Appendices

Appendix 1. Summary of changes to projects in the present 2015 – 2021 RLTPs

This list also includes projects that are proposed to be abandoned, suspended or varied, in this update of the RLTPs.

Table 13: Southland changes to projects in the present 2015 – 2021 RLTP

Organisation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
Activity Class 12 - New and Improved Infrastructure Local Roads						
ES	Minor improvements 2015-18	To complete and advise the industry of the network of stock truck effluent sites in southern NZ, thus minimising the spillage of stock effluent onto roads, and the resultant road safety risk and environmental pollution.	1	Funding approved	Not applicable	
GDC	Bridge Replacement	Replace Pyramid Bridge to maintain a safe and economic crossing of the Mataura River on this existing route.	1	Detail Business Case Approved. Construction not approved	No	Construction should be approved in 2017/18, so this project would be committed.
SDC	Alternative Scenic Route Seal Extension	Seal extension along the scenic route Haldane-Curio Bay Road to achieve the following benefits: Enhance the ability to upgrade the area's status to Gateway (55%). Reduce number and seriousness of crashes (5%). A greater ability to maximise maintenance investment across the region (40%).	1	Construction Approved	Not applicable	Scheduled to be completed in 2017/18
SDC	Mararoa River Bridge	Replacement of a nine-span single lane wooden bridge to ensure continued access to two major stations and a conservation area used by hunters, trampers and anglers.	3	Not included in 2015/18 NLTP	No	Abandoned

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
Activity Class 13 - New and Improved Infrastructure State Highways						
NZTA	Edendale Realignment	Bypass of Edendale Township. There are issues with variations in the speed limits through the Edendale township and a horizontal curve with an intersection located on the apex and an adjacent level crossing within a short section of highway. Additionally, an expansion of Fonterra's plant will generate additional traffic, which will travel past residential properties and a school. The project will provide a by-pass to the township with appropriate connections to the Fonterra plant. Fonterra will provide financial contribution to this project in kind. The project will improve safety for vehicles from head on and turning crashes and reduce travel time.	**1**	Included in 2015/18 NLTP. Construction Not Approved	Yes	
NZTA	Elles Road Roundabout	Realign highway approaches to existing intersection. Replace priority control with roundabout. Extend Lake Street to become fourth leg of roundabout. Objective of project is improved safety for all road users. Reduction in crashes and the severity of crashes that are unavoidable. Improved access to commercial/industrial premises.	1	Detail Business Case Approved	Yes	
NZTA	Falls Creek Bridge Widening	This is a single-lane bridge on which tourist buses stop to enable viewing of Falls Creek and Christie Falls, with no real edge protection, just sight rails. The project will replace the existing one-lane bridge with a new two-lane bridge, widen the approaches and provide a separate pedestrian walkway. Objective(s) are to improve (i) safety for vehicles from head on crashes (ii) safety for tourists on bridge and (iii) reduce delays.	**1**	Not included in 2015/18 NLTP	No	Varied - This project is now being delivered under the Visiting Driver Signature Project which has funding committed for 2017/18.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Invercargill - Moto Rimu Rd Safety Improvements	Safer Journeys - Roads and Roadsides. Various activities to address crash types which may include wide centreline, safety barrier, ATP and intersection improvements and closures. Objectives are improved safety for all road users, and reduction in crash rates and severity of crashes.	**2**	Not being delivered in 2015/18. No longer fits funding requirements	No	Varied - This is no longer a State Highway improvement activity and will be delivered as a Low Cost/Low Risk activity.
NZTA	Longbush - Invercargill Safety Improvements	Safer Journeys - Roads and Roadsides. Various activities to address crash types which may include wide centreline, safety barrier, ATP and intersection closures. Objectives are improved safety for all road users, and reduction in crash rates and severity of crashes that are unavoidable.	**2**	Not being delivered in 2015/18. No longer fits funding requirements	No	Varied - This is no longer a State Highway improvement activity and will be delivered as a Low Cost/Low Risk activity.
NZTA	Mataura Intersection Improvement	Rail line parallel with SH1 at the intersection of SH1 & SH93. Trucks from SH93 are unable to pull up to the limit line to confirm it is safe to turn left into SH1 without straddling rail line. Install merge bay on SH1 for left turning traffic. Objectives are improved safety for road and rail users. Improved amenity for residents.	**2**	Not on 2015/18 approved programme	No	Varied - This is no longer a State Highway improvement activity and will be delivered as a Low Cost/Low Risk activity.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Milford Rockfall/Aval-anche Protection	Realignment to avoid avalanche path on eastern approach to Homer tunnel. Relocation of visitor attraction/stopping location. High velocity catch fencing at two locations. Objectives are improved safety for users and resilience of a key tourism route. Fewer highway closures will lead to a reduction in losses for tourism operators. Avalanche risk management will remain an on-going issue based on climatic conditions. Current solution is to relocate stopping areas away from avalanche path.	1	Not on 2015/18 approved programme	Yes	
NZTA	Visiting Driver Signature Project - Southland	Safety improvements for tourist drivers on the Southland section of the Queenstown - Milford Sound route including ATP, pull-off areas and barriers. This aims for a reduction in tourist driver related crashes and, where these cannot be avoided, a reduction in their severity. Consistency in the application of safety measures on major routes through Southland which provide key links to the adjacent region of Otago.	1	Funding approved	Yes	
NZTA	Wilsons Crossing Passing Lanes	Construction of staggered passing lanes Lochiel (southbound), Wilsons Crossing (northbound). Year 1 - earthworks, drainage, subbase. Year 2 - basecourse, surfacing. This passing lane project is situated within an undulating section of SH6 with poor passing opportunities; traffic volumes > 6400 vpd; increasing commuter and heavy traffic for the port. Objective(s): the project will provide (i) a safe passing environment while at the same time (ii) reducing travel time and (iii) vehicle operating costs.	3	Not included in 2015/18 NLTP	No	Suspended - This project has been reprioritised in the 10-year State Highway Programme beyond the 2018-21 period.

Table 14: Otago, changes to projects in the present 2015 – 2021 RLTPs

Organisation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
Activity Class 3 – Walking and Cycling						
DCC	Central City Transport Hub	The ORC is planning a Central City Bus Hub. This project is to enhance the bus hub to provide centralised facilities for other transport modes such as walking, cycling, taxis and intercity buses / coaches. It is part of the Central City PBC.	4	Probable	No	Varied - any work required to accommodate other modes will be undertaken by ORC through their Bus Hub project, or through the DCC Low Cost/Low Risk programme, as appropriate.
DCC	Central City and NEV Cycle Network	Provision of a cycle network for the central city and North East Valley. This is part of a programme business case.	1	Indicative Business Case Approved	No	Varied - part of this activity will be completed in 2017/18, part is included in the Dunedin Urban Cycleways project included in the 2018-21 programme.
DCC	Strategic Cycle Network - Mosgiel	Provide local cycle network in Mosgiel. This will be part of a programme business case to be developed in 2017/18.	4		No	Varied - this activity will be included as appropriate in the Dunedin Urban Cycleways and the Mosgiel Town Centre and Arterial Routes projects.
DCC	Tertiary Precinct	Upgrade to streets surrounding University of Otago and Otago Polytechnic Campuses, to improve safety and accessibility by foot and cycle.	3		Yes	Varied - name changed to Tertiary Precinct Improvement Project and included in the 2018/21 programme.
NZTA	Dunedin One Way Pair Cycle Lanes	In Dunedin, to establish separated cycle lanes on t one-way SH1 routes through the central city. To improve road safety for cyclists; provide a safe route choice for cyclists, facilitate adoption of cycling as a safe and practical choice for inner city transport, and integrate with the wider city cycling network. While this could be implemented as a standalone project, it integrally contributes to a wider inner & city network. Also, the Dunedin City Council is proposing to set up a project covering the central city area (i.e. that would be the programme for which this is an initiative).	1	Funding approved	Not applicable	

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	SH88 Cycling and Pedestrian Facilities	SH 88 cycling and pedestrian facilities.	1	Funding approved for property only (at this point in time)	No: see comment	Varied - now to be delivered under the Dunedin - Port Chalmers Safety Improvements project (which is listed under Activity Class 13).
WDC	Walking and Cycling Oamaru to Pukeuri 2015/16	This is a separated cycleway on SH1 from the north end of Oamaru to the Pukeuri Alliance meat works located on the west side of the road carriageway. The objective of this project is to provide a separated cycling track off SH1 from Oamaru's north end boundary to the Pukeuri Alliance meat works, which will allow cyclists to commute to and from work in safety without death or serious injury.	4	Not included in 2015-18 NLTP	No	Varied - included in Low Cost/Low Risk projects for 2020/21.
Activity Class 4 – Public Transport Services						
ORC	Wakatipu Public Transport Improvements	Objective is to increase patronage in this network through route, service and fare changes.	1	Funding approved; improvements underway	Not applicable	Also, NZTA has approved ($150,000) funding for detailed business case preparation in 2017/18.
Activity Class 12 - New and Improved Infrastructure Local Roads						
CDC	Streetlight LED upgrade	Conversion of streetlights in the district's townships to LEDs.	3	Funding approved 2017/18	No	
CDC	Seal Extension of The Nuggets Road	The objective is to provide a safe and quality experience for visiting drivers using the route to the Nuggets by sealing the Nuggets Road.	1	Complete	Not applicable	
DCC	Central City Safety and Accessibility Upgrade	Safety and accessibility upgrade of Dunedin's central city and North Dunedin area.	1	Indicative Business Case Approved	Yes	Varied - name changed to Central City Upgrade and included in the 2018-21 programme.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
DCC	Eastern Bypass	Improvements to the efficiency and design of the freight bypass between SH1 in Andersons Bay and SH88 to Port Otago. This is part of the programme business case.	1	Indicative Business Case Approved	No	Suspended - investigation and data collection will be carried out, prior to confirming the scope of this project.
DCC	Mosgiel Safety and Accessibility Upgrade	Improve safety and accessibility in Mosgiel town centre. It will covered by a programme business case.	2		No	Varied - name changed to Mosgiel Town Centre and Arterial Routes projects and included in the 2018-21 programme.
DCC	Peninsula Roading - Portobello Road	Roading improvement works on Otago Peninsula as detailed in the city's Integrated Transport Strategy Project to secure sea wall protection, enable sustainability for sea level rise effects and security of tourist route, maintain connectivity of communities, reduce accident rate, improve travel time and enable safe separation of vulnerable road users with increasing demand volumes.	1	Construction Underway	Not applicable	
DCC	Phase 4 Peninsula Roading - Harrington Point Rd	Roading improvement works on Otago Peninsula as detailed in the city Integrated Transport Strategy Project to secure sea wall protection, enable sustainability for sea level rise effects and security of tourist route, maintain connectivity of communities, reduce accident rate, improve travel time and enable safe separation of vulnerable road users.	1	Funding approved	Not applicable	
DCC	Strategic Corridors: Warehouse Precinct Accessibility (SH1)	The project is part of the Strategic Corridors package which assessed existing and future requirements for the movement of goods, services and people, including the corridor demands of major traffic generators. Revitalisation of the harbourside area and permeability across the rail corridor to the Central Activity Area (CAA) were also considered. Dunedin is an origin or destination for most vehicle movements travelling within the city. The One-Way Pair (SH1) is required to serve the access function equally as well as mobility or through movement.	2	Project not started. Programmed for 2021-23	No	Suspended - investigation and data collection will be carried out, prior to confirming the scope of this project.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
DCC	Street Light Renewal With LED	Renewal of street light luminaires with LED as existing ones reach the end of life.	2	Not approved to date	Yes	Varied - name changed to LED Streetlight Renewal and included in the 2018/21 programme. Funding approval being sought in 2017/18.
ORC	Stock truck effluent disposal facilities	Installation of two facilities in Central Otago		Funding approved	Not applicable	Construction to commence in early 2018.
QLDC	Eastern Access Road	Eastern Access Road (now known as Hawthorne Drive).	1	Funding approved	Completed	
QLDC	Frankton Flats Programme Business Case Implementation	This project is a placeholder for new works anticipated to arise from the completion of the Frankton Flats programme business case. This project is part of the Frankton Flats Programme Business Case. This work is being undertaken this financial year (2014/15).	1	Funding approved	Not applicable	
QLDC	QLDC streetlight LED conversion project	Replacement of street light luminaires with LED in the district's townships.	3	NZTA has approved up to $2M funding in 2017/18	No	QLDC may seek a cost scope adjustment in 2018/19 (for another $1M funding), if the enhanced FAR rate for this work is extended to 2018/19.
QLDC	Queenstown Town Centre Programme Business Case Implementation	Implementation of transport interventions recommended by the Queenstown Town Centre Programme Business Case, to be completed by February 2014.	3		No	Varied - Project has been split into a number of combined transport initiatives for the Queenstown network.
QLDC	Wanaka Programme Business Case Implementation	Implementation of the transport interventions emanating from the Wanaka Programme Business Case, which is presently being developed.	3	Proposed	No	Varied - Project now included as wider Wanaka Transport Business Case.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
WDC	Harbourside Projects 2015/18	An extract from the Oamaru Harbour Development Strategy: "Roads within the harbour will service commercial requirements and support business, tourism and connectivity. Shared space between pedestrians and vehicles will be enabled. Speed limits will be restricted to support pedestrian, penguin and port user safety."	**3**	Not included in 2015-18 NLTP	No	Variation - included in Low Cost Low Risk projects for 2019/20.
WDC	Street Light Upgrade 2016-2018	Renewal of street light luminaires with LED as existing ones reach the end of life	**3**	Funding approved	Not applicable	Construction - installation to be fully complete by 31 December 2018.
WDC	River Training 2015/18	River training is required at these two locations to ensure the river flows freely under existing bridges. The objective is to complete river training works at these two locations so the rivers are free flowing and do not cause extensive damage to the bridge or road infrastructure.	**3**		No	Variation - included in Low Cost/Low Risk projects for 2020/21.
Activity Class 13 - New and Improved Infrastructure State Highways						
NZTA	Albert Burn Bridge Replacement	Replacement of a vulnerable existing narrow bridge on poor vertical alignment with an HPMV capable structure. Load limitations currently force trucks to cross at the Luggate Bridge, which is increasing the maintenance costs of this structure. Objectives are: improved freight efficiency, improved resilience, improved vertical alignment by raising the bridge to lessen the severity of the dip and reduce driver surprise, reduced traffic and therefore loading on the Luggate Bridge, resulting in lower maintenance costs.	**5**	Not applicable	No	Suspended - This project has been reprioritised in the 10 year State Highway Programme beyond the 2018-21 period.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Andersons Bay Rd/Caversham Motorway	Improvements to the intersection of Andersons Bay Rd and Caversham Motorway to improve efficiency for freight using the local arterial by-pass to access Port Otago. Current alignment requires deviation in the opposite direction of travel. Traffic signal control of approach and circulating flow. There is a by-product of improved safety and congestion relief on the Dunedin one-way network.	1	Not included in 2015-18 NLTP	No	Varied - This project has been programmed to align with the reprioritisation of the DCC's Eastern Bypass project which is now beyond the 2018-21 period.
NZTA	Beaumont bridge replacement	Replacement bridge and approach realignment. An aging bridge, which has reached the (next 1 to 5 years) end of its economic life. The project proposes to replace the existing structure with a new two-lane bridge. The project will ensure a resilient and secure transport network and reduce delays.	3	Funding approved for development of the detailed business	Yes	
NZTA	Big Kuri Creek Flood Mitigation	Regular flooding at Big Kuri Creek bridge due to aggradation of river bed. Raise approaches and bridge deck to clear peak flood levels. Objectives are improved highway corridor resilience with fewer or no road closures during storm events reliable freight movement with little or no delays, reduced maintenance costs through construction of a pavement less susceptible to inundation by floodwater.	3	Proposed	No	Varied - The flood mitigation works are now consented as an ongoing maintenance activity and therefore this improvement project is no longer required.
NZTA	Cromwell Intersection Improvement	SH6 and SH8B fatal crash site. Separated left turn lane has improved safety but may require further improvement. Objectives are improved safety for all road users, and a reduction in crashes and the severity of unavoidable crashes.	5	Start year outside of 2015-18 RLTP	No	Suspended - This project has been reprioritised in the 10 year State Highway Programme beyond the 2018-21 period.
NZTA	Deborah Realignment	Realign the road to a 100 km/h design speed over the railway line by lowering the railway line 5.1m and installing a new 76m culvert railway underpass on the new alignment. Reverse curves cause driver surprise and pose a crash hazard, particularly with respect to HCVs, which is exacerbated in wet conditions. The project proposes to undertake a realignment of the railway line and highway to eliminate driver surprise and improve network resilience. Objective of the project is to improve safety for motorists.	2	Not included in 2015-18 NLTP	No	Suspended - This project has been reprioritised in the 10 year State Highway Programme beyond the 2018-21 period.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Dunedin - Fairfield Safety Improvements	Infill of wire rope side barriers and other improvements to create safer and more forgiving roadsides. Objectives are improved safety for all road users and a reduction in crash rates and severity of unavoidable crashes. A by-product will be fewer highway closures as a result of crashes.	2	Funding approved	No	Due for completion 2017/18
NZTA	Grant Rd to Kawarau Falls Bridge Improvements	Capacity issues, widening, urbanisation and intersection improvements. Work necessary to compliment development projects in the area including improvements for pedestrians, lighting, widening and utility integration. Includes surrounding projects for Glenda Drive, Frankton BP R/A Improvements and BP R/A to Kawarau Falls Bridge Corridor Improvements. Objectives are reduced congestion, improved use of existing corridor, and improved customer experience.	1	Funding approved	Not applicable	
NZTA	Hilderthorpe Straight Flood Mitigation	Flooding at various locations from surface water run-off during heavy rainfall resulting in road closures. Flood-prone areas include McEneaney passing lanes, 45th Parallel, Hilderthorpe Floodway, Hilderthorpe Rd and Wai-iti Park. Significant drainage work required. Objectives are improved highway corridor resilience with fewer or no road closures during storm events, reliable freight movement with little or no delays, safer highway for motorists with less potential for surface flooding along the corridor, and reduced maintenance costs through construction of a pavement less susceptible to inundation by floodwater.	1	Start year outside of 2015-18 RLTP	No	Varied - This project has been reprioritised in the 10 year State Highway Programme beyond the 2018-21 period.
NZTA	Katiki Erosion Protection	Coastal erosion along Katiki straight. Currently being monitored but requires a long-term solution. Objectives are improved highway corridor resilience to storm events, reliable freight movement with little or no delay, and reduced pavement maintenance costs through improved coastal protection and shoulder support.	3	Funding approved	Not applicable	Due for completion 2017/18

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Enhanced Network Resilience Otago	Improve resilience of SH network addressing bridge deficiencies, rock fall/slips risk areas, flood prone areas and coastal erosion	3	Not included in 2015-18 NLTP	No	Abandoned - This was a "placeholder" activity which has been replaced by site specific resilience activities.
NZTA	Ladies Mile Corridor Improvements	Capacity and safety issues related to Howards Drive, which is the only access to the Lake Hayes Estate residential development. Development down Stalker, Lower Shotover and Tucker Beach Rds requires corridor and access improvements. Further population growth predicted for the area. Objectives are reduced congestion, improved use of existing corridor, improved customer experience, and journey time reliability.	3	Funding approved for development of the detailed business for Tuckers Beach Road intersection improvement	Yes	
NZTA	Maheno Flood Mitigation	Prone to flooding from the Kakanui River resulting in road closures with no logical commercial vehicle detour. Approximately 300m of highway needs to be raised by up to 500mm with large diameter culverts installed to provide resilience to flood events. Objectives are improved highway corridor resilience with fewer or no road closures during storm events, reliable freight movement with little or no delays, safer highway for motorists with less potential for surface flooding along the corridor, and reduced maintenance costs through construction of a pavement less susceptible to flood inundation.	1	No Approvals to date	No	Varied - This is no longer a State Highway improvement activity and will be delivered as a Low Cost/Low Risk activity.
NZTA	Mosgiel - Balclutha Safety Improvements	ATP infill to encourage lane discipline on a highway with challenging geometry. Additional treatment as required. Part of the Safer Journeys - Roads and Roadsides business case. Objectives are improved safety for all road users, reduced crash rates and severity of unavoidable crashes, improved network efficiency and resilience with fewer highway closures as a result of crashes.	2	Funding approved	Not applicable	
NZTA	Nevis Bluff Rockfall Protection	Additional to the ongoing work, a capital project is needed. International peer review recommends staged physical catch fences. Objective is improved safety for users and resilience of this key route.	1	No Approvals to date	Yes	

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	North Oamaru Corridor Improvements	Possible re-allocation of road space with removal of cycle lanes and provision of quiet street detours for cyclists. Intersection improvements. Objectives are improved safety for all users, improved efficiency for people and goods on main highway corridor with improved access for residents from side roads, and improved amenity for residents.	3		Yes	
NZTA	Oamaru - Dunedin Safety Improvements	Installation of wire rope barrier and ATP in high risk areas along the highway corridor. Part of the Safer Journeys - Roads & Roadsides business case. Objectives are improved safety for all road users and a reduction in crash rates and severity of unavoidable crashes. A by-product of safety improvements is improved network efficiency and resilience with fewer highway closures because of crashes.	3	Funding approved for development of the detailed business	Yes	
NZTA	Pine Hill Rd/Great King St Intersection Improvements	Identified as one of the 100 high risk intersections in NZ. Restricted visibility from priority controlled intersection located at base of a steep incline. Consideration of an improved at grade solution required. Improved safety for all intersection users by potentially signalising with pre-warning amber signals located prior to the George St over bridge and installation of a downhill crawl lane for heavies. Priority phasing may be given to heavy vehicles using the crawl lane to ensure the intersection is clear. This should mitigate the risk of conflict at the intersection. Part of the Safer Journeys - Roads & Roadsides business case.	1	Proposed	Yes	Delayed - Now included in 2018-21 implementation programme.
NZTA	Roaring Meg Bridge Widening	Narrow bridge on poor alignment. Widening of one side needs to be progressed. Objectives are improved safety for all motorists and improved corridor resilience on an arterial route linking Queenstown with Central Otago region.	5	Not included in 2015-18 NLTP	No	Varied - This project has been reprioritised in the 10 year State Highway Programme beyond the 2018-21 period.

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	SH88 Safety Improvements	A Safe Roads Alliance project. Safer roadsides through combination of improved delineation (e.g. ATP markings); wire rope barrier, guardrail barrier. Nominally focus in areas of 80 km/h speed limit between Ravensbourne and Port Chalmers, and to protect from loss of control impact from entry into harbour, onto rail lines, into/over steep embankments.	1	Construction has not yet been approved / committed	No	Awaiting NZTA's funding decision.
NZTA	SH6A Corridor Improvements	Corridor improvements to relieve congestion, improve use of existing corridor, and improve customer experience with greater accessibility from side roads.	3	No approvals to date	Yes	
NZTA	St Andrews St Anzac Ave	Revise layout of existing signal controlled intersection to improve operational efficiency, especially for port-bound freight. Intersection complicated by adjacent rail line. By-product of improved safety and congestion relief on the Dunedin one-way network.	1	Not included in 2015-18 NLTP	No	Varied - This project has been programmed to align with the reprioritisation of the DCC's Eastern Bypass project which is now beyond the 2018-21 period.
NZTA	Stanley St Corridor Improvements	Main arterial link into Queenstown which doesn't cope with peak hour demand. Delays also occur due to the current roundabout configuration at the major intersections and a pedestrian crossing. Objectives are reduced congestion and associated driver frustration, improved and more reliable travel times, enhanced safety for pedestrians along the corridor, and improved visitor experience.	2	Not included in 2015-18 NLTP	No	Abandoned - This project has been replaced by the Queenstown Town Centre Arterial activity in the 2018-21 RLTP.
NZTA	Visiting Driver Signature Project Otago	Safety improvements to the Otago network for tourist drivers on key links: Queenstown - Milford (Otago section), Queenstown - West Coast, Queenstown - Christchurch (Otago section), ATP, pull-off areas and barriers. Objectives are a reduction in tourist driver related crashes and, where these cannot be avoided, a reduction in their severity. Also, consistency in the application of safety measures on major routes through Otago which provide key links to the adjacent regions of Canterbury and the West Coast.	1	Funding approved	Not applicable	

Organis-ation Name	Project Name	Project Description and Objective	Regional Priority 2015-18	Status at October 2017	Included in 2018/21 Programme?	Comment
NZTA	Waikouaiti Flood Mitigation	Highway prone to flooding from the Waikouaiti River between the Waikouaiti River bridge and Karitane turn-off. Possible solution to overlay and raise highway by up to 700mm requiring installation of large diameter culverts. Objectives are improved highway corridor resilience with fewer or no road closures during storm events, reliable freight movement with little or no delays, safer highway for motorists with less potential for surface flooding along the corridor, and reduced maintenance costs through construction of a pavement less susceptible to inundation by floodwater and erosion from the adjacent river.	1	Proposed	No	Varied - This is no longer a State Highway improvement activity and will be delivered as a Low Cost/Low Risk activity.
NZTA	Waitati Curve Realignment	Realign curve to 550m radius, relocate Blueskin store and SH1: Harvey Street Intersection. Curve very much out of context with adjacent commercial land use. The project will: (i) improve safety for vehicles (ii) reduce potential for roadside impact crashes (iii) reduce travel time and (iv) vehicle operating costs.	5	Not included in 2015-18 NLTP	No	Suspended - This project has been reprioritised in the 10-year State Highway Programme beyond the 2018-21 period.
NZTA	Weigh Right, Otago	Weigh in motion station. Designed to support weight compliance in the heavy truck fleet. Involves enhancing existing weigh bridges with Weigh in Motion and Automatic Number Plate Recognition. Provides for the selection of vehicles which will directly increase the effectiveness of enforcement when matched with linked roadside, data analysis and investigative activity. Improved strategic siting of additional weigh bridges significantly increases the likelihood of an errant operator being prosecuted and should result in a higher level of compliance.	4	No Approvals to date.	Yes	

Appendix 2. Clarifying the appropriate role for each transport mode

This section explains the role the RTCs expect each mode of transport will play over the next three to ten years. This explanation is intended to guide the participating organisations as they implement those projects that NZTA decides to fund.

It is worth noting the transport needs for rural communities are different to those of urban ones and solutions need to be targeted to these different needs. This may require, in some instances, prioritising the value of the local roading network for light vehicle and heavy traffic over the more urban focus on public transport.

Freight – road, rail

Industrial, agricultural and commercial activity gives rise to freight on road and rail networks, both within the regions and inter-regionally. The volume of freight carried within and through Otago and Southland is expected to increase significantly during the outlook of this plan. In the short-term (at least), a large proportion of the regions' freight will continue to be moved on the road network. Good rural roading and state highway networks are therefore essential for the regions' economic development. Rural roads provide access to areas of primary production. Our local authorities face increasing challenges in maintaining rural roads appropriate for heavy vehicles transporting primary products, given the councils' small rating bases and the significant length of road network involved, much of it unsealed.

The state highway network has potential to handle additional volumes of freight. These plans recognise the importance of optimising the operational efficiency of this network for freight traffic. They also recognise that efficiencies are being gained from trucks being able to carry larger and heavier loads, and the need to ensure the roading network, including bridges, can accommodate this. Hubs to allow freight movement onto higher capacity vehicles will support this. This will be particularly important when oil supply shortages make it imperative to reduce fuel usage.

Rail freight is appropriate not only for the movement of high volumes of goods over long distances between key production and distribution nodes, but also for domestic freight over shorter distances. Rail freight will play a key role in the event of oil supply shortages. The strategic part of these plans envisage rail as an energy-efficient way of transporting bulk and containerised commodities along the east coast, including to and from the South Island's deepwater ports. Over the long-term, greater access to rail for commercial and industrial activities, as well as for primary production, will support further improvements to the rail network. Intermodal hubs allow freight carriers to switch modes to save costs and reduce carbon footprints, and will continue to play a role in the regions' transport networks.

Private motor vehicles and shared transport

For the past few decades, individuals in both urban and rural parts of Otago and Southland have relied on private vehicles for most trips due to the flexibility and convenience a car provides. Those living in small towns and rural areas are particularly reliant on private vehicles for access to key goods and services. These plans acknowledge that, because people in Otago and Southland are likely to continue to value high levels of mobility and freedom of individual mobility, many will continue to use the private vehicle as their primary mode of transport. Nevertheless, there is a need to gradually reduce reliance on private vehicles, particularly in urban areas, to contain roading costs and to build resilience. Changes in vehicle design are already taking place, such as electric vehicles and self-drive vehicles.

Presently, there are only a few public charging stations for electric vehicles in Otago and Southland. In the longer-term, alternative fuel powered vehicles may require supporting facilities and changes in the way the transport network is used.

These plans consider private vehicle use to be the most appropriate mode of transport over distances that cannot be easily cycled or walked, or in areas without any public transport services. (traditionally, that has been around 2 km for walking and 10 km for cycling, although recent indications are that journeys taken by these modes in NZ are lengthening). For urban areas, these plans seek to develop patterns of settlement and complementary transport systems that will enable, encourage and support people to reduce reliance on private vehicular travel, particularly for short trips. Some people living in rural areas and small towns will continue to rely on the private vehicle for necessary travel, and these plans therefore expect rural communities to have a high degree of self-reliance and self-organisation concerning transport.

The plans envisage that, if the price of oil-based fuels rise and/or transport fuels become scarce at times, people would make much greater use of shared transport using private or community-owned vehicles – whether formal arrangements such as RideShare or informal ones (e.g. neighbourhood ride sharing). In those areas where public transport is unavailable or low frequency, shared transport will fill an important role. There is also a shift happening in urban areas where younger generations are less reliant on the private motor vehicle.

The plans also aim to increase road safety for vulnerable road users, with several projects focusing on the safety of cyclists in particular.

Public passenger transport (scheduled/unscheduled services, taxis, shuttles, private hire)

The plans envisage public passenger transport continuing to play a vital role in supporting community well-being. As the regions' population ages, and with younger generations being less reliant on the private motor vehicle than many other population sectors, the role of public passenger transport and shared transport will grow. New technologies e.g. Mobility as a Service, and new forms of transport e.g. Uber. are changing the nature of public passenger transport.

In busy areas such as Queenstown, scheduled bus services play an important role in easing the current and projected congestion, aided by use of the Mobility as a Service app. Gradually reducing reliance on private motor vehicles is requiring significant investment over time in public transport services and infrastructure, from both the public and the private sectors.

As well as these Wakatipu Basin services, public transport bus networks also operate in Dunedin and Invercargill. Recent improvements to the Dunedin and Wakatipu Basin public transport networks are intended to build patronage while maintaining the viability of these networks. The plans anticipate shuttle services, taxis, the Ministry of Education-funded school bus network and special education travel assistance continuing to fill the roles they currently play. The public transport network in Invercargill will be operated to meet the basic needs of the community.

Outside these three areas, existing bus services are largely orientated to the visitor market (both domestic and international), and priced accordingly. The services on arterial routes across/through Otago and Southland are either shuttle services or scheduled, inter-regional bus services. Shuttle bus services also support the operation of the off-road cycle networks

such as the Great Rides in the two regions. The plans envisage these visitor-oriented services continuing to be an important travel mode in coming decades.

Passenger rail for commuting is unlikely to be viable within the term of this plan, but rail could be used increasingly for transport to special events and for visitor excursions.

For any public transport service, whether existing or new, to be viable, the community must be prepared to support it (e.g. through rates, if necessary), and users must be willing to pay a sufficient share of the operating costs.

If public transport is to be viable outside of regions' urban areas, even at the basic level of service currently available between many towns, then it must be supported by land use planning that concentrates housing within walking and cycling distance of the key roading corridors used by buses.

For public transport use to increase, services need to be accessible for those with disabilities and for older people. This requires attention to roading design and layout, bus infrastructure, including bus stops, plus a greater proportion of the regions' buses and shuttles being accessible.

Collectively, the different forms of public passenger transport provide a means for those without cars, and those who choose not to travel by car, to travel longer distances. Public passenger transport will remain important for those for whom active transport poses a physical challenge.

Walking

The plans seek greater provision of facilities and levels of service for active modes of travel and greater use of these modes – principally walking and cycling – for local trips. An essential component of a sustainable, accessible land transport system, walking is currently considered a suitable mode of transport for short trips (under 2 km) and for connecting different modes (e.g. walking to a bus stop or from a car park to work). Walking also has an important recreational role and contributes to improvements in community wellbeing, public health, the minimisation of environmental effects and the transition to a low emissions economy.

The plans envisage people walking longer distances and more often. The strategic part of these plans seeks to encourage and support higher levels of pedestrian activity through land-use planning that enables people to live within walking distance of local services, including transport services, and through improved pedestrian facilities.

Cycling

The RTCs are seeking to increase the number of people choosing to cycle in urban and peri-urban areas and on cycle trails (as discussed in Section 0 above).

Making better provision for cycling is not just about providing space on the roads; it also means providing connections between trails and cycling tracks on the one hand, and those parts of the road network used by cycling commuters on the other hand.

Urban and rural connections for walking are also important and often done as part of an Approved Organisation's programme of low cost / low risk projects.

Cycling contributes positively towards a sustainable and accessible transport network, because it is energy efficient, has minimal environmental impacts, is affordable and has associated health and fitness benefits. Increasing the use of cycling will contribute to improvements in community wellbeing, public health and the transition to a low emissions economy.

The plans seek to encourage and enable higher levels of cycling. Reallocating existing roading space to cycling, and providing for cycling in new roading projects, will help increase recognition of the rights of cyclists to safe road space. Provision of good quality cycle facilities within the roading corridor, including separate facilities, will play an important role in increasing the levels of cycling within the two regions. Improved land-use planning practices will also assist in greater levels of cycling activity because local services, as well as transport services, will be more accessible by bicycle.

Continued expansion of cycle tourism, through the provision of quality experiences on trails and the construction of further trails, will help build this sector of the tourist market, aimed at both overseas and domestic visitors. Providing better connections between trails (although this is not a major focus of this plan) will encourage visitors to remain longer in the south.

Other modes of personal transport

The RTCs recognise the need to provide for the safe use of other modes of personal transport such as mobility scooters, electric bikes, skateboards, and horses. In some areas, infrastructure may need to be redesigned or operator skills increased, to provide for their safe use, together with other modes such as walking and cycling.

Addressing current and future demand for access to economic and social opportunities

These plans seek to manage demand for travel and freight to make best use of the existing transport network, to promote resilience in the face of potential volatility in the price and supply of oil-based fuels, and to address any localised current and future congestion on particular routes. Demand for vehicle travel is forecast to rise in areas experiencing economic and population growth (GPS 2015). Market forces, land-use planning, and the provision of information on travel choices are commonly used to help to manage demand. The provision of quality public transport, walking and cycling infrastructure in urban areas, the installation of bike racks on buses, the management of parking supply and price, and encouraging people to live near bus routes, will help manage travel demand. Improvements in, and wider use of, communications technology may also reduce the need to travel.

An aging population, and the younger generations being less reliant on the private motor vehicle, as well as possible changes in oil price or supply constraints, and the increasingly availability of alternative fuels (including “drop-in” fuels) are expected to influence people’s choices about where to live, what type of vehicle to own, how much travel they undertake, and how essential social and government services are located or provided. Walking and cycling facilities and public transport provide an alternative to car travel and help ensure community resilience when needed.

Encouraging future development and subdivision in areas that can be efficiently serviced by public transport will help reduce demand for private vehicle use and therefore the load on the network. Public transport linking rural communities, towns, Dunedin and Invercargill can also help reduce reliance on private vehicle travel. This is particularly so when land-use planning concentrates housing near key nodes and within walking or cycling distance of key roading corridors where public transport services run on a regular basis, connecting these nodes to a

centre with essential services. For this to be a viable way of managing the demand for travel, communities must be prepared to support public transport through rates and users must be prepared to pay a fair and sufficient share of the operating costs through bus fares. In urban areas, restrictions on car parking and appropriate pricing of parking will be required to support efforts to increase public transport use.

To build resilience and help manage capacity on the transport network, these plans propose steadily building the capacity and use of urban public transport networks in Dunedin and the Wakatipu Basin, ensuring capacity does not get too far ahead of demand and threaten the network's viability. To support improvements to urban bus services and increased patronage, local authorities need to ensure urban subdivision and developments have street layouts suited to public transport as well as adequate bus stops, shelters and footpaths so people can access buses safely and conveniently. Growing the use of public transport will also mean keeping bus fares competitive with the costs of private vehicular travel.

To help manage network capacity and ensure reliable journey times, particularly for freight, there is likely to be a need to provide for an alternative utilisation of road space in busy urban areas and on key corridors – this is an issue for Queenstown. Alternatively, new modes could make use of alternative space to provide for active and shared travel modes (e.g. the gondola option being considered for Queenstown). This reduced reliance on private vehicle should ease congestion in busy areas such as SH6A.

Appendix 3. Putting customers' voices and needs to the fore

Increasingly, the voice of customers is becoming more important: the diversity of their requirements, modality shift and integration with technology to add value for money. Tourists want increased accessibility to information and facilities, e.g. communities need increased support for resiliency and cohesion and freight flows are increasing to meet customer and export growth.

The notion of what constitutes value for money needs to take diverse customer needs into account.

The shift in emphasis away from asset management to activity management, guided by adoption of the business case approach and the ONRC system, has led to a focus on providing transport systems that meet customer needs. Road controlling authorities' activity management plans and NZTA's state highway corridor management plans consider the different needs of the following groups of customers (note some customer groups overlap):

- daily commuters
- freight operators
- business and commercial traffic
- farming traffic
- rural dwellers
- the transport-disadvantaged
  - those least able to travel to basic community activities and services
- vulnerable road users
  - those who face the greatest safety risk when using the road network
- recreational users
  - those accessing recreational opportunities on road or elsewhere
- tourism operators
- international visitors
  - seeking safe, reliable routes between their arrival point and tourist attractions
  - may not be familiar with local road conditions
  - may be distracted by scenery while driving
- domestic visitors
  - almost certainly familiar with road rules and safety protocols
  - may not be familiar with local road conditions
  - may be distracted by scenery while driving.

For details of how these plans consider the needs of these customer groups, please refer to the individual plans (references below)[53].

[53] *Web links to the completed AMPs will be added in the final RLTPs (these are not yet available).* The draft State Highway Investment proposal 2018-21 and corridor management plans are available at https://www.nzta.govt.nz/planning-and-investment/201821-national-land-transport-programme/state-highway-investment-proposal/ .

Appendix 4. Measuring the success of the programme against the strategy

The proposed strategic results framework

Moving from the immediate focus to long-term results requires thinking about the best way to work out where we are now and how to make sure we are moving towards intended results of NLTF investment in projects and activities in Otago and Southland.

The first step taken by the RTCs has been to draft a strategic results framework, setting out what, why and how:

- **What** types of activities / projects that approved organisations and the RTCs themselves should be carrying out.
- **How** we should do this (e.g. by concentrating on addressing certain problems and realising certain benefits, in the way that the business case approach requires).
- And **why**: identifying the results this work is intended to achieve.

The figure on the next page, summarises the Strategic Results Framework proposed for the Otago and Southland RLTPs. This framework sets out both the short-term focus (the problems and benefits to be addressed in the next three or so years) and the longer-term results sought.

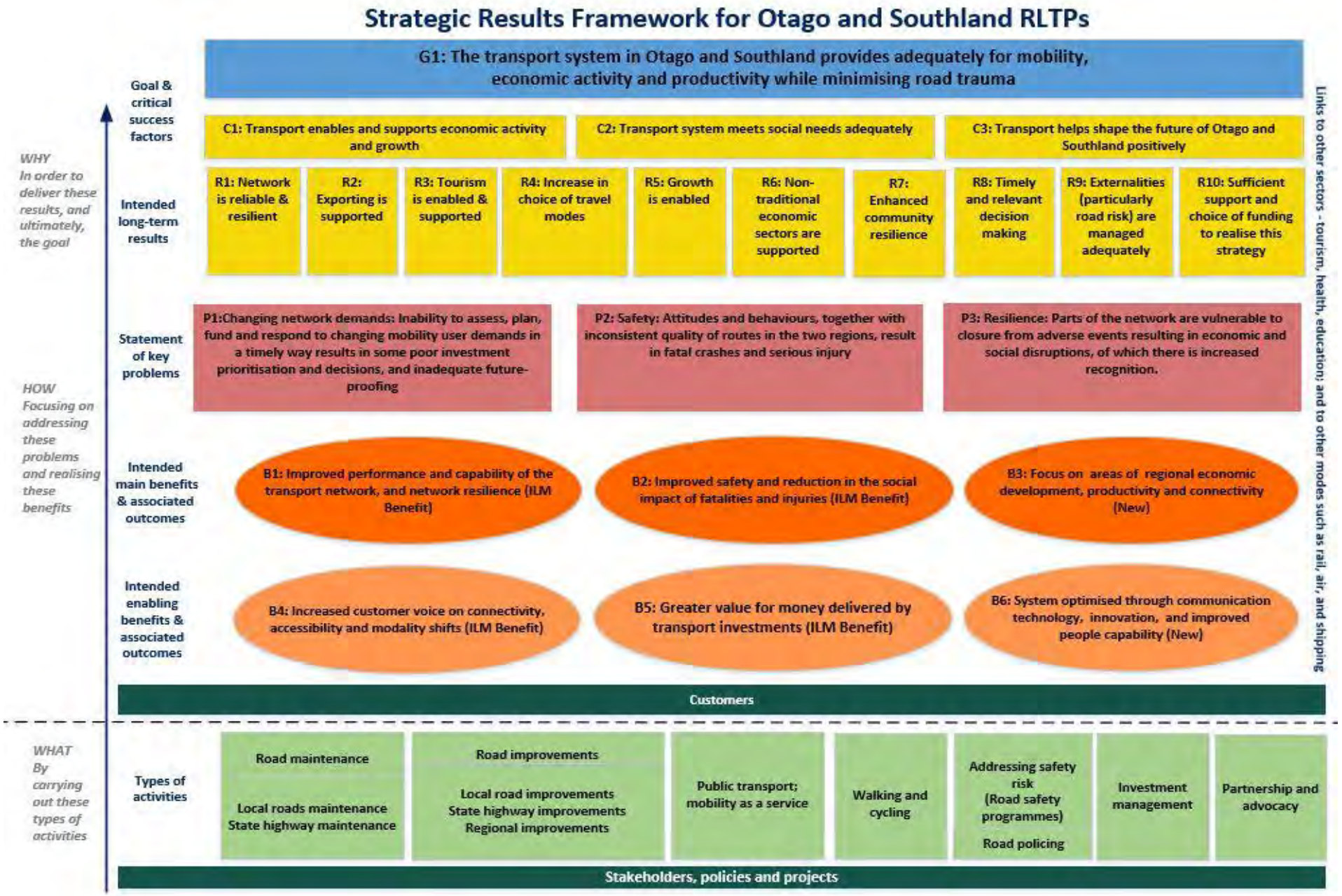
At the base of the strategic results framework are the types of activities that will feed into the main outputs and outcomes. It is intended that undertaking these activities will lead to the key outcomes and objectives being achieved and the problems addressed:

- road maintenance
- road improvements
- public transport and Mobility as a Service
- walking and cycling
- road policing
- addressing safety risk
- investment management
- partnership and advocacy.

This list of activities is consistent with the categorisation of activity classes in the (draft) GPS 2018[54]; partnership and advocacy has been added to recognise the work done by the RTCs.

Note: several activity classes have sub-activity classes which, for the sake of brevity, are not shown in the figure on the next page. Examples include local roads maintenance and local road improvements.

[54] The draft GPS as at November 2017, acknowledging this may change as a result of the change of government and the intention of the new Minister of Transport to issue a new draft GPS.


Strategic Results Framework for Otago and Southland RLTPs
G1: The transport system in Otago and Southland provides adequately for mobility, economic activity and productivity while minimising road trauma
Goal & critical success factors
C1: Transport enables and supports economic activity and growth
C2: Transport system meets social needs adequately
C3: Transport helps shape the future of Otago and Southland positively
WHY
In order to deliver these results, and ultimately, the goal
Intended long-term results
R1: Network is reliable & resilient
R2: Exporting is supported
R3: Tourism is enabled & supported
R4: Increase in choice of travel modes
R5: Growth is enabled
R6: Non-traditional economic sectors are supported
R7: Enhanced community resilience
R8: Timely and relevant decision making
R9: Externalities (particularly road risk) are managed adequately
R10: Sufficient support and choice of funding to realise this strategy
Statement of key problems
P1:Changing network demands: Inability to assess, plan, fund and respond to changing mobility user demands in a timely way results in some poor investment prioritisation and decisions, and inadequate future-proofing
P2: Safety: Attitudes and behaviours, together with inconsistent quality of routes in the two regions, result in fatal crashes and serious injury
P3: Resilience: Parts of the network are vulnerable to closure from adverse events resulting in economic and social disruptions, of which there is increased recognition.
HOW
Focusing on addressing these problems and realising these benefits
Intended main benefits & associated outcomes
B1: Improved performance and capability of the transport network, and network resilience (ILM Benefit)
B2: Improved safety and reduction in the social impact of fatalities and injuries (ILM Benefit)
B3: Focus on areas of regional economic development, productivity and connectivity (New)
Intended enabling benefits & associated outcomes
B4: Increased customer voice on connectivity, accessibility and modality shifts (ILM Benefit)
B5: Greater value for money delivered by transport investments (ILM Benefit)
B6: System optimised through communication technology, innovation, and improved people capability (New)
Customers
WHAT
By carrying out these types of activities
Types of activities
Road maintenance
Local roads maintenance
State highway maintenance
Road improvements
Local road improvements
State highway improvements
Regional improvements
Public transport; mobility as a service
Walking and cycling
Addressing safety risk (Road safety programmes)
Road policing
Investment management
Partnership and advocacy
Stakeholders, policies and projects
Links to other sectors - tourism, health, education; and to other modes such as rail, air, and shipping

In the strategic results framework, the next level up from activities is the benefits/outcomes intended as a result of the activities. There are three key benefits and three enabling benefits shown in the figure on the preceding page.

As explained in section 3.3, by focusing on realising the six benefits in the framework (and addressing the key problems), then the associated outcomes will be achieved, allowing approved organisations to make an impact on longer-term results and goals. The way that specific outcomes are expected to contribute to the realisation of each benefits is shown below (note, for the sake of brevity, these desired outcomes are not included in the figure on the proceeding page).

Main benefits and associated outcomes

1. Improvement in the performance and capability of the transport network, and network resilience.
   - Maintain current network(s).
   - Enhance network performance and capability.

2. Improved safety and reduction in the social impact of fatalities and injuries.
   - Improve safety.

3. Regional improvements, economic development, productivity and connectivity.
   - Increase economic growth and productivity (the focus areas for this are Queenstown, Dunedin, SH1, and South/North Otago rural).

Enabling benefits and associated outcomes

4. Increased customer voice, connectivity, accessibility and modality shifts.
   - Enhance community resilience and cohesion.
   - Increase health, wellbeing and environmental management.
   - Improve support of customer groups.

5. Enhanced value for money of transport investments.
   - Enhance system performance and cost.

6. Optimisation of systems: communication, technology, innovation.
   - Increase partnership and adaptive management.
   - Increase communication and technology solutions.

As management of the transport system in the Otago and Southland regions becomes more customer focused, the enabling benefits and outcomes are important building blocks to achieving the main benefits. Technology is increasingly being used to communicate with customers and to promote safety, and to collect data for timely decision-making i.e. traffic flows, pedestrian counts and real-time information for passengers and drivers.

The three enabling benefits embed not only value for money and customer voice into the three main benefit areas but also technology, innovation and system optimisation. Aligning projects to strategic results requires modality shift, customer satisfaction and system optimisation be included in activities, to contribute to the expanded longer-term results sought.

Examples of factors to be considered under each RLTP desired outcome

1. Maintain current network(s)

- activity management planning
- implement ONRC requirements
- undertake ONRC monitoring
- operate public transport networks.

2. Enhance network performance and capability

- throughput
- travel time and reliability
- availability and access
- network resilient to risk
- customer experience and/or comfort
- public transport.

3. Increase economic growth and productivity

- accessibility and connectivity
- productivity
- mobility
- customer outcomes, technical outputs, cost efficiency
- public transport
- walking and cycling tourism trails and rides.

4. Improve safety

- attitudes and behaviours (reduce road risk)
- safety (reduce social and economic costs of crashes)
- safety (reduce deaths and serious injuries)
- infrastructure safety
- public transport safety.

5. Increase communication and technology solutions

- mobility as a service
- digital integration of transport services
- increased and timely use of data in decision-making
- public transport.

6. Improve support of certain customer groups

- road safety for and of visiting drivers
- main tourist routes in Otago and Southland
- understand the internal freight task
- support efficient freight movement despite resilience issues.

7. Increase partnership and adaptive management

- making submissions and representations
- collaborative effort.

8. Increase wellbeing, health and environmental management

- support for use of active travel modes
- biodiversity
- pollution and greenhouse gases
- noise
- liveability – urban/rural - and amenity value
- resource consumption.

9. Enhance community resilience and cohesion

- community resilience
- community cohesion.

10. Enhance system performance and cost

- reduce cost of mobility and connectivity
- decrease/maintain financial cost of using transport
- timely investments.

Reporting on results

The ability to, and framework for, reporting on results is a core component of the (draft) GPS 2018. NZTA is required to report at least annually on progress being made in achieving the GPS 2018 short, medium and long-term results. Additionally, each RLTP is required to set out measures that will be used to monitor the performance of activities and a description of how monitoring will be undertaken to assess implementation of the RLTP.

In 2018/19, indicators will be added to this framework to allow the RTCs to monitor and assess progress towards achieving the long-term results and desired outcomes, sought through the investment recommendations in these RLTPs. A table of indicators will be added to the RLTPs (containing key measures and questions) and then accessible baseline information collected and targets for 2018/19 and beyond identified.