

Regional Land Transport Plan 2015 - 2025

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FOREWORD

The Canterbury Regional Transport Committee is a statutory body established under the Land Transport Management Act 2003. The Act requires Environment Canterbury to appoint a councillor from each territorial authority to the Committee, as well as a representative from the New Zealand Transport Agency. Environment Canterbury chairs and convenes the Committee.

The Regional Transport Committee's principal task is to identify the key transport-related issues, objectives and outcomes for the Canterbury region and in this context recommend a prioritised programme of transport activities. The Committee does this formally through the Canterbury Regional Land Transport Plan, which sets out the investment priorities for the Canterbury region and the programme of transport activities which will give effect to these priorities.

Canterbury's transport network has been built over generations to provide us with access to economic and social opportunities. However, this Plan sets out a number of serious challenges that impact on the effectiveness of our transport network. The resilience of the network has been tested most recently by the North Canterbury earthquake in November 2016 and also following severe flooding in 2017. Another challenge facing the transport network is the expected growth in road freight travelling within Canterbury of approximately 80% between 2012 and 2042.¹ In addition, population growth will also place pressure on the network, with Canterbury's population of 563,000 in 2013 expected to expand by 36% by 2043.²

Ongoing investment is critical to ensure that our transport system is fit-for-purpose to support our region's growing population and economy, to manage the risks posed by natural hazards such as earthquakes and floods, and to minimise the environmental impact of transport, and to reduce the number of deaths and serious injuries on our roads. Innovation will also be important, and Canterbury needs to be positioned to harness the potential of new technologies so we can increase the attractiveness of public transport and other ride share alternatives to the single occupancy vehicles which congest our network.

A core component of achieving this vision is to encourage mode optimisation: shifting freight where possible from road to rail and coastal shipping; and encouraging greater use of passenger and active transport to reduce reliance on single occupancy vehicles. A Regional Transport Scorecard has been developed to assist the Regional Transport Committee to monitor progress against the objectives of the Plan and to enable robust, evidence-based investment decisions.

A key challenge faced by local government is that existing transport planning and policy settings and funding models inhibit the development and implementation of innovative multi-modal transport solutions. The Regional Transport Committee welcomes the change in direction that has been signalled by the Government through the draft Government Policy Statement on Land Transport, with a greater focus on rail and mode neutrality. The Committee will continue to advocate for positive change, specifically through advocacy on the second stage Government Policy Statement on Land Transport.

The Committee also welcomes the opportunity to collaborate with central government, councils outside the region, our private sector partners, and the community to improve transport outcomes in Canterbury and across the South Island. A joint statement from the South Island Regional Transport Committee Chairs Group has been included in this update of the Regional Land Transport Plan, and highlights this need to work together. South Island-wide collaboration is particularly important as critical freight and visitor journeys cross regional boundaries, extending along and across the South Island, and connecting to both Stewart Island and the North Island.

Finally, I would like to thank the Canterbury councils and the NZ Transport Agency (NZTA) for their assistance in reviewing and updating this Plan, and the Canterbury public for their input. I would also like to acknowledge the hard work of the Regional Transport Committee members and their staff in preparing this iteration of the Plan.



Steve Lowndes

Chair, Canterbury Regional Transport Committee

¹ Ministry of Transport (2014) National Freight Demand Study.

² Statistics New Zealand 2013 Census (forecast released December 2016).

JOINT STATEMENT BY THE SOUTH ISLAND REGIONAL TRANSPORT COMMITTEE CHAIRS GROUP

Recognising the interconnectedness of South Island regional economies and communities, the chairs of the seven Regional Transport Committees in the South Island have formed a group and agreed to a work programme to address South Island-wide issues. Chairs agree that they can make greater progress toward realising common goals if they work together.

The South Island has a relatively small and dispersed population of around one million. Christchurch is the largest urban area and is centrally located, and there are several other main centres located throughout the island. Small communities are often at a significant distance from main centres, and depend on the products transported to their locality every day, as well as the ability to move products to be processed, distributed and exported. This makes the resilience of transport linkages between South Island communities of critical importance.

The efficient movement of both goods and people is essential to the South Island's economy, as well as the social and economic wellbeing of its residents. The majority of freight is moved by road, with substantial freight growth being projected. Freight demand in the South Island is currently driven by a mix of primary sector and export growth, as well as population change. There has also been significant growth in the tourism sector, with the South Island recognised as a tourism destination in its own right. These critical freight and tourism journeys do not stop at regional boundaries – they extend across the South Island.

The South Island Regional Transport Committee Chairs Group was established with the purpose of significantly improving transport outcomes in the South Island, to help drive our economy and better serve our communities, through collaboration and integration.

The three key collaborative priorities for the Group are to:

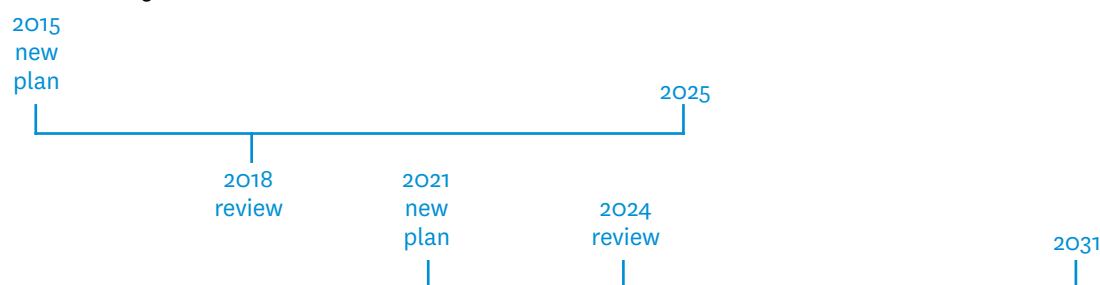
1. Identify and facilitate integrated multi-modal (road, rail, air, sea) freight and visitor journey improvements (including walking and cycling journeys) across the South Island.
2. Advocate for a funding approach which enables innovative and integrated multi-modal solutions to transport problems, and small communities with a low ratepayer base to maintain and enhance their local transport network.
3. Identify and assess options for improving the resilience and security of the transport network across the South Island, as well as vital linkages to the North Island.

INTRODUCTION

The Regional Land Transport Plan 2015-2025 (RLTP) has been prepared by the Canterbury Regional Transport Committee, a joint committee of the region's councils, as well as NZTA. The Regional Transport Committee is convened every three years by the regional council following local body elections, and has a membership and role prescribed by the Land Transport Management Act 2003.

Developing the RLTP is the primary role of the Regional Transport Committee and is a requirement for each region's Regional Transport Committee across New Zealand. It is part of the nationwide process in which local and regional councils work together to apply for, and receive, government investment in their land transport activities¹ for the coming three-year period. RLTPs also include planned expenditure by the NZTA on any state highways that run through a region.

This iteration of the Canterbury Regional Land Transport Plan 2015-2025 was published in 2018 to ensure the plan reflects the current state of our regional transport network, following a "mid-term" review required by the Land Transport Management Act 2003.



The Regional Transport Committee remains committed to the vision that:

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

This vision remains the over-arching goal for the committee and will guide future relationships, and planning and investment, across the sector, for the next ten year.

Accordingly, this plan:

- outlines the economic, social and spatial context in which the transport system operates;
- identifies regional transport issues and challenges anticipated over time;
- describes how these challenges will be met; achieving the vision and objectives through policies, measures and investment priorities over time;
- includes a regional programme of proposed land transport activities and prioritises significant activities; and
- provides a ten-year financial forecast of anticipated investment and revenue for the region's land transport activities.

The strategic context, issues and challenges, and strategic response sections of this RLTP were reviewed between 2015-16, and changes were adopted through a variation made in May 2016 to:

- align this RLTP with the Canterbury Regional Economic Development Strategy²; and
- reflect sector consensus on the need to plan in a more holistic and coordinated way that best serves the wellbeing of Canterbury and New Zealand.

Following extensive public consultation, the strategic context and issues and challenges were updated so that:

- The strategic context sets out the trends and drivers in the transport sector now and into the future.
- The issues and challenges section comprehensively presents current and future issues that are anticipated as a result of the strategic drivers, and the associated challenges these raise for transport providers.
- The strategic response section sets out how the Regional Transport Committee plans to respond to these drivers, issues and challenges. The strategic response is not a detailed list of all the activities planned, but rather a description of the overall approach the Regional Transport Committee feels is necessary to meet the region's needs into the future.

¹ These activities can include the planning and delivery of new roads, road maintenance, cycle facilities, public transport facilities and services, and so on. Typically, government meets 50-60% of the total cost of agreed council land transport activities, depending on the council, using an agreed methodology to establish a Funding Assistance Rate (FAR). The FAR for State Highway activities is 100%.

² See <http://canterburymayors.org.nz/creds>.

³ The National Land Transport Fund is a fully hypothecated (ring-fenced) transport fund made up of fuel excise duty, road user charges, a portion of the annual vehicle licensing fee, and income from the sale and lease of state highway property. This means that all the revenue collected from transport users is dedicated to investment in land transport. The NZTA Board has independent statutory responsibilities for the allocation and investment of the National Land Transport Fund, which occurs through the National Land Transport Programme.

The remainder of the Plan was subsequently reviewed in accordance with guidance issued by the New Zealand Transport Agency, including the need to identify a small number of priority issues. The strategic response section was also updated to ensure it remains current.

The comprehensive issues and challenges section informed the identification of a set of regional investment priorities that focus on travel time reliability, access, condition and suitability of assets, safety, resilience, and environmental impact. These investment priorities strike a balance between:

- addressing the region's most pressing needs;
- consistency with the priorities outlined in the Government Policy Statement on Land Transport 2018; and
- alignment with the National Land Transport Programme Investment Assessment Framework 2018-21.

Public consultation was undertaken again in 2017/18 on the additional proposed changes, including the proposed regional investment priorities.

The investment priorities established in this Plan will enable a more comprehensive and integrated approach to meeting regional transport challenges, as well as supporting territorial authorities to seek funding from the National Land Transport Fund to progress their priority projects.³ It should be noted that the final decision on whether any of the activities proposed in this Plan are included in the National Land Transport Programme rests with NZTA.



STRATEGIC CONTEXT

This section describes the key features of the Canterbury situation relevant to the future planning of our transport system. It includes an explanation of our diverse rural and urban populations and economic structure, and our current transport system. This section also describes our relationships to the rest of New Zealand and to the rest of the world.

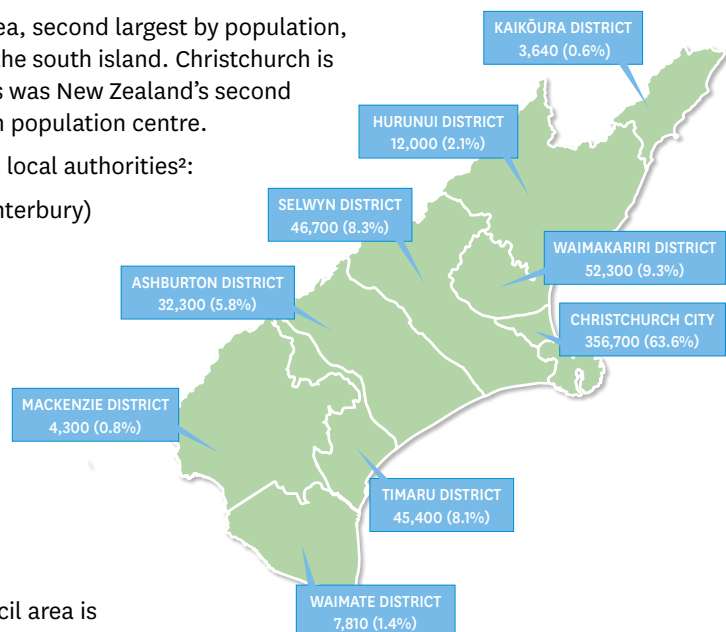
OUR REGION

Our people

The Canterbury region is New Zealand's largest by area, second largest by population, home to 562,900 people¹ and the most populous in the south island. Christchurch is located centrally in the region and at the 2013 census was New Zealand's second largest city. The greater Christchurch area is the main population centre.

The Canterbury region is composed of nine territorial local authorities²:

- Kaikōura District (population 3,640, 0.6% of Canterbury)
- Hurunui District (12,000, 2.1%)
- Waimakariri District (52,300, 9.3%)
- Christchurch City (356,700, 63.6%)
- Selwyn District (46,700, 8.3%)
- Ashburton District (32,300, 5.8%)
- Timaru District (45,400, 8.1%)
- Mackenzie District (4,300, 0.8%)
- Waimate District (7,810, 1.4%)



The total population of the Canterbury regional council area is projected to grow, on average, by 0.9 % a year between 2013 and 2043, slightly higher than the average national growth rate of 0.8 % a year.

But only three territorial authorities within the region will meet or exceed the national growth rate: Selwyn district (2.2 %), Waimakariri district (1.3 %) and Ashburton district (0.9 %).

In the remaining six areas, average annual population growth rates are projected to be between zero and 0.7 %. On this projection, Canterbury's population will increase from around 560,000 to 730,000 between 2013 and 2043, with nearly half of that growth occurring between 2013 and 2023. Canterbury's population growth contributes 14 per cent of the national growth.

Canterbury is projected to continue to be New Zealand's second most populous region (after Auckland), hosting 13 per cent of New Zealand's total population.

Our economy

Canterbury's economy expanded more than any other region (30.9%) between 2009 and 2014. This was partially due to strong construction and recovery activity following a series of major earthquakes in 2010 and 2011. This compares to 22.4% growth over the same period for New Zealand as a whole. In 2014, Canterbury contributed 13.1% of national Gross Domestic Product (GDP) and had the second-largest GDP increase by region after Auckland (10.6%, compared to 6.7% for New Zealand overall). In per capita terms, GDP is currently \$53,054 per year in Canterbury, compared to \$48,944 per year for the rest of New Zealand³.

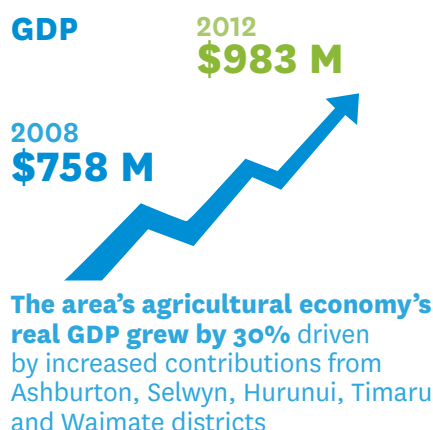
The earthquake rebuild is currently a major driver of economic activity in Canterbury. However the underlying economy, which is not temporary in nature, has been growing, with some sectors outside of construction performing well despite the earthquake disruptions.

¹ Statistics New Zealand 30 June 2013 population estimate.

² Whilst the portion of Waitaki District north of the Waitaki River lies in Canterbury, for the purposes of transport planning, Waitaki District is considered part of the Otago region.

³ Source: Statistics New Zealand, 2014 figures.

Between 2008 and 2012 Canterbury's agricultural economy's real GDP grew by 30% (from \$758m to \$983m) driven by increased contributions from Ashburton, Selwyn, Hurunui, Timaru and Waimate districts. Dairy volume expansion over the decade to 2010 was worth \$590 per person in the Canterbury region compared to \$270 in Waikato. The estimated net farm gate contribution of irrigation on Canterbury's GDP increased from \$335m in 2003 to \$1,394m in 2012, driven by expansion in areas with access to irrigation from 287,000 to 444,777 hectares and an increase from gross margins per hectare associated with access to irrigation.



DAIRY VOLUME EXPANSION over the decade to 2010



WAIKATO 2010
\$270 per person

CANTERBURY 2010
\$590 per person

Manufacturing is also a key component of the Canterbury economy, particularly transport and machinery equipment, food and beverage. Christchurch is the manufacturing hub, with particular strengths in machinery and equipment manufacturing and chemical, minerals and metal manufacturing.

Tourism is another key aspect of the Canterbury economy and provides a pivotal role in the wider tourism offering of the south island. Airfares and international tourist spend now outstrips dairying as New Zealand's prime source of export earnings, quoted in Statistics New Zealand data as \$13.5 billion⁴. In Canterbury, whilst the Christchurch industry continues to rebuild following the earthquakes, the remainder of the region has performed strongly and emphasises the need for good transport links between Christchurch and other key tourism destinations across Canterbury and in neighbouring regions.

Transport plays a key role as enabler for each sector of the regional economy. Efficient and effective transport for the movement of inputs and outputs of these sectors, as well as for service industries and employees, plays a critical role in economic productivity, keeping costs down and contributing to international competitiveness. This is crucial for New Zealand as a trading nation some distance from our main markets.

OUR TRANSPORT SYSTEM

Land

Canterbury is well serviced by 14,220 km of council owned and operated local roads established over generations by local authorities to provide access to rural land, visitor destinations and small and large settlements. These networks are a mix of unsealed and sealed roads, mainly with two lanes but in busier urban centres like Christchurch, Ashburton and Timaru, four lane roads to manage volumes efficiently and safely.

AREA	% SHARE OF REGIONAL POPULATION	% SHARE OF REGIONAL ROAD NETWORK BY LENGTH	ROAD DENSITY (LENGTH / LAND AREA)
Kaikōura	0.6	1.3%	0.10
Hurunui	2.1	9.2%	0.17
Waimakariri	9.3	9.8%	0.70
Christchurch	63.6	14.8%	1.66
Selwyn	8.3	15.8%	0.39
Ashburton	5.8	16.9%	0.43
Timaru	8.1	10.8%	0.63
Mackenzie	0.8	4.5%	0.10
Waimate	1.4	8.4%	0.38
State Highways	-	8.4%	-

⁴ Source: Tourism Industry Association and Statistics New Zealand, Tourism Satellite Account 2015.

Canterbury has 1,330 km of State Highways (owned and operated by the NZTA) that provide access between points of national significance, as well as providing inter-regional connections to Otago, West Coast and Marlborough. State Highway 1 runs north – south linking Picton to Bluff and in places north and south of Kaikōura is nestled between steep hillsides and the Pacific Ocean. The Christchurch motorways Roads of National Significance (RoNS) programme is underway in Christchurch and scheduled for completion by 2020. They are intended to introduce significant journey time reliability improvements on State Highway 1, State Highway 74 and State Highway 76.

Public transport networks are provided in Greater Christchurch and Timaru. The greater Christchurch network was severely impacted by the earthquakes of 2011 and continues to be disrupted by road repairs. The network has been re-designed to operate in a more efficient way and better serve the changes in land use that have merged since 2011, however land use change and workplace dislocations are ongoing, and this has impacted on public transport patronage, with numbers yet to recover to pre-earthquake levels. Outside of Greater Christchurch and Timaru, rural public transport in the form of community vehicle trusts have emerged where scheduled buses services and taxi services are not sustainable. These community led initiatives make available a vehicle for booking and are partially supported, alongside fares, by the regional council through a local rate agreed annually by the community. Thirteen such trusts now exist across Canterbury and more are in various stages of development.

In most urban areas taxi companies provide on-demand private transport services. These offer an effective private transport option for people who enjoy the convenience of a private vehicle but do not wish to use, or do not have, their own. Aside from these point to point journeys, taxis can also form part of a multi-modal journey, for example as the final leg of a trip made primarily by plane, bus or coach.

The emergence of innovative shared vehicle ownership models, ride sharing, hire schemes and mobile technology that enables on-demand transport services may also improve the efficiency of the network and ultimately slow the growth in peak period journeys. Increasingly these market led solutions will compete with the markets local and central government serve through public transport provision and change the way publicly provided infrastructure is used by the public and commercial operators. It will be important that public agencies are enablers of positive change, as well as provide appropriate regulation where public funds, and safety and security of the travelling public are at stake.

The region also has a Total Mobility scheme, which assists eligible people with impairments to access appropriate transport to enhance their community participation. This assistance is provided in the form of subsidised door-to-door transport services wherever scheme transport providers operate. Within Canterbury, Total Mobility services are available in Greater Christchurch, Ashburton, Timaru and Waimate. In each of these areas, a subsidy is currently set at 50 per cent of the fare up to a maximum of \$35 per trip.

A significant amount of urban roads have bicycle facilities within the same corridor, either beside traffic lanes or separated from them, alongside footpaths. In Christchurch, separated cycle paths have significant coverage in places, with a further 13 under development through a \$200m programme of investment in Major Cycle Routes.

Rail

The rail network plays an important role in transporting people and freight around the region, and from plant to port. Rail plays a significant part in moving large volumes of export products for key commodities within the south island.

There is 650 km of rail network across the region, with links north to Picton and south to Dunedin and beyond. The midland line provides a rail link through the main divide to Greymouth and points in between. These lines are primarily used to move freight in the form of coal from the West Coast to the port of Lyttelton, as well as a range of other containerised products and logs. Passenger services operating primarily as scenic visitor experiences also operate daily year round between Greymouth and Christchurch; and seasonally between Picton and Christchurch. These form an important part of the tourism landscape in the region.

Air

Christchurch International Airport Limited (CIAL) is the tourism gateway to the South Island and provides a significant contribution to both the Canterbury region and the South Island as a whole, with the total airport operation employing more than 5,500 employees across a diverse range of companies.

An economic assessment in 2012 identified that Christchurch Airport contributed to the generation of \$1.8 billion in regional GDP, representing 7.1% of the total GDP in the Canterbury region and supported employment for 9.7% of the region's workforce. CIAL is seeking to grow the economic development of both the region and the South Island, by pursuing growth in airlines visiting Christchurch and international passengers holidaying in the South Island and through being a catalyst to growing the wider South Island visitor economy.

There is also a commercial airport in Timaru located 12.6km north of the city. It is the main airport in South Canterbury, with daily flights between Timaru and Wellington. Timaru airport has the capacity to take more flights and larger aircraft, including for freight.

Sea

Lyttelton Port of Christchurch (LPC) provides handling and stevedoring services for containers and bulk cargoes. The container trade has grown significantly in recent years and the port handles a large proportion of the South Island's imports, with Christchurch being a major distribution centre. The port is also equipped for bulk cargoes and is the biggest coal export port in New Zealand. The port is also a key part of the CIAL's supply chain receiving and storing jet fuel that is trucked to the airport. LPC operates two inland port sites in Christchurch at Woolston and Rolleston. The port itself is undergoing a significant rebuild following extensive damage as a result of the earthquakes. Reconfiguration and expansion forms part of this rebuild, including consideration of the potential future return of cruise ships which are a key component of the regional tourism offering.

Port of Timaru (PrimePort) also has significant port infrastructure including large areas and particularly cold stores. Container handling facilities and services in partnership with the Port of Tauranga are available. Port of Tauranga offers a feeder service to the extensive global services operated from Tauranga. The Port of Tauranga also operates an inland port at Rolleston that provides a container feeder service to the Port of Timaru. PrimePort also handles dry bulk and break bulk cargo, and is a key import and export gateway for bulk liquids including fuel and inputs to food processing. PrimePort also handles logs and timber products, as well as large volumes of exports, including ocean fish, meat, dairy fruit and vegetables.

FIGURE 1: THE CANTERBURY REGION AND KEY TRANSPORT ROUTES



INTER-REGIONAL CONNECTIONS

Links to neighbouring South Island regions and the North Island are of major importance to South Islanders, and for the flow of road freight and domestic and international visitors.

State Highway 1 provides links north to the Marlborough District and Picton; and south into the Otago region. State Highways 7 and 73 link Canterbury to the West Coast. State Highway 8 is also a key route linking visitors to central Otago and Queenstown. These routes are characterised by two lane highways with occasional passing lanes through a range of challenging geography that exposes them to natural and weather hazards.

Rest and scenic lookout areas are provided in some places, recognising the role these routes play linking visitors to destinations across the region and beyond. There are some concerns around the movement of pedestrians in these areas adjacent to high speed roads, and measures such as signage, layout design and the NZTA-led Visiting Drivers Project are aimed at mitigating these risks to the extent possible.

Rail transport in Christchurch consists of two main railway lines carrying largely long-haul freight, as well as two long-distance passenger trains. The Main North Line runs from Christchurch along the east coast and through Kaikōura and Blenheim to Picton, connecting with ferries from Picton to Wellington. The Main South Line runs from Lyttelton through Christchurch and along the east coast of the South Island to Invercargill via Dunedin.

The ports and airports also play an important role in connecting Canterbury to other regions. LPC is a significant destination for rail freight and handles a large proportion of the South Island's imports. PrimePort partners with the Port of Tauranga, making it part of an inter-regional integrated network that extends from Whangarei to Timaru. CIAL provides a gateway to the South Island for visitors and Timaru Airport provides a direct connection between South Canterbury and Wellington.

INTERNATIONAL LINKS

New Zealand's economy is heavily reliant on international exports, however given our distant markets, shipping costs form a large proportion of the total cost of export products. Our distance also introduces a time factor that is important for certain products, such as perishable foods, so each link in the export logistics chain needs to be efficient and effective to keep costs down, as well as be reliable.

Christchurch's airport provides the South Island's only direct access to long haul destinations, with links to Singapore, China, Australia and Fiji. Increasing the number of carriers flying direct to Christchurch boosts the regional economy, as well as that of the rest of the South Island. Achieving this offers the dual benefit of opening up new long haul air cargo destinations for high value low volume time sensitive export products such as seafood, meat, fruit and flowers. To promote this, transport providers have a role in making the transport system a safe and attractive component of the overall South Island offering, and by supporting the airport to remain an attractive proposition for international carriers.

More than 15% of international visitors hire a vehicle at some stage during their stay in New Zealand⁵, with increasing numbers from China and Japan in particular. This figure is likely to be higher in Canterbury due to the distances between South Island destinations. Catering for all overseas visitors by ensuring routes are safe and well sign posted, and supported by information, education, and appropriate infrastructure (such as public toilets and appropriate places to stop and take photos or look at scenery), is an essential part of delivering a world class south island experience and maintaining the safety of the road network.

Christchurch and Timaru ports both have facilities to cater for international ships, however currently Lyttelton provides the main gateway to international ports of call. As part of the Lyttelton Port Recovery Plan, plans are underway to rebuild the port after much of its infrastructure was extensively damaged after the Canterbury earthquakes. Ultimately the Port will cater for increased land side handling and storage facilities and the capacity to handle larger ships, as is the trend internationally towards ships capable of carrying in excess of 15,000 TEU⁶. Channels to the berths will also be widened and deepened to accommodate larger ships.

The Port of Timaru exports a large proportion of Canterbury's exports goods via the Port of Tauranga. This is set to grow as the Port of Tauranga, New Zealand's largest port, uses Timaru as a feeder service for its large container ships. Whilst smaller than Lyttelton, Timaru Port is also a major exporting contributor particularly in recent times with log exports and containers.

⁵ International Visitor Survey: Transport. YE September 2015. <http://nzdotstat.stats.govt.nz/wbos/>

⁶ TEU is the unit of measurement of the capacity of a container ship and stands for twenty foot equivalent unit, i.e. a forty foot container equals 2 TEU's.

STRATEGIC DRIVERS OF THE TRANSPORT SYSTEM

International and domestic economy

Economic activity is a driver of demand in the Canterbury transport system, whether it be for the local, regional, inter-regional, inter-island or international movement of people and goods. People moving to, from or between workplaces, and the movement of commodities and products are important components of the regional economy and the way in which these needs are met has implications for productivity and community wellbeing.

An attractive, effective transport system can also be a key factor in attracting skilled labour to the region, both in terms of the overall amenity of public spaces but also the ease with which people can get around for leisure, education and work purposes. Canterbury's ageing demographic profile suggests the attraction and retention of skilled labour to support economic growth will be an important component of the overall strategy to secure the future wellbeing of the region.

Journeys to workplaces by private vehicle, often combined with delivering children to school, are a key driver of peak demand. Where demands become concentrated, such as along key corridors, longer journey times result, safety issues emerge, environmental impacts worsen and traveller frustration grows. The most common means of travel to work on the 2013 census day for people in Canterbury was driving a car, truck or van (79.8 % of people who travelled to work used this form of transport). More than 19 % of households in Canterbury have access to three or more motor vehicles, compared with a little over 16 % of all households in New Zealand⁷.

The supply of inputs to businesses in the region and the delivery of their products for domestic and international consumption is also a key function supported by the transport system. Whilst the number of freight journeys is smaller than the number of trips made by people, they are an important function supporting a strong economy, which contributes positively to broader community wellbeing. New Zealand relies on trade with distant markets, with the cost of freight added to the price of our exports and imports. Canterbury is central to this, with around 13%⁸ of New Zealand's commodity export earnings passing through CIAL and Lyttelton Port. Ensuring key journeys to and from these points are efficient, effective and responsive to changing circumstances is therefore important. The affordability of our own domestic consumption of fast moving consumer goods, durable goods and major appliances, whether produced domestically or overseas are also supported by an efficient and effective freight transport system.

According to analysis completed as part of the South Island Freight Plan, overall freight activity in Canterbury is forecast to increase by 85%⁹ by 2042, with most growth occurring by 2027, driven by increases in liquid milk, manufactured dairy, general freight, aggregates, concrete and limestone, cement and fertiliser. Most movements (88% of tonnage) will begin and end within the region, which means 940,000 more 44 tonne truck trips per year based on current patterns of use. Currently 92% of all freight is moved by road and this is set to remain under current trends. Whilst this represents forecasts using best available information, international and domestic conditions will continue to shape the types, proportions and quantities of products the region imports and exports to and from the rest of New Zealand and internationally. Whilst the international demand for New Zealand dairy products in recent years has shaped Canterbury rural land use and created new transport demands on the network, such international trends can shift over time and see new land uses emerge along with new transport demands. A responsive and flexible transport system, enabled by appropriate and timely monitoring and planning is therefore important to ensure economic development and growth is supported. The strategic response section of this RLTP discusses further the need for collaboration across the sector to enable a responsive planning and investment framework.

High Productivity Motor Vehicles (HPMV) and an associated permit system make available a way for higher freight volumes to be transported without the need for an equivalent increase in truck trips, making road transport more efficient, effective and productive. This initiative allows for the movement of trucks over 44 tonnes on certain parts of the network under a permit system, so that vehicles, roads and structures can be assessed prior to their use, ensuring safety is maintained and strength and maintenance implications for roads and structures are understood and addressed. There has been a dramatic jump in the uptake of high productivity motor vehicles across the country. As HPMV's provide average productivity gains of between 14-20%, it is estimated that this level of high productivity travel has avoided around 10-15 million kilometres of standard heavy truck trips per quarter, providing commercial savings of between \$20 - \$30 million. So while HPMV trips are increasing, standard heavy truck trips show a corresponding decline.

⁷ <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-a-place.aspx>

⁸ Source: Stats NZ : Exports for Overseas Cargo (fob NZ\$): New Zealand Port by Country of Destination, Commodity (HS2) and Period

⁹ Draft South Island Freight Plan, July 2015. 33 million tonnes in 2012 to 61.2 million tonnes in 2042.

Key bridges on the strategic road network are of particular concern with regard to increased truck numbers and weights. Whilst the HPMV system will accommodate some of the forecast growth in freight volumes, increasing heavy vehicle numbers over time on the road network are an inevitability. Combined with the age of some of the region's key structures, and a heightened awareness of our need for resilience to natural disasters; bridge renewal, strengthening and improvement are a key strategic issue for the region.

In a similar way, factors outside the transport system can drive urban land use change; such as the need for new housing, educational precincts, or industrial developments. However, it is important the transport implications of location choices are well understood and factored into decision making. In the greater Christchurch area, the Greater Christchurch Urban Development Strategy provides a forward view of land use change over time and enables a long term transport planning approach to be followed, potentially itself driving land use change by allowing for long term infrastructure developments to take place that achieve the multi-modal objectives sought in this Plan.



Population change

The Canterbury population is projected to grow by 166,300 people by 2043¹⁰. Most growth will take place in the Greater Christchurch area (Waimakariri, Christchurch and Selwyn districts), with also some significant growth in the Ashburton District. In the remainder of the region, population growth will be very flat or in some districts marginally declining by 2043.

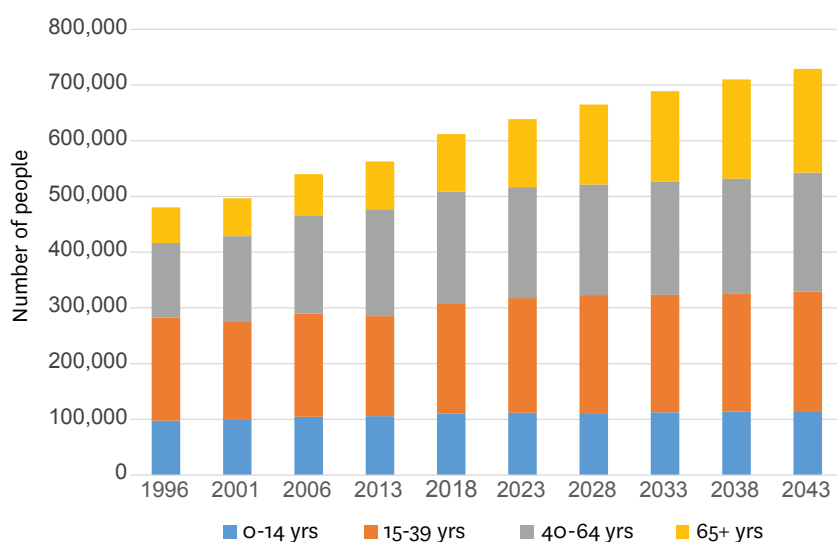
Such growth will place demands on all aspects of service provision, and not least the transport system in terms of domestic freight growth and people movement. However, evolving technology, information provision and people's changing attitudes to how they meet their travel needs will mean current approaches to meeting these needs must change.

There is emerging evidence internationally, such as in the USA¹¹, supported by recent trends in New Zealand around the age young drivers complete their journey through the graduated driver licensing system, that young people today, especially in urban areas, are making less use of private vehicles and instead make use of technology to access transport services, or even replace the need to travel.

A key feature of the changing age profile will be the increasing numbers of people aged 65 years and over. By 2031, one in four of Canterbury's residents is projected to be aged 65 and older. In eight of ten districts, the percentage is projected to be higher than this, with around a third of the resident population over 65+ in the Waimate, Timaru, Mackenzie and Kaikōura districts. Whilst these numbers are not large, in absolute terms they represent a challenge for local councils in terms of funding, but also a broader issue of ensuring communities remain connected and able to use the transport system to access their daily needs.

Older people in the future will not be the same as the older people of today. Trends suggest they will on the whole, be healthier for longer into old age and still able to enjoy physical activities and be out and about. Many may also continue to work past the age of 65. Active travel, public transport and increased inter-peak traffic movements may all become important issues as we see a growing older generation, perhaps less inclined or able to continue driving but nevertheless assertive of their need to have independent mobility and access to all of the opportunities the rest of society enjoys.

FIGURE 2: POPULATION AGE STRUCTURE, CANTERBURY REGIONAL COUNCIL AREA MEDIUM PROJECTION, 1996-2043 (2013-BASE)



¹⁰ Statistics New Zealand 30 June 2013 medium population projection.

¹¹ Transportation and the New Generation Why Young People Are Driving Less and What It Means for Transportation Policy. Benjamin Davis and Tony Dutzik, Frontier Group Phineas Baxandall, U.S. PIRG Education Fund. April 2012.

International and domestic visitors

Visitors to Canterbury declined in the immediate aftermath of the Canterbury earthquakes, but visitor numbers are recovering and very recently exceeded pre-earthquake levels, due mainly to an increase in domestic visitors. Visitor numbers are projected to increase as the rebuild of the Christchurch central city continues, including the provision of more visitor accommodation and attractions.

There were 3.09 million international visitors to New Zealand in the year to November 2015, the highest ever annual total. The number of both domestic and international visitors is forecast to increase by over 30% to 5.72m guest nights by 2020¹².

Tourism is an important part of the New Zealand economy, its direct contribution to GDP is 3.7%. The biggest changes in international visitors by country of residence between the years ended November 2014 and 2015 were in arrivals from: China (up 87,400 to 344,900), Australia (up 71,300 to 1.32million) and the United States (up 21,100 to 240,000). Australia, China, the United States and the United Kingdom were New Zealand's biggest visitor sources, contributing more than two thirds of all arrivals in the November 2015 year.

Within this there has been an increase in the number of Free Independent Travellers (FITs) touring New Zealand. Traditionally domestic tourists made up the bulk of FITs, however there has been a marked increase in the amount of international FITs who hire campervans and rental cars and drive. Based on the 2014 international Visitor Survey, driving in New Zealand is part of the visitor experience for 68% of visitors. CIAL is the international gateway to the South Island for many of these visitors.

Christchurch is an international gateway to the South Island, providing direct access to and from major cities in Australia, China and Singapore. As well as Christchurch attractions, visitors use the city as a stepping stone to other parts of the region and the South Island. Ensuring safe and efficient links between Christchurch and the tourism offerings of the South Island is important.

Meeting the self-drive and other travel needs of domestic and international tourists visiting Canterbury is an important contribution the transport sector makes to the regional economy by providing safe access to key attractions and supporting a positive overall visitor experience. As such, efforts to improve the visitor experience and increase the actual number of visitors is of strategic significance to the Canterbury economy. The Increasing number of visitors flying direct from overseas cities increases the number of wide bodied jets flying into and out of Christchurch. This, in turn, provides capacity to export long haul, high value, time sensitive goods, such as seafood, fresh meat, flowers and other perishables.

NZTA's Visiting Drivers project aims to improve road safety for domestic and international visitors, while maintaining New Zealand's reputation as an attractive and safe tourist destination. The project has a focus on Otago, Southland and the West Coast regions where visiting drivers make up a significantly large proportion of the traffic in these major tourist destinations. However, many of the project initiatives especially in information provision will benefit visitors across the country, including in Canterbury. Where possible, the lessons learned from the Project can be used in other areas as part of the usual Transport Agency and local council road safety initiatives.

¹² Christchurch and Canterbury Tourism Visitor Forecasts 2014/15 to 2019/20.

Technological change

Advances in technology are having a significant impact on the movement of people and goods. This can change the cost of travel and impact on transport networks, road safety and the environment. Vehicle technology is developing at an extremely rapid rate, through both passive and active safety features and user assist technology. History shows that these changes can be positive and negative, and emerge gradually over a long period of time or be disruptive, making existing technology redundant over a very short timeframe.

Whilst transport providers and the Regional Transport Committee have little or no control over these emerging technologies, it is important their implications are understood and planned for so that local, regional and national policy is amended appropriately and investment is properly directed where necessary to realise the benefits. Technological change is largely driven by consumer demand for cheaper, new and improved products and services. National, regional and local bodies have a role in enabling these benefits, whilst protecting the public through regulation and enforcement.

The following table captures some of the current emerging technological trends in general terms and outlines how these may drive changes in our transport system. It indicates the types of responses that will likely be needed by public bodies and other transport providers.

TECHNOLOGY	IMPACT OF RESULTING CHANGE	IMPLICATION FOR TRANSPORT PROVIDERS
Vehicle automation (e.g. takes control of vehicle in certain situations, to varying degrees)	Enhanced road safety Enhanced network capacity If fully autonomous changes the way mobility is achieved fundamentally	Less investment required in road safety over time Transport-related industries and infrastructure needs (e.g. parking replaced with drop-off)
Fuel efficient engines	Reduced consumer costs Reduced emissions Reduced fuel excise revenue	Less revenue into the National Land Transport Fund
Alternative fuel vehicles	Reduced consumer costs Reduced emissions Reduced fuel excise revenue	Role in EV charging / alternative fuel infrastructure Less revenue into the National Land Transport Fund
On-demand transport services	Lower cost private transport Reduced vehicle ownership Reduced fuel excise revenue	Potentially less investment required in road network improvements over time Less revenue into the National Land Transport Fund
Smart Motorways	Consistent journey times Reduce congestion	Delayed or avoided investment in capacity increases
Traveller information systems	Information changes consumer behavior	Better incident management Potentially less investment required in transport improvements over time

Vulnerability to hazards

Cantabrians have a new understanding of the region's exposure to natural hazards since the earthquake sequence of 2010/11. Whilst the transport network proved to be resilient through the earthquakes in greater Christchurch, potential future earthquakes, floods, tsunami and land slide are all hazards that can be expected to have serious impacts on transport infrastructure across the region. In rural areas, where route choices are fewer, their impact may be felt more keenly thereby restricting the movement of people and goods to support communities more so than in the urban areas of the region.

Network outages of weeks, months and even years are possible, making the need for long-term alternative arrangements a realistic possibility. The Canterbury Lifeline Utilities Group, in association with transport providers, undertakes investigations to reduce infrastructure vulnerability and improve resilience. This work can lead to physical improvements to infrastructure, scheduled with other work, as well as response plans in the event of natural disasters.

Weather hazards, such as fire, snow and flood can also interrupt the normal operation of the transport system and result in outages for days and possibly weeks. Having response plans in place, and the ability to respond quickly, can effectively minimise impacts upon the community and economic wellbeing.

ISSUES AND CHALLENGES

When considering transport drivers in the current regional, national and international context, a number of issues emerge; and with them transport challenges. These are outlined below and enable short, medium and long term priorities to emerge that inform the strategic response described in section 4 that follows.

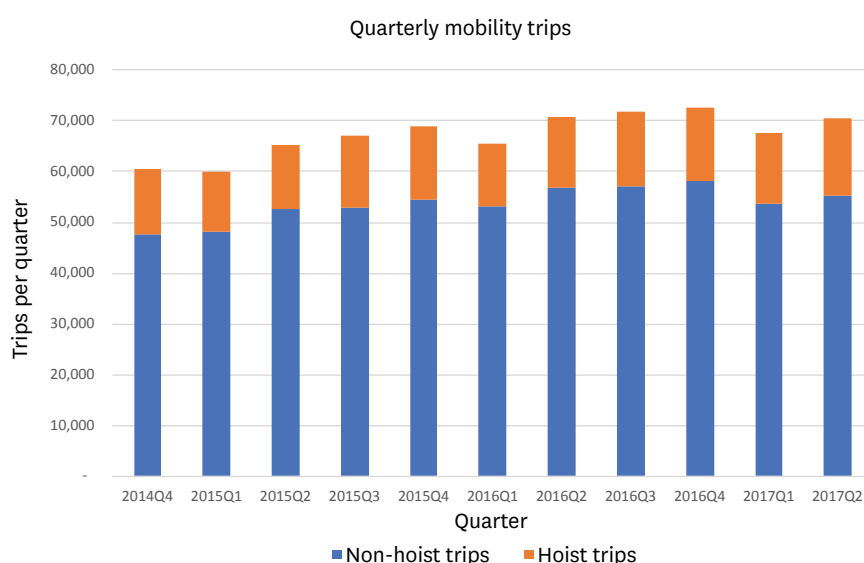
Canterbury is a diverse region with varying geography and a unique economic and demographic mix. Whilst town and country rely on one another for ongoing wellbeing and prosperity there are unique challenges in each that require an appropriate transport response at the local level. The following issues and challenges capture the key strategic factors facing the region into the future and where appropriate note particular urban or rural factors.

ISSUE - MAINTAINING AND ENHANCING ACCESSIBILITY

The primary purpose of transport is to provide opportunities for the movement of people and goods. Accessibility refers to the potential to reach destinations and mobility represents the ability to travel freely to and from destinations. Most people living in Canterbury enjoy a high level of mobility, which is largely met by high levels of car ownership and use. This mobility enables key social and economic benefits including access to work, education and recreational opportunities. Market research confirms most people living in the region place a high value on their level of mobility and expect their future mobility needs to continue to be largely based around the motor vehicle.

Mobility services are monitored by Environment Canterbury and these are presented in Figure 1. Trips for wheelchair users where a hoist is required are monitored as a subset of the mobility trips.

FIGURE 3: MOBILITY SERVICES



In urban areas, some people choose to access the places they need to by means other than private car, such as by walking, cycling, using public transport and catching a taxi. This can lead to conflicts between modes that can have profound implications for safety, travel time and the further uptake of these more sustainable transport options. There is the potential for conflicts to also arise in rural areas, for example where cyclists make use of state highways. The separation of these modes from private vehicles is increasingly seen as a way to support their growth and complement capacity upgrades to the roading system.

Integration problems and conflicts can also occur between traffic in urban areas when catering for access to local destinations on strategic roads, such as motorways and expressways, showing that whilst access to destinations in itself is a positive outcome, it can have adverse implications for other road users.

Key challenge

Maintaining current levels of accessibility and mobility for most Cantabrians and enhancing accessibility for those who are currently disadvantaged because of poor levels of mobility.

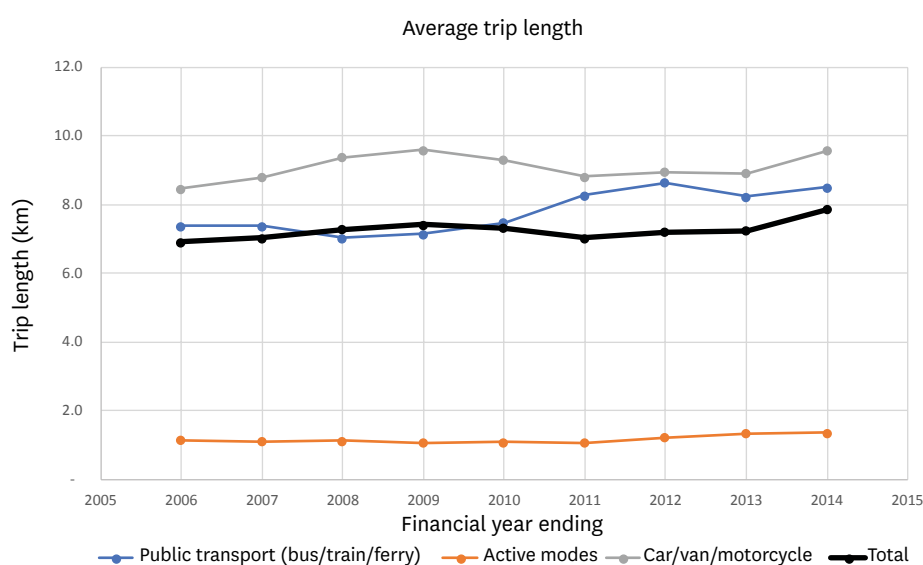
ISSUE - PROVIDING TRANSPORT OPTIONS

The use of private vehicles currently dominates the way that most people meet their transport needs. As vehicle numbers grow in line with population and demographic changes, current travel time delays and congestion will rise overall, despite targeted infrastructure investment at key locations that unlock access to new development and ease chronic localised congestion. For the future wellbeing of the region, it is important that a range of transport options are available enabling people and businesses to access what they need in the way of goods, services and activities.

Many regard improving public transport, better use of rail and increased provision of cycling and walking infrastructure as significant challenges facing the region. For many people, especially those in rural areas, including rural towns, these options are not always readily available. Low density and dispersed population centres make providing attractive and affordable public transport services extremely difficult, requiring innovative approaches to be explored, such as community vehicle trusts that provide on-demand shared transport options delivered within, and by, the community. Ageing communities and the need to access centralised health care facilities may open up opportunities for collaboration between public agencies in recognition of where the costs and benefits of travel fall.

Trip lengths are monitored in the Ministry of Transport Household Travel Survey. The results of this are provided in Figure 2 showing that average trip lengths in Canterbury have been increasing since 2011, likely due to increases in the private vehicle mode share and trip length.

FIGURE 4: AVERAGE TRIP LENGTH BY MODE



Some sectors of the community are “transport disadvantaged” in that they are faced with a lack of choices because they have limited access to a car or other transport options. Access to some goods and services can be enhanced through integrated land use measures, changes to the way services are provided or through the use of communications technology. Such initiatives can play a significant role in determining overall levels of accessibility. Providing for accessibility is considered more important than providing for mobility.

Key challenge

Supporting, and in some cases supplying, a range of transport and non-transport options to ensure the accessibility needs of all people and businesses can be met.

ISSUE - SUPPORTING FREIGHT GROWTH

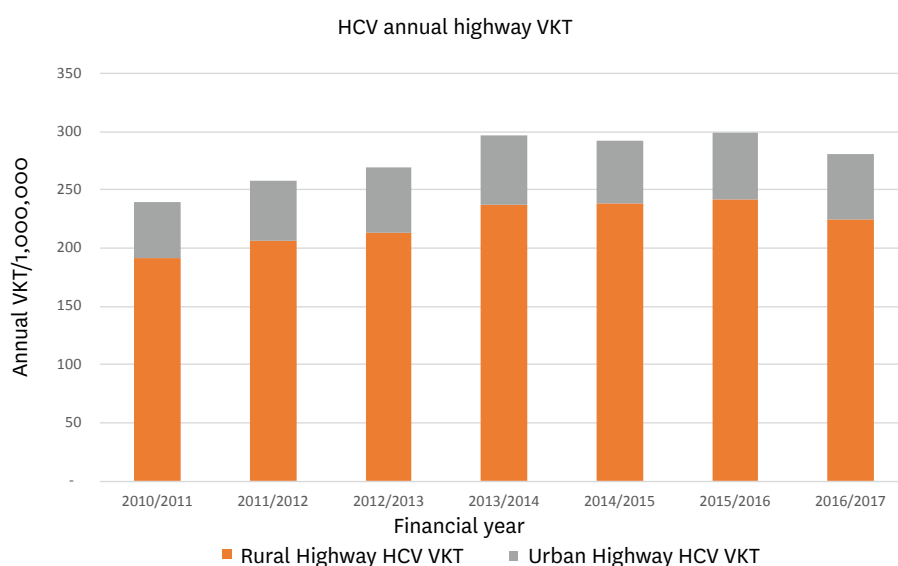
The efficient movement of goods and people is essential to support the region's economic wellbeing. Although the region's economy is expected to continue to diversify over time, industries such as agriculture and forestry that have significant freight requirements will continue to play major roles.

Over the next 25 or more years, freight volumes to, through and from Canterbury are expected to almost double. Without intervention, the majority of freight (92%) will continue to be moved on the state highway and local roading network, with only 6% moving by rail and only 1.6% moving by coastal shipping. However, through this Plan multi-modal options will be sought where these make sense. Investigation is necessary to understand what the opportunity is for these other modes, whether it be for the movement of international or domestic freight within the region.

Just increasing the number of trucks is not a sustainable option for meeting the forecast growth in freight volumes and managing its effects. Aside from the network impacts, driver shortages and road maintenance costs are a significant issue. At a system level there is the potential to consolidate freight volumes moved from rural areas by truck at strategic points in the network. Transporting them onward by rail or coastal shipping is then made possible so long as travel time, volume and distances are such that these options are financially advantageous for producers.

Currently, the growth is partially being met by increased heavy vehicle mass and dimension limits through the new High Productivity Motor Vehicle (HPMV) rule. The proportion of heavy vehicles operating on HPMV permits is high and growing. The mass is increasing with vehicles operating at mass between 55 and 60 tonne now common place and this is likely to continue to increase. A resilient road network that has the capacity to cope with these HPMV mass limits and an overall increase in heavy vehicles is a challenge. Much of the Canterbury transport network is not designed for this increase in heavy vehicles and increasing failures or restrictions are resulting.

FIGURE 5: ANNUAL TRUCK VEHICLE KILOMETERS TRAVELLED



There is a lack of integration between the road, rail and shipping sectors which can make it difficult to effectively plan in a multi-modal way for the region's future transport needs, particularly in light of the forecast increase in freight movements. Without intervention the majority (92%) of freight will continue to be moved on road networks, with the rail share predicted to drop from 6% currently to 5% in the next 20 years. A key focus of the Regional Transport Committee will be to bridge the gap between sectors by bringing their views and knowledge together to enable joined up planning and investment decisions.

The vehicle kilometers travelled by heavy commercial vehicles on Canterbury roads has increased by approximately 3% per annum since 2011 although there has been little change since 2014.

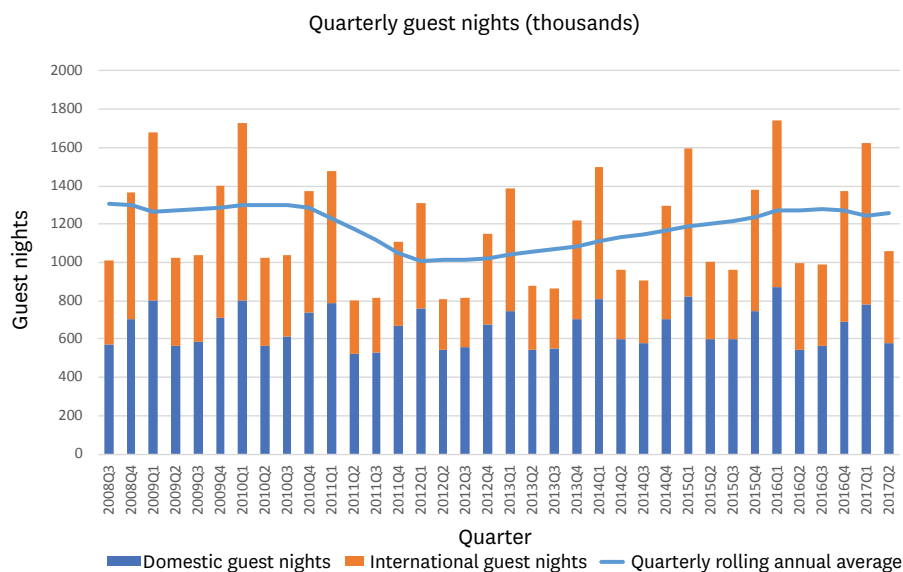
Key challenge

Ensuring the region's transport system effectively supports economic development and growth in freight volumes by taking a multi-modal and integrated approach.

ISSUE – SUPPORTING DOMESTIC AND INTERNATIONAL VISITOR GROWTH

Canterbury and the wider South Island offer wonderful visitor experiences that present the region, and our neighbouring regions, with economic growth opportunities. Ensuring visitors have an enjoyable, value for money and safe experience on transport networks is paramount to the region's reputation and ongoing growth in visitor numbers. Airport and cruise ship links, information, education and facilities provided in a seamless way are each important features of the visitor experience.

FIGURE 6: QUARTERLY GUEST NIGHTS IN CANTERBURY



The average quarterly guest nights in Canterbury have been recovering from a low in 2011 of approximately 1 million to approximately 1.25 million in 2017.

An additional 1.3 million domestic and international visitor guest nights in Canterbury are forecast by 2020¹³. Many of these will be self-drive visitors travelling in and around urban and rural parts of the region and into neighbouring regions. Fifteen per cent of international visitors are known to self-drive during their visit to New Zealand.

Key challenge

Developing the transport system to support domestic and international visitor growth and ensure the safety of visitors and other road users.

¹³ Visitor Forecasts 2015. Christchurch and Canterbury Tourism.

ISSUE - FUNDING AND AFFORDABILITY

Investment is essential for maintaining existing transport infrastructure and delivering improvements to the region's transport system. The ongoing implementation of the One Network Road Classification (ONRC) system provides a basis for prioritising such investment.

The increase in freight growth and subsequent increase in heavy vehicles is resulting in an increasing rate of road asset consumption with many roads failing prior to their design lives. Bridge capacity and age is also becoming an emerging issue. This increases the demands on limited funding to ensure a network that is both fit for purpose and resilient.

The increase in vehicle fuel efficiency, electric vehicles and smarter recording of Road User charges has made transport more affordable for users, but has almost flat-lined Government road tax revenue. This is not sustainable in the long term so alternative funding mechanisms need to be developed.

In light of these, and other factors, the Government has highlighted the need for non-asset solutions, demand management and intelligent transport systems (ITS) to ensure future demands can affordably be met¹⁴. However, some of the region's transport plans have not been fully realised because of funding constraints. Additionally, some parts of the region have relatively small populations that find it difficult to raise sufficient revenue to afford the levels of transport investment desired by the community. A particular issue exists on rural council-owned roads where heavy vehicle damage is not adequately covered by revenue.

Key challenge

Delivering high quality transport options that meet the needs of all Cantabrians in an affordable manner within the funding available.

ISSUE - MANAGING PRIVATE HOUSEHOLD VEHICLE TRAFFIC GROWTH

Projected increases in household numbers, coupled with the current trend of high household car ownership, is contributing to an increase in the demand for travel and the use of private cars, particularly in urban areas, and especially across Greater Christchurch. While traffic congestion can cause delays - which impose an economic cost to the region - it can also help manage travel demand by influencing trip timing, land use decisions and encouraging the use of a mix of transport modes, such as public transport, car-sharing, cycling and walking.

Key challenge

Effectively managing traffic growth to ensure that accessibility is maintained and that the region's economic performance is not adversely affected.

¹⁴ New Zealand Infrastructure Plan 2015.

ISSUE - IMPROVING ROAD SAFETY FOR ALL ROAD USERS

Approximately 40 people die and nearly 300 people are seriously injured on average every year on Canterbury roads. Although the number of fatalities arising from road crashes has generally decreased since the 1970s, in recent times crashes resulting in fatalities, hospitalisation and injury have increased. Improvements in vehicle safety over recent years has had a significant effect on reducing the fatality rate in crashes although this technology is slow to impact the safety of the transport system due to the high average age of Canterbury light vehicle fleet (with lower safety star ratings).

These contrasting trends suggest that whilst improving vehicle technology has the capability to significantly reduce fatalities and injury severity (data demonstrates that the survivability of a crash in a higher safety star vehicle almost doubles compared to a lower one), high numbers of accidents are still occurring.

Crashes impose a considerable social and economic cost on the region, our health system and the economic sustainability of a community. New Zealand has a national road safety strategy known as 'Safer Journeys 2010-2020'. Safer Journeys adopts the internationally endorsed safe system approach to road safety.

The current trend of increasing levels of motorbike ownership is also likely to increase overall exposure to risk. Accident numbers may also increase as the population ages. Canterbury's highest risk factor is intersections. The region faces particular issues with high numbers of casualties associated with:

- Intersection crashes (47% of all fatal and injury crashes)
- Loss of vehicle control or head on crashes (33% of all fatal and injury crashes)
- High and growing numbers of cycle crashes, (9% of all fatal and injury crashes)

In some cases, measures that have improved safety for motorists have had unintended consequences by reducing the safety of people using other transport options, such as walking and cycling.

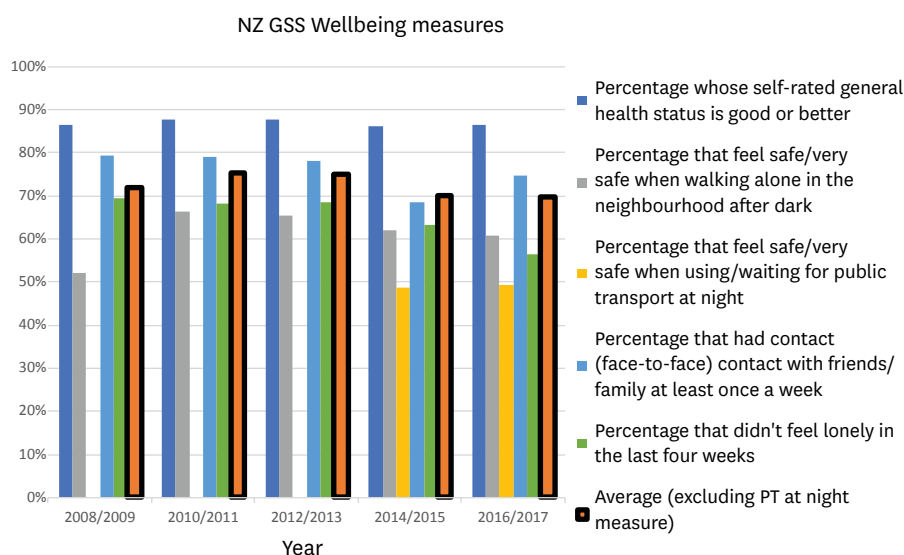
Antisocial use of motor vehicles is also an issue that has received much media attention and requires a cultural change in attitude toward responsible driving behaviour and a shared responsibility for road safety. A multi-agency approach is essential to achieving this culture change, with education and enforcement by the Police an essential complement to engineering for safer roads and roadsides by Road Controlling Authorities.

Key challenge

Improving safety outcomes for all transport users.

ISSUE - USE OF THE TRANSPORT SYSTEM HAS IMPLICATIONS FOR THE POPULATION'S HEALTH

FIGURE 7: NZ GENERAL SOCIAL SURVEY WELLBEING MEASURES



While high levels of car ownership and mobility provide people with some health benefits, such as access to medical services, motor vehicle dependence has been linked to increased levels of physical inactivity and obesity. Air and noise pollution from vehicles can also have significant health impacts on people that are exposed to them for long periods.

Although there are demonstrable health benefits of active modes of transport, such as cycling and walking, market research indicates most people do not see a strong link between transport policies and public health issues.

The New Zealand General Social Survey monitors overall wellbeing with a number of measures directly impacted by the transport system. The trend in these indicators over the last decade are shown in Figure 5.

Key challenge

Ensuring transport makes a positive contribution to the health of Cantabrians.



ISSUE - MANAGING THE ENVIRONMENTAL IMPACTS OF TRANSPORT

The use of motor vehicles and development of transport infrastructure has significant impacts on the environment including air pollution, dust, greenhouse gas emissions, visual intrusion, storm water run-off, noise and vibration.

Transport is responsible for approximately 20% of New Zealand's greenhouse gas emissions and is one of the sectors that has seen ongoing growth, increasing by 69% between 1990 and 2013. As a consequence of the close links between population increase, economic growth and transport demand, Canterbury has experienced an increase in transport-related carbon dioxide emissions from motorised transport.

The Government's policy direction for transport over the next decade is set out in Connecting New Zealand. Connecting New Zealand summarises a number of direction-setting documents for the transport sector, including the National Infrastructure Plan, the Government Policy Statement on Land Transport Funding, and the New Zealand Energy Efficiency and Conservation Strategy. In turn, these policy documents also drive regional and local transport policy.

Incentives and research are underway in the areas of new fuels and technology, vehicle fuel economy labelling, improved efficiency of commercial fleets and encouraging forms of transport that are less carbon intensive. The Ministry of Transport has begun investigating the potential role for Government to encourage increased use of electric vehicles in New Zealand and in the meantime has extended the exemption for light electric motor vehicles from the requirement to pay road user charges from 2013 to 2020.

Local Government also has a leadership role in promoting electric motor vehicles. In 2015, the Christchurch City Council commenced a feasibility study into the replacement of its 350 vehicle fleet with electric vehicles. Environment Canterbury also runs four hybrid-electric vehicles as part of its 190 vehicle fleet.

The carbon dioxide emissions in Canterbury have been increasing over the last 20 years in absolute terms. However, over the last 5 years, the emissions per capita have remained relatively constant.

Key challenge

Maintaining and improving levels of access and mobility in an environmentally sustainable manner.

ISSUE - NETWORK SECURITY

The ability of the region to withstand a hazard event, such as flooding or a seismic event is an important consideration for maintaining the integrity of the region's transport system. A number of transport links in Canterbury face extremely challenging construction and maintenance issues particularly along the Kaikoura Coast, through the alpine passes and across some of the major rivers. Many of these links provide lifelines to neighbouring regions and are of national social and economic importance.

Canterbury has a high number of ageing bridges which are susceptible to damage and will require upgrades during the next 30 years. Furthermore, the increasing size, and frequency of heavy vehicles are exacerbating road maintenance issues on the region's extensive local road network.

Climate change is expected to have impacts on the region's transport infrastructure, particularly by generating more severe weather events such as flooding. In the long term, sea level rise will impact on land use and transport infrastructure, particularly in low-lying coastal areas. There will be a major impact on the rail network because much of the South Island's main trunk line is located in low-lying coastal areas.

Increasing levels of interconnectivity between transport infrastructure and other infrastructure sectors, for example the communications sector supporting new transport technologies, makes the network security challenge more complex than it has been in the past. A greater level of collaboration and understanding of cross-sector risks is required to manage network security.

Key challenge

Minimising the risk of disruption on key regional and inter-regional transport routes.

ISSUE - MEETING THE TRANSPORT NEEDS OF DISPERSED COMMUNITIES

The type and form of land use development that has taken place in the region has significant impacts on the transport system. Dispersed land use patterns are typically linked with high levels of motor vehicle ownership, use, and dependence since factors, such as the lack of availability of other transport options, affordability and distance to neighbouring towns and services make motor vehicle use the only practical transport option.

Conversely, concentrated land use is more commonly linked with lower levels of car ownership and use and higher levels of active transport and public transport patronage. The Canterbury region, particularly outside Christchurch, is characterised by a relatively dispersed population with low density communities that are often more reliant on motor vehicles to travel.

Key challenge

Future land use development occurs in a manner that social and economic needs can be met most efficiently and affordably.

ISSUE - OIL SUPPLY SECURITY AND FUEL PRICE VOLATILITY

The transport sector is highly reliant on imported oil supplies. During the next 30 years it is expected that oil prices will rise (subject to the highs and lows of economic cycles) as access to relatively cheap oil supplies diminishes. The resulting fuel price increases and volatility are likely to have significant social and economic impacts. Key export generating industries in the New Zealand economy, including tourism and timber, dairy and meat exports, are vulnerable to such impacts given most freight movement takes place by road. Although an increase in oil prices is expected to accelerate change from petroleum-based vehicles to alternative fuels and engine types, the transition is expected to take decades.

The price and supply of oil also affects road maintenance costs because bitumen is derived from crude oil. Alternatives for road surfacing such as concrete are not currently affordable.

In accordance with the Paris Agreement, New Zealand is obligated to reduce its greenhouse gas emissions. These reductions are also likely to have significant social and economic impacts as freight and commuter transport modes shift towards lower carbon options in the near future.

Key challenge

In the short term, ensuring the region is resilient to energy supply and fuel price volatility.

In the longer term, moving toward a transportation system that is less reliant on oil.

ISSUE - MANAGING THE TRANSPORT IMPACTS OF ANTICIPATED POPULATION CHANGE

By 2043, the region's population is expected to grow from approximately 563,000 to more than 729,000¹⁵. Most of this population growth is expected to occur within Greater Christchurch. This growth will create additional demands on the transport system. However, some parts of the region that already have relatively low populations are not experiencing population growth, such as parts of South Canterbury.

The proportion of people aged 65 and over is expected to increase significantly towards 2031, with one in four people in urban areas and one in three people in some rural areas aged 65 or older. An ageing population is expected to lead to increasing personal mobility issues, demand for public transport services and raises some road safety issues, as older people have a higher risk of being injured in road crashes. Social isolation is also of real concern for older people who might lose their personal mobility for a range of reasons, including the affordability of transport options.

Key challenge

Predicting and meeting the needs of a changing population and providing transport that enables access to these.

¹⁵ Statistics New Zealand medium project using estimated resident population at 30 June 2013 as a base.

ISSUE - UNCERTAINTIES ABOUT INTERNATIONAL TECHNOLOGY TRENDS

Technological innovations have the potential to change transport demand and the way that people travel. Examples that may emerge during the next 30 years, include wider availability of electric vehicles, alternative fuels, improvements in vehicle safety, telecommunications and traveller information.

Further development of electric vehicles or alternative fuels could help reduce the country's dependence on imported oil supplies. However, the mass adoption of electric vehicles is dependent upon the car industry supplying affordable technology comparable with conventional vehicles in sufficient numbers and a change in purchasing habits by New Zealand motorists. Increasing automation of vehicles and in particular driverless vehicle technology (e.g. driverless cars, unmanned aerial vehicles) has the potential to disrupt industries in the same way that the internal combustion engine did at the start of last century, with significant benefits to society.

Key challenge

Positioning the region to take advantage of iterative technological advances and being aware of the possibility and likelihood of more disruptive technological advances so that strategy and investment plans can be amended appropriately.

ISSUE - EARTHQUAKE RECOVERY

The damage caused by the November 2016 Kaikōura earthquake to the Main North Line railway and SH1 along the east coast of the South Island was unprecedented in New Zealand. This has led to disruption in the lives of those who live along the highway and who rely on the road and rail networks to access their homes, farms and businesses and the movement of goods to market.

Impacts arising from the Canterbury earthquakes also present an additional and ongoing challenge for the region, placing demands on the Greater Christchurch transport system which the system was not designed to meet. This includes the repair of physical damage to roads and pipes, the relocation of residential dwellings and businesses, and related land use change.

Key challenge

Managing traffic issues as a result of short to medium term land use change whilst targeting major investment on long term strategic network priorities arising from permanent land use changes.



STRATEGIC RESPONSE

The aspiration of the Regional Transport Committee is to achieve an integrated multi-modal transport system for the Canterbury region.

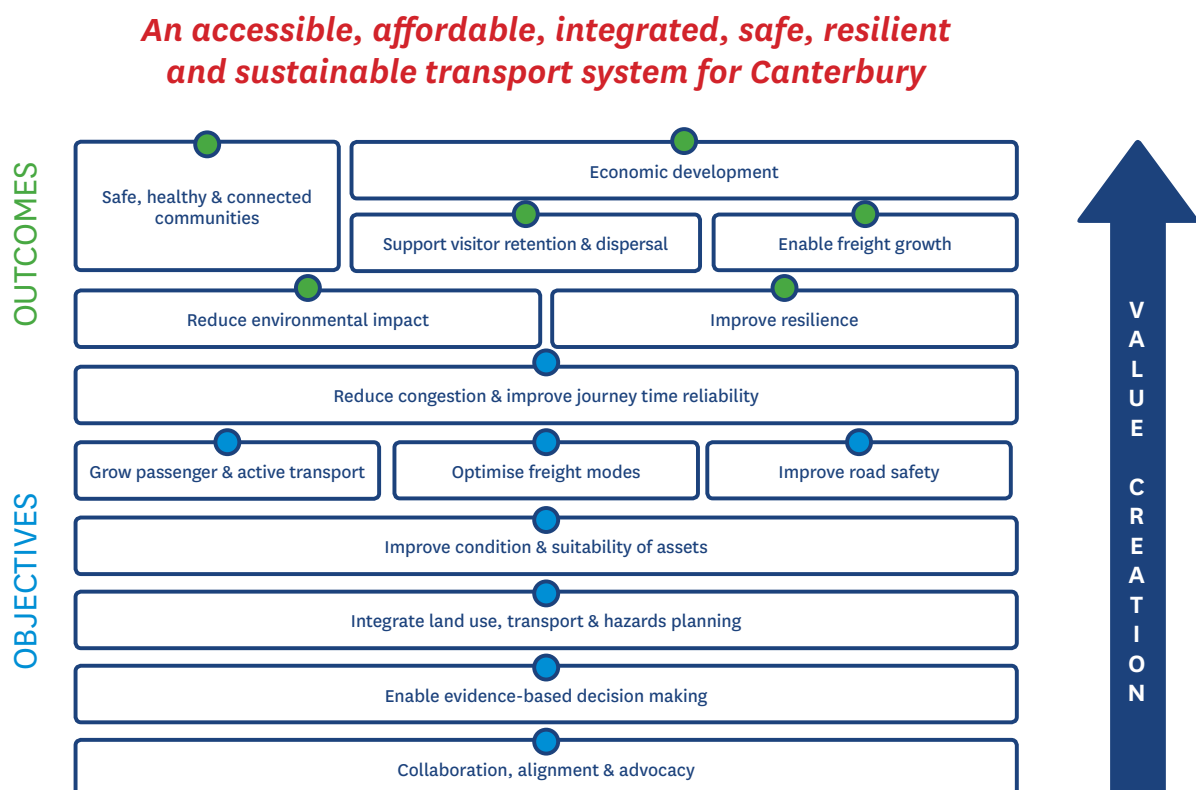
Given the observed trends and the current emerging issues, the Committee believes an integrated multimodal system will best support the region's economic growth, as well as social and environmental wellbeing into the future.

A number of actions are required to build up the conditions under which this can be achieved. Collaboration, and access to quality data and information form the base of the response that is needed. Following on from this it will be vital to integrate key decisions on land use, transport and planning for hazards, as well as improving and future-proofing our assets. Greater uptake of public transport will reduce reliance on single occupancy vehicles. This, coupled with encouraging freight shift from road to rail and coastal shipping, will reduce network congestion, improve journey time reliability and contribute to improved road safety.

Taking action in these areas will support the achievement of the following key outcomes necessary to achieve the vision in this Plan:

- Reducing environmental impact
- Improving resilience
- Enabling freight growth
- Supporting visitor retention and dispersal
- Supporting safe, healthy and connected communities, and
- Supporting economic development.

This approach to achieving the vision for Canterbury's transport network is summarised in the following Strategy Map:



During this review period, the Regional Transport Committee agreed to assume responsibility for implementing the Transport Workstream of the Mayoral Forum's Canterbury Regional Economic Development Strategy. This work is essential to achieving the vision for transport in Canterbury. Priorities include better understanding the opportunity for freight mode shift and improving the resilience of the transport network.

The development of a Regional Transport Scorecard (which establishes a series of measures to monitor performance) during this review period will also help to ensure that, looking ahead, the Regional Transport Committee can monitor and react to changes in trends to support the development of solutions that are timely, affordable and fit-for-purpose.

The Regional Transport Committee is the only publicly accountable organisation with a regional perspective that represents the interests of the wider community in transport. The Regional Transport Committee has taken a leadership role in creating a more collaborative environment across the whole transport sector, so that strategy, planning and investment in every transport mode, whether for freight or people, is more cohesive and aligned to the long-term vision of the region.

In doing so, the Regional Transport Committee is working closely with neighbouring Regional Transport Committees. The Chair of the Canterbury Regional Transport Committee is a member of the South Island Regional Transport Committee Chairs Group. This Group recognises that freight and visitor journeys, and concerns about the resilience of the network, do not stop at district or regional boundaries. The Group has committed to working collaboratively to advance planning work across the South Island in these key areas. It is likely that there will be some projects that will be progressed over the next three-year period (2018-2021). These projects are currently being scoped to better understand issues and gather information, and it is intended that they will be included in one or more Regional Land Transport Plans at a later stage. The current focus of work is on better understanding the understanding for freight mode shift, improving the resilience of the transport network, and ensuring the transport network supports the forecast growth in visitor numbers.

The Regional Transport Committee continues to work closely with NZTA to invest in transport infrastructure and services, and is also working with other central government agencies, such as the Ministry of Transport, which are essential to delivering the vision. A Regional Transport Forum, comprising both public and private membership with interests in a wide range of transport infrastructure across different modes, has also been convened to support Canterbury's response to significant issues like the North Canterbury earthquakes.

The Regional Transport Committee will continue to develop appropriate structures necessary for collaboration across the sector, to provide a meaningful way for all transport entities to come together, communicate and share knowledge. This will enable a greater understanding of the flow of people and goods across the region into the future, as well as nationally and internationally, opening avenues for detailed investigation and potentially new investment opportunities.

This new approach also provides an opportunity to align business-as-usual programmes of work, where they can be integrated to leverage better outcomes for public and private sector investment and the continued sustainable growth of the region.

While these actions sit outside of the formal role of Regional Transport Committees prescribed by the Land Transport Management Act 2003, the Canterbury Regional Transport Committee believes these actions will ultimately deliver better value to local communities, national transport investment, and private sector productivity.

The Committee will also maintain its role and formal responsibilities under the Act for prioritising land transport investment in the regional roading system. Using the One Network Road Classification system¹, developed jointly with NZTA, local authorities will continue to maintain and improve the roading system to support the vision of this Regional Land Transport Plan. The Regional Transport Committee continues to support a strategic response for the roading system that:

- Preserves what we have through cost-effective road maintenance and renewals.
- Finishes what we started, such as the Roads of National Significance programme.
- Focuses investment on strategic and urgent priorities in accordance with the framework outlined in the following sections.

PROPOSED NEW INVESTMENT PRIORITIES

OVERVIEW

The key strategic priorities for the Government are safety and access. These key priorities are supported by the priorities of environment and value for money. The strategic direction in the draft Government Policy Statement on Land Transport (GPS) 2018 is discussed further in the next section.

Taking account of the draft GPS and the issues and challenges outlined at the front of this Plan, the following six priority investment areas have been identified:

- Travel time reliability
- Accessibility
- Condition and suitability of assets
- Safety
- Resilience
- Environmental impact.

The priority investment areas relate to a number of the issues and challenges set out earlier in this Plan as follows:

AREA	KEY ASSOCIATED ISSUE/S
Safety	Improving road safety for all users
Accessibility	Maintaining and enhancing accessibility, providing transport options
• Condition and suitability of assets	Network security
• Travel time reliability	Managing private household vehicle traffic growth
Resilience	Network security and earthquake recovery
Environmental impact	Managing the environmental impacts of transport Use of the transport system has implications for the population's health

This section details the problems, objectives and outcomes for these priority areas, with the following table providing a summary of the investment priorities

ISSUES	OBJECTIVES	OUTCOMES
1. Safety Safety is compromised by: <ul style="list-style-type: none"> • speed, roadsides, road user behaviour, and vehicle standards. 	<ul style="list-style-type: none"> • Progressively reduce transport-related fatalities and serious injuries over time. 	An accessible, affordable, integrated, safe, resilient and sustainable transport system that: <ul style="list-style-type: none"> • supports the safe, efficient and effective movement of people and goods by the most appropriate mode (including road, rail, sea, air);
2. Accessibility Accessibility is compromised by: <ul style="list-style-type: none"> • a high reliance on single occupancy vehicles; • earthquake damage / post-earthquake recovery activities; • population change, changing land use patterns; • lack of transport choices; • network design and land use planning; and • difficulties accessing or crossing major routes in urban areas (severance). 	<ul style="list-style-type: none"> • Improve levels of access in an environmentally sustainable way by increasing the attractiveness of public transport, walking and cycling, so there is greater use of these modes: <ul style="list-style-type: none"> • for public transport the focus is on timeliness, convenience, affordability, efficiency, connectedness and sustainability; and • for walking and cycling the focus is on safety, amenity, convenience, connectivity and being able to take a direct route. • Improve connections between different transport modes. 	<ul style="list-style-type: none"> • is responsive and supports population change and economic development, including freight and tourism growth; • minimises the consequences of disruptive events; • supports convenient and connected transport options to support mobility and access; • reduces the likelihood and extent of death and serious injury; • is the result of co-ordinated transport and land use planning and infrastructure investment; • fully incorporates sustainability issues, including environmental sustainability, into transport planning decisions; • ensures transport makes a positive contribution to the health of Cantabrians; and • represents good value-for-money.

ISSUES	OBJECTIVES	OUTCOMES
3. Condition and suitability of assets The condition and suitability of assets are compromised by: <ul style="list-style-type: none"> • more and heavier/wider vehicles on the network, due to freight growth; • dated assets and assets that are no longer fit-for-purpose; and • earthquake damage. 	<ul style="list-style-type: none"> • Increased capability for appropriate roads and bridges to carry heavy vehicles. • All roads comply with One Network Road Classification performance measures. 	See previous page
4. Travel time reliability Travel time reliability is compromised by: <ul style="list-style-type: none"> • a high reliance on single occupancy vehicles; • an expanding range of road users mixing at different speeds, including an increasing number of freight vehicles and tourists; • a lack of supporting infrastructure, network management, and transport alternatives; • earthquake damage/post-earthquake recovery activities; and • population change, changing land use patterns. 	<ul style="list-style-type: none"> • Improve journey time reliability on key corridors, with a focus on freight, public transport and tourism. • Improve access to freight hubs. 	
5. Resilience The availability of the transport network is compromised by: <ul style="list-style-type: none"> • disruptive events such as natural hazards and crashes; • limited appropriate alternatives for strategic routes in some places; and • the consequences of climate change, in particular, sea level rise, coastal erosion, coastal inundation and an increasing number of inland flooding events. 	<ul style="list-style-type: none"> • Resilience routes are in place for strategic routes that are most at risk of disruption. • Reduce the number and duration of road closures. • Identify routes that are at risk of being impacted by climate change, and how to manage these risks to improve resilience. 	
6. Environmental impact The quality of the environment is compromised by the impact of: <ul style="list-style-type: none"> • emissions from a vehicle fleet predominantly powered by fossil fuel and the adverse effects these emissions have on the climate, local environment, and public health • the large number of vehicles on the road (both for freight transport and private travel); • a lack of environmentally sustainable transport alternatives; • dispersed settlement patterns making it difficult to service communities efficiently and sustainably; • pollutants from vehicles and rainfall runoff from roads which degrade water and air quality and affect biodiversity. • vehicle noise pollution; • increased roading and rainfall intensity contribute to greater runoff and risk of flooding. 	<p>Meeting the objectives outlined above under “accessibility” would also help to address environmental impact.</p> <p>In addition, the following objectives are also important:</p> <ul style="list-style-type: none"> • Increased uptake of energy efficient and environmentally sustainable vehicles. • Increased transport and land use integration. • Reduced air and water pollution. • Improved storm water management. 	

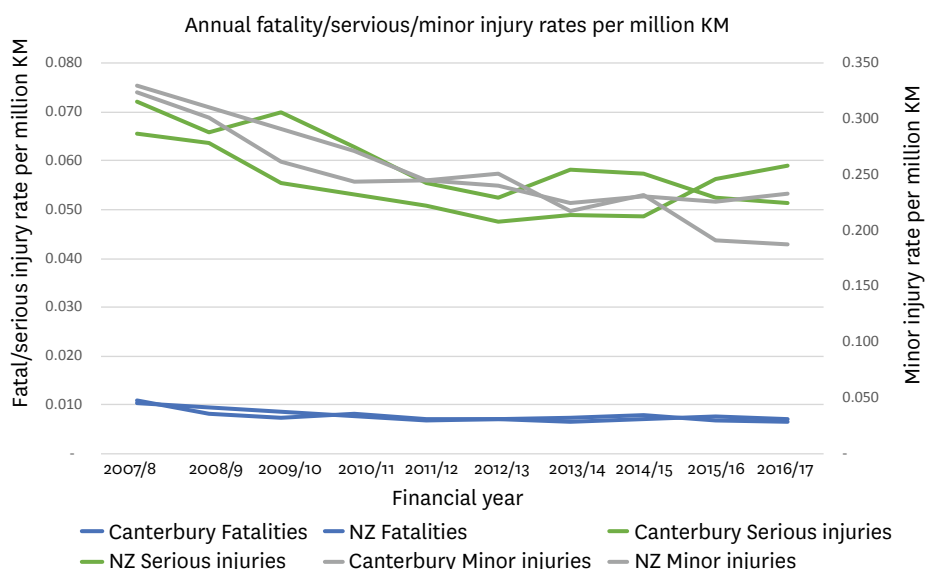
¹ The One Network Road Classification (ONRC) is a classification system, which divides New Zealand's roads into six categories based on how busy they are, whether they connect to important destinations, or are the only route available.

KEY ISSUE: SAFETY

Safer Journeys, the national strategy to guide improvements in road safety from 2010-2020, describes the significance of road safety across New Zealand.

Road safety is compromised by speed, roadsides, road user behaviour, and vehicle standards. These factors are consistent with those identified in the safe system approach, which was adopted by the *Safer Journeys* strategy. A safe system endeavours to minimise errors and reduce the severity of crashes where errors occur through a focus on vehicles, roads and roadsides, speed, and road users. This includes the safety of our most vulnerable road users, such as those cycling or walking, and the mobility impaired. In addition, increasing numbers of heavy commercial vehicles on the road also negatively impact on the safety of other road users, with the consequences of crashes involving trucks typically being more severe.

FIGURE 8: INJURY AND FATALITY RATES



For the year 2016/2017 fiscal year, 41 people were killed in road crashes in Canterbury, and 321 people were seriously injured. These numbers are similar to 2015/2016 (41 deaths and 316 serious injuries) after a long term downward trend from a peak in 2007/2008 (56 deaths and 374 serious injuries).

Since 2007, crashes resulting in deaths or serious injuries have been attributed to a range of causes. Approximately 30% of crashes have a single cause, 45% have two causes and 25% have three causes or more.

Poor observation features as the leading cause (37% of crashes) with failure to give way/stop and poor handling also featuring highly (28% and 25% respectively). Alcohol and speed (19% and 16%) also feature as significant causes since 2007. In 2017, poor observation and alcohol were the leading causes (34% and 31% respectively). The majority of crash causes have been steady or declining with the exception of alcohol and excessive speed which have been increasing as causes of crashes over the last five years.

Of the crashes involving alcohol, 36% also include excessive speed as a cause, and 41% include poor handling. Only 2% of crashes involving alcohol have no other contributing cause. Of the crashes involving excessive speed, 42% also include alcohol as a cause, and 52% include poor handling.

The Government has signalled that it is seeking engagement with local government as part of an ongoing dialogue on the development of a road safety strategy for New Zealand. The Canterbury Regional Transport Committee welcomes this increasing focus on road safety and will continue to work with government agencies and the community to improve road safety outcomes, in particular through work on identifying and understanding the biggest road safety risks, the actions needed, and how we can work together to have a greater impact on improving road safety in Canterbury.

RESPONSE

Priority objective: Progressively reduce transport-related fatalities and serious injuries

KEY ISSUE: ACCESSIBILITY

Accessibility refers to the ease of reaching goods, services, activities and destinations.

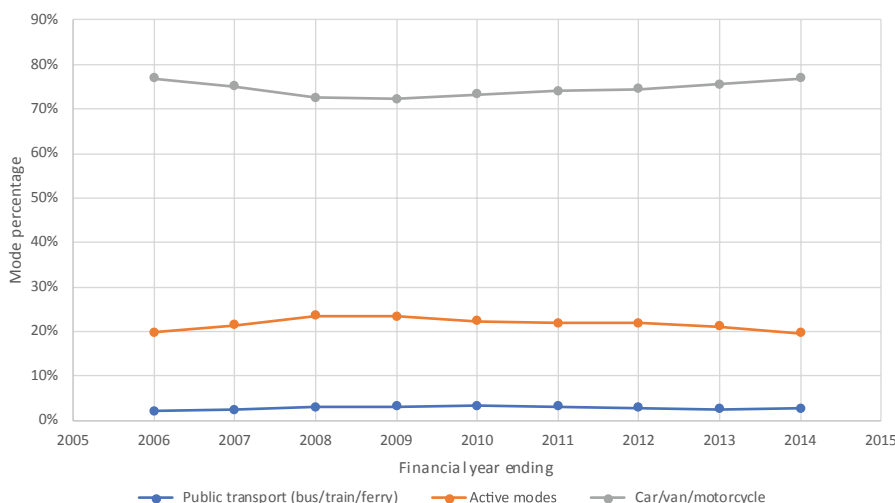
Accessibility is compromised by:

- a high reliance on single occupancy vehicles;
- earthquake damage / post-earthquake recovery activities;
- population change, changing land use patterns;
- lack of transport choices;
- network design and land use planning; and
- difficulties accessing or crossing major routes in urban areas (severance).

In urban areas, such as Christchurch city, transport choice is a central component of accessibility, particularly the provision of public and active transport options. In rural and provincial areas, it is about providing options for those who do not have access to a private vehicle.

FIGURE 9: CANTERBURY MODE SPLITS

Mode share - trip legs



There is a high reliance in Canterbury on private vehicles, with car travel accounting for 77% of all household trip legs, pedestrian travel for 16%, cycling for 3% and public transport (bus, trains and ferries) for 3% (Household Travel Survey 2014). These mode shares for all household trip legs have remained reasonably consistent in Canterbury over the last decade as shown in Figure 2, with slight increases in private vehicle use from 2009 following a decline between 2006 and 2009.

The Canterbury earthquakes had a major effect on commuting patterns in Greater Christchurch, with employment becoming more dispersed, and large population increases in the Waimakariri and Selwyn Districts. 2013 Census data showed an increase in the number of commuters in Greater Christchurch using a car to get to work (an increase from 82.3% in 2006 to 84.0% in 2013).

RESPONSE

Priority objective: Increase the attractiveness of public transport, walking and cycling, so there is greater use of these modes:

- for public transport the focus is on timeliness, convenience, affordability, efficiency, connectedness, and sustainability; and
- for walking and cycling the focus is on safety, amenity, convenience, connectivity, and being able to take a direct route.

Priority objective: Improve connections between different transport modes.

KEY ISSUE: CONDITION AND SUITABILITY OF ASSETS

The condition and suitability of assets refers to the need for the transport network to respond to changing traffic patterns and vehicle mix.

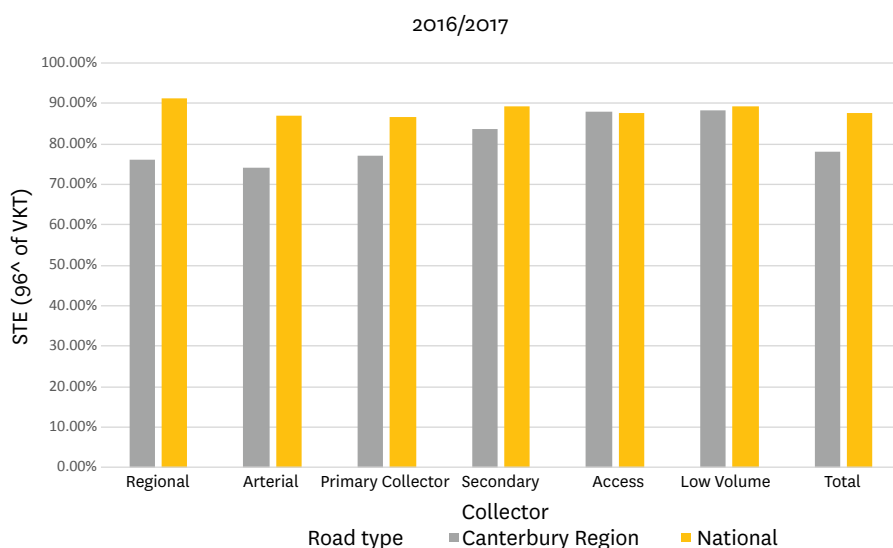
The condition and suitability of assets in Canterbury are compromised by:

- more and heavier/wider vehicles on the network, due to freight growth;
- dated assets and assets that are no longer fit-for-purpose; and
- earthquake damage.

A problem for Canterbury is managing the impact of assets that are not-fit-for purpose for freight and/or tourism tasks. Our assets (including both roads and bridges) need to cope with traffic and vehicles they were never constructed to carry.

NZTA One Network Road Classification (ONRC) system includes information on asset condition, including the proportion of the region's travel which has been on a road which is considered "smooth". Time series data does not currently exist for this "smooth travel exposure" but the Canterbury data is compared with national averages in Figure 3. As expected, due to the recent Canterbury earthquakes, all road classifications are less smooth than national averages.

FIGURE 10: SMOOTH TRAVEL EXPOSURE (STE)



In particular, there are concerns around the ability of our assets to cope with the increased width and weight of trucks, as well as growth in tourism and the locations tourists visit. In some instances, tourists are driving on roads that are not safe or fit-for-purpose, given the traffic volumes and experience of the road user. Tourism is vital for the Canterbury economy, and tourism expenditure in Canterbury for the year ending January 2017 was \$3.397 million (MBIE). Land use changes can also impact on the mix of vehicles that travel a particular section of road.

The growing freight task has increased the number of heavy vehicles on our roads. The vast majority of freight in Canterbury (92%) is transported by road. There is a projected 68% increase in freight volumes by 2042, and freight growth in Canterbury will account for around 60% of all growth forecast to occur in the South Island over this period (with most being in road transport).

The national uptake of High Productivity Motor Vehicles (HPMV) permits has exceeded expectations. The number of permits issued in the region in the last two years is 4,377 50MAX permits, and 1,566 HPMV permits (50MAX is a new generation of truck that has an additional axel meaning lower road degradation for the equivalent weight HPMV). The table below shows the number of 50MAX permits issued for the South Island by year, over the last three years:

YEAR	2014	2015	2016
No. of 50 Max permits issued	1941	1910	2467

RESPONSE

Priority objective: Increased capability for appropriate roads and bridges to carry heavy vehicles.

Priority objective: All roads comply with One Network Road Classification performance measures.

KEY ISSUE: TRAVEL TIME RELIABILITY

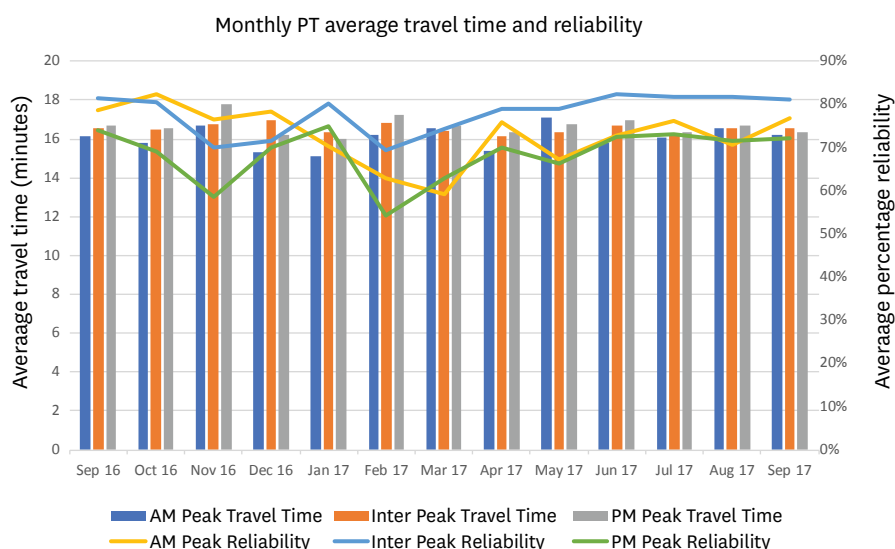
Travel time reliability refers to consistency in travel times, as measured from day-to-day or across different times of the day. When travel time reliability is low on a particular route, this creates uncertainty about the time it takes to move between points on that route. It is difficult for people to manage significant and unpredictable delays, and those delays can have adverse social and economic impacts on individuals and businesses. In particular, freight transport relies on meeting time schedules, and missing important transit deadlines can increase costs. Inappropriate routes may also be used to avoid unreliable travel times on the most appropriate routes.

Travel time reliability is compromised by:

- a high reliance on single occupancy vehicles;
- an expanding range of road users mixing at different speeds, including an increasing number of freight vehicles and tourists;
- a lack of supporting infrastructure, network management, and transport alternatives;
- earthquake damage/post-earthquake recovery activities; and
- population change, changing land use patterns (for example, increasing population dispersal following the Canterbury earthquakes).

Journey time variance for general traffic in Christchurch city is currently between 6% and 20%. For public transport, the variance is between 10% and 20% (Christchurch Transport Operations Centre). The Christchurch Transport Operations Centre monitors travel times and variability across a range of radial corridors in Christchurch for both public transport and general traffic. The average travel times and average reliability (defined as buses arriving between 1 minute early and 4 minutes late) across these monitored corridors are shown in Figure 1. There is no clear trend in either average travel time or reliability with reasonable seasonal variation.

FIGURE 11: PUBLIC TRANSPORT TRAVEL TIME AND RELIABILITY



The SH1 Picton to Christchurch (Ashley River Bridge) Strategic Case identified a number of locations on the route where commercial vehicle speeds were slow, resulting in inefficient freight transport and unreliable travel times for others (which was particularly critical for ferry traffic). Prior to the North Canterbury earthquake, there was a 55 minute variance in travel times between faster and slower moving vehicles (TOMTOM data).

Travel time reliability affects the entire region, particularly where it inhibits access to key freight destinations such as ports.

RESPONSE

Priority objective: Improve journey time reliability on key corridors, with a focus on freight, public transport and tourism.

Priority objective: Improve access to freight hubs.

KEY ISSUE: RESILIENCE

New Zealand's topography, climate and exposure to severe natural events pose an ongoing risk of network disruption. Resilience is about the ability to withstand disruptions, absorb disturbances, perform effectively in a crisis, adapt to changing conditions and recover quickly. Disruptions can impact widely on economic growth and social wellbeing.

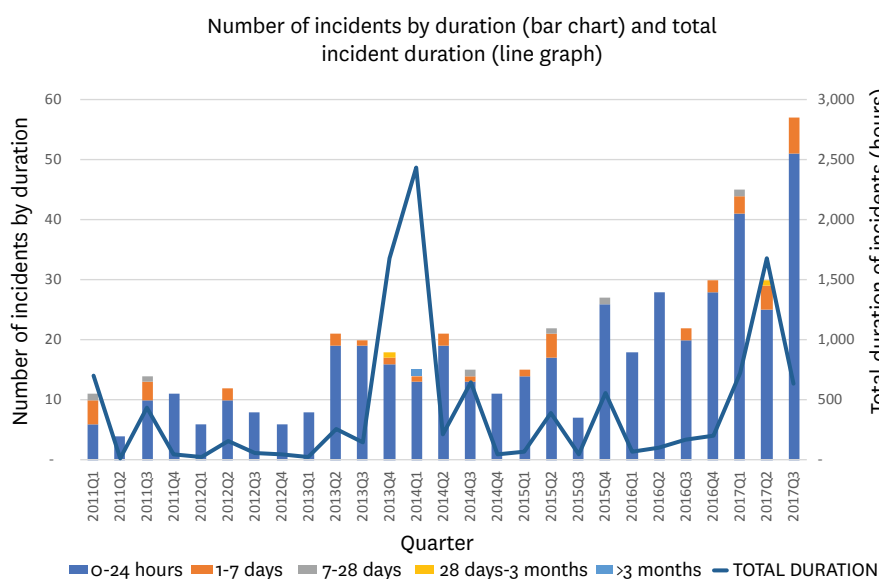
In Canterbury, the availability of the transport network is compromised by:

- disruptive events, such as natural hazards and crashes;
- limited appropriate alternatives for strategic routes in some places;
- in the longer-term, the consequences of climate change, in particular, sea level rise, coastal inundation and coastal erosion.

Major events, such as the North Canterbury and Canterbury earthquakes, have had a significant impact on the transport network in recent times. In the case of the North Canterbury earthquakes, State Highway 1, the Inland 70 route (former State Highway 70 from Kaikōura to Culverden) and rail links were closed, and the direct Picton to Christchurch road and rail links will not be fully operational for some time.

Each year, the Canterbury region experiences closures resulting from disruptive events of less significance, as well as crashes. For example, Traffic Road Event Information System (TREIS) data shows that the total closure time for all sections of State Highway 1 from Christchurch to Dunedin from November 2010 to November 2015, was 485.4 hours. The most common causes for road closure along this corridor were vehicle crashes, snow and ice events, and flooding.

FIGURE 12: QUARTERLY INCIDENTS ON CANTERBURY ROADS



The number of incidents and incident durations are shown in Figure 5. There has been a steady increase in both the number of closures logged, as well as the combined incident durations. Note that this data does not capture the total number of people affected.

Over the last seven years, the Lewis Pass/SH7 has had on average five to six snow and ice weather storms each winter which have involved highway closures. Most of these closures were for fewer than four hours, and generally not for longer than 24 hours. The other main highway to the West Coast via Arthur's Pass, SH73, is closed for slightly more days than the Lewis Pass on average. There are an average of four simultaneous closures per year, the majority of which are for less than 24 hours.

There will also be an increasing need to address the impacts of climate change. This includes the impact of sea level rise, increased inundation, and coastal erosion on low-lying routes. It also includes the impact of more extreme one-off weather events, particularly those resulting in flooding and road degradation.

RESPONSE

Priority objective: Resilience routes are in place for strategic routes that are most at risk of disruption.

Priority objective: Reduce the number and duration of road closures.

KEY ISSUE: ENVIRONMENTAL IMPACT

Motor vehicles have a significant impact on the environment, in particular by contributing to greenhouse gas emissions, as well as more generally lowering air quality which impacts adversely on the population's health and wellbeing. The negative impact of heavy commercial vehicle traffic is more significant than for cars and light vehicles particularly with respect to noise, emissions and community severance. Transport infrastructure can also have an impact on storm water run-off and thereby water quality, as well as biodiversity, in Canterbury.

Rainfall runoff from roads collects pollutants that degrade water quality in natural streams and rivers. The Canterbury Regional Land and Water Plan recognises this issue and requires improved water quality standards prior to discharge, necessitating response such as road runoff treatment.

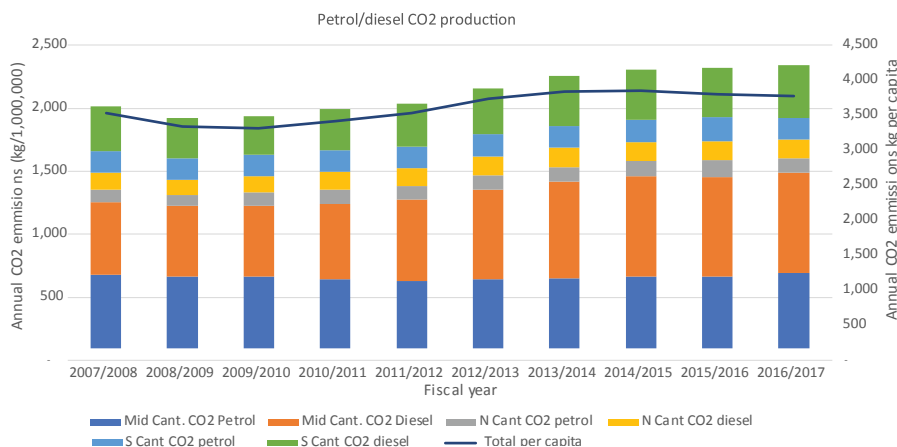
New Zealand is committed to reducing its greenhouse gas emissions. As part of the Paris Agreement under the United Nations Framework Convention on Climate Change, New Zealand intends to reduce its emissions to 30% below 2005 levels (11% below 1990 levels) by 2030. Transport will play an important role in achieving this, given that greenhouse gas emissions from the transport sector make up about 20 percent of New Zealand's total greenhouse gas emissions each year.

CO₂ production from petrol and diesel fuel sold in Canterbury has continued to rise over the last 20 years, although on a per capita basis these have levelled off over the last 5 years.

Increasing CO₂ emissions in absolute terms will contribute to climate change and the associated impacts for our transport infrastructure. These impacts will be felt both through longer term coastal inundation and erosion risk, as well as increased frequency of extreme weather events causing flooding and degradation of roads.

Poor integration of the transport system with land use planning and a settlement pattern that leads to dispersive and physically separated activity, also result in higher travel demand and therefore exacerbate the negative environmental impacts of travel outlined above. Better integration is also needed at a suburban level to incorporate active and passenger transport in subdivision design.

FIGURE 13: CO₂ EMISSIONS (1,000S OF KILOGRAMS PER YEAR)



The environment is compromised by the impact of:

- emissions from a vehicle fleet predominantly powered by fossil fuel and the adverse effects these emissions have on the climate, local environment, and public health
- the large number of vehicles on the road (both for freight transport and private travel);
- a lack of environmentally sustainable transport alternatives;
- dispersed settlement patterns making it difficult to service communities efficiently and sustainably;
- pollutants from vehicles and rainfall runoff from roads which degrade water and air quality and affect biodiversity.
- vehicle noise pollution;
- increased roading and rainfall intensity contribute to greater runoff and risk of flooding.

RESPONSE

Meeting the objectives outlined above under “accessibility” would also help to address environmental impact.

Objective: Increased uptake of energy efficient and environmentally sustainable vehicles.

Objective: Increased transport and land use integration.

Objective: Reduced air and water pollution.

Objective: Improved storm water management.

OUTCOMES

In light of the priority issues and objectives outlined above, the Regional Transport Committee has identified the following outcomes to work towards.

Priority outcomes for the Canterbury region

An accessible, affordable, integrated, safe, resilient and sustainable transport system that:

- a) supports the safe, efficient and effective movement of people and goods by the most appropriate mode (including road, rail, sea, air);
- b) is responsive and supports population change and economic development, including freight and tourism growth;
- c) minimises the consequences of disruptive events;
- d) supports convenient and connected transport options to support mobility and access;
- e) reduces the likelihood and extent of death and serious injury;
- f) is the result of co-ordinated transport and land use planning and infrastructure investment;
- g) fully incorporates sustainability issues, including environmental sustainability, into transport planning decisions;
- h) ensures transport makes a positive contribution to the health of Cantabrians; and
- i) represents good value-for-money.

ALIGNMENT WITH THE GOVERNMENT POLICY STATEMENT ON LAND TRANSPORT

Section 14 of the Land Transport Management Act 2003 requires Regional Transport Committees to be satisfied that their RLTP is consistent with the Government Policy Statement on Land Transport (GPS), before submitting the RLTP to the relevant regional council for approval.

The revised draft GPS was released on 3 April 2018 and will be finalised prior to 30 June 2018. This draft supersedes the previous draft GPS released in 2017. Due to the extent of change signalled in the draft GPS, a second stage GPS is also signalled for mid-2019 to fully implement new policies. Further revisions to this RLTP may be required at a later date to give effect to the final GPS and/or the second stage GPS. If so, these changes will be made by way of variation, and in accordance with the significance policy outlined in this RLTP.

A major step change

The draft GPS 2018 signals a major step change in strategic direction for transport in New Zealand, with a greater focus on the potential of transport investment as a powerful enabler of safe, liveable communities. Importantly, the funding allocations for activity classes are aligned with this new strategic direction.

The draft GPS identifies four strategic priorities:

- a. Safety – delivering a land transport system free of death and serious injury.
- b. Access – improving people's ability to connect with people, goods, services and opportunities. In particular:
 - i. using transport to shape urban form and create liveable cities, and thereby reduce the need to travel by private motor vehicle; reduce the need to travel long distances, and support mode shift from private single occupant vehicles to walking, cycling and public transport;
 - ii. creating nationally important freight and tourism connections that are safe, efficient, resilient, and minimise greenhouse gas emissions; and
 - iii. increasing the resilience of the transport system.
- c. Environment – shifting to lower emission forms of transport, and recognising the public health benefits of a well-designed transport system, including through active transport.
- d. Value for money – accounting for a full range of benefits and costs over whole of life investments, and greater emphasis on robust decision making and reporting.

The draft GPS recognises the importance of a holistic and adaptive approach. Effective delivery of the priorities is underpinned by three themes: transitioning to a mode neutral approach to transport planning and investment; using transport to shape urban form and create liveable cities; and greater leverage of technology and innovation.

The draft GPS 2018 proposes an expenditure target of \$3.95 billion for the 2018/19 financial year, and allocates a total of \$12.65 billion over the first three years (2018/19 to 2020/21). Funding is allocated across 12 activity classes, with increases in the maximum funding for all activity classes except State Highway Improvements. A new Rapid Transit activity class has been created which is focussed on public transport in Auckland, Wellington and Greater Christchurch.

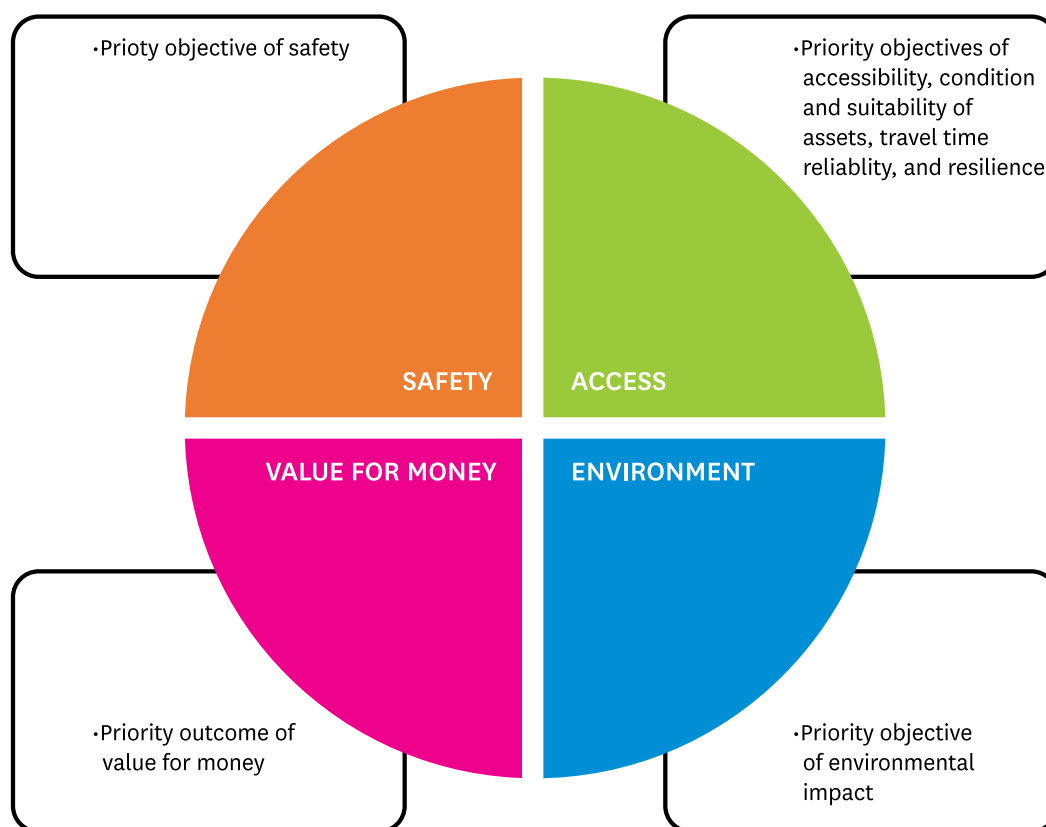
The second stage GPS will likely contain more significant proposals around mode neutrality, road safety, and active and passenger transport, as well as local and central government agreements on transport's role in the future development of Greater Christchurch, including rapid transit options.

Alignment of the Canterbury RLTP with the draft GPS

Canterbury's transport strategy as articulated in the draft RLTP is well aligned with the new direction outlined in the draft GPS. Figure 14 on the next page shows that the six investment priorities in the draft RLTP (outer boxes) align with the GPS 2018 strategic priorities (centre).

However, some time is required to improve alignment between the investment priorities in the GPS and the funding requested through RLTPs and allocated in councils' annual and long term plans. Changes to the programme of activities that are needed to fully implement the GPS will be made by further variations to the RLTP as need be, and in accordance with the significance policy outlined in this RLTP.

FIGURE 14: INVESTMENT AND STRATEGIC PRIORITIES



Request to include all upcoming investment in RLTPs

Public transport in Greater Christchurch

The draft GPS 2018 has an increased focus on urban centres to ensure that transport and land use planning reduce the need to travel by private motor vehicle. This can be achieved through urban design which reduces the need to travel long distances and supporting a mode shift from single occupant private vehicles to more efficient, low cost modes like walking, cycling and public transport. The GPS also has a focus on reducing transport's negative effects on the global climate, in particular those caused by greenhouse gas emissions.

The Canterbury earthquakes have resulted in faster than anticipated population growth occurring in satellite towns in Selwyn and Waimakariri and on the periphery of Christchurch City. Over the next 30 years, population growth in Greater Christchurch is expected to exceed 30% or 160,000 people. There is a high likelihood that this will increase congestion to unacceptable levels; however actual congestion levels will depend on population distribution, travel patterns and the proportion of travellers using single occupant vehicles.

The Greater Christchurch Partnership Committee is in the process of preparing a Future Development Strategy (FDS) to identify where and how this growth will be supported in Greater Christchurch. In conjunction with the FDS, a Future Public Transport Business Case is being developed as a new and integral part of the existing multi-modal transport programme for Greater Christchurch. The Business Case is exploring options to increase public transport patronage and hence reduce reliance on single occupant vehicles, which will be critical to catering for the projected population growth. This will only be achieved through a holistic approach which includes service enhancements across the network, infrastructure improvements on core routes, rapid transit on the two highest demand corridors, on-demand services, supporting policies, and investment in enabling technologies and behaviour change.

The Business Case highlights the significant investment required over the next thirty years to develop a public transport system which is fit for the future. Lead investment is recommended in the first ten years, to avoid the need for expensive, disruptive and sub-optimal retrofits to transport infrastructure once congestion has reached unacceptable levels, and also to reduce emissions from current levels to ensure obligations are met under the Paris agreement. Such lead investment can also help to shape urban form by encouraging development in locations which reduce the need for private vehicle travel, thereby contributing to the development of liveable communities and supporting the transition to a low carbon future.

The Business Case is not yet finalised or therefore reflected in councils' Long Term Plans or this RLTP. As such, rather than make a specific investment request at this point in time, Greater Christchurch councils and partners wish to signal in this RLTP their collective intent and commitment to work with central government to accelerate the programme of work arising from the Future Public Transport Business Case.

Early engagement is sought with central government to identify funding mechanisms to enable councils to respond rapidly to the opportunity identified in the Business Case, and remove any barriers, in order to accelerate progress towards the ambitious outcomes envisaged in the draft GPS. This would be a core component of the proposed agreement between local and central government on transport's role in the future development of Greater Christchurch, including consideration of transport's role as a place-maker and future rapid transit options.

Other regional initiatives

A number of councils have signalled an interest in expanding road safety programmes, though there is a need for the Government to announce funding mechanisms before any decisions can be made. NZTA has indicated there may be changes to the cost-benefit analysis of safety projects that will assist with prioritising safety improvements.

Agencies are also exploring the proposal to develop a cycle trail from Picton to Christchurch. It is likely that funding from the **Provincial Growth Fund** will be sought to support this initiative.

STATEMENT OF PRIORITIES FOR 2015 TO 2025

This section outlines the Canterbury regional investment priorities for the period 2015-2025. All improvement projects are included in priorities 2-4.

Priority 1

Priority 1 is focused on looking after what we have, including planning services, maintenance and renewal programmes, low cost/low risk programmes, and existing public transport services. These services and programmes are regarded as essential to avoid going backwards.

Priority 2

Priority 2 projects are existing commitments within the National Land Transport Fund (NLTF). No further prioritisation was undertaken for these projects as they are already well-advanced, and funding is assured.

Priority 3

Priority 3 projects have a high alignment to the regional investment priorities.

The selection of priority 3 projects was based on an assessment of each project against the following two criteria:

1. Alignment with regional outcomes

The regional outcomes are: an accessible, affordable, integrated, safe, resilient and sustainable transport system that:

- supports the safe, efficient and effective movement of people and goods by the most appropriate mode (including road, rail, sea, air);
- is responsive and supports population change and economic development, including freight and tourism growth;
- minimises the consequences of disruptive events;
- supports convenient and connected transport options to support mobility and access;
- reduces the likelihood and extent of death and serious injury;
- is the result of co-ordinated transport and land use planning and infrastructure investment;
- fully incorporates sustainability issues, including environmental sustainability, into transport planning decisions;
- ensures transport makes a positive contribution to the health of Cantabrians; and
- represents good value-for-money.

For each activity, an overall assessment was made against these outcomes. Activities were given a ranking of high, medium or low, based on the extent to which outcomes were met, rather than how many were met.

2. Urgency

- A high ranking was given to projects for which construction would start in the 2015-2018 period.
- A medium ranking was given to projects where planning and design would start in the 2015-2018 period.
- A low ranking was given to projects where planning and design would start after the 2015-2018 period.

As a general guideline, approved organisations were told that a high alignment with outcomes would normally suggest the activity is priority 3, and a medium or low alignment with regional outcomes or urgency would normally suggest the activity is priority 4.

Priority 4

Priority 4 projects include improvements of lower regional priority. Only regionally significant projects are shown in this section. Priority projects that cost less than \$5 million and are of local, rather than regional, significance are shown in Appendix 1. Although not regionally significant, such projects remain an efficient use of the NLTF due to the significant local benefits and the relatively low cost involved.

Additional comment

The projects and programmes of regional significance include all priority 1, 2 and 3 activities, and priority 4 projects or programmes over \$5 million.

Priority 1: Looking after what we have

For most trips in Canterbury, the existing transport network and services provide effective and efficient access. The first priority for the region is keeping the existing network fit-for-purpose. In addition to maintaining existing infrastructure and services, priority 1 projects include related activities such as road safety promotion and enforcement. This is the core business for road controlling authorities and other agencies such as the New Zealand Police.

Priority 1 programmes are:

- infrastructure maintenance and renewals;
- existing public transport services;
- safety enforcement and promotion; and
- low risk/low cost programmes and optimisation of the existing transport network and assets (note that low risk/low cost programmes replaced the category of minor improvements in 2017 under the National Land Transport Programme, and the threshold has been increased from \$300,00 to \$1,000,000).

Table 1 shows the expenditure on these activities by approved organisation.

Christchurch City Council has now included the repair of earthquake-damaged roads within their renewals programme, rather than as a separate item. There has consequently been an increase in the cost of the renewals programme to reflect the cost of earthquake repairs.

The post-earthquake transport rebuild programmes agreed in the cost share agreements between the Crown, Christchurch City Council and Waimakariri District Council were previously included as priority 1. The projects within these programmes are managed through a separate governance arrangement agreed with Government. Many of these projects are now complete, and the remainder have been included in this plan as priority 2 or 3 projects.

TABLE 1: PRIORITY 1 EXPENDITURE

ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
ASHBURTON DISTRICT COUNCIL				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$8,129,301
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$39,609,182
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$382,491
NZ TRANSPORT AGENCY				
State highway improvements	Canterbury LED replacement programme	2026/2027	2026/2027	\$20,639,195
State highway improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$16,535,822
State highway improvements	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$164,948,616
CHRISTCHURCH CITY COUNCIL				
Investment management (incl. Transport Planning)	Business Case Activities	2018/2019	2020/2021	\$920,250
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$13,797,280
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$184,251,349
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$5,084,786
DOC (CANTERBURY)				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$100,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$1,354,131
ENVIRONMENT CANTERBURY				
Regional Land Transport Planning Management 2018-2021	Regional Land Transport Planning Management 2018-2021	2018/2019	2028/2029	\$11,235,121
Public Transport	Public Transport Programme	2018/2019	2021/2022	\$145,702,507
Public transport	Low cost / low risk improvements 2018-21	2018/19	2020/20	\$1,000,000
HURUNUI DISTRICT COUNCIL				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$3,966,500
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$24,203,356
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$180,000
KAIKOURA DISTRICT COUNCIL				
Local road maintenance	Kaikoura Nov 2016 EQ	2016/2017	2018/2019	\$11,893,500
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$606,991
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$3,875,310
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$33,000
Investment management (incl. Transport Planning)	Activity Management Planning Improvement	2017/2018	2025/2026	\$ 75,000
MACKENZIE DISTRICT COUNCIL				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$2,500,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$9,859,356
SELWYN DISTRICT COUNCIL				
Investment management (incl. Transport Planning)	Transport Planning	2018/2019	2027/2028	\$220,000
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$3,727,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$45,120,000
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$682,000

ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
TIMARU DISTRICT COUNCIL				
Local road improvements	Asset Management Plan Improvements 2018-21	2017/2018	2020/2021	\$360,000
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$11,720,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$41,200,000
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$926,000
WAIMAKARIRI DISTRICT COUNCIL				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$9,710,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$33,596,149
Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$570,000
WAIMATE DISTRICT COUNCIL				
Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$1,480,000
Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$15,013,300
Local road improvements	Accelerated LED Street Light Renewal	2017/2018	2018/2019	\$250,750



Priority 2: Finishing what we have started (existing commitments)

There are a small number of significant projects that already have funding secured. In most instances, construction has already commenced.

- Key Christchurch City Council projects included as priority 2 are the Northern Arterial Extension and Cranford Street Upgrade (in partnership with NZTA), and the Riccarton Interchange and Bus Priority.
- NZ Transport Agency previously agreed a financial assistance rate of 83% for the Christchurch City Council rebuild programme for the period 2015-2017. Christchurch City Council is seeking to continue the rate for the reinstatement of the Sumner-Evans Pass-Lyttelton route, as this work is not yet complete, but this route is part of the rebuild programme.
- There are a number of state highway improvements currently under construction to deliver safety, reliability and resilience improvements. These include:
 - The Christchurch Northern Arterial, extension to and upgrade of Cranford Street (in partnership with Christchurch City Council).
 - The Christchurch Southern Motorway stages 2 and 3.
 - Lyttelton Tunnel Safety Retrofit (fire deluge) – to reduce the likelihood of closure of the tunnel due to fire damage. This will help to ensure resilience for freight as this is the primary access route to the Port of Lyttelton. This risk is currently heightened by the closure of Evans Pass Road due to earthquake damage.
 - SH1 Clarence to Oaro – safety, access, and amenity improvements along the state highway corridor in parallel with Kaikōura reinstatement works.



TABLE 2: PRIORITY 2 EXPENDITURE

ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
NZ TRANSPORT AGENCY				
Regional Improvements	Rakaia to Ashburton Safety Improvements	2017/2018	2019/2020	\$31,575,819
State highway improvements	CHCH Northern Arterial Rural with QE2	2008/2009	2021/2022	\$298,535,520
State highway improvements	CHCH Southern Motorway HJR to Rolleston (Stage 2 & 3)	2009/2010	2020/2021	\$314,688,322
State highway improvements	Kaikoura Nov 2016 EQ: SH1 Clarence & Oaro Improvement (NLTF)	2016/2017	2019/2020	\$251,520,010
State highway improvements	Lyttelton Tunnel Safety Retrofit (Deluge) System	2013/2014	2018/2019	\$25,249,693
State highway improvements	Waimakariri Bridge safety and reliability improvements	2018/2019	2020/2021	\$22,995,399
State highway improvements	Western Belfast By-Pass	2009/2010	2018/2019	\$180,283,416
State highway improvements	Ashley to Belfast Safety Improvement	2016/2017	2019/2020	\$14,779,626
State highway improvements	Brouchs Road Extension	2015/2016	2019/2020	\$5,207,916
State highway improvements	Weigh Right Glasnevin	2016/2017	2019/2020	\$30,719,406
State highway improvements	Harewood Rd to Yaldhurst Rd 4 Laning	2009/2010	2018/2019	\$159,105,212
State highway improvements	Barters/Main Sth intersection	2014/2015	2018/2019	\$17,709,262
State highway improvements	Groynes To Sawyers Arms 4L	2009/2010	2018/2019	\$58,986,015
State highway improvements	Sawyers Arms To Harewood 4L	2008/2009	2018/2019	\$28,352,313
CHRISTCHURCH CITY COUNCIL				
Local road improvements	AAC Victoria Street	2015/2016	2018/2019	\$7,083,289
Local road improvements	AAC Lichfield Street works stage 2	2019/2020	2020/2021	\$1,000,110
Local road improvements	AAC Tuam Street works stage 2	2019/2020	2020/2021	\$1,000,110
Local road improvements	Burwood & North Shirley Rd Reconstruction	2019/2020	2020/2021	\$1,169,172
Local road improvements	Cluster 1 - Core PT Route: North (Papanui & Belfast)	2018/2019	2020/2021	\$1,602,720
Local road improvements	Corridor 2 - Intersection Improvement: Lower Styx/ Marshland	2018/2019	2018/2019	\$7,731,083
Local road improvements	Northern Arterial Extension and Cranford Street Upgrade	2016/2017	2022/2023	\$31,248,440
Local road maintenance	EW Sumner-Lyttelton Corridor EQ damaged infrastructure	2017/2018	2018/2019	\$37,894,054
Public transport	Cluster 1 - PT Facilities: Northlands Hub	2017/2018	2018/2019	\$1,062,910
Public transport	Riccarton Interchange and Bus Priority	2018/2019	2020/2021	\$4,028,174
Walking and cycling improvements	Major Cycleway: Quarryman's Trail (Halswell to City) UCF	2016/2017	2018/2019	\$14,285,113
Walking and cycling improvements	Major Cycleway: Rapanui - Shag Rock (Sumner to City) UCF	2017/2018	2020/2021	\$5,126,000
Walking and cycling improvements	Major Cycleway: Northern Line (Nthn Rail Rte to Rcton) UCF	2020/2021	2020/2021	\$5,029,984
HURUNUI DISTRICT COUNCIL				
Local road maintenance	Kaikoura Earthquake 14 November 2016	2016/2017	2018/2019	\$7,203,600
SELWYN DISTRICT COUNCIL				
Local road improvements	LED Upgrade	2017/2018	2019/2020	\$3,285,000

Priority 3: Improvements with high strategic alignment

Priority 3 includes programmes with a high alignment to the regional investment priorities in this plan. Most of these programmes are in, or around, Christchurch due to the higher demand levels on this part of the network.

The priority 3 projects are grouped into programmes of similar type, as described below and shown in Table 3. The strategic alignment of individual projects is also shown in Table 3, through assessment against the following evaluation criteria:

- Regional priority
- Urgency

Each project was rated as high (H), medium (M), or low (L) against these two criteria, as shown in Table 3. The grouping of projects into sub-categories and the ordering of these sub-categories does not imply any priority order. The relative priority and importance of individual projects can be seen through the assessment of strategic priority.

High priority road projects

These are:

- The downstream improvement projects relating to RONS; and
- Brougham Street corridor improvements that are aimed at improving travel time reliability and accessibility along and across the state highway.

Next stages of the An Accessible City (AAC) programme for central Christchurch

AAC has now entered phase 2. These projects will improve the access and quality of urban spaces within the central city, and are jointly funded by council and the Government. Only the projects scheduled for 2018-2021 are included in priority 3. Salisbury Street and Kilmore Street, apart from the town hall frontage, have been re-phased to 2024-25.

High priority intersection safety improvements

These projects are mostly within Greater Christchurch, and arise from an analysis of high risk intersections. The SH73 Weedons Ross Road intersection improvement responds to a rapidly growing area and addresses safety and access issues.

Other factors, such as changes in pedestrian traffic associated with school mergers and integration with other high priority works, have also been considered in selecting these projects.

High priority cycle routes

The cycle and public transport projects aim to enhance transport choice for travel in and around Greater Christchurch. Enhancing alternatives to travel by private car is a key priority in this part of the region and supports efficiency, effectiveness, safety, earthquake recovery and long-term sustainability. From a regional perspective, the highest-ranked cycle route is between Christchurch and Kaiapoi, where there is currently no designated facility for crossing of the Waimakariri River for cyclists or pedestrians. A cycle and walking lane over the SH1 bridge will be built as part of the Waimakariri Bridge Improvements (see priority 2).

The Christchurch City Council Major Cycleways Programme, comprising 13 major urban cycleways, commenced in 2014 and seeks to achieve a major modal shift away from private cars to cycling. These projects are considered priority 3 because funding has not yet been secured.

High priority public transport route and facility improvements, and planning for the future

The improvements for public transport support a transition to a hub and spokes public transport system. Alongside cycle routes, they also support access to the central city as part of earthquake recovery.

The Greater Christchurch Future Public Transport Business Case will help shape land use and transport decisions. It is anticipated that the business case will be completed and incorporated in the revision of the Regional Public Transport Plan by mid-2018. Consultation with the public and interested groups on the proposed solutions coming out of the business case, and their delivery, will follow. Discussion on the future of public transport will continue through the next three years, and will inform funding decisions in the next RLTP for 2021 and beyond.

Access to port

Access improvements to the Port of Timaru are now included as being of regional significance under priority 3, given the strategic importance of the port as a freight route.

Other community access and safety projects

These include a variety of projects with significant alignment to the objectives in this plan. They include state highway corridor safety projects such as Tinwald, Rolleston and Woodend, and road and intersection improvements in urban areas to improve community access and safety.

The intersection improvements proposed for Rolleston within this category include relatively minor improvements to existing intersections and the Rolleston inter-connection, a grade separation proposal being progressed by NZTA and Selwyn District Council. The inter-connection aims to safely connect the main residential and industrial sites/inland ports in Rolleston, without having to cross both the state highway and railway lines. Further discussions between NZTA and Selwyn District Council will refine the scope and funding of these projects.

TABLE 3: PRIORITY 3 PROJECTS

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
ASHBURTON DISTRICT COUNCIL					
3HH	Local road improvements	Land Purchase, Second Ashburton Urban Bridge	2023/2024	2023/2024	\$860,000
3HM	Local road improvements	Second Ashburton Urban Bridge, Ashburton River	2020/2021	2025/2026	\$30,000,000
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$1,565,151
NZ TRANSPORT AGENCY					
3HH	Regional Improvements	SH1 - Rolleston Intersection improvements	2018/2019	2020/2021	\$5,643,000
3HH	Regional Improvements	Woodend Corridor Safety Improvements	2017/2018	2019/2020	\$3,878,280
3HH	State highway improvements	SH76 Brougham Street Corridor Imps	2017/2018	2021/2022	\$20,596,362
3HH	State highway improvements	SH75 Halswell Rd improvements	2018/2019	2028/2029	\$18,162,726
3HH	State highway improvements	SH73 Weedons-Ross Road Intersection	2018/2019	2020/2021	\$5,643,000
3HH	State highway improvements	SH82 Elephant Hill Stream Bridge	2019/2020	2021/2022	\$4,289,130
3HH	State highway improvements	Tinwald Corridor Improvements	2023/2024	2026/2027	\$4,040,973
3HM	State highway improvements	Canterbury ITS Improvement Programme	2018/2019	2020/2021	\$14,450,286
3HM	State highway improvements	Rolleston Interconnection Improvement	2018/2019	2026/2027	\$40,249,153
3HM	State highway improvements	SH75 Christchurch to Akaroa Corridor Improvements	2021/2022	2023/2024	\$2,562,366
3HM	State highway improvements	SH1 Oaro to Cheviot Safer Corridor and Resilience	2021/2022	2023/2024	\$70,465,094
3HM	State highway improvements	SH7 and SH7A Waipara to Hanmer Springs Corridor Imps	2021/2022	2023/2024	\$3,984,032
3MH	State highway improvements	Weigh Right Rakaia	2017/2018	2019/2020	\$4,263,030
3MH	State highway improvements	Active Road User I/S (Canterbury)	2018/2019	2020/2021	\$3,018,206
3MH	State highway improvements	SH1 Templetons to Weedons Rd Safe System Transformation	2018/2019	2020/2021	\$6,036,412
3MH	State highway improvements	SH1 Temuka to Dominion Road Safe System Transformation	2018/2019	2019/2020	\$13,280,106
3MH	State highway improvements	SH1 Waipara to Kaiapoi Safer Corridor	2018/2019	2020/2021	\$10,865,540
3MH	State highway improvements	SH73 Yaldhurst to Old West Coast Rd Safe System Transformati	2018/2019	2020/2021	\$2,656,020
3MH	State highway improvements	SH74 and 74A Safer Corridor	2018/2019	2020/2021	\$14,487,388
3MH	State highway improvements	SH75 Seabridge Rd to Duckpond Rd Safer Corridor	2018/2019	2020/2021	\$1,629,830
3MM	State highway improvements	SH1 Dominion Rd to SH1/8 I/S Safer Corridor	2021/2022	2023/2024	\$10,890,060
3MM	State highway improvements	SH1 Dunsandel Rd to Rakaia Safer Corridor	2021/2022	2022/2023	\$3,202,959
3MM	State highway improvements	SH1 Greta Valley to Davaar Rd Safer Corridor	2021/2022	2022/2023	\$8,968,286
3MM	State highway improvements	SH1 Hinds to Winchester Safer Corridor	2021/2022	2023/2024	\$14,477,374
3MM	State highway improvements	SH73 Yaldhurst to Railway Rd I/S Safer Corridor	2021/2022	2023/2024	\$11,786,889
3MM	State highway improvements	SH75 Little River to Seabridge Rd Safer Corridor	2021/2022	2023/2024	\$11,530,652

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
CHRISTCHURCH CITY COUNCIL					
3HH	Local road improvements	AAC Central City: Wayfinding	2018/2019	2023/2024	\$5,657,247
3HH	Local road improvements	AAC Colombo Street (Bealey - Kilmore)	2019/2020	2020/2021	\$961,550
3HH	Local road improvements	AAC Ferry Rd (St Asaph - Fitzgerald)	2018/2019	2019/2020	\$1,904,573
3HH	Local road improvements	AAC Hereford Street (Manchester-Cambridge)	2018/2019	2019/2020	\$4,248,635
3HH	Local road improvements	AAC High Street (Manchester-St Asaph)	2018/2019	2021/2022	\$3,725,602
3HM	Local road improvements	AAC Salisbury Street and Kilmore Street	2018/2019	2024/2025	\$13,150,005
3HH	Local road improvements	Cluster 6 - Lincoln Rd (Curletts - Wrights)	2018/2019	2022/2023	\$9,505,111
3HH	Local road improvements	Cluster 6: Core PT Route/Facilities: South-West (Wigram)	2017/2018	2020/2021	\$2,902,284
3HH	Local road improvements	Cluster 6-Intersection safety: Barrington/Lincoln/Whiteleigh	2019/2020	2020/2021	\$1,378,090
3HH	Local road improvements	Cluster 8 - Intersection safety: Ilam/Middleton/ Riccarton	2018/2019	2019/2020	\$1,026,637
3HH	Local road improvements	Core PT Route: Orbiter - Northwest	2021/2022	2022/2023	\$1,796,599
3MH	Local road improvements	Corridor 1- Intersection Improvemt:Cashmere/HoonHay/Worsley	2020/2021	2020/2021	\$3,255,789
3HH	Local road improvements	Halswell Junction Road Extension	2018/2019	2018/2019	\$3,700,000
3HH	Local road improvements	Intersection Improvement: Augustine/Halswell: Development SW	2017/2018	2018/2019	\$1,531,505
3HM	Local road improvements	Intersection Improvement: Burwood/Mairehau: Development Nth	2018/2019	2020/2021	\$1,249,205
3HH	Local road improvements	Intersection Safety: Aldwins/Buckleys/Linwood (13)	2018/2019	2019/2020	\$1,092,846
3HH	Local road improvements	Intersection Safety: Bealey/Papanui/Victoria (14)	2018/2019	2020/2021	\$1,181,133
3HH	Local road improvements	Network Management Improvement: McLeans Island Rd & Pound Rd	2020/2021	2025/2026	\$2,258,946
3HH	Local road improvements	Network Management Improvements: RoNS Downstream	2018/2019	2026/2027	\$4,500,000
3HH	Local road improvements	New Link: Halswell Junction to Connaught: Development S-W	2019/2020	2020/2021	\$1,177,098
3HH	Local road improvements	R102 Pages Road Bridge: General Traffic Upgrade	2018/2019	2022/2023	\$20,353,826
3HH	Local road improvements	RONs Downstream Inter Improvements: Cranford St Downstream	2018/2019	2022/2023	\$11,402,151
3HH	Local road improvements	RONs Downstream Inter Safety:Main Rd/Marshland/Spencerville	2020/2021	2021/2022	\$683,145
3HH	Local road improvements	Route Improvement: Barbadoes St & Madras St (Bealey to Warri	2018/2019	2020/2021	\$3,437,700
3HH	Local road improvements	Safety Improvements: Guardrails - Dyers Pass Rd	2019/2020	2019/2020	\$1,445,009
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$26,954,560
3HH	Public transport	Central City Transport Interchange	2018/2019	2018/2019	\$22,933,000
3HH	Walking and cycling improvements	AAC Antigua Street (St Asaph-Moorhouse)	2018/2019	2019/2020	\$961,550
3HH	Walking and cycling improvements	AAC High Street (Hereford-Manchester)	2018/2019	2020/2021	\$3,356,900
3HH	Walking and cycling improvements	Belfast Park Plan Change 43: Underpass: Development North	2018/2019	2019/2020	\$1,254,875
3HH	Walking and cycling improvements	City Wide Bike Share	2017/2018	2019/2020	\$1,239,948
3HH	Walking and cycling improvements	Coastal Pathway Project	2018/2019	2020/2021	\$5,730,164
3HH	Walking and cycling improvements	Local Cycleway:Northern Cycle Connection: Belfast - Waimakar	2020/2021	2024/2025	\$1,811,463
3HH	Walking and cycling improvements	Major Cycleway: Nor'West Arc	2017/2018	2025/2026	\$23,058,426
3HH	Walking and cycling improvements	Major Cycleway: Southern Lights (South to City)	2020/2021	2024/2025	\$2,972,580
3HH	Walking and cycling improvements	Major Cycleway:South Express (Hornby Rail-Templeton to City)	2020/2021	2024/2025	\$2,931,607
3HH	Walking and cycling improvements	Local Cycleway: Northern Arterial Link Cranford to Rutland Reserve	2020/2021	2023/2024	\$2,924,187
ENVIRONMENT CANTERBURY					
3HH	Public Transport	Data warehouse Canterbury Public Transport	2018/2019	2019/2020	\$400,000.00
3HH	Public Transport	National Ticketing Project	2019/2020	2020/2021	\$10,000,000.00
3HH	Public Transport	Super Gold Card Ticketing Integration	2018/2019	2019/2020	\$100,000.00
3HH	Public Transport	Total Mobility System Migration	2019/2020	2020/2021	\$150,000.00
MACKENZIE DISTRICT COUNCIL					
3HH	Local road improvements	Lilybank Road Seal Extension	2018/2019	2018/2019	\$3,020,000

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
SELWYN DISTRICT COUNCIL					
3HH	Local road improvements	Prebbleton Arterial CSM Related Upgrade Packages	2019/2020	2022/2023	\$24,280,000
3HH	Local road improvements	Selwyn Coordinated Transport Upgrades	2020/2021	2026/2027	\$4,262,000
TIMARU DISTRICT COUNCIL					
3HH	Investment management (incl. Transport Planning)	Bridge Renewal Programme Business Case	2018/2019	2019/2020	\$130,000
3HH	Investment management (incl. Transport Planning)	Timaru Port Area Road Infrastructure	2018/2019	2019/2020	\$100,000
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$1,620,000
3HH	Local road improvements	Timaru Port Southern Access	2020/2021	2020/2021	\$5,850,000
3HH	Local road improvements	Washdyke Industrial area road upgrades	2020/2021	2024/2025	\$3,700,000
WAIMAKARIRI DISTRICT COUNCIL					
3HH	Local road improvements	West Kaiapoi - Mill Road to Skewbridge Road	2018/2019	2024/2025	\$7,000,000

Priority 4: Other improvements

All other improvement projects are included in priority 4. Projects over \$5 million are deemed as regionally significant and shown in this summary. All other improvement projects with expenditure between \$1 million and \$5 million are shown by district in Appendix 1. Projects under \$1 million are covered within the low cost/low risk activities under priority 1.

TABLE 4: PRIORITY 4 EXPENDITURE

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
NZ TRANSPORT AGENCY					
4LH	State highway improvements	Noise Walls and Improvement Programme	2018/2019	2020/2021	\$10,377,723



EXPENDITURE AND REVENUE FORECASTS

Total public expenditure for Canterbury land transport projects is forecast (as at February 2018) to be around \$4.7 billion over the ten years from 2015/16 to 2024/25. Figures 4 and 5 show the distribution of this expenditure by activity class and approved authority, respectively.

FIGURE 4: EXPENDITURE BY APPROVED ORGANISATION

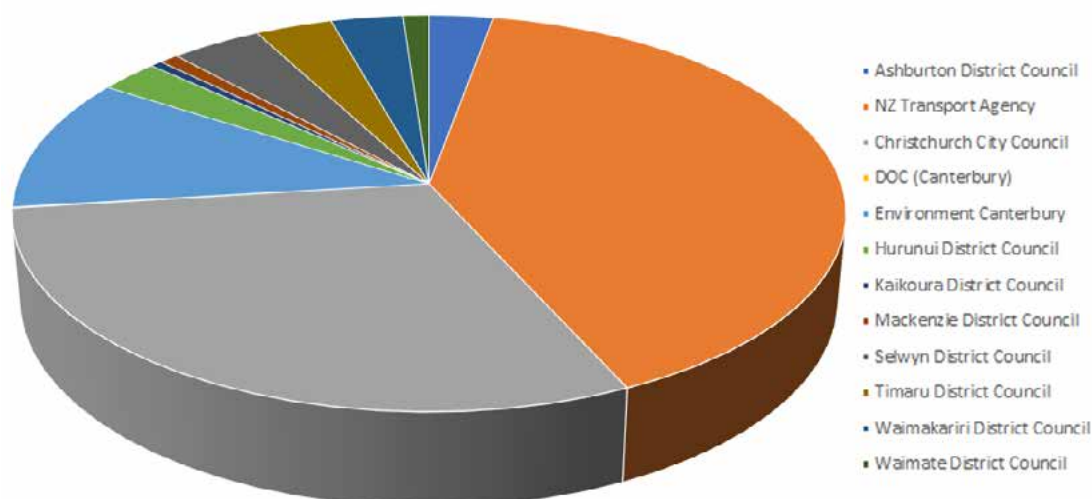
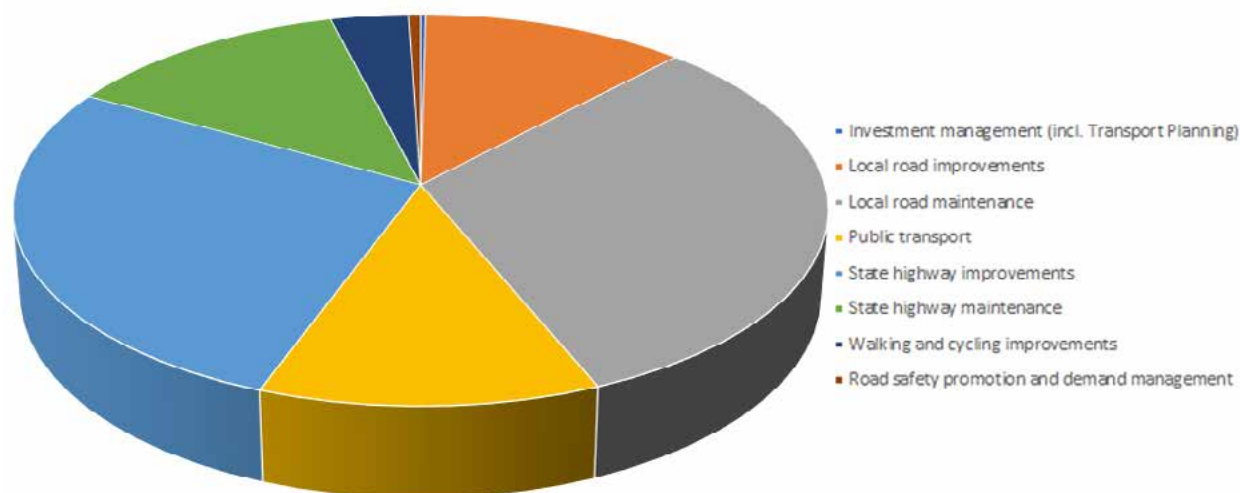


FIGURE 5: EXPENDITURE BY ACTIVITY CLASS



Ten-year expenditure by activity and approved organisation is shown in Table 5. The primary sources of revenue for publicly funded transport projects are the NLTF and local Government contributions, with the respective contributions depending upon the Financial Assistance Rate (FAR) applied by NZTA to each organisation. All NZ Transport Agency and New Zealand Police activities are fully funded from the NLTF. NLTF contributions to the ten-year expenditure figures are shown in Table 4.

In addition to the activities and funding shown in this Plan, the following activities are funded by local authorities without assistance from the NLTF:

- footpath infrastructure maintenance, renewals and improvements
- public off-street parking provision, maintenance and enforcement of parking regulations
- amenity improvements, landscaping and urban design elements within the street environment.

TABLE 5: TEN-YEAR EXPENDITURE BY ORGANISATION AND ACTIVITY

ACTIVITY CLASS	ASHBURTON DISTRICT COUNCIL	NZ TRANSPORT AGENCY	CHRISTCHURCH CITY COUNCIL	DOC (CANTERBURY)	ENVIRONMENT CANTERBURY	HURUNUI DISTRICT COUNCIL	KAIKOURA DISTRICT COUNCIL	MACKENZIE DISTRICT COUNCIL	SELWYN DISTRICT COUNCIL	TIMARU DISTRICT COUNCIL	WAIMAKARIRI DISTRICT COUNCIL	WAIMATE DISTRICT COUNCIL
Investment management (incl. Transport Planning)	\$270,000	\$1,093,188	\$2,602,130	\$150,000	\$5,391,472		\$15,000		\$204,482	\$1,050,000		
Local road improvements	\$13,656,914		\$403,564,354	\$100,000		\$10,356,500	\$581,255	\$5,900,000	\$44,398,782	\$41,665,496	\$35,719,203	\$4,992,103
Local road maintenance	\$120,420,471		\$770,098,622	\$3,438,640		\$115,043,893	\$24,709,870	\$34,038,169	\$145,492,471	\$117,845,000	\$112,359,287	\$50,192,939
Public transport			\$56,148,362		\$511,544,855							
Road safety promotion and demand management	\$1,307,880	\$1,106,192	\$15,821,851			\$613,800	\$102,854		\$2,226,000	\$2,562,000	\$1,676,716	
State highway improvements		\$1,296,593,374										
State highway maintenance		\$607,143,305										
Walking and cycling improvements	\$140,000		\$162,908,096						\$576,741		\$2,070,000	
Grand Total	\$135,795,265	\$1,905,936,059	\$1,411,143,415	\$3,688,640	\$516,936,327	\$126,014,193	\$25,408,979	\$39,938,169	\$192,898,476	\$163,122,496	\$151,825,206	\$55,185,042

TABLE 6: TEN-YEAR EXPENDITURE FROM NATIONAL LAND TRANSPORT FUND

ACTIVITY CLASS	ASHBURTON DISTRICT COUNCIL	NZ TRANSPORT AGENCY	CHRISTCHURCH CITY COUNCIL	DOC (CANTERBURY)	ENVIRONMENT CANTERBURY	HURUNUI DISTRICT COUNCIL	KAIKOURA DISTRICT COUNCIL	MACKENZIE DISTRICT COUNCIL	SELWYN DISTRICT COUNCIL	TIMARU DISTRICT COUNCIL	WAIMAKARIRI DISTRICT COUNCIL	WAIMATE DISTRICT COUNCIL
Investment management (incl. Transport Planning)	\$137,700	\$1,093,188	\$1,315,582	\$150,000	\$2,753,617		\$7,650		\$104,286	\$541,900		
Local road improvements	\$6,949,417		\$204,659,243	\$51,000		\$5,290,815	\$294,749	\$3,029,964	\$22,643,379	\$21,518,794	\$18,235,000	\$2,947,920
Local road maintenance	\$61,144,140		\$386,503,196	\$1,792,807		\$58,739,029	\$12,548,677	\$17,550,296	\$74,201,160	\$61,057,778	\$57,400,634	\$29,520,786
Public transport			\$28,635,665		\$261,303,178							
Road safety promotion and demand management	\$663,432	\$1,106,192	\$7,997,500			\$313,601	\$52,270		\$1,135,260	\$1,330,147	\$855,814	
State highway improvements		\$1,296,593,374										
State highway maintenance		\$607,143,305										
Walking and cycling improvements	\$71,400		\$82,267,384						\$294,138		\$1,057,137	
Grand Total	\$68,966,089	\$1,905,936,059	\$711,378,569	\$1,993,807	\$264,056,795	\$64,343,445	\$12,903,347	\$20,580,259	\$98,378,223	\$84,448,619	\$77,548,585	\$32,468,706

MONITORING AND PERFORMANCE INDICATORS

The performance of the programme of activities in this Plan will be assessed through the measures in the Regional Transport Scorecard outlined below. Targets will be developed over time, as appropriate. Reporting will be quarterly to the Regional Transport Committee, with data being updated as it becomes available.

TABLE 7: OUTCOMES AND PERFORMANCE MEASURES

OBJECTIVE/OUTCOME	MEASURE	DATA SOURCE
STRENGTHENING PARTNERSHIPS AND MAKING INFORMED DECISIONS		
Improved collaboration, alignment and advocacy	List of submissions and deputations to central government from the Regional Transport Committee and its sub-groups, as well as through affiliated groups such as the South Island Regional Transport Chairs Group. Submissions and deputations on core central government transport policy matters will be specifically measured.	Environment Canterbury
Demonstration of evidence-based decision making	The use of this scorecard which will be updated quarterly (as data release allows) to support evidence-based decision making.	
DEVELOPING AN INTEGRATED, MULTI-MODAL REGIONAL TRANSPORT NETWORK		
Integrate land use, transport and hazards planning	Average trip length by private vehicle, public transport and active modes	MoT Household Travel Survey
Improve condition and suitability of assets	The annual proportion (%) of vehicle kilometres travelled that occur on 'smooth' sealed roads	NZTA ONRC database
Improve road safety	Six monthly fatalities and injuries Annual injuries per million kilometres travelled Annual crashes involving trucks	NZTA Crash Analysis System database
Optimise freight modes	Quarterly proportion of freight to and from Canterbury ports by rail Note that a measure for coastal shipping is being developed	NZTA Freight Information Gathering System
Improved effectiveness of passenger and active transport	Annual public transport modal share compared with private vehicle and active modes Quarterly public transport boardings Quarterly mobility service usage (Total Mobility Scheme)	MoT Household Travel Survey
Reduced congestion and improve journey time reliability	Monthly average travel time on key corridors in Greater Christchurch Monthly variability on key corridors in Greater Christchurch Monthly reliability of public transport services in Greater Christchurch	Christchurch Transport Operations Centre
A more resilient transport network	Quarterly number of incidents on the Canterbury State Highway network Quarterly duration of incidents on the Canterbury State Highway network	NZTA Traffic Road Event Information System
Environmental sustainability	Quarterly tonnes of CO ₂ produced from petrol and diesel sold in Canterbury	Regional fuel sales
Facilitating and supporting freight growth	Annual truck vehicle kilometres travelled Quarterly bulk, confidential and containerised freight exported from Canterbury Ports Quarterly rail freight movements to, from and within Canterbury	NZTA MoT Freight Information Gathering System
SUPPORTING POSITIVE SOCIO-ECONOMIC OUTCOMES FOR THE CANTERBURY REGION		
Visitor retention and dispersal	Quarterly guest nights spent in Canterbury	Statistics New Zealand
Economic development	Annual regional Gross Domestic Product	Statistics New Zealand
Safe, healthy and connected communities	Annual wellbeing survey results	New Zealand General Satisfaction Survey

APPENDICES

Appendix 1: Regional programme details

The full regional programme is shown in the following tables. This includes projects that are not regionally significant but provide local benefit and are under \$5M.

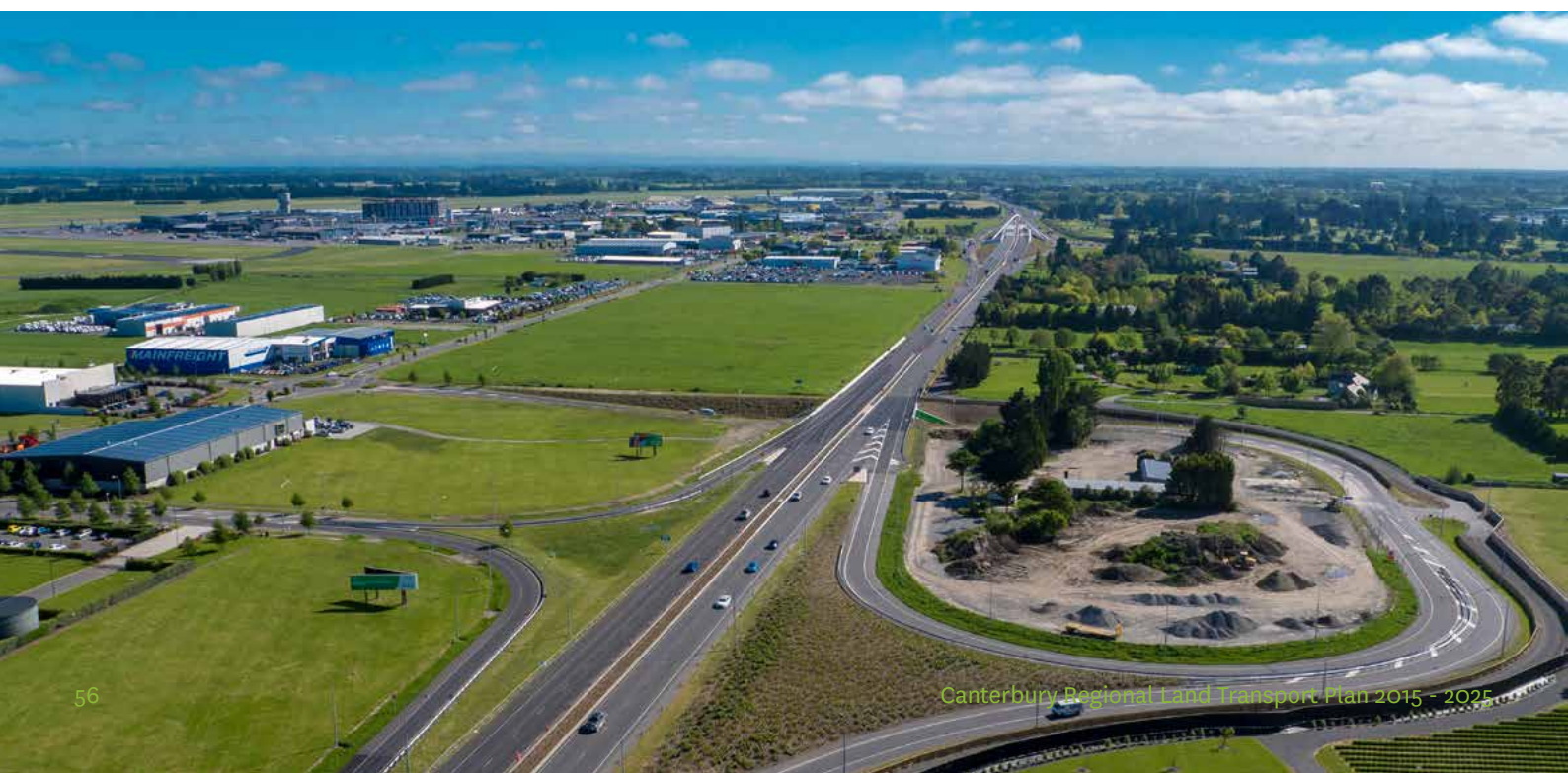
TABLE 8: PROJECT INFORMATION BY APPROVED AUTHORITY

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
ASHBURTON DISTRICT COUNCIL					
4	Investment management (incl. Transport Planning)	Ashburton Urban Walking and Cycling Programme	2018/2019	2018/2019	\$18,000
3HH	Local road improvements	Land Purchase, Second Ashburton Urban Bridge	2023/2024	2023/2024	\$860,000
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$8,129,301
3HM	Local road improvements	Second Ashburton Urban Bridge, Ashburton River	2020/2021	2025/2026	\$30,000,000
4	Local road improvements	Tinwald Corridor Associated Improvement	2018/2019	2020/2021	\$150,000
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$1,565,151
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$39,609,182
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$382,491
NZ TRANSPORT AGENCY					
2	Regional Improvements	Rakaia to Ashburton Safety Improvements	2017/2018	2019/2020	\$31,575,819
3HH	Regional Improvements	SH1 - Rolleston Intersection improvements	2018/2019	2020/2021	\$ 5,643,000
3HH	Regional Improvements	Woodend Corridor Safety Improvements	2017/2018	2019/2020	\$3,878,280
3HH	State highway improvements	SH76 Brougham Street Corridor Imps	2017/2018	2021/2022	\$20,596,362
2	State highway improvements	CHCH Northern Arterial Rural with QE2	2008/2009	2021/2022	\$298,535,520
2	State highway improvements	CHCH Southern Motorway HJR to Rolleston (Stage 2 & 3)	2009/2010	2020/2021	\$314,688,322
3HH	State highway improvements	SH75 Halswell Rd improvements	2018/2019	2028/2029	\$18,162,726
3HM	State highway improvements	Canterbury ITS Improvement Programme	2018/2019	2020/2021	\$14,450,286
2	State highway improvements	Kaikoura Nov 2016 EQ: SH1 Clarence & Oaro Improvement (NLTF)	2016/2017	2019/2020	\$251,520,010
1	State highway improvements	Canterbury LED replacement programme	2026/2027	2026/2027	\$20,639,195
1	State highway improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$16,535,822
2	State highway improvements	Lytelton Tunnel Safety Retrofit (Deluge) System	2013/2014	2018/2019	\$25,249,693
3HM	State highway improvements	Rolleston Interconnection Improvement	2018/2019	2026/2027	\$40,249,153
3HH	State highway improvements	SH73 Weedons-Ross Road Intersection	2018/2019	2020/2021	\$5,643,000
3HM	State highway improvements	SH75 Christchurch to Akaroa Corridor Improvements	2021/2022	2023/2024	\$2,562,366
3HH	State highway improvements	SH82 Elephant Hill Stream Bridge	2019/2020	2021/2022	\$4,289,130
3HH	State highway improvements	Tinwald Corridor Improvements	2023/2024	2026/2027	\$4,040,973
2	State highway improvements	Waimakariri Bridge safety and reliability improvements	2018/2019	2020/2021	\$22,995,399
3MH	State highway improvements	Weigh Right Rakaia	2017/2018	2019/2020	\$4,263,030
2	State highway improvements	Western Belfast By-Pass	2009/2010	2018/2019	\$180,283,416
1	State highway improvements	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$164,948,616
3HM	State highway improvements	SH1 Oaro to Cheviot Safer Corridor and Resilience	2021/2022	2023/2024	\$70,465,094
2	State highway improvements	Ashley to Belfast Safety Improvement	2016/2017	2019/2020	\$14,779,626
2	State highway improvements	Broughs Road Extension	2015/2016	2019/2020	\$5,207,916
2	State highway improvements	Weigh Right Glasnevin	2016/2017	2019/2020	\$30,719,406
2	State highway improvements	Harewood Rd to Yaldhurst Rd 4 Laning	2009/2010	2018/2019	\$159,105,212
3MH	State highway improvements	Active Road User I/S (Canterbury)	2018/2019	2020/2021	\$3,018,206
2	State highway improvements	Barbers/Main Sth intersection	2014/2015	2018/2019	\$17,709,262

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
2	State highway improvements	Groynes To Sawyers Arms 4L	2009/2010	2018/2019	\$58,986,015
4LH	State highway improvements	Noise Walls and Improvement Programme	2018/2019	2020/2021	\$10,377,723
3MM	State highway improvements	SH1 Dominion Rd to SH1/8 I/S Safer Corridor	2021/2022	2023/2024	\$10,890,060
3MM	State highway improvements	SH1 Dunsandel Rd to Rakaia Safer Corridor	2021/2022	2022/2023	\$3,202,959
3MM	State highway improvements	SH1 Greta Valley to Davaar Rd Safer Corridor	2021/2022	2022/2023	\$8,968,286
3MM	State highway improvements	SH1 Hinds to Winchester Safer Corridor	2021/2022	2023/2024	\$14,477,374
3MH	State highway improvements	SH1 Templetons to Weedons Rd Safe System Transformation	2018/2019	2020/2021	\$6,036,412
3MH	State highway improvements	SH1 Temuka to Dominion Road Safe System Transformation	2018/2019	2019/2020	\$13,280,106
3MH	State highway improvements	SH1 Waipara to Kaiapoi Safer Corridor	2018/2019	2020/2021	\$10,865,540
3HM	State highway improvements	SH7 and SH7A Waipara to Hanmer Springs Corridor Imps	2021/2022	2023/2024	\$3,984,032
3MH	State highway improvements	SH73 Yaldhurst to Old West Coast Rd Safe System Transformati	2018/2019	2020/2021	\$2,656,020
3MM	State highway improvements	SH73 Yaldhurst to Railway Rd I/S Safer Corridor	2021/2022	2023/2024	\$11,786,889
3MH	State highway improvements	SH74 and 74A Safer Corridor	2018/2019	2020/2021	\$14,487,388
3MM	State highway improvements	SH75 Little River to Seabridge Rd Safer Corridor	2021/2022	2023/2024	\$11,530,652
3MH	State highway improvements	SH75 Seabridge Rd to Duckpond Rd Safer Corridor	2018/2019	2020/2021	\$1,629,830
2	State highway improvements	Sawyers Arms To Harewood 4L	2008/2009	2018/2019	\$28,352,313
CHRISTCHURCH CITY COUNCIL					
1	Investment management (incl. Transport Planning)	Business Case Activities	2018/2019	2020/2021	\$920,250
2	Local road improvements	AAC Victoria Street	2015/2016	2018/2019	\$7,083,289
3HH	Local road improvements	AAC Central City: Wayfinding	2018/2019	2023/2024	\$5,657,247
3HH	Local road improvements	AAC Colombo Street (Bealey - Kilmore)	2019/2020	2020/2021	\$961,550
3HH	Local road improvements	AAC Ferry Rd (St Asaph - Fitzgerald)	2018/2019	2019/2020	\$1,904,573
3HH	Local road improvements	AAC Hereford Street (Manchester-Cambridge)	2018/2019	2019/2020	\$4,248,635
3HH	Local road improvements	AAC High Street (Manchester-St Asaph)	2018/2019	2021/2022	\$3,725,602
2	Local road improvements	AAC Lichfield Street works stage 2	2019/2020	2020/2021	\$1,000,110
3HM	Local road improvements	AAC Salisbury Street and Kilmore Street	2018/2019	2024/2025	\$13,150,005
2	Local road improvements	AAC Tuam Street works stage 2	2019/2020	2020/2021	\$1,000,110
2	Local road improvements	Burwood & North Shirley Rd Reconstruction	2019/2020	2020/2021	\$1,169,172
2	Local road improvements	Cluster 1 - Core PT Route: North (Papanui & Belfast)	2018/2019	2020/2021	\$1,602,720
3HH	Local road improvements	Cluster 6 - Lincoln Rd (Curllets - Wrights)	2018/2019	2022/2023	\$9,505,111
3HH	Local road improvements	Cluster 6: Core PT Route/Facilities: South-West (Wigram)	2017/2018	2020/2021	\$2,902,284
3HH	Local road improvements	Cluster 6-Intersection safety: Barrington/Lincoln/Whiteleigh	2019/2020	2020/2021	\$1,378,090
3HH	Local road improvements	Cluster 8 - Intersection safety: Ilam/Middleton/ Riccarton	2018/2019	2019/2020	\$1,026,637
3HH	Local road improvements	Core PT Route: Orbiter - Northwest	2021/2022	2022/2023	\$1,796,599
3MH	Local road improvements	Corridor 1- Intersection Improvemnt:Cashmere/HoonHay/ Worsley	2020/2021	2020/2021	\$3,255,789
2	Local road improvements	Corridor 2 - Intersection Improvement: Lower Styx/ Marshland	2018/2019	2018/2019	\$7,731,083
3HH	Local road improvements	Halswell Junction Road Extension	2018/2019	2018/2019	\$3,700,000
3HH	Local road improvements	Intersection Improvement: Augustine/Halswell: Development SW	2017/2018	2018/2019	\$1,531,505
3HM	Local road improvements	Intersection Improvement: Burwood/Mairehau: Development Nth	2018/2019	2020/2021	\$1,249,205
3HH	Local road improvements	Intersection Safety: Aldwins/Buckleys/Linwood (13)	2018/2019	2019/2020	\$1,092,846
3HH	Local road improvements	Intersection Safety: Bealey/Papanui/Victoria (14)	2018/2019	2020/2021	\$1,181,133
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$13,797,280
3HH	Local road improvements	Network Management Improvement: McLeans Island Rd & Pound Rd	2020/2021	2025/2026	\$2,258,946
3HH	Local road improvements	Network Management Improvements: RoNS Downstream	2018/2019	2026/2027	\$4,500,000
3HH	Local road improvements	New Link: Halswell Junction to Connaught: Development S-W	2019/2020	2020/2021	\$1,177,098
2	Local road improvements	Northern Arterial Extension and Cranford Street Upgrade	2016/2017	2022/2023	\$31,248,440
3HH	Local road improvements	R102 Pages Road Bridge: General Traffic Upgrade	2018/2019	2022/2023	\$20,353,826

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
3HH	Local road improvements	RONS Downstream Inter Improvements: Cranford St Downstream	2018/2019	2022/2023	\$11,402,151
3HH	Local road improvements	RONS Downstream Inter Safety: Main Rd/Marshland/Spencerville	2020/2021	2021/2022	\$683,145
3HH	Local road improvements	Route Improvement: Barbadoes St & Madras St (Bealey to Warri)	2018/2019	2020/2021	\$3,437,700
3HH	Local road improvements	Safety Improvements: Guardrails - Dyers Pass Rd	2019/2020	2019/2020	\$1,445,009
2	Local road maintenance	EW Sumner-Lyttelton Corridor EQ damaged infrastructure	2017/2018	2018/2019	\$37,894,054
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$184,251,349
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$26,954,560
3HH	Public transport	Central City Transport Interchange	2018/2019	2018/2019	\$22,933,000
2	Public transport	Cluster 1 - PT Facilities: Northlands Hub	2017/2018	2018/2019	\$1,062,910
2	Public transport	Riccarton Interchange and Bus Priority	2018/2019	2020/2021	\$4,028,174
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$5,084,786
3HH	Walking and cycling improvements	AAC Antigua Street (St Asaph-Moorhouse)	2018/2019	2019/2020	\$961,550
3HH	Walking and cycling improvements	AAC High Street (Hereford-Manchester)	2018/2019	2020/2021	\$3,356,900
3HH	Walking and cycling improvements	Belfast Park Plan Change 43: Underpass: Development North	2018/2019	2019/2020	\$1,254,875
3HH	Walking and cycling improvements	City Wide Bike Share	2017/2018	2019/2020	\$1,239,948
3HH	Walking and cycling improvements	Coastal Pathway Project	2018/2019	2020/2021	\$5,730,164
3HH	Walking and cycling improvements	Local Cycleway: Northern Cycle Connection: Belfast - Waimakar	2020/2021	2024/2025	\$1,811,463
3HH	Walking and cycling improvements	Major Cycleway: Nor'West Arc	2017/2018	2025/2026	\$23,058,426
2	Walking and cycling improvements	Major Cycleway: Quarryman's Trail (Halswell to City) UCF	2016/2017	2018/2019	\$14,285,113
2	Walking and cycling improvements	Major Cycleway: Rapanui - Shag Rock (Sumner to City) UCF	2017/2018	2020/2021	\$5,126,000
3HH	Walking and cycling improvements	Major Cycleway: Southern Lights (South to City)	2020/2021	2024/2025	\$2,972,580
2	Walking and cycling improvements	Major Cycleway: Northern Line (Nthn Rail Rte to Rcton) UCF	2020/2021	2020/2021	\$5,029,984
3HH	Walking and cycling improvements	Major Cycleway: South Express (Hornby Rail-Templeton to City)	2020/2021	2024/2025	\$2,931,607
3HH	Walking and cycling improvements	Local Cycleway: Northern Arterial Link Cranford to Rutland Reserve	2020/2021	2023/2024	\$2,924,187
DOC (CANTERBURY)					
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$100,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$1,354,131
ENVIRONMENT CANTERBURY					
1	Regional Land Transport Planning Management 2018-2021	Regional Land Transport Planning Management 2018-2021	2018/2019	2028/2029	\$11,235,121
1	Public transport	Low cost / low risk improvements 2018-21	2018/19	2020/20	\$1,000,000
3HH	Public Transport	Data warehouse Canterbury Public Transport	2018/2019	2019/2020	\$400,000
3HH	Public Transport	National Ticketing Project	2019/2020	2020/2021	\$10,000,000
1	Public Transport	Public Transport Programme	2018/2019	2021/2022	\$145,702,507.00
3HH	Public Transport	Super Gold Card Ticketing Integration	2018/2019	2019/2020	\$100,000
3HH	Public Transport	Total Mobility System Migration	2019/2020	2020/2021	\$150,000
HURUNUI DISTRICT COUNCIL					
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$3,966,500
2	Local road maintenance	Kaikoura Earthquake 14 November 2016	2016/2017	2018/2019	\$7,203,600
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$24,203,356
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$180,000
KAIKŌURA DISTRICT COUNCIL					
1	Local road maintenance	Kaikoura Nov 2016 EQ	2016/2017	2018/2019	\$11,893,500
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$606,991
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$3,875,310
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$33,000
1	Investment management (incl. Transport Planning)	Activity Management Planning Improvement	2017/2018	2025/2026	\$75,000

PRIORITY	ACTIVITY CLASS	PROJECT NAME	START YEAR	END YEAR	TOTAL COST FOR ALL YEARS
MACKENZIE DISTRICT COUNCIL					
3HH	Local road improvements	Lilybank Road Seal Extension	2018/2019	2018/2019	\$3,020,000
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$2,500,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$9,859,356
SELWYN DISTRICT COUNCIL					
1	Investment management (incl. Transport Planning)	Transport Planning	2018/2019	2027/2028	\$220,000
2	Local road improvements	LED Upgrade	2017/2018	2019/2020	\$3,285,000
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$3,727,000
3HH	Local road improvements	Prebbleton Arterial CSM Related Upgrade Packages	2019/2020	2022/2023	\$24,280,000
3HH	Local road improvements	Selwyn Coordinated Transport Upgrades	2020/2021	2026/2027	\$4,262,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$45,120,000
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$682,000
TIMARU DISTRICT COUNCIL					
3HH	Investment management (incl. Transport Planning)	Bridge Renewal Programme Business Case	2018/2019	2019/2020	\$130,000
3HH	Investment management (incl. Transport Planning)	Timaru Port Area Road Infrastructure	2018/2019	2019/2020	\$100,000
1	Local road improvements	Asset Management Plan Improvements 2018-21	2017/2018	2020/2021	\$360,000
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$11,720,000
3HH	Local road improvements	Timaru Port Southern Access	2020/2021	2020/2021	\$5,850,000
3HH	Local road improvements	Washdyke Industrial area road upgrades	2020/2021	2024/2025	\$3,700,000
3HH	Local road improvements	Accelerated LED Conversion Programme	2018/2019	2020/2021	\$1,620,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$41,200,000
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$926,000
WAIMAKARIRI DISTRICT COUNCIL					
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$9,710,000
3HH	Local road improvements	West Kaiapoi - Mill Road to Skewbridge Road	2018/2019	2024/2025	\$7,000,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$33,596,149
1	Road safety promotion	Road Safety Promotion 2018-21	2018/2019	2020/2021	\$570,000
WAIMATE DISTRICT COUNCIL					
1	Local road improvements	Low cost / low risk improvements 2018-21	2018/2019	2020/2021	\$1,480,000
1	Local road maintenance	Maintenance, Operations and Renewals Programme 2018-21	2018/2019	2020/2021	\$15,013,300
2	Local road improvements	Accelerated LED Street Light Renewal	2017/2018	2018/2019	\$250,750



Appendix 2: Significance policy

Each regional transport committee must, in accordance with section 106(2) of the Act, adopt a policy that determines “significance” in respect of variations it wishes to make to its Regional Land Transport Plan (“Plan”) as provided for by section 18D of the Act and the activities that are included in the plan under section 16.

Variations to the Regional Land Transport Plan

If good reason exists to do so, a regional transport committee may prepare a variation to its Plan during the period to which it applies. A variation may be prepared by a regional transport committee:

- i. at the request of an approved organisation or the transport agency
- ii. on the regional transport committee’s own motion.

Consultation is not required for any variation to the Plan that is not significant in terms of this Significance Policy.

The Significance Policy is defined below.

Where a variation to the Plan is required, the significance of that variation will be determined on a case-by-case basis.

Relevant considerations include:

- Whether the improvement activity is large or of strategic importance
- Whether the activity has a significant effect on the objectives in this Plan
- Whether the activity impacts on the overall affordability of the Plan
- Whether the activity has significant network, economic or land use implications or impacts on Canterbury and/or other regions.
- The extent to which, and the manner in which, the matter has already been or needs to be consulted upon.

For the avoidance of doubt, the following variations to the Plan are not generally considered significant for purposes of consultation:

- i. Addition of an activity or combination of activities that has previously been consulted on in accordance with section 18 of the Land Transport Management Act (LTMA).
- ii. A scope change to an activity or the addition or removal of an activity that has a value of less than \$5 million.
- iii. Replacement of activities within an approved programme or group with activities of the same type and general priority.
- iv. Funding requirements for preventative maintenance and emergency reinstatement activities.
- v. Improvements to routes which are needed to support changes in traffic following an emergency
- vi. For improvement projects variations to timing, cash flow or total cost resulting from costs changes.
- vii. End-of-year carry-over of allocations.
- viii. Addition of the investigation or design phase of a new activity which has not been previously consulted upon in accordance with section 18 of the Act.
- ix. Variations to timing of activities if sufficient reasoning is provided for the variation and the variation does not substantially alter the balance.

Inclusion and prioritisation of activities in the Regional Land Transport Plan

For activities included in the Plan, section 16(3)(d) of the LTMA requires the Plan to show the order priority for all activities identified by the regional transport committee as significant. In this Plan we have listed and prioritised all activities if they are:

- priority 1, 2 or 3 activities
- priority 4 activities and have a total cost of over \$5 million
- any other activity that the regional transport committee resolves as being regionally significant.

Appendix 3: Assessment of compliance with LTMA section 14

Section 16(6) of the LTMA requires the inclusion of an assessment of how the Plan complies with section 14 of the Act. The following outlines how this requirement has been met.

An RLTP must contribute to the purpose of the LTMA which is “to contribute to an effective, efficient, and safe land transport system in the public interest” (section 3, LTMA). This purpose is reflected in the objectives of this Plan and the prioritisation process and the resulting statement of priorities. In addition, NZTA and approved authorities provide assessments of effectiveness and efficiency in submitting projects for funding. Safety is explicitly included as an objective in the Plan.

An RLTP must be consistent with the GPS which has been incorporated in the development of this Plan and referenced at numerous points. There is also alignment between the objectives in the GPS and this Plan.

In developing the Plan, the Regional Transport Committee must consider alternative regional land transport objectives that would contribute to the purpose of the LTMA, and the feasibility and affordability of those alternative objectives. The development of the consultation draft took account of the existing 2015 objectives which were identified following an ILM process which included consideration of alternatives and their feasibility. A further facilitated workshop was held for Regional Transport Committee members in 2017, to review these existing objectives to ensure they were still fit-for-purpose. The public notification, submissions and hearings provided further opportunity for consideration of alternative objectives.

The RLTP must take into account any:

- NEEC
- Relevant National Policy Statement and any relevant Regional Policy Statements or plans that are, for the time being, in force under the RMA
- Likely funding from any source.

This Plan supports the NEEC through the objectives of accessibility (which will improve transport choice), improving resilience, and environmental impact. A key outcome is also to fully incorporate sustainability issues, including environmental sustainability, into transport planning decisions. Similarly, the relevant sections of the Canterbury Regional Policy Statement and district plans are reflected in the projects put forward in this Plan and the respective priorities applied.

All likely funding sources have been taken into account and are identified within this Plan.

Appendix 4: Assessment of the relationship of Police activities to the RLTP

Section 16(6) of the LTMA requires the inclusion of an assessment of the relationship of Police activities to the RLTP.

Police’s strategic direction is outlined in Police’s four-year plan The Safest Country: Policing 2021. New Zealand’s road safety strategy, Safer Journeys, also provides a focus for road policing. This strategy has led to the introduction of a range of measures to promote a safe road system which will reduce the number of deaths and injuries on the roads. The New Zealand Police receives annual Government funding of approximately \$300 million for delivering road policing activities. In the Canterbury Police district, which excludes Kaikōura, Police have identified the following priority areas:

- speed
- impaired driving (drink/drug driving and fatigue)
- restraint use
- intersections.

The Police work with other transport sector agencies, including NZTA and local authorities, to co-ordinate the delivery of programmes. In Canterbury, local authorities, the Police and other partner agencies develop annual road safety action plans and regularly report against these plans.

The New Zealand Police were invited to provide a summary of expenditure for the Canterbury district to include in this Plan, but declined to do so.

Appendix 5: Summary of consultation

The draft RLTP was developed with input from territorial authorities, NZTA, and the New Zealand Police. It took into account existing public documents as required by the LTMA.

The strategic context, issues and challenges, and strategic response sections of this RLTP were reviewed between 2015-16, and changes were adopted through a variation made in May 2016 following extensive public consultation. The remainder of RLTP was subsequently reviewed in accordance with guidance issued by NZTA. The strategic response section was also updated to ensure it remains current. Public consultation on these further changes took place between February and March 2018.

Appendix 6: Legislative requirements

The following extracts from the LTMA outline the key requirements with respect to regional land transport plans.

Section 14 - core requirements of regional land transport plans

Before a regional transport committee submits a regional land transport plan to a regional council, the regional transport committee must:

- a. be satisfied that the regional land transport plan
 - i. contributes to the purpose of this Act
 - ii. is consistent with the GPS on land transport
- b. have considered
 - i. alternative regional land transport objectives that would contribute to the purpose of this Act
 - ii. the feasibility and affordability of those alternative objectives
- c. have taken into account any
 - i. NEECS
 - ii. relevant NPS and any relevant RPSs or plans that are, for the time being, in force under the RMA
 - iii. likely funding from any source.

Section 16 - form and content of regional land transport plans

1. A regional land transport plan must set out the region's land transport objectives, policies, and measures for at least ten financial years from the start of the regional land transport plan.
2. A regional land transport plan must include:
 - a. a statement of transport priorities for the region for the ten financial years from the start of the regional land transport plan
 - b. a financial forecast of anticipated revenue and expenditure on activities for the ten financial years from the start of the regional land transport plan
 - c. all regionally significant expenditure on land transport activities to be funded from sources other than the NLTF during the six financial years from the start of the regional land transport plan
 - d. an identification of those activities (if any) that have inter-regional significance.
3. For the purpose of seeking payment from the national land transport fund, a regional land transport plan must contain for the first six financial years to which the plan relates:
 - a. activities proposed by approved organisations in the region relating to Local road maintenance, local road renewals, local road minor capital works, and existing public transport services
 - b. (not relevant to Canterbury)
 - c. the following activities that the regional transport committee decides to include in the regional land transport plan:
 - i. activities proposed by approved organisations in the region ... other than those activities specified in paragraphs (a) and (b)
 - ii. activities relating to state highways in the region that are proposed by the agency
 - iii. activities, other than those relating to state highways, that the agency may propose for the region and that the agency wishes to see included in the regional land transport plan
 - d. the order of priority of the significant activities that a regional transport committee includes in the regional land transport plan under paragraphs (a), (b), and (c)

- e. an assessment of each activity prepared by the organisation that proposes the activity under paragraph (a), (b), or (c) that includes:
 - i. the objective or policy to which the activity will contribute
 - ii. an estimate of the total cost and the cost for each year
 - iii. the expected duration of the activity
 - iv. any proposed sources of funding other than the NLTF (including, but not limited to, tolls, funding from approved organisations, and contributions from other parties)
 - v. any other relevant information
 - f. the measures that will be used to monitor the performance of the activities.
4. An organisation may only propose an activity for inclusion in the regional land transport plan if it or another organisation accepts financial responsibility for the activity.
- For the purpose of the inclusion of activities in a national land transport programme:
- a. a regional land transport plan must be in the form and contain the detail that the agency may prescribe in writing to regional transport committees
 - b. the assessment under subsection (3)(e) must be in a form and contain the detail required by the regional transport committee, taking account of any prescription made by the agency under paragraph (a)
5. For the purpose of the inclusion of activities in a national land transport programme:
- a. a regional land transport plan must be in the form and contain the detail that the agency may prescribe in writing to regional land transport committees
 - b. the assessment under subsection (3)(e) must be in a form and contain the detail required by the regional transport committee, taking account of any prescription made by the agency under paragraph (a).
6. A regional land transport plan must also include:
- a. an assessment of how the plan complies with section 14
 - b. an assessment of the relationship of Police activities to the regional land transport plan
 - c. a list of activities that have been approved under section 20 but are not yet completed
 - d. an explanation of the proposed action, if it is proposed that an activity be varied, suspended or abandoned
 - e. a description of how monitoring will be undertaken to assess implementation of the regional land transport plan
 - f. a summary of the consultation carried out in the preparation of the regional land transport plan
 - g. a summary of the policy relating to significance adopted by the regional transport committee under section 106(2)
 - h. any other relevant matters.

For the purposes of this section, existing public transport services means the level of public transport services in place in the financial year before the commencement of the regional land transport plan, and any minor changes to those services.

Section 18 - consultation requirements

- 1. When preparing a regional land transport plan, a regional transport committee:
 - a. must consult in accordance with the consultation principles specified in section 82 of the Local Government Act 2002
 - b. may use the special consultative procedure specified in section 83 of the Local Government Act 2002.

Section 106 - functions of regional transport committees

- 1. The functions of each regional transport committee are:
 - a. to prepare a regional land transport plan, or any variation to the plan, for the approval of the relevant regional council
 - b. to provide the regional council with any advice and assistance the regional council may request in relation to its transport responsibilities.
- 2. Each regional transport committee must adopt a policy that determines significance in respect of:
 - a. variations made to regional land transport plans under section 18D
 - b. the activities that are included in the regional land transport plan under section 16.

Appendix 7: Glossary

Active transport – Transport modes that rely on human power, primarily walking and cycling.

AM peak – The period between 07:00 and 09:00 on weekdays.

An Accessible City (AAC) – An Accessible City refers to the transport chapter of the Christchurch Central Recovery Plan. It was launched in October 2013.

Canterbury – For the purposes of this strategy, the Canterbury region is the administrative area covered by the Canterbury Regional Council, excluding the administrative area covered by the Waitaki District Council. The whole of the Waitaki district is covered under the Otago Regional Land Transport Strategy.

Capacity – The theoretical maximum number of vehicles (vehicular capacity) or persons (person capacity) that can pass through a given section of road or an intersection during a given period of time, usually expressed as vehicles per hour or persons per hour.

Community transport – A transport service established and operated by a community for members of that community.

Corridor – A geographical area usually defined by a railway, motorway, roadway, or other physical element and its immediate surrounding area.

Freight hub – Is a physical location where freight vehicles converge on a common user facility for the purpose of transferring goods within or between transport modes.

Greater Christchurch – For the purpose of this strategy, greater Christchurch is the area covered by the Greater Christchurch Urban Development Strategy (UDS). Greater Christchurch comprises the Christchurch City Council area, including Lyttelton Harbour but not the remainder of Banks Peninsula, and parts of Waimakariri and Selwyn district councils. For a map of the UDS area, visit www.greaterchristchurch.org.nz.

Infrastructure – All fixed components of a transportation system, including roadways and bridges, railways, ports, park-and-ride sites, bus stops/shelters and other physical elements.

Interchanges – Places where people or goods transfer between vehicles or from one mode to another.

Inter-peak – The period between 09:00 and 16:00 on weekdays.

Investment Logic Mapping (ILM) – A technique to test and confirm the rationale for a proposed investment.

Land transport – means: (a) transport on land by any means, (b) the infrastructure, goods and services facilitating that transport. The definition also includes coastal shipping.

Land transport system – All infrastructure, services, mechanisms and institutions that contribute to providing for land transport.

Level of service – A qualitative measure that describes the operational conditions of a road or intersection.

Level of service ‘C’ – The Austroads Guide to Traffic Engineering Practice – Part 2 Roadway Capacity describes this level of service as “The zone of stable flow but most drivers are restricted to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience declines noticeably at this level”. In the context of this RLTP, the term is used to describe the desired minimum level of service on the regional strategic road network that lies outside of greater Christchurch.

Local roads – Roads operated by territorial local authorities.

LTMA – Land Transport Management Act 2003.

Mobility – The ability to move or be moved freely and easily. Mobility is not the same as accessibility which is about the ease of reaching a specific location or service.

Multi-modal – Used to describe travel or transport of goods involving more than one transport mode.

Mode – A categorisation of transport methods, e.g. private motor vehicle, walking, cycling, rail, public transport.

Motor vehicles – A vehicle powered by an engine or motor, including cars, vans, trucks, trains and motorbikes.

National Energy Efficiency and Conservation Strategy (NEECS) – A Government strategy prepared under the Energy Efficiency and Conservation Act 2000.

National Land Transport Fund (NLTF) – The dedicated part of the Crown Bank Account into which land transport revenue, as defined in section 6 of the Land Transport Management Act 2003, is paid.

National Land Transport Programme (NLTP) – The mechanism through which NZTA allocates funds for land transport infrastructure and services.

NZ Transport Agency (NZTA) – A Government transport agency created under section 93 of the Land Transport Management Act 2003.

Network – Infrastructure or services that are connected to enable the transition of people and goods from one piece of infrastructure or service to another.

One Network Road Classification (ONRC) – A road classification system jointly developed by NZTA and local government to provide a nationally consistent framework for determining road function, future levels of service, the appropriate maintenance levels, and improvement priorities.

Outcome – Outcomes set out how the objectives of the strategy will be delivered.

Peak period – The time period, usually in the morning and in the afternoon, when the heaviest demand occurs on a transportation facility or corridor.

PM peak – The period between 16:00 and 18:00 on weekdays.

Private motor vehicles – Motor vehicles owned, leased or hired for sole use by an individual, household or organisations.

Public transport – Passenger transportation services available to the public on a regular basis using vehicles, including buses, trains, trams, ferries and taxis, that transport people for payment of a fare, usually but not exclusively over a set route or routes from one fixed point to another.

Regional GDP – Annual estimates of regional Gross Domestic Product for the Canterbury region. These estimates are provided by Infometrics.

RMA – Resource Management Act 1991.

Rideshare – The act of co-ordinating the sharing of rides with other people in a private motor vehicle, sometimes referred to as carpooling.

RLTP – Regional Land Transport Plan.

Road Controlling Authority (RCA) – City councils, district councils and NZTA.

Roads of National Significance (RONS) – A group of state highway projects commenced in 2009 to address Government priorities for the state highway system within, or close to, New Zealand's five largest population centres.

Regional Transport Committee – A committee of Environment Canterbury required by the Land Transport Management Act 2003. The Committee is responsible for the preparation and approval of this Plan.

Rural area – For the purposes of this plan, the definition used by Statistics New Zealand is applied: "The rural areas of New Zealand are those which are not specifically designated as 'urban'. They include rural centres and district territories where these are not included in main, secondary or minor urban areas". (Refer to definitions in this glossary of rural centres, main, secondary and minor urban areas.)

Single occupancy vehicle – A vehicle carrying a driver with no passengers.

A state highway – A road managed by NZTA and gazetted as state highway.

Strategic network – A network of routes that has been defined as having strategic significance at a regional level.

Sustainability – In the transport sector, this is taken to mean finding ways to move people and goods in ways that reduce the impact upon the environment, economy and society.

Territorial local authorities – City councils and district councils.

Transport Officer Group – An informal group of transport staff from the regional council, district councils and NZTA.

Total Mobility – A subsidised transport service to increase the mobility of people with serious mobility constraints.

Volume – The number of vehicles or people on a motorway, roadway or any other transportation facility.

Vehicle occupancy – The number of people in a vehicle.



