



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