

EXECUTIVE SUMMARY

Transit's forecasts of expenditure in Waikato for the next 10 years are set out in Table WK1.

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 Waikato 10-year plan are:

- › Mercer to Longswamp section of the Waikato Expressway, currently under construction
- › Huntly Internal Bypass currently under construction
- › safety improvements to the Longswamp to Rangiriri section of SH1, for a construction start in 2003/04
- › development of the Ngaruawahia and Cambridge bypasses, for a construction start in 2012/13
- › major rural realignments including:
 - › Mangatawhiri Deviation on SH2, for a construction start in 2004/05
 - › Maramarua Deviation on SH2, for a construction start in 2010/11
 - › Tapapa Curves Realignment, east of Tirau on SH5, for a construction start in 2003/04
- › Hamilton city bypasses comprising:
 - › Avalon Drive Bypass between Rotokauri Road and Norton Road, for a construction start in 2004/05
 - › Te Rapa Bypass, for a construction start in 2008/09
- › five intersections in Hamilton city including the Te Kowhai Road intersection on Te Rapa Road north of Hamilton
- › development of a funding package with Taupo District Council, for the construction of an eastern bypass of Taupo
- › a new, two-lane Kopu Bridge on SH25, for a construction start in 2010/11
- › a bypass of Whitianga on SH25 in conjunction with the Whitianga Waterways development, currently under construction
- › eight safety improvements on rural highways in the next three years comprising small rural realignments, seal widening, bridge widening and intersection improvements
- › fifteen more passing lanes including four passing lanes on SH3 between Te Kuiti and Mokau, for development and construction in the next three years
- › three new stock effluent disposal facilities
- › seven cycling improvement projects.

BACKGROUND

Economic growth and resultant increases in traffic demand mean that the state highway network in the Waikato will require substantial upgrading within the next 10 to 20 years. The major road corridors which are planned for upgrading to four-lane expressway standard are SH1 between Mercer and Cambridge and SH2 between Pokeno and Mangatarata (to be called the Maramarua Expressway). The priority for improvements to the SH1 corridor to complete the Waikato Expressway has been confirmed by Transit's consultation with stakeholders in the region.

Recent Improvements

A number of major improvements to state highways in the Waikato have been completed in recent years. The most significant improvements have been:

- ▶ SH1: Pokeno to Mercer 4-Laning, Waikato Expressway
- ▶ SH1: Rangiriri to South of Ohinewai 4-Laning, Waikato Expressway
- ▶ SH1: Tamahere 4-Laning, south of Hamilton
- ▶ SH1: Cobham/Grey Street Intersection Improvements, Hamilton
- ▶ SH2: Orchard to Tyes Corner Realignment, north of Paeroa
- ▶ SH2: South of Sarjants Reconstruction, north of Paeroa
- ▶ SH3: Mokau and Awakino Bridge Replacements, south of Te Kuiti
- ▶ SH3: Hannah's Curve to Awakino Seal Widening, south of Te Kuiti
- ▶ SH5: Mamaku Bluffs Realignment, east of Tirau
- ▶ SH27: Mahuta Road to Waikumete Stream Reconstruction, south of Maramarua
- ▶ SH25: Seal Extension between Whitianga and Coromandel
- ▶ SH25: Petersons/Duggans Realignment, south of Tairua

- ▶ SH25: Oturu to Swampy Realignment, south of Tairua
- ▶ SH27: Patersons to Pouriri Stream Reconstruction, south of Maramarua
- ▶ SH27: Costellos to Patersons Reconstruction, south of Maramarua

Current Improvements

Projects currently under construction include:

- ▶ SH1: Mercer to Longswamp 4-Laning, Waikato Expressway
- ▶ SH1: Huntly Internal Bypass
- ▶ SH1: Paddy Road/Hall Road Intersection Improvements, north of Rangiriri
- ▶ SH2: Turners Hill to Dohertys Corner Safety Improvements, east of Paeroa
- ▶ SH3: Waitomo Road Seal Widening north of Te Kuiti
- ▶ SH27: Waikaka Culvert Replacement, south of Maramarua

The designation for the Cambridge Bypass is in place and Transit is proceeding towards obtaining designations for the remaining sections of the Waikato Expressway including the Huntly, Ngaruawahia, and Hamilton bypasses and for sections of the Maramarua Expressway on SH2 between Pokeno and Mangatarata. Designations and resource consents for replacement of the Kopu Bridge on SH25 were recently obtained.

PROPOSED IMPROVEMENTS

The locations of Waikato projects in the 10-year plan are shown on Figure WK and the expected cost and timeframe for the development and construction of these projects are indicated in Table WK2.

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.

Waikato Expressway

Good progress has been made in recent years on progressing the construction of the Waikato Expressway. The Rangiriri to South of Ohinewai section has recently been opened and the very difficult and expensive section between Mercer and Longswamp is currently under construction. Thereafter, the remaining sections of the Waikato Expressway are likely to be deferred for some years due to funding constraints.

In the meantime, safety improvements are planned for the existing three-lane section between Longswamp and Rangiriri. These improvements will include widening to allow more frequent passing in both directions and provision of a median between the opposing traffic lanes.

Maramarua Expressway

On SH2 between Pokeno and Mangatarata, it is proposed to construct two-lane deviations with passing lanes at Mangatawhiri and Maramarua, consistent with an ultimate scheme to four-lane this section of highway. A realignment at Grahams Stream Bridge is also being investigated. While the four-lane Maramarua Expressway is a long-term project, improvements to the alignment of the existing highway with passing lanes are required in the meantime to improve safety and provide more frequent passing opportunities.

Urban Areas

Work is proceeding with Hamilton City Council on developing a number of schemes within Hamilton City including a Te Rapa Bypass, an Avalon Drive Bypass, and improvements to the southern approaches to Hamilton. This latter project includes possible widening of the Cobham Bridge and its approaches. The Avalon Drive Bypass is required urgently to relieve congestion on Avalon Drive between Rotokauri Road and Norton Road while the Te Rapa Bypass will be required, in part, to support the extensive growth planned for the Rotokauri growth cell in Hamilton north. The Te Rapa Bypass needs to be completed before the Ngaruawahia Bypass.

Within Hamilton City, improvements are also proposed at the following intersections:

- › SH1: Te Kowhai Road
- › SH1: Killarney Road
- › SH1: Hillcrest
- › SH1: Morrinsville Road
- › SH3: Ohaupo Road/Kahikatea Drive (SH1)

It is proposed to upgrade street lighting on Cobham Drive in Hamilton.

Safety improvements are also proposed at the Tainui Bridge and the Tregoweth Lane intersections on SH1 in Huntly.

Bypasses

The Taupo District Council has been developing a scheme for an eastern bypass of Taupo between the SH1/5 junction, north of Wairakei, and SH1, north of Taupo Airport. A designation has already been obtained for this bypass and Taupo District Council is ready to proceed with design work.

The Taupo District Council proposes to construct the first three stages of the bypass between Taupo Airport and Broadlands Road, with an expectation that Transit will assume responsibility for the fourth stage between Broadlands Road and the SH1/5 junction, including a crossing of the Waikato River. At this stage, this project is deferred in the 10-year plan due to funding constraints and other higher priorities in the Waikato region. Transit is in discussions with Taupo District Council on alternative funding arrangements for the fourth stage to enable this project to proceed.

A bypass of Whitianga on SH25 is being constructed incorporating waterways that will sever the existing highway as part of a residential development in Whitianga. This bypass is being funded primarily by the developer.

Consideration has previously been given to bypasses of Ohaupo and Te Awamutu/Kihikihi on SH3 and Tirau on SH1. At this stage, none of these projects is included in the 10-year plan.

Rural Highway Improvements

Rural realignments proposed for construction within the next three years are:

- › SH5: Tapapa Curves Realignment, east of Tirau
- › SH25A: Kopu East Realignment, south of Thames
- › SH31: Owaikura Road North Realignment, west of Otorohanga

A number of major rural realignments have been deferred and are not included in the 10-year plan. These include:

- › SH1: Piaere to Oak Tree Bend Realignment, north of Tirau
- › SH3: Blakett Road South Realignment, north of Otorohanga
- › SH3: Chinamans Hill to Airport Turn-off, south of Hamilton
- › SH23: Raglan Deviation West Realignment, west of Hamilton
- › SH25: Tairua Hill North and South Realignments, north of Tairua
- › SH27: Kaihere Eastern Deviation, south of Maramarua

It is proposed to investigate further improvements to SH1: Titoki to Bulli Point, south of Taupo, SH2 : Karangahake Gorge east of Paeroa and SH25 : Thames Coast Road, north of Thames. No major improvements to those sections of highway are envisaged within the next 10 years.

Improvements are proposed to the following rural intersections within the next three years:

- › SH27: Tahuna Road Roundabout, north of Matamata
- › SH26/27: Intersection, east of Morrinsville
- › SH2/25: Intersection at Mangatarata, south of Maramarua.

Seal widening is proposed within the next three years at:

- › SH2: Sarjants Corner to Awaiti, north of Paeroa
- › SH26: Strange Road, north of Paeroa.

It is proposed to replace the existing one-lane bridge at Kopu with a new two-lane bridge to relieve congestion, particularly in holiday periods. It is also proposed to widen the Matarawa Bridge on SH1, south of Tokoroa.

Three stock effluent disposal facilities in the Waikato area are proposed. The facilities will be located at:

- › SH1: Putaruru
- › SH3: Te Kuiti
- › SH26: Morrinsville

Passing Lanes

In accordance with the strategy of providing passing lanes at 5km intervals on high-volume highways, the 3-year plan for small and medium-sized projects includes a number of passing lanes on SH1 between Ngaruawahia and Hamilton and also between Cambridge and the Desert Road on SH2 between Pokeno and Mangatarata. The plan also includes additional passing lanes on SH3 between Te Kuiti and Mokau and on SH25A between Kopu and Hikuai on sections of highway with limited passing opportunities due to rolling terrain.

Walking and Cycling

A number of walking and cycling projects are proposed for urban areas in the Waikato over the next three years. These include providing separate cycle facilities at the narrow control-gate bridge at the northern entry to Taupo and between Taupo and Wairakei. The installation of a pedestrian refuge facility at the Kiddle Drive intersection with SH5 in Taupo is also planned.

In Hamilton a separate cycleway to the polytechnic is planned on Rotokauri Road to cater for the student cyclists. This cycleway will link with existing facilities. Improvements will also be made at Massey Street in Hamilton West to better cater for cyclists.

A cycleway is planned for the western side of the Ngaruawahia Bridge on SH1 in Ngaruawahia to discourage the use of the adjacent rail bridge, which is a significant local safety issue.

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:

- › improve road condition information to road users at critical points on the network, especially forward warning of traffic delays for southbound traffic on the Bombay Hills
- › improve road condition information in snow and ice-affected areas and for flood-prone sections of SH25
- › further develop ice-prediction technology including thermal mapping of the central plateau and provide more weather stations
- › extend the use of Calcium Magnesium Acetate, a relatively inert de-icing agent
- › maintain hazard-response plans and warning systems particularly in relation to the Mt Ruapehu lahar risk
- › maintain and improve skid resistance of the network targeted at further reduction in wet-weather crashes
- › implementation of a seismic retrofitting programme for a small number of “at risk” bridges in the region.

Table WK1

Forecasts of Expenditure on Maintenance and Improvements

Waikato 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	30.7	31.4	32.1	32.7	33.4	34.0	34.7	35.4	36.1	36.8	337.4
Corridor	12.7	13.6	14.2	14.8	15.5	16.2	16.9	17.6	18.4	19.2	159.2
Professional Services	5.6	5.7	5.8	6.0	6.1	6.2	6.3	6.5	6.6	6.7	61.5
Property Management	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	6.4
Preventive Maintenance	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	11.4
Emergency Works	1.8	3.1	3.1	3.2	3.3	3.4	3.5	3.7	3.8	3.9	32.8
Sub-total	52.2	55.5	57.0	58.5	60.0	61.7	63.3	65.0	66.8	68.6	608.6
Improvements											
Minor Safety Projects	2.0	2.0	2.1	2.1	2.2	2.3	2.3	2.4	2.4	2.5	22.3
Committed Projects	20.0	19.0	14.3	4.5	-	-	-	-	-	-	57.8
New Projects	15.3	19.0	21.2	23.2	18.5	23.3	27.4	46.7	49.4	45.6	289.5
Property Purchase	13.5	8.6	8.8	10.2	10.5	10.8	11.2	11.5	11.8	12.2	109.1
Walking & Cycling	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	3.0
Sub-total	51.1	48.9	46.7	40.3	31.5	36.7	41.2	60.9	63.9	60.6	481.7
Total	103.3	104.4	103.7	98.8	91.5	98.3	104.5	125.9	130.7	129.2	1090.3