8. Draft Transport Strategy for Consultation

The works included in the Draft Transport Strategy undertaken in the last consultation phase are listed below in three parts being, major works, minor works and CIA works. The works were reported for each corridor and growth area individually however due to the nature of the study there was an overlap between each of the corridors and growth areas. Section 9 details what changes were considered and made to the Strategy based on the consultation that occurred, while Section 10 confirms the Strategy once the changes were made.

The major works included in the Draft Transport Strategy for Consultation were:

- Hornby to Burnham Corridor – Four laning between north of Curraghs Road and immediately north of Hoskyns Road and three lanes from immediately north of Hoskyns Road to Rolleston Drive (South), including intersection upgrades and closures. Realign Pound Road at Barters and Waterloo Roads such that it has priority from State Highway 1 to State Highway 73 with associated intersection upgrades (note - this is also a part of the Hornby to Belfast Corridor),
- Christchurch Southern Access Corridor – Extension of a four lane motorway south west from Halswell Junction Road/Springs Road intersection to State Highway 1 south of Dawsons / Waterholes Road including intersection upgrades and closures. Note it is a given for this study that the Southern Motorway Duplication and Extension from Barrington Street to the Halswell Junction Road/Springs Road intersection will be completed,
- Belfast to Hornby Corridor (Western Corridor) – Four laning of Johns Road, Russley Road, Masham Road and Carmen Road between Main North Road and Main South Railway at Hornby including intersection upgrades and closures,
- Christchurch to Lincoln Corridor incorporating Prebbleton – Promotion/development of a new route between Lincoln and Christchurch that uses a new southern bypass of Lincoln, upgraded Ellesmere Road, improvements to Longstaffs and Fountains Road, a new link between Marshs Road and Wigram Road, grade separation at Awatea / Dunbars Roads and Curletts Road and an upgrading of Magdala Place, Birmingham Drive, Wrights Road and Matipo Street to Blenheim Road. Future south facing ramps to the Southern Motorway at Awatea / Dunbars Roads were also being considered.
- South Western Orbital Corridor – Promotion/development of a new route between State Highway 1 and State Highway 75 that uses Hamptons Road, Trices Road, a new link between Trices Road and Sabys Road, and Candys Road.

The minor works included in the Draft Transport Strategy for Consultation were:

- Russley to Aylesbury Corridor – Standard Transit New Zealand practice of passing lanes, minor safety improvements, pavement maintenance,
- Christchurch to Tai Tapu Corridor – Standard Transit New Zealand practice of passing lanes, minor safety improvements, pavement maintenance,
- Rolleston to Lincoln Corridor – Promotion of the Rolleston Springston Road and Weedons Road route through cross section upgrades to 8.5m in rural areas and up to 14m in urban areas depending on incorporation of cycleways, parking etc, and modification of the intersections so the route has priority except at Lowes Road, Shands Road and Ellesmere Junction Road,
- Christchurch Outer Suburbs – Promotion of Amyes Road, Awatea Road and Dunbars Road as per the Do Minimum Network with the extension of Dunbars Road to the intersection of Hendersons Road and Sparks Road,
- Rolleston – Upgrade of the cross section of the Inner Ring Road (Rolleston Drive North) up to 16m between State Highway 1 and Masefield Drive, to 14m for the remainder, and upgrade of the existing intersections to current standards for visibility, lane widths, etc. Upgrade of the cross section of the Outer Ring Road (Weedons Road, Levi Road, Lowes Road and Dunns Crossing Road) to 10m for rural portions (north of Masefield Drive), 14m for urban portions (the remainder), and upgrade of the existing intersections to current standards for visibility, lane widths, etc. Upgrade of the cross section of the Rolleston Industrial Park access route to 10m for the rural portions, 13m for the urban portions (Jones Road between Hoskyns Road and Railway Road), and upgrade of the existing intersections to current standards for visibility, lane widths, etc. It should be noted that these are

suggested widths and will depend on incorporation of flush medians, cycleways, parking and landscaping. Identification of a new collector road to the south of Rolleston between Weedons Road and Dunns Crossing Road,

- Lincoln – Note that a southern bypass of Lincoln is included in the major works for the Christchurch to Lincoln Corridor. Local Area Traffic Management such as widening, pavement smoothing, speed control devices, installation of pedestrian and cycle facilities, etc.
- Springston – Local Area Traffic Management such as pavement smoothing, speed control devices, installation of pedestrian and cycle facilities, etc.

The CIA works included in the Draft Transport Strategy for Consultation are:

- Conversion of the roundabout at the intersection of Memorial Avenue and Russley Road to a full diamond interchange,
- Realignment of Ron Guthrey Road and Peter Leeming Road to form one signal controlled intersection with Memorial Avenue,
- Conversion of the roundabout at the intersection of Wairakei Road and Russley Road to a Left In / Left Out intersection on the city side and closing of the approach from the Airport side,
- Conversion of the intersection of McLeans Island Road and Johns Road to a Left In Only intersection (from the southern approach of Johns Road), and the connection of McLeans Inland Road to Sayers Arms Road,
- Security controlled access to Capital A Road and Ron Guthrey Road i.e. no public access so the roads cannot be used as through roads,
- Closing of the intersection of Avonhead Road and Russley Road,
- Construction of a signalised half seagull at the intersection of Capital A Road and Russley Road so southbound traffic do not have to give way and there is no right hand turn into Capital A Road from the north.

For details of the major works alignments, cross sections, speed limits, intersection forms and hierarchy associated with the Draft Transport Strategy for Consultation refer to the Draft Transport Strategy, Interim Assessment Report, September 2006.

8.1 Draft Transport Strategy for Consultation Traffic Volumes

It was found from modelling of the major works that if the Draft Transport Strategy was to be implemented, it would result in changes to the traffic volumes on various links. Figure 14 shows the predicted changes in traffic volumes compared to the revised Do Minimum Network for a 24 hour period in 2021 and Figure 15 shows the predicted absolute traffic volumes for a 24 hour period in 2021. Table 15 contains the 24 hour period 2021 traffic volumes for a number of significant links.

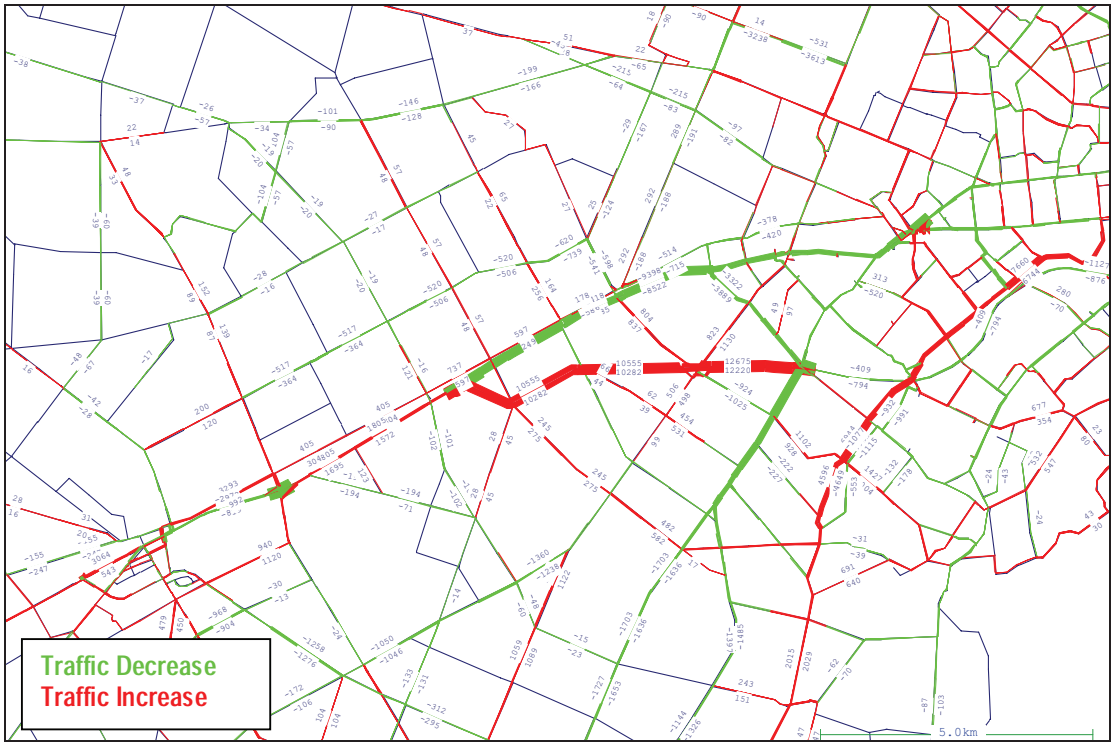

Figure 14

Draft Transport Strategy for Consultation Major Works – Traffic Volume Change Plot (Compared to Revised Do Minimum)

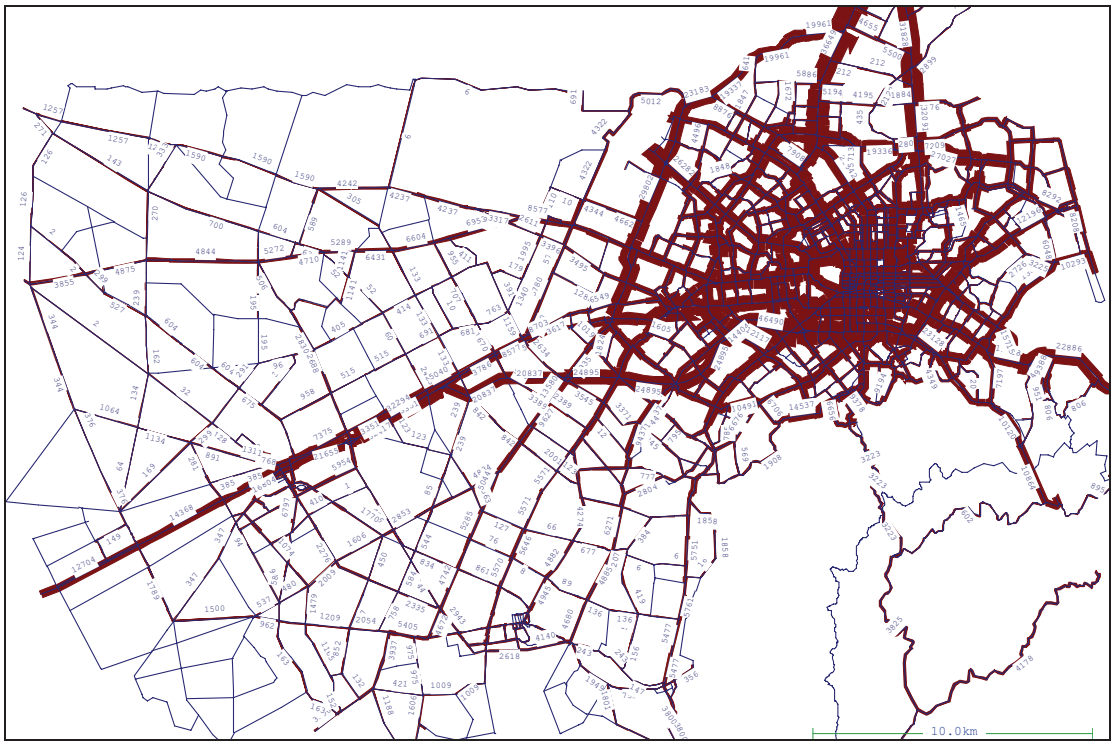

Figure 15

Draft Transport Strategy for Consultation Major Works – Traffic Volume Plot

ROUTE	DESCRIPTION	24 hour volumes Validation Network 2001	Do Min Network 2021	Growth Val to Do Min	Options SCO 2021	Growth Val to Pckge SCO
SH1 - Hornby to Rolleston	SH1 Sth Carmen	16400	19200	17%	10800	-34%
	SH1 Sth HJR	15500	26600	72%	8700	-44%
	SH1 Sth Barters	15800	27300	73%	11400	-28%
	SH1 Sth Kirks	16300	29800	83%	12400	-24%
	SH1 Sth Dawsons	15700	29200	86%	11400	-27%
	SH1 Sth Curraghs	15300	28900	89%	32300	111%
	SH1 Sth Weedons	14700	25400	73%	21700	48%
Springs - Trents to Main South	Springs Sth Main South	18000	22400	24%	19600	9%
	Springs Sth Amyes	14600	16200	11%	14700	1%
	Springs Sth HJR	10300	27300	165%	9800	-5%
	Springs Sth Marshs	10500	23200	121%	10600	1%
	Springs Sth Birchs	9200	21400	133%	10100	10%
	Springs Sth Toswilll	6500	15900	145%	6400	-2%
	Springs Sth Hamptons	4500	8900	98%	5600	24%
Shands - Halswell Junction to Main South	Sth Main South	21100	26200	24%	26400	25%
	Sth Amyes	11400	11000	-4%	12900	13%
	Sth Seymour	12500	12100	-3%	13500	8%
Lincoln Connection	Birmingham Sth Vulcan	5700	6500	14%	15500	172%
	Wigram Sth Haytons	3500	8800	151%	18100	417%
	Dunbars to Halswell Junction			NA	13500	NA
	Halswell Junction to Marshs			NA	14200	NA
	Fountains Sth Hodgens	200	500	150%	8500	4150%
	Ellesmere Sth Leadleys	2800	2200	-21%	6300	125%
	Lincoln Southern Bypass			NA	4100	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%	23200	36%
	Russley Sth Harewood	16500	21700	32%	20700	25%
	Russley Sth Wairakei	16900	22100	31%	22500	33%
	Russley Sth Memorial	22200	30800	39%	30600	38%
	Russley Sth Ryans	18000	23700	32%	26900	49%
	Masham Sth Yaldhurst	16100	23600	47%	24000	49%
	Carmen Sth Buchannans	16900	25400	50%	25100	49%
	Carmen Sth Waterloo	17100	23800	39%	24400	43%
CSM - Nash to Jerrold	Barrington Wst Selwyn	27300	43800	60%	42400	55%
	CSM Wst Barrington	24000	48500	102%	46500	94%
	CSM Wst Curletts		26100	NA	24900	NA
	CSM Wst Nash		26100	NA	24900	NA
	CSM Wst Awatea/Dunbars		26100	NA	24900	NA
	CSM Wst Springs			NA	24900	NA
	CSM Wst Shands			NA	20800	NA
Main South/Blenhiem - Springs to Curletts	Blenhiem Wst Curletts	40200	35500	-12%	29800	-26%
	Main South Wst Epsom	50200	54400	8%	48300	-4%
	Main South Wst Lowther	43300	48000	11%	35800	-17%
	Main South Est Springs	44500	48700	9%	37800	-15%
Curletts - Blenhiem to Lincoln/Halswell	Curletts Sth Blenhiem	35500	37400	5%	31500	-11%
	Curletts Sth Parkhouse	35400	35100	-1%	34800	-2%
	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%	14800	469%
	Awatea Nth Wigram	2400	10700	346%	8800	267%
	Dunbars Sth Wigram	5100	12000	135%	13400	163%
	Dunbars Nth Halswell	4700	9800	109%	10300	119%
Halswell Junction - Main Sth to Springs	HJR Nth Shands	1800	8200	356%	1000	-44%
	HJR Nth Springs	7200	16900	135%	8600	19%
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%	22500	25%
	Halswell Sth Aidenfield	18000	22100	23%	18800	4%
	Halswell Sth Dunbars	13600	17500	29%	15300	13%
Rolleston Drive	Rolleston Sth SH1	2400	5900	146%	8400	250%
	Rolleston Sth Tennyson	100	2300	2200%	2300	2200%

Table 14

Draft Transport Strategy for Consultation Major Works – Traffic Volumes

The data in Figure 14, Figure 15 and Table 14 indicates that the two most significant effects of the Draft Transport Strategy for Consultation are the shift of traffic from State Highway 1 north of the Christchurch Southern Motorway connection to the Southern Motorway Connection and the shift of traffic from Springs Road to the Lincoln connection. These effects are both related to the construction of new roads and connections. The 24 hour period effects in 2021 of the Draft Transport Strategy for Consultation 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 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. 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 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 decrease, however it appears this is due to traffic from Prebbleton and Lincoln not being able to access the motorway. 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 greater lower level than 2001 volumes,
- Belfast to Hornby Corridor (Western Corridor) – Refer to the CIA works details below,
- Christchurch to Lincoln Corridor incorporating Prebbleton – The construction of a new link from Wigram Road to connect with the intersection of Marshs Road and Fountains 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 Draft Transport Strategy for Consultation 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 the traffic volumes on Levi Road, Lowes Road, Jones Road, Weedons/Weedons Ross Road, Rolleston Drive North of the Byron Street Extension, Rolleston Drive South of Brookside Road and Byron Street increases. Most other roads have minor changes in traffic volume.
- Lincoln – As a result of the major works, specifically the construction of the southern bypass of Lincoln and the promotion of the new Christchurch to Lincoln connection the traffic volumes on most roads in Lincoln decrease. However, the traffic volume on the roads connecting to the southern bypass increase slightly,

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

It was found from modelling of the CIA works that if the Draft Transport Strategy for Consultation was to be implemented it would result in changes to the traffic volumes on various links. Figure 16 shows the predicted changes in 24 hour 2021 traffic volumes around the airport compared to the revised Do Minimum Network and Figure 17 shows the predicted absolute traffic volumes around that airport for a 24 hour period in 2021. Table 15 contains the 24 hour period 2021 traffic volumes for a number of significant links around the airport.

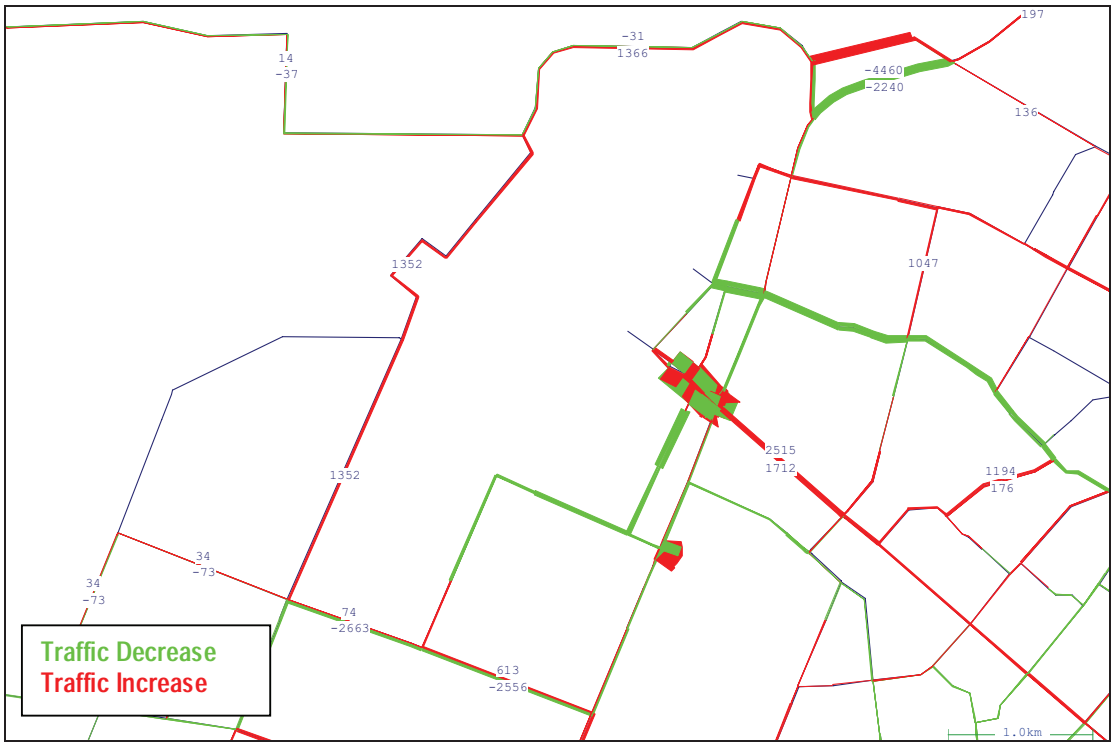

Figure 16

Draft Transport Strategy for Consultation CIA Works – 24 Hour Traffic Volume Change Plot (Compared to Do Minimum)

Figure 17

Draft Transport Strategy for Consultation CIA Works – 24 Hour Traffic Volume Plot

ROUTE	DESCRIPTION	24 hour volumes				
		Validation Network 2004	Do Min Network 2021	Growth Val to Do Min	Package of Options SCO 2021	Growth Val to Pckge SCO
SH1 - Main South to Main North	Johns Wst Gardiners	11200	17500	56%	17900	60%
	Johns Wst of Sawyers Arms	19200	31100	62%	24400	27%
	Russley Sth Harewood	18800	25600	36%	25700	37%
	Russley Sth Wairakei	19800	27800	40%	26200	32%
	Russley Sth Memorial	22800	29500	29%	28900	27%
	Russley Sth Ryans	18000	25500	42%	27900	55%
Ryans Road	Ryans Est Pound	3500	7100	103%	4500	29%
	Ryans Est Greys	3800	7000	84%	5000	32%
Capital A Road	Capital A Wst Russley		4600	NA	3100	NA
Memorial Avene	Memorial Est Orchard EB	12000	9400	-22%	11900	-1%
	Memorial Est Orchard WB	12000	10500	-13%	12200	2%
	Memorial Wst Russley EB	13900	11400	-18%	14300	3%
	Memorial Wst Russley WB	13900	12400	-11%	15000	8%
	Memorial Est Russley	13800	21900	59%	26200	90%
Wairakei Road	Wairakei Wst Russley	4200	8500	102%		-100%
	Wairakei Est Russley	5600	9800	75%	3900	-30%
Harewood Road	Harewood Wst Russley	7500	12400	65%	14200	89%
	Harewood Est Russley	6800	9900	46%	11900	75%
Mcleans Island Road	Mcleans Wst Johns	900	3400	278%	2700	200%
Sawyers Arms Road	Sawyers Wst Johns	6300	14000	122%	15200	141%
	Sawyers Est Johns	9500	16300	72%	16400	73%
Pound Road	Pound Sth Mcleans	400	2700	575%	4000	900%
	Pound Sth Ryans	3700	9600	159%	8100	119%
Orchard Road	Orchard Sth Harewood	5900	11100	88%	12900	119%
	Orchard Sth Wairakei	7700	14200	84%	12800	66%

Table 15

Draft Transport Strategy for Consultation CIA Works – Traffic Volumes

The 24 hour period effects in 2021 of the Package of Options 1 CIA works includes:

- A minor shift of traffic from State Highway 1 to McLeans Island Road / Pound Road,
- A shift of traffic from Wairakei Road to Harewood Road and Memorial Avenue,
- Access only to Capital A Road and Ron Guthrey Road and the banning of through traffic results in a decrease in traffic volume,
- A shift of traffic travelling south from the Ryans Road/Pound Road route to the Russley Road/State Highway 73 route.

8.2 Draft Transport Strategy for Consultation Levels of Service

Table 16 and Table 17 contain the predicted link and intersection levels of service in 2021 for the Draft Transport Strategy for Consultation. The locations included in the tables are those identified as being under pressure in the Do Minimum plus other sites that have been identified using a Performance Level Analysis of the Draft Transport Strategy for Consultation.

ROUTE	DESCRIPTION	Link Type	FWD Dir	Link Lanes	24 hour volume	AM Peak (1 hour equivalent volumes)				PM Peak (1 hour equivalent volumes)			
						FWD Vol	BAK Vol	FWD LOS	BAK LOS	FWD Vol	BAK Vol	FWD LOS	BAK LOS
SH1 - Hornby to Rolleston	SH1 Sth Carmen	Urbm	Sth	2	**11000**	225	563	Urban Link		679	427	Urban Link	
	SH1 Sth HJR	R2L	Sth	1	**9000**	204	423	C		504	369	C	
	SH1 Sth Barters	Urb	Sth	1	**11000**	413	763	Urban Link		836	574	Urban Link	
	SH1 Sth Kirks	R2LP	Sth	2	**12000**	414	644	Passing Lanes		736	591	Passing Lanes	
	SH1 Sth Dawsons	R2L	Sth	1	**11000**	384	606	D		697	564	D	
	SH1 Sth Weedons	Mtw	Sth	2	**22000**	829	1051	A	A	1406	910	B	A
	SH1 Sth Rolleston	Mtw	Sth	2	**22000**	829	1051	A	A	1406	910	B	A
Springs - Trents to Main South	Springs Sth Main South	Urb	Sth	1	**20000**	704	1076	Urban Link		1150	892	Urban Link	
	Springs Sth Amyes	Urb	Sth	1	**15000**	847	718	Urban Link		811	903	Urban Link	
	Springs Sth HJR	R2L	Sth	1	**10000**	537	548	D		655	671	D	
	Springs Sth Marshs	R2L	Sth	1	**11000**	566	551	D		678	679	D	
	Springs Sth Birchs	Urbm	Sth	1	**10000**	538	562	Urban Link		643	664	Urban Link	
	Springs Sth Toswill	Urbm	Sth	1	**6000**	476	301	Urban Link		340	523	Urban Link	
Shands - Halswell Junction to Main South	Sth Main South	Urb	Sth	2	**26000**	1106	1073	Urban Link		1379	1379	Urban Link	
	Sth Amyes	Urb	Sth	1	**13000**	483	484	Urban Link		681	594	Urban Link	
	Sth Seymour	Urb	Sth	1	**14000**	591	508	Urban Link		681	686	Urban Link	
SH1 - Main South to Main North	Johns Wst Main North	Mtw	Wst	2	**20000**	1541	665	B	A	872	1459	A	B
	Masham Sth Yaldhurst	Urb	Sth	2	**24000**	1154	1314	Urban Link		1233	1719	Urban Link	
	Carmen Sth Buchannans	Urb	Sth	2	**25000**	1291	1074	Urban Link		1472	1397	Urban Link	
	Carmen Sth Waterloo	Urb	Sth	2	**24000**	1169	1100	Urban Link		1336	1596	Urban Link	
CSM - Nash to Jerrold	CSM Wst Barrington	Mtw	Wst	2	**46000**	2312	2878	C	D	3091	2626	D	C
	CSM Wst Curletts	Mtw	Wst	2	**25000**	925	1911	A	C	1819	1303	C	B
	CSM Wst Nash	Mtw	Wst	2	**25000**	925	1911	A	C	1819	1303	C	B
	CSM Wst Awatea/Dunbars	Mtw	Wst	2	**25000**	925	1911	A	C	1819	1303	C	B
	CSM Wst Springs	Mtw	Wst	2	**25000**	925	1911	A	C	1819	1303	C	B
	CSM Wst Shands	Mtw	Wst	2	**21000**	713	1293	A	B	1347	889	B	A
Main South/Blenhiem - Springs to Curletts	Blenhiem Wst Curletts	Urbm	Wst	2	**30000**	1134	1190	Urban Link		1426	1142	Urban Link	
	Main South Wst Epsom	Urbm	Wst	2	**48000**	1747	2214	Urban Link		2507	2068	Urban Link	
	Main South Wst Lowther	Urbm	Wst	2	**36000**	1170	1468	Urban Link		1759	1417	Urban Link	
	Main South Est Springs	Urbm	Wst	2	**38000**	1166	1686	Urban Link		1973	1523	Urban Link	
Curletts - Blenhiem to Lincoln/Halswell	Curletts Sth Blenhiem	Urbm	Sth	2	**32000**	1494	1424	Urban Link		1668	1630	Urban Link	
	Curletts Sth Parkhouse	Urbm	Sth	2	**35000**	1786	1840	Urban Link		2099	2063	Urban Link	
	Curletts Sth CSME	Urb	Sth	1	**12000**	434	726	Urban Link		978	519	Urban Link	
Amyes - Shands to Springs	Amyes Sth Shands	Urb	Sth	1	**15000**	571	681	Urban Link		821	769	Urban Link	
	Amyes Nth Springs	Urb	Sth	1	**18000**	789	763	Urban Link		1013	983	Urban Link	
	Awatea Sth Springs	Urb	Sth	1	**15000**	528	736	Urban Link		918	706	Urban Link	
	Awatea Nth Wigram	Urb	Sth	1	**9000**	403	465	Urban Link		651	536	Urban Link	
	Awatea Sth Wigram	Urb	Sth	1	**9000**	403	465	Urban Link		651	536	Urban Link	
	Dunbars Sth Wigram	Urb	Sth	1	**13000**	437	854	Urban Link		1016	688	Urban Link	
	Dunbars Nth Halswell	Urb	Sth	1	**10000**	501	489	Urban Link		767	587	Urban Link	
	Dunbrs/Hndsns Est Halwell	Urb	Est	1	**15000**	537	966	Urban Link		1113	776	Urban Link	
Halswell Junction - Main Sth to Springs	HJR Nth Shands	Urb	Sth	1	**1000**	70	43	Urban Link		48	86	Urban Link	
	HJR Nth Springs	Urb	Sth	1	**9000**	291	714	Urban Link		698	420	Urban Link	
Halswell - Nicholls to Lincoln	Lincoln Sth Wrights	Urbm	Sth	2	**28000**	698	1636	Urban Link		1693	1146	Urban Link	
	Halswell Sth Curletts	Urb	Sth	2	**25000**	554	1556	Urban Link		1654	938	Urban Link	
	Halswell Sth Aidenfield	Urb	Sth	2	**19000**	320	1279	Urban Link		1121	774	Urban Link	
	Halswell Sth Aidenfield	Urb	Sth	2	**19000**	320	1279	Urban Link		1121	774	Urban Link	
	Halswell Sth Dunbars	Urb	Sth	1	**15000**	378	895	Urban Link		878	687	Urban Link	
Wigram - Birmingham to Halwell Junction	Wigram Extn Sth Brmghm	Urb	Sth	1	**14000**	382	1088	Urban Link		1044	755	Urban Link	
	Wigram Sth Treffers	Urb	Sth	1	**14000**	347	1066	Urban Link		1007	714	Urban Link	
	Wigram Sth Haytons	Urb	Sth	1	**18000**	385	1244	Urban Link		1323	769	Urban Link	
	Wigram Sth Nash	Urb	Sth	1	**13000**	344	859	Urban Link		926	620	Urban Link	
	Wigram Dev Sth Awatea	Urb	Sth	1	**13000**	556	715	Urban Link		859	766	Urban Link	
Hayton - Blenheim to Washbornes	Hayton De Sth Blenheim	Urb	Sth	1	**6000**	434	414	Urban Link		531	473	Urban Link	
SH1 - Main South to Main North	Johns Wst Gardiners	Mtw	Wst	2	**18000**	1398	638	B	A	764	1224	A	B
	Johns Wst of Sawyers Arms	Mtw	Wst	2	**24000**	1923	728	C	A	989	1403	A	B
	Russley Sth Harewood	Mtw	Sth	2	**26000**	1736	972	B	A	1159	1549	A	B
	Russley Sth Wairakei	Mtw	Sth	2	**26000**	1834	972	C	A	1343	1549	B	B
	Russley Sth Memorial	Mtw	Sth	2	**29000**	1623	1452	B	B	1588	1561	B	B
	Russley Sth Ryans	Mtw	Sth	2	**28000**	1676	1266	B	B	1708	1434	B	B
Memorial Avene	Memorial Est Orchard EB	Urb	Est	2	**12000**	646		Urban Link		1248		Urban Link	
	Memorial Est Orchard WB	Urb	Est		**12000**		1296	Urban Link			678	Urban Link	
	Memorial Wst Russley EB	Urb	Est	2	**14000**	593		Urban Link		1416		Urban Link	
	Memorial Wst Russley WB	Urb	Est	2	**15000**		1524	Urban Link			668	Urban Link	
	Memorial Est Russley	Urb	Est	2	**26000**	1033	1273	Urban Link		1361	846	Urban Link	
Wairakei Road	Wairakei Est Russley	Urb	Est	1	**4000**	147	244	Urban Link		112	296	Urban Link	
Harewood Road	Harewood Wst Russley	Urb	Est	1	**14000**	316	731	Urban Link		716	414	Urban Link	
	Harewood Est Russley	Urb	Est	1	**12000**	417	577	Urban Link		555	627	Urban Link	
Pound Road	Pound Sth Mcleans	R2L	Sth	1	**4000**	322	298	C		316	306	C	
	Pound Sth Ryans	R2L	Sth	1	**8000**	372	627	D		363	532	C	
Orchard Road	Orchard Sth Harewood	Urb	Sth	1	**13000**	664	292	Urban Link		356	623	Urban Link	
	Orchard Sth Wairakei	Urb	Sth	1	**13000**	585	508	Urban Link		528	550	Urban Link	

Table 16

2021 Link level of service for Draft Transport Strategy for Consultation

Intersection	Control	AM Peak (seconds of delay) Worst App	Max App Del	Flw Wgt Del	LOS	PM Peak (seconds of delay) Worst App	Max App Del	Flw Wgt Del	LOS
SH1 / Tennyson St	P	Tennyson	16.5	2.56	C	Tennyson	16.6	5.46	C
SH1/Weedons Rd South Bound On Ramp	P	Sth Bnd On Ramp	16.5	0.14	C	Sth Bnd On Ramp	17.1	0.16	C
SH1/Weedons Rd North Bound On Ramp	P	Nth Bnd On Ramp	17.7	5.64	C	Nth Bnd On Ramp	17.2	3.39	C
Weedons Ross Rd/SH1 Ramps	P	Weedons Ross Nth	13.9	10.44	B	Off Ramp (nth bnd)	12.9	8.54	B
Weedons Rd/SH1 Ramps	P	Off Ramp (sth bnd)	13.9	4.95	B	Off Ramp (sth bnd)	14.5	9.89	B
SH1/Dawsons Rd	P	Waterholes	16.3	2.68	C	Waterholes	18.6	2.83	C
SH1/Kirk Rd	P	Trents	15.5	5.27	C	Trents	18.8	5.78	C
SH1/Yaldhurst	S	Yaldhurst Est	82.2	22.96	C	Yaldhurst Est	323.2	73.59	E
SH1/Barters Rd	S	SH1 Nth	21.2	17.84	B	SH1 Nth	28.4	20.92	C
SH1/Gardiners Rd	P	Gardiners	11.3	0.69	B	Gardiners	11.3	0.33	B
Main South Rd/Symes	P	Symes	14.9	0.52	B	Symes	20.8	1.29	C
Sockburn Signals	S	Epsom	29.7	15.11	B	Epsom	53.6	19.57	B
Main Sth/Blenhiem	S	Main Sth Nth	40.8	21.96	C	Main Sth Nth	34.6	28.53	C
Blenhiem Rd/Curletts Rd	S	SH73 Wst	74.1	57.32	E	SH73 Wst	71.2	63.67	E
Parkhouse Rd/Treffers Rd	P	Treffers Est	7.5	0.25	A	Treffers Est	7.3	0.28	A
Curletts Rd/CSME Sth Bnd Offramp	S	Curletts West	1	0.42	A	Curletts West	1.5	1.08	A
Springs Rd/ Amyes Rd	P	Amyes Est	16.5	7.12	C	Amyes Est	18.5	9.00	C
Springs Rd/HJR/CSME	R	HJR Est	14.4	11.57	B	HJR Est	14.2	10.97	B
Springs Rd/ Marshes Rd	P	Marshs Est	20.5	6.40	C	Marshs Wst	24.7	7.29	C
Springs Rd/Hodgens Rd	P	Hodgens	19.1	0.02	C	Hodgens	21.1	0.01	C
Springs Rd/Toswill Rd	P	Toswill	13.6	1.99	B	Toswill	14.4	2.06	B
Shand Rd/Marshs Rd	P	Marshs Wst	24	6.55	C	Marshs Est	30.7	9.00	D
Lincoln Connection/Halswell Junction Road	P	Lincoln Conection Sth	19.5	18.66	C	Lincoln Conection Sth	19.3	18.40	C
Halswell Rd/Curletts Rd	S	Curletts Est	33.4	28.08	C	Curletts Wst	31.4	29.86	C
Halswell Rd/Hendersons Rd	S	Aidenfield Nth	48.1	16.47	B	Aidenfield Nth	32.3	25.93	C
Halswell Rd/Nash Rd	S	Nash Wst	10.1	3.28	A	Nash Wst	9.7	4.42	A
Halswell Rd/Dunbars Rd	S	Halswell Sth	40.4	27.70	C	Halswell Nth	32.4	29.14	C
Wigram Rd/Treffers Rd	P	Treffers Wst	9.1	0.50	A	Treffers Wst	8.9	0.43	A
Wigram Rd/Haytons Rd	R	Haytons Wst	21.4	18.81	B	Wigram Nth	58.3	35.32	D
Wigram Rd/Nash Rd	P	Nash Est	21.1	9.29	C	Nash Wst	27.2	10.19	D
SH1/Memorial Ave South Bound On Ramp	P	Sth Bnd On Ramp	19.4	1.96	C	Sth Bnd On Ramp	19.4	3.29	C
SH1/Memorial Ave North Bound On Ramp	P	Nth Bnd On Ramp	19	1.44	C	Nth Bnd On Ramp	19.4	2.53	C
SH1/Memorial Ave North Bound Off Ramp Left	P	Off Ramp (nth bnd)	13.4	2.29	B	Off Ramp (nth bnd)	12.6	1.15	B
SH1/Memorial Ave North Bound Off Ramp Right	S	Off Ramp (sth bnd)	41.8	16.91	B	Off Ramp (sth bnd)	86.6	14.58	B
SH1/Memorial Ave South Bound Off Ramp Left	P	Off Ramp (sth bnd)	13.3	2.08	B	Off Ramp (sth bnd)	13.5	1.23	B
SH1/Memorial Ave South Bound Off Ramp Right	S	Off Ramp (nth bnd)	62.4	8.11	A	Off Ramp (nth bnd)	66.2	5.23	A
SH1/Harewood Rd	R	SH1 Nth	27.5	23.49	C	SH1 Sth	23.5	21.46	C
SH1/Sawyers Arms Rd	R	SH1 Nth	43.2	28.56	C	SH1 Sth	26.9	22.19	C

Table 17

2021 Intersection level of service for Draft Transport Strategy for Consultation

Table 18 contains a comparison of the routes and intersections listed in Table 19 and Table 20 with the lowest desirable levels of service for this study as defined in Table 11. Only the lowest LOS for any portion of the route has been reported. This, however, does not mean that the whole route is operating at this LOS, refer to Table 19 and Table 20 for more detailed LOS information.

Route/Location	Specific Portion	RLTS Class	AMP LOS	PMP LOS	Desirable Min Peak LOS	Issue
State Highway 1 Hornby to Rolleston	Rural	CO	D	D	C	Yes [1]
State Highway 1 Hornby to Rolleston	Intersections	CO	C	C	C	No
Springs Road, Trents Road to Main South Road	Rural and intersections	CO	D	D	C	Yes [2]
Shands Road, Halswell Junction Road to Main South Road	Intersections	CO	C	C	C	No
State Highway 1 Belfast to Hornby	Rural	CO	B	B	C	No
State Highway 1 Belfast to Hornby	Intersections	CO	C	C	C	Yes [3]
Christchurch Southern Motorway	Ring Road	SU	D	D	D	No
Christchurch Southern Motorway Extension	Non Ring Road	SU	C	C	D	No
Main South Road/Blenheim Road – Springs Road to Curletts Road	Intersections	CI	E	E	E	Yes [4]
Curletts Road – Blenheim to Lincoln	Ring Road Intersections	SU	C	D	D	No
Amyes Road – Shands to Springs	Intersections	CO	C	C	C	No
Halswell Junction – Shands to Springs	Intersections	CO	C	C	C	No
Halswell – Nicholls to Lincoln	Intersections	CO	C	C	C	No
Parkhouse	Intersections	CO	B	B	C	No
Wigram – Magdala to Halswell Junction	Intersections	CO	C	D	C	Yes [5]

Table 18

2021 Links and intersections Draft Transport Strategy for Consultation LOS compared to desirable minimum LOS

Note 1 – The particular section of highway with level of service D, which is below the minimum desirable, is State Highway 1 South of Dawson Road. The predicted traffic volumes in the future at this location are approximately 11,000 vehicles per day. The current traffic volumes are approximately 15,000 vehicles per day. It is believed that the predicted volume of 11,000 vehicles per day is acceptable, hence, it is not considered necessary to develop works to address the low Level of Service.

Note 2 - The location of the level of service D that is below the minimum desirable is Springs Road between Halswell Junction Road and Marshs Road. The predicted traffic volumes in the future at this location are approximately 11,000 vehicles per day. The current traffic volumes are of a similar order of magnitude. It is believed that these volumes are acceptable hence it is not considered necessary to develop works to address the low Level of Service.

Note 3 – Calculated by specific analysis.

Note 4 – The location of the level of service E is the intersection of Blenheim Road and Curletts Road. Whilst this is not below the minimum desirable Level of Service as mentioned in Section 4.2.2, Level of Service E is rarely attained hence should not be planned for. This intersection has been investigated and it has been found that the issue is due to limitations in the modelling process. The intersection will operate at a level of service of C in reality, which meets the desirable minimum Level of Service.

Note 5 – The location of the level of service D that is below the minimum desirable is the intersections of Wigram Road with Nash Road and Haytons Road. These intersection are just below (at worst approximately 3 seconds below) level of service C. It is felt that this is acceptable, hence it is not considered necessary to develop works to address low Level of Service.

8.3 Draft Transport Strategy for Consultation – Social and Environmental Effects

Existing/potential land uses: The Draft Transport Strategy for Consultation affects existing roading corridors and also involves the creation of new roads. The existing roading corridors adjoin a range of different land uses from quarrying, industrial and service activities, the Christchurch International Airport, residential activities, recreation activities, and rural activities. The new roads outlined in the Draft Transport Strategy for Consultation principally affect rural and rural-residential land uses. The purchase 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 near the intersection of State Highway 1 and Dawsons/Waterholes Road, may require any new roads to be aligned around them.

Designations: Designations will be required for new roads, road widening, and to upgrade intersections. There is an existing Christchurch City Council designation for the realignment of Wigram Road and designations for the widening of State Highway 1. Important new designations will be required to establish new roads for:

- Widening for a service lane for Whincops Road between Halswell Junction Road and Quaifes Road
- Southern Motorway extension from Halswell Junction Road to State Highway 1
- A link between Trices Road and Candys Road
- The Lincoln bypass
- Realignment of Pound Road at Barters/Waterloo Road
- Rolleston Drive South Extension
- State Highway 1 / Weedons Road Interchange

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.

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 Draft Transport Strategy for Consultation 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 Draft Transport Strategy for Consultation 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.

Mtigation 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.

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 and the Fountains Road connections. 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: There is a historic waka path on Owaka Road of significance to Ngai Tahu, a historical marker on Russley Road near Ryans Road, and remnant dry grasslands near Wigram Hotmix Plant (ecological heritage area 11.05 in the Operative Christchurch City Plan). There are no other known sites of Maori, cultural, historical or archaeological significance affected by the Strategy. However, the following waterways and the areas surrounding these which could be affected by the Strategy will be of interest to Ngai Tahu:

- the Halswell River and its tributaries such as Knights Stream
- the Styx River and its tributaries
- the tributaries of the Heathcote River
- the LII Stream

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 arterial routes. 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, the Longstaffs Road/Whincops Road intersection will be closed, 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 may also be opportunities to provide for separate cycle lanes or at least improvements to the shoulders of the carriageway and footpaths.

Consultation to date: The following topics were raised in the consultation process undertaken in 2006:

- Access
- New roads, including increases in noise
- Recreational uses
- Public transport
- Timing of implementation
- Cycling
- Business impacts
- Ecological impacts

Specific issues or sites within these categories are discussed in the following chapters which address each corridor and growth area.

A summary table highlighting the relevant effects for the Transport Strategy and for each component is provided in Appendix G.

8.4 Draft Transport Strategy for Consultation Economic Assessment

The economic assessment was 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 was found that the benefits of any options considered are generally marginally more than the calculated values. Appendix B contains the estimated benefits, costs and benefit cost ratio for the Draft Transport Strategy for Consultation. These are summarised below in Table 19.

These are discounted costs for the major projects that amount to around $200M. Other road widening 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	Draft Transport Strategy	Do Minimum	Net Cost/Benefits
Costs	$181,000,000		$181,000,000
Benefits	*$6,721,000,000	*$6,911,000,000	$189,000,000
Tangible Benefit/Cost Ratio			1.0

Table 19

Benefits, cost and benefit/cost ratio for Draft Transport Strategy for Consultation

* These costs are nett 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 $15.7 million per annum from approximately $13.7 million in 2001 to $29.4 million in 2021.
- The benefit cost ratio for this Package of Options is 1.0.
- 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 3,419,544 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 3,815,621 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.

8.5 Draft Transport Strategy for Consultation Transportation Effectiveness

The analysis for 2021 shows that the Draft Transport Strategy for Consultation addresses the issues raised, resulting in the following:

Hornby to Burnham Corridor

- Decreased traffic volumes 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 8,400 vehicles per day through the intersection on Main South Road,
- Increased traffic volumes carried on a 4-lane median divided highway between Dawsons Road and Rolleston by approximately 3,500 vehicles per day with an estimated volume of 32,300 vehicles per day,
- Increased traffic on Jones Road between Kirk Road and Rolleston. For example, south of Weedons Road volumes increase from approximately 3,100 vehicles per day to 7,400 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 Road,

- Provides capacity (including through managed access) on links and at intersections, with reduced delay to through traffic meaning increased mobility,
- Access to Rolleston from the north is improved with Weedons Road interchange providing access either via Jones Road/Rolleston Drive North and Lowes Road, or Weedons Road, Levi Road and Lowes Road,
- Safety is improved with the closing of Brookside and Elizabeth Street intersection with State Highway 1 and converting Tennyson Street to left-in/left-out only,
- Access between Rolleston Township and the Industrial Park is improved with the Rolleston Drive North Link,
- 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.

Christchurch Southern Access Corridor

- Provides a key access corridor from the south, to Christchurch and Port of Lyttelton. Traffic volumes range from 20,800 vehicles per day (State Highway 1 to Shands), 24,900 vehicles per day (Shands to Curletts), and 46,500 (Curletts to Barrington),
- Relieves traffic volumes on the Hornby to Burnham corridor north 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 42,600 vehicles per day (currently 50,200) and from a predicted 34,200 on Blenheim Road (east of the roundabout) to 28,700 (currently 39,200),
- Provides capacity on the existing links and at intersections,
- Decreases traffic on Halswell Junction Road by approximately 8,300 vehicles per day to 8,600 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 28,800 vehicles per day, south of Sawyers Arms Road 24,400 vehicles per day and south of Yaldhurst Road 24,000 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,
- Decreases traffic on Springs Road north of Prebbleton north of Marshs Road by 17,600 from 27,400 to 9,800 vehicles per day (currently 10,400),
- Increases traffic on Fountains, Longstaffs and Ellesmere Roads due to the new connection to Christchurch via Wigram Road etc to Blenheim Road. Fountain Road increases from 500 to 9,500 vehicles per day, Longstaffs Road 1,000 to 8,500 vehicles per day and Ellesmere 2,800 to 6,300 south of Leadleys Road,
- Reduced traffic through Prebbleton improving safety and severance issues,
- Improved access to both Prebbleton and Lincoln via new connections to Christchurch via Wigram Road and to Blenheim Road and the Halswell area via Trices and Sabys Road.

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 Rolleston from the north improved with Weedons Road interchange providing access either via Jones Road/Rolleston Drive North Extension and Lowes Road, or Weedons Road, Levi Road and Lowes Road,
- 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,
- 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,
- Safety is improved with the closing of Brookside and Elizabeth Street intersections with State Highway 1 and converting Tennyson Street to left-in/left-out only,
- Inner and outer ring roads, Rolleston Drive North and Weedons/Lowes/Dunns Crossing Roads respectively, established and upgraded to allow for better access to all areas of Rolleston,
- Cycling promoted by incorporation of wider shoulder and cycle lanes where appropriate,
- Provision for future 'Park and Ride' facility.

Lincoln

- Southern bypass reduces traffic volumes on existing east west route through Lincoln by approximately 1,100 vehicles per day with an actual volume of 2,800 vehicles per day,
- Diverts heavy traffic to bypass, in particular stock trucks away from the town centre,
- Reduces noise within the town centre,
- Location for future 'Park and Ride' facility identified on Springs Road near the Lincoln University Car Parks,
- Southern bypass to act as collector road for future subdivisions to the south.

Christchurch International Airport

- Access to the airport provided via three key access points, being Capital A road to the south for freight, Memorial Avenue for access to passenger terminal areas and 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,
- 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 Draft Transport Strategy for Consultation to address the issues is high.