

Monitoring the Implementation of the Canterbury Regional Land Transport Strategy 2008 – 2018

Progress Report for period
2008/09 – 2010/11

Report No. R11/57

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Prepared for the Canterbury Regional
Transport Committee by

The Canterbury Regional Transport Officers
Group

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1 Introduction

The Land Transport Management Act 2003 (as amended in 2008) (LTMA) stipulates that “every three financial years, the Canterbury Regional Transport Committee (RTC) must prepare a progress report on the implementation of any regional land transport strategy in place during the previous three financial years” - S83(1).

This report is the progress report for the Canterbury region, covering the period from July 2008 to June 2011 inclusive and outlines progress made on implementing the Canterbury Regional Land Transport Strategy 2008-18 (RLTS).

The changes to the LTMA that were introduced in 2008 created a Regional Land Transport Programme (RLTP) as the implementation vehicle for delivery of regional land transport strategies. As such, this progress report presents available data and commentary on the delivery of the Canterbury RLTP 2009/10 – 2011/12. The RLTP data gives an insight into delivery at the activity class level, but not of individual project delivery. As such, a further section is included that lists specific significant transport projects that have been delivered or are in the process of being delivered in the region.

The report also presents trend data collected as part of the RLTS monitoring programme that informs progress towards the ten targets contained within the RLTS.

The current RLTS contains 5 region wide targets, all with a time horizon of 2011:

- No congestion outside Greater Christchurch (UDS Area);
- Carbon dioxide emissions increases to no more than 10% above 2001 levels;
- Reduce deaths from road crashes to 6 or less per 100,000 population;
- Reduce deaths plus hospitalisations to less than 560 per year;
- Increase satisfaction among Canterbury’s residents about their footpaths, pedestrian areas and overall walking environment.

There are also 5 targets for the Greater Christchurch (UDS) area, again all with a 2011 time horizon:

- Reduce the proportion of single occupancy motor vehicles in peak periods within Greater Christchurch;
- No traffic congestion within Greater Christchurch outside peak periods;
- Contain the amount of congested (see footnote 1) road within Greater Christchurch during peak periods to 40 lane kilometres or less;
- Increase proportion of all trips (excluding walking trips) made by cycle to 12%;
- Increase proportion of all trips (excluding walking trips) made by public passenger transport to 6%.

The RTC has been informed in the past that quantitative measurement of progress towards some of these targets is not possible with available annual data. It is therefore essential that an entire new set of measurable targets is developed to record the progress of the next RLTS in terms of its implementation.

In the interim, however, this report focuses on a qualitative assessment of progress towards targets. For example, the three congestion targets are impossible to measure without comprehensive level of service monitoring of the entire Canterbury road network on an ongoing basis. As this is currently not a feasible task, the material that is presented in this report discusses whether congestion in Greater Christchurch and elsewhere within the region is getting better or worse, without reference to absolute levels.

In this report, the format for reporting progress around RLTS targets is essentially a two step process:

- Are we above trend, below trend, or on track to meet the target?

- Are we heading in the right direction?

The earthquakes that have impacted the Canterbury region in the final year of this three year period have understandably had a marked impact upon transportation networks and travel patterns within the region. They have also impacted transport investment decisions, with planned investment often needing to be deferred, with resources directed to emergency works and network rehabilitation.

As the report effectively presents material that covers pre- and post-earthquake periods, the report needs to be read in this context. Specifically:

- The Regional Transport Highlights section covers important transport investments made in the region, but also comments on earthquake recovery tasks;
- The implementation of the Canterbury RLTP encompasses funds spent on “emergency works”, of which a significant proportion are earthquake related in the 2010/11 financial year.
- The earthquakes have significantly disrupted the regions’ transport monitoring programme. As such, the data presented in Sections 4 and 5 this report covers the first two years of the three year period from 2008/09 to 2010/11.

2 Regional Transport Highlights: 2008/09 – 2010/11

The following sections present a picture of the transport related investment activities that have been progressed / delivered during the reporting period. The list of activities has been prepared based upon material supplied by transport officers from the various approved organisations with the region and an analysis of the various district reports.

State Highway Improvements, Investigation and Design

- ◆ SH73 Christchurch Southern Motorway Extension (CSM1) – construction phase commenced and ongoing (NZTA – RONS Southern Corridor).
- ◆ SH1 (Yaldhurst Rd – Memorial Ave) 4-laning – construction phase commenced and ongoing (NZTA – RONS Western Corridor).
- ◆ Western Belfast Bypass, Northern Arterial, Christchurch Southern Motorway Extension Stage 2 and Main South Road 4 Laning – investigations underway (NZTA – RONS)
- ◆ Western Corridor Groynes to Sawyers Arms, Sawyers Arms to Memorial Ave and Yaldhurst to Waterloo - design underway (NZTA RONS)
- ◆ SH73 Pound Road intersection upgrade – completed (NZTA).
- ◆ SH74 Travis Road / Burwood Road / QEII Drive intersection improvements – completed (NZTA).
- ◆ SH75 Dunbars Road intersection upgrade – completed (NZTA).
- ◆ Christchurch Bus Priority Measures, Main North Road and Main South Road completed (NZTA).
- ◆ SH79 Inmans & Elliots Bridge widening – completed (NZTA).
- ◆ SH1 Orari North and Winchester passing lanes – completed (NZTA).
- ◆ SH1 Improvements to Shingle Fans (Kaikoura fords removed) – completed (NZTA).
- ◆ SH1 Kaikoura Coast safety retrofit work completed (NZTA).
- ◆ SH74 Marshlands/QE2 Drive intersection improvement design completed (NZTA).
- ◆ SH82 Waitaki Bridges replacement – design ongoing (NZTA).
- ◆ SH1/SH8/Seadown Road (Washdyke) intersection improvements – completed (NZTA, TDC).
- ◆ Ongoing earthquake rehabilitation projects, particularly around SH74 Anzac Drive Bridge, Tunnel Road and environs (NZTA).

Local Road Improvements

- ◆ Christchurch City, Waimakariri and Selwyn District roads and infrastructure were badly affected by earthquake events and an extensive number of roads and road surfaces have had to be repaired and relaid (including numerous bridge repairs in Christchurch eastern suburbs) (CCC, SDC, WDC)
- ◆ Upgrade work on Ferrymead Bridge commenced (CCC).
- ◆ Various bridge replacements undertaken on Banks Peninsula (CCC).
- ◆ Preliminary ground works undertaken for Wigram – Magdala link (CCC).
- ◆ Byron Street Extension, Rolleston – completed (SDC)
- ◆ Stage 1 Rolleston to Christchurch Local Arterial Upgrade – completed (SDC)
- ◆ Tram Road upgrade project completed (WDC)

Public Transport

- ◆ New contracts started in July and November 2010 which led to improved services on some routes in and around Christchurch. In particular, services to Selwyn district were reconfigured and the newly branded “Selwyn Star” services commenced. These services have increased the visibility and frequency of public transport within Selwyn District and the linkages to Christchurch. (ECan).

- ◆ The Sumner – Avonhead service was extended to the airport in November, with consequent increases in demand observed (ECan).
- ◆ New ticketing machines have been rolled out across the network (ECan).
- ◆ Bike racks were added to more services. (ECan).
- ◆ Pre-earthquake, positive travel time / reliability improvements had been observed on the first Christchurch bus priority corridor – Papanui Road (ECan/CCC).
- ◆ Main North Road State Highway Bus Priority project completed (NZTA).
- ◆ The first (Papanui Road), second (Queenspark) and third (Colombo Street) Christchurch bus priority corridors were completed (CCC).
- ◆ Bus priority investigations for New Brighton, Riccarton and Sumner completed (CCC).
- ◆ 30 new bus stops, 15 bus shelters, 45 seats at bus stops, 10 bus finders and 1 Variable Message System display added to network (CCC).
- ◆ Approximately 100 bus stops moved and/or upgraded to provide sufficient length for buses to operate safely (CCC).
- ◆ CCC, ECan and NZTA continue to work on re-configuring the city's public transport linkages post earthquake, including a new temporary interchange facility.

Rail

- ◆ Development of rail siding into IZone industrial area, Rolleston (Kiwirail, SDC).
- ◆ Implementation of CityDepot for port rail shuttle service (Kiwirail, LPC).
- ◆ Container terminal rail expansion, significantly increasing rail receipt capacity and container throughput (LPC).

Walking & Cycling

- ◆ Construction of 1.8km of new cycleways, including the completion of the Northcote Road to Tuckers Road "off road" cycle path extension (CCC).
- ◆ Work on improving pedestrian priority in Christchurch Central City had been progressed prior to the February 2011 quake. (CCC).
- ◆ Nine road safety programmes delivered per year, with last years' programme adapted to encompass earthquake road safety promotion activities (CCC).
- ◆ Cycle Safe programme delivered to 86 schools in 2010 and continued into 2011 despite earthquake disruption to timetable (CCC).
- ◆ Council confirmed the route for the Little River Rail Trail to the south of Lincoln and engineering scoping study completed (SDC).
- ◆ Christchurch Southern Motorway cycleway being developed alongside motorway contract (CCC).
- ◆ Extension of Rail Trail along Edward Street, Lincoln (SDC).
- ◆ Installation of Active Warning Signs at two rural schools, along with a range of other improvements at schools to improve safety and encourage walking and cycling (WDC).
- ◆ Installation of new footpaths in some of the districts' townships (SDC, WDC).
- ◆ Construction of combined footpath/cycleway from Killarney St / Churchill St intersection to racecourse in South Bay (KDC, NZTA).
- ◆ Development of a new Active Transport Strategy (TDC).
- ◆ Installation on first stage of walking wayfinding signage in Timaru CDB (TDC).
- ◆ Construction of 1.7km of new footpaths and resurfacing of 12.7km of footpath within the Timaru District (TDC).
- ◆ Construction of a new boardwalk, lookout and toilet facility along Caroline Bay (TDC).

Travel Demand Management

- ◆ Adoption of the Greater Christchurch Travel Demand Management Strategy (CCC, ECan, SDC and WDC).

- ◆ Acceptance of the “A to B” travel demand management branding initiative (ECan, CCC, WDC, SDC).

Transport Planning

- ◆ The new Timaru Metro Strategy was adopted (ECan, TDC).
- ◆ The new Greater Christchurch Metro Strategy was drafted following nearly 2000 submissions from the public. It was approved by the Urban Development Strategy Implementation Committee at the end of June and is has now been adopted by each council (ECan, CCC, WDC, SDC).
- ◆ Redesign of Christchurch bus routes and network has commenced following the February earthquake to reflect the changes brought on by closed roads and bridges particularly in eastern suburbs (ECan)
- ◆ SH1 Blenheim to Ashley River Strategic Study (NZTA)
- ◆ SH73 Route Security Study (NZTA)
- ◆ Christchurch Transport Model Upgrade (CTM) – completed (NZTA, ECan, CCC, WDC for UDS TG)
- ◆ GCTS – various CTM applications to guide transport strategy development (NZTA)
- ◆ Christchurch Northern Access Transport Investigation – to develop implementation package (NZTA, CCC, ECan)
- ◆ Greater Christchurch Public Transport Futures and Corridors Study (ECan for UDS TG)
- ◆ Developed a travel plan for the new Christchurch City Council civic offices (CCC).
- ◆ Main Road Sumner 3-laning design phase completed (CCC).
- ◆ Investigation and design completed for McCormacks Bay central culvert (CCC).
- ◆ Wigram – Magdala grade separated link investigation phase completed (CCC).
- ◆ Studies undertaken to support Belfast Area Plan and Northern Access Links (CCC).
- ◆ Development of Selwyn District Transportation Plan Change which formally establishes a connection between sustainable land use and transport systems and the promotion of walking, cycling and travel demand management (SDC).
- ◆ Revised roading standards and classifications for Selwyn District that encapsulate the principles contained within the Selwyn District Council Urban Design Guide (SDC).

Other

- ◆ Approval of increased mass limits on heavy vehicles transporting product from Clandeboye dairy factory to the Temuka railhead, thus reducing truck movements (TDC).
- ◆ Stage One of coal yard expansion project completed and resource consent for land reclamation for future stage lodged with the Environment Court (LPC, Solid Energy).
- ◆ Approval by NZTA to trial 40km/hr “When Children Present” speed restrictions outside schools on local roads in rural areas (SDC).

3 Implementation of the Canterbury RLTP – 2009/10 – 2011/12

At time of report preparations, the region is midway through the final year of the inaugural Canterbury Regional Land Transport Programme – the three year programme of transport expenditure for the region between 2009/10 and 2011/12.

The tables that follow compare the three year regional request for funding support against the funding spent in 2009/10 and 2010/11 and that which has been approved by the New Zealand Transport Agency for 2011/12 – as at the beginning of September 2011. Key points to note include:

- ◆ Maintenance and renewals budget tracking largely to budget when emergency works and preventative maintenance spending is added.
- ◆ PT operations budget largely tracking as requested.
- ◆ PT infrastructure budget significantly below budget because new Christchurch Transport Interchange project withdrawn from programme due to earthquake. ECan and CCC are reviewing PT network and infrastructure requirements post earthquake.
- ◆ State Highway improvements on budget, with reprioritisation of Roads of National Significance projects occurring within funding envelope.
- ◆ Local road improvements approvals significantly down on amount requested – 61% for region as a whole. NZTA indicate that this is due to significant numbers of proposed projects still remaining as ‘Cat 2’ within the NLTP – i.e. they have not been progressed sufficiently in terms of development to be promoted to ‘Cat 1’ status in order to have funding approved.
- ◆ Transport planning expenditure much lower than envisaged for all AO’s except NZTA State Highways due to NZTA review of this activity class during 2009/10. Subsequent changes to government spending priorities have reduced the available funds for this activity class, as well as amending qualifying criteria. As a result, limited numbers of studies have been approved.
- ◆ Walking and cycling expenditure running at less than half of request due to shift in government spending priorities signalled in revised GPS on Transport.
- ◆ Rail & Sea Freight funding removed from NLTP due to shift in government spending priorities signalled in revised GPS on Transport.
- ◆ Administration Support activity class removed from NLTP and these costs now attached as “on-costs” to specific projects.

Activity Class	Ashburton District Council			Christchurch City Council			DOC (Mount Cook)		
	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved
Administration Support	\$323,951	\$0	0%	\$6,955,012	\$0	0%	\$7,500	\$0	0%
Demand Management & Community Programmes	\$403,943	\$323,113	80%	\$5,260,137	\$3,570,957	68%	\$0	\$0	N/A
Maintenance & Operation of Local Roads	\$8,499,656	\$9,093,324	107%	\$69,368,459	\$64,672,677	93%	\$345,000	\$345,000	100%
Maintenance & Operation of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
New & Improved Infrastructure for Local Roads	\$3,610,152	\$2,879,467	80%	\$51,737,764	\$32,407,660	63%	\$147,600	\$158,040	107%
New & Improved Infrastructure for State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Public Transport Infrastructure	\$0	\$0	N/A	\$69,816,864	\$13,680,146	20%	\$0	\$0	N/A
Public Transport Services	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Rail & Sea Freight	\$3,174,000	\$0	0%	\$0			\$0		
Renewal of Local Roads	\$17,226,187	\$16,689,940	97%	\$57,957,978	\$47,534,365	82%	\$0	\$0	N/A
Renewal of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Transport Planning	\$370,097	\$216,151	58%	\$2,606,000	\$1,502,116	58%	\$0	\$0	N/A
Walking & Cycling Facilities	\$138,381	\$40,697	29%	\$11,084,584	\$6,622,336	60%	\$0	\$0	N/A
Totals	\$33,746,367	\$29,242,692	87%	\$274,786,798	\$169,990,257	62%	\$500,100	\$503,040	102%
Emergency Works		\$0			\$64,568,065				

Activity Class	Environment Canterbury			Hurunui District Council			Kaikoura District Council		
	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved
Administration Support	\$0	\$0	\$0	\$258,245	\$0	0%	\$67,342	\$0	0%
Demand Management & Community Programmes	\$1,398,040	\$1,242,512	89%	\$196,518	\$168,267	86%	\$132,340	\$124,999	94%
Maintenance & Operation of Local Roads	\$0	\$0	N/A	\$9,245,475	\$8,623,466	93%	\$1,173,000	\$1,178,001	100%
Maintenance & Operation of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Preventative Maintenance	\$0	\$0	N/A	\$0	\$266,376	N/A	\$0	\$0	N/A
New & Improved Infrastructure for Local Roads	\$0	\$0	N/A	\$2,716,962	\$1,469,788	54%	\$294,000	\$170,880	58%
New & Improved Infrastructure for State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Public Transport Infrastructure	\$3,960,000	\$4,454,999	112%	\$0	\$0	N/A	\$0	\$0	N/A
Public Transport Services	\$122,034,743	\$127,157,084	104%	\$0	\$0	N/A	\$0	\$0	N/A
Rail & Sea Freight	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Renewal of Local Roads	\$0	\$0	N/A	\$9,716,550	\$8,884,953	91%	\$958,000	\$958,001	100%
Renewal of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Transport Planning	\$5,628,300	\$1,580,050	28%	\$61,820	\$0	0%	\$0	\$0	N/A
Walking & Cycling Facilities	\$0	\$0	N/A	\$275,000	\$0	0%	\$800,000	\$0	N/A
Totals	\$133,021,083	\$134,434,645	101%	\$22,470,570	\$19,412,850	89%	\$3,424,682	\$2,431,380	71%
Emergency Works					\$539,644			\$292,645	

Activity Class	Mackenzie District Council			New Zealand Transport Agency			Selwyn District Council		
	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved
Administration Support	\$179,700	\$0	0%	\$7,989,042	\$0	0%	\$347,839	\$0	0%
Demand Management & Community Programmes	\$0	\$0	N/A	\$206,000	\$120,333	58%	\$886,000	\$571,800	65%
Maintenance & Operation of Local Roads	\$4,076,500	\$3,567,296	88%	\$0	\$0	N/A	\$13,591,230	\$11,483,751	84%
Maintenance & Operation of State Highways	\$0	\$0	N/A	\$75,733,343	\$63,116,518	83%	\$0	\$0	N/A
Preventative Maintenance	\$0	\$0	N/A	\$0	\$341,870	N/A	\$0	\$0	N/A
New & Improved Infrastructure for Local Roads	\$1,268,700	\$643,499	51%	\$0	\$0	N/A	\$8,554,195	\$6,124,724	72%
New & Improved Infrastructure for State Highways	\$0	\$0	N/A	\$190,409,489	\$183,904,832	97%	\$0	\$0	N/A
Public Transport Infrastructure	\$0	\$0	N/A	\$3,028,000	\$4,611,835	152%	\$0	\$0	N/A
Public Transport Services	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Rail & Sea Freight	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Renewal of Local Roads	\$3,227,970	\$3,307,681	102%	\$0	\$0	N/A	\$16,516,024	\$12,408,227	75%
Renewal of State Highways	\$0	\$0	N/A	\$64,424,340	\$56,071,204	87%	\$0	\$0	N/A
Transport Planning	\$0	\$0	N/A	\$357,545 (1)	\$634,241	177%	\$77,910	\$63,983	82%
Walking & Cycling Facilities	\$0	\$0	N/A	\$3,027,655	\$28,600	1%	\$1,075,280	\$68,208	6%
Totals	\$8,752,870	\$7,518,475	86%	\$345,175,414	\$308,829,433	89%	\$41,048,478	\$30,720,693	75%
Emergency Works		\$14,150			\$25,483,028			\$3,000,000	

(1) Original request amended by subsequent variation to RLTP – approved October 2009 to add AMP and RoNS investigation work

Activity Class	Timaru District Council			Waimakariri District Council			Waimate District Council		
	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved
Administration Support	\$901,866	\$0	0%	\$450,000	\$0	0%	\$112,907	\$0	0%
Demand Management & Community Programmes	\$840,000	\$648,000	77%	\$450,000	\$325,000	72%	\$0	\$0	N/A
Maintenance & Operation of Local Roads	\$12,098,000	\$11,472,692	95%	\$11,069,055	\$11,069,052	100%	\$3,789,901	\$4,014,583	106%
Maintenance & Operation of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Preventative Maintenance	\$0	\$250,000	N/A	\$0	\$0	0%	\$0	\$0	N/A
New & Improved Infrastructure for Local Roads	\$8,921,000	\$2,533,712	28%	\$2,589,500	\$2,544,243	98%	\$982,703	\$722,468	74%
New & Improved Infrastructure for State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Public Transport Infrastructure	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Public Transport Services	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Rail & Sea Freight	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Renewal of Local Roads	\$20,310,000	\$18,993,649	94%	\$13,073,969	\$13,073,970	100%	\$5,287,279	\$5,083,176	96%
Renewal of State Highways	\$0	\$0	N/A	\$0	\$0	N/A	\$0	\$0	N/A
Transport Planning	\$220,000	\$202,001	92%	\$0	\$0	N/A	\$0	\$0	N/A
Walking & Cycling Facilities	\$510,000	\$0	0%	\$1,583,000	\$0	0%	\$0	\$0	N/A
Totals	\$43,800,866	\$34,100,054	78%	\$29,215,524	\$27,012,264	91%	\$10,172,790	\$9,820,227	98%
Emergency Works		\$575,000			\$9,385,000				

Activity Class	Canterbury Region		
	RLTP 2009/12 request	Spent 2009/10 and 2010/11, plus approved 2011/12	% of 3-yr request spent and approved
Administration Support	\$17,593,404	\$0	0%
Demand Management & Community Programmes	\$9,772,978	\$7,094,481	73%
Maintenance & Operation of Local Roads	\$133,256,276	\$125,519,843	94%
Maintenance & Operation of State Highways	\$75,733,343	\$63,116,518	83%
Preventative Maintenance	\$0	\$858,246	N/A
New & Improved Infrastructure for Local Roads	\$80,822,576	\$49,654,480	61%
New & Improved Infrastructure for State Highways	\$190,409,489	\$183,904,832	97%
Public Transport Infrastructure	\$76,804,864	\$22,746,980	30%
Public Transport Services	\$122,034,743	\$127,157,084	104%
Rail & Sea Freight	\$3,174,000	\$0	0%
Renewal of Local Roads	\$144,273,957	\$126,933,962	88%
Renewal of State Highways	\$64,424,340	\$56,071,204	87%
Transport Planning	\$9,321,672	\$4,198,541	45%
Walking & Cycling Facilities	\$18,493,900	\$6,759,841	43%
Totals	\$946,115,542	\$774,016,011	82%
Emergency Works		\$103,857,532	

4 Progress towards Canterbury wide targets

All data and commentary in this section relates to the period up to and including June 2010.

Target: No congestion outside Greater Christchurch (UDS Area)



Traffic levels on rural State Highways around the region appear largely static – when compared to 2008. After the fuel price spike related falls seen a year ago, traffic volumes on the northern and southern approaches to Christchurch have increased during 2009 – typically now back to the volumes seen in 2007. Residents from outside Greater Christchurch rarely report experience of traffic congestion and when they do, it is generally confined to peak period trips on the northern approach to Christchurch.

The RLTS recommends a minimum level of service (LoS) outside of Christchurch City. Whilst the specified LoS varies by road type and time of day, the target essentially is stating that the desired outcome is that there are no serious instances of heavy congestion that occur on a regular and ongoing basis.

The Canterbury State Highway network carries around 40% of vehicle kilometres travelled in the region. Figures 4.1 and 4.2 present traffic count data for several rural State Highway locations around the Canterbury region.

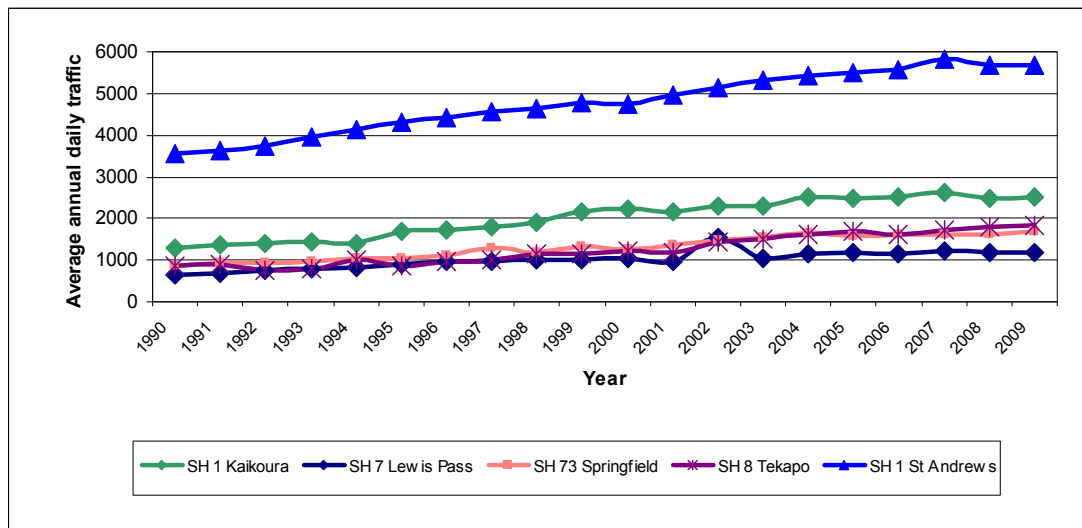


Figure 4.1: Annual average daily traffic (AADT) counts at selected rural State Highway locations
Source: NZTA

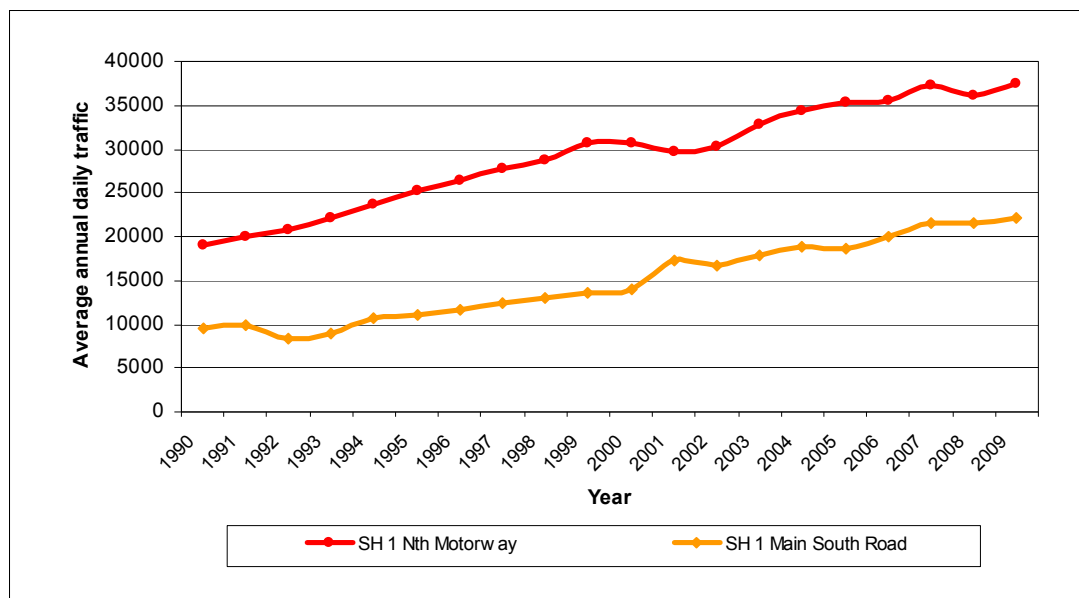


Figure 4.2: Annual average daily traffic (AADT) counts at rural State Highway locations to the north and south of Christchurch

Source: NZTA

Discussion

Fuel prices have been relatively stable during the year from July 2009, only fluctuating in a narrow range from \$1.57/litre to \$1.80/litre – for 91 octane petrol. Whilst these levels are still high historically, they are markedly lower than the prices seen during the winter of 2008.

Fuel sales, which are a good indicator of total travel being undertaken in the region, remained subdued during 2009. Petrol sales in the region are slightly up – back to the levels of 2007 – but on a per capita basis, are at their lowest level (689 litres/resident) since this series was first produced in 1998. Sales of diesel are notably (down 2%) lower again (after the falls seen in 2008) during 2009, as the prolonged recession continues to impact negatively on business activity within the region.

Ministry of Transport regional vehicle fleet data for Canterbury has seen growth in the size of the fleet in every year since 2000, except for 2009. Two thousand fewer light passenger vehicles and five hundred fewer heavy goods vehicles were estimated to be in the fleet in 2009 when compared to 2008. This fleet data, together with the fuel sales data noted in the preceding paragraph suggest that on average, a typical Cantabrian is travelling less intensively than they have done in previous years.

Perceptions of congestion around the region, as measured in the Environment Canterbury Opinions Monitor Survey, remain low – only 8% of Cantabrians surveyed indicated that they experienced congestion either “very often” or “quite often” on roads outside of Christchurch – with the northern approaches to Christchurch City being the only area to feature to an identifiable extent.

Target: Carbon dioxide emissions to increase by no more than 10% above 2001 levels

😊/😞 A prolonged period of subdued economic growth is producing positive impacts for regional CO₂ emissions from transport sources. Generally flat traffic volumes and reduced commercial activity are, however, driving the emission totals, rather than improvements in vehicle efficiency or more environmentally friendly mode choice decisions.

Transport related carbon dioxide emissions for the region are calculated via a methodology that employs petrol and diesel sales data. Whilst improvements in engine efficiency for newer vehicles translates into lower fuel consumption for a given distance travelled, intensity of transport is intimately linked to economic and population growth and the average age / inefficiency of the regions' vehicle fleet continues to increase. Furthermore, there is little evidence that significant numbers of Cantabrians are choosing less carbon intensive modes of transport for their travel.

Discussion

2004 saw a peak in sales of petrol in the region – when 387 million litres were sold. Since then, sales have settled at around 380/385 million litres a year. In terms of per capita consumption, the 2009 figure of 689 litres/person is the lowest it has been since this series was commenced in 1998 and is closely related to flat traffic volumes and a reduction in the size of the regions' petrol powered vehicle fleet, as noted above. Diesel sales are more closely linked to economic growth than sales of petrol, reflecting its heavy use in commercial vehicles and also off-road applications. Diesel sales in the region have increased every year since 1998, except for the last two years – in 2008 a 1% fall in diesel sales was recorded, with a further 2% fall in 2009.

Figure 4.3 shows how the fuel price spike in 2008, with subsequent fall off in economic growth has impacted upon transport related CO₂ emission estimates for the Canterbury region.

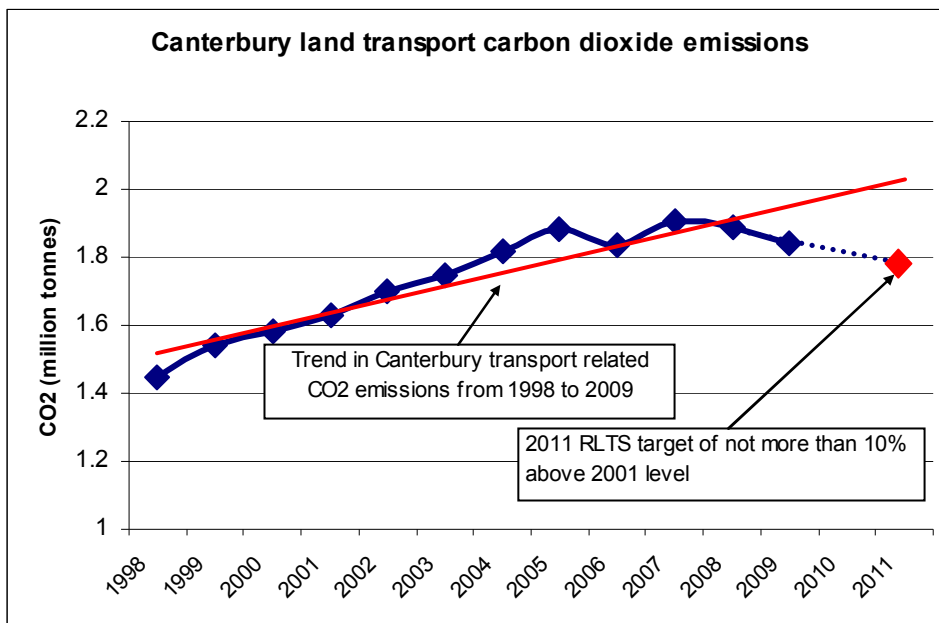


Figure 4.3: Time series analysis of transport related CO₂ emissions in Canterbury.
Source: Territorial authority fuel sales data and ECan derived CO₂ calculation formulae

The average age / inefficiency of the regions' vehicle fleet also continues to increase. The average age of a light passenger vehicle in Canterbury has increased from 12.5 years in 2005, to 13.4 years in

2009. The corresponding figures for heavy goods vehicles and buses are largely static – 14.8 years for both categories in 2009.

Available transport mode choice data from the Ministry of Transport Household Travel Survey suggests that, within Greater Christchurch at least, little evidence of modal switching is evident – in 2009/10, 74% of all trip legs were undertaken in a private motor vehicle, either as a the driver or as a passenger.

Whilst recent trends on CO₂ emissions are therefore positive, this has more to do with historically high (although less volatile of late) fuel prices and recessionary effects, rather than any fundamental decoupling of fuel use from economic growth or through travel being undertaken by less carbon intensive modes of transport. The challenge for Canterbury and, indeed, the wider New Zealand economy is to continue to reduce transport related CO₂ emissions when economic growth picks up once again.

Target: Reduce deaths from road crashes to 6 or less per 100,000 population

😊/😞 In 2009, 32 people were killed on the regions’ roads. This was the lowest recorded total since 2000. The positive 2009 result was reversed in 2010 when the number of road fatalities rose again to 47.

Figure 4.4 presents a time series analysis of road deaths in the Canterbury region, expressed as a rate per 100,000 population.

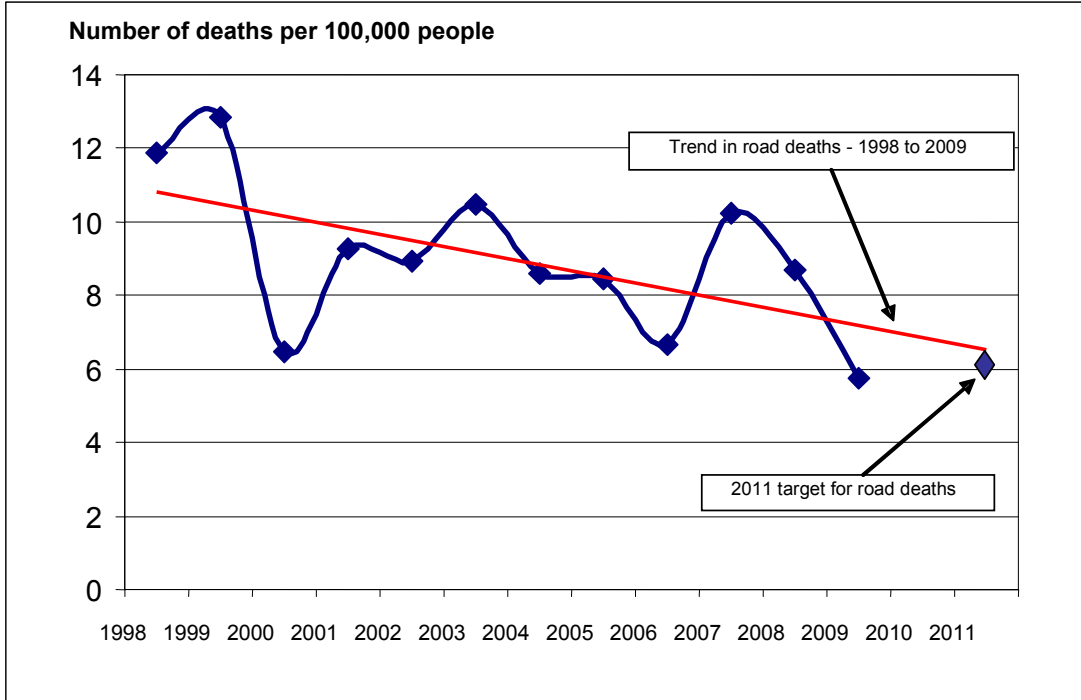


Figure 4.4: Road deaths in the Canterbury region – 1998 to 2009
Source: NZTA

Discussion

The fluctuation in road death statistics suggest that the road safety message in the region needs continuous reinforcement. The low figure for 2009, tempered by the high figure in the 2010 calendar year suggests that key safety messages may not be being fully assimilated into the social conscience. Despite the increase in 2010 the general trend from previous statistics is for a gradual fall in deaths on the regions roads.

Target: Reduce deaths plus hospitalisations to less than 560 per 100,000 population



The number of deaths plus hospitalisations is, once again, very high and the trend is heading away from the 2011 target. It is clear from this deaths plus hospitalisation data series that driver behaviour is still producing high numbers of crashes that result in drivers and their passengers being hospitalised.

Figure 4.5 presents data for the period 2001 to 2009 for a combined deaths plus hospitalisation series – 2001 was the year in which the monitoring programme began tracking this road safety indicator. It also highlights the trend in the series over this timeframe, together with the 2011 target of less than 560 per 100,000 Canterbury residents.

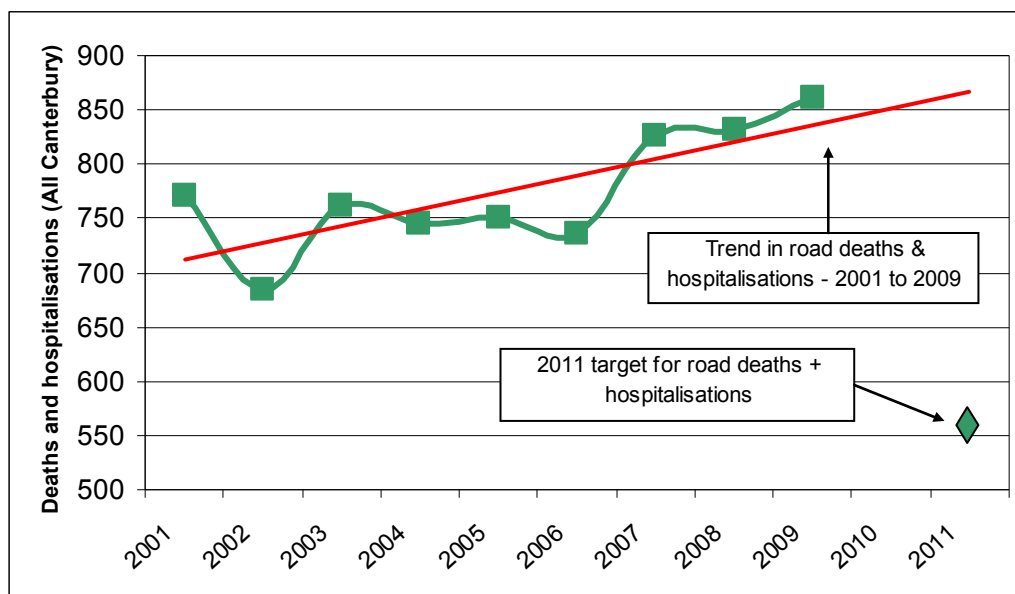



Figure 4.5: Road deaths plus hospitalisations in the Canterbury region – 2001 to 2009
Source: NZTA

Discussion

The pattern of deaths plus hospitalisations observed clearly reinforces the conclusion that serious accidents, that cause hospitalisation, if not death, are happening with increasing frequency, with this indicator still heading away from the 2011 RLTS target. Whilst safer vehicles appear to be reducing fatalities, the hospitalisation data would tend to indicate that driver behaviour is not improving.

Target: Increase satisfaction among Canterbury’s residents about their footpaths, pedestrian areas and overall walking environment

 Satisfaction with the overall walking environment continues to remain high amongst residents of Canterbury.

Discussion

The RLTS recognises the importance of walking and promotes pedestrian-friendly built environments. Pedestrian-friendly environments, where people choose to walk for short distance journeys and enjoy their experience of being out and about, are difficult to measure using quantitative techniques, but an annual perception survey of 600 Canterbury residents (400 people in Christchurch and 200 people outside of Christchurch) has been used to gauge residents’ satisfaction with the overall walking environment.

Figure 4.6 presents a time series analysis of Cantabrians response to the following question about their perceptions of their walking environment.

Thinking about the places you go, overall how easy or difficult is it to walk around using public facilities such as footpaths, pedestrian areas, street crossings?

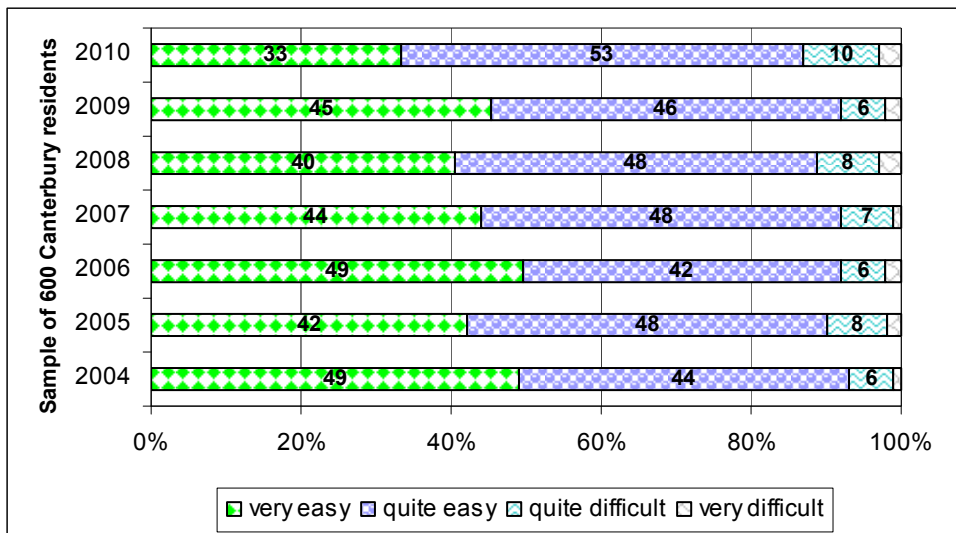


Figure 4.6: Cantabrians perceptions of their walking environment – 2004 to 2010
Source: Environment Canterbury Opinions Monitor Survey

Over the six year period to 2009, satisfaction with the walking environment has largely remained high and stable – typically around 9 out of 10 Cantabrians indicate that they find walking around the city / wider region either “very easy” or “quite easy”.

Whilst Cantabrians state that they are generally satisfied with the walking environment that is available to them, walking is not the mode of choice for the vast majority of trips that are made. The Ministry of Transport Household Travel Survey (HTS) data provides an insight into the actual walking habits of Canterbury residents. In 2009/10, around 20% of all trip legs in the region were made on foot. Whilst this gives an indication of walking trips, it does not say a great deal about how far people are walking. The HTS does allow analysis of how many residents are undertaking 30 minutes or more of active (i.e. walking or cycling) a day – this is a level that is typically taken to indicate whether any health benefits

are being derived by the community from the active travel activity. In 2009/10, 13% of Cantabrians state that they walked or cycled for more than 30 minutes on both survey days, whereas 22% achieved this level of physical activity over the two day survey period.

5 Progress towards Greater Christchurch (UDS Area) targets

All data and commentary in this section relates to the period up to and including June 2010.

Target: Reduce the proportion of single occupancy motor vehicles in peak periods



No marked change in morning peak vehicle occupancy is evident from the vehicle occupancy surveys undertaken over the past few years.

Discussion

The Environment Canterbury Vehicle Occupancy Survey was last undertaken in 2009 – having been previously conducted in 2007 and 2003. The 2007 survey indicated that the average occupancy of cars/vans was 1.34. Repeating the survey this year has produced an equivalent figure of 1.27. The 2003 survey, by comparison, produced a result of 1.29.

From the above, it would seem reasonable to conclude that car occupancy within Christchurch City, during the morning peak, has remained largely unchanged over the period from 2003 to 2009. This result is largely as would be expected as there has been little encouragement or persuasion to encourage car pooling / ride sharing during the period in question. Essentially, car sharing / pooling that is observed is largely a result of personal choice, rather than as a direct result of any policy implementation / other intervention methods.

The annual Greater Christchurch data sample from the Ministry of Transport Household Travel Survey (HTS) may be able to provide better data on vehicle occupancy trends going forward. The Environment Canterbury Vehicle Occupancy Survey only provides a one week snapshot of vehicle occupancy at the 'city end' of key radial route into Christchurch, whereas the HTS takes an ongoing view across a far wider range of trips that are made during the morning peak period.

Analysis undertaken on the 2009/10 HTS data suggest an average vehicle occupancy figure of 1.45 for trip legs originating within the 7am to 9am time period. When this data is broken down further into 7am to 8am and 8am to 9am segments two distinct patterns are evident – 1.27 in the first hour and 1.56 in the second hour (both figures for residents of Christchurch City). This very different vehicle occupancy is likely driven by school trips in the second hour, whereas the 1.27 figure is probably more typical of the journey to work behaviour alone. Trends in these two aspects of peak period vehicle occupancy will continue to be monitored going forward, as they have quite distinct policy implications.

Targets: No traffic congestion within Greater Christchurch outside peak periods & contain the amount of congestion within Greater Christchurch during peak periods to 40 lane kilometres of less



Traffic volumes within Greater Christchurch present a mixed picture – with volumes up on some key roads, but flat on others. Congestion indicators suggest a decline in levels of service, but surveys and traffic patterns have been impacted negatively by a number of road works. Perceptions of congestion levels remain relatively constant.

Discussion

It has been noted in previous Annual Monitoring Reports that the “lane kilometre” congestion target is very difficult to measure in a quantifiable manner. As such, this target will be replaced as part of the forthcoming major review of the RLTS. For the interim, the RLTS Annual Scorecard will use data that is currently available to comment on congestion issues within Greater Christchurch in a more generic manner – essentially, is congestion getting better or worse?

Whilst these are two distinct RLTS targets, they are discussed within one section of this Annual Scorecard – largely because the indicators used to understand the progress being made are the same ones for each target.

The monitoring programme has three indicators that provide an insight into traffic congestion within the Greater Christchurch urban area – the NZTA Travel Time Survey, the Environment Canterbury Opinions Monitor Survey and Average Daily Traffic (ADT) count data from Christchurch City Council¹ monitoring sites. Each of these is discussed in turn below.

Christchurch Travel Time Survey

This survey is undertaken by NZTA, in partnership with Environment Canterbury and Christchurch City Council, twice each year – in March and November. The latest available data set is for March 2010.

Two sets of the data from the Travel Time Survey are reproduced in this monitoring report:

- **Congestion Indicator** (CGI) – this compares observed travel time against the theoretical minimum that would be possible, if travelling, unimpeded by any delay (congestion related or intersection related) whatsoever, at the posted maximum speed. Over time, the CGI gives an indication as to whether journey times are becoming quicker or slower – the latter tending to indicate increasing delay associated with congestion.
- **Variability Indicator** (VTT) – as part of each survey, a number of distinct vehicle ‘runs’ are undertaken. The VTT measures how consistent travel times are. A high degree of travel time variability is often a good indicator of a congested network.

¹ Attempts have been made to source comparable data from Rangiora and Kaiapoi, but count site data series do not appear to show stable trends.

Figure 5.1 presents March data for the period 2006 to 2010 for the CGI in peak and interpeak periods within Greater Christchurch.

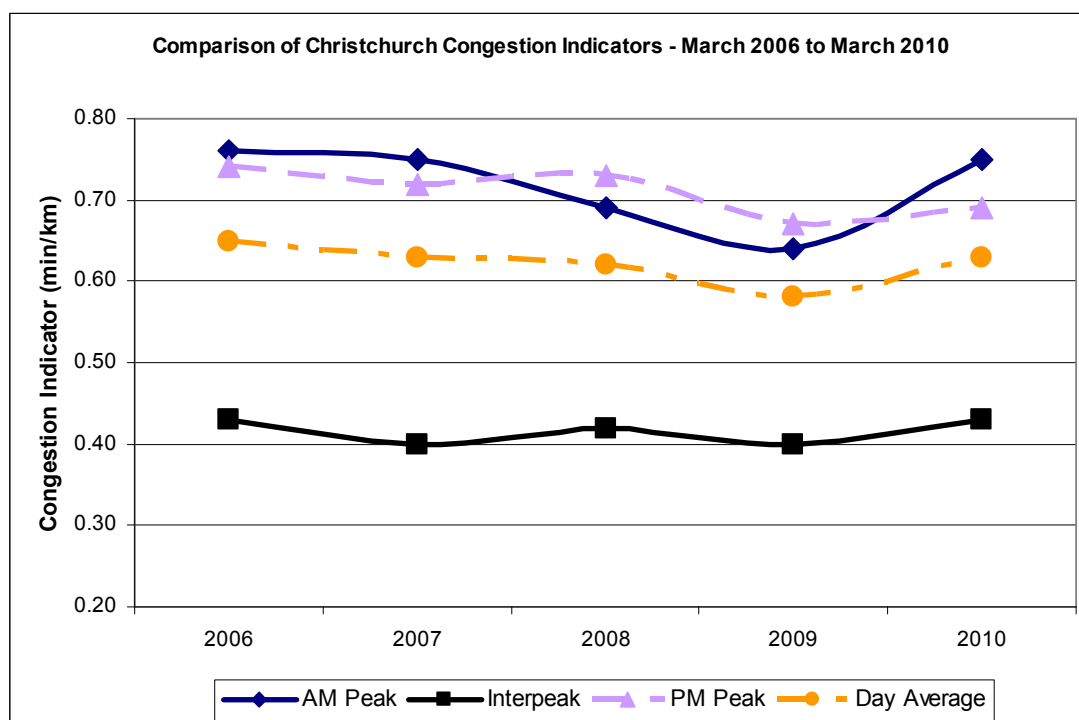


Figure 5.1: Trends in Christchurch Congestion Indicator – 2006 to 2010
Source: NZTA Travel Time Surveys

The CGI indicator can only ever be at zero if a given journey is undertaken at the posted speed limit – in other words, there is no slowing / stopping / accelerating from traffic signals or other intersections, and there is no other disruption to the trip speed. Clearly in any city, but particularly in one like Christchurch, with many urban arterial roads with large numbers of traffic signals, there is a base level of congestion given these impacts upon actual journey times. The inter-peak period in Christchurch is largely uncongested and this relatively stable travel time can be seen in Figure 5.1. This can be used as a baseline position for the overall network performance, ie a CGI value of around 0.4 is to be expected across the Christchurch road network, simply due to negotiating traffic management systems.

As congestion is more a phenomenon associated with peak period travel, the difference between the inter-peak CGI and peak period values gives a better indication of the impact of congestion on travel times – the traffic signals are the same ones, so the additional delay can be largely attributed to congestion. Figure 5.1 suggests that congestion improved in Christchurch over the three year period from March 2006 to March 2009, but has worsened during the last year. This apparent worsening of travel conditions is most noticeable in the morning peak period – where congestion levels have returned to that last seen in 2007. The 2010 survey report does caveat its findings in the sense that a number of the surveyed routes were negatively affected by roadworks during the survey period – future surveys will provide confirmation on whether the observed results are indicative of a change in trend, or a one off result.

Figure 5.2 presents a time series profile for travel time variability within Christchurch for the morning peak, interpeak and afternoon peak periods.

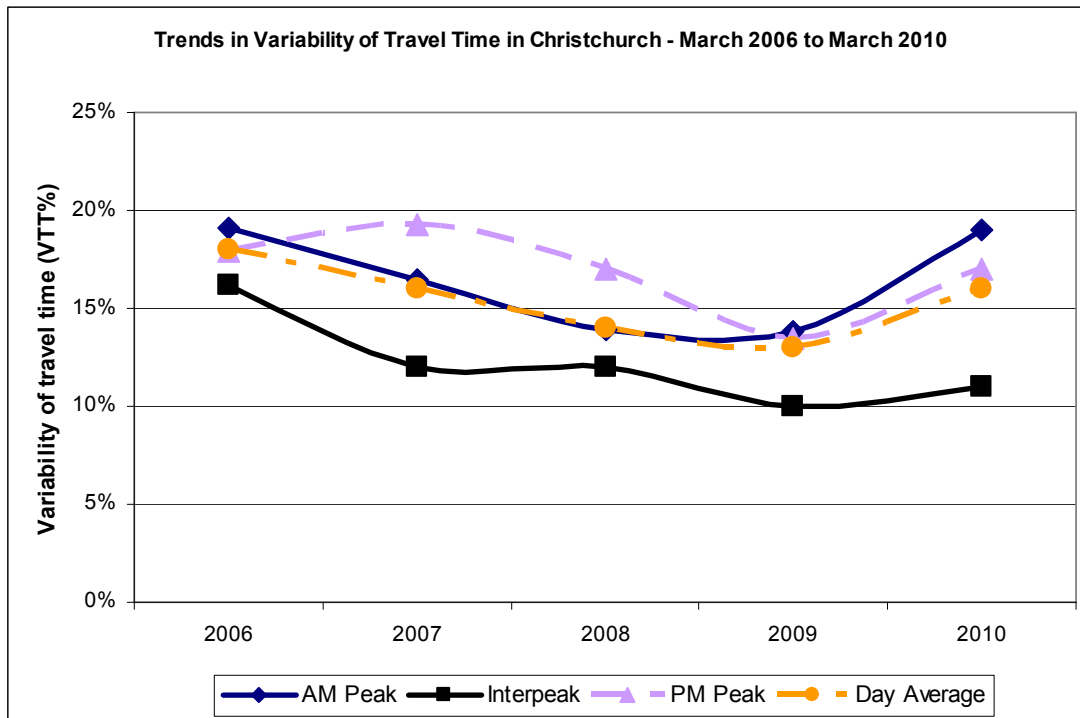


Figure 5.2: Trends in Christchurch Travel Time Variability – 2006 to 2010
Source: NZTA Travel Time Surveys

The variability data presented tends to mirror the CGI data reported in Figure 5.1 – the last year shows a marked worsening in travel variability in the peak periods. Perceptions of congestion and traffic count data (reported below) do not, however, support this observed pattern of data, so future surveys will be analysed to understand whether the March 2010 surveys were representative of actual congestion issues, or a one-off results adversely affected by roadworks during the survey week.

Perceptions of Congestion

The Environment Canterbury Opinions Monitor Survey asks 400 residents of Christchurch and 200 residents of the wider region the following question each year:

Thinking about travelling in and around Christchurch, for example by car, public transport, bicycle or on foot, how often does traffic congestion on Christchurch roads affect your travel?

Figure 5.3 shows how the response to this question has evolved since 2003.

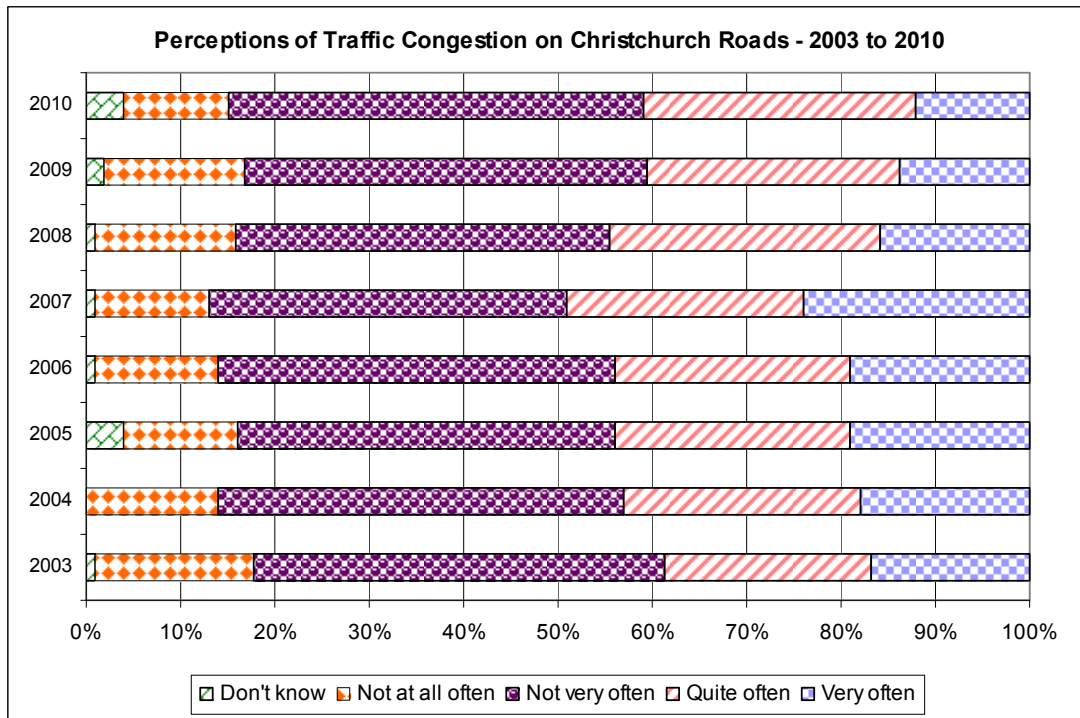


Figure 5.3: Perceptions of Traffic Congestion on Christchurch Roads – 2003 to 2010
Source: *Environment Canterbury Opinions Monitor Survey*

Whilst the proportion of respondents answering ‘quite often’ or ‘very often’ has remained in a broad band of between 40% and 50% over time, there has been a year on year decline since 2007.

For those that do report that traffic congestion in Christchurch affects them on a regular basis, Papanui Road and Riccarton Road are the two most frequently mentioned locations.

Average Daily Volumes

Figure 5.4 presents average daily traffic count data for a series of key locations around the city.

After the decline in volumes observed at most count sites during 2008, 2009 presents a more mixed picture of traffic levels – 3 locations (Northern Motorway, Riccarton Road – Newnham Terrace and Ferry Road) have experienced increases, whereas other locations are largely flat when compared to 2008.

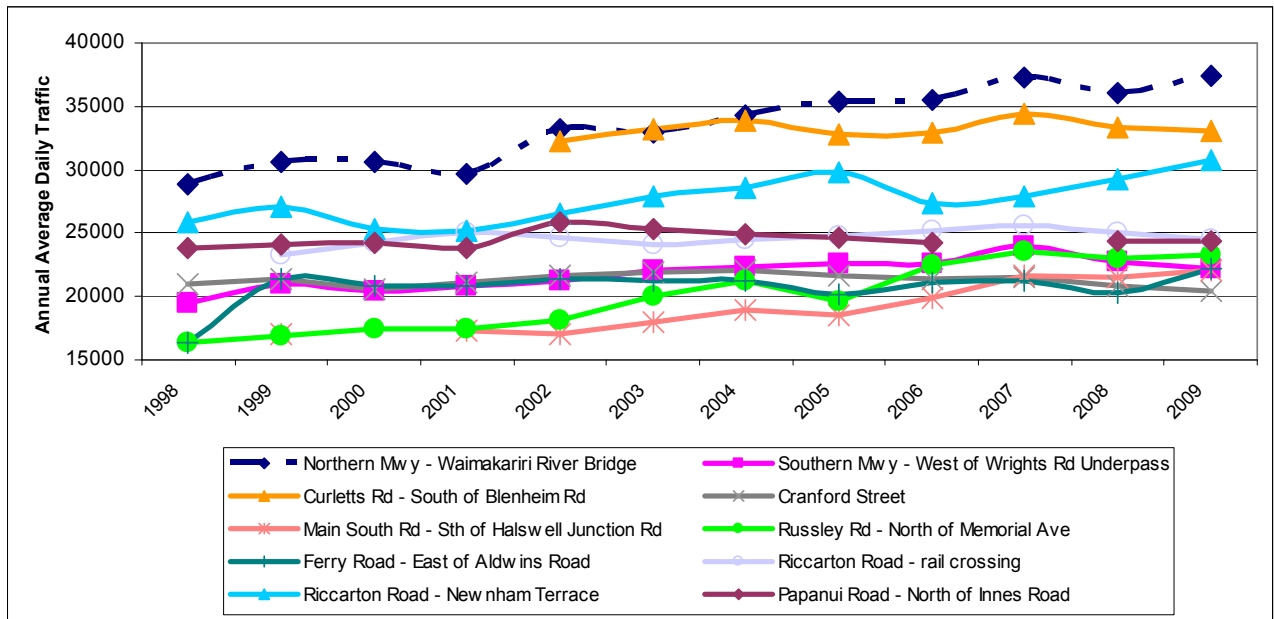



Figure 5.4: ADT counts at selected Christchurch locations
Source: NZTA and Christchurch City Council

Overall Summary

Despite the observed travel time survey results, the available evidence suggests that traffic growth within Greater Christchurch remained subdued during 2009/10. Whilst fuel prices were stable, they were stable at a relatively high level over the period. This, coupled with a continuation of a period of relatively subdued economic activity (borne out in the reduced fuel consumption data), has produced a largely unchanged congestion picture across the urban area.

Target: Increase proportion of all trips (excluding walking trips) made by cycle to 12%

 During 2009/10, the proportion of all trips (excluding walking trips) made by cycle was largely unchanged on 2008/09 – at under 3% of all trips made within the Greater Christchurch urban area.

Discussion

The 2009/10 mode share data from the MoT Household Travel Survey (HTS) largely confirms the 2008/09 share of all trip making, excluding walking trips, that are made by cycle within Greater Christchurch – 2.5% of trips in the 2008/09 survey, versus 2.7% in 2009/10. By historical standards, these percentages remain at very low levels, with little indication that significant change will occur without major changes in attitudes towards cycling.

Over half of Christchurch City residents who responded to the HTS in 2009/10 have not used a bicycle in the past 12 months – a figure that is also virtually unchanged on a year ago.

Target: Increase proportion of all trips (excluding walking trips) made by public transport to 6%



Overall public transport trip making within Greater Christchurch during 2009/10 was at broadly the same levels seen a year earlier, after several years of continuous growth. In terms of the share of all trips made within Greater Christchurch, public transport continues to attract between 3.5% and 4% of all trips, excluding walking trips. Trips by school age children contribute a significant share of all public transport trips.

Discussion

2009/10 is the first year since 2003/04 in which public transport patronage has not grown. Given the recovery in general traffic volumes noted in Figures 4.2 and 5.4, it would appear logical to conclude that the fuel spike related patronage gains that public transport enjoyed in 2008/09 have been tempered now that fuel prices have returned to generally lower and less volatile levels. Furthermore, 2009/10 did not see any major enhancements to service provision stemming from the service review process. Growth seen in past years can, to an extent, be attributed to the service review process – for example, the changes to the Northern Star service made in 2006 continued to boost patronage into the 2008/09 year.

Against this system-wide overall picture, good patronage growth and service reliability / journey time improvements have been witnessed on the Papanui Road / Main North Road corridor since the introduction of peak period bus priority measures. On average, since the introduction of the priority measures, buses are travelling between 2 and 3 minutes faster during peak period, with travel time reliability also noticeably improved².

Across the Greater Christchurch urban area, public transport takes around a 4% share of all trip making, with a slightly higher share within Christchurch City itself, where service provision is more extensive.

In terms of demographics, school age children are slightly more likely than other segments to use public transport, with the lowest intensity of public transport trip making amongst the over 65's.

² Data taken from an internal Environment Canterbury report that compares journey time data from November 2008 / February 2009 with November 2009 / February 2010.