduced opex savings and greenhouse gas emissions not realised.

8. Are there any significant negative effects that this activity will create?

Negative Effect	Mitigation
Rough Roads	<p>A rougher road network than pre earthquake levels will contribute to increased travel times and vehicle operating costs and has an overall cost to the economy. Environmental issues are also associated with this due to vibration levels for residents and commercial premises.</p> <p>A localised programme of smoothing works to reactive to specific issues will need to be delivered</p>
Positive Effect	Mitigation
Economic development	Prioritised planning for an efficient road network that allows for the movement or freight key hubs and markets, therefore allowing economic growth and prosperity
Effective Programming to support the wider recovery	Prioritised planning to support the implementation of other strategic plans which will benefit the accelerated recovery of the City
Industry leading Asset Management development	Earthquake legacy will allow Council to improve its understanding of the transport network, the asset needs, community needs, commercial needs and maximise value for available budgets

9. Does this Service Plan need to change as a result of a service delivery review?

No changes are required.