

EXECUTIVE SUMMARY

Transit's forecasts of expenditure in Northland for the next 10 years are set out in Table N1. Transit anticipates it will have further expenditure from regional distribution funding, but this is yet to be determined.

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 is indicative only, and is likely to change depending on the use of regional distribution funding to advance projects.

The Northland state highway 10-year plan seeks to protect and preserve the existing asset, improve the security, safety and efficiency of the transport corridors into and out of Northland, and to improve road safety generally.

Major features of the plan are:

- › slip repairs on SH1, between Mangamuka and Rangiahua, north of Ohaeawai for a construction start in 2004/05
- › four more passing lanes on SH1, north and south of Whangarei, for construction in the next three years, in addition to the seven passing lanes recently completed or currently under construction, or approved for construction
- › a further 15 safety improvements for construction in the next three years including small rural realignments, rural intersection upgrades, seal widening and guardrails
- › safety improvements in Kaingaroa Village on SH10, for construction in 2005/06, in addition to the rural realignment on Kaingaroa Hill currently under construction
- › sealing of the remaining section of SH1F from Waitiki Landing to Cape Reinga
- › cycling and walking facilities at a number of different locations for construction in the next three years.

KEY REGIONAL TRANSPORT ISSUES

The key regional transport issues in Northland include:

- › secure, efficient and safe transport corridors, especially between Auckland and Whangarei
- › forestry traffic – over the next 5 to 10 years the forestry harvesting is expected to increase to 4 million tonnes per year with much of it expected to be exported through the Marsden Point Port facilities
- › tourist traffic, particularly on the Twin Coast Highway network linking the Bay of Islands, Cape Reinga, and the Waipoua Forest
- › road safety:
 - » of particular concern is the separation, or safe interaction, of heavy freight traffic from general traffic (including tourist traffic)
 - » spillages from stock trucks.

TRANSIT'S CONTRIBUTION TO TRANSPORT ISSUES

The terrain in Northland is often difficult, causing the alignment of state highways to generally be quite winding and hilly. Northland also has a diverse geology resulting in areas of unstable soft rock formation (Onerahi Chaos). This together with an almost tropical climate of intense rainfall results in some lengths of the state highway having an uneven rough surface. Transit will continue to seek engineering solutions to permanently stabilise such areas.

Intensified land use, particularly around Kerikeri and west of Whangarei, and growing traffic volumes are placing increasing demands on state highways. The result is a need to improve the alignment of highways and provide more passing lanes, especially on SH1 between the intersection with SH10 at Pakaraka and Ross Road, north of Wellsford.

Improvements are also required on logging routes to accommodate the future 'wall of wood' from Northland forests. The annual timber harvest of 1 million tonnes is predicted to increase threefold within the next few years, most of which will be transported on the state highway network to the new port at Marsden Point. Proposed improvements

include provision of passing lanes, seal widening, upgrading approaches onto bridges, and the upgrade of intersections where logging trucks enter onto the state highway network. Innovative low-cost solutions to the latter will be required due to the relatively short periods when logging trucks will generally use these intersections.

The locations of possible Northland projects in the 10-year plan are shown in Figure N. The expected cost and possible timeframe for the development and construction of these projects is indicated in Table N2. The timing of projects could be advanced depending on the allocation of regional funding. A final policy has yet to be determined by Transfund New Zealand (as at July 2004).

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 three years.

Secure, Efficient and Safe Transport Corridors (SH1, Kaitiāia to Pakaraka to Wellsford)

There is a significant concern about the growing volume of road forestry traffic, particularly on SH1 from Pakaraka to Marsden Point Port. A proposed alternative is to have up to one-third of the logs transported by rail but this requires a new line from Oakleigh to Marsden Point. Notwithstanding the rail alternative possibility, Transit is upgrading the highway including realignment works and passing lanes.

Rural Highways

Projects currently under construction, or recently completed include:

- › SH1F: Waitiki Landing to Cape Reinga Seal Extension, south of Cape Reinga
- › SH1: Huatau Slips Reconstruction, north of Ohaewhai
- › SH1: Katetoke to Oakleigh Safety Improvement, south of Whangarei.

Repairs are proposed to a 15-kilometre section of SH1 between Mangamuka and Rangiahua to improve route security and the condition of the road surface. These works will include stabilising existing and potential slips, and reconstruction of the pavement. Within this section, slip repairs at Huatau have been scheduled as a separate project.

Transit envisages that, eventually, SH1 between Whangarei and One Tree Point Road will need four-laning. In the meantime, access will need to be strictly controlled to avoid compromising safety on this section of highway. The only major improvement proposed over the next 10 years for this section of highway is a 1.2-kilometre realignment between Katotoke and Oakleigh. Construction of this project has begun.

A number of other improvements may be possible in the next 10 years, such as Snake Hill Realignment on SH1 north of Whangarei and Matakoho Realignment on SH12 east of Ruawai, depending on regional distribution funding.

Passing Lanes

There are a number of passing lanes that have either been completed or are under construction on SH1 north and south of Whangarei. They include:

- › SH1: Otonga Flat South Southbound Passing Lane, north of Whangarei
- › SH1: Mangapai River Bridge Passing Lane, south of Whangarei
- › SH1: Hewlitt Road Passing Lane, south of Whangarei
- › SH1: Otonga Flat North Northbound Passing Lane, north of Whangarei
- › SH1: Flyger Road Southbound Passing Lane, south of Whangarei
- › SH1: Tauroa Stream Bridge Northbound Passing Lane, south of Whangarei
- › SH1: Longhill Southbound Passing Lane, south of Kawakawa.

To further progress the goal of providing passing lanes at 5-kilometre intervals on high-volume highways in Northland, especially on SH1 between the intersection with SH10 at Pakaraka and Ross Road north of Wellsford, the three-year plan for small and medium-sized projects includes the construction of a further four passing lanes on SH1 north and south of Whangarei, as follows:

- › SH1: Watercress Creek Southbound Passing Lane, north of Whangarei
- › SH1: Waiomio Northbound Passing Lane, north of Whangarei
- › SH1: Uretiti Road Northbound Passing Lane, south of Whangarei
- › SH1: Brook Road Northbound Passing Lane, south of Whangarei.

Tourist Routes

Transit has begun to seal the remaining 20-kilometre unsealed section of SH1F from Waitiki Landing to Cape Reinga. Cape Reinga is a nationally significant tourist destination and sealing will meet tourist expectations and improve safety.

Road Safety

Transit plans to remove the 'out of context' sections of state highway, roadside hazards, and provide a network of stock truck effluent disposal facilities.

Rural Highways

Safety projects currently under construction, or recently completed, in Northland include:

- › SH1F: Waiharara Safety Improvements, north of Awanui
- › SH1F: Waipapakauri Safety Improvements, north of Awanui
- › SH1: Fairburn Bends South Realignment, south of Kaitaia
- › SH1: Hukerenui South Realignment, south of Kawakawa

- › SH1: 7-km Clear Run-off Zone, south of Whangarei
- › SH1: Loop Road North Intersection, south of Whangarei
- › SH1: Mangamuka Bridge No. 58 Guardrail, south of Kaitaia
- › SH10: Kaingaroa Hill Realignment, west of Taipa
- › SH12: Maropiu Guardrail, north of Dargaville
- › SH12: Scotty's Bend Guardrail, north of Dargaville.

Small and medium-sized safety projects proposed for construction within the next three years are:

- › SH1: Saleyards Road North Intersection, north of Whangarei
- › SH1: Loop Road North to Smeatons Hill Safety Improvement, south of Whangarei
- › SH1: Springfield Road to Oakley Service Station Safety Improvements, south of Whangarei
- › SH1: Mangapai River North Safety Improvement, south of Whangarei
- › SH1: One Tree Point Road Intersection Upgrade, south of Whangarei
- › SH1: Mangakaramea Road to Waipu Gorge Rd Safety Improvements, south of Whangarei
- › SH1: Piroa Stream to SH12 Intersection Realignment, south of Whangarei
- › SH1: Kaiwaka to Schiska Road Seal Widening, south of Kaiwaka
- › SH1: Plantation North Realignment, south of Kaiwaka
- › SH1: Topuni Bridge to Ross Road Seal Widening, south of Kaiwaka
- › SH10: Kaingaroa Safety Improvements, west of Taipa
- › SH10: Kerikeri Intersection Safety Improvements, at Kerikeri
- › SH10: Bulls Gorge Realignment, south of Kerikeri

- › SH12: Wairau River S-Bend Realignment, east of Ruawai
- › SH14: Millington Road to Kara Road Safety Improvement, west of Whangarei.

A number of other safety improvements may be possible depending on regional distribution funding.

Stock Effluent Disposal Facilities

To commence the North Island stock effluent disposal facilities strategy in Northland the construction of a facility on SH1 close to Whangarei is planned. Further facilities are planned for the future.

Walking and Cycling

A number of walking and cycling projects have been planned for construction in the next three years to provide new or upgraded pedestrian or cyclist facilities in Whangarei and Dargaville, and in 14 other mainly urban areas in Northland. These works include:

- › construction and widening of footpaths
- › construction of footbridges, pedestrian crossings and refuges
- › erection of pedestrian and cyclist signs
- › seal widening to provide for cyclists.

MAINTENANCE and OPERATIONS

In addition to maintaining current and future levels of service, and preserving the asset, Transit proposes to:

- › resurface 70 kilometres and rehabilitate 12 kilometres of pavement in 2004/05
- › renew drainage assets at 12 sites in 2004/05
- › complete long-term repairs at 38 slip sites in the coming year and continue to manage in excess of 300 existing slips and any new slips that occur
- › conduct a trial of a new surfacing material with a view to improving skid-resistance durability.

Table NI**Forecasts of Expenditure on Maintenance and Improvements****Northland Region**

	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)	13/14 (\$M)	Total (\$M)
Maintenance											
Structural	8.3	8.4	8.4	9.8	8.8	9.3	9.9	9.9	10.5	11.3	94.6
Corridor	3.5	3.9	4.0	4.3	4.3	4.3	4.5	4.7	5.0	5.3	43.9
Professional Services	3.0	3.4	3.6	3.8	4.0	4.2	4.5	4.7	4.9	5.3	41.5
Property Management	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.3	10.6
Preventive Maintenance	0.1	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	4.1
Emergency Works	2.7	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.2	12.1
Sub-total	18.5	18.0	18.4	20.3	19.5	20.4	21.6	22.1	23.2	24.9	206.8
Improvements											
Minor Safety Projects	1.2	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.8	14.4
Committed Projects	3.4	1.6	0.0	0.0	-	-	-	-	-	-	5.0
New Projects	5.4	5.8	5.7	5.5	5.2	5.2	5.9	6.6	8.0	8.8	62.1
Property Purchase	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	10.9
Walking & Cycling	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
Regional Development	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.5	3.0
Sub-total	11.3	10.0	8.3	8.3	7.9	8.1	9.0	9.7	11.4	12.4	96.4
Regional Distribution Funding	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	tbd	
Total	29.8	27.9	26.6	28.6	27.4	28.5	30.5	31.8	34.6	37.3	303.2

tbd = to be determined