

OTAGO STATE HIGHWAY PLAN

EXECUTIVE SUMMARY

Transit's forecasts of expenditure in Otago for the next 10 years are set out in Table O1.

These forecasts of expenditure are based on a 10-year plan of maintenance and improvements, including commitments. The timeframe for the development and construction of the improvements proposed in the 10-year plan are indicative only, and might change, for example, as a result of changes in funding availability and delays in project development.

Major features of the Otago 10-year plan are:

- › Tumai to Waikouaiti Realignment on SH1, north of Dunedin, for a construction start in 2004/05
- › nineteen other rural realignments, bridge improvements and other safety improvements, for construction in the next three years
- › nine more passing lanes on SH1, north and south of Dunedin, and on SH6, for construction in the next three years
- › extensive remedial work on Nevis Bluff on SH8, undertaken in the next three years
- › another stock effluent disposal facility at Raes Junction on SH8 (or SH90)
- › a cycle facility on Balclutha Bridge on SH1 and a walkway on the approach to Wanaka on SH84, for construction in 2004/05.

BACKGROUND

State highways in Otago are generally of a high standard with a number of significant projects having been completed over the last 10 years. Apart from a few realignments to address significant safety concerns, rural highways require only relatively minor safety improvements and a few additional passing lanes.

Transit continues to address requirements for improved availability and safety under winter conditions, and to be responsive to changing risks in areas of instability and flooding.

Recent Improvements

A number of improvements have been undertaken to state highways in Otago in recent years. The most significant improvements have been:

- › SH1: Langdon and Awamoa Bridge Widening, near Oamaru
- › SH1: Ngutakaka Realignment, south of Oamaru
- › SH1: Waitati Bridge Widening and Curve Improvement, north of Dunedin
- › SH1: Fairfield Motorway
- › SH1: Saddle Hill 4-Laning
- › SH1: Cherry Lane Passing Lane, north of Balclutha
- › SH1: Main Street Improvements, Milton
- › SH6: Pearsons Road Curve Improvements, west of Cromwell
- › SH6: William Reid Bridge Widening, north of Frankton
- › SH6A: Major Upgrade to Queenstown

Also, passing lanes on SH1, north and south of Dunedin, and six stock effluent disposal facilities have been constructed in recent years.

Current Improvements

A number of small projects are currently under construction. These include:

- › SH1: Waitaki River Bridge Guardrail, north of Oamaru

- › SH1: Junction Safety Improvements, Oamaru
- › SH1: Four Mile Creek Passing Lane, south of Balclutha

PROPOSED IMPROVEMENTS

The locations of Otago projects in the 10-year plan are shown on Figure O and the expected cost and timeframe for the development and construction of these projects are indicated in Table O2.

Large improvement projects (with construction costs more than \$3M) have been planned for 10 years and small and medium-sized projects (with construction costs of less than \$3M) have been planned for 3 years.

Rural Realignments

The large project planned for construction in Otago within the next 10 years is the SH1: Tumai to Waikouaiti Realignment. This 3.4 km realignment will improve safety on this substandard section of SH1 between Oamaru and Dunedin.

The following small and medium-sized rural realignments are planned for development and construction over the next three years:

- › SH1: Sharpes Bend Realignment, south of Oamaru
- › SH1: Leith Saddle to Watermans Realignment, north of Dunedin
- › SH1: Clydevale Curves Realignment, south of Balclutha
- › SH1: Waikouaiti to Cherry Farm Vertical Realignment, north of Dunedin
- › SH6: Gold Mining Centre Vertical Realignment, Kawerau Gorge
- › SH6: Gentle Annie West Realignment, Kawarau Gorge
- › SH6: Boyd Road Realignment, south of Frankton
- › SH8: Butchers Dam Realignment, east of Alexandra

Safety Improvements

Other safety improvement projects planned for construction in the next three years are:

- › SH1: Kaihiku Curve Seal Widening, south of Balclutha
- › SH1: Coast Road Intersection Improvements, north of Dunedin
- › SH1: Pine Hill Heavy Vehicle Run-Off, north of Dunedin
- › SH1: Lookout Point Safety Improvement, Dunedin
- › SH1: Waiwera Seal Widening, south of Balclutha
- › SH88: Blanket Bay Road Intersection Improvement, Port Chalmers

Bridge Improvements

Bridge improvements in the next three years include:

- › SH1: Mosgiel Off-Ramp Intersection Improvement
- › SH1: Waianakarua North Bridge Widening, south of Oamaru
- › SH1: Hilderthorpe and Richmond Bridges Widening, north of Oamaru.
- › SH6: Wye Creek Bridge Two-Laning, south of Frankton
- › SH6: Kawarau Falls Bridge Widening, south of Frankton

Passing Lanes

More passing lanes are planned for construction in the next three years, primarily on SH1 both north and south of Dunedin, as follows:

- › SH1: Brydone Memorial Northbound Passing Lane, south of Oamaru
- › SH1: Mill House Southbound Passing Lane, south of Oamaru
- › SH1: Findlays Road Northbound Passing Lane, north of Palmerston
- › SH1: Patmos Southbound Passing Lane, north of Dunedin

- › SH1: Waihola Northbound Passing Lane, north of Milton
- › SH1: Lake Road Northbound Passing Lane, north of Milton
- › SH1: Clarendon Realignment and Passing Lane, north of Milton
- › SH1: West Road Northbound Passing Lane, north of Milton
- › SH6: Waitiri Passing Lane, Kawerau Gorge

Route Security

Further remedial work on Nevis Bluff in the Kawerau Gorge is required to improve route security. This work will involve approximately \$2.6M expenditure over the next three years.

Stock Effluent Disposal Facilities

The following stock effluent disposal facility is proposed for construction in 2003/04:

- › SH8: Raes Junction Stock Effluent Disposal Facility

Urban Areas

Funding has already been approved for Transit to assist the Dunedin City Council in a Strategic Corridor Study of Dunedin. It is not envisaged that any substantial improvements will be required to improve the safety and efficiency of state highways in Dunedin within the next 10 years but this will not preclude the Dunedin City Council undertaking state highway improvements for amenity reasons, provided these improvements do not affect the safety and efficiency of the state highways.

The 10-year plan includes a scheme for improvements to SH1 between Orwell Street and Coquet Street, Oamaru comprising primarily intersection improvements. This scheme is to be developed in consultation with the Waitaki District Council.

Transit is continuing to consult with the Queenstown Lakes District Council on the possible relocation of SH6A in Queenstown but no work has been planned for the next 10 years.

Walking and Cycling

The existing cycleways on Cumberland and Castle Streets are currently being extended from Fredrick Street to St Andrews Street, and the section of St Andrew Street from Castle Street and Anzac Avenue is being lane-marked for cyclists.

It is proposed to continue to investigate minor improvements on SH88 to Port Chalmers to gradually upgrade this highway with a particular focus on walking and cycling facilities. In the next three years, it is proposed to widen the carriageway and provide footpaths between De Lacy and Jessie Streets, and between Maia and Burkes Drive and Butts Road to Adderly Terrace to make this section of highway safer for cyclists and pedestrians.

Other walking and cycling projects proposed for the next three years are:

- ▶ SH1: Balclutha Bridge Cycleway Improvement
- ▶ SH84: Wanaka Walkway on the approach to Wanaka

MAINTENANCE and OPERATIONS

In addition to undertaking maintenance and improvements to meet current and future levels of service, and to preserve the asset, Transit proposes to:

- ▶ undertake some 130km of resurfacing and 10km of road reconstruction per year on state highways in Otago
- ▶ manage the risk from snow and ice on the network through the use of the de-icer CMA (calcium magnesium acetate) and implement more cost effective and safer methods as they become available
- ▶ continue to develop procedures for managing rock falls and major slips to protect route security and safety
- ▶ continue the strategy of managing wet-road crashes through maintaining high-skid-resistance surfacings.

Table 01

Forecasts of Expenditure on Maintenance and Improvements

Otago Region

| | 03/04 (\$M) | 04/05 (\$M) | 05/06 (\$M) | 06/07 (\$M) | 07/08 (\$M) | 08/09 (\$M) | 09/10 (\$M) | 10/11 (\$M) | 11/12 (\$M) | 12/13 (\$M) | Total (\$M) |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Maintenance | | | | | | | | | | | |
| Structural | 10.7 | 11.0 | 11.2 | 11.4 | 11.6 | 11.9 | 12.1 | 12.3 | 12.6 | 12.8 | 117.6 |
| Corridor | 5.1 | 5.5 | 5.7 | 6.0 | 6.2 | 6.5 | 6.8 | 7.1 | 7.4 | 7.7 | 63.9 |
| Professional Services | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 | 2.4 | 2.5 | 2.5 | 23.1 |
| Property Management | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Preventive Maintenance | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 4.1 |
| Emergency Works | 0.6 | 1.1 | 1.1 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 | 1.4 | 11.9 |
| Sub-total | 18.9 | 20.1 | 20.6 | 21.2 | 21.7 | 22.3 | 23.0 | 23.6 | 24.3 | 24.9 | 220.6 |
| Improvements | | | | | | | | | | | |
| Minor Safety Projects | 0.7 | 0.7 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 8.2 |
| Committed Projects | 0.0 | 0.0 | 0.0 | 0.0 | - | - | - | - | - | - | 0.0 |
| New Projects | 4.2 | 4.9 | 5.8 | 5.4 | 5.1 | 5.0 | 4.6 | 4.6 | 4.8 | 4.9 | 49.5 |
| Property Purchase | 0.8 | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 | 0.7 | 0.7 | 0.7 | 0.7 | 6.5 |
| Walking & Cycling | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 1.0 |
| Sub-total | 5.8 | 6.3 | 7.2 | 6.9 | 6.7 | 6.5 | 6.2 | 6.3 | 6.5 | 6.7 | 65.1 |
| Total | 24.7 | 26.3 | 27.8 | 28.1 | 28.4 | 28.9 | 29.2 | 29.9 | 30.7 | 31.6 | 285.7 |