

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.

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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.

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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

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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)

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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))	

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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>	Planning, building, maintaining and providing facilities for Active Travel, including: Cycle networks and facilities	Mode Share: Ensure proportion of all trips made by active means (cycling).	Re-establish baseline
			Amenity: Ensure perception of Christchurch is a cycle friendly city	Percentage of people who agree or strongly agree
		Planning, building, maintaining and providing facilities for Active Travel, including: Walking networks (public footpaths, public pedestrian malls and open spaces)	Mode Share Ensure proportion of all trips made by active means (walking).	Re-establish baseline
			Ensure resident satisfaction with footpath quality.	Maintain resident satisfaction with footpath quality
			Amenity: Ensure perception that Christchurch is a walking friendly city	Percentage of people who agree or strongly agree
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>	Public Transport Infrastructure (stops, shelters (Council, Adshel), travel information systems, priority systems)	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	Peak Travel Time
			Amenity: Ensure user satisfaction with the number, quality of, and personal safety at, bus shelters	Number: Re-establish baseline
				Quality: Re-establish baseline

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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%	

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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

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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.	

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Annual Plan 2012/13		Three Year Plan 2013 - 2016			Annual Plan 2012/13		Three Year Plan 2013 - 2016		
	\$000	2013/14	2014/15	2015/16		\$000	2013/14	2014/15	2015/16
Cost of proposed services					Cost of capital expenditure				
86,514	Road Network	77,542	78,513	81,374	13,124	Renewals and replacements	12,815	16,910	19,892
15,161	Active Travel	13,750	15,063	16,675	150,585	Earthquake rebuild	162,431	194,221	102,252
3,776	Parking	2,552	3,690	3,015	16,692	Improved service levels	17,905	25,620	22,260
2,811	Public Transport Infrastructure	2,528	2,891	3,224	16,034	Increased demand	17,365	31,342	26,527
108,262		96,372	100,157	104,288	196,435		210,516	268,093	170,931
Revenue from proposed services					This capital expenditure is funded by				
17,507	Road Network	15,491	15,580	13,462	8,531	Rates	8,807	12,145	13,645
75	Active Travel	76	104	142	104,667	Earthquake rebuild recoveries	103,253	128,697	75,501
2,750	Parking	3,080	4,829	4,968	31,412	Borrowing	79,782	102,749	61,140
535	Public Transport Infrastructure	370	380	573	45,918	Transfers from Reserves	-	-	-
110,574	Capital revenues	121,927	153,199	96,146	901	Development Contributions	1,803	2,264	2,117
131,441		140,944	174,092	115,291	5,006	Grants, Subsidies and other	16,871	22,238	18,528
(23,179)	Net operational cost (funded by rates)	(44,572)	(73,935)	(11,003)	196,435		210,516	268,093	170,931
1,650	Vested assets	1,650	1,725	1,794					
(24,829)	Net cost of services	(46,222)	(75,660)	(12,797)					

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.

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Annual Plan 2012/13	Three Year Plan 2013 - 2016			Annual Plan 2012/13	Three Year Plan 2013 - 2016				
	2013/14	2014/15	2015/16		2013/14	2014/15	2015/16		
	\$000				\$000				
	Sources of operating funding				Applications of capital funding				
49,894	General rates, uniform annual general charges, rates penalties	46,200	50,353	56,873		Capital expenditure			
-	- Targeted rates	-	-	-	13,124	- to replace existing assets	12,815	16,910	19,892
9,897	Subsidies and grants for operating purposes	10,038	10,311	10,851	150,585	- earthquake rebuild	162,431	194,221	102,252
4,481	Fees and charges	5,047	6,774	6,784	16,692	- to improve the level of service	17,905	25,620	22,260
-	- Internal charges and overheads recovered	-	-	-	16,034	- to meet additional demand	17,365	31,342	26,527
5,894	Earthquake recoveries	3,363	3,221	904	(45,918)	Increase (decrease) in reserves	-	-	-
595	Local authorities fuel tax, fines, infringement fees, and other receipts	570	586	605	-	Increase (decrease) of investments	-	-	-
70,761	Total operating funding	65,218	71,245	76,017	150,517	Total applications of capital funding	210,516	268,093	170,931
	Applications of operating funding				(4,262)	Surplus (deficit) of capital funding	(6,267)	(9,779)	(12,980)
55,934	Payments to staff and suppliers	48,945	49,864	48,808		- Funding balance	-	-	-
5,932	Finance costs	4,072	5,712	7,891		Reconciliation to net cost of services			
4,618	Internal charges and overheads applied	5,934	5,890	6,323	4,262	Surplus (deficit) of operating funding from funding impact statement	6,267	9,779	12,980
15	Other operating funding applications	-	-	15	(49,894)	Remove rates funding	(46,200)	(50,353)	(56,873)
66,499	Total applications of operating funding	58,951	61,466	63,037	(41,763)	Deduct depreciation expense	(37,422)	(38,689)	(41,249)
4,262	Surplus (deficit) of operating funding	6,267	9,779	12,980	110,574	Add capital revenues	121,927	153,198	96,145
	Sources of capital funding				1,650	Add vested assets / non cash revenue	1,650	1,725	1,794
5,006	Subsidies and grants for capital expenditure	16,871	22,237	18,527	24,829	Net cost of services per activity statement surplus/(deficit)	46,222	75,660	12,797
901	Development and financial contributions	1,803	2,264	2,117					
104,667	Earthquake recoveries	103,253	128,697	75,501					
35,681	Increase (decrease) in debt	82,322	105,116	61,806					
-	- Gross proceeds from sale of assets	-	-	-					
-	- Lump sum contributions	-	-	-					
146,255	Total sources of capital funding	204,249	258,314	157,951					