

Roads and Footpaths

“The city is rebuilding now, so the traffic issues are temporary. But we will have a better city in the future because of the current road/infrastructure works”



Gar Hong Chin
Papanui



What activities are included in roads and footpaths?

Road Network

- Road Infrastructure (including roadways, kerbs, channels, bridges, structures, and street lighting)
- Traffic Operations
- Traffic Systems (including signals)
- Transport Safety
- Road Amenity (street landscaping, street trees)

Active travel

- Planning, building, maintaining and providing facilities for Active Travel, including: Cycle networks and facilities
- Walking networks (including public footpaths, public pedestrian malls and open spaces)

Parking

- On-street parking
- Off-street parking (Council operating car parks)

Public transport infrastructure

- Planning, building, maintaining and/or providing Public Transport Infrastructure, including public transport infrastructure (stops, shelters (Council, Adshel), travel information systems, priority systems), transport interchanges (provision and maintenance of the building, passenger facilities, public display information etc.) and the tram infrastructure

Why is the Council involved in roads and footpaths?

- To provide safe, easy and comfortable access to homes, shops, businesses and many recreational and leisure destinations for road users. The road network also provides the corridor for utilities, such as power, telecommunications, water supply and waste disposal.
- Providing safe, accessible parking supports the economic vitality of the city and the community's aspirations for its development by providing for an appropriate mix of transport options, and traffic flow solutions.

How do roads and footpaths contribute to our community outcomes?

There are a range of travel options that meet the needs of the community

- Providing roads and traffic management services enables private cars, commercial vehicles and public transport to move safely and easily around the city
 - providing access to homes, shops, businesses and recreational destinations.
- Providing parking facilities contribute to the options people have for accessing the places, people and activities they want and need to reach.
- Providing public transport infrastructure supports public transport as an option for people to access goods and services, work and leisure activities

The transport system provides people with access to economic, social and cultural activities

- Providing a network of roads, pedestrian and cycle routes helps people access the people, places and activities they need and want to reach.
- Providing parking facilities enables people to access goods and services, work and leisure activities
- Providing a network of public transport infrastructure, roads, pedestrian and cycle routes helps people access the people, places and activities they need and want to reach.

Council Activities and Services

Roads and Footpaths

How do roads and footpaths contribute to our community outcomes? (continued)**An increased proportion of journeys is made by active travel and public transport**

- Providing pedestrian crossings, traffic islands and signals provides safe and convenient access along and across the road network for pedestrians and cyclists.
- Providing roads and traffic management services enables public transport to move safely and easily around the city.
- Providing safe and convenient bus stops and bus shelters, and bus priority systems, helps to encourage people to make more journeys by public transport

Streetscapes, public open spaces and public buildings enhance the look and function of the city

- Street trees and landscaping provide ecological, environmental and amenity benefits are an integral part of the Christchurch's internationally recognised identity as the Garden City and contribute to area character and identity and city heritage.

Transport safety is improved

- The layout and design of the road network and traffic management services help to ensure that pedestrians, cyclists and vehicles can move around safely.

Christchurch's infrastructure supports sustainable economic growth

- Providing roads and traffic management services enables efficient links to local, regional, national and international markets and destinations.
- The road network corridor also provides access to utilities for power, telecommunications, water supply and waste disposal activities.

- Providing parking facilities enables people to access goods and services and places of employment, thus contributing to economic activity in the city
- Providing public transport infrastructure enables people to access goods and services and places of employment.
- Locating transport interchanges near shops and services helps to support economic activity in the city.

The central city is used by a wide range of people and for an increasing range of activities

- Providing parking facilities encourages people into the central city

Christchurch is recognised as a great place to work, live and visit, invest and do business.

- Walking and cycling paths provide choices of travel options and contribute to the ease of getting around for residents and visitors.

What changes are planned for roads and footpaths?

Perceptions that Christchurch is walking and cycle friendly are expected to be lower than pre-earthquake. Travel times for private vehicles and buses are expected to increase slightly. Measures have been introduced to improve the time for responding to faults.

The Council will be providing free parking (for a period encouraging turnover) in its metered disability car parks throughout the City, with the exception of long-term parking at the airport.

The first hour's parking will be free at the Council's hospital on-street car parks.

Council Activities and Services

Roads and Footpaths

What negative effects or risks can occur in relation to roads and footpaths?

Negative Effects	Mitigation Options
User safety issues.	Manage/implement safety strategies/standards Designs to allow separation between user groups; clarity of user function through the provision of traffic signals, signage, and road markings; skid-resistant surfaces
Implications of land acquisitions (land not available for other uses; affects demand / property market).	Aim for land purchases to complement other land uses; and for management of land use to support and encourage sustainable transport systems
Pollution – motor vehicle emissions, noise, vibration, sediment, light, air, water, chemicals (including trade-waste and wash-down water, and water-borne sediments).	Manage air, water and soil pollutants: <ul style="list-style-type: none"> • Management of congestion which generates air pollutants • Landscaping treatments as pollutant ‘sinks’ • Manage storm water run-off quality from street surfaces with on-street storm water treatment systems • Manage soil quality/disposal • Manage on-street activity and adjacent construction to minimise pollution. • Management of storm water run-off quality from adjacent properties, trade wastes and public and private off-street pre-treatment systems • Provision and management of on-street management systems • Limit the use of agrochemicals • Manage hazardous spills
Effects during construction – energy use, noise, vibration, nuisance, sediments, pollutants, disruptions, the use of non-renewable resources, public and site staff safety issues and production of waste.	Design projects around economies of scale, control of construction site issues, safe traffic management, use of recycled resource materials, and responsible waste disposal
Impact on adjacent property owners/residents – post-construction. Consultation/ implementation processes to ensure awareness of impacts.	Design and construction solutions that minimise impacts such as severance and loss of amenity
Consumption of energy by streetlights and traffic signals – increasing use and costs.	Energy use reductions by operational and design management to ensure efficiency and efficacy gains over time
Use of non-renewable resources.	Minimise congestion and travel times. Meet standards for upward waste light and light spill for streetlights Recycling of road construction materials
Unclean or unhealthy elements such as litter and stagnant water.	Manage street cleanliness and potential health issues

Council Activities and Services

Roads and Footpaths

Activity	What is the Council trying to achieve?	What services will the Council offer to make this happen?	How would we know these services were successful?	Target
Road network	<p>There are a range of travel options that meet the needs of the community</p> <p>The transport system provides people with access to economic, social and cultural activities</p> <p>An increased proportion of journeys is made by active travel and public transport</p> <p>Streetscapes, public open spaces and public buildings enhance the look and function of the city</p> <p>Transport safety is improved</p> <p>Christchurch's infrastructure supports sustainable economic growth</p>	Traffic operations	<p>Measure</p> <p>Congestion: Peak travel times over 10km of the arterial road network travelled by private motor vehicles (7.30am to 9.30am and 4.00pm to 6.00pm)</p>	Peak travel times over 10km of the arterial road network travelled by private motor vehicles
			<p>Congestion: Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles (10.00am to 12.00pm)</p>	Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles
			<p>Mode Share: Proportion of trips by private motor vehicles</p>	The proportion of private trips made by private vehicle
		Road Infrastructure (including roadways, kerbs, channels, bridges, structures, and street lighting)	<p>Response Times: time taken to investigate repairs to road surfaces, once problem is identified.</p>	Time taken to investigate repairs to road surface: Arterial roads
				Time taken to investigate repairs to road surface: Collector/local roads
				Time taken to investigate repairs to road surface: Rural roads
			Street lights operating at night	Percentage of street lights operating city wide
			Resident satisfaction with roadway quality	Residents satisfied with roadway quality
		Traffic systems (including signals)	<p>Response Times: time taken to investigate/undertake repairs to traffic signal faults, once identified.</p>	On-site response to traffic signal faults (24/7) for flashing yellow; black-out; lanterns out of alignment (Conflict)

Council Activities and Services

Roads and Footpaths

Current Performance	Planned Performance		
	2013/14	2014/15	2015/16
Council actual Peak travel times: March 2009: 16m30s March 2010: 16m50s April 2011: 19m40s March 2012: 18m00s	Peak travel times over 10km of the arterial road network travelled by private motor vehicles at: No more than 19 minutes 40 seconds	Peak travel times over 10km of the arterial road network travelled by private motor vehicles at: No more than 19 minutes 40 seconds	
Council actual Interpeak travel times: March 2009: 14m00s March 2010: 14m00s April 2011: 15m20s March 2012: 14m30s	Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles: No more than 15 minutes 20 seconds	Interpeak travel times over 10km of the arterial road network travelled by private motor vehicles: No more than 15 minutes 20 seconds	
Private Vehicle: 2008/09: 71.4% 2009/10: 72.9% 2010/11: no data	The proportion of private trips made by private vehicle: Establish baseline	The proportion of private trips made by private vehicle: Decrease baseline result from 2013/14 by 1.5%	
2009/10: 97.4% 2010/11: not measured 2011/12: not measured	Time taken to investigate repairs to road surface: Arterial roads: At least 95% within 24 hours	Time taken to investigate repairs to road surface: Arterial roads: At least 95% within 24 hours	
2009/10: 98.5% 2010/11: not measured 2011/12: not measured	Time taken to investigate repairs to road surface: Collector/local roads: At least 95% within 48 hours	Time taken to investigate repairs to road surface: Collector/local roads: At least 95% within 48 hours	
2009/10: 100% 2010/11: not measured 2011/12: 98%	Time taken to investigate repairs to road surface: Rural roads: At least 95% within 72 hours	Time taken to investigate repairs to road surface: Rural roads: At least 95% within 72 hours	
2009/10: 99% 2010/11: 99% 2011/12: 99%	At least 99% street lights operating city wide	At least 99% street lights operating city wide	Maintain
2009/10: 63% 2010/11: N/A 2011/12: 40%	Residents satisfied with roadway quality: Maintain at least the same as baseline result from 2012/13	Residents satisfied with roadway quality: Maintain at least the same as baseline result from 2012/13	
Not measured historically	On-site response to traffic signal faults (24/7) within 1.5 hours (for Flashing yellow; Black-out; lanterns out of alignment (Conflict))	On-site response to traffic signal faults (24/7) within 1.5 hours (for Flashing yellow; Black-out; lanterns out of alignment (Conflict))	

Council Activities and Services

Roads and Footpaths

Activity	What is the Council trying to achieve?	What services will the Council offer to make this happen?	How would we know these services were successful?	Target	
Road network (continued)			Measure	On-site response (for Lamp out (one in group, excluding overheads); Pedestrian audio tactile not working)	
Active travel	<p>There are a range of travel options that meet the needs of the community</p> <p>The transport system provides people with access to economic, social and cultural activities</p> <p>An increased proportion of journeys is made by active travel and public transport</p> <p>Streetscapes, public open spaces and public buildings enhance the look and function of the city</p> <p>Transport safety is improved</p> <p>Christchurch is recognised as a great place to work, live and visit, invest and do business</p>	<p>Planning, building, maintaining and providing facilities for Active Travel, including: Cycle networks and facilities</p>	<p>Mode Share: Ensure proportion of all trips made by active means (cycling).</p>	<p>Re-establish baseline</p>	
			<p>Amenity: Ensure perception of Christchurch is a cycle friendly city</p>	<p>Percentage of people who agree or strongly agree</p>	
			<p>Planning, building, maintaining and providing facilities for Active Travel, including: Walking networks (public footpaths, public pedestrian malls and open spaces)</p>	<p>Mode Share Ensure proportion of all trips made by active means (walking).</p>	<p>Re-establish baseline</p>
				<p>Ensure resident satisfaction with footpath quality.</p>	<p>Maintain resident satisfaction with footpath quality</p>
				<p>Amenity: Ensure perception that Christchurch is a walking friendly city</p>	<p>Percentage of people who agree or strongly agree</p>
Public transport infrastructure	<p>There are a range of travel options that meet the needs of the community.</p> <p>The transport system provides people with access to economic, social and cultural activities.</p> <p>An increased proportion of journeys is made by active travel and public transport.</p> <p>Christchurch's infrastructure supports sustainable economic growth.</p>	<p>Public Transport Infrastructure (stops, shelters (Council, Adshel), travel information systems, priority systems)</p>	<p>Congestion: Manage peak travel times (7.30 am to 9.30 am and 4.00 pm to 6.00 pm) over 10 km of the public transport network travelled by buses</p>	<p>Peak Travel Time</p>	
			<p>Amenity: Ensure user satisfaction with the number, quality of, and personal safety at, bus shelters</p>	<p>Number: Re-establish baseline</p>	
					<p>Quality: Re-establish baseline</p>

Council Activities and Services

Roads and Footpaths

Current Performance	Planned Performance		
	2013/14	2014/15	2015/16
Not measured historically	On-site response within five days (for Lamp out (one in group, excluding overheads); Pedestrian audio tactile not working)	On-site response within 5 days (for Lamp out (one in group, excluding overheads); Pedestrian audio tactile not working)	
2008/09: 2.1% 2009/10: 2.2% 2010/11: no data	Re-establish baseline	Increase baseline result from 2013/14 by 0.5%	
2009/10: 54% 2010/11: N/A 2011/12: 42%	At least 40% agree or strongly agree	At least 42% agree or strongly agree	
2008/09: 21.8% 2009/10: 20.6% 2010/11: no data	Re-establish baseline	Increase baseline result from 2013/14 by 0.5%	
2009/10: 67% 2010/11: N/A 2011/12: 46%	Maintain resident satisfaction with footpath quality at least at baseline from 2012/13 (excluding red zoned areas)	Maintain at least baseline % from 2012/13 result (excluding red zoned areas)	
2009/10: 88% 2010/11: N/A 2011/12: 81%	At least 80% agree or strongly agree	At least 82% agree or strongly agree	
March 2010: 23:30 March 2011: no data March 2012: 25:04	Peak Travel Time: No more than 26 mins 4 secs	Peak Travel Time: No more than 26 mins 4 secs	
Overall satisfaction with location, number, appearance and condition of bus stops and bus shelters: 2008/09: 70% 2009/10: 66% 2010/11: N/A 2011/12: 67%	Number: Re-establish baseline	Number: Increase baseline result from 2013/14 by 5%	
Not measured historically	Quality: Re-establish baseline	Quality: Increase baseline result from 2013/14 by 5%	

Council Activities and Services

Roads and Footpaths

Activity	What is the Council trying to achieve?	What services will the Council offer to make this happen?	How would we know these services were successful?	Target
			Measure	
Public transport infrastructure (continued)				Personal safety: Re-establish baseline
		Transport Interchanges (provision and maintenance of the building, passenger facilities, public display information etc.)	Amenity: Ensure user satisfaction with the appearance and safety and ease of use of the Central Transport Interchange (Bus Exchange)	Appearance: Re-establish baseline
				Safety: Re-establish baseline
				Ease of use: Re-establish baseline
Parking	<p>There is a range of travel options that meet the needs of the community</p> <p>The transport system provides people with access to economic, social and cultural activities</p> <p>The central city is used by a wide range of people and for an increasing range of activities</p> <p>Christchurch's infrastructure supports sustainable economic growth</p>	On-street parking	Metered on-street parking spaces provided	Maintain a minimum of metered parking spaces
			Metered on-street parking spaces usage	Number of parking events
			Customers satisfaction with ease of use of meters	Maintain customer satisfaction
		Off-street parking (Council operating car parks)	Off-street, short term parking usage	Maintain a minimum of off-street parking spaces

Council Activities and Services

Roads and Footpaths

Current Performance	Planned Performance		
	2013/14	2014/15	2015/16
Not measured historically	Personal safety: Re-establish baseline	Personal safety: Increase baseline result from 2013/14 by 5%	
2009/10: 75% 2010/11: 72% 2011/12: N/A	Appearance: Re-establish baseline	Appearance: Increase baseline result from 2013/14 by 5%	
Not measured historically	Safety: Re-establish baseline	Safety: Increase baseline result from 2013/14 by 5%	
Not measured historically	Ease of use: Re-establish baseline	Ease of use: Increase baseline result from 2013/14 by 5%	
850 metered parking spaces	Maintain a minimum of 850 metered parking spaces	There is still more work to do in aligning councils parking objectives with the high level principles contained in both the draft "An Accessible City" chapter and the Christchurch Transport Strategy Plan, and it is expected this will be completed for the Annual Plan 2014/15.	
>= 500,000 parking events p.a.	At least 500,000 parking events	There is still more work to do in aligning councils parking objectives with the high level principles contained in both the draft "An Accessible City" chapter and the CTSP, and it is expected this will be completed for the Annual Plan 2014/15.	
97%	Maintain 97%	There is still more work to do in aligning councils parking objectives with the high level principles contained in both the draft "An Accessible City" chapter and the CTSP, and it is expected this will be completed for the Annual Plan 2014/15.	
348 off-street short term parking spaces	Maintain a minimum of 348 spaces	There is still more work to do in aligning councils parking objectives with the high level principles contained in both the draft "An Accessible City" chapter and the CTSP, and it is expected this will be completed for the Annual Plan 2014/15.	

Council Activities and Services

Roads and Footpaths

Annual Plan 2012/13		Three Year Plan 2013 - 2016		
		2013/14	2014/15	2015/16
		\$000		
	Cost of proposed services			
86,514	Road Network	76,782	77,690	80,543
15,161	Active Travel	13,553	14,843	16,462
3,776	Parking	2,532	3,653	2,991
2,811	Public Transport Infrastructure	2,499	2,853	3,186
108,262		95,366	99,039	103,182
	Operating revenue from proposed services			
17,507	Road Network	15,491	15,579	13,463
75	Active Travel	76	104	142
2,750	Parking	3,050	4,798	4,936
535	Public Transport Infrastructure	370	380	573
20,867		18,987	20,861	19,114
110,574	Capital revenues	125,323	167,684	110,222
1,650	Vested assets	1,650	1,725	1,795
(24,829)	Net cost of services	(50,594)	(91,231)	(27,949)

Rationale for activity funding (see also the Revenue and Financing Policy)

User charges for certain services, such as parking fees, are collected at levels considered reasonable by the Council. Subsidies will be claimed from the New Zealand Transport Agency (NZTA) for both operational and capital expenditure to the maximum allowed. The balance of the net operating cost is funded by general rates, with a loading on the Business sector.

Development contributions are applied towards appropriate capital expenditure. The balance of capital expenditure is funded corporately in accordance with the Revenue and Financing Policy.

Council Activities and Services

Roads and Footpaths Funding Impact Statement

Annual Plan 2012/13		Three Year Plan 2013 - 2016		
		2013/14	2014/15	2015/16
		\$000		
	Sources of operating funding			
49,894	General rates, uniform annual general charges, rates penalties	45,214	49,231	55,763
-	- Targeted rates	-	-	-
9,897	Subsidies and grants for operating purposes	10,038	10,311	10,852
4,481	Fees and charges	5,015	6,743	6,751
-	- Internal charges and overheads recovered	-	-	-
5,894	Earthquake recoveries	3,363	3,221	904
595	Local authorities fuel tax, fines, infringement fees, and other receipts	570	586	605
70,761	Total operating funding	64,200	70,092	74,875
	Applications of operating funding			
55,934	Payments to staff and suppliers	49,275	50,238	49,237
5,932	Finance costs	3,725	5,241	7,563
4,618	Internal charges and overheads applied	4,933	4,834	5,080
15	Other operating funding applications	-	-	15
66,499	Total applications of operating funding	57,933	60,313	61,895
4,262	Surplus (deficit) of operating funding	6,267	9,779	12,980
	Sources of capital funding			
5,006	Subsidies and grants for capital expenditure	20,769	22,238	18,529
901	Development and financial contributions	1,302	1,749	2,117
104,667	Earthquake recoveries	103,253	143,697	89,578
35,681	Increase (decrease) in debt	128,238	106,235	76,905
-	- Gross proceeds from sale of assets	-	-	-
-	- Lump sum contributions	-	-	-
146,255	Total sources of capital funding	253,562	273,919	187,129

Annual Plan 2012/13		Three Year Plan 2013 - 2016		
		2013/14	2014/15	2015/16
		\$000		
	Applications of capital funding			
	Capital expenditure			
13,124	- to replace existing assets	12,815	16,910	19,892
150,585	- earthquake rebuild	205,831	209,826	131,430
16,692	- to improve the level of service	18,735	25,620	22,260
16,034	- to meet additional demand	22,448	31,342	26,527
(45,918)	Increase (decrease) in reserves	-	-	-
-	Increase (decrease) of investments	-	-	-
150,517	Total applications of capital funding	259,829	283,698	200,109
(4,262)	Surplus (deficit) of capital funding	(6,267)	(9,779)	(12,980)
-	Funding balance	-	-	-
	Reconciliation to net cost of services			
4,262	Surplus (deficit) of operating funding from funding impact statement	6,267	9,779	12,980
(49,894)	Remove rates funding	(45,214)	(49,231)	(55,763)
(41,763)	Deduct depreciation expense	(37,433)	(38,726)	(41,287)
110,574	Add capital revenues	125,324	167,684	110,224
1,650	Add vested assets / non cash revenue	1,650	1,725	1,795
24,829	Net cost of services per activity statement surplus/(deficit)	50,594	91,231	27,949