

## 4. Transport Strategy Major Projects

In support of the future main road network identified, a number of major projects have been proposed. An assessment of the likely timing of these projects has been undertaken to identify those required in the short, medium and long term. These are summarised in the figure and text below with further intersection details shown in the appendices.

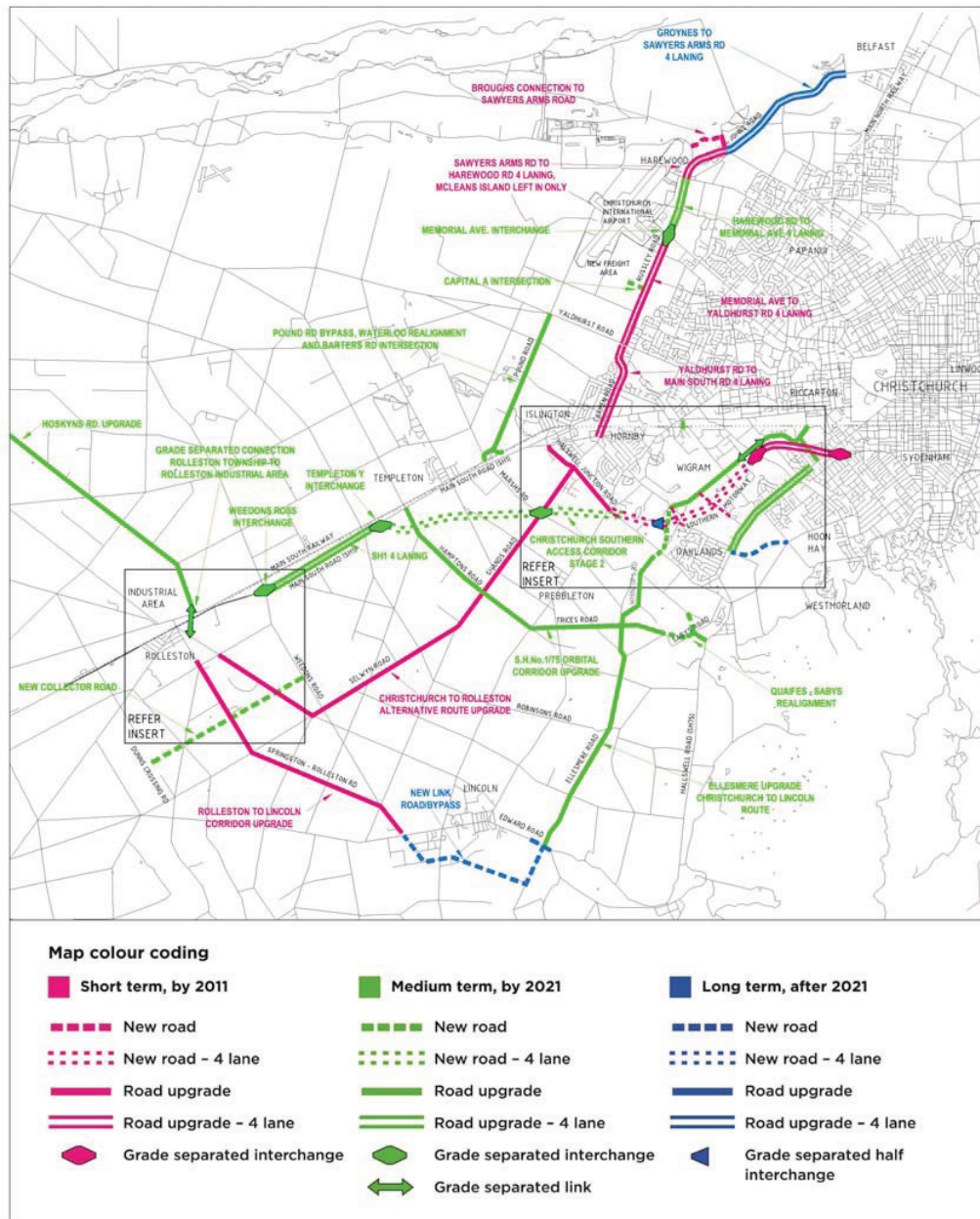


Figure 4  
Transport Strategy Staging and Timing Diagram

### Christchurch Southern Access Corridor (Stage I) – Christchurch Southern Motorway, Barrington to Halswell Junction / Main South

This has been assumed as a Do Minimum work for the area. Duplication of the existing Christchurch Southern Motorway between Barrington Street and Curletts Road. Four lane extension of the Southern Motorway west of Curletts Road to Halswell Junction Road / Springs Road roundabout and upgrading of Halswell Junction Road north to

Main South Road. Local road overbridges at Nash Road and a realigned Awatea / Dunbars Road. Major interchanges at Barrington Street and Curletts Road. Other supporting arterial network improvements (see south west Christchurch map).

#### **Christchurch Southern Access Corridor (Stage II)**

Four lane extension of the Christchurch Southern Motorway south west from Halswell Junction Road / Springs Road intersection to connect to State Highway 1 about 2km south of Templeton, including intersection upgrades and closures. Major interchange at Marshs / Shands Roads intersection with no access at Springs / Halswell Junction Roads intersection. Possible south facing ramps around Awatea / Dunbars Road in the longer term.

#### **Belfast to Hornby Corridor**

Four-laning (with median) of Johns Road, Russley Road, Masham Road and Carmen Road from the vicinity of Groynes Drive to the Main South Railway Line (at Hornby) including intersection upgrades, closures and access restrictions. Development of a state highway bypass of Hornby via Yaldhurst Road and Pound Road to rejoin Main South Road at an upgraded Barbers Road intersection, with associated realignment of Waterloo Road.

#### **Hornby to Burnham Corridor and Templeton Township**

Traffic through Templeton is reduced by a diversion to the proposed Christchurch Southern Access Corridor works. Main South Road (State Highway 1) through Templeton remains a state highway route and has no changes proposed except for new traffic signals at Barbers Road. This facilitates right turns into Templeton and provides for safe pedestrian crossing of State Highway 1. Four-laning (with median) of State Highway 1 from approximately 2km south of Templeton to a grade separated interchange at Weedons/Weedons Ross Road as the main access point into Rolleston (via Levi and Lowes Road) and the industrial area (via Jones Road). Retention of the existing passing lanes south of Weedons Ross/ Weedons Road and Hoskyns Road and a new service lane south of Hoskyns Road for access to the BP Service Station and Tennyson Street / Brookside Road. Replacement of the Rolleston Drive North and Hoskyns Road traffic signals at State Highway 1 at a time when they can not accommodate the required capacity with a separated grade access across State Highway 1 between the Hoskyns Road / Jones Road intersection and Rolleston Drive North including a proposed extension of Byron Street between Tennyson St and Rolleston Dr. This would then influence the timing of the interchange at Weedons/Weedons Ross Road. Development of a secondary local roading alternative route to State Highway 1 via Shands Road, Selwyn Road, and Lincoln-Rolleston Road, incorporating road upgrades and intersection priority changes.

#### **Lincoln, Prebbleton and Tai Tapu to Christchurch Corridors**

The aim is to reduce future traffic growth on Springs Road through Prebbleton Township. This includes

1. The promotion of a route between Lincoln and Christchurch that uses:
  - Improvements to Ellesmere Road, Longstaffs and Whincops Road to Halswell Junction Road to create a district arterial route
  - An upgrade and modification of Wigram Road between Halswell Junction Road and Dunbars / Awatea Road (then extended to Blenheim Road via Wigram Road, Magdala Place, Birmingham Drive and Matipo Street; see south-west Christchurch map).
2. Improvements to Hamptons Road, Trices Road and Candys Road to provide an orbital route between Templeton (SH1), Prebbleton and Halswell (SH75) and onto southern Christchurch via Sparks/Frankleigh/Milton Roads. Birchs Road is to be reconfigured to provide a public transport route and off-road cycleway (Part of Christchurch to Little River Rail Trail constructed in 2006). No significant improvement between Tai Tapu and Halswell, but four-laning of Halswell Road (SH75) and Lincoln Road from Dunbars Road to Wrights Road, to strengthen its use as a passenger transport corridor, (see south west Christchurch map).
3. Removing access to the Southern Motorway at Halswell Junction/Springs Roads when the Southern Motorway is extended to State Highway 1 south of Templeton and providing a full interchange at Shands/Marshs Roads intersection which will attract traffic to use Shands Road in preference to Springs Road to access the central city and beyond.

### **Rolleston to Lincoln Corridor**

Upgrading of Springston-Rolleston Road including intersection priority changes to provide a district arterial roading connection between Rolleston and Lincoln. Upgrading of Weedons Road and Weedons Ross Road (from State Highway 73 at West Melton and beyond to the Old West Coast Road) to provide an north/south arterial connection to the proposed interchange on State Highway 1. Lincoln Rolleston Road and Boundary Road promoted as a cycle route from Rolleston to Lincoln, connecting with cycling facilities on Birchs Road.

## Rolleston

Promotion of inner ring road (Rolleston Drive) and outer ring road (Weedons Road, Levi Road, Lowes Road, Dunns Crossing Road, Walkers Road, Two Chain Road, Jones Road and Weedons Ross Road) with associated road and intersection upgrades. Main access to Rolleston via a new Weedons/Weedons Ross Road interchange on State Highway 1. Upgrading of Hoskyns Road from Jones Road to State Highway 73, for access from the west to both Rolleston industrial area and Rolleston Township. Provision for a new collector road (would only come about through new subdivisional development that would occur to the south of Rolleston if additional land was rezoned) and at Rolleston Drive South between Brookside Road and State Highway 1 (currently under construction). Byron Street extended to connect Tennyson Street and Rolleston Drive north. Upgrading of Springston Rolleston Road and Lincoln Rolleston Road as part of arterial roading provisions connecting to Lincoln and south of Christchurch respectively. Retention of the existing passing lanes along State Highway 1 south of Weedons/ Weedons Ross Road and provision of a new service lane south of Hoskyns Road for access to the BP Service Station and Tennyson Street / Brookside Road.

Linking of Rolleston Township and the industrial area by replacing the Rolleston Drive North and Hoskyns Road traffic signals at State Highway 1, with a grade separated access across State Highway 1 between the Hoskyns Road / Jones Road intersection and Rolleston Drive North including the proposed extension of Byron Street.

Restricted access of local roads and streets to State Highway 1 at various locations (closures or left in/out).

Realignment of Two Chain / Jones Road at Railway Road and construction of rail crossing control.

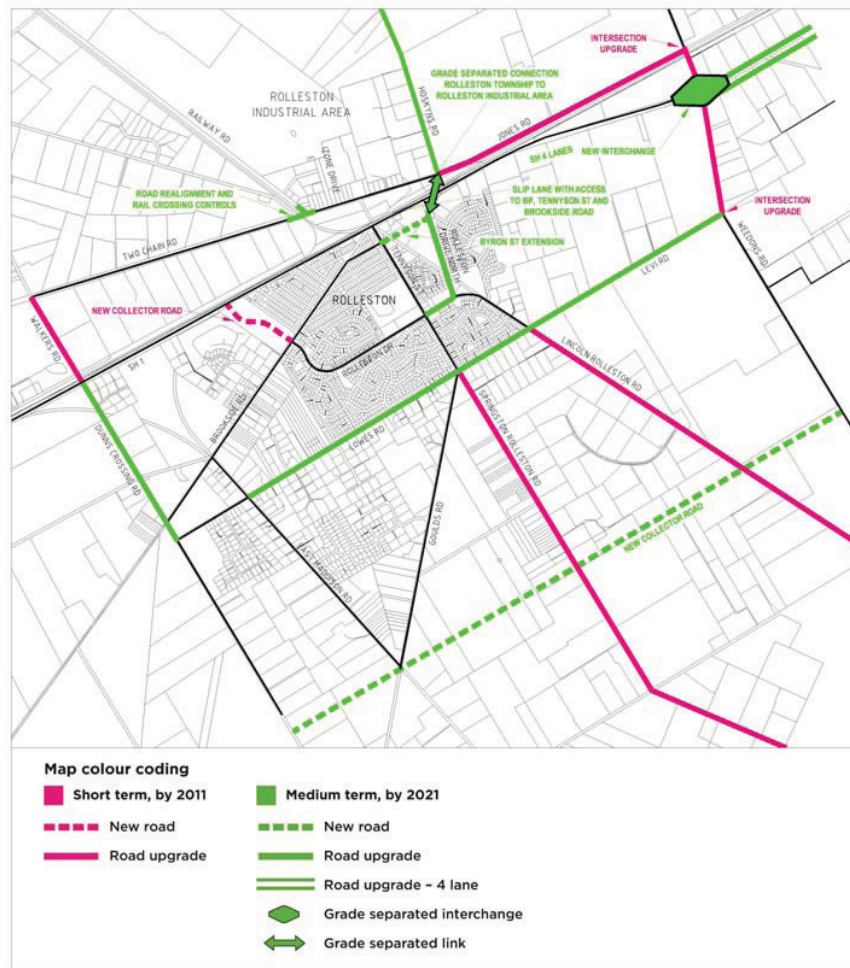


Figure 5  
Rolleston Township



### Christchurch International Airport

- The main entrance to the airport would be via a grade separated interchange at the intersection of Russley Road and Memorial Ave. This would require Wairakei Road and Avonhead Road to be closed or revert to left in/left out,
- Harewood and Sawyers Arms Roads provide arterial access to the state highway,
- McLeans Island Road from State Highway 1 would be left-in traffic only from the south and Broughs Road would be upgraded and extended to provide a new link between McLeans Island Road and Sawyers Arms Road for all other traffic,
- A proposed airport freight area south of Memorial Avenue would be served by the interchange and a new road (called Capital A Road).

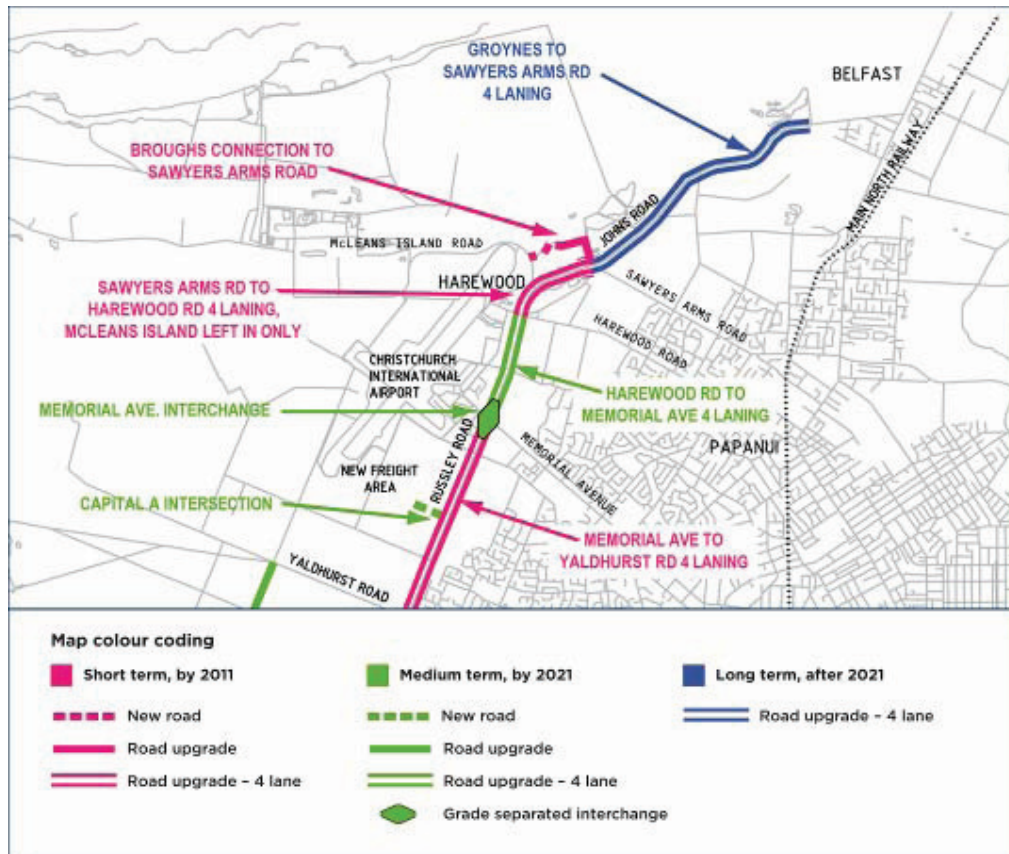


Figure 6  
Christchurch International Airport

### South West Christchurch

The Christchurch Southern Motorway scheme has been revised to exclude access at Awatea / Dunbars and Nash Road. Analysis shows that when these accesses are provided the motorway becomes overloaded east of Curletts Road and upstream on Brougham Street. By restricting local access the motorway can fulfil its strategic function into the future, while local travel demand is facilitated through the urban arterial network, public transport, walking or cycling.

A summary of the proposed land transport system for southwest Christchurch is shown below.

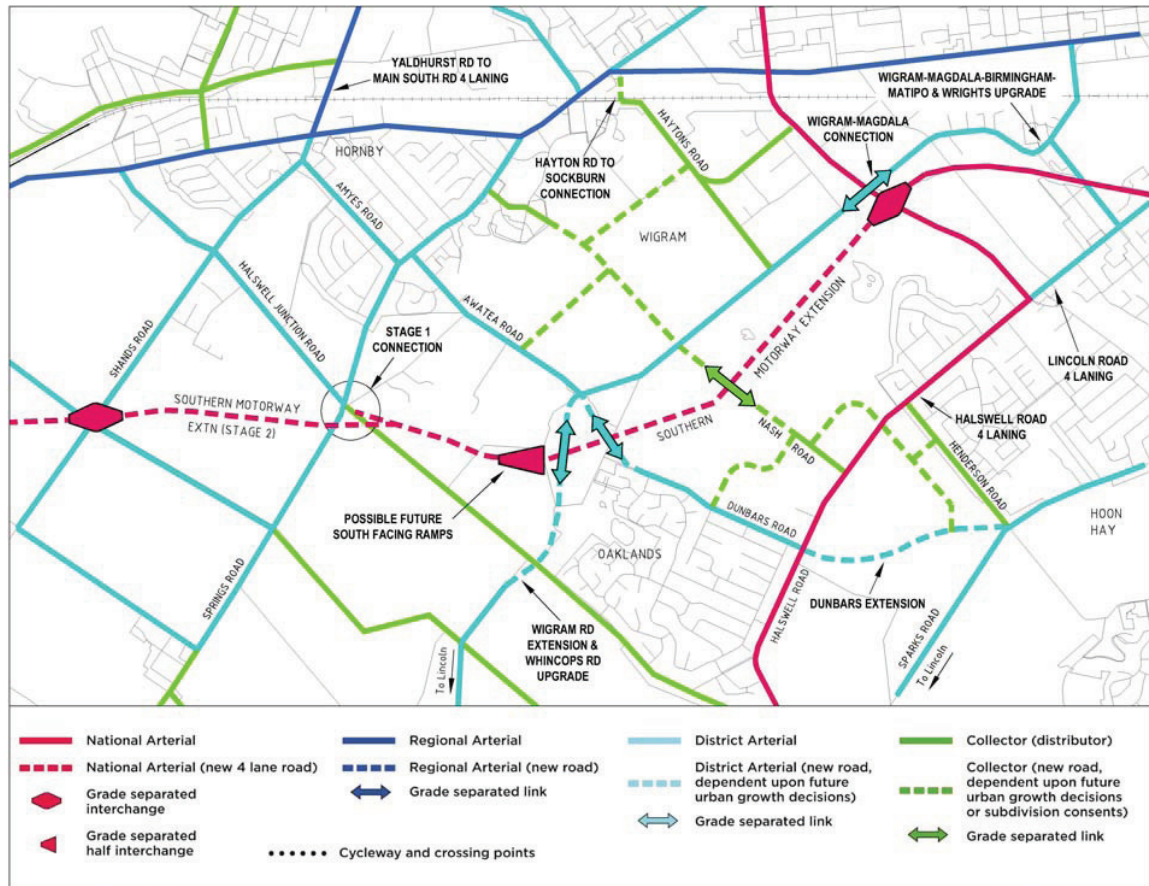


Figure 7.  
Christchurch Southern Motorway Duplication and Extension (Stage 1)

#### Christchurch Southern Motorway Duplication and Extension (Stage I)

(already planned):

- Duplication of the existing Christchurch Southern Motorway (Barrington Street to Curletts Road),
- Four lane extension of the motorway to Halswell Junction Road,
- Improvements along Halswell Junction Road till it rejoins Main South Road at new traffic signals,
- Major interchanges at Barrington Street and Curletts Road,
- An upgraded roundabout at Springs Road / Halswell Junction Road,
- Intersection improvements at Halswell Junction Road / Shands Road,
- Motorway underpasses at Awatea / Dunbars and Nash Road (Aidanfield Drive) to connect with Wigram Road,
- Various walk / cycle crossing points and a cycleway along the corridor.

#### Christchurch Southern Motorway Extension Stage 2 (medium term):

- Four lane extension of the motorway beyond Springs Road / Halswell Junction Road to south of Templeton,
- Major interchange at Shands / Marshs Roads,
- Removal of motorway access at Halswell Junction Road / Springs Road,
- Possible south facing ramps in the vicinity of Awatea / Dunbars Roads in the long term.

### **Orbital Arterial Roads**

- Amyes Road - Awatea Road - Dunbars Road upgrade (medium term),
- Extension of Dunbars Road south-eastwards to the Sparks / Hendersons intersection (long term, dependent upon future growth decisions).

### **Radial Arterial Roads**

- Springs Road, improvements to intersections (short term),
- Shands Road, road and intersection upgrades as part of the development of a secondary local roading alternative route to State Highway 1 including Selwyn Road, and Lincoln-Rolleston Road as part of the Hornby to Burnham corridor package of works. (short term). Full interchange planned at Shands/Marshs Roads for access to Southern Motorway Extension.
- Upgrade of existing parts of Wigram Road (medium term),
- Wigram Road extension north-eastwards for Lincoln, Halswell and Wigram development traffic (medium term) via:
  - grade separated link (over Curletts Road) to Magdala Place,
  - upgrade Magdala Place, Birmingham Drive and Matipo Street (to link with Blenheim Road) and Wrights Road (to link with Lincoln Road).
- Wigram Road extension south-westwards for Lincoln and Halswell development traffic (medium term), via:
  - new roundabout with Awatea Road,
  - grade separated link (over new Southern motorway) realignment of Wigram Road to Whincops Road and the route to Lincoln via Whincops, Longstaffs and Ellesmere Road.
- Halswell Road (SH75),(medium term) upgrade to four lanes with public transport priority between Dunbars Road and Curletts Road, including:
  - traffic signals at Dunbars Road (already planned) and new Aidanfield North connection,
  - give way and stop controlled intersections at other side road intersections with u-turn facilities where intersection movements are restricted.
- Lincoln Road, (medium term) upgrade to four lanes with public transport priority between Curletts Road and Wrights Road including:
  - give way and stop controlled intersections at other side road intersections with u-turn facilities where intersection movements are restricted.

### **Other features** (medium to long term, dependent upon future urban growth decisions)

- New link paralleling Hendersons Road connecting to the proposed traffic signals at the Aidanfield north connection with Halswell Road,
- Radial and orbital collector roads within the proposed Wigram development area,
- Hayton Extension across the railway line to connect with Alloy Place at the Sockburn roundabout.

**Note:** The possible staging and timing of the Transport Strategy Projects is based on a more strategic technical analysis only. It is up to the partner agencies to further investigate at project level feasibility and establish funding and identify timelines for the completion of the projects.

The overall cost of the improvements proposed in the Transport Strategy is estimated to be in the order of \$230 million dollars. This does not include the cost of the planned Christchurch Southern Motorway duplication and extension project (Stage 1).