Canterbury
Regional
Transport
Committee

Canterbury Regional Land Transport Strategy

2012 - 2042

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Foreword

Canterbury is the largest region in New Zealand. It has a diverse geographical environment from the Eastern coast of the South Island to the main divide in the Southern Alps and from the Kaikoura coast in the North to the Waitaki in the South. Canterbury's prosperity and quality of life depends on a land transport network that meets the needs of all the region's communities from the large urban population in Greater Christchurch to remote rural areas.

Primary industry drives much of the region's economy and so effective linkages between the region's producers and international markets are critical to the region's economic wellbeing. The tourism, manufacturing and service industries in Canterbury also depend on high quality transport links. Canterbury's significant contribution to the nation's economy means that a good land transport system in Canterbury is of national importance.

There are many challenges facing the region over the next thirty years. Over the next few decades the region will see demographic and technological changes. Oil supply security and fuel price volatility have also been identified as challenges the region needs to prepare for. The land transport system needs to be able to adapt to meet our changing needs while supporting the region's economy and improving access in an affordable way.

The Canterbury Regional Transport Committee has prepared this strategy identify a combination of interventions that will meet these challenges. The strategy seeks to transition over time towards a multi-modal transport system that gives people greater choice, supported by land use patterns that make transport accessible and affordable. The strategy seeks to enable people to choose efficient travel options by employing a mix of infrastructure and service interventions, public education and price signals.

The strategy reflects the limitations on the funding that is available for land transport and therefore concentrates on delivering a more flexible transport system by reallocating spending over the life of the strategy. This means that maintaining, protecting and making the best use of the region's transport network is its first priority. The strategy initially concentrates on delivering agreed strategic infrastructure projects and then later promotes a shift in investment to facilitate a greater range of travel choices over time, whilst maintaining essential infrastructure for economic activities.

The recent earthquakes present an additional challenge for the region. They have caused significant damage to parts of the transport network and have changed travel patterns, particularly within Greater Christchurch. Clearly there is much work to be done to repair the damage but despite their impact, the effects of the earthquakes don't change the need to set out long term goals for the region's land transport system. In fact, opportunities may be taken to improve the transport network within the region during the rebuild process that assist in meeting some of the objectives of this strategy.

I believe this strategy is capable of delivering the identified outcomes for our regional transport system in the years ahead.

Commissioner Rex Williams

Chair Canterbury Regional
Transport Committee
Environment Canterbury

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The Canterbury Regional Land Transport Strategy 2012-2042 has been prepared under the Land Transport Management Act 2003 by the Canterbury Regional Transport Committee on behalf of the Canterbury Regional Council.

Regional Issues and Challenges

The issues and challenges that the RLTS seeks to address in Canterbury are:

- Maintaining and enhancing accessibility
- Providing transport options
- Supporting freight, tourism and the economy
- Funding and affordability
- Managing private vehicle traffic growth
- Improving road safety for all road users
- Managing the negative impacts and supporting the positive impacts of transport on health
- Managing the environmental impacts of transport
- Network security
- Meeting the transport needs of dispersed communities
- Oil supply security and fuel price volatility
- Managing the transport impacts of anticipated population change
- Uncertainties about international technology trends
- Earthquake recovery.

Many of these issues and challenges are interrelated. Further detail on the issues and challenges are provided in Appendix D

Vision

Canterbury has an accessible, affordable, integrated, safe, resilient and sustainable transport system.

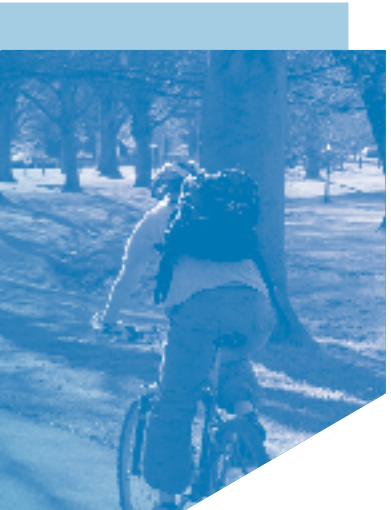
Vision
A description of where the region wishes to head and what the end-state transport system will look like.

Objectives
These describe, in high level terms, what the region will focus on over the next 30 years to achieve the vision.

Outcomes
More detailed descriptions of how the region intends to achieve the objectives.

Targets
Describe how progress towards the outcomes will be measured within the region.

Objectives



The vision is supported by 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.

Regional Transport Outcomes

To deliver on the objectives a set of regional transport outcomes has been identified. The table below lists the outcomes and shows how they relate to the objectives. The outcomes are detailed in Appendix F.

Outcomes	Objectives: Resilient, environmentally sustainable & integrated	Safe for all users	Public health	Economic development	Accessibility
Reduced greenhouse gas emissions from use of the domestic transport system.	primary		secondary		
Improved resilience of the transport network to infrastructure damage or emergencies.	primary	secondary		secondary	secondary
Improved resilience of the transport system to external changes.	primary	secondary		secondary	secondary
Improved land use and transport integration.	primary	secondary	secondary	secondary	secondary
Reduction in fatal and serious injuries for all modes.		primary	primary	secondary	
Improved personal safety and reduced security risks to all transport users.		primary	primary		secondary
Improved health from increase in time spent travelling by active means.	secondary		primary	secondary	
Increased proportion of the population travelling by active means.	secondary		primary		secondary
Reduced community exposure to vehicle pollutants, noise and vibration.	secondary		primary		
Improved journey time reliability on the strategic transport network.				primary	
Increased energy efficiency per trip.	primary		secondary	primary	
Regional and inter-regional journey time reliability on key freight routes is maintained.				primary	
Freight hubs are protected and maintained.	secondary			primary	
Connectedness is enhanced.	secondary	secondary	secondary	secondary	primary
Increased travel choices for households to access urban and suburban centres.	secondary	secondary		secondary	primary
Improved mobility for the transport disadvantaged.			secondary	secondary	primary

Key
- primary relationship
- secondary relationship
- minor relationship

Targets

The table below shows the targets that the RLTS seeks to achieve over the 30-year lifespan of the strategy. Interim targets have also been set to provide a focus for short to medium term efforts (during the 12 years to 2024).

For some outcomes, it has not been possible to obtain the information needed to allow the setting of measurable targets. Performance indicators will be used to track progress across the strategy's full range of outcomes so that policy and implementation can be adjusted in the future if progress is not being made. Appendix J provides a full description of the targets and performance indicators.

		Targets	Baseline
1	The Environment	Return regions' transport related CO_2 emissions to 1998 levels: 1.45 million tonnes per annum by 2024, further reducing to 0.95 million tonnes per annum by 2042.	Transport related CO_2 has been trending upwards in the region over the period from 1998 – rising from 1.45 million tonnes per annum to 1.84 million tonnes in 2009.
2	Road Safety	Fewer than 31 deaths on the region's roads per year by 2024, falling to fewer than 26 per year by 2042.	Trend in road deaths over period from 1998 is downwards, but has never gone below 32 per year.
3	Road Safety	A maximum of 250 serious injuries on the region's roads per year by 2024, falling to a maximum of 200 by 2042.	Trend in serious injuries has been largely flat since 1998 in the mid 300's per year.
4	Healthy lifestyles	Increase the relative amount of total travel time that Christchurch City residents spend travelling by active means to 100 hours per person per year by 2024 and to 150 hours per person per year by 2042.	In 2009/10, travel by active modes was around 70 hours per person per year.
5	Predictable travel times	Improve journey time variability to 15% or less by motor vehicle on the strategic road network in Greater Christchurch during weekday AM and PM peak periods by 2024 and to maintain this level to 2042.	Between 2006 and 2010, variability has fluctuated between 14% and 20%, but with no consistent downward trend or clear pattern.
6	Predictable travel times	Maintain journey time variability by motor vehicle at 10% or less on the strategic road network in Greater Christchurch during weekday inter-peak periods to 2042.	Variability has decreased from above 15% in 2006 to around 10% in 2010.
7	Predictable travel times	Maintain relatively stable traffic flow[1] on the strategic road network outside Greater Christchurch to 2042.	Only localised, peak period congestion is experienced in urban areas outside Greater Christchurch.
8	Efficient trip making	Improve energy efficiency to reduce petrol consumption in the region to less than 600 litres petrol per person per year by 2024 and to 500 litres petrol per person per year by 2042.	Current consumption is around 700 litres per person per year.
9	Efficient trip making	Improve energy efficiency of commercial transport to reduce diesel consumption in the region to 22 litres diesel per $1,000 of Regional GDP by 2024 and then to 20 litres diesel per $1,000[2] of Regional GDP by 2042.	A relatively stable consumption of around 25 litres per $1,000 Regional GDP has been observed over the period 2000 to 2008, with a modest improvement in 2009.
10	Efficient trip making	Improve energy efficiency in Greater Christchurch by reducing proportion of driver only vehicle trips to 40% of all trips by 2024 and to 30% by 2042.	In 2009/10, 48% of all trips made in Greater Christchurch were by car drivers with no passengers.

1 Refers to Level of Service 'C' as defined in the Austroads Guide to Traffic Engineering Practice.

2 2012 price.

Strategic Direction

To achieve the objectives of this strategy, the transport system in Canterbury must provide people with accessible, affordable transport that is reliable and safe. It must also be resilient and adaptive to change with the minimum impact on their social, economic and environmental well-being.

To achieve these diverse objectives the region must invest in a transport system that provides realistic choices for people and businesses about, how, where and if they travel. The transport system must be supported by land-use patterns that make transport accessible and affordable. Decisions about efficient travel must be promoted through appropriate use of education, enforcement and price signals.

This will require:

- **Finishing what we started**
  Completing agreed strategic infrastructure projects.
- **Looking after what we have**
  Greater attention to maintaining existing networks.
- **Providing more choice**
  Investing more in initiatives that facilitate walking, cycling and public transport usage (particularly in urban areas) to provide greater mode choice.
- **Doing things smarter**
  Ensuring that land use, pricing, education and enforcement measures will achieve network efficiency and safety gains.

By diversifying investment in a way that gives greater choice throughout the region, the transport system can become more resilient. Communities will be better able to cope with external influences such as economic downturns, oil price volatility and changing demographics. For freight, greater efficiency and an increased choice of modes will enable the region's freight activities to adapt to changing transport costs and international shipping practices.

Through diversified investment and the delivery of supportive measures, the region will be able to get most benefit from advances and innovations in energy sources and supportive technologies across all modes. The overall transport system can also be managed to achieve greater efficiency.

The strategy seeks to shape travel demand to improve the effectiveness, efficiency and affordability of the transport system. The demand management strategy elements are outlined in Appendix H.

THE STRATEGIC DIRECTION EXPLAINED

The strategic direction sees a staged transition from high levels of investment in road improvements on strategic roads around Christchurch in the short term, to investment that provides a multi-modal transport system in the medium to long term. This approach will deliver a safer, more sustainable and resilient transport system at the end of the 30 year lifespan of the RLTS, compared with simply continuing current investment patterns for the same period.

IN THE SHORT TERM

Current transport system maintenance, and programmed improvement and management practices will continue over the next three years. Many activities are already committed over the short term with limited funding available to introduce new activities. However, some planning and investigations can now begin, to enable a change in strategic direction and investment over the medium term. The regional transport system can then begin the transition into one that provides greater choice, with real options for moving people and freight. Whilst it is acknowledge that earthquake recovery will be a key focus within Greater Christchurch, the recovery presents opportunities to achieve earlier implementation of projects that will deliver the strategy's medium and long-term aspirations. These opportunities should be seized wherever possible.

IN THE MEDIUM TERM

Investment in the medium term will concentrate on transition from the short-term focus on roads, to one that will ensure the region's communities are sustainable, resilient, and able to prosper in the long term. This will be achieved by developing a more multi-modal transport system where all modes appropriate for a journey are available and can be used easily and safely. Greater emphasis will be placed on insulating people from the rising cost of current energy sources through promoting sustainable urban design principles, investing in energy efficient vehicles and modes, and encouraging local trip-making. This new direction will improve the efficiency of transport networks, and will support economic activity and affordable access within the region.

A mixture of interventions will be needed to achieve the diverse objectives of the strategy:

- Existing transport infrastructure will be maintained as a first priority.
- Investment will be targeted at transport interventions that provide options.
- Some road space within urban areas will be reallocated for safe use of active modes and efficient and attractive public transport.
- In Greater Christchurch investment in public transport services and infrastructure will be concentrated on high demand corridors supported by connecting services.
- In the wider region, provision of community public transport services where viable.
- Integrated land-use measures to improve local access and mode choice.
- Management of parking provision and pricing that ensures parking resources are used efficiently and effectively.
- Education and enforcement that ensures people make efficient and safe transport choices.
- Support for communication technology alternatives that can reduce the need for travel.
- Promote the uptake of new technologies in planning documents and investment plans.
- Promotion of efficient transport modes and faciliating the use of renewable energy fuels as a key strategic direction for the medium term.
- Comprehensive education and marketing initiatives to support efficient multi-modal travel practices and travel alternatives.

IN THE LONG TERM

Interventions developed through the medium term are continued or enhanced to ensure the desired objectives and outcomes are achieved. Changes in emphasis and timing of interventions will be informed by a monitoring programme that records progress towards the outcomes and targets, which in turn feed into periodic reviews of this strategy.

Sought Outcome	How the strategic direction contributes
Reduced greenhouse gas emissions from use of the domestic transport system	In the medium term, traffic growth is minimised by reducing the need for travel. Increasing the number of people who walk, cycle or use public transport will lower emissions per trip. In the longer term, transport sector emissions will decline as new vehicle technologies play a more significant role in the fleet and land use patterns evolve to reduce the length and frequency of motor vehicle trips.
Improved resilience of the transport network to infrastructure damage or emergencies	Focus on maintenance and renewals increases, reducing the duration and frequency of network disruptions stemming from natural events. Targeted investment on strategic routes ensures that they are fit for purpose and robust.
Improved resilience of the transport system to external changes	In the medium term, as the population ages, economic factors change and fuel prices increase etc. the availability of transport choice provides the population with flexibility and options. In the longer term, transport options and new technologies will further enable Cantabrians to adapt to external changes.
Improved land use and transport integration	In the longer term, integrated land use decisions, delivered through multi-agency consensus on city and district plans, that minimise the need for travel begin to have tangible benefits for Cantabrians.
Reduction in fatal and serious injuries for all modes	Through a regionally focused implementation of the Safe Systems approach to road safety, as articulated in the Safer Journeys 2020 strategy, all transport modes see a reduction in the number of deaths and serious injuries over time. Better provision of walking and cycling infrastructure delivers improved safety outcomes for these modes.
Improved personal safety and reduced security risks to all transport users	Focus on quality urban environments and the resulting increase in pedestrian numbers leads to improved personal safety for users of all modes as there are more ‘eyes on the street’. This is supported by education and enforcement measures with a safety focus. Road user safety on roads is also enhanced through an appropriately located and managed network of stock effluent disposal sites.

Sought Outcome	How the strategic direction contributes
Improved health from increase in time spent travelling by active means.	Biggest impacts are in urban areas where good infrastructure and information encourages Cantabrians to spend a greater proportion of their time walking and cycling as part of their typical day.
Increased proportion of the population travelling by active means	Over the life of the strategy, walking and cycling becomes a natural choice of transport for a much larger proportion of the community, as better infrastructure and education around these choices encourages more active trips to be made.
Reduced community exposure to vehicle pollutants, noise and vibration	Focusing heavy traffic movements to most appropriate routes through urban areas, calming of residential streets and increased use of walking and cycling translates into reduced community exposure. A reduction in traffic growth and development of new technologies also contribute positively to minimising effects in the long term.
Improved journey time reliability on the strategic transport network	The Roads of National Significance projects will deliver reliable travel times on key state highways in Greater Christchurch. Over the duration of the strategy, journey time reliability will be maintained by actively managing strategic networks. Increases in walking, cycling and using public transport will relieve urban networks of congestion pressures. Small scale improvements e.g. passing lanes/loops help maintain journey time reliability on the rest of the regional strategic network.
Increased energy efficiency per trip	More use of energy efficient modes, shorter trips and improvements in vehicle or fuel technology and efficient use of vehicles deliver significant energy efficiency savings per trip.
Regional and inter-regional journey time reliability on key freight routes is maintained	Delivery of network improvements through the Roads of National Significance projects, signed freight routes, support for rail capacity / reliability enhancements and network management that gives priority to freight vehicles where appropriate will ensure that reliable journey times for freight movement is maintained over the duration of the strategy.
Freight hubs are protected and maintained	Planning that avoids incompatible land uses around freight hubs and networks that are linked directly into hubs will ensure that freight operations can continue to function effectively.
Connectedness is enhanced	Increased focus on urban design and provision of travel choice will contribute positively towards connecting people and places, particularly in urban areas. Implementation of innovative public transport services will help improve rural connectedness.
Increased travel choices for households to access key activity centres	Greater levels of investment in walking, cycling and public transport will provide more choices to the region's population. The strategy also supports the exploration of car-pooling and alternative vehicle ownership models.
Improved mobility for the transport disadvantaged	Support for walking, cycling and local services, ongoing accessibility improvements to existing public transport services and a shift in emphasis to more tailored and targeted public transport will help address transport disadvantage. Developments that reduce or remove the need to travel will also positively contribute to this outcome.

Role of transport modes

This section outlines the role of each mode of transport in Canterbury. As essential elements relating to the transport system, the role of strategic networks, land use integration, education, enforcement, parking and pricing are also outlined in later sections of this chapter.

Before the role of each mode can be understood, the overall role of transport needs to be clarified. Transport is a means to an end and it can also serve to create better "ends" for individuals and the population as a whole. It enables individuals, families and communities to participate in and contribute to society by providing access to their basic needs[3] and to social, economic and cultural opportunities. Businesses and organisations also often rely on transport to enable the transfer of goods and services to those that want to buy or use them. However, transport is not the only means to achieve social and economic transactions. For this reason, this chapter also considers the role of technology and supportive actions outside of the transport sector.

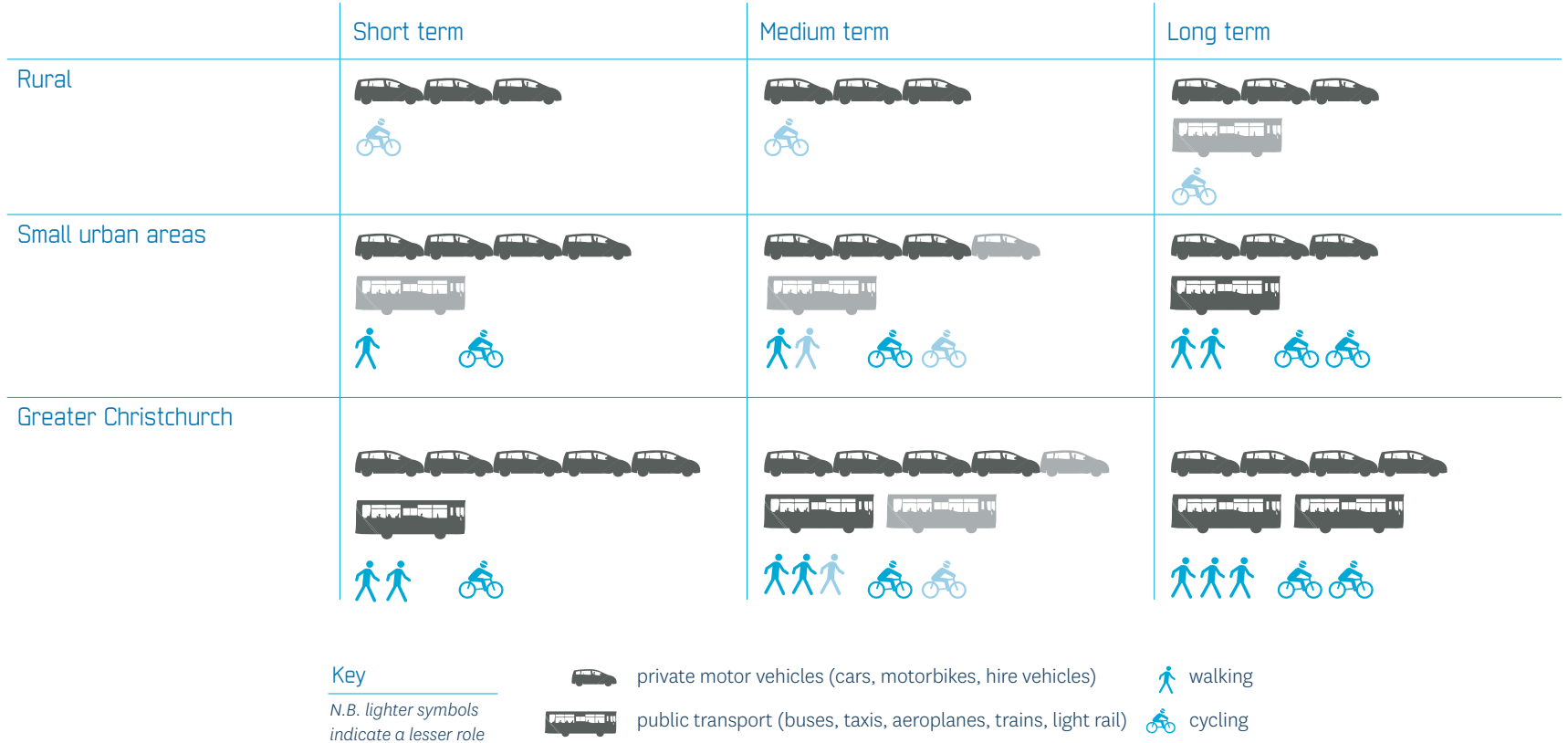
Transport enables individuals, families and communities to participate in and contribute to society by providing access to their basic needs and to social, economic and cultural opportunities.

3 Basic needs are the essentials for life such as food, water, warmth and shelter.

PEOPLE MODES

Currently, the use of privately owned and operated motor vehicles is the dominant mode of transport for people in Canterbury. This is supported by walking to reach the final destination at the end of the trip and as a mode in its own right for local trips. Cycling, public transport, coaches, taxis, trains, shuttle services and vehicle hire also play an important but relatively small role in meeting travel needs in Canterbury. For international journeys and, to a lesser extent, inter-regional journeys, air travel plays a significant role. Investment in the short term will do little to change the role of each mode. 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.

INDICATIVE ROLE OF PEOPLE MODES IN THE SHORT, MEDIUM AND LONG TERM IN CANTERBURY.[4]



4 Icons are indicative of change in the roles of mode over time and not meant to accurately represent mode share or numbers of trips.

REGION WIDE

Private motor vehicles – Across the region private motor vehicles are expected to continue to be the main mode used by Cantabrians for the lifespan of this strategy given the convenience and comfort they provide. Private motor vehicle use is well supported by the existing transport system and land use patterns and by high levels of vehicle ownership. Maintenance of the road network is essential in order to support mobility throughout the region.

Walking – Walking plays an increasingly important role over the life of this strategy as it is affordable, healthy and sustainable. Walking will be supported by investment in quality pedestrian facilities in urban areas.

Cycling – Cycling plays an increasingly important role over the life of this strategy. Cycle lanes, off-road paths and increased cycle parking in urban areas support use of this mode which has health, efficiency and affordability benefits.

Public transport – Scheduled and commercial public transport services play an increasingly important role in meeting the region's transport needs. Investment in public transport services, infrastructure and priority measures will provide choice, create network efficiencies and help reduce transport disadvantage.

Taxis – The role of taxis is to provide mobility in situations where other forms of transport are unavailable, unattractive or not possible.

Air travel – Air travel, while not a land transport mode, will continue to play a primary role for international travel and provide significant opportunity for inter-regional travel over the period of the strategy. Therefore, transport connections to and from the region's commercial airports will remain important for inter-regional connectivity.

RURAL AREAS

Private motor vehicles – Private motor vehicles will continue to be the primary mode in rural areas, or between rural areas and urban areas as the distances to be travelled are often too far and the population too dispersed to provide realistic alternatives. Maintenance of the rural road network is essential to maintain high levels of access and mobility in rural Canterbury.

Walking – Walking will be limited in rural areas given the long distances that are usually associated with rural trips. Trips made in and around rural centres can often be made on foot. Walking can be supported by pedestrian facilities in rural centres.

Cycling – Cycling can provide access in and around rural centres. In remote rural areas cycling may be impractical given the long distances that are usually associated with rural trips. Cycling can be supported by providing a low speed environment and parking for cycles in rural centres as well as safety improvements and road user behaviour marketing campaigns on rural routes where there is potential for frequent cycle use.

Public transport – Public transport in rural areas will be limited due to the dispersed populations. Some local community transport schemes may be viable and intercity services may connect some rural centres to larger urban areas.

Taxis – Taxi services are unlikely to be commercially viable given the low population densities and high levels of private car ownership in rural areas.

SMALL URBAN AREAS

Private motor vehicles – Private motor vehicles are often the most appropriate mode of transport and there are scenarios where this is unlikely to change, for example where goods are being transported or equipment is needed. Maintenance of roads in small urban areas is essential to retain the option of using a private motor vehicle. However, within small urban areas there is scope to reallocate some road space to support the use of other modes and promote more efficient and effective motor vehicle use. When motor vehicles are used, car-pooling is to be encouraged. This supports efficient use of the road network, and reduces negative social and environmental impacts.

Walking – In small urban areas walking plays an increasingly important role over the life of this strategy. Walking is an appropriate mode for short local trips, for connections between modes, and at the start and end of longer journeys by other modes. Walking is often quick, easy and the cheapest way to make short trips. In urban areas walking facilities need to be well integrated with parking facilities and public transport stops to enable 'door to door' journeys where the main mode is, a motor vehicle, cycle or public transport.

Cycling – Cycling can provide a practical means of travelling in and around small urban centres. Over the life of the strategy, provision of cycle lanes and secure, convenient cycle storage facilities will make the mode more attractive to more people for a wider range of trips. Workplaces and schools will be encouraged to adopt cycle-supportive policies that provide for facilities such as changing rooms, showers and lockers.

Public transport – Public transport will play a greater role towards the end of the strategy period in some small urban areas and for inter-urban travel, both within the region and to urban centres in other regions. The role will remain relatively minor compared with private modes. In future years there is likely to be scope for some contracted services alongside local community transport schemes and commercial intercity services connecting small urban areas with larger urban centres.

Taxis – Taxi services are unlikely to be commercially viable in many small urban areas given the low population densities and high levels of private car ownership. Where services are available they can provide mobility in situations where other forms of transport are unavailable, unattractive or not possible. Taxis help reduce transport disadvantage by providing a transport alternative for those without access to a private vehicle or where public transport services are not available or unsuitable.

GREATER CHRISTCHURCH

Private motor vehicles – Private motor vehicles are ideal for certain trips in Greater Christchurch, for example where goods are being transported or for people who need to take heavy or bulky equipment or materials with them. Maintenance of the roads in Greater Christchurch, is essential to maintain connectivity to and within the city. Improvements to some high volume strategic roads that pass through the urban area are planned early in the strategy period. In residential and commercial areas the strategy recognises that some road space needs to be reallocated to support the use of other modes and promote more efficient and effective motor vehicle use such as car-pooling, reducing negative social and environmental impacts.

Walking – In Greater Christchurch walking plays an increasingly important role over the life of this strategy. It is ideal for short local trips, for connections between modes, and at the start and end of longer journeys by other modes. Walking is often quick, easy and the cheapest way to make short trips within the Greater Christchurch urban area. High quality pedestrian facilities around urban and suburban centres will support walking as a preferred mode for short trips. Walking facilities need to be well integrated with public transport stops and parking facilities to enable 'door to door' journeys where the main mode is public transport, a motor vehicle or cycle. It is essential that pedestrian access to public transport in particular is easy, safe and pleasant so that public transport is an attractive option, which in turn will increase the efficiency and cost-effectiveness of public transport.

Cycling – Cycling is an efficient and effective mode for moving people over short to medium distances within Greater Christchurch. Cycling contributes to health, overall network efficiency and reduces congestion because cycles require much less road and parking space than other vehicles. Over the life of the strategy, provision of a complete cycle network, together with

priority measures and secure, convenient cycle storage facilities will make cycling more attractive to more people for a wider range of trips. Workplaces and schools will be encouraged to adopt cycle-supportive policies that provide for facilities such as changing rooms, showers and lockers.

Public transport – Within Greater Christchurch, and for connections to other urban areas, public transport services play a more significant and increasingly important role. Focusing services and investment in high quality infrastructure and priority measures along key corridors will make public transport services an increasingly attractive option. These services can be supported by local services with the provision of good interchange facilities.

Taxis – The role of taxis is to provide mobility in situations where other forms of transport are unavailable, unattractive or not possible. Taxis help to provide a transport alternative for people who don't have access to a private vehicle, or where public transport services do not provide adequately for a trip.

INTEGRATION WITHIN AND BETWEEN PEOPLE MODES

For a multi-modal transport system to operate effectively, integration between modes plays a pivotal role. The role of integration for people modes is summarised in the following table:

	Private motor vehicles	Public transport	Walking	Cycling	Taxis	Air travel
Private motor vehicles	N/A	Park & ride facilities provided where appropriate	Direct and safe pedestrian access to and within parking areas	Park and pedal facilities provided where appropriate	N/A	Parking facilities at airports
Public transport		Integrated ticketing; timetable alignment; high quality transfer interchanges	Direct & safe pedestrian connections to stops and stations; sheltered waiting areas	Safe cycling links and cycle storage at stops and stations, bike carriage on public transport	Taxi ranks at major stops and stations, particularly at end of a public transport route	Services with stops at airports; timetable alignment
Walking			Pedestrian crossings	Cycle parking and storage facilities serving key destinations	Taxi ranks serving key destinations	Direct and safe pedestrian access at airports to public transport stops, taxi ranks and parking areas
Cycling				N/A	Taxis equipped to carry cycles	Safe cycling links to and cycle, storage and assembly facilities at airports
Taxis					N/A	Taxi ranks at airports
Air travel						Transit lounges and facilities

FREIGHT MODES

Freight modes enable the movement of goods to, from and within the region. Freight includes anything transported as part of a commercial arrangement, from a small package, to larger household goods or shipping containers and bulk goods such as coal or logs. Freight transport plays a key role in ensuring timely delivery of goods produced by or needed in the region. This is of vital importance for the primary production sector which contributes significantly to the national and Canterbury economy. The primary freight modes in Canterbury are trucks and vans, trains and coastal shipping.

Freight transport plays a key role in ensuring timely delivery of goods produced by or needed in the region.

Around two thirds of current freight volumes in Canterbury are moved within the region – a mixture of bulk primary produce moving to/from ports and agricultural production areas and distribution of finished goods within the region. Inter-regional flows, i.e. goods transported between Canterbury and other regions account for most of the remaining third of freight volumes. Use of the region as a freight route between two other regions is relatively small, estimated to be less than 5% of total freight volumes. This reflects Canterbury's location as the major distribution centre for the South Island and also as the home of two major ports and the South Island's major international airport.

Although freight volumes are forecast to grow significantly over the life of the strategy, the general pattern and mode of transport for this increased volume is not envisaged to alter markedly. What this means is that the freight modes that perform the task today will largely perform similar roles into the future, albeit carrying higher volumes of freight. Should different freight modes and/or demands emerge in the future, however, adaptation of existing networks and distribution centres will be supported to meet emerging demand.

REGION WIDE

Trucks and vans – Road freight is the most appropriate way of moving small items and goods over short distances and is well-suited to making multiple pick-ups or deliveries. Given the relatively short distances involved and lack of other viable options, the vast majority of intra-regional freight will continue to be moved by road. Access for trucks within urban areas is therefore essential for deliveries to business, retail and manufacturing locations.

Trains – Rail freight works best for the movement of high volumes of goods over longer distances between large scale, single location production and distribution points. Depending upon the origin/destination and the type of freight, trains play an important role in moving inter-regional freight in particular.

Coastal Shipping – Coastal shipping is most appropriate for the movement of high volumes of goods that do not need to be delivered rapidly. Depending upon the origin/destination and the type of freight, coastal shipping is a viable option for moving bulk freight between regions.

Air – Air transport plays a relatively minor role in terms of freight volumes, but does have a role in transporting small high value or time sensitive products, particularly to international markets.

Ports and airports – The regions commercial ports and airports play a significant role for freight by enabling the transfer of goods to/from overseas destinations and other regions. Therefore, freight access to these key modal interchanges plays a major role in supporting economic activity in the region.

RURAL AREAS

Trucks and vans – Road freight will continue to serve most local freight transport needs such as the movement of goods to and from farms or from processing plants to export terminals. What may become more prevalent over the life of the strategy is the availability and use of alternative fuel sources for freight vehicles, particularly bio-diesel blends that are suited to longer distance road freight needs.

Trains – Rail freight will service the needs of major rural customers on the rail network where commercially appropriate.

SMALL URBAN AREAS

Trucks and vans – Road freight will continue to serve most local distribution and freight transport needs within the region. Over the life of the strategy, alternative fuels and commercially driven changes to distribution mechanisms will increase the energy efficiency of operations.

Trains – Over the life of the strategy, new investment in inter-modal terminal facilities, driven by partnerships between KiwiRail and commercial freight companies may see greater use of rail services for exporting produce from railheads to ports.

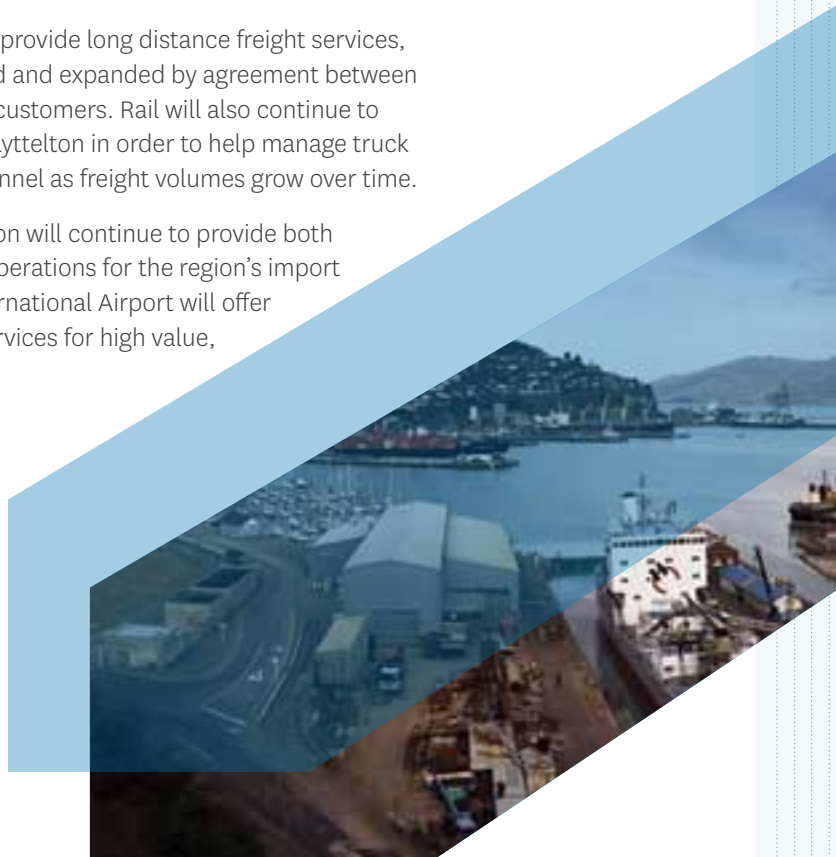
Ports and Airports – PrimePort Timaru will continue to provide both international and coastal shipping operations for the regions' import and export needs. Timaru and Ashburton Airports are positioned to offer niche services for high value, time-sensitive freight products.

GREATER CHRISTCHURCH

Trucks and vans – Road freight will remain the dominant mode for most local freight movement within Greater Christchurch. Heavy freight movements will be routed via a signed freight route appropriate for this type of traffic. Conversely, heavy traffic will be discouraged from using other elements of the local road network through signage and traffic-calming measures. Improvements to the fleet's operating efficiency will be largely commercially driven, supported by policy initiatives to ensure that destination facilities support efficient operations. Alternative fuel sources for commercial fleets will be supported through policy initiatives, but will be largely commercial decisions for freight companies.

Trains – Rail freight will continue to provide long distance freight services, with inter-modal terminals upgraded and expanded by agreement between KiwiRail and its key freight handling customers. Rail will also continue to offer inland port facilities to Port of Lyttelton in order to help manage truck movements through the Lyttelton tunnel as freight volumes grow over time.

Ports and airports – Port of Lyttelton will continue to provide both international and coastal shipping operations for the region's import and export needs. Christchurch International Airport will offer domestic and international niche services for high value, time-sensitive freight products.



INTEGRATION WITHIN AND BETWEEN FREIGHT MODES

For a multi-modal transport system to operate effectively, integration between modes plays a pivotal role. The role of integration for freight modes is summarised in the following table:

	Trucks & Vans	Trains	Coastal shipping	Air
Trucks & Vans	Private companies develop and operate distribution centres as market dictates in areas zoned accordingly in district plans	Private companies develop inter-modal operations with KiwiRail as commercial opportunities arise in areas zoned accordingly in district plans	Ports handle road-to-ship transfers either on wharf or via remote container parks or inter-modal rail hubs	Airport landside freight handling facilities develop according to commercial imperatives
Trains		KiwiRail operations continue at existing marshalling yards	Ports handle rail-to-ship transfer on wharf	N/A
Coastal shipping			Ship-to-wharf for short term storage and onward forwarding as appropriate	N/A
Air				Airside freight handling and secure storage facilities

ROLE OF STRATEGIC TRANSPORT NETWORKS

Strategic transport networks provide a high level of mobility for people and freight transport within the region. The criteria used to identify the strategic transport networks reflect routes of national significance and recognise the nationally significant role of Canterbury as the most populous region in the South Island. Canterbury is a major producer of primary goods and a major distribution centre for the South Island. It is home to two major ports as well as the South Island's major international airport. The strategic networks connect the region to neighbouring regions and provide contingency routes for inter-regional travel. They also link the main population centres, tourist destinations and freight hubs within the region.

CANTERBURY REGION

- Strategic Roads
- Strategic Railways
- Tourist destination

CHRISTCHURCH AREA

- Planned Roads
- Strategic Roads
- Airport
- Strategic Railways
- Sockburn Freight Area
- Middleton Freight Area
- Woolston Freight Area
- Port

TIMARU AREA

- Strategic Roads
- Airport
- Strategic Railway
- Strategic Freight Area
- Port

INTEGRATION WITH LAND USE

Urban form and the way land use patterns and the transport system inter-relate plays a fundamental role in influencing the effectiveness and efficiency of transport. Good, compact integration and urban design provides a high level of access and mobility and reduce energy use.Poor integration results in an inefficient transport system and can be a significant contributor to transport disadvantage. Certain land uses and transport infrastructure can be incompatible and have a negative impact on the operation of the transport system. The Regional Policy Statement, City and District Plans and the Greater Christchurch Development Strategy play a key role in achieving good integration. Through these documents, local authorities can assist in improving the efficiency of local transport networks and layouts so that people and freight can move about more easily and efficiently.

When land-use activities are well located and designed, less travel is needed overall because people are able to live closer to their main destinations for work and play. This can contribute significantly to accessibility and affordability. Similarly, the location of productive land or production plants near to consumers, processing plants or ports provides a competitive advantage by reducing the costs of moving goods.

Well-located intermodal freight terminals also have the potential to improve the efficiency and effectiveness of freight operations and also significantly reduce energy use associated with the freight task, by allowing more optimal rail / road shipping combinations to be realised.

Well-integrated land use and transport policy can be effectively supported by travel demand management. This is a term used for interventions that influence travel choices to make more efficient and effective use of available transport networks. Many of the interventions listed in this strategy fall into this area of policy. Appendix H of this strategy gives full details of the demand management strategy that has been adopted.

When land use activities are well located and designed, less travel is needed overall because people are able to live closer to their main destinations for work and play.

ROLE OF EDUCATION AND ENFORCEMENT

Education, delivered through the driver licensing process and skills training courses, plays an important role in improving road safety, as part of a holistic Safe Systems approach. Safety education is reinforced with targeted awareness campaigns. Education about the relative cost, health, safety, environmental and other benefits associated with transport choices assists in delivering transport efficiencies as it allows informed transport choices to be made. Making accurate travel choice information widely available through journey planners and real time information systems encourages efficient decision-making around mode choice, time of travel, and vehicle purchase and use. Informed decision-making can play a significant role in improving safety and in reducing congestion and greenhouse gas emissions.

Enforcement plays an important role in achieving safety outcomes and targets in particular as it provides incentives for improved safety and personal security by deterring dangerous or undesirable behaviour by transport users. However, enforcement also plays a role in managing infrastructure to ensure the network is used in a way that does not compromise network capacity and efficiency. Effective parking enforcement and lane management help ensure this, as does the reduction of interruption to networks caused by accidents. Coordinated education and enforcement initiatives are important elements in achieving the objectives of this strategy.

ROLE OF TECHNOLOGY

Technology has a role to play in achieving the strategy outcomes in a number of ways. Vehicle technology improvements can assist in achieving some of the strategy's outcomes through improved materials, engines and fuels. These improvements will be led largely by international and national developments and policy. Therefore, the position taken in this strategy is to advocate to central government for the need for actions that encourage people to choose new vehicle technology and to use alternative forms of transport energy.

Increasingly, modern communications technologies (e.g. internet & mobile communications) are enabling human engagement and economic transactions to take place without the need to travel to a particular location. With the advent of these technologies, transport has become only one of a number of ways of providing access to many goods and services. While the supply of goods will always rely on physically moving items, communications technologies will play an increasingly important role over the next 30 years in reducing the need to travel or altering the way in which people work and interact.

Improvements in infrastructure technology can assist in improving the safety and efficiency of the transport system. Electronic navigation technologies such as GPS and real time information systems also have a role to play in making more efficient use of transport systems.

Evolving communication and electronic technology has the potential to deliver ridesharing solutions that dramatically increase the attractiveness of this form of transport. Innovative developments in this area are supported.

ROLE OF PARKING AND PRICING

Parking plays a key role in an integrated transport system, enabling people to transfer from one mode to another as well as the delivery or transfer of goods. The availability, cost and duration of parking facilities influences where and when people choose to travel, which mode they use and how long they stay at their destination.

Similarly, the cost of vehicles, fuel, public transport fares, insurance and other transport-related costs all influence the availability and affordability of transport. Some of these costs can be influenced through taxation and/or regional transport policy as a means of reinforcing policy direction and making transport systems more efficient and effective.

ROLE OF SUPPORTIVE ACTIONS OUTSIDE OF THE TRANSPORT SECTOR

Decisions made through all sectors of society have an impact on the demand for and use of transport services. Because of this relationship there are many actions that can be taken outside of the transport sector that can either support or jeopardise the objectives of this strategy. Because these decisions lie outside of the transport sector the position taken in this strategy is to advocate and influence central government and other agencies that are in a position to facilitate supportive actions in order to optimise transport outcomes within the region.

Some of these decisions relate to land use. For example the location of schools, hospitals, employment and retail centres close to the communities that need to access them. Standardised working or operating hours are a primary cause of peak traffic congestion and competition for parking. Flexible arrangements can contribute significantly to spreading peak period traffic and making better use of available transport capacity. Support for remote working arrangements can also assist in reducing peak period traffic.

While most public and commercial services are provided at a specific location e.g. libraries, social welfare, health and retail, there is scope for some services to be provided in the home or at a number of locations through a mobile facility. This model can provide a better access to services especially for people with limited ability to travel and those in rural areas as well as reducing overall transport demand. New communications technologies also enable access to many services that can reduce the need to travel e.g. electronic news and information services and internet shopping facilities.

Another area where there is scope for change is the way in which vehicles are owned. In other countries car collectives are emerging that deliver a more affordable way of providing access to private vehicles. In these schemes a number of households or businesses have access to a pool of vehicles and pay according to use, rather than ownership. This model has the benefit of enabling people to choose a vehicle that suits the purpose of the trip.

Implementation

This chapter sets out the actions and policies required to give effect to the strategic direction described in the previous chapter. The intention is to guide public organisations with responsibility for delivering transport activities so that their decisions assist in the delivery of the overall strategic direction for the region. The implementation measures also acknowledge non-transport policies and initiatives that can also contribute to the outcomes of this strategy.

While much of the content of this strategy focuses on accommodating growth and improving the performance of the transport system by providing for smart transport choices, the maintenance of existing assets remains the top priority for the region. It is expected that a significant proportion of expenditure on transport in the region will be needed to maintain and renew existing networks and services, and that the proportion will increase over time as the asset base increases.

The following types of intervention are included in the strategy to ensure efficient delivery of the strategic direction. They reflect the full range of tools available to achieve the strategy objectives. Actions across the range of intervention types can provide significantly greater benefits than implementing a single intervention in isolation:

- Infrastructure measures
- Infrastructure management measures
- Service provision
- Land use measures
- Pricing measures
- Information provision
- Attitude and behavioural change measures
- Enforcement measures

STAGING

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 the short term the strategy is to complete planned strategic infrastructure improvements and over time reduce investment in road improvements and increase investment in walking, cycling and public transport infrastructure and services. This shift in expenditure will need to be supported by actions to achieve better integration between transport and land use, measures to educate the travelling public and pricing signals that support a more efficient and multi-modal use of transport capacity within the region.

This strategy sets out a staged approach to delivering the strategic outcomes across the range of geographical settings found in Canterbury. The communities and their transport needs are different in rural Canterbury, small urban areas and in the region's major metropolitan centre of Greater Christchurch. This strategy recognises that the interventions required to meet these differing needs and deliver the strategy objectives are also different.

The remainder of this chapter provides an overview of the rate of transition across a range of investment and planning practices for each geographical setting. Appendix G contains detailed tables of interventions needed to implement the strategy over the short, medium and long term in rural areas, small urban areas and Greater Christchurch.

The Canterbury Regional Land Transport Programme (RLTP) is the statutory document that will be used to provide the detailed short-term implementation programme and medium-term investment signals to support the packages of interventions in this strategy.

RURAL AREAS

In rural Canterbury the focus of implementation will be on improving safety and the efficient use of motor vehicles because there are limited opportunities to use other modes. Given the highly dispersed population and low volumes of traffic on most rural roads there is little need for large scale improvements to infrastructure or services. Because of the relatively small numbers of people living in rural Canterbury there are significant challenges in the funding of transport initiatives. The focus of implementation in rural Canterbury will be on maintaining and renewing road networks to retain community connectedness and reliable travel times. Low-cost measures that help remote communities maintain affordable access to key services are also considered.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Road maintenance & renewals	Maintain and renew the road network as a priority throughout region, ensuring that the "safe systems" principles, together with opportunities to improve the road environment for all users are applied at all times.		
State highway investment	Limited improvements to strategic rural parts of the State Highway network due to short term expenditure focus on Roads of National Significance. Further development and refinement of investment requirements flowing from State Highway Corridor Strategy studies.	As Roads of National Significance are completed, attention turns to bridge replacements and localised improvements on rural parts of state highway network for safety and travel time reliability e.g. passing lanes, as outlined in State Highway Corridor Strategies.	Ageing assets replaced and localised improvements and safety measures occur.
Local road investment	Some localised investment made as outlined in local plans.	Some localised investment made, primarily in safety improvements and freight efficiency.	
Active modes (walking and cycling)	Some localised investment made as outlined in local plans.	Small scale investment occurs in rural centres and where demand is high on rural roads.	
Parking provision	No change.		
Public transport	School buses and some commercial services and community transport services continue.	School buses and some commercial services continue with an increase in accessible community transport services where feasible.	
Land use planning	Regional and District plans are amended over time to support improved integration between land use and transport and choice of transport modes where feasible.	Regional and District plans are amended over time to support improved integration between land use and transport and choice of transport modes where feasible. Implementation of amended plans occurs as soon as is practicable.	Amended Regional and District plans are implemented and further refined as required to deliver strategy objectives.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Railway investment	Reduce transit time and improve reliability on Auckland to Christchurch route and increase renewals on other routes.	Reduce transit time and improve reliability on Auckland to Christchurch route and increase renewals on other routes. Consider rail-to-road transfer opportunities.	Ongoing improvements are made to ensure rail remains an option for transfer of bulk goods.
Education & marketing	Some localised investment occurs as outlined in local plans.	Increase activity to support safe efficient vehicle use.	Ongoing programmes support safe, efficient vehicle use and other travel management practices.
Supporting measures	Policies developed to support alternatives to travel e.g. internet services. Regional position formed on take up of alternative technologies to support lobbying efforts.	Investments in infrastructure to support uptake of alternative technologies as they emerge onto the market. Remote working and rideshare support services are investigated and trialled.	Investments in infrastructure to support take up of alternative technologies as they emerge onto the market. Tele-work, rideshare support services and vehicle cooperatives implemented as appropriate.

SMALL URBAN AREAS

In small urban areas the focus of implementation is on improving transport options and promoting a multi-modal approach to meet transport needs. Walking, cycling and to a lesser extent public transport all require greater support over the period of the strategy if this is to be achieved. The size of the population in small urban areas presents significant challenges around the funding of transport initiatives. Implementation in small rural centres will be focused on maintaining and renewing road networks to maintain community connectedness. Low-cost initiatives are included to support and influence safe and efficient motor vehicle use. This includes some parking management and better integration with other modes. Efficient movement of freight is supported.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Road maintenance & renewals	Maintain and renew the road network as a high priority throughout region.		
State highway investment	Limited due to short term expenditure focus on roads of national significance.	As Roads of National Significance are completed, attention turns to replacement of ageing assets, localised targeted improvements and safety measures.	Ageing assets are replaced and targeted localised improvements and safety measures occur.
Local road investment	Some localised investment takes place as outlined in local plans.	Investment focus is on safety improvements. Traffic calming measures are put in place in suburban areas to encourage use of arterial routes and support use of active modes for local trips.	Focus is on addressing emerging safety and freight efficiency issues. Continued management of sub-urban streets to support use of active modes for local trips.
Active modes (walking and cycling)	Some localised investment takes place as outlined in local plans.	Rate of infrastructure improvement increases significantly to support active travel, particularly access to urban centres.	Ongoing infrastructure improvements occur across region. High quality paths and cycle parking facilities are maintained.
Parking provision	Parking pricing policies and district plan requirements are reviewed.	Planning rules and parking charges amended to maximise efficient use of parking resources and encourage more productive use of land where possible.	Over time, amount of long stay parking in urban centres is reduced and prices are set to encourage high turnover to support businesses and access by walking, cycling and public transport where available.
Public transport	Public transport services are provided in Timaru with a few community services in other centres. Commercial services link urban areas.	Public transport services are provided in Timaru with a few community services in other centres. Commercial services link urban areas.	Public transport services are provided in Timaru. More community services are introduced and more commercial inter-urban services are expected.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Land use planning	District plans are amended over time to support greater mode choice, local trip making, improved integration between land use and transport and between transport modes.	District plans are amended over time to support greater mode choice, local trip making, improved integration between land use and transport and between transport modes.	Amended district plans are implemented.
Pricing mechanisms	Regional position is formed on pricing signals that could be set by central government to support the strategic direction of the RLTS.	Region lobbies central government to adopt supportive tax structures and enable diversified funding options.	Lobbying to support RLTS implementation is ongoing.
Railway investment	Reduce transit time and improve reliability on Auckland to Christchurch route and increase renewals on other routes.	Reduce transit time and improve reliability on Auckland to Christchurch route and increase renewals on other routes. Consideration of rail to road transfer opportunities.	Ongoing improvements to ensure rail remains an option for transfer of bulk goods.
Education & marketing	Some localised investment occurs as outlined in local plans.	Increase in activity occurs to support safe efficient vehicle use; increase use of active travel and public transport services where available.	Programmes continue to support safe efficient vehicle use, active travel and public transport use and other travel management practices.
Supporting measures	Policies are developed to support alternatives to travel e.g. internet services. Regional position is formed on take up of alternative technologies to support lobbying efforts.	Investments in infrastructure support uptake of alternative technologies as they emerge onto the market. Remote working, rideshare support services and vehicle cooperatives are investigated and trialled.	Investments in infrastructure support take up of alternative technologies as they emerge onto the market. Tele-work, rideshare support services and vehicle cooperatives implemented as appropriate.

GREATER CHRISTCHURCH

The 2010 and 2011 earthquakes occurred during the development of this strategy. They caused significant damage to parts of Greater Christchurch, including the transport infrastructure in many areas. Significant effort and investment is required in the short and medium term to repair this damage. The rebuilding programme also offers opportunities to implement projects that will contribute to the outcomes in this strategy. The implementation measures outlined below over the short to medium term should be applied flexibly to maximise those opportunities.

Delivery over the short to medium term will be guided by a range of recovery planning processes and documents being developed by the Canterbury Earthquake Recovery Authority and affected councils. These plans will provide further detail on the rebuild priorities and establish the actions and policies for the central city and suburban centres most affected by the earthquakes.

In Greater Christchurch the focus of this 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 projected 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 the transport corridors through the city needs to be achieved to maintain community access. This includes initiatives to support active modes, public transport priority and measures that support and influence safe and efficient motor vehicle use. This includes active management of parking and better integration between modes. Over time, measures will be needed to promote alternatives to using private motor vehicles at certain times of day or in certain locations within the city in order to make more efficient use of road capacity and to encourage modes that have greater overall benefit for the community.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Road maintenance	Maintain and renew the road network as a high priority throughout region.		
State highway investment	Focus on delivery of roads of national significance.	Roads of national significance improvements are completed.	Small scale targeted improvements and safety measures are completed.
Local road investment	Focus on earthquake repair and recovery Some localised investment is made to improve safety, intersections and amenity and calm suburban streets.	Investment is made in safety improvements and increasing capacity at intersections. Traffic calming measures are put in place in suburban areas to encourage traffic to use arterial routes and support use of active travel for local trips.	Focus is on addressing emerging safety issues. Management of suburban streets to support use of active travel for local trips continues.
Active modes (walking and cycling)	Some localised investment is made to improve infrastructure and support active travel in urban centres.	The rate of infrastructure improvements increases significantly to support active travel. Delivery of a quality cycle network providing access to urban centres begins.	Quality cycle network is completed. Infrastructure improvements continue in wider city. High quality paths and cycle parking facilities are maintained.

	Short term (Years 1-3)	Medium term (Years 4-12)	Long term (Years 13-30)
Parking provision	Parking pricing policy and district plan requirements are reviewed.	Planning rules and parking charges are amended to maximise efficient use of parking resources and to encourage more productive use of land where possible. Long-stay parking is reduced over time at urban centres.	Over time, amount of long stay parking in urban centres is reduced and prices are set to encourage high turnover to support businesses and access by walking, cycling and public transport.
Public transport	Service delivery model, location of future public transport interchange sites and priority measures are reviewed. Services are amended and some priority measures implemented.	Quality of high demand routes increases, supported by implementation of priority measures. Central city and suburban interchange facilities and park and ride services are developed.	Quality services on main corridors are supported by connecting services. Community led services may develop and an increase in inter-urban services where required in support.
Land use planning	City and district plans are amended over time to support greater mode choice, local trip making, improved integration between land use and transport, and between transport modes.	City and district plans are amended over time to support greater mode choice, local trip making, improved integration between land use and transport, and between transport modes.	Amended district plans are implemented.
Pricing mechanisms	Regional position is formed on pricing signals that could be set by central government to support the strategic direction of the RLTS.	Region lobbies central government to adopt supportive tax structures and enable diversified funding options.	Ongoing lobbying occurs to support RLTS implementation.
Railway investment	Transit time is reduced and reliability improved on Auckland to Christchurch route and renewals increased on other routes.	Transit time is reduced and reliability improved on Auckland to Christchurch route and renewals increased on other routes. Rail-to-road transfer opportunities are considered.	Ongoing improvements are made to ensure rail remains an option for transfer of bulk goods.
Education & marketing	Some localised investment is made as outlined in local plans.	Activity to support safe efficient vehicle use is increased; as is use of active travel and public transport services.	Programmes to support safe efficient vehicle use practices, active travel and public transport use and other travel management practices continue.
Supporting measures	Rideshare support services are provided. Policies are developed to support alternatives to travel e.g. internet services. A regional position is formed on take up of alternative technologies to support lobbying efforts.	Investments are made in infrastructure to support uptake of alternative technologies as they emerge onto the market. Remote working and vehicle cooperatives are investigated and trialled.	Investments in infrastructure are made to support take up of alternative technologies as they emerge onto the market. Tele-work and vehicle cooperatives are implemented as appropriate.

Funding and Affordability

The short-term implementation of this strategy is consistent with the current Government Policy Statement on Land Transport Funding (GPS) which focuses investment on state highway improvements. This will enable the delivery of capacity improvements required on the strategic network for the strategy period. In order to deliver across all the desired regional outcomes, there will need to be advocacy to Government to change the distribution of central government funding. Funding distribution will need to be adjusted over the medium term in order to ensure that funding is aligned with the strategy.

PUBLIC FUNDING

As far possible, this strategy takes into account the public funding likely to be available for implementation within its lifespan. There are many factors influencing the source and use of funding for land transport, making it difficult to estimate with any confidence how much will be available and from which sources over the next 30 years.

The main sources of public funding are:

- ***Local government (principally rates and development contributions)***
- ***Central government for road based modes and policing through the National Land Transport Fund***
- ***Central government for rail through Treasury***
- ***Central government for school bus services through the Ministry of Education.***

However, in order to ensure this strategy is affordable it has been assumed that the average amount of funding on an annual basis will not change significantly in real terms from the level seen over recent years. This is consistent with GPS forecasts, which indicate that the level of central government funding is expected to rise steadily over time at an average rate of around 3.5%[5]. It is assumed that the share of this funding that might be allocated to the Canterbury region will also remain around the average of 6% that was observed between 2000 and 2010[6].

Given these assumptions it is estimated that the average public funding available for transport in the region will remain in the order of $400M per year in real terms. This will inevitably vary from year to year depending on the staging of the more expensive initiatives.

5 Average inflation in New Zealand over the last decade was 2.7% but is currently rising. Source: Reserve Bank of New Zealand.

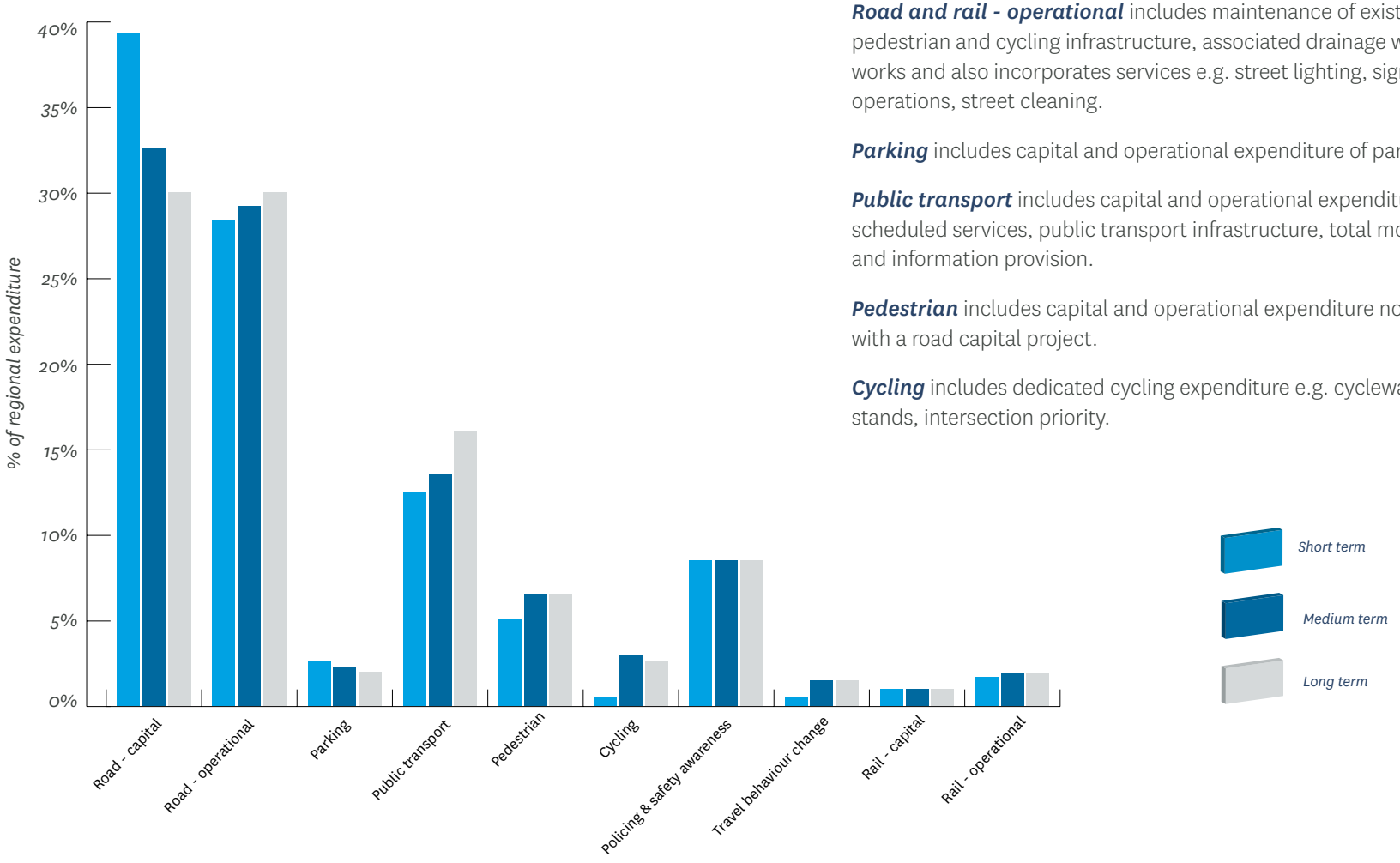
6 www.smartmovez.org.nz/data

In order to deliver the strategy, the distribution of the funding available will need to change over time as indicated in the following graph. This does not include emergency works as these are by their nature unpredictable. For example, the repair and reinstatement of infrastructure damaged in the earthquakes is not included in this breakdown.

Historically, roading renewals have required roughly the same level of expenditure as roading maintenance in the Canterbury region. As such, the graphic on P37 sees capital expenditure on new roading infrastructure in Canterbury reducing from around 10% of all transport annual expenditure in the short term, to less than 5% in the medium term and to relatively low levels thereafter. It is this expenditure that is then redirected to the other areas indicated, with renewals continuing at broadly the same level as seen in the past.

It is clear that if the strategy's aims to improve fuel efficiency in both private and commercial vehicles are successful, there will need to be alternative revenue streams available for transport investment to compensate for the loss of Fuel Excise Duty.

INDICATIVE FUNDING DISTRIBUTION



Road and rail – capital includes new roads/rails and renewals of existing roads/rails and associated infrastructure.

Road and rail - operational includes maintenance of existing road/rail/pedestrian and cycling infrastructure, associated drainage works, safety works and also incorporates services e.g. street lighting, signals and operations, street cleaning.

Parking includes capital and operational expenditure of parking facilities.

Public transport includes capital and operational expenditure i.e. scheduled services, public transport infrastructure, total mobility services and information provision.

Pedestrian includes capital and operational expenditure not associated with a road capital project.

Cycling includes dedicated cycling expenditure e.g. cycleways, parking stands, intersection priority.

PRIVATE COSTS

While the focus of this strategy is on the delivery of infrastructure and services by the public sector, use of the transport system comes at significant cost to the private sector. The cost to households of owning and operating motor vehicles alone costs the region around $1.3 billion each year[7], almost four times the amount spent by the public sector on transport. This does not include the cost of commercial freight and fleet vehicles. The cost of providing land and infrastructure for garages, parking lots and driveways is another significant cost borne by the private sector[8]. There are also costs associated with purchasing and operating cycles as well as paying public transport and taxi fares.

The commercial sector is also responsible for funding port and airport infrastructure, as well as much of the cost associated with freight transfer sites. Coastal shipping operations are also provided on a private commercial basis.

This strategy sets out a direction for Canterbury that will enable a reduction in private costs through efficiency gains, greater provision of less costly modes and promotion of better integration between transport and land use. This will have a positive effect on the affordability of transport over the 30 year strategy period.

7 Based on Statistics New Zealand 2007 household expenditure survey.

8 These costs have not been quantified for the Canterbury region.

Monitoring

This strategy outlines the direction for the Canterbury region's transport system over the next 30 years. The nature of transport-sector responsibilities and associated funding availability means that for the strategy to successfully deliver on its stated objectives, a collaborative and concerted approach to delivery is required. This collaborative approach involves central government, the New Zealand Transport Agency, KiwiRail, the regional council, each local authority, the airport & port authorities and other non-governmental organisations.

Legislation dictates that much of the formal accountability for delivery of this strategy rests with central government, the regional council and the local authorities within the Canterbury region. While the support of the other organisations above is critical to success, it is the three tiers of government that are formally responsible for delivery.

Appendix J outlines who is responsible for the collection and analysis of monitoring data to allow three-yearly implementation monitoring reports to be produced by the regional council. In many cases, there is a requirement for local authority partners and central government agencies to supply relevant monitoring data in a timely manner, with the subsequent analysis then being undertaken by the regional council.


CROSSING
RAIL
WAY
3
TRACKS
RAIL