# Strategic Assessment

# Christchurch City Council's Transport System

November 2015

VERSION 2.0

Strategic Assessment - Part A







# **EXECUTIVE SUMMARY**

This strategic assessment outlines the strategic context and case for change to ensure efficient, safe and efficient transport outcomes for Christchurch City Council's (CCC's) transport system.

The strategic assessment has been developed by key staff from CCC and with input provided by colleagues from the NZ Transport Agency (NZTA).

Independently facilitated Investment Logic Mapping (ILM) workshops were held on 28 September 2015 and 14 October 2015 with key project partners to form a consensus around the key problems and challenges facing CCC's transport system over the next ten years. Existing programmes and funded projects were an agreed and underlying assumption by all stakeholders participating in the ILM.

The project partners identified and agreed the following key problems:

Problem One: 60%

The current transport system and the way we operate it as a network does not offer viable modal choice resulting in a high number of journeys by private vehicle which is becoming increasingly detrimental to the environment and people's wellbeing and health.

Problem Two: 40%

Population and business changes (post-earthquake shift and growth) has put the network under pressure, resulting in road congestion and network delays.

The potential benefits that could be realised through successful investment to address the identified problems were agreed as follows:

Benefit One: People have easy access to liveable community amenity (40%)

Benefit Two: Better able to support economic growth activity (30%)

Benefit Three: People able to make safe, healthy travel choices (30%)

This strategic assessment has undertaken a review of the key transport problems and challenges that were identified in both the UDS and the CTSP, and a review of available evidence has confirmed that these key challenges remain current and relevant.

This assessment will be refined through the development of several 'Portfolio Cases'. These portfolio cases will be based on the GPS outcomes and will be used to inform a number of specific focus areas, where more detailed analysis of problems, benefits and objectives could be undertaken.

It is recommended that this report be accepted and that partners continue to work together to agree and identify the next steps, including the development of 'Portfolio Cases'.

# PART A – THE STRATEGIC ASSESSMENT

# **1. INTRODUCTION**

#### **1.1 Purpose**

This strategic assessment outlines the strategic context and case for change to ensure Christchurch City Council's (CCC's) transport system provides seamless, safe, accessible and efficient transport outcomes, to support the city's growth and community aspirations over the next ten years.

### **1.2 Introduction**

The purpose of this strategic assessment is to review the key problems and challenges that were identified in both the Urban Development Strategy 2007 (UDS) and the Christchurch Transport Strategic Plan 2012 (CTSP), to confirm that they remain current and relevant, particularly given the changes that have occurred in the post-earthquake environment.

The study area for this strategic assessment is the CCC boundary, with a focus on the CCC transport system. All modes of transport were considered when looking at the key challenges to achieving the vision of the CTSP of a seamless, safe, accessible and efficient transport system.

The outcome of this process will be used to help inform transport investment priorities for CCC's 2018-21 Long Term Plan, shape future programmes, and identify new strategic responses that may be required to address specific challenges where gaps currently exist.

The remainder of this document identifies the key problems or rationale for investment, outlines the potential benefits of investment, and provides the strategic context and fit for future investment.

# 2. PARTNERS AND KEY STAKEHOLDERS

Both CCC and NZ Transport Agency (NZTA) Planning and Investment staff contributed to Investment Logic Mapping (ILM) workshops. Please refer to **Appendix A** for the full Partner and Stakeholder List.

# **3. STRATEGIC ASSESSMENT**

### **3.1 Defining the Problem/Opportunity**

A facilitated ILM workshop was held on 28/09/2015 with key stakeholders to gain a better understanding of the key transport problems and challenges. The full ILM is attached at **Appendix B**.

During the ILM workshops the stakeholder panel identified and agreed two key transport problems. A snap shot of the existing evidence base to support each problem has been captured below each problem statement and confirms that the problems identified are valid. Further evidence has been taken from the technical appendices of the CTSP and is provided at **Appendix C and D**.

#### • Problem One (60%)

The current transport system and the way we operate it as a network does not offer viable modal choice resulting in a high number of journeys by private vehicle which, is becoming increasingly detrimental to the environment and people's wellbeing and health.

Under-developed and under-utilised public transport, walking and cycling networks have resulted in a high reliance on private vehicles and low levels of public transport patronage and walking and cycling. Private vehicles account for 83 per cent of trips to work in the Christchurch metropolitan urban area (public transport 3 per cent, walking 6 per cent and cycling 8 per cent)<sup>1</sup>.

The impact of Christchurch's reliance on the private vehicle threatens environmental outcomes and negatively impacts people's wellbeing and health. The Greater Christchurch area is reported to have the highest rate of car ownership in New Zealand<sup>III</sup> and unsurprisingly carbon dioxide emissions have increased by 43 per cent in the last 10 years<sup>III</sup>. CCC has adopted a target of reducing greenhouse gas emissions by 50 per cent by 2040 (based on 2008 levels) and the transport system contributes a large proportion of current emissions<sup>IVI</sup>.

Private vehicle use is exacerbated in parts of the city due to incomplete or inadequate alternative travel options. As an example, only 68 per cent of households within the Greater Christchurch urban area are located within 500m of a bus route<sup>v</sup>. For many residents the private vehicle is the only viable option. Creating safe, healthy and liveable communities is a key goal of the CTSP, however, currently only 39 per cent of residents are active every day<sup>vi</sup>, despite 40 per cent of trips being less than 2km in length, making these trips ideal for walking or cycling<sup>vii</sup>.

Recent investments to the cycle and public transport networks are already making a difference to modal choice and wider strategic outcomes, such as the opening of the first of the Major Cycleways on Matai Street East. The opening of the new Central City Bus Interchange has also improved the customer experience and it is estimated that 70,000 people will pass through the Interchange each day by 2041<sup>viii</sup>.

In developing strategic responses it is important to consider the wider barriers to the uptake of public transport, walking and cycling. Research suggests that a multitude of factors affect travel behaviour, including social-norms and perceptions. For example, public transport users are often categorised as being from low income groups or elderly, whereas travelling by car is often associated with success and cycling is often perceived as unsafe. Strategic responses therefore need to consider interventions to address perceptions alongside physical interventions.

#### • Problem Two (40%)

Population and business changes (post-earthquake shift and growth) has put the network under pressure, resulting in road congestion and network delays.

The Canterbury earthquakes have caused significant disruption to business and residential areas in Christchurch and surrounding districts. Christchurch city has seen significant population movement, particularly away from the eastern suburbs and the city centre towards the north and southwest and into neighbouring districts. The current and ongoing land use shift has implications for how close people are to employment opportunities, social facilities, entertainment and recreation and as a result has a significant impact on the local and regional transport network<sup>ix</sup>.

The population of Greater Christchurch (476,900) is already above pre-earthquake levels (464,900), and is estimated to increase further by 2018 (498,400)<sup>x</sup>. Christchurch's population growth is resulting in an increase in demand for travel due to the high number of people from the surrounding districts that commute daily to the city, which is putting increased pressure on the transport system. It is important to note that the city is still in a recovery phase, which is affecting the operation of the

transport network as repairs are undertaken and this contributes to disruption and delays to the transport system. It is unclear if delays and disruption are temporary or if they will continue post recovery. Further background information to support these problem statements is provided at **Appendices C and D**.

### **3.2 Benefits of Investment**

The potential benefits of successfully addressing these problems were identified as part of a second facilitated investment logic mapping held on 14/10/2015. The full Benefit Map is attached at **Appendix E**. The stakeholder panel identified and agreed the following benefits:

- Benefit one: People have easy access to liveable community amenity (40%)
- Benefit two: Better able to support economic growth activity (30%)
- Benefit three: People able to make safe, healthy travel choices (30%)

#### 3.3 The Key Performance Indicators

Potential Key Performance Indicators (KPI's) are summarised below and included in the Benefit Map attached at **Appendix E** (note some of the individual KPI's cover multiple benefits).

- Benefit one: People have easy access to liveable community amenity
  - Travel time delay by mode
  - o Reliability actual public transport journey times
  - Travel time by mode
  - Throughput people by mode
  - Throughput freight weight by mode
  - Energy is used more efficiently
- Benefit two: Better able to support economic growth activity
  - o Reliability actual public transport journey times
  - Customer experience feedback
  - Spatial coverage
- Benefit three: People able to make safe, healthy travel choices
  - Decreased pollution
  - Increase community cohesion
  - Increase physical activity
  - Ease of cycling perceived
  - o KiwiRoad Assessment rating

These KPI's will be reviewed and refined in each programme business case, and it is likely that further targets specific to each investment proposal will be recommended.

A review of existing datasets will be undertaken to confirm the suitability of these KPI's and to identify any gaps that may exist in current monitoring and reporting frameworks.

# 4. STRATEGIC CONTEXT

#### 4.1 Organisational Overview

**Appendix F** illustrates how investment in the CCC transport system aligns with existing partner and stakeholder strategies and organisational goals. In summary, this high level strategic assessment aligns with relevant national, regional and local strategic priorities and objectives.

Several organisations are responsible for both the provision and funding of different components of Christchurch's transport system using a 'one network' approach. CCC is responsible for the majority of the transport system, including local roads and the infrastructure associated with them (footpaths, cycleways, bridges, etc.), provision of parking and bus stops, road safety planning and engineering, traffic signals, and land use planning.

Environment Canterbury as the Regional Council is responsible for the provision of public transport services, the Regional Land Transport Programme, while the NZ Transport Agency manages the State Highway network and associated infrastructure such as State Highway intersections and cycleways. KiwiRail own and operate the rail system through Christchurch (largely freight only rail services).

A range of community organisations, volunteer interest groups, institutions and private landowners also influence the nature of Christchurch's transport system. Such stakeholders have a variety of different mandates, objectives and priorities, which can be complimentary to, or in conflict with, the priorities of the CCC, other organisations or the wider community.

Achieving a fully integrated system can be difficult in this multi-agency environment. Despite this challenge, CCC continues to work in constructive partnerships with these agencies and organisations toward delivering an efficient, safe and effective transport system.

### 4.2 Anticipated Strategic Fit and Effectiveness

An assessment of the anticipated Strategic Fit has been undertaken in accordance with the NZTA Investment Assessment Framework for the Transport Planning Activity Class and is provided at **Appendix G**. It has been determined that this strategic assessment has a high level of strategic fit. An assessment of effectiveness is also provided at **Appendix G**.

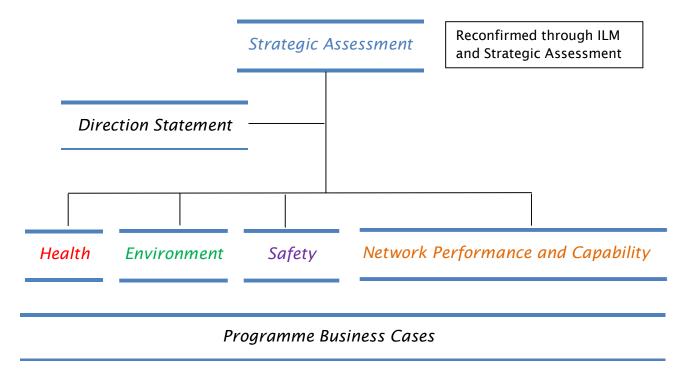
# 5. CONCLUSIONS AND NEXT STEPS

This strategic assessment has undertaken a review of the key transport problems and challenges that were identified in both the UDS and the CTSP, and a review of available evidence has confirmed that these key challenges remain current and relevant (as highlighted in **Appendix H**).

It is recommended that this overarching strategic assessment is refined through the development of several 'Portfolio Cases'. These portfolio cases will be based on the GPS outcomes and will be used to inform a number of specific focus areas, where more detailed analysis of problems, benefits and objectives could be undertaken.

The diagram below shows the relationship between this strategic assessment and the proposed 'Portfolio Cases'.





### 5.1 Direction Statement

The direction is required to set the strategic intent of all modes across the CCC transport system for the other portfolio cases. This brief document will set the aspirational aim of the role that all modes play in the future for the transport system. It also includes a summary of how transport and land use integration is important to realise spatial, economic, social and environmental benefits. This document will summarise the strategic direction that is set out in the CTSP.

### 5.2 Potential Portfolios

CCC will identify and confirm the proposed portfolio cases following the project partner meeting on 2 November. Potentially these portfolios could reflect the five GPS outcome classes of health, safety, cost, network performance and capability and environment.

All subsequent programme business cases would then link to relevant portfolio cases. As an example the walking and cycling programme business case would likely link to all of the portfolio cases, whereas a maintenance programme business case may link solely to the network performance and capability portfolio. CCC is keen to progress this work and intends to complete the mode direction statement and portfolio business cases within the next two/three months.

### 5.3 Recommendations

It is recommended that:

- i. This Strategic Assessment be accepted; and that
- ii. Project partners from NZTA and CCC continue to work together to agree and identify the next steps, including the development of 'Portfolio Cases'.

# **APPENDIX A - PARTNER AND STAKEHOLDER LIST**

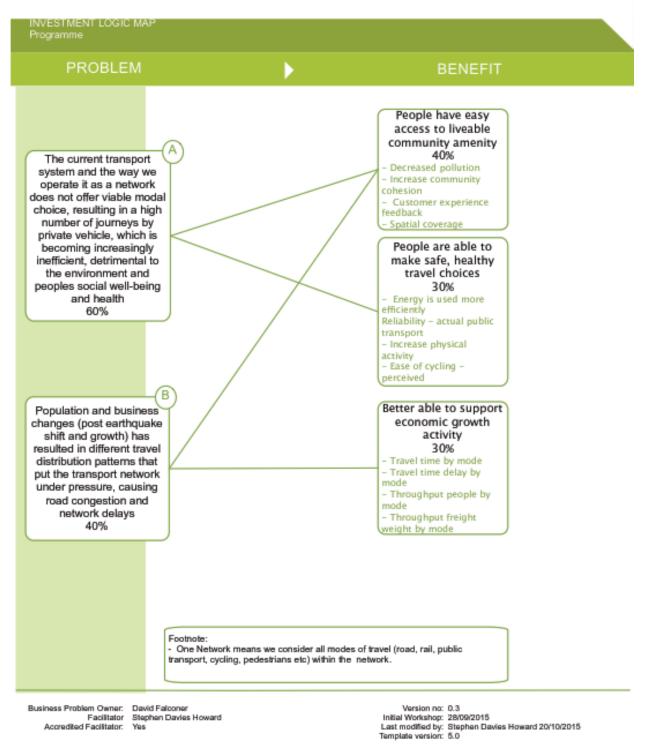
Name	Organisation and Position	Input to Strategic Assessment
Stephen Davies-Howard	Davies Howard Group	Accredited ILM Facilitator
Rae-Anne Kurucz	CCC, Team Leader Transport Strategy and Planning	ILM session 2
David Falconer	CCC, Senior Transport Policy Planner	ILM session 1 and 2
Andrew Smith	CCC, Transport Policy Planner	ILM session 1 and 2
Paul Burden	CCC, Acting Unit Mgr. Transport and City Streets	ILM session 1 and 2
Adam Taylor	CCC, Senior Transport Planner	ILM session 1 and 2
Michael Jacobson	CCC, Asset Engineer	ILM session 1 and 2
Richard Holland	CCC, Tm. Leader Transport Planning	Project partner
David Boothway	CCC, Planning Manager	ILM session 2
Steve Higgs	NZTA, Planning and Investment	ILM session 1
Caroline Hutchinson	NZTA, Planning and Investment	ILM session 2

# **APPENDIX B - INVESTMENT LOGIC MAP**

#### Christchurch City Council



### Christchurch City Council - Transport Plan

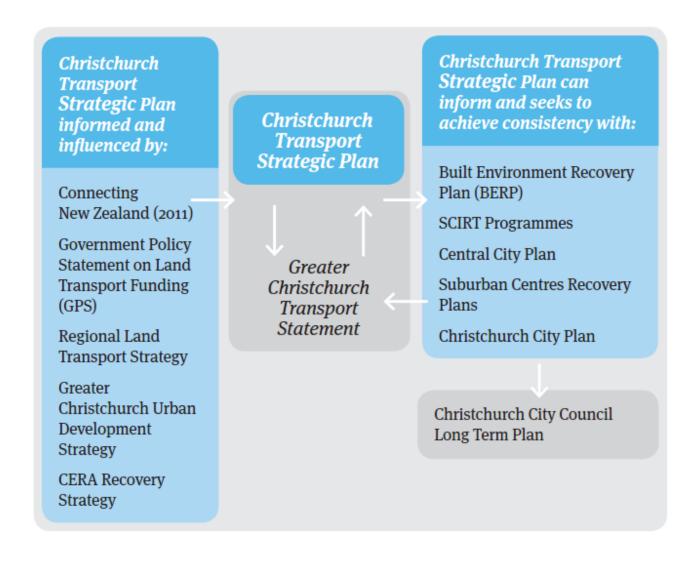


# **APPENDIX C – CTSP TECHNICAL APPENDICES**

A web link is provided below to the Technical Appendices of the CTSP.

http://www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Strategies/ChchTransportPlan2012Appendices.pdf

#### Strategic Context (Page 11 of CTSP)



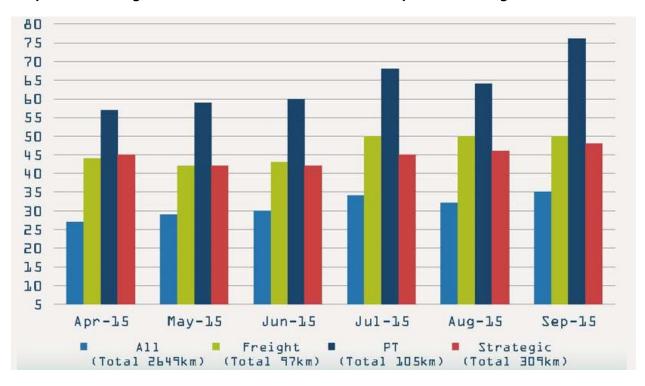
# **APPENDIX D – BACKGROUND INFORMATION**

Canterbury generates about 12 per cent of the national GDP and Christchurch is a key strategic node in the national transport network<sup>xi</sup>. Christchurch airport and seaport are the busiest in the South Island and play a major role in getting goods to market and as a gateway to the South Island. The handling of containerised cargo at Lyttleton Port has increased by 38 per cent between 2010 and 2015<sup>xii</sup>.

#### Traffic Changes

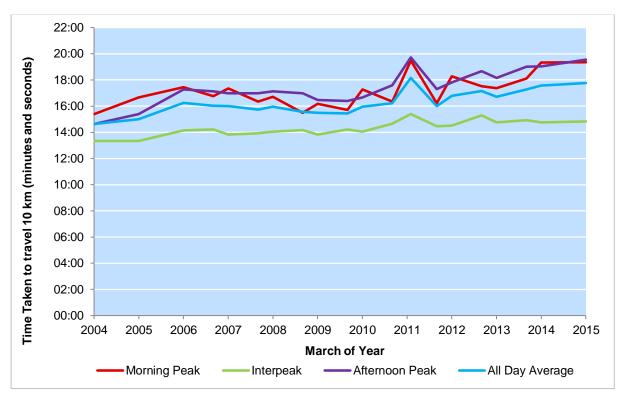
- There was a 32.2 percent increase in the number of people commuting into Christchurch city to work from Hurunui district, Waimakariri district, Selwyn district, and Ashburton district.
- In 2013, 13.4 percent of the Christchurch city workforce (23,166 people) commuted to work from surrounding districts up from 17,526 (10.7 percent) in 2006.
- In 2013, there was an increase in the number of people commuting into Christchurch city since 2006 from:
  - Selwyn district up 11,169 people (44.0 percent)
  - Waimakariri district up 10,728 people (20.1 percent).

The graph below shows the percentage of the network affected by road works has increased over time and is at its highest level since records started in November 2013.



#### Graph 1: Percentage of Kilometres of Network Affected by Traffic Management Plans

Population growth and changes post-earthquake has resulted in increasing travel times on some corridors, which subsequently impacts on economic productivity and quality of life. Future projections suggest that travel times and network delays will worsen as Christchurch grows, especially for trips to and from the City Centre. Graph 2 highlights the average time taken to travel 10 km and indicates how average travel times have increased for all periods that are monitored since 2004.



Graph 2: Average travel times by time of day (CCC road network)xiii

Figure 1 shows the movement of population away from Christchurch's eastern suburbs toward the north, west and south-west.

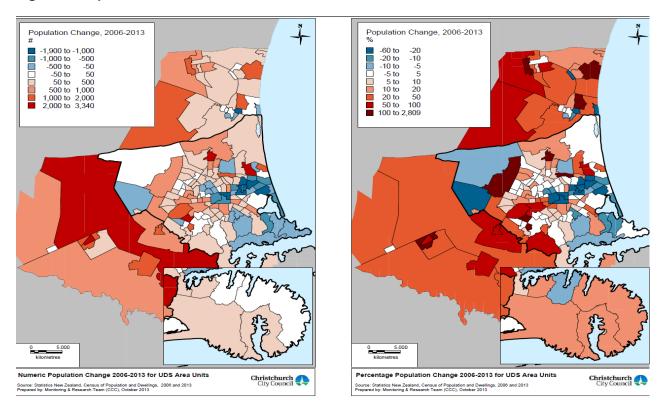


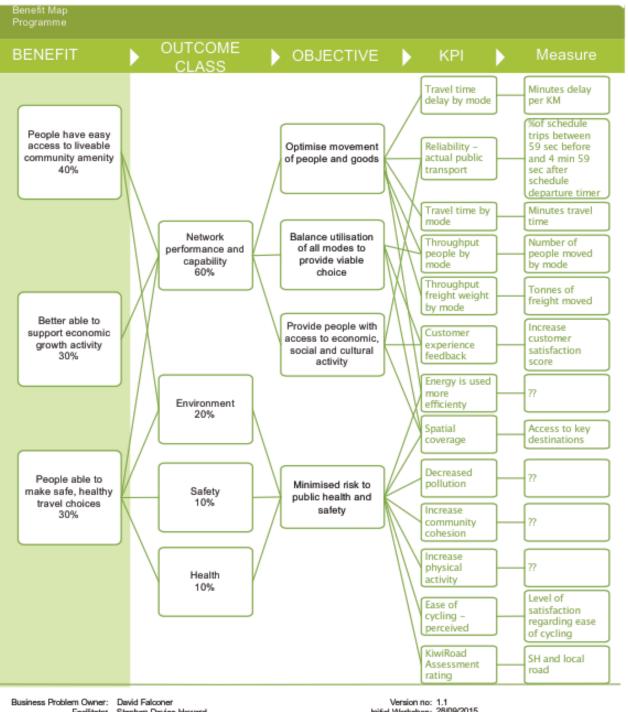
Figure 1: Population movement in Greater Christchurch between 2006 and 2013 censusesxiv

# **APPENDIX E - BENEFITS MAP**

**Christchurch City Council** 



# Christchurch City Council - Transport Plan



Facilitator Stephen Davies Howard Accredited Facilitator: Yes Version no: 1.1 Inifial Workshop: 28/09/2015 Last modified by: Stephen Davies Howard 21/10/2015 Template version: 5.0

# APPENDIX F - ALIGNMENT TO PARTNER AND STAKEHOLDER STRATEGIES

Strategic Document	Organisation	Targets/directives/impacts and priorities
Land Transport Management Act 2003 (LTMA) updated 2013	NZ Government, Minister of Transport	The LTMA provides the legal framework for managing and funding land transport activities. The framework channels around \$3 billion of central government funding annually into roading, public transport and traffic safety.
		The aim of the LTMA is to:
		"Achieve an affordable, integrated, safe, responsive and sustainable land transport system".
		The act:
		- Provides an integrated approach to land transport funding and management that take into account the views of affected communities.
		- Improves social and environmental responsibility in land transport funding, planning and management.
		- Ensures options and alternatives are given full consideration at an early stage in the development of programmes.
		- Improves long term planning and investment in land transport.
		- Ensures that land transport funding is allocated in an efficient and effective manner.
		- Improves the flexibility of land transport funding by providing for alternative funding mechanisms.
		The act also defines the function and roles of regional councils, CCC's Infrastructure. Transport and Environment (ITE) committee.
Government Policy Statement on Land	NZ Government, Minister of	The national strategic direction for land transport is as follows:
2015/16 - 2024/25		- To drive improved performance from the land transport system by focussing on:
		<ul> <li>Economic growth and productivity</li> <li>Road safety</li> <li>Value for money</li> </ul>
		This strategic direction has been informed by the Government's national policy priorities. These are:
		- Building a more competitive and productive economy

		- Rebuilding Christchurch
		- Delivering better public services within tight financial constraints
		- Responsibly managing the Government's finances.
		To support economic growth and productivity the government is continuing investment in Roads of National Significance (the RoNS) programme, providing additional capacity through more transport choice (for example public transport) and improvements in Christchurch. This investment is significant and managing the local road network is an important component of maximising the return on investment on RoNS.
		Effective and efficient freight movement is also highlighted as critical to the economic health of New Zealand. Christchurch airport and seaport are the busiest in the South Island and play a major role in getting goods to market and as a gateway to the South Island.
		The GPS recognises that great access underpins all successful cities. Addressing current constraints and forecast demand will require the use of all available transport tools.
		The GPS notes that Canterbury traffic patterns have been significantly affected by land use changes following the earthquakes, with a substantial shift of traffic to the periphery of Christchurch. This has produced pressures on the network, some of which will be mitigated by a combination of the Christchurch RoNS investment and the re-opening of the Central Business District.
		However, there is substantial uncertainty around the speed and scale of further changes to the distribution of Christchurch traffic. The long term impacts of changed land use patterns will become clearer over the next 3 years. Additional measures to address network capacity may well prove necessary over time.
Canterbury Regional Land	Canterbury Regional	The regional vision for transport is included in the RLTS:
Transport Strategy 2012 - 2042	Transport Committee	"Canterbury has an accessible, affordable, integrated, safe, resilient and sustainable transport system".
	(Ecan)	The vision is supported by five high level objectives to:
		- Ensure a resilient, environmentally sustainable and integrated transport system
		- Increase transport safety for all users
		- Protect and promote public health
		- Assist economic development

		- Improve levels of accessibility for all
		The strategy recognises the use of private vehicles is the dominant mode of transport for many people in Canterbury. However, the strategic direction over the medium to long term. Particularly in urban areas, is for the region to move to a more multi-modal transport system where the appropriate roles of each mode are used to their best advantage.
		The RLTS notes that to achieve the regional outcomes over the next 30 years, a shift in the balance of transport investment is required. A more multi-modal approach will shift investment away from providing additional road capacity towards active management of the road network to optimise its use.
		In Greater Christchurch the focus of the strategy is on improving transport options and promoting a multi-modal approach to meeting transport needs. Walking, cycling and public transport all require greater funding and planning support over the period of the strategy if this is to be achieved.
		In the short-term, planned road capacity improvements on the State Highway network will be completed, catering for much of the proposed growth in traffic congestion over the period of the strategy.
		In the medium to long term a more balanced approach is promoted to ensure freight can be efficiently transported into and around the city on the expanded road network. More efficient use of transport corridors through the city needs to be achieved to maintain community access.
Greater Christchurch Transport Statement 2012	UDS Partners (CCC, Ecan, Selwyn, Waimakariri, NZTA, CERA,	The GCTS provides an overarching framework to enable a consistent, integrated approach to planning, prioritising, implementing and managing the transport network and services in the Greater Christchurch area.
	MoT, LPC,	The aim is:
	KiwiRail, Christchurch Int. Airport)	"The transport system will support economic and social well-being by connecting people, goods and services with places, while minimising the environmental impacts and creating liveable communities".
		The GCTS outlines eight overarching objectives:
		- Integrate land-use activities with transport solutions, enabling ease of movement between places.
		- Optimise the use of existing transport assets through managing travel demand and networks
		- Provide safe, efficient and resilient links to connect people and places

		<ul> <li>Ensure efficient and predictable travel time between key places</li> <li>Provide more options for people to walk, cycle and use public transport</li> <li>Minimise the severity and social cost of crashes</li> <li>Improve personal security</li> <li>Support place-making and 'active travel' and public transport, reducing emissions and improving public and environmental health.</li> <li>The strategy highlights a number of top priorities which have been grouped as follows:</li> <li>Port Access: port repair and development, potential freight corridor and access to rail yards.</li> <li>Public transport: develop public transport interchanges, priority measures and protect future options.</li> <li>Western Corridor/Airport: airport access, inter-modal road/rail facilities and future freight opportunities.</li> <li>North/South Access and Growth: future growth areas access.</li> <li>Central City: integration with wider strategic networks and develop transport system to support the Christchurch Central Recovery Plan.</li> </ul>
Christchurch Transport Strategic Plan (2012)	Christchurch City Council	<ul> <li>The CTSP is a non-statutory plan that provides strategic direction for local transport policy in relation to relevant statutory plans.</li> <li>The vision is:</li> <li>"To keep Christchurch moving forward by providing transport choices to connect people and places".</li> <li>The plan recognises that there are many challenges facing the transport system in Christchurch ranging from congestion, changing travel patterns to changing demographics and environmental issues.</li> <li>To achieve the vision and address these challenges the CTSP focuses on four goals:</li> <li>Improve access and choice</li> <li>Delivering resilient transport networks with an emphasis on efficient road use, public transport walking and making Christchurch a cycle city.</li> <li>Create safe, healthy and liveable communities</li> </ul>

<ul> <li>Adopting a safer systems approach. Transport actions which support the recovery of the Central City, suburban centres and new growth areas. Strengthening the integration of land use and transport planning through District Plan changes.</li> <li>Support economic vitality</li> <li>Developing local freight routes to improve access to Christchurch airport, Lyttleton Port and freight hubs. Parking and congestion management to support the growth of commercial centres.</li> <li>Create opportunities for environmental enhancements</li> <li>Building green infrastructure and adapting to climate change and peak oil by encouraging new technology and infrastructure enhancements.</li> <li>To successfully deliver each of the four goals, the plan identifies a range of actions to be delivered during the next 30 years, moving from recovery through transition to achieving the vision.</li> </ul>
involvement and collaboration with the Urban Development Strategy partners, central government, technical experts and others as well as public consultation.

## APPENDIX G - ANTICIPATED STRATEGIC FIT AND EFFECTIVENESS

Strategic Fit	Investment Assessment Framework	CCC Strategic Assessment/Investment
HIGH	<ul> <li>Transport Planning Activity Class</li> <li>Meets all of the medium rating requirements for transport planning.</li> <li>Also meets majority of requirements for high rating as follows:</li> <li>Makes improvements to whole-of-network, long-term local, regional and national planning in response to significant changes in actual or predicted transport demand or performance, and their drivers such as changes in industry, population, technology, energy and climate.</li> <li>Easing of severe congestion</li> <li>Optimised levels of service, operation and management of networks</li> <li>Journey time reliability</li> </ul>	The Christchurch Transport Strategy Plan and this Strategic Assessment both seek to ensure that transport investment in Christchurch is appropriately prioritised to deliver timely enhancements and changes to all networks; providing more attractive and safe transport choices for people of all ages and abilities. Increasing modal choices and integration between modes will make the transport system more resilient and enable CCC to maintain good journey times and target congestion hot spots. Christchurch will have an efficient, integrated transport system offering accessible travel choices for everyone. The system will create vibrant commercial centres and thriving communities, connected by safe, resilient, affordable, healthy and sustainable transport networks.

Component	Explanation	Rating
Outcomes Focused	The degree to which the problem, issue or opportunity, supported by evidence, is significant enough to warrant further development.	Н
	Consistency with levels of service in an appropriate classification system.	М
Integrated	Consistency with the current network and future transport plans.	н
	Consistency with other current and future activities.	Н
	Consistency with current and future land use planning.	н
	Accommodates different needs across modes.	н
	Involvement of, or consultation with, appropriate stakeholders in developing strategic case.	М
Correctly Scoped	The degree of fit as part of an agreed strategy or business case.	Н

	Funding application is tailored to relative size, impacts and complexity, and confirms the problem.	н
	Is of an appropriate scale in relation to the issue/opportunity.	н
	Covers and/or manages the spatial impact (upstream and downstream, network impacts).	н
	Mitigates any adverse impacts on other results.	Н
Affordable	Is affordable through the lifecycle for all parties.	Н
	Has understood and traded off the best whole of life cost approach.	Н
	Has understood the benefits and costs between transport users and other parties and sought contributions as possible.	М
Timely	Delivers enduring benefits over the timeframe identified in the justified strategy or business case.	Н
	Provides the benefits in a timely manner.	Н
	There is demonstrated urgency in the need to provide a solution to the problem, issue or opportunity	Н
Confidence	Manages current and future risk for results/outcomes.	Н
	Manages data deficiency risks and identifies information gaps that will need to be addressed in the next business case.	н
Overall	Assessment based on lowest rating of all components.	М

# **APPENDIX H - STRATEGIC ALIGNMENT**

CTSP Challenges	ILM Problems
Congestion	Problem one
Travel patterns	The current transport system and the way we operate it as a network does not offer viable
Earthquake damage, recovery, resilience	modal choice, resulting in a high number of journeys by private vehicle, which is becoming
Household/business relocation & growth	increasingly inefficient, detrimental to the environment and peoples social well-being and
Managing growth - long term land use	health.
Changing demographics	<u>Problem two</u>
Safety for all road users	Population and business changes (post- earthquake shift and growth) has resulted in
Growth in freight demand	different travel distribution patters that put the transport network under pressure, causing road
Health and wellbeing	congestion and network delays.
Environment	
Climate change	
Peak oil	

CTSP Goals	ILM Benefits
Improve access and choice	People have access to liveable community amenity
Create safe, healthy and liveable communities	People are able to make safe, healthy travel choices
Support economic vitality	Better able to support economic growth activity
Create opportunities for environmental enhancements	

# REFERENCES

<sup>1</sup> New Zealand Household Travel Survey, data available at: <u>www.nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7432</u>

<sup>#</sup> Greater Christchurch Urban Development Strategy, quote taken from: <u>www.greaterchristchurch.org.nz/Background/TrendsAndIssues/Transport/</u>

<sup>III</sup> Greater Christchurch Urban Development Strategy, emissions data taken from: <u>www.greaterchristchurch.org.nz/Background/TrendsAndIssues/Transport/</u>

<sup>iv</sup> Christchurch City Council Climate Smart Strategy 2010-2025, available at: <u>www.ccc.govt.nz/the-</u> <u>council/plans-strategies-policies-and-bylaws/strategies/climate-smart-strategy/</u>

\* Access to a PT route, data provided by Len Fleete Environment Canterbury, email dated11.09.2015

<sup>vi</sup> Christchurch Transport Strategic Plan, page 19, available at: <u>www.ccc.govt.nz/the-council/plans-</u> <u>strategies-policies-and-bylaws/strategies/transport-strategic-plan-2012/</u>

vii Christchurch Transport Strategic Plan, page 16, see above web link.

viii New bus interchange: Christchurch Central Development Unit, quote taken from: <u>www.ccdu.govt.nz/projects-and-precincts/bus-interchange</u>

<sup>ix</sup> Land Use Recovery Plan, page 12, available at: <u>www.cera.govt.nz/recovery-strategy/built-</u> <u>environment/land-use-recovery-plan</u>

\* Population figures from Statistics New Zealand, available at: <u>www.stats.govt.nz/browse\_for\_stats/population/estimates\_and\_projections/SubnationalPopulationEst</u> <u>imates\_HOTPAt30Jun15.aspx</u>

<sup>xi</sup> Christchurch Central Recovery Plan, page 3, available at: <u>www.ccdu.govt.nz/the-plan</u>

<sup>xii</sup> Freight growth calculated from Lyttleton Port Annual Reports, available at: <u>www.lpc.co.nz/News-</u> <u>Room/Annual-Reports.jasc</u>

xiii Graph based on data provided by David Price, CCC Monitoring and Research Team, October 2015

<sup>xiv</sup> Maps based on data collected by Statistics New Zealand, Census of Population and Dwellings, 2006 and 2014, maps prepared by CCC Monitoring and Research Team, October 2013