22 Lincoln Township Summary

22.1 Issues Raised

This summary covers only the issues and works proposed within Lincoln. The issues and works relating to travel between Rolleston and Christchurch and Rolleston and Lincoln have been covered in other summaries.

The issues raised that relate to Lincoln Township have been taken from the Issues and Option Identification Report. The issues have been raised via three methods being, the initial consultation phase, study brief and through technical analysis. The issues that specifically relate to Lincoln Township include:

- Concern regarding the social amenity effects of traffic in Lincoln – initial consultation,
- Concern regarding the noise associated with traffic in Lincoln – initial consultation,
- Concern regarding the traffic volumes in Lincoln – initial consultation,
- Concern regarding the number of heavy vehicles in Lincoln – initial consultation,
- Concern regarding the safety of road users in Lincoln – initial consultation,
- Consider the functions of roads within Lincoln with respect to the hierarchy – study brief,
- Consider bypasses of Lincoln to reduce the traffic volumes and hence alleviate the effect of the traffic – study brief.

22.2 Transport Strategy Works and Hierarchy

The works included in the Transport Strategy for Lincoln Township are over and above the currently programmed works to 2011.

The works included in the Transport Strategy for Lincoln are:

- Construction of a southern bypass/collector road. This road would run from the intersection of Weedons Road and Ellesmere Junction Road to the south of the University, then east to connect to Moirs Lane and Ellesmere Road. It is suggested that the bypass have a wide two lane cross section,
- The intersections along the route would have the following forms and priority:
    - Ellesmere Road/Edward Street/Lincoln Tai Tapu Road intersection remains unaltered.
    - Give the bypass priority where it intersects with Springs Road.
    - Give the bypass priority where it intersects with South Drive (a private road on the Lincoln University campus).
    - Give the bypass priority where it intersects with Farm Road (a private road on the Lincoln University campus).
    - At the intersection of Ellesmere Junction Road/Weedons Road/Bypass, give Ellesmere Junction Road the priority.

In addition to these works it is suggested that the Selwyn District Council consider the upgrading of James Street, Gerald Street, and Edward Street to provide for cycle lanes to improve east/west connectivity from the existing town centre and the University and to the Rail Trail on Birchs Road. Included in this would be local area traffic calming in Lincoln to control speed and smoothing the pavement surface and running surface, to reduce noise concerns. It is noted that traffic calming needs to include vertical elements such as speed humps, which, potentially create more noise.

The works included in the Transport Strategy for Lincoln are shown in Figure 43.

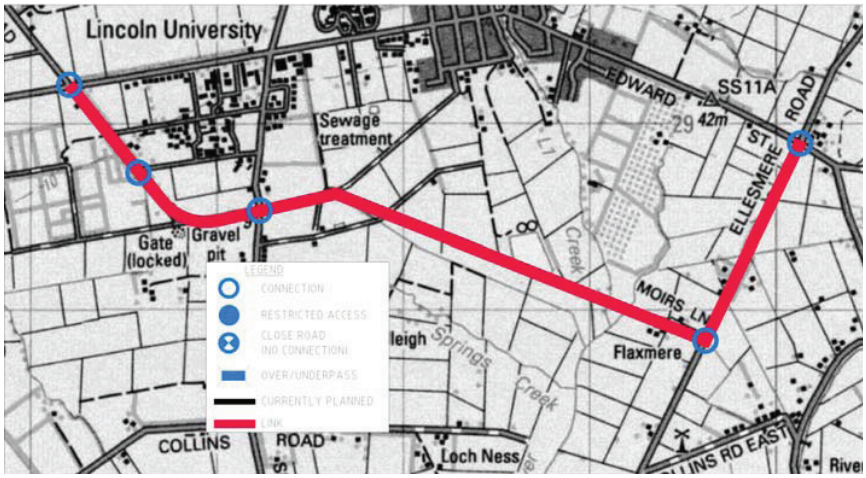

Figure 43

Lincoln Township Transport Strategy Works

These works are related to the hierarchy for Lincoln, in that the new bypass/collector road south of Lincoln would become a collector road in the hierarchy. Its function would therefore be to provide both mobility and access. It is recommended that Springs Road south of Ellesmere Road also be designated as collector roads in the Hierarchy. The function of these roads would therefore be to collect traffic from the local roads and distribute it to the arterials.

It is recommended that Gerald Street and Edward Street are designated as Regional Arterials to complete the link between Ellesmere Junction Road and Lincoln Tai Tapu Road through Lincoln.

The Transport Strategy hierarchy for Lincoln is shown in Figure 44.

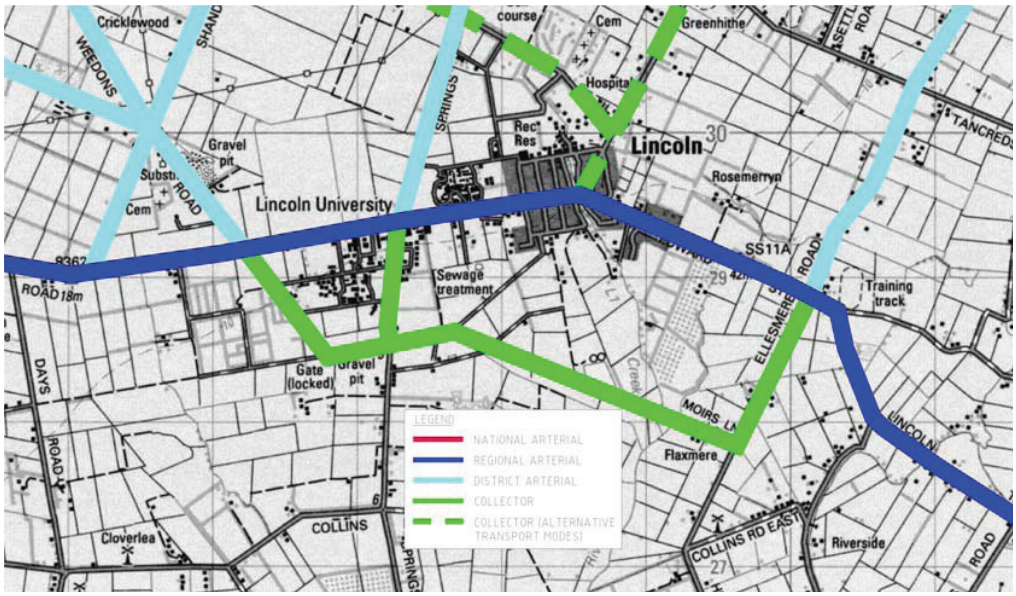

Figure 44

Lincoln Township Transport Strategy Hierarchy

The analysis carried out for this study has enabled the following comments to be made regarding the Transport Strategy:

- Two other bypasses of Lincoln have been considered. The first is a northern bypass from Springs Road to Birchs Road and the second an eastern bypass from the intersection of Boundary Road/James Street to Edward Street,
- The northern bypass has been found to attract very low traffic volumes and is considered inconsistent with the desire to improve Birchs Road as an alternative modes route. Therefore this route has not been considered further,
- The eastern bypass is also predicted to attract very low traffic volumes and requires land that has been recently developed as a residential area. Therefore this route has not been considered further in this study. In a recent Lincoln Structure Plan process undertaken by Selwyn District Council a link north of Boundary Road and Liffeyfields Drive, connecting to Southfield Drive at Edward Street, has been identified as part of a larger growth pattern for Lincoln envisaged by UDS. This road would come about more through residential development in the future when further land was rezoned,
- It has been found that a southern bypass/collector road of Lincoln on its own does not attract significant volumes of traffic out of Lincoln. When the southern bypass/collector road is connected directly to the Ellesmere Road route to Christchurch the southern bypass/collector road is more attractive,
- The predicted traffic volumes indicate that the volume of traffic that is completely bypassing Lincoln is low. Most of the traffic on a southern bypass/collector road will use the route to either access the University or the area south of Lincoln where further residential development is planned .Further ideas not modelled under this Study to create another commercial or industrial centre proposed by the Lincoln Structure Plan Process to the southeast of the university may increase vehicles numbers,
- While a southern link around Lincoln is required for future development, as it is not strictly acting as a bypass, it is to be classified as a collector road and is only likely to come about in conjunction with new residential development and will provide for both mobility and access.

22.3 Traffic Effects

The traffic effects in terms of vehicle kilometres and minutes travelled have been determined for the Transport Strategy network as a whole. The effects of the works associated with this township cannot easily be isolated hence, specific details of the effects for this corridor are limited to changes in traffic volumes. Some of the changes in traffic volumes in this township are related to works for connecting corridors, hence the volumes quoted are not necessarily a direct result of the Transport Strategy works for this township. Table 37 is a summary list of the traffic volumes on links affected by the Transport Strategy works for the township.

Traffic Volume Location	2001 (veh per day)	2021 (veh per day)
James Street south of Boundary Road	3,300	5,100
Edward Street east of Ellesmere Road	2,300	3,300
Edward Street east of East Belt	1,900	1,300
Gerald Street west of Edward Street	3,600	3,000
Gerald Street east of Springs Road	4,800	3,400
Ellesmere Junction Road south of Springs Road	2,200	2,400
Springs Road north of Gerald Street	4,700	6,600
Springs Road south of Gerald Street	6,800	6,700
Southern Collector west of Edwards Street	NA	1,400
Southern Collector west of a potential local road connection	NA	700
Southern Collector west of Springs Road	NA	500
Southern Collector south of Ellesmere Junction Road	NA	2,600
Boundary Road west of James Street	1,800	1,900[1]
Birchs Road north of Boundary Road	4,200	5,100
Weedons Road east of Shands Road	600	2,500

Table 37

Lincoln Township Transport Strategy Major Link Traffic Volumes

Note [1] – may vary as influenced by zone boundary.

22.4 Social and Environmental Effects

Existing/potential land uses: The Lincoln Township element of the Transport Strategy utilises existing roads as well as involving the creation of a new road. The existing roads adjoin a range of different land uses from residential, recreation and rural activities. The new road outlined in this element of the Strategy principally affects rural and rural-residential land uses. The purchase of a significant area of rural land will be necessary for this new road.

Designations: Designations will be required for the new road and to upgrade some intersections.

Property access severance: Changes to roading hierarchies will seek to consolidate access onto key arterial routes and avoid the creation of new accesses 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. This element of the Strategy involves widening existing roads, establishing new roads, and constructing new structures like bridges that will create local adverse visual effects. This element of the Strategy will also require the removal or relocation of existing features in the landscape such as trees and vegetation, dwellings and other buildings, fencing, lighting and power poles.

Mitigation of effects on landscape: To ensure that the roading will be integrated into the existing environment areas of roading, improvements will be suitably landscaped where appropriate. Design and landscaping will assist in mitigating some of the adverse effects arising from the establishment of the new road, however such measures will have limited positive impacts on raised structures such as the bridges over the LII Stream.

Geological/geotechnical considerations: 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 bridges.

Drainage: The new road link will pass over two branches of the LII Stream, which is a tributary to the Halswell River. It is also recognised that the location of the new link road to the south of Lincoln is subject to high groundwater conditions particularly in the winter months. Appropriate measures to protect the waterways and address the ground conditions can be assessed at the time of design and construction.

Noise: There will be temporary noise effects during the construction phase. The new road will introduce vehicle noise currently distant from high-volume traffic flows. Increases in traffic-generated noise levels on the new 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 are no known sites of Maori, cultural, historical or archaeological significance affected by the Strategy. However, the LII Stream and the surrounding area will be of interest to Ngai Tahu. Therefore, it is recommend that further consultation with the relevant parties be undertaken at a more appropriate time such as the scheme assessment stage.

Social effects, social severance and property severance: This element of the Strategy seeks to minimise social severance within settlements by ensuring existing links are maintained while new roads bypass settlements. The potential removal of some dwellings and/or reduction of the size of properties may have significant adverse social effects for affected owners and occupiers. 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. There will be considerable adverse social effects for the affected owners and occupiers.

Public transport/cycle: The improved 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. A Park and Ride facility has been identified as being an option for Lincoln to promote increased use of Public Transport i.e. buses, especially to cater for peak morning and evening commuter traffic to and from Christchurch. A recent Lincoln Structure Plan process undertaken by Selwyn District Council identified 5 possible sites. While originally a site at the University was considered preferable a site on Boundary Road

near the proposed Birchs Road Public Transport route was identified as more appropriate. Feasibility studies will be required to determine if and when such a service would be viable.

Consultation to date: No topics were raised in the consultation process undertaken in 2006 which specifically affect this element of the Strategy, although general matters such as public transport, cycling, access to businesses and noise effects may be of relevance.

22.5 Staging and Timing (Also refer section 0)

The construction of a southern bypass/collector road, while on its own is not viable, if combined with proposed subdivisional work on the south side of Lincoln will form an important link road. The southern bypass/collector road will provide an important connection between Lincoln University and the eastern suburbs of Christchurch utilising the Ellesmere Road connection and could still be used to remove through traffic, in particular stock trucks and other heavy vehicles from the main street of Lincoln. Timing of this work would depend on proposed subdivisional development to the south of Lincoln.

22.6 Response to Issues Raised

From the analysis carried out for this study the following points have been made in response to the issues raised:

- The increasing population and consequential increase in traffic within Lincoln will result in increased traffic related effects i.e. noise, social amenity issues. The southern collector/bypass road will however help to reduce the traffic volumes through the centre of Lincoln and hence the noise, social amenity issues in the centre of Lincoln will be minimised,
- Street upgrading and widening to provide cycle lanes on the main streets combined with local area traffic management, pavement smoothing and surface smoothing will help further improve safety and reduce noise issues within the centre of Lincoln,
- There were conflicting functions of the roads within the centre of Lincoln, i.e. access to the commercial and residential areas versus the mobility function. The southern bypass/collector road resolves this issue by separating the traffic accessing the commercial area and those bypassing Lincoln,
- There were conflicting functions of the roads within the centre of Lincoln, i.e. access to the commercial and residential areas versus the mobility function. The southern bypass/collector road resolves this issue by separating the traffic accessing the commercial area and those bypassing Lincoln,
- Three bypass alignments have been considered however only one has been considered in detail as the other two did not provide any benefit and conflicted with other objectives.

23. Springston Village Summary

23.1 Issues Raised

The issues raised that relate to this village have been taken from the Issues and Option Identification Report. The issues have been raised via three methods being, the initial consultation phase, study brief and through technical analysis. The issues that specifically relate to this township include:

- Concern regarding the social amenity effects of traffic in Springston – initial consultation,
- Concern regarding the noise associated with traffic in Springston – initial consultation,
- Concern regarding the traffic volumes in Springston – initial consultation,
- Concern regarding the number of heavy vehicles in Springston – initial consultation,
- Consider bypasses of Springston to reduce the traffic volumes and hence alleviate the effect of the traffic – study brief.

23.2 Transport Strategy Works and Hierarchy

It is suggested that Ellesmere Junction Road be designated as a regional arterial in the hierarchy. This means that Ellesmere Junction Road would be developed as part of the Regional Arterial from State Highway 1 at Burnham to State Highway 75 at Tai Tapu. Its function would therefore be to provide mobility rather than access. It is recommended that property access to the road be limited so as to preserve the mobility function of the road.

It is also suggested that Leeston Road be designated a district arterial in the hierarchy. This means that Leeston Road would have the function of providing for travel from Springston to the south. It is recommended that property access to the road be limited so as to preserve the mobility function of the road.

The analysis carried out for this study has enabled the following comments to be made regarding the Transport Strategy:

- Two bypasses of Springston have been considered. The first is a northern bypass from Ellesmere Junction Road around the developed area and then back to Ellesmere Junction Road. The second is an eastern bypass from Leeston Road to Ellesmere Junction Road,
- It has been found that the northern bypass, due to its additional length over the existing route, is predicted to attract very little traffic. This route has therefore not been further considered,
- Whilst the eastern bypass does attract traffic, it is considered that the expense of constructing the bypass is not justified.

23.3 Traffic Effects

Table 38 is a summary list of the traffic volumes on the roads in the village.

Traffic Volume Location	2001 (veh per day)	2021 (veh per day)
Ellesmere Junction Road east of Leeston Road	3,800	5,600
Ellesmere Junction Road east of Waterholes Road	1,000	1,800
Ellesmere Junction Road west of Waterholes Road	1,500	2,000
Leeston Road south of Ellesmere Junction Road	3,000	4,200

Table 38

Lincoln Township Transport Strategy Major Link Traffic Volumes

23.4 Social and Environmental Effects

Environmental effects: As no works are proposed for this element of the Strategy, no assessment of social and environmental effects is necessary.

Consultation to date: No topics were raised in the consultation process undertaken in 2006 which specifically affect this element of the Strategy.

23.5 Staging and Timing

No major works are planned for this element of the strategy.

23.6 Response to Issues Raised

From the analysis carried out for this study the following points have been made in response to the issues raised:

- Local area traffic management, pavement smoothing and surface smoothing will significantly help reduce the noise issues within the centre of Springston,
- Local area traffic management would also help to control the speeds of traffic though Springston, hence improving safety in the village,
- Two bypass alignments have been considered however they are not considered justified on the basis of cost and that they conflict with other objectives.

24. Transport Strategy – Staging and Timing of Work

24.1 Background and Method

Staging and timing of work is a trade-off between capacity/standards of a road network, safety and the cost of physical road construction. Generally road construction work would proceed when the cost to carry out the work can be justified on the basis of efficiency and safety in accordance with the LTNZ Economic Evaluation Manual and the projects meeting LTNZ's assessment procedures profiles. If justified on this basis its funding can be subsidised by Land Transport NZ through the National Land Transport Programme. However, there are cases within the CRETS study area where work will be carried out by the partners fully at their cost to advance the work based on the wishes of the community or for strategic and/or social reasons.

From the extensive modelling, analysis and consultation carried out to date, a strategy has been formed, which takes into account social and environmental concerns, effectiveness and economic efficiency. The staging and timing of work included in the strategy is based on the following:

- Highway Capacity (links)
- Safety (intersections)
- Strategic
- Social / Environmental

Highway capacity is based on Level of Service (LOS). This is explained in Section 3.2 of this report. With reference to the RLTS, the desirable level of service for a two lane rural road is C, with a maximum flow of 900 vehicles per hour per lane in the peak period in two directions. This is equal to approximately 9,000 VPD per lane for a 24 hour period in two directions. The concern here is that we know that there are two lane rural roads within the study area that carry over 20,000 VPD in two directions, yet are not included in the Transit 10 year Land Transport Programme, and until recently have not shown significant capacity problems.

To test the methodology of using the RLTS desirable level of service, the year at which individual two lane rural roads meet the RLTS peak period desirable minimum level of service has been calculated.

The results show that for the State Highway 1 Belfast to Hornby corridor, the upgrade work included within the strategy should have been completed by 1993, with the widening of Russley Road between Memorial Avenue and Yaldhurst Road to have been completed by 1964.

It is known that a two lane rural road will cope with around 18,000 to 22,000 VPD before four laning is required. For planning purposes, the LOS for CRETS has been modified to mid way through LOS E, giving a 2 way peak hourly flow of 2,200 and a 24 hour flow of approximately 22,000 vpd. The year at which individual two lane roads meet the LOS mid E during the peak period has been calculated in the same way as before using LOS C.

The results show that for the State Highway 1 Belfast to Hornby corridor, the various upgrade works included within the strategy, should be completed between 1994 and 2023. This appears to be a far more realistic result, for example Russley Road between Memorial Avenue and Yaldhurst Road using LOS C has a construction date of 1964, and using LOS mid E 1994. This section of road is not included in the do minimum works planned for the next 10 years. This indicates that while the RLTS desirable LOS C for 2 lane rural roads maybe desirable, it is not practicable for this study when looking at staging and timing.

24.2 Staging and Timing of Work

Staging and timing of work for specific links and intersections has primarily been based on a modified minimum peak level of service as shown below in Table 39.

In addition each package of work has been assessed as to its effect on adjoining packages of work or areas of concern. For example the Christchurch Southern access (Southern Motorway Extension) is directly related to State Highway 1 through Templeton and the Rolleston Drive North overbridge is closely related to the State Highway 1 / Weedons Road interchange.

As the exact timing of any project will depend on various criteria as discussed in the previous sections, timing of the projects included in the Transport Strategy have been categorised as one of the following:

1. Short Term (by 2011)
2. Medium Term (2011 to 2021)
3. Long Term (after 2021)

Modified						
Road Type	RLTS Class	Peak Period Desirable Min LOS	Max Flow/Delay			
			Urban Roads		Rural Roads	Motorway
			Priority (Seconds)	Roundabout & Signals (Seconds)	2way flow per hour	Veh / 2lanes per hour
Strategic Urban outside Chch Ring Road	SU	Links LOS Mid E Intersections LOS D	35	55		3750
Remainder of classified network (except as stated below)	CO	Links LOS Mid E Intersections LOS C	25	35	2200	3750
Chch CBD	CBD	LOS F	999	999		9999
Remainder of Chch Classified network	CI	LOS E	50	80		4000
Other local roads	OT	Local Criteria Links Mid E Intersections C	25	35	2200	

Table 39

Modified Desirable Minimum Level of Service cut offs used in the Staging and Timing Analysis

24.3 Corridors – Links

24.3.1 Corridor A – Christchurch Southern Access (Stage Two only)

The extension from Springs Road to State Highway 1 is triggered by State Highway 1, south of Barters Road reaching LOS mid E. This is estimated to be within the medium term.

24.3.2 Corridor B – Belfast to Hornby, including Pound Road Hornby Bypass

The four laning of the section Belfast (The Gryones) to Yaldhurst Road is triggered by this section reaching LOS mid E. This is estimated as follows:

i. The Groynes to Sawyers Arms Road – long term
ii. Sawyers Arms Road to Harewood Road – short term
iii. Harewood Road to Memorial Avenue – medium term
iv. Memorial Avenue to Yaldhurst Road – short term

The four laning of the section Yaldhurst Road to the Main South Railway Line (Hornby) would normally be triggered by the intersections along this section reaching LOS E. However, as the intersections here have already been upgraded the trigger point is now traffic volume based. On this basis the upgrading work is within the short term.

The Pound Road Bypass is driven by Hierarchy and the desire to remove through traffic from the Hornby area. The timing of this is not critical, however it would be desirable to complete the required work on Pound Road so that it coincides with the completion of the Christchurch Southern Access work. For this reason this work should be completed within the medium term.

24.3.3 Corridor C – Russley to Aylesbury

No major works are proposed for this element of the strategy.

24.3.4 Corridor D – Hornby to Burnham

The four laning of the section between Christchurch Southern Motorway extension and Weedons Road is triggered by this section reaching LOS mid E. However, it must also be in place when the Christchurch Southern Motorway extension is complete. Both are estimated to be within the medium term.

The construction of the interchange at the State Highway 1 / Weedons intersection is an integral item of work associated with the four laning of State Highway 1. The interchange must therefore be constructed at the same time which is estimated to be within the medium term.

The upgrading of the Lincoln Rolleston Road/Selwyn Road/Shands Road connection is shown to be required in the short term to cater for increased traffic between Christchurch and Prebbleton. The upgrading of this route will also help to relieve some of the traffic off State Highway 1 and delay major works such as four laning and interchanges as long as possible.

24.3.5 Corridor E – Christchurch to Lincoln including Prebbleton

The construction of a new link between Wigram Road and Halswell Junction Road is required to reduce traffic on Springs Road, to and through Prebbleton and to provide a strong link further south to Lincoln. The construction of this section is triggered by the LOS reaching mid E on Springs Road between Halswell Junction Road and Prebbleton. This is estimated to be within the medium term.

Upgrading work on Ellesmere Road connection south of Halswell Junction Road including Whincops Road, Longstaffs Road and Ellesmere Road to Edward Street at Lincoln is driven by hierarchy and available road width to cater for the proposed traffic volumes including cyclists. The existing width is approximately 6.0m and the 2001 traffic volume south of Leadleys Road is 2800 vpd and south of Tancred Street is 1600 vpd. The widening to 10.0m to cater for increased traffic and cyclists could be undertaken as a single project, or the width increased in stages as the traffic volumes increase.

While the traffic volume will slowly increase between 2001 and 2016, the construction of the new link between Wigram Road and Halswell Junction Road will be the main trigger point. Therefore widening of the Ellesmere Road connection between Halswell Junction Road and Trices Road is estimated to be required within the medium term.

The upgrading of Ellesmere Road connection south of Trices Road is not required to cater for increased traffic until after 2021. Widening could be carried out prior to 2021 to cater for cyclists, however this would depend on either a successful funding application or the willingness of the partner authorities to fully fund this work. Due to drivers for widening other than traffic volume, upgrading is estimated to be required within the medium term.

24.3.6 Corridor F – Christchurch to Tai Tapu

The four laning of Halswell Road between Curletts Road and Dunbars Road is required to provide capacity, and has been included to provide an efficient public transport route. The 2001 traffic volume south of Henderson Road is 18,000 vpd and the predicted 2021 traffic volume is 18,600 vpd. This work is a integral part of work within the Christchurch Southern Access corridor and the Christchurch to Lincoln corridor. For this reason the work should be carried out within the medium term.

24.3.7 Corridor G – Christchurch Outer Suburbs and South Western Orbital

The upgrading of this route is to provide a strong link between State Highway 1 and State Highway 75 and to provide a link to the Christchurch Lincoln corridor. Upgrading work is driven by hierarchy, safety at the Sabys Road end and completion of the Christchurch Southern Access corridor and the Christchurch to Lincoln corridor. Traffic currently travels this route without too many concerns and the projected traffic problems only marginally increase east of Ellesmere Road, however it would be desirable to complete the required work in conjunction with the Christchurch to Lincoln upgrade, to support the bypass of Prebbleton and correspondingly linked with the trigger that the LOS reaches mid E on Springs Road between Halswell Junction Road and Prebbleton which is estimated to be within the medium term for Corridor E. For this reason this work should be completed within the medium term.

24.3.8 Rolleston to Lincoln Corridor

The Rolleston to Lincoln work is driven by hierarchy and available road width to cater for the proposed traffic volumes. The route is predicted to carry relatively low traffic volumes in 2021, however the intersection changes and widening work should be undertaken to support the hierarchy. Suggested timing to upgrade the route is within the short term to address current safety concerns with some intersections e.g. Shands Road/Springston Rolleston Road/Weedons Road.

24.3.9 Christchurch International Airport

Work relating to the airport is closely related to Corridor B – Belfast to Hornby. For completeness, work within Corridor B directly relating to the airport is repeated in this section.

Four laning of the section Belfast (The Groynes) to Yaldhurst Road is triggered by this section reaching LOS med E. This is estimated as follows:

i. The Groynes to Sawyers Arms Road – long term
ii. Sawyers Arms Road to Harewood Road – short term
iii. Harewood Road to Memorial Avenue – medium term
iv. Memorial Avenue to Yaldhurst Road – short term

The restricted access of McLeans Island Road / State Highway 1 intersection and the new link via Sawyers Arms Road is triggered by the State Highway 1 four laning. As shown above, this is within the short term.

The Russley Road (State Highway 1), Memorial Avenue interchange is required when LOS at this intersection reaches D. For the AM peak this is 2025 and for the PM peak this is 2009. The mean of the two peaks has been taken, which is within the medium term.

The Capital A intersection and upgrades to Ron Guthrey Road and Peter Lemming Road are associated with the new Airport freight facility being established. At this stage the date is not confirmed, so for the purpose of this report, it is assumed that this work will be done at the same time as Russley Road / Memorial Avenue interchange, being within the medium term.

24.3.10 Rolleston Township and Industrial Area

Work relating to Rolleston Township and the Rolleston Industrial Area relate closely to Corridor D – Hornby to Burnham. For completeness work within Corridor D directly relating to Rolleston and the Rolleston Industrial Area is repeated in this section.

The construction of the grade separated interchange at the Weedons / Weedons Ross Road intersection is required when State Highway 1 between the Christchurch Southern Access Corridor extension and Weedons Road is four laned. This is estimated to be within the medium term.

The Rolleston Drive North Hoskyns Road/Jones Road connector and Byron Street Extension are part of the Rolleston strategy of having one Northern, and two southern accesses (i.e. Rolleston Drive South and Dunns Crossing Road), with a connection between the Rolleston Residential and Rolleston Industrial area. This connection being the Rolleston Drive North Hoskyns Road/Jones Road connection can be constructed any time after the Northern access (Weedons /

Weedons Ross Road interchange) has been completed. With the Weedons / Weedons Ross Interchange estimated to be constructed within the medium term, it is suggested that the Rolleston Drive North Hoskyns Road/Jones Road connection and Byron Street extension can also be constructed within the medium term but one year following the construction of the State Highway 1 / Weedons / Weedons Ross Interchanges.

Hoskyns Road is included in the Transport Strategy to become a District Arterial connecting the Rolleston Residential and Rolleston Industrial areas to the west. This part of the strategy can be implemented once the Rolleston Drive North Hoskyns Road/Jones Road connection has been constructed. This work is therefore within the medium term.

It is suggested that the upgrade of the inner and outer ring roads should be encouraged as early as possible, in particular Rolleston Drive North and the Rolleston Drive/Tennyson Street intersection. While a number of the road cross sections can cater for the current traffic use, Walkers Road, Jones Road (between Hoskyns and Weedons Ross Roads) and Weedons Road (between State Highway 1 and Levi Road) are considered too narrow and should be widened including intersection upgrades at Jones / Weedons Ross Roads and Weedons / Levi Roads in the short term.

When the Rolleston Drive South intersection is created with State Highway 1, this then triggers the closure of the Elizabeth Street intersection with the State Highway as required by a previous planning condition. It is also suggested that the changes to access at Tennyson Street and Brookside Road (banning of right hand turns out of Tennyson Street at Brookside Road) are undertaken at this time so that access to Rolleston between Rolleston Drive North and Rolleston Drive South is rationalised. This will then ensure safer access to the State Highway offered by these intersection treatments in conjunction with the traffic signals at Rolleston Drive North.

The construction of new collector roads will be driven by subdivisional development. These include Rolleston Drive South (which is currently under construction) and the unnamed proposed collector road to the southeast. The proposed unnamed road is considered to be in the medium to long term as the land in this area is currently not zoned for residential development.

24.3.11 Lincoln Township

The construction of a southern bypass/collector road at Lincoln, while on its own is not viable, if combined with proposed subdivisonal work on the south side of Lincoln will form an important bypass together with a collector road function. The bypass will provide an important connection between Lincoln University and the eastern suburbs of Christchurch, and potentially remove through traffic, in particular stock trucks and other heavy vehicles from the main street of Lincoln. Timing of this work would depend on proposed subdivisional development to the south of Lincoln.

24.3.12 Templeton Township

No direct work is proposed for Templeton Township. However, the suggested Pound Road bypass including new traffic signals at the State Highway 1 / Barters Road intersection and associated Pound Road / Waterloo Road intersection realignment indirectly affects Templeton. The timing of this is not critical, however it would be desirable to complete this work so that it coincides with the completion of the Christchurch Southern Access work. For this reason this work should be completed within the medium term.