



Transit New Zealand's 10-year State Highway Plan and Forecast for 2007/08 to 2016/17

Incorporating Transit's 2007/08 Land Transport Programme





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FOREWORD



With year one complete in our new five-year plan of works we can be justifiably proud of the significant progress that has been made. We are showing good progress towards delivering all the large state highway improvement projects outlined in the plan. When we began this journey we were under no illusions that this would be the most challenging work programme in our history. Whilst progress is good, we are fully aware of the need to maintain this momentum.

Key events for 2006/07 were:

- › Completion of the Central Motorway Junction in Auckland
- › Auckland ramp signalling installation started
- › Church to Avalon Drive construction started in Hamilton
- › Tauranga Harbour Link contract let
- › Transmission Gully Investigation underway
- › Tumai – Waikouaiti Realignment substantially complete
- › Christchurch Main Road North 4 Laning stage 2 completed

Along the way we have worked diligently to ensure we meet our statutory objectives under the Land Transport Management Act, while continuously looking for drivers to achieve value for money from the Government's substantial investment in state highways.

Hence in the coming year we are planning the greatest number of project investigation, design and construction starts ever. As well as the large projects, we will be undertaking some 150 small to medium sized projects. We are very aware that state highways are an essential part of New Zealand's transport network and a critical ingredient in our recipe for social, environmental and economic development.

To those who join us on this journey of investment in New Zealand's growth, we seek your continued support.

Bryan Jackson
Acting Chairperson



Continued stability

This year's State Highway Plan and Forecast for 2007/08 is year two of the five-year plan of works announced in June 2006, made possible by Budget 2006 which provided a five-year revenue guarantee for the National Land Transport Programme. The guarantee covered state highway maintenance and administration, a cost escalation guarantee for state highway improvements (2006/07 to 2010/11), and in particular, a list of key deliverables. The cost guarantee covers the cost of escalation above that allowed for in the 2006/07 published forecast.

The objectives for the remainder of the plan are certainty and stability in the delivery of all projects and activities. The aim is to ensure that funding issues do not delay progress on nationally and regionally significant state highway initiatives.

We anticipate that in 2008, the Government will consider the extension of the revenue and cost guarantee as part of the planned Update process. This process will extend the five-year plan to six years, and to create a new six-year plan possibly starting in 2009/10. The Update process will need to address the sustainability of revenue to deliver the remainder of Transit's 10-year Forecast, and any cumulative effects of higher than forecast cost escalation.

Drivers

The National State Highway Strategy 2007, which will be published in July 2007, will become the key document to drive future forecasts. It sets out how we will ensure the state highway network contributes to the New Zealand Transport Strategy objectives of economic development, safety and personal security, access and mobility, public health and environmental sustainability. The strategy defines Transit's long-term direction by having a view of the network some 30 years into the future. Appropriate allowances have been made to support growth and development based on existing long term plans. We recognise the need to take a different approach to 'predict and provide' for traffic growth and instead focus on the following visions and goals:

- › Ensure state highway networks make the optimum contribution to an integrated multi-modal land transport system
- › Provide safe state highways for all users
- › Enable improved and more reliable access and mobility for people and freight
- › Improve the contribution of state highways to economic development
- › Improve the contribution of state highways to the environmental and social wellbeing of New Zealand

In conjunction with the National State Highway Strategy, Transit's integrated and sustainable approach is to be captured in its updated Planning Policy Manual. This manual sets out Transit's approach to highway planning and how that interacts with growth and land use planning undertaken by local authorities. Integrating transport and land use is a key method of helping to ensure sustainable development because it enables adverse effects, such as environmental pollution or pressures on limited resources, to be addressed through collaborative planning and funding processes. The intent of the Planning Policy Manual is, therefore, to facilitate sustainable development, by seeking closer alignment between land use changes and the transport infrastructure and operational commitments needed to ensure the main transport links are effective for the long term future of New Zealand.

Transit has also adopted an Environmental Plan that makes clear that environmental and social responsibilities are key parts of how we operate and make balanced decisions. We use these considerations to determine what we do rather than treat them as effects to be mitigated.

Each project listed in this Forecast has a component that focuses on ensuring environmental sustainability, ranging from utilising local materials to reducing haulage costs and emissions to providing noise mitigation to address the adverse public health effects of road traffic noise. For example, projects such as the Auckland Harbour Bridge Stormwater Upgrade significantly reduce the amount of contamination affecting nearby water bodies.

Urban design is an integral part of our approach to planning, constructing and maintaining state highways because it helps to ensure state highways are sensitive to the surrounding environs, whether they be rural or urban. Many of the projects listed in this Forecast, such as the Bell Block Bypass and the Christchurch Southern Motorway, have undergone urban design reviews to ensure the outcomes are consistent with the New Zealand Urban Design Protocol and the New Zealand Transport Strategy.

Transit endorses the principles of Travel Demand Management as an integral component of an environmentally sustainable approach to land transport planning. Projects such as the Advanced Traffic Management Systems project in Auckland have multiple benefits including improving energy efficiency and vehicle emission performance.

Value for Money

While the Budget 2006 provided greater stability for state highway construction, Transit is ever mindful of the need to achieve value for money. As part of its continuous improvement programme Transit has put in place a number of measures for controlling cost, including:

- › Regularly reviewing all aspects of projects, including examining project standards, to ensure they are “fit for purpose” and that there is no “gold plating”
- › The scrutinising and approving of significant project scope changes by Transit’s senior management team and Board. This includes reviewing the conditions from councils for project designations, and rejecting those that are considered onerous, unaffordable and inconsistent with NZTS objectives.
- › Broadening Transit’s procurement procedures, including consideration of direct purchasing of materials and/or plant, where this achieves demonstrable savings
- › Early involvement of contractors in project development to work with the designers to help with practical suggestions on scope and design to reduce costs.

What are the differences in the Forecast?

This year sees the introduction of two new large projects into the Forecast. The first is the Prebensen Drive/Hyderabad Road Interchange in Napier. This project will assist regional economic development by providing an efficient route to the Port of Napier. The other project is the realignment of Buckle Street in Wellington (SH1) to redevelop the National War Memorial Park. This \$10M state highway project is being funded direct from Government (\$8M central and \$2M local) and managed by Transit.

In addition, two large state highway projects have been redefined as local roading projects. These are the Kapiti Western Link Road and the East Taupo Arterial. We have adjusted the forecast by removing the cashflows associated with both projects. Land Transport NZ has reassigned these funds to local roading.

Maintenance

Although we are indicating a higher level of funding for maintenance over the next 10 years than we forecast in 2006/07 (which partially offsets the effect of higher than forecast escalation), there is an impact on our works programme. For 2007/08 this will be achieved by deferring planned upgrades of bridges and other structures to meet current standards. Asset preservation and maintaining existing operations remains paramount. There will be no compromising Transit’s contribution to road safety and environmental responsibility where this is an integral part of performing our maintenance activities.

The Update process will address any further funding issues.

Consultation

This year's public consultation process highlighted a number of common themes across the country. Nationally, the highest number of submissions related to supporting the provision of safe walking and cycling activities. In response to this, Transit has adopted a Walking and Cycling Policy and is targeting walking and cycling activities that complement local authority urban strategies and are transport focused rather than recreationally focused.

There was also keen interest in the provision of passing opportunities. Transit's new Passing and Overtaking Opportunities Policy comes into operation this year and will enable us to explore a greater range of options across the state highway network.

Improved liaison with councils and key stakeholders was a common theme in the submissions. Transit welcomes this feedback and will be working more closely with these groups to ensure better alignment with them during the annual planning process undertaken in the spring.

As highlighted in 2006, even with much improved funding confidence, issues around designations, resource consents, material shortages and community agreement on projects, will continue to affect what can be delivered and by when. It continues to be a top priority for Transit to resolve these issues promptly with help from our transport partners, especially local government and communities.

Auckland Western Ring Route and tolling

In April 2007 the Board considered the outcome of the Auckland Western Ring Route (WRR) tolling consultation. It resolved not to proceed further with Transit's toll proposal pending resolution of alternative funding, which has been shown at \$800M in the 10-year Financial Forecast. Transit is continuing to plan for completion of the route by 2015, with the continued support of the Auckland region.

Sector Reviews

In August 2006 a final report from the Ministerial Group on Roothing Costs was published. This report considered the drivers of cost increases in the roading sector by looking at construction costs, technical standards, tendering processes and other inputs. The report recognised that urban construction had increased in scale and complexity. Environmental mitigation, property costs and material costs have been fundamental influences on price increases for state highway construction.

Next Steps

Government subsequently commissioned the Next Steps project to consider the performance, roles and responsibilities of the Ministry of Transport and the two Crown entities, Land Transport New Zealand and Transit New Zealand. The final review has now been reported and the Government has recently announced that it will establish short to medium term funding and investment priorities for the sector through the development of a Government Policy Statement, and the merger of Transit New Zealand and Land Transport New Zealand. The aim of these changes is to support a cohesive and efficient sector. Detailed implementation of these proposed changes is being worked through, and hence the consequences of the review have not been included in this forecast.

Table I – 10-year Financial Forecast

Maintenance and Improvements

	07/08 (\$M)	08/09 (\$M)	09/10 (\$M)	10/11 (\$M)	11/12 (\$M)	12/13 (\$M)	13/14 (\$M)	14/15 (\$M)	15/16 (\$M)	16/17 (\$M)	Total (\$M)
Maintenance (Escalated) ²	Note 1										
Road Maintenance and Operations	210	231	250	264	278	294	310	327	345	364	2,873
Road Renewals	168	185	200	211	223	235	248	262	276	291	2,300
Property Management	14	14	16	17	17	18	19	21	22	23	180
Preventive Maintenance	5	5	6	6	7	7	7	8	8	9	68
Emergency Works	32	34	36	37	39	40	41	42	43	45	389
Sub-Total ²	429	469	508	535	564	594	626	659	694	732	5,811
Improvements (Escalated) ³											
Minor Safety Projects	31	33	35	36	37	38	40	41	42	43	377
Committed Projects	452	281	120	8	0	0	0	0	0	0	861
New Large Projects	161	307	462	672	935	799	594	536	560	650	5,676
New Small & Medium Sized Projects	61	93	93	96	59	61	64	67	70	72	736
Property Purchase	96	96	58	60	45	45	66	68	70	72	676
Walking and Cycling	3	5	5	5	5	6	6	6	6	6	54
Sub-Total	804	815	773	878	1,082	949	769	718	748	844	8,380
Community Road Safety Programme	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	5.5
Administration	49.4	52.9	56.0	57.7	59.4	61.2	63.1	65.0	66.9	68.9	600.5
Total Expenditure	1,283	1,338	1,338	1,471	1,706	1,605	1,459	1,442	1,510	1,645	14,797
Capital injection for ALPURT B2	87	39									126
Auckland Western Ring Route Completion by 2015 ⁴			140	180	180	180	120				800
Funding to be considered by update process ⁵					242	224	99				565
NLTP anticipated funding ⁵	1,196	1,299	1,198	1,291	1,284	1,201	1,240	1,442	1,510	1,645	13,306
Total Revenue	1,283	1,338	1,338	1,471	1,706	1,605	1,459	1,442	1,510	1,645	14,797

Notes:

- The dark grey columns denote the remainder of the Government's 5-year State Highway Funding Plan announced as part of Budget 2006. This remains on track and on budget for successful completion. Escalation within this period is underwritten by the Government's cost escalation guarantee.
- The 2006/07 Forecast provision for maintenance escalation at 3% per year has been updated to Land Transport New Zealand's forecasts of 7% for 2008/09, 6% for 2009/10, 3% per year for 2010/11 and beyond.
- The provision for escalation beyond 2010/11 has been set at 3% where used.
- In accordance with the 2006/07 Forecast Transit continues to plan for opening the Auckland Western Ring Route by 2015. This milestone date produces a funding requirement of \$800M for which alternative funding sources are under investigation.
- Land Transport NZ has advised of lower revenue forecasts post the current 5-year state highway funding package, and reduced funding to small & medium sized projects, property purchase, and the start of two projects which complement, but are not essential to, the Western Ring Route. Rather than adjust the programme now the remaining shortfall against previously anticipated NLTP revenue is a matter to be considered in the planned Update process.

Table 2 – State Highways Activities for 2007/08 (Land Transport Programme)

		Activity Name	Priority (P)	Indicative Start Date Quarter (Q)			Indicative Cash Flow (\$,000)
Maintenance		Road Maintenance and Operations	P1	Q1			210,000
		Road Renewals	P1	Q1			168,000
		Property Management	P1	Q1			14,000
		Preventive Maintenance	P1	Q1			5,000
		Emergency Works	P1	Q1			32,000
Administration			P2	Q1			49,400
Commitments		Large Projects	P3	Q1			417,000
		Small and Medium sized projects	P3	Q1			35,000
Improvements		Minor Safety Projects	P4	Q1			31,000
		New Projects (As listed below)	P5	Q1			126,000
Region	SH	Activity Name	P5	Indicative Start Date Quarter (Q)	Phase *	Total Phase Cost (\$,000)	Indicative Cash Flow (\$,000)
Auckland	1	AHB Moveable Lane Barrier		Q1	C	10,197	10,197
Auckland	18	Hobsonville Deviation		Q1	C	194,830	22,660
Auckland	16	Te Atatu to Royal 6L		Q2	D	2,300	824
Auckland	16	Waterview to Rosebank 8L		Q1	I	2,100	1,133
Auckland	16	Waterview to Rosebank 8L		Q2	D	2,800	733
Auckland	20	Waterview Connection		Q1	D	50,000	6,180
Auckland	16	Rosebank to Te Atatu 8L		Q1	I	927	927
Auckland	Var	ATMS Stage IV – Stage 2		Q1	I	180	144
Auckland	Var	ATMS Stage IV – Stage 2		Q2	D	2,805	2,513
Auckland	Var	ATMS Stage IV – Stage 2		Q4	C	76,700	4,635
Auckland	16	Punganui Stream Bridge		Q1	D	120	62
West Coast	6	Arahura Bridge Replacement		Q1	C	20,000	3,605
Auckland	1	Newmarket Viaduct		Q1	D	6,000	4,120
Auckland	1	Newmarket Viaduct		Q2	C	150,100	17,348
Auckland	1	Newmarket Viaduct to Greenlane Aux L		Q1	D	1,750	1,750
Christchurch		Christchurch TDM		Q4	C	3,100	412
Bay of Plenty		Tauranga Central Corridor TDM		Q1	I	106	106
Bay of Plenty		Tauranga Central Corridor TDM		Q2	D	618	618
Wellington	1	Basin Reserve Improvements		Q3	I	1,000	103
Wellington		Transmission Gully		Q1	D	65,000	20,600
Waikato	1	Hamilton Southern Links		Q2	I	4,000	2,060

* I = Investigation D = Design C = Construction

Table 2 – State Highways Activities for 2007/08 (Land Transport Programme) continued

Region	SH	Activity Name	Priority P5	Indicative Start Date Quarter (Q)	Phase *	Total Phase Cost (\$,000)	Indicative Cash Flow (\$,000)
Waikato	1	Te Rapa Bypass		Q4	D	4,750	464
Auckland	1	Warkworth Stage 1		Q1	D	846	630
Auckland	1	Warkworth Stage 1		Q1	C	15,000	2,575
Auckland	1	Papakura Interchange Upgrade Stage 1		Q1	I	1,545	1,545
Waikato	2	Maramarua Deviation		Q2	D	3,000	515
Auckland	2	Kopuku Realignment		Q2	I	1,500	412
Waikato	1	Huntly Bypass		Q4	D	9,000	3,502
Waikato	1	Ngarauwahia Bypass		Q2	D	8,000	1,030
Bay of Plenty	2	Tauranga Eastern Motorway		Q2	D	20,300	3,039
Waikato	1	Hamilton Bypass		Q4	D	9,000	3,090
Waikato	1	Rangiriri Bypass		Q3	D	2,000	206
Northland	10	Bulls Gorge Realignment		Q1	D	250	155
Waikato	1	Piarere – Oak Tree Bend Realignment		Q4	C	12,000	515
Bay of Plenty	36	Pyes Pa Bypass		Q2	D	1,100	1,100
Hawke's Bay	50A	Hawke's Bay Expressway Southern Extension		Q1	D	220	155
Otago	6	Kawarau Falls Bridge Replacement		Q1	I	400	206
Hawke's Bay	2	Waipukurau Overbridge Realignment		Q1	D	206	206
Canterbury	1	Chch Northern Arterial Rural		Q3	I	1,480	824
Canterbury	1	Memorial Ave Intersection		Q4	I	515	515
Wellington	2	Rimutaka Corner Easing (Muldoon's)		Q1	D	72	72
Man-Wanganui	2	Papatawa Realignment		Q3	D	425	103
Northland	1	Kamo Bypass Stage 2		Q2	D	650	206
Otago	1	East Taieri Bypass		Q1	I	400	206
Waikato	1	Long Swamp to Rangiriri 4L		Q4	D	2,400	927
Hawke's Bay	2	Matahorua Gorge Realignment		Q2	D	1,000	515
Hawke's Bay	2	Prebensen Drive / Hyderabad Rd IC		Q2	I	309	309
West Coast	6	Gates of Haast		Q1	I	800	650
Bay of Plenty	2	Katikati Bypass		Q2	I	618	618
Bay of Plenty	2	Omokoroa Roundabout		Q2	I	464	464
Wellington	2	SH2/58 Grade Separation		Q4	D	2,100	258
Nelson-Tasman	6	Hope Saddle Realignment		Q2	I	300	103
Gisborne	35	Tolaga to Gisborne S/W		Q1	I	155	155
Improvements		Small and Medium sized projects	P6	Q1			61,000
		Strategic Studies	P6	Q2			9,000
		Investigations from Strategic Studies	P6	Q4			4,000
		Strategic Plan Initiatives	P6	Q3			22,000
		Property Purchase	P6	Q1			96,000
		Walking & Cycling	P6	Q1			3,000

* I = Investigation D = Design C = Construction

Notes:

1. Indicative durations of large projects are shown in the regional tables
2. The priority is a requirement of the LTMA and is listed in relative terms

GUIDE TO REGIONAL TABLES – EXAMPLE

AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

Green icons represent committed project phases.
Black icons represent programmed project phases.

Identification of problem and potential solutions.

Engineering design of works to be undertaken, including cost estimation.

Construction of final project.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$\$ 20-100M \$\$ 5-20M \$\$\$ 100+M
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Appendix 1 lists large projects and their objectives to be achieved under the Act, as well as options and alternatives considered.

Denotes funding sources as shown on the bottom of the page.

LARGE PROJECTS

ATMS Stage IV-Central Motorway Junction

Economic Development

1.4

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
Committed construction. Value of remaining works to be funded by Land Transport NZ.		Estimated total cost of project (all phases).

16	Waterview to Rosebank 8L	Economic Development	\$\$\$
I	Victoria Park Tunnel ®	Economic Development	\$\$\$
SMALL AND MEDIUM PROJECTS			
I	AHB Structural Upgrade	Safety and Personal Security	0.8
I	Drury Interchange Traffic Signals	Economic Development	0.8
Passing Lanes			
I	Hoteo River 5th Bd PL	Safety and Personal Security	1.8
Stock Effluent Disposal Facilities			
I	Wellford SEDF	Environmental Sustainability	0.3
Walking & Cycling			
16	Westgate Pedestrian Facility	Public Health	\$

\$ in conjunction with third party contributions outside NLTP funding \$\$ capital injection

Indicative funding sources identified by Land Transport NZ in the NLTP

® denotes regionally distributed funds

© denotes crown funding

Ⓜ denotes national funding, however Land Transport NZ has indicated possible crown funding

Ⓝ denotes national funding, however Land Transport NZ has indicated possible regionally distributed funding

Projects in investigation or design may not necessarily proceed to construction.

Total cost of either investigation, design or construction phase.

Committed phase. Value of remaining works to be funded from Land Transport NZ.

Phase Cost. Cost of phase shown by symbol.

Appendix 2 gives a generic list of how projects contribute to the purposes of the Land Transport Management Act, as well as options and alternatives considered.

Where Land Transport NZ has yet to determine the funding source, it has been denoted as either N/C, N/R, R or C. This is to be consistent with the NLTP.

The phase shown in the Land Transport Programme may continue into the plan years. In this case the icon will remain dark. The icons shown after these forecast years are shown in grey. This is to represent indicative timings given that the outcomes of earlier phases are not fully known.

COMMONLY USED ABBREVIATIONS WITHIN THE REGIONAL TEXT AND TABLES

Project Names

AHB	Auckland Harbour Bridge
ATTOMS	Auckland Transit Traffic Operation Management System
CMJ	Central Motorway Junction
SWATT 2010	South Waikato and Taupo Target 2010
UH Br	Upper Harbour Bridge
ALPURT	Albany to Puhoi realignment

Project Type

4L	Four laning
6L	Six laning
8L	Eight laning
ATMS	Advanced Traffic Management Systems
Aux	Auxiliary
BPL	Bus Priority Lane
EF	Stock Effluent Disposal Facility
Ext	Extension
Imp.	Improvement
I/C	Interchange
I/S or Int	Intersection
Ped	Pedestrian
PL	Passing Lane
Realign	Realignment
SE	Seal Extension
SI	Safety Improvement
SVB	Slow Vehicle Bay
TDM	Travel Demand Management

Project Related Information

CCTV	Close Circuit Television
SH	State Highway
Var	various
VMS	Variable Message Signs
Nth	north
NB or Nth Bd	northbound
Sth	south
SB or Sth Bd	southbound
West Bd	westbound
East Bd	eastbound

Related Documents and Organisations

LTMA	Land Transport Management Act 2003
MOT	Ministry of Transport
NZTS	New Zealand Transport Strategy
NLTP	National Land Transport Programme
RLTS	Regional Land Transport Strategy



KEY TRANSPORT ISSUES

In meeting the objectives of the NZTS and LTMA the key regional transport issues for the Northland region include:

- › Road Safety: of particular concern is the separation of heavy freight traffic and other traffic (including tourist traffic), and crashes on bends
- › Secure, efficient and safe transport corridors, especially between Auckland and Whangarei
- › Forestry traffic: over the next few years forestry harvesting is expected to increase with much of it expected to be exported through Northport at Marsden Point
- › Tourist traffic: particularly on the Twin Coast Highway network linking the Bay of Islands, Cape Reinga and the Waipoua Forest
- › Increased land development, particularly at Ruakaka, Marsden Point, Kerikeri and Waipapa, Bay of Islands, Doubtless Bay, Opononi and Omapere, and Mangawhai. This is resulting in growing traffic volumes, leading to the need for some improvements to the strategic roading network, including state highways
- › Increasing congestion through the Whangarei urban area, including on state highways
- › Lack of passing opportunities
- › Spillages from stock trucks.

How we plan to address these key issues

The terrain in Northland is often difficult, causing state highways to be generally quite winding and undulating. Northland also has a diverse geology resulting in areas of inherently unstable rock formation known as Onerahi Chaos Breccia. This, together with an almost sub tropical climate of high rainfall, results in some lengths of 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 and south 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 Rd, north of Wellsford.

Transit will also continue to liaise with councils and developers to ensure that an integrated approach is taken in relation to development and transportation needs.

Improvements are also required on key forestry routes to accommodate the predicted increases in forestry traffic from Northland forests to Northport at Marsden Point. Proposed improvements include the provision of passing lanes, seal widening, and the upgrade of intersections where forestry trucks enter the state highway network. Innovative low-cost solutions to the latter will be required because logging trucks generally use intersections only for the relatively short harvesting period.

Road Safety – Secure and Efficient Transport Corridors

Transit plans to continue to improve the safety and efficiency of state highways. A number of large and small to medium activities have been proposed. These include realignments, intersection improvements and seal widening and guard rails. In conjunction with local authorities, further stock truck effluent facilities are being investigated.

Tourist Routes

Stage 1 of the sealing of SH1 from Waitiki Landing to Cape Reinga was completed during 2004/05. The remainder of the sealing of this 20-kilometre section of state highway is now underway and is expected to be completed in 2009/10. Cape Reinga is a nationally significant tourist destination and sealing will meet tourist expectations and improve safety.

Passing Opportunities

Limited passing opportunities in some parts of the region's road network lead to driver frustration and accidents. In addition to the many passing lanes already completed, Transit plans to progress further passing lanes on SH1 between Auckland and Kaitia and on SH14. A passing and overtaking opportunities study will be undertaken on these routes.

Walking and Cycling

Four activities for walking and cycling have been proposed in the Northland region to provide new or upgraded pedestrian or cyclist facilities in Otaika, Kaikohe, Kawakawa and from Paihia to Haruru Falls.

Strategic Studies

We propose to undertake a strategic study between Wellsford and Whangarei to improve our long term planning and ensure good decision-making.

Maintenance and Operations

Maintenance activities make up a large proportion of the forecast expenditure in the Northland region. In addition to preserving the highway network and undertaking maintenance and improvements to meet future levels of service, we propose to:










- › Resurface 73km and reconstruct 28km of highway
- › Continue a programme of slip site monitoring and management and make provision for emergency reinstatements
- › Carry out corridor maintenance including litter and graffiti removal, routine vegetation control, road marking, maintenance of signs, traffic signals and carriageway lighting maintenance and incident response
- › Continue a programme of minor safety improvements, including drainage improvements, intersection upgrades, seal widening and installing guardrails, in addition to planned capital improvements to address safety issues.

NORTHLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
LARGE PROJECTS						
I	Waitiki Landing to Cape Reinga Seal Ext Stage 2 [Ⓞ]	Access and Mobility	13.5			
I	Akerama Curves Realignment & Sth Bd PL [Ⓞ]	Safety and Personal Security	0.3			
I	Kamo Bypass Stage 2 [Ⓞ]	Access and Mobility	0.1			
10	Bulls Gorge Realignment [Ⓞ]	Access and Mobility	\$			
I	Akerama Curves Realignment & Sth Bd PL [Ⓞ]	Safety and Personal Security	\$\$			
I	Kamo Bypass Stage 2 [Ⓞ]	Access and Mobility	\$\$			
I	Snake Hill Realignment [Ⓞ]	Safety and Personal Security	\$\$			
12	Matakohe Realignment [Ⓞ]	Access and Mobility	\$\$			
I	Brynderwyn Hill Realignment [Ⓞ]	Access and Mobility	\$\$			
I	Port Marsden Highway Interchange	Economic Development	\$\$			
SMALL & MEDIUM PROJECTS						
I	Plantation North to Topuni Bridge SI	Safety and Personal Security	0.1			
I	Safety Retrofit	Safety and Personal Security	0.4			
12	Wairau River S-Bend Realignment	Safety and Personal Security	2.2			
10	Kaingaroa Safety Improvement	Safety and Personal Security	0.7			
I	One Tree Point Intersection Upgrade Stage 2	Safety and Personal Security	3.0			
10	Puketona SH11 Intersection Improvement	Safety and Personal Security	2.0			
Total Phase Cost						

Indicative funding sources identified by Land Transport NZ in the NLTP

[Ⓞ] denotes regionally distributed funds
















Projects in investigation or design may not necessarily proceed to construction.

NORTHLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction


The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining	Land Transport Programme	Plan	Forecast
			\$ < 5M \$\$\$ 20-100M \$\$\$\$ 5-20M \$\$\$\$\$ 100+M	07/08	08/09-10/11	11/12-16/17
	SMALL & MEDIUM PROJECTS (continued)					
			Total Phase Cost			
I	Plantation North Realignment	Safety and Personal Security	0.1			
I	Bends South of Kawakawa Realignment	Safety and Personal Security	0.2			
I	Mountain Rd Seal Widening	Safety and Personal Security	0.1			
I	Loop Rd North to Smeatons Hill SI	Safety and Personal Security	0.5			
I	Springfield Rd to Oakleigh Service Station SI	Safety and Personal Security	1.7			
I	SH14 Intersection Improvement	Safety and Personal Security	0.1			
I	Saleyards Rd North Intersection	Safety and Personal Security	0.1			
	Passing Lanes					
I	Waioomio Nth Bd PL	Safety and Personal Security	2.5			
I	Kaiwaka Sth Bd PL	Safety and Personal Security	0.1			
I	Hukerenui Nth Bd PL Extension	Safety and Personal Security	0.1			
I	Old North Rd Sth Bd PL	Safety and Personal Security	0.1			
I	Waioitu North Nth Bd PL	Safety and Personal Security	0.1			
I	Callaghan Rd Nth Bd PL	Safety and Personal Security	1.5			
I4	Newton Rd West Bd PL [Ⓞ]	Safety and Personal Security	0.1			

Projects in investigation or design may not necessarily proceed to construction.
[Ⓞ] denotes regionally distributed funds

NORTHLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$\$ 20-100M \$\$ 5-20M \$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
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The grey symbols show indicative timings given that the investigation or design phase has not been completed.

Stock Effluent Disposal Facilities

I	Whangarei District SEDF	Environmental Sustainability				
			Total Phase Cost			0.1

Walking & Cycling

12	Kaikohe Pedestrian Facility	Public Health	\$			
I	Otaika Pedestrian Crossing Upgrade	Public Health	\$			
II	Paihia to Haruru Falls Pedestrian Facility	Public Health	\$			
II	Kawakawa Township Footpath	Public Health	\$			

Strategic Studies

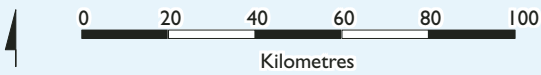
- SH I Whangarei to Kaitaia Passing Opportunities Plan
- SH I Wellsford to Whangarei

Projects in investigation or design may not necessarily proceed to construction.

Fig N

NORTHLAND REGION

State Highway Network at 01 July 2006



KEY DELIVERABLES 5-YEAR FUNDING PACKAGE (2006/07 to 2010/11)		INDICATIVE PROJECTS
Large Projects	Small / Medium Projects	Forecast
BUILT AND OPENED		
SUBSTANTIAL CONSTRUCTION		
PREPARED FOR CONSTRUCTION		
PREPARED FOR DESIGN		



- Transit Region
- Territorial Authority Boundary
- State Highway
- Other Roads



KEY TRANSPORT ISSUES

Transit will work closely with the Auckland Regional Transport Authority (ARTA) and regional and district councils to ensure there is alignment of priorities, to relieve congestion and support regional growth strategies.

In meeting the objectives of the NZTS and LTMA the key regional transport issues for the Auckland region include:

- › Severe congestion, resulting in variability in trip times
- › Road safety, in particular on SH1 and SH16 north of Auckland where there is a lack of passing opportunities
- › Traffic growth, driven by population growth
- › An alternative route to SH1 through Auckland
- › Secure, efficient and safe transport corridors, especially between Auckland & Whangarei and SH2 within the Auckland region
- › The impact of land use development because of continuing intensification within the Metropolitan Urban Limit (MUL)
- › Increased land use development at growth nodes such as Warkworth and Kumeu leading to the need for improvements to the roading network
- › Passenger transport infrastructure requirements.

How we plan to address these key issues

Economic growth and resulting increases in traffic demand mean that the state highway network in Auckland will need to be extended and existing lengths substantially upgraded within the next 10 to 20 years to relieve congestion and support the Auckland Regional Growth Strategy.

Travel Demand Management (TDM) is a combination of activities that together seek to influence travel behaviour. TDM methods include travel plans, traveller information systems and traffic management

techniques such as ramp signalling. Transit endorses the principle of TDM as an integral component of a sustainable approach to land transport and is actively investigating opportunities for TDM.

Improvement works encompass the entire region with particular focus on the Auckland Central Corridor, Western Ring Route and the Northern Busway, including the recently completed and opened Esmonde Road Interchange.

Corridors outside the Auckland MUL also require improvements to accommodate increases in inter-regional travel. Proposed activities include improvements to the alignment of existing two lane highways, seal widening and the provision of passing lanes.

Travel Demand Management

Ramp signalling is one of a number of travel demand management approaches that seeks to influence demand for transport or travel. Installation of signals has commenced on the Southern Motorway, with the Northwestern and Northern Motorways following as an integrated project. Signals are also included as an integral part of forward planning on all of the Western Ring Route. The overall objective is to reduce congestion, reduce journey times and improve journey time reliability during peak travel periods.

Auckland Central Corridor

Auckland Central Corridor activities cover SH1 from Albany to Manukau. Several capacity improvement projects are forecast for the next 10 years. These include projects such as the Vic Park Tunnel and Newmarket Viaduct replacement, which will add capacity to maximise the performance of the Central Motorway Junction.

Western Ring Route

The Western Ring Route (WRR) is a proposed strategic motorway running south to north through Auckland, connecting Manukau City, Auckland City, Waitakere City and North Shore City. It is made up of ten individual projects that need to be completed as a package. It will take traffic from Manukau through Waterview and Hobsonville to Albany to provide a strategic alternative to State Highway 1.

Provision for completion of the WRR has been included in Transit's State Highway Forecast, but in order to complete by 2015, as planned since August 2005, additional revenue will be needed to fund the required debt. Transit is working on the understanding that Auckland does want the WRR and wants it completed sooner (2015) than would be possible under current conventional funding.

Two projects shown in the tables have been marked to show that Land Transport New Zealand has not included the cost of these projects in the 10 year financial allocation to Transit. These projects are Constellation to Albany and Puhinui to Mangere. They remain in the forecast and will be subject to the update process for funding.

Public Transport Improvements

Transit considers and makes appropriate provision for public transport for all new projects being developed and ensures there is a close alignment with ARTA's programme. A number of bus priority lanes are being progressed in conjunction with other motorway capacity improvements.

Road Safety

Transit has identified a number of activities to improve the safety and efficiency of sections of state highways. These include realignments, intersection improvements, seal widening and lighting safety retrofits.

Passing Opportunities

Limited passing opportunities on parts of the rural state highway network lead to driver frustration and accidents. Transit plans to progress passing lanes on both SH1 and SH16 north of Auckland.

Stock Effluent Disposal Facilities

As part of a national programme to provide a safe and convenient network of stock effluent disposal facilities, two new facilities are being constructed on SH1 at Wellsford and on the Bombay Hills.

Walking and Cycling

Provision for walking and cycling activities is an integral part of state highway planning. While these facilities are provided as part of improvement projects where applicable, there is one specific pedestrian facility planned for implementation in the next three years, on SH16 at Westgate.

Strategic Studies

We are proposing to undertake a number of new strategic studies for the Auckland region to improve our long-term planning and assist good decision-making. These include the Auckland Regional Growth Strategy – serving the growth nodes, the Northern Motorway study from Auckland Harbour Bridge to Albany, the SH22 & Southern Motorway study from Glenbrook to Wiri, and a study of SH20A and 20B for airport access.

Maintenance and Operations

Maintenance and operations activities make up a large proportion of the forecast expenditure in the Auckland region and are due to increase over the next 10 years because of the commissioning of capital projects.

In addition to preserving the highway network and undertaking maintenance and improvements to meet future levels of service, other asset renewals and operations activities include:







- › Resurfacing 56km of multi-lane motorway
- › Resurfacing 29km and reconstructing 1km of rural state highway
- › Improving safety by applying high skid resistance surfacing
- › Continuing to refine maintenance practices to reduce traffic disruptions and noise during the day and night
- › Continuing to carry out structural and seismic strengthening of bridges, including the Auckland Harbour Bridge
- › Improving techniques and response times when managing incidents on motorways.

In 2007/08 the Transit managed Traffic Management Unit (TMU), a joint collaboration between Transit and six Auckland local authorities providing 24-hour intergrated traffic management, incident management and traveller information to road users, proposes to:




























- › Continue to improve management of the wider impacts of the expanding motorway construction programme
- › Expand the geographic coverage and improve the functionality of the motorway Advanced Traffic Management Systems
- › Provide an improved traveller information service to users through the traffic website and associated services
- › Increase resource levels to operate travel demand management measures, such as ramp signalling
- › Continue to enhance the management of the critical arterial network by improving co-ordination of traffic signals throughout the region
- › Improve asset management systems for all high technology equipment
- › Improve traffic flow within the region
- › Continue to improve incident management.

AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
LARGE PROJECTS						
20	Mt Roskill Extension	Economic Development	97.0			
I	Northern Busway PT (Stages 1 & 2)	Economic Development	48.8			
20	Manukau Extension §	Economic Development	157.2			
I	Esmonde Rd Interchange	Economic Development	4.0			
18	Greenhithe Deviation	Economic Development	22.9			
Var	Advanced Traffic Management Systems Stage IV-Central Motorway Junction	Economic Development	1.4			
Var	Western Ring Route Ramp Signalling	Economic Development	9.0			
I	Southern Motorway TDM (Ramp Signalling)	Economic Development	15.0			
I	Northern Motorway TDM (Ramp Signalling)	Economic Development	13.4			
I	AHB Storm Water Upgrade	Environmental Sustainability	4.5			
20	Manukau Harbour Crossing	Economic Development	1.5			
I	Northwestern Motorway TDM (Ramp Signalling)	Economic Development	11.4			
I	Victoria Park Tunnel	Economic Development	3.1			
20	Waterview Connection	Economic Development	3.8			
Var	Advanced Traffic Management Systems Stage IV-Central Motorway Junction	Economic Development	1.4			
I	Warkworth Stage I	Economic Development	1.1			
I	ALPURT – Sector B2 Toll Road §§	Economic Development	126			

Projects in investigation or design may not necessarily proceed to construction.







§ in conjunction with third party contributions outside NLTP funding §§ capital injection













































Indicative funding sources identified by Land Transport NZ in the NLTP

Ⓢ denotes regionally distributed funds

AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction

SH	Project	Primary LTMA Objective	Estimated Total Cost (\$M)	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
			\$ < 5M \$\$\$ 20-100M \$\$\$\$ 5-20M \$\$\$\$\$ 100+M			
LARGE PROJECTS (continued)						
I	Auckland Harbour Bridge Moveable Lane Barrier	Safety and Personal Security	\$\$			
I	Northcote to Sunnynook Auxiliary Lane	Economic Development	\$			
18	Hobsonville Deviation §	Economic Development	\$\$\$\$			
16	Te Atatu to Royal 6L	Economic Development	\$\$\$\$			
16	Te Atatu Interchange West Bd Off-Ramp Upgrade	Economic Development	\$			
16	Waterview to Rosebank 8L	Economic Development	\$\$\$\$			
20	Waterview Connection	Economic Development	\$\$\$\$\$			
20	Manukau Harbour Crossing	Economic Development	\$\$\$\$\$			
16	Rosebank to Te Atatu 8L	Economic Development	\$\$\$\$			
Var	Advanced Traffic Management Systems Stage IV-Stage 2	Economic Development	\$\$\$\$			
16	Punganui Stream Bridge Replacement	Access and Mobility	\$			
I	Victoria Park Tunnel ®	Economic Development	\$\$\$\$\$			
I	Newmarket Viaduct ®	Economic Development	\$\$\$\$\$			
I	Newmarket Viaduct to Greenlane Auxiliary Lane ®	Economic Development	\$			
16	Brigham Creek Extension ® or ©	Access and Mobility	\$\$\$\$			
I	Warkworth Stage I ® or © §	Economic Development	\$			
I	Papakura Interchange Upgrade Stage I ® or © §	Economic Development	\$			

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

Projects in investigation or design may not necessarily proceed to construction.

§ in conjunction with third party contributions outside NLTP funding



Indicative funding sources identified by Land Transport NZ in the NLTP













® denotes regionally distributed funds

© denotes crown funding

AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17









Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
LARGE PROJECTS (continued)						
2	Kopuku Realignment ©	Safety and Personal Security	\$\$\$			
1	Schedewys Hill Deviation ©	Safety and Personal Security	\$\$\$			
18 *	Constellation to Albany Interchange Upgrade	Economic Development	\$\$\$			
	Integrated Transport Control Centre	Economic Development	\$			
20A	Kirkbride Rd Grade Separation © or ©	Economic Development	\$\$\$			
20 *	Puhinui to Mangere 6L	Economic Development	\$\$\$			

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SMALL & MEDIUM PROJECTS

1	AHB Structural Upgrade	Safety and Personal Security	0.8			
1	Stafford – Esmonde Bus PL	Safety and Personal Security	2.2			
1	Orewa Township Upgrade	Safety and Personal Security	0.3			
1	McKinney Rd Intersection Improvements	Safety and Personal Security	3.9			
1	Auckland Harbour Bridge Northern Approach Sth Bd Lane Light Trial	Economic Development	0.1			
1	Greville Rd Nth Bd Off-Ramp Left-Turn Slip Lane	Safety and Personal Security	0.1			
1	Drury Interchange Traffic Signals	Economic Development	0.8			
22	Mercer to Oira Lighting Improvement	Safety and Personal Security	0.1			
1	Auckland Harbour Bridge Sth Bd Extension Structural Upgrade	Safety and Personal Security	3.8			

Projects in investigation or design may not necessarily proceed to construction.

* projects marked as reserve in the NLTP. Subject to review in the update process

Indicative funding sources identified by Land Transport NZ in the NLTP

© denotes regionally distributed funds

© denotes crown funding

AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
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The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SMALL & MEDIUM PROJECTS (continued)

		Total Phase Cost
I	Auckland Harbour Bridge Nth Bd Extension Structural Upgrade	3.8
	Relocatable VMS	0.5
	Moveable VMS	0.3
	Portable CCTV	0.2
I6	Quay St – Ronayne St Upgrade	1.1
I	Ellerslie Sth Bd Off-Ramp Slip Lane	0.4
I	Southern/Northern Motorway Lighting Safety Retrofit	4.2
I6	Waitangi Bridge to Basil Orr Rd Seal Widening	1.1
I6	Taupaki Rd/Old North Rd Intersection Upgrade	2.4
I	Takanini Interchange Upgrade	0.3
22	Glenbrook Rd Intersection Improvement ©	0.1
I	Wayby Valley Road Intersection	0.1
Passing Lanes		
I	Horoa River Sth Bd PL	1.8
I	Te Hana Overbridge Nth Bd PL	0.1
I	Toovey Rd Sth Bd PL	3.0
I	Sheepworld Sth Bd PL	1.9
I6	Kumeu No.2 Bridge West Bd PL ©	0.1







Indicative funding sources identified by Land Transport NZ in the NLTP

© denotes regionally distributed funds





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AUCKLAND State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
SMALL & MEDIUM PROJECTS (continued)						
I	Mangawhai Rd Sth Bd PL	Safety and Personal Security	2.4			
I	Waitemata Sth Bd PL	Safety and Personal Security	0.1			
Stock Effluent Disposal Facilities						
I	Wellsford SEDF	Environmental Sustainability	0.3			
I	Bombay Hills SEDF	Environmental Sustainability	0.3			
Walking & Cycling						
16	Westgate Pedestrian Facility	Public Health	\$			

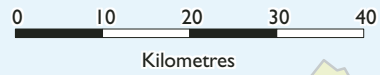
Projects in investigation or design may not necessarily proceed to construction.

Strategic Studies

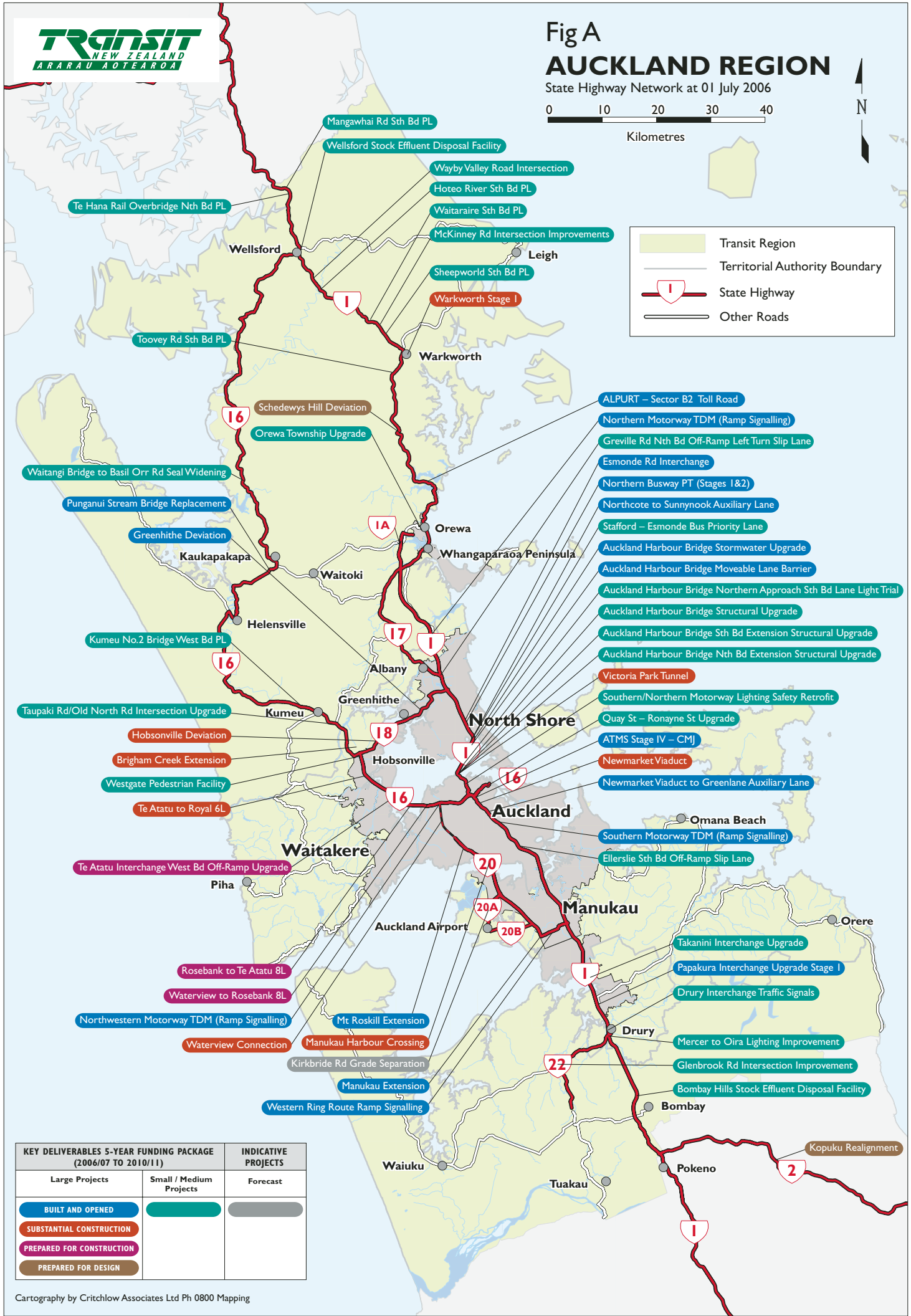
- SH18 Upper Harbour Corridor – Albany to Constellation
- Northern Busway Extension to Orewa
- Southwestern Corridor Study
- SH1/16 Auckland to Wellsford
- SH1 Waitemata Harbour Crossing
- SH22 Strategic Study Review
- Whau River Crossing
- Auckland Regional Growth Strategy – Servicing the Growth Nodes
- Auckland State Highway Walking and Cycling Strategy
- SH20A & 20B Airport Access
- Auckland State Highway Strategy
- Auckland Harbour Bridge to Albany Study

Fig A AUCKLAND REGION

State Highway Network at 01 July 2006



- Transit Region
- Territorial Authority Boundary
- State Highway
- Other Roads



KEY DELIVERABLES 5-YEAR FUNDING PACKAGE (2006/07 TO 2010/11)		INDICATIVE PROJECTS
Large Projects	Small / Medium Projects	Forecast
BUILT AND OPENED		
SUBSTANTIAL CONSTRUCTION		
PREPARED FOR CONSTRUCTION		
PREPARED FOR DESIGN		



KEY TRANSPORT ISSUES

In meeting the objectives of the NZTS and LTMA, the key regional transport issues for the Waikato Region include:

- › Safety: the Waikato state highway network has the highest fatal crash densities in the country, 20 percent higher than any other region. It has 20 of the nation's 100 worst "black routes", with a high frequency of serious and fatal crashes
- › Long-haul routes: the Waikato is part of a growth triangle linking major export hubs, population centres and tourist attractions in Auckland, Waikato and the Bay of Plenty. A number of the country's strategic corridors with high proportions of heavy vehicles go through the Waikato, contributing to a complex mix of local, inter-regional and tourist traffic
- › Congestion and bottle necks: rapid population and development growth in and around Hamilton, and to a lesser extent Cambridge and Taupo, is causing congestion and increasing travel delays and transport costs for long-haul travellers, as well as a deterioration of environmental and amenity values for the communities that these long-haul routes pass through
- › Large volumes of vehicles are diverting onto unsuitable alternative routes to avoid delays, with resultant impacts on safety and economic development
- › Forestry traffic: over the next 5 to 10 years forestry harvesting is expected to increase from 10 to 11 million tonnes from Central Plateau forests, with much of the product to be exported through the Port of Tauranga
- › Hamilton growth: there is significant pressure for commercial access and growth in northern and western Hamilton. This, combined with the development of the Crawford Street rail freight village, is putting significant pressure on the Hamilton Western Corridor, which also has a local road function. Transit will work closely with its transport partners to build on the Access Hamilton Strategy, which seeks a balance between roading,

rail, passenger transport, and active modes of transport to manage demand

- › Tourist traffic: particularly in Taupo and on the Coromandel Peninsula (where the number of domestic holidaymakers is also a significant issue), and on the routes linking Auckland, Waitomo Caves, Lake Taupo, and Rotorua
- › Route security: flooding on the Thames Coast highway and interruption of the state highway network because of bad weather and slips, particularly on the SH1 Desert Road and on SH3 through the Awakino Gorge, has a significant economic impact nationally as well as on the Taranaki region and the local communities
- › Spillages from stock trucks.

How we plan to address these key issues

The Waikato Expressway continues to be the highest priority transport issue for the region. A significant component of this Expressway between Mercer and Longswamp has been completed and further progress will be made on the remaining components over the next 10 years. This will, in time, reinforce SH1 as a preferred long haul route, together with SH29 between the Bay of Plenty and Auckland. The SH2 Maramarua Corridor and SH27 are expected to remain as attractive routes for long haul traffic in the short to medium term.

Further improvements are proposed to the Hamilton Western Corridor to compliment the works already in progress. Improvements will include the identification and protection of the strategic transport corridors in south Hamilton through the planning process. Transit will also consider a number of projects on the existing routes in the meantime to relieve congestion and improve efficiency.

Transit is also considering improvements to route security for the region on the Thames Coast and on SH3 between Taranaki and the Waikato.

A number of walking and cycling activities are also planned to complement the strategies and work of the various territorial authorities.

Studies are currently underway to look at increasing safety on the black routes. Further studies have also been identified and will be undertaken in the coming year. The following projects identified from these studies have been added to the forecast.

- › Hamilton North Safety Improvement
- › Hamilton Urban Safety Improvements
- › SH27 Safety Improvements
- › SH39 Safety Improvements
- › South of Hamilton Safety Improvements

Congestion and Strategic Corridor Improvements

Transit expects to design and commence construction of the Rangiriri Bypass within five years as well as making significant progress with the Cambridge and Ngaruawahia Bypasses within 10 years. The detailed design of the Cambridge Bypass is already underway and we are planning to progress the design of the Huntly and Hamilton Bypasses. The region has expressed a preference to develop the Hamilton Bypass ahead of the Huntly Bypass. Transit will work with the region to consider tolling opportunities.

Construction of the Church to Avalon 4-lane project and the Avalon Drive Bypass project have commenced. Construction of the Te Rapa Bypass will commence subject to completion of the planning and land purchase requirements and subject to the agreement of a funding package with Hamilton City Council. The strategic routes for the Southern Links project in the south Hamilton area will also be identified and designated within five years.

A number of small intersection improvement projects are also proposed for Hamilton City, to relieve congestion and improve the efficiency of the existing network in the meantime.

A two-lane replacement for the single lane Kopu Bridge is currently being designed and its construction will be progressed to assist with the high volumes of traffic visiting the Coromandel Peninsula, particularly on weekends and public holidays.

A number of strategic studies will be undertaken to determine strategies for a number of other corridors in the Waikato.

Safety

The Maramarua Deviation was designated in 2005/06 and the design will be carried out and construction started within five years. This will complement the Mangatawhiri Deviation, currently under construction, and the double passing lanes to the east at the Heavens rest area that have just been completed. In addition investigation work is proposed for the Kopuku Road section of the highway.

A number of small safety projects will be constructed in the next five years, together with the continued “black route” safety work (including removal of roadside hazards) between Tokoroa and Taupo and at new identified sites around the Waikato.

Route Security and Availability

Design and construction is planned to follow the investigation work already undertaken for the replacement of bridges at Te Puru, Tararu and Kirikiri on SH25 and SH26 north and south of Thames as part of Project Peninsula, a multi-agency flood protection package.

The Taranaki and Waikato regions have agreed to share the cost of investigations in the Awakino Gorge, including the Awakino North Realignment using their respective \$R funding. Two projects are planned to provide better road information to the travelling public in North Waikato on SH1 and SH2 and on the Coromandel Peninsula.

Passing Opportunities

Four new passing lanes are proposed in the next three years on SH1 between Tokoroa and Taupo and a further one south of Turangi. One new passing lane on SH3 at Meads Hill south of Te Kuiti is also proposed to compliment the passing lanes already built on this strategic highway over the past few years. Four sites on SH25A between Kopu and Hikuai will also be developed as either slow vehicle bays or passing lanes.

Stock Effluent Disposal Facilities

As part of a national programme to provide a safe and convenient network of stock effluent disposal facilities, new facilities will be constructed on SH1 at Putaruru and on SH3 at Te Kuiti.

Walking and Cycling

Improvements for walking and cycling are proposed in Hamilton City, Cambridge, Turangi and Te Awamutu. Transit proposes to work in partnership with Hamilton City Council to jointly implement improvements to pedestrian facilities across SH1 Cobham Drive to the Hamilton City Gardens.

Strategic Studies

Transit proposes to undertake a number of strategic studies to improve our long-term planning and assist good decision-making, together with studies that lead to sustainable environmental outcomes. These studies include a Lake Taupo Stormwater Runoff Environmental Scoping Study and corridor studies of SH2/29 Pokeno to Hairini, and Hamilton State Highway Walking and Cycling Strategy.

Maintenance and Operations

Maintenance activities make up a large proportion of the forecast expenditure in the Waikato region. In addition to preserving the highway network and undertaking maintenance and improvements to meet future levels of service, we propose to:

- › Undertake 236km of resurfacing, including 25km with low noise surfacing
- › Strengthen 55km of highway
- › Continue improving techniques to manage highways in winter
- › Target noise reduction works for specific problem areas
- › Improve traffic and travel demand management in East Waikato and the Coromandel by upgrading signals and dynamic signage to provide real time information for road users in Hamilton
- › Implement plant pest strategies and use special plant pest eradication programmes to target hotspots
- › Implement planting to reduce future maintenance on steep slopes or batters next to highways
- › Continue to implement and maintain special safety programmes (including speed activated dynamic signs) in areas or corridors with poor road safety records, including identified “black routes”
- › Introduce thermal mapping of the inland network to better predict where ice will occur.

WAIKATO State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
LARGE PROJECTS						
2	Mangatawhiri Deviation	Safety and Personal Security	35.6			
1	Avalon Drive Bypass	Access and Mobility	35.6			
1	Church to Avalon Drive 4L	Economic Development	7.3			
25	Kopu Bridge Replacement	Economic Development	1.5			
1	Mercer to Long Swamp 4L	Access and Mobility	1.3			
1	Cambridge Bypass 2L @+@	Access and Mobility	4.2			
1 / 3	Hamilton Southern Links	Access and Mobility	\$\$\$\$			
1	Te Rapa Bypass ^(NDC)	Economic Development	\$\$\$\$			
2	Maramarua Deviation @ or @	Safety and Personal Security	\$\$\$			
1	Huntly Bypass ^(NR)	Access and Mobility	\$\$\$\$			
1	Ngaruawahia Bypass ^(NDC)	Access and Mobility	\$\$\$\$			
1	Hamilton Bypass ^(NR)	Access and Mobility	\$\$\$\$			
1	Cambridge Bypass 2L ^(NDC)	Access and Mobility	\$\$\$			
1	Rangiri Bypass ^(NR)	Access and Mobility	\$\$\$			
1	Piarere – Oak Tree Bend Realignment	Safety and Personal Security	\$\$			

Projects in investigation or design may not necessarily proceed to construction.




Indicative funding sources identified by Land Transport NZ in the NLTP

- ^(R) denotes regionally distributed funds
- ^(C) denotes crown funding
- ^(NDC) denotes national funding, however Land Transport NZ has indicated possible crown funding
- ^(NR) denotes national funding, however Land Transport NZ has indicated possible regionally distributed funding

WAIKATO State Highway Plan and Forecast for 2007/08 to 2016/17















Legend: Nature of work

 Committed Investigation	 Committed Design	 Committed Construction
 Investigation	 Design	 Construction

SH	Project	Primary LTMA Objective	Estimated Cost Remaining \$ < 5M \$\$\$ 5-20M \$\$\$\$ 100-M	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
LARGE PROJECTS (continued)						
25	Kopu Bridge Replacement	Economic Development	\$\$\$			
I	Long Swamp to Rangiriri 4L	Access and Mobility	\$\$\$			
27	Kaihere Eastern Deviation ®	Safety and Personal Security	\$			

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SMALL & MEDIUM PROJECTS

					Total Phase Cost
I	SWATT 2010 Stage 2 Tokoroa to Taupo	Safety and Personal Security	1.5		
26	SH26/27 Intersection Improvement	Safety and Personal Security	0.1		
27	Tahuna Road Roundabout	Safety and Personal Security	0.1		
I	Gallagher Road Intersection	Safety and Personal Security	0.1		
2	Maramarua Expressway Safety Improvement	Safety and Personal Security	0.5		
25	Te Puru Stream Bridge Replacement	Economic Development	3.8		
25	Tararu Stream Bridge Replacement	Economic Development	3.4		
26	Kirikiri Stream Bridge Replacement	Economic Development	2.7		
25	Coromandel Road Information System	Access and Mobility	0.4		
Var	Waikato Road Information System	Economic Development	1.0		
I	Hamilton North Safety Improvements	Safety and Personal Security	0.4		
I	Hamilton Urban Safety Improvements	Safety and Personal Security	0.8		
27	SH27 Safety Improvements	Safety and Personal Security	0.1		
39	SH39 Safety Improvements	Safety and Personal Security	0.1		

Indicative funding sources identified by Land Transport NZ in the NLTP

® denotes regionally distributed funds

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WAIKATO State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
			Total Phase Cost			
SMALL & MEDIUM PROJECTS (continued)						
3	South of Hamilton Safety Improvements	Safety and Personal Security	0.1			
1	Piarere Junction Safety Improvements	Safety and Personal Security	0.1			
1	Hillcrest & Morrinsville Rd Intersection	Economic Development	0.1			
39	Kiwi Rd Realignment	Safety and Personal Security	0.1			
27	Tahuna Rd Roundabout	Safety and Personal Security	3.3			
3	Waitomo Rd / SH3 Intersection Safety Improvement	Safety and Personal Security	0.1			
1	Matarawa Bridge Widening	Safety and Personal Security	0.1			
31	Owaikura Rd North Realignment	Safety and Personal Security	1.1			
1	Tregoweth Lane Intersection	Access and Mobility	0.2			
1	Ohaupo / Kahikatea Intersection	Economic Development	3.0			
1	Greenwood / Killarney Intersection ®	Safety and Personal Security	3.3			
2	Waimata Realignment	Safety and Personal Security	0.1			
26	SH26/27 Intersection Improvement ©	Safety and Personal Security	3.5			
3	Awakino North Realignment ®	Access and Mobility	2.0			
1	Gallagher Rd Intersection ®	Access and Mobility	0.1			

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Indicative funding sources identified by Land Transport NZ in the NLTP














® denotes regionally distributed funds

© denotes crown funding

WAIKATO State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

SH	Project	Primary LTMA Objective	Estimated Cost Remaining	Land Transport Programme 07/08	Plan 08/09-10/11	Forecast 11/12-16/17
	Passing Lanes		Total Phase Cost			
2	Campbell Road Nth Bd PL Extension	Safety and Personal Security	0.1			
25A	One Ton West PL Extension	Safety and Personal Security	0.7			
I	Rangipo Nth Bd PL	Safety and Personal Security	0.9			
I	James Farm South PL	Safety and Personal Security	0.7			
I	Tutukau Road Nth Bd PL	Safety and Personal Security	0.1			
25A	4th Branch SVB	Safety and Personal Security	0.1			
25A	Piranui Saddle Slow Vehicle Bay	Safety and Personal Security	0.5			
25A	Frenchmans Gap SVB	Safety and Personal Security	0.1			
I	Lichfield Sth PL	Safety and Personal Security	0.8			
I	Hatu Patu PL	Safety and Personal Security	0.6			
3	Meads Hill Nth Bd PL ®	Safety and Personal Security	0.1			
Stock Effluent Disposal Facilities						
I	Putaruru SEDF	Environmental Sustainability	0.3			
3	Te Kuiti SEDF	Environmental Sustainability	0.1			

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

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® denotes regionally distributed funds

WAIKATO State Highway Plan and Forecast for 2007/08 to 2016/17

Legend: Nature of work

	Committed Investigation		Committed Design		Committed Construction
	Investigation		Design		Construction

The grey symbols show indicative timings given that the investigation or design phase has not been completed.

SH	Project	Primary LTMA Objective	Estimated Cost Remaining	Land Transport Programme	Plan	Forecast
			\$ < 5M \$\$ 5-20M \$\$\$ 20-100M \$\$\$\$ 100+M	07/08	08/09-10/11	11/12-16/17

Walking & Cycling

1	Avalon Drive Cycleway	Public Health	\$			
23	Massey Street Cycle Lane	Public Health	\$			
3	Mangapiko Bridge Footpath Widening	Public Health	\$			
3	Te Awamutu Pedestrian Facilities	Public Health	\$			
3	Te Awamutu to Kihikahi Footpath Link	Public Health	\$			
1	Tongariro Bridge Walk / Cycle Retrofit	Public Health	\$			
1	Cobham Drive Pedestrian Facility	Public Health	\$			

Passenger Transport

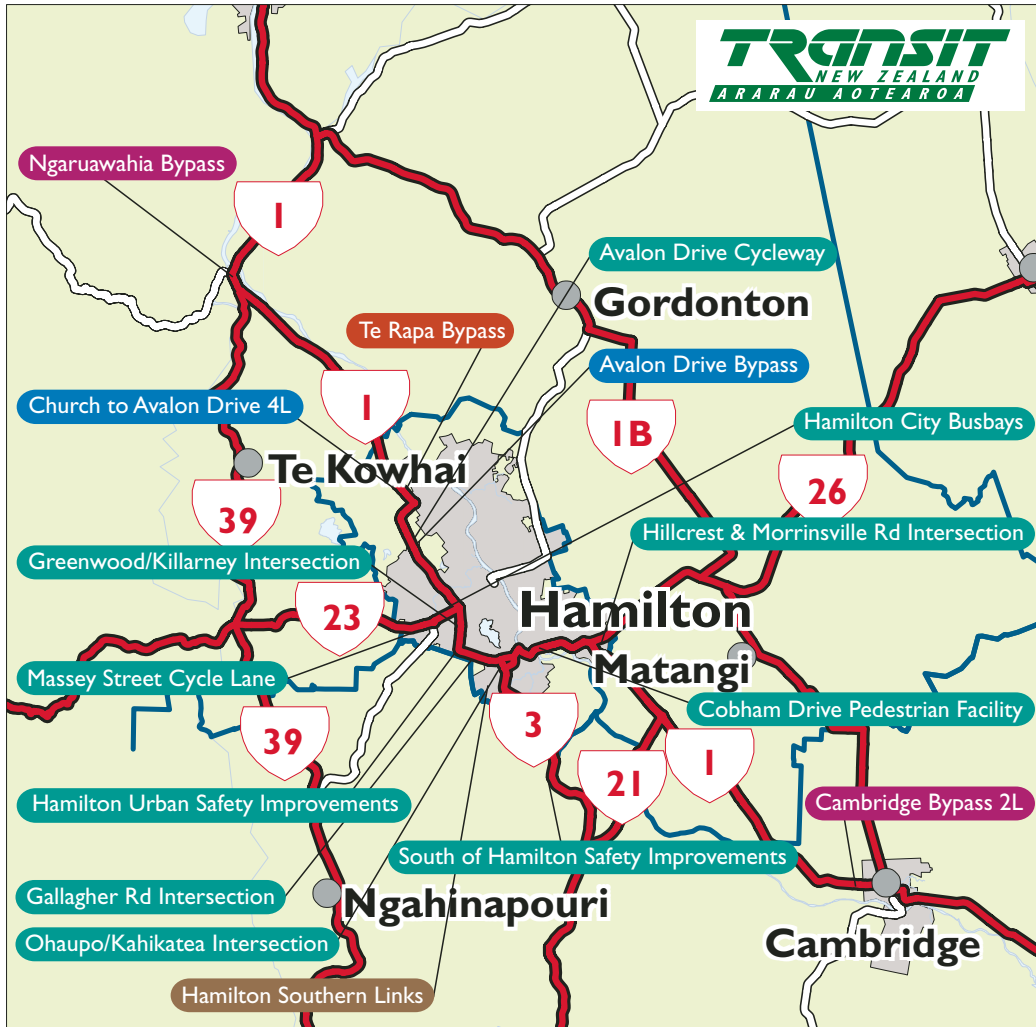
Hamilton City Busbays						
			0.4			

Strategic Studies

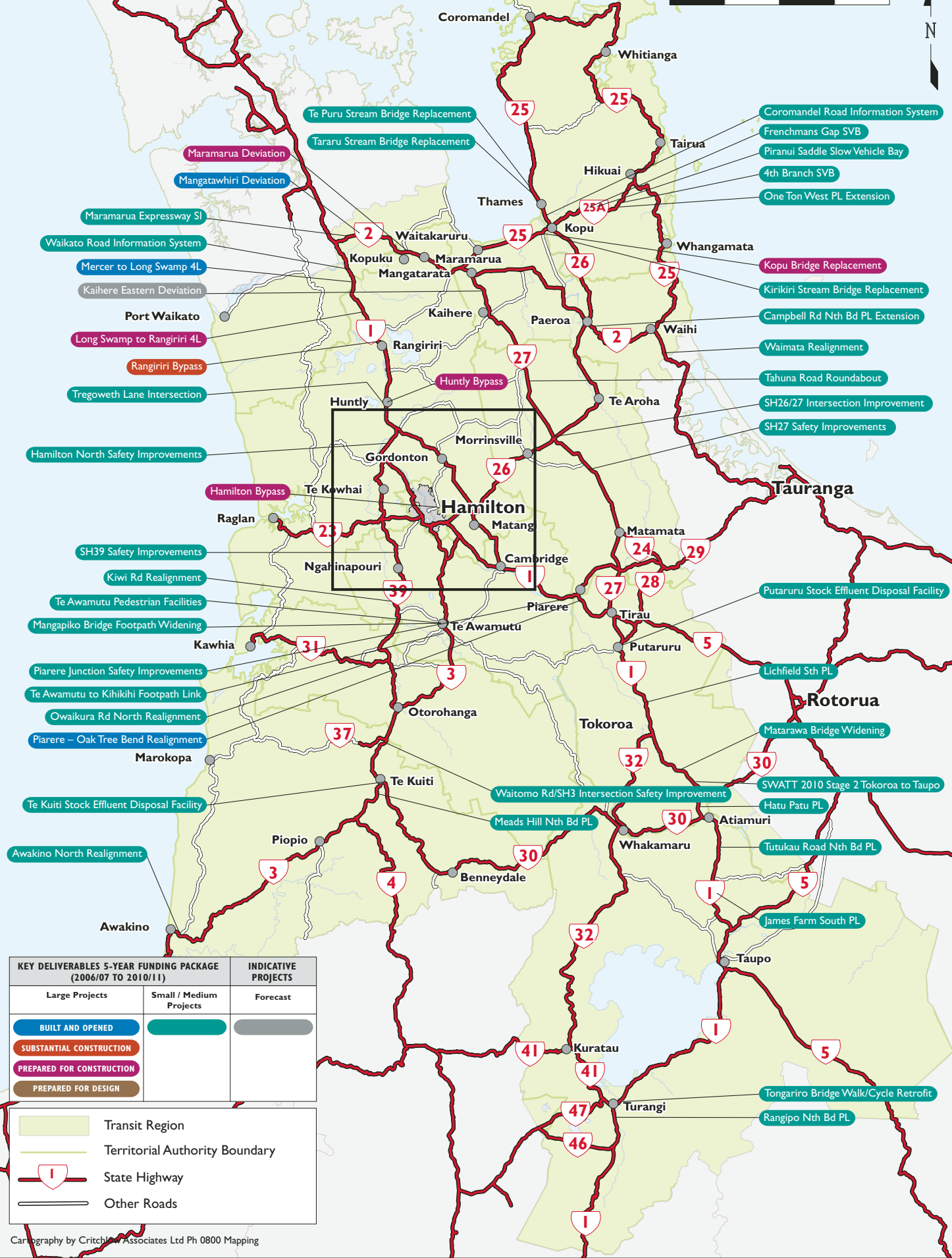
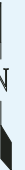
- Waikato Transportation Model
- SH2/29 Auckland to Tauranga
- SH1 Kahikatea Dr Hamilton
- Waikato Passing Opportunities Plan
- Lake Taupo Stormwater Runoff Environmental Scoping Study
- Hamilton State Highway Walking and Cycling Strategy

Projects in investigation or design may not necessarily proceed to construction.

Fig WK Inset
WAIKATO REGION – Inset Map
 State Highway Network at 01 July 2006



KEY DELIVERABLES 5-YEAR FUNDING PACKAGE (2006/07 TO 2010/11)		INDICATIVE PROJECTS
Large Projects	Small / Medium Projects	Forecast
BUILT AND OPENED		
SUBSTANTIAL CONSTRUCTION		
PREPARED FOR CONSTRUCTION		
PREPARED FOR DESIGN		



- Te Puru Stream Bridge Replacement
- Tararu Stream Bridge Replacement
- Maramarua Deviation
- Mangatawhiri Deviation
- Maramarua Expressway SI
- Waikato Road Information System
- Mercer to Long Swamp 4L
- Kaihere Eastern Deviation
- Port Waikato
- Long Swamp to Rangiriri 4L
- Rangiriri Bypass
- Tregoweth Lane Intersection
- Hamilton North Safety Improvements
- Hamilton Bypass
- SH39 Safety Improvements
- Kiwi Rd Realignment
- Te Awamutu Pedestrian Facilities
- Mangapiko Bridge Footpath Widening
- Piarere Junction Safety Improvements
- Te Awamutu to Kihikihi Footpath Link
- Owairua Rd North Realignment
- Piarere - Oak Tree Bend Realignment
- Marokopa
- Te Kuiti Stock Effluent Disposal Facility
- Awakino North Realignment
- Coromandel Road Information System
- Frenchmans Gap SVB
- Piranui Saddle Slow Vehicle Bay
- 4th Branch SVB
- One Ton West PL Extension
- Kopu Bridge Replacement
- Kirikiri Stream Bridge Replacement
- Campbell Rd Nth Bd PL Extension
- Waimata Realignment
- Tahuna Road Roundabout
- SH26/27 Intersection Improvement
- SH27 Safety Improvements
- Putaruru Stock Effluent Disposal Facility
- Lichfield Sth PL
- Matarawa Bridge Widening
- SWATT 2010 Stage 2 Tokoroa to Taupo
- Hatu Patu PL
- Tutukau Road Nth Bd PL
- James Farm South PL
- Tongariro Bridge Walk/Cycle Retrofit
- Rangipo Nth Bd PL

KEY DELIVERABLES 5-YEAR FUNDING PACKAGE (2006/07 TO 2010/11)		INDICATIVE PROJECTS
Large Projects	Small / Medium Projects	Forecast
BUILT AND OPENED		
SUBSTANTIAL CONSTRUCTION		
PREPARED FOR CONSTRUCTION		
PREPARED FOR DESIGN		

- Transit Region
- Territorial Authority Boundary
- State Highway
- Other Roads

