5. Transport Strategy - Outcomes - *Including Traffic, Social, Environmental, Economic and Transportation Effectiveness*

Land Use Activity

Traffic forecasting has been modelled based upon future levels of landuse activity.

The land use data used in the traffic modelling has been obtained from Census information held by Statistics New Zealand and growth projections carried out by Statistics New Zealand. The base year for the traffic model must be the same as a census year; hence the base year for the model is 2001 that was the only data available at the outset of the study. The future year for the traffic model is 2021 which at the time of this study is the last year that Statistics New Zealand have sufficiently detailed land use projection data. The medium growth projections were used as the basis for 2021 population. The study partners, given their knowledge of the study area and development patterns, have allocated the land use for 2021 as supplied by Statistics New Zealand. The 2021 adopted land use has been used for the bulk of this study. However, it is recognised, that there are other potential land use growth scenarios. For this reason sensitivity testing has been carried out using the Urban Development Strategy (UDS) landuse growth forecasts. The sensitivity testing is discussed and reported in Section 25 of the main report.

For reporting purposes, the land use data for various zones has been aggregated to the approximate extents of the Selwyn Townships, Christchurch City Suburbs, the remainder of the CTS modelled area and the model expansion area. Table 1 shows the 2001 land use data as obtained from Statistics New Zealand, the projected 2021 medium growth scenario landuse data and the associated growth.

Area	2001 CRETS		2021 CRETS		Growth 2001 to 2021	
	HH	Jobs	HH	Jobs	HH	Jobs
Rolleston	959	260	5296	2107	452%	710%
Lincoln	665	1492	1750	1571	163%	5%
Prebbleton	503	397	2000	468	298%	18%
Templeton	710	843	833	903	17%	7%
West Melton	554	215	758	263	37%	2%
Hornby	4782	5820	4654	6521	-3%	12%
Avonhead	4448	722	4283	756	-4%	5%
Wigram	264	506	3388	1635	1183%	223%
Halswell	4568	984	8743	1439	91%	46%
CTS Area Total	**138332**	**119548**	**170796**	**129280**	**23%**	**8%**
Area of Expansion	989	485	1404	562	42%	16%
Total	**139321**	**120033**	**172200**	**129842**	**24%**	**8%**

Table 1

Growth in Households and Employment

Traffic Volumes

It has been found from modelling of the major works that if the Transport Strategy was to be implemented, it would result in changes to the traffic volumes on various links. Figure 8 shows the predicted changes in traffic volumes compared to the revised Do Minimum Network for a 24 hour period in 2021 and Figure 9 shows the predicted absolute traffic volumes for a 24 hour period in 2021. Table 2 contains the 24 hour period 2021 traffic volumes for a number of significant links.

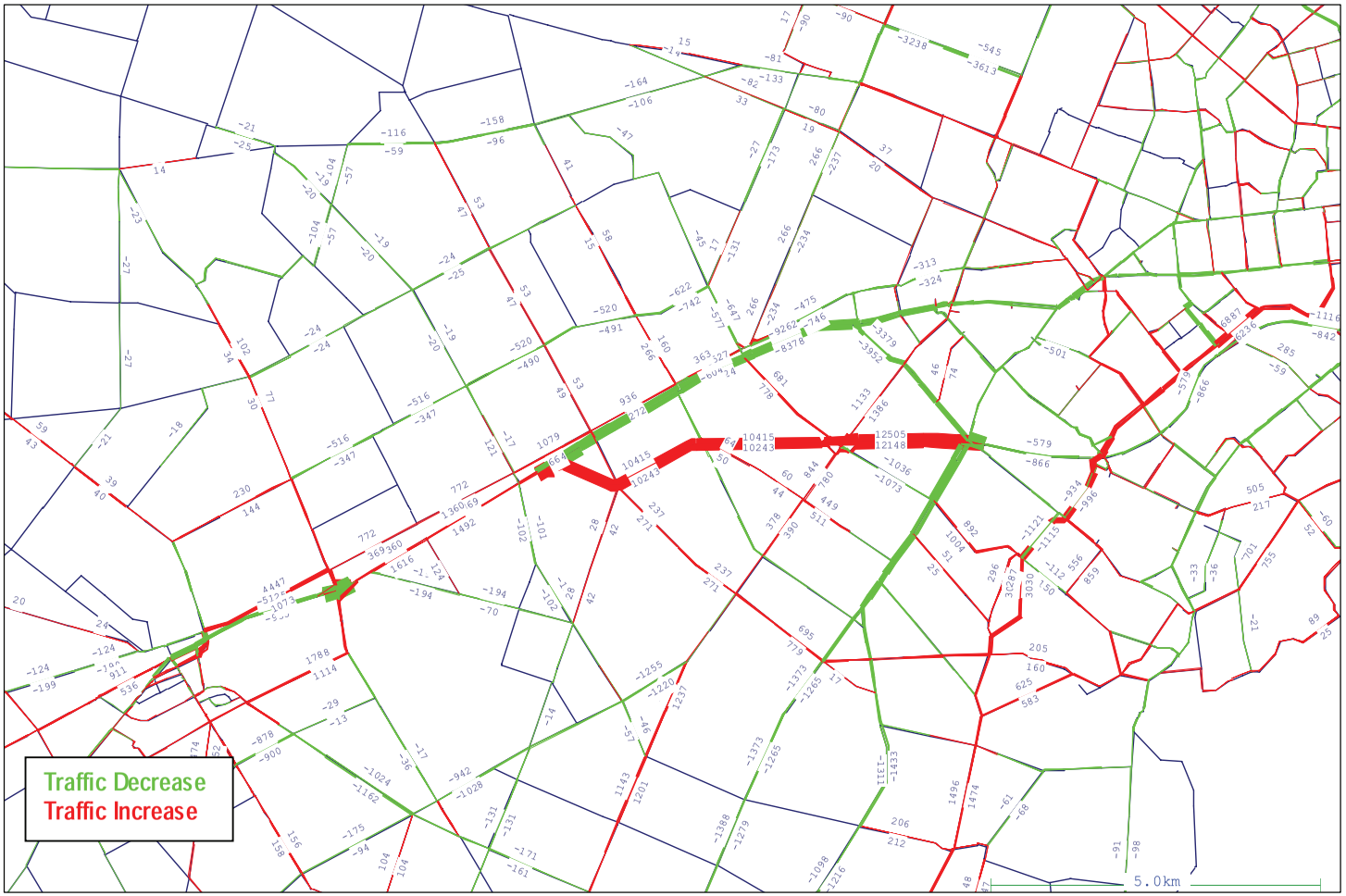

Figure 8

Transport Strategy Major Works – 24 Hour 2021 Traffic Volume Change Plot (Compared to Do Minimum Network)

Figure 9

Transport Strategy Major Works –24 Hour 2021 Traffic Volume Plot

ROUTE	DESCRIPTION	24 hour volumes				
		Validation Network 2001	Do Min Network 2021	Growth Val to Do Min	Package of Options TS 2021	Growth Val to Pckge TS
SH1 - Hornby to Rolleston	SH1 Sth Carmen	16400	19200	17%	11000	-33%
	SH1 Sth HJR	15500	26600	72%	9000	-42%
	SH1 Sth Barters	15800	27300	73%	11400	-28%
	SH1 Sth Kirks	16300	29800	83%	12100	-26%
	SH1 Sth Dawsons	15700	29200	86%	11100	-29%
	SH1 Sth Curraghs	15300	28900	89%	31800	108%
	SH1 Sth Weedons	14700	25400	73%	19400	32%
Springs - Trents to Main South	Springs Sth Main South	18000	22400	24%	21100	17%
	Springs Sth Amyes	14600	16200	11%	15100	3%
	Springs Sth HJR	10300	27300	165%	10500	2%
	Springs Sth Marshs	10500	23200	121%	11300	8%
	Springs Sth Birchs	9200	21400	133%	10300	12%
	Springs Sth Toswilll	6500	15900	145%	6500	0%
	Springs Sth Hamptons	4500	8900	98%	6300	40%
Shands - Halswell Junction to Main South	Sth Main South	21100	26200	24%	27000	28%
	Sth Amyes	11400	11000	-4%	13700	20%
	Sth Seymour	12500	12100	-3%	14200	14%
Lincoln Connection	Birmingham Sth Vulcan	5700	6500	14%	14500	154%
	Wigram Sth Haytons	3500	8800	151%	16700	377%
	Dunbars to Halswell Junction			NA	12300	NA
	Halswell Junction to Marshs			NA	11000	NA
	Whincops Sth Quaifes	200	500	150%	7200	3500%
	Ellesmere Sth Leadleys	2800	2200	-21%	5200	86%
	Lincoln Southern Collector			NA	1400	NA
SH1 - Main South to Main North	Johns Wst Main North	12100	19800	64%	20000	65%
	Johns Wst Gardiners	11300	18700	65%	19300	71%
	Johns Wst of Sawyers Arms	17100	27300	60%	23100	35%
	Russley Sth Harewood	16500	21700	32%	20600	25%
	Russley Sth Wairakei	16900	22100	31%	22300	32%
	Russley Sth Memorial	22200	30800	39%	30300	36%
	Russley Sth Ryans	18000	23700	32%	26600	48%
	Masham Sth Yaldhurst	16100	23600	47%	23800	48%
	Carmen Sth Buchannans	16900	25400	50%	24900	47%
	Carmen Sth Waterloo	17100	23800	39%	24000	40%
CSM - Nash to Jerrold	Barrington Wst Selwyn	27300	43800	60%	42500	56%
	CSM Wst Barrington	24000	48500	102%	46500	94%
	CSM Wst Curletts		26100	NA	24700	NA
	CSM Wst Nash		26100	NA	24700	NA
	CSM Wst Awatea/Dunbars		26100	NA	24700	NA
	CSM Wst Springs			NA	24700	NA
	CSM Wst Shands			NA	20700	NA
Main South/Blenhiem - Springs to Curletts	Blenhiem Wst Curletts	40200	35500	-12%	31500	-22%
	Main South Wst Epsom	50200	54400	8%	52200	4%
	Main South Wst Lowther	43300	48000	11%	39200	-9%
	Main South Est Springs	44500	48700	9%	40400	-9%
Curletts - Blenhiem to Lincoln/Halswell	Curletts Sth Blenhiem	35500	37400	5%	33300	-6%
	Curletts Sth Parkhouse	35400	35100	-1%	35000	-1%
	Curletts Sth CSME	12000	11900	-1%	12100	1%
Amyes - Shands to Springs	Amyes Sth Shands	7700	16900	119%	14600	90%
	Amyes Nth Springs	10600	20500	93%	17900	69%
	Awatea Sth Springs	2600	18300	604%	15500	496%
	Awatea Nth Wigram	2400	10700	346%	9000	275%
	Dunbars Sth Wigram	5100	12000	135%	13000	155%
	Dunbars Nth Halswell	4700	9800	109%	9700	106%
Halswell Junction - Main Sth to Springs	HJR Nth Shands	1800	8200	356%	900	-50%
	HJR Nth Springs	7200	16900	135%	8300	15%
Halswell - Nicholls to Lincoln	Lincoln Sth Wrights	24400	30500	25%	27800	14%
	Halswell Sth Curletts	23500	27200	16%	24600	5%
	Halswell Sth Hendersons	18000	26100	45%	22400	24%
	Halswell Sth Aidenfield	18000	22100	23%	18600	3%
	Halswell Sth Dunbars	13600	17500	29%	14800	9%
Rolleston Drive	Rolleston Sth SH1	2400	5900	146%	9700	304%
	Rolleston Sth Tennyson	100	2300	2200%	2400	2300%

Table 2

Transport Strategy Major Works – Traffic Volumes

The data in Figure 8, Figure 9, and Table 2 indicates that the two most significant effects of the Transport Strategy are the shift of traffic from State Highway 1 north of the Christchurch Southern Motorway connection (Stage II) south of Templeton to the Southern Motorway Extension and the shift of traffic from Springs Road to the Lincoln to Christchurch connection utilising Ellesmere Road. These effects are both related to the construction of new roads and/or connections. The 24 hour period effects in 2021 of the Transport Strategy on the major works corridors and growth areas compared to the revised 2021 Do Minimum Network include:

- Hornby to Burnham Corridor – The extension of the Christchurch Southern Motorway to Main South Road(State Highway 1) from the intersection of Springs Road and Halswell Junction Road results in the traffic volumes on Main South Road through Templeton, Hornby and Sockburn decreasing to near the 2001 traffic volumes. The traffic volume on State Highway 1 between the Southern Motorway Extension and Weedons Road increase. The traffic volumes on State Highway 1 between Weedons Road and Rolleston Drive North decrease whilst the traffic volumes between Rolleston Drive North and Rolleston Drive South increase slightly. The traffic volumes on the parallel routes of Shands/Selwyn Roads decrease while the traffic volumes on Jones Road south of Weedons Road increase,
- Christchurch Southern Access Corridor – The extension of the Christchurch Southern Motorway (Stage I) to Main South Road (State Highway 1) from the intersection of Springs Road and Halswell Junction Road, results in the traffic volumes on Halswell Junction Road decreasing. The traffic volumes on the Southern Motorway east of the intersection of Springs Road and Halswell Junction Road (Stage I) decrease, due to traffic from Prebbleton and Lincoln not being able to access the motorway (access to the Christchurch Southern Motorway (Stage II) would be available via Shands Road). The traffic volumes on other routes such as Halswell Road, Springs Road (north of Halswell Junction Road), Main South Road and Blenheim Road all decrease. The traffic volumes on Main South Road and Blenheim Road generally decrease by 10% or more compared to 2001 volumes,
- Belfast to Hornby Corridor (Western Corridor) – Refer to the CIA works details below,
- Christchurch to Lincoln Corridor incorporating Prebbleton – The upgrade of Wigram Road to connect with the intersection of Halswell Junction Road and Whincops Road, and upgrade of roads to the south (Ellesmere Road Route) results in the traffic volumes on Springs Road through Prebbleton decreasing to near 2001 traffic volumes,
- South Western Connection Corridor – Upgrade of Hamptons Road and Trices Road along with extension of Trices Road to the intersection of Sabys Road and Candys Road increases traffic along the route whilst reducing traffic volumes on adjacent parallel routes. However, the changes are minor.

The 24 hour period effects 2021 of the Transport Strategy on the minor works corridors and remaining growth areas include:

- Russley to Aylesbury Corridor – As a result of the major works, the traffic volumes on State Highway 73 decrease slightly, however, the change is minor. There is a slight increase in traffic travelling across to State Highway 1 and then using the State Highway 1 or the Christchurch Southern Motorway to access Christchurch,
- Christchurch to Tai Tapu Corridor – As a result of the major works the traffic volumes on State Highway 75 decrease slightly, however, the change is minor,
- Rolleston to Lincoln Corridor – As a result of the works the traffic volumes on the Rolleston Springston Road and Weedons Road route increase slightly and there is a small decrease in traffic volumes on the Lincoln Rolleston Road and Boundary Road route,
- Christchurch Outer Suburbs – As a result of the major works, specifically the extension of the Christchurch Southern Motorway to State Highway 1, and the new Christchurch to Lincoln Connection, the traffic volumes on most other roads in the outer suburbs decrease slightly. The connection of Haytons Road to the Sockburn Roundabout results in an increase in the traffic volumes on Haytons Road and other roads providing access to the Haytons Road extension. There is a decrease in the traffic volumes on Treffers Road due to the limiting of movements at its intersection with Wigram Road,
- Rolleston – As a result of the major works, specifically the upgrade of State Highway 1 including the provision of the proposed interchange at Weedons/Weedons Ross Road the traffic volumes on Lowes Road, Levi Road, Jones Road, Weedons/Weedons Ross Road, Rolleston Drive North of the Byron Street Extension, Rolleston Drive South of Brookside Road and Byron Street increase. Most other roads have minor changes in traffic volume,
- Lincoln – As a result of the major works, specifically the construction of a new bypass/collector road to the south of Lincoln and the promotion of the new Christchurch to Lincoln connection (Ellesmere Road Route) the traffic volumes on most main roads in Lincoln decrease, however this is likely to be offset with the connection of new

subdivision roads and streets connecting to existing main streets and to the new bypass/collector road south of Lincoln as part of new development.

- Springston – The traffic volumes in and around Springston do not significantly change.

Social and Environmental Effects

Existing/potential land uses: The Transport Strategy affects existing roading corridors and also involves the creation of new roads. The existing roading corridors adjoin a range of different land uses from servicing townships and schools, university and research institutions, quarrying, industrial and service activities, the Christchurch International Airport, residential and rural residential activities, recreation activities, and rural farming activities. The new roads and connections outlined in the Transport Strategy principally affect rural and rural-residential land uses. The designation and acquisition of significant amounts of rural land will be necessary for these new roads. Some residential land will be required near Halswell and Lincoln. Recent rural-residential developments, such as the Claremont Subdivision near the intersection of State Highway 1 and Dawsons/Waterholes Road will require any new roads adjoining them to be aligned and constructed in a manner that minimises any adverse effects as much as practicable.

Designations: Designations will be required for new roads, road widening, and to upgrade intersections where new alignments will fall outside current road reserve boundaries. There is an existing Christchurch City Council designation for the realignment of part of Wigram Road and designations for the widening of State Highway 1. Important new major designations will be required to establish new roads for:

- Widening for a service lane for Whincops Road between Halswell Junction Road and Quaifes Road
- Creation of the Wigram Road to Magdala Place link
- Southern Motorway extension from Halswell Junction Road to State Highway 1
- A link between Trices Road and Candys Road
- The Lincoln southern bypass/collector
- Realignment of Pound Road at Barters/Waterloo Road
- State Highway 1 / Weedons/Weedons Ross Road Interchange
- Byron Street Extension
- Hoskyns Road and Rolleston Drive connection and other Rolleston intersections
- Bend and intersection realignments along upgrade routes in rural areas

Property access severance: This will be an issue principally affecting State Highway 1 and Halswell / Lincoln Roads with the construction of a four-lane median divided road. Existing properties will join the highway in one direction and cross movement will be limited to the main intersections. For safety reasons, the LAR status will be extended so as to cover State Highway 1 from Dawsons/Waterholes Road to Rolleston and also the new section of the Southern Motorway extension. Changes to roading hierarchies may seek to consolidate access onto key arterial routes and avoid the creation of new access where possible. These changes will have to be introduced into the respective Study Partners District Plan provisions.

Landscape characteristics/quality: The study area is flat terrain consisting predominantly of grassed open farmland, rural-residential allotments, scattered buildings, some shelterbelts and trees and Christchurch. The Transport Strategy involves widening existing roads, establishing new roads, and constructing new structures like grade separated interchanges and roundabouts that will create local adverse visual effects. The Transport Strategy will also require the removal or relocation of existing landscape features such as trees and vegetation, fencing, lighting and power poles, as well as introducing them.

Mitigation of effects on landscape: To ensure that the roading will be integrated into the existing environment, those sections of State Highways and local authority roading will be suitably landscaped where appropriate, as will the intersections that are proposed to be closed. Design and landscaping will assist in mitigating some of the adverse effects arising from the establishment of the new roads.

Geological/geotechnical considerations: There is the possibility of the presence of filled pits in the area between the Halswell Junction Road/Springs Road intersection and the Marshs Road/Shands Road intersection. This would require further detailed investigation. New roads, widening, and changes at intersections will require detailed geotechnical investigations during the design phase of roading improvements. This is particularly important when establishing new structures such as those at grade separated interchanges.

Drainage: The parts of the study area where drainage is a particularly important consideration include new roads or roading improvements that pass over or are near to the tributaries of the Halswell River and near to the Halswell River itself. Compliance with Environment Canterbury's Natural Resources Regional Plan to treat and dispose of stormwater will form a significant part of larger scale drainage and stormwater requirements.

Noise: There will be temporary noise effects during the construction phase. New roads will introduce vehicle noise from high-volume traffic flows to some presently quiet areas, most notably in the case of the Southern Motorway extension. Other roading improvements will facilitate higher traffic volumes with a consequent rise in traffic-generated noise or increased noise levels at the notional boundaries of existing dwellings by bringing vehicle paths closer to existing dwellings. An increase in traffic-generated noise is to be expected, given existing roading designations, the purpose of which is to cater for growing traffic volumes. Increases in traffic-generated noise levels on the new portions of road can be mitigated in areas of higher density residential use through the employment of buffers or barriers.

Maori, archaeological, cultural and heritage sites: Halswell River and its tributaries, such as Knights Stream and the surrounding area, are well known as significant sites/areas to Ngai Tahu. Therefore, it is recommended that further consultation with the relevant parties be undertaken at a more appropriate time such as at the scheme assessment stage. There are no other known sites of Maori, cultural, historical or archaeological significance affected by the Transport Strategy.

Social severance and property severance: The Transport Strategy seeks to minimise social severance within settlements by ensuring existing links are maintained while new roads bypass settlements. At some intersections it is proposed that road links be closed to provide priority to key strategic and arterial routes e.g. at Rolleston. New roads will lead to the separation of land that is currently in the same ownership or otherwise provide a barrier between neighbours. This is particularly the case for rural and rural-residential properties to be separated by the Southern Motorway extension. There will be considerable adverse social effects for the affected owners and occupiers. There will be realignments at some intersections and Trents Road will be closed where the proposed Southern Motorway extension crosses it.

Public transport/cycle: The more efficient highway and roading network will enable public transportation to operate more efficiently. There will also be opportunities to provide for separate cycle lanes, improvements to the shoulders of existing carriageways, or separate off road cycleways to establish cycling routes between townships and also to Christchurch city.

Transport Strategy Economic Assessment

The economic assessment has been carried out using the procedures contained in the Land Transport New Zealand Economic Evaluation Manual. It is, however, acknowledged that the procedures have been adapted from the detailed project analysis procedures for use in this area wide study. It has been found that the benefits of any options considered are generally marginally more than the calculated values. Appendix B of the Christchurch, Rolleston and Environs Transportation Study Transport Strategy contains the estimated benefits, costs and benefit cost ratio for the Transport Strategy. The costs, summarised below in Table 3, are discounted costs for the major projects that amount to around $185M undiscounted. Other road improvement works add around $50M to the total construction costs. There are benefits for these works but they have not been represented in the approach used for this analysis. These projects will require specific analysis as they are developed further outside of this study.

Project Options	Transport Strategy	Do Minimum	Net Cost/Benefits
Costs	$165,000,000		$165,000,000
Benefits	*$7,208,000,000	*$7,410,000,000	$202,000,000
Tangible Benefit/Cost Ratio			1.2

Table 3

Benefits, cost and benefit/cost ratio for Transport Strategy

* These costs are net present value network operation costs, from which the benefits are calculated from the difference of the two.

Economic Efficiency

- The benefit stream for this option increases approximately $17.7 million per annum from approximately $12.5 million in 2001 to $30.2 million in 2021.
- The benefit cost ratio for the Transport Strategy is 1.2.
- The First Year Rate of Return is 10%.

VKT and VMT

- The 2021 24-hour total Vehicle Kilometres Travelled on this package of work within the study area is 3,413,274 kilometres.
- The 2021 24-hour total Vehicle Kilometres Travelled on this the revised Do Minimum Network within the study area is 3,400,902 which is less than the VKT for this package of options.
- The 2021 24-hour total Vehicle Minutes of Travel on this package of work including intersection delays within the study area is 3,819,040 minutes.
- The 2021 24-hour total Vehicle Minutes Travelled on this, the Do Minimum Network within the study area is 3,969,843 which is greater than the VMT for this package of options.

As the benefit stream is increasing with time this option is sustainable in that it will continue to provide economic benefits into the future.

Transport Strategy Transportation Effectiveness

The Transport Strategy has been developed following the Study Partners Discussions. The analysis for 2021 shows that the Transport Strategy addresses the issues raised, resulting in the following:

Hornby to Burnham Corridor

- Decreased traffic volumes on State Highway 1 between Hornby and Curraghs Road from a predicted 27,300 (South of Barters) to 11,400 vehicles per day. Currently 15,800 vehicles per day,
- Reduced traffic volumes through townships of Templeton and Islington,
- Reduced traffic at Hornby Intersection on the Main South Road Link by approximately 8,200 vehicles per day through the intersection on Main South Road,
- Increased traffic volumes carried on the State Highway 1 4-lane median divided highway between Dawsons Road and Weedons Ross Road by approximately 2,900 vehicles per day with an estimated volume of 31,800 vehicles per day,
- Increased traffic on Jones Road near Rolleston. For example, south of Weedons Ross Road volumes increase from approximately 3,100 vehicles per day to 8,600 vehicles per day,
- Increased safety as a result of lower traffic volumes on State Highway 1 in northern section and median divided four lane and intersection improvement on the southern section,
- Safer cross movements of State Highway 1 with a full diamond interchange at Weedons Ross Road/Weedons Road,
- Provides capacity (including through managed access) on links and at intersections, with reduced delay to through traffic meaning increased mobility,

- Access to industrial areas to the north of Rolleston is improved with the State Highway 1/Weedons Road interchange providing access via Weedons Ross Road and Jones Road, while access to the residential areas south of State Highway 1 from the interchange is provided by an outer ring road utilising Weedons Road, Levi Road and Lowes Road,
- Safety is improved with the closing of Elizabeth Street intersection with State Highway 1 and providing a service lane to provide left-in/left-out only access to the BP Service Station, Tennyson Street / Brookside Road,
- Access between Rolleston Township and the Industrial Park is improved with the connection of Rolleston Drive North to Jones/Hoskyns Road grade separated over State Highway 1,
- Access to Rolleston from the south is provided via Dunns Crossing Road and Rolleston Road South until such time that the increase in traffic on State Highway 1 requiring the ban of right turns at Rolleston Drive South and the conversion of the intersection to left turn in/out only.

Christchurch Southern Access Corridor

- Provides a key access corridor from the south, to Christchurch and Port of Lyttelton. Traffic volumes range from 20,700 vehicles per day (State Highway 1 to Shands), 24,700 vehicles per day (Shands to Curletts), and 46,500 (Curletts to Barrington),
- Relieves traffic volumes on the Hornby to Burnham corridor north of Curraghs Road as noted above,
- Decreases traffic on Main South Road through Sockburn from a predicted 54,400 vehicles per day (west of roundabout) to 52,200 vehicles per day (50,200 in 2001) and from a predicted 35,500 on Blenheim Road (east of the roundabout) to 31,500 (40,200 in 2001),
- Provides capacity on the existing links and at intersections,
- Decreases traffic on Halswell Junction Road by approximately 8,600 vehicles per day to 8,300 vehicles per day west of Springs Road,
- Route only has two intermediate access points providing the corridor with a high degree of mobility.

Belfast to Hornby Corridor (Western Corridor) (also refer to CIAL work)

- Provides 4-lane median divided to cater for the increased traffic volumes in the order of 30% to 2021. Examples being south of Memorial Avenue predicted traffic 30,300 vehicles per day, south of Sawyers Arms Road 23,100 vehicles per day and south of Yaldhurst Road 23,800 vehicles per day,
- Rationalises intersections for mobility and safety.

Christchurch to Lincoln Corridor incorporating Prebbleton

- Decreases traffic on Springs Road through Prebbleton by 11,200 vehicles per day from 18,900 to 7,700 vehicles per day (currently 7,600), improving safety and severance issues,
- Decreases traffic on Springs Road north of Prebbleton (north of Marshs Road) by 16,800 from 27,300 to 10,500 vehicles per day (currently 10,400),
- Increases traffic on Wigram, Whincops, Longstaffs and Ellesmere Roads due to the new connection to Christchurch via Wigram Road etc to Blenheim Road. Whincops Road increases from 500 to 7,200 vehicles per day, and Ellesmere 2,200 to 5,200 south of Leadleys Road,
- Improved orbital access to both Prebbleton and Lincoln via new connections to Christchurch via Wigram Road and Blenheim Road and the Halswell area via Trices and Sabys Road and beyond to Christchurch via Sparks/Frankleigh/Milton..

South Western Orbital Corridor – State Highway 1 to State Highway 75

- Increased traffic on the route by 500 vehicles per day with an actual volume of 1,000 vehicles per day on Hamptons Road between Waterholes and Shands Road,
- Increased traffic on the route by 500 vehicles per day between Ellesmere Road and State Highway 75,
- Provides an alternative route as a south-western bypass of Christchurch near Halswell between State Highway 1 and State Highway 75 through the upgrade of existing and construction of a section of new road,
- Mobility improved through rationalising of property access.

Rolleston

- Access to the north (industrial) and south (residential) of Rolleston improved with the State Highway 1/Weedons Ross Road/Weedons Road interchange as above for the Hornby to Burham Corridor,
- Access to Rolleston from the south is provided via Dunns Crossing Road and Rolleston Road South until such time that the increase in traffic on State Highway 1 requires the ban of right turns at Rolleston Road South and the conversion of the intersection to left turn in/out only,
- Access to the Rolleston Industrial Park provided via Jones Road/Weedons Ross Road/State Highway 1 to the north, Two Chain Road/Walkers Road/State Highway 1 to the south and to Rolleston Township via Rolleston Drive North extension to Jones Road/Hoskyns Road,
- Safety is improved with the closing of the Elizabeth Street intersection with State Highway 1, providing new service lane to provide left in/left out access to the BP Service Station, Tennyson Street and Brookside Road,
- Inner and outer ring roads, Rolleston Drive and Weedons Road/Levi Road/Lowes Road/Dunns Crossing Road respectively, upgraded to allow for the increase in traffic and to improve access to all areas of Rolleston,
- Cycling promoted by widening existing main roads and streets to include cycle lanes where appropriate, in particular on the inner and outer ring roads,
- Provision for future 'Park and Ride' facility utilising buses between Rolleston and Christchurch.
- Collector road to cater for any future residential subdivisions to the south of Rolleston.

Lincoln

- Southern bypass/collector road reduces traffic volumes on existing east west route through Lincoln by approximately 700 vehicles per day with an actual volume of 700 vehicles per day, however this may increase based on the development of a local area network and connectivity to serve future residential growth in the area.
- Diverts heavy traffic to bypass, in particular agricultural vehicles and stock trucks away from the town centre,
- Provides alternative part of main orbital route connecting Burnham (State Highway 1) and Tai Tapu (State Highway 75) that does not rely on the use of the main street through Lincoln Township,
- Reduces noise and improves the amenity of the existing town centre,
- Provision for future 'Park and Ride' facility, utilising buses between Lincoln and Christchurch
- Southern bypass/collector road can also act as a local collector road for future subdivisions to the south as identified in a recent Lincoln Structure Plan process undertaken by Selwyn District Council,

Christchurch International Airport

- Access to the airport provided via three key access points, being Memorial Avenue as the main access to the passenger terminal areas and freight area south of the terminal, Harewood Road for access to both the passenger terminal area from the north and access to the commercial and industrial areas to the north of the passenger terminal area, and Capital A road to the southern freight area,
- Provides an acceptable level of service at all intersections and links,
- Separation of freight vehicles from passenger vehicles by new Capital A road access off State Highway 1.

Hornby Bypass

- Bypass (north) of Hornby provided by upgrades to Yaldhurst and Pound Road that would carry approximately 5,700 vehicles per day and a reduction of approximately 1,000 vehicles per day on Carmen Road

Halswell Road – Curletts Road to Dunbars Road

- Corridor to be strengthened by four laning and median dividing for a passenger transport and cycling route.

Overall effectiveness of the Transport Strategy to address the issues is high.