

NATIONAL STATE HIGHWAY PLAN

The national forecasts of state highway expenditure for the next 10 years are set out in Table 1.

These forecasts cover:

- › maintenance and operations
- › improvements including commitments.

Maintenance and Operations

The current replacement value of state highways is approximately \$12 billion. The 10-year plan ensures systems are in place to protect this investment by renewal and refurbishment.

The plan provides for delivery of the levels of service required by road users, relating to such things as:

- › pavement repairs
- › skid resistance
- › ride quality
- › vegetation control
- › signs and markings

In addition to these corridor activities to maintain levels of service, the plan also makes provision for periodic and structural maintenance activities such as reseals, pavement overlays and pavement reconstructions.

Bridge maintenance and preventative maintenance works will continue to be a critical activity to ensure that route security is maintained. Improvement works to bring safety systems in tunnels up to international standards will continue. The plan also makes provision for emergency reinstatement of highways after extreme weather events. All these activities combine to deliver an increasingly safe environment for road users.

Maximising the capacity of the existing network is the other key activity that Transit is undertaking within its maintenance and operations plan. The major components of this plan over the next few years will be:

- › integration of traffic management on the state highway and local road networks in Auckland and Wellington

- › coordination of NZ Police, Fire and Ambulance services with Transit's responses to incidents to clear highways as quickly as possible
- › ramp-metering on motorways, where appropriate, to reduce motorway congestion
- › more effective planning and controls to manage the type and number of accesses onto state highways

Capital Improvements

The order of priority, estimated construction costs and expected construction start dates of large capital projects (with construction costs more than \$3M) are shown in Table 2. Attached is also a detailed 3-year plan for each region of small and medium-sized projects (with construction costs of less than \$3M).

While expected construction start dates take account of funding constraints, there remains a possibility of projects being delayed by factors such as planning approvals and land purchase. The risks of cost increases were taken into account in the cost estimates of projects, and timing and cost risks were both taken into account in the overall expenditure projections.

Auckland projects were initially prioritised taking into account the submissions of the Auckland RLTC and other stakeholders. Projects in other regions were then integrated with Auckland projects on the basis of Transit's prioritisation criteria, recognising the importance of economic development and safety, and the submissions of RLTCs and other stakeholders. Finally, the construction start dates of projects were adjusted without amending the priority order of projects in order to constrain expenditure to the expected level of revenue each year for the state highway sector.

As well as numerous safety projects (with construction costs of less than \$3M), the 3-year plan of small and medium-sized projects includes 83 passing lane projects and 13 projects to install stock effluent disposal facilities.

Beyond the next three years, provision has been made in the 10-year plan for ongoing expenditure each year on small and medium-sized projects. This will cover an ongoing plan of safety projects such as rural realignments, bridge and seal widening, intersection upgrades and guardrailing for side protection, as well as more passing lanes and stock effluent disposal facilities.

There is also an ongoing plan of minor safety works which includes:

- › guardrailing of bridges and roadside berm drop-offs

- › minor intersection improvements
- › threshold treatments on approaches to urban areas

Regional Distribution

The regional distribution of expenditure in total, on a per capita, and per vehicle kilometre basis is shown in Figure 1. Account has been taken of all expenditure in assessing the regional distribution of expenditure.

Table 1

Forecasts of National Expenditure on State Highway

Maintenance and Improvements

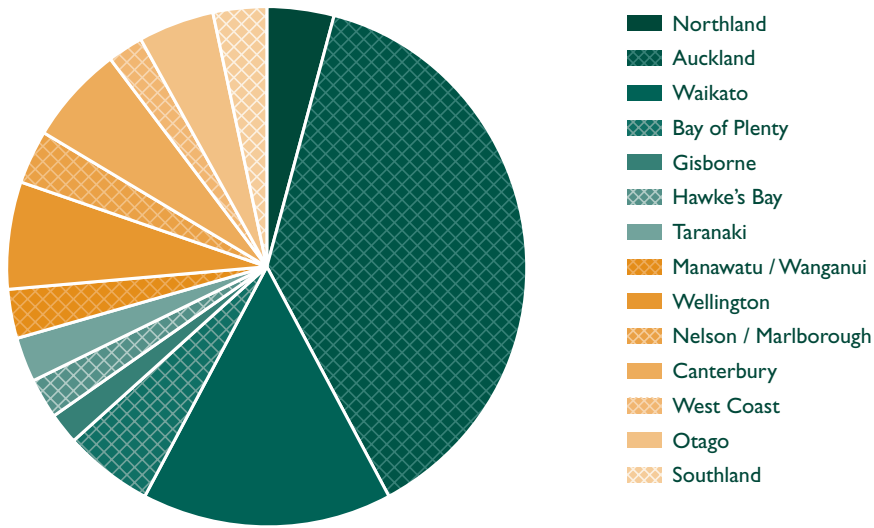
	03/04 (\$M)	04/05 (\$M)	05/06 (\$M)	06/07 (\$M)	07/08 (\$M)	08/09 (\$M)	09/10 (\$M)	10/11 (\$M)	11/12 (\$M)	12/13 (\$M)	Total (\$M)
Maintenance											
Structural	166.5	170.5	173.9	177.4	180.9	184.6	188.2	192.0	195.8	199.8	1829.6
Corridor	67.7	72.6	75.8	79.2	82.7	86.3	90.0	93.9	97.8	101.9	847.8
Professional Services	40.0	41.0	41.8	42.6	43.5	44.3	45.2	46.1	47.1	48.0	439.5
Property Management	8.9	10.7	10.9	11.1	11.4	11.6	11.8	12.0	12.3	12.5	113.3
Preventive Maintenance	5.5	6.1	6.2	6.3	6.5	6.6	6.7	6.9	7.0	7.1	65.0
Emergency Works	17.0	17.5	18.0	18.6	19.1	19.7	20.3	20.9	21.5	22.2	194.9
Sub-total	305.6	318.3	326.6	335.2	344.0	353.1	362.3	371.8	381.6	391.6	3490.2
Improvements											
Minor Safety Projects	11.0	11.4	11.7	12.0	12.3	12.6	12.9	13.3	13.6	14.0	124.7
Committed Projects	155.1	139.5	103.6	32.2	-	-	-	-	-	-	430.4
New Projects	94.0	157.1	169.0	193.8	228.8	252.4	271.3	304.4	313.9	323.5	2308.2
Property Purchase	65.0	41.2	42.4	49.2	50.6	52.2	53.7	55.3	57.0	58.7	525.3
Walking & Cycling	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	11.5
Regional Development	0.3	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	10.8
Sub-total	326.4	351.2	328.8	289.4	293.9	319.5	340.3	375.4	387.1	398.8	3410.8
Administration	30.4	32.2	34.1	36.0	38.0	39.9	41.9	44.0	44.8	45.7	387.0
Total	662.4	701.8	689.5	660.6	676.0	712.5	744.5	791.3	813.4	836.0	7288.0

Table 2**Major State Highway Projects**

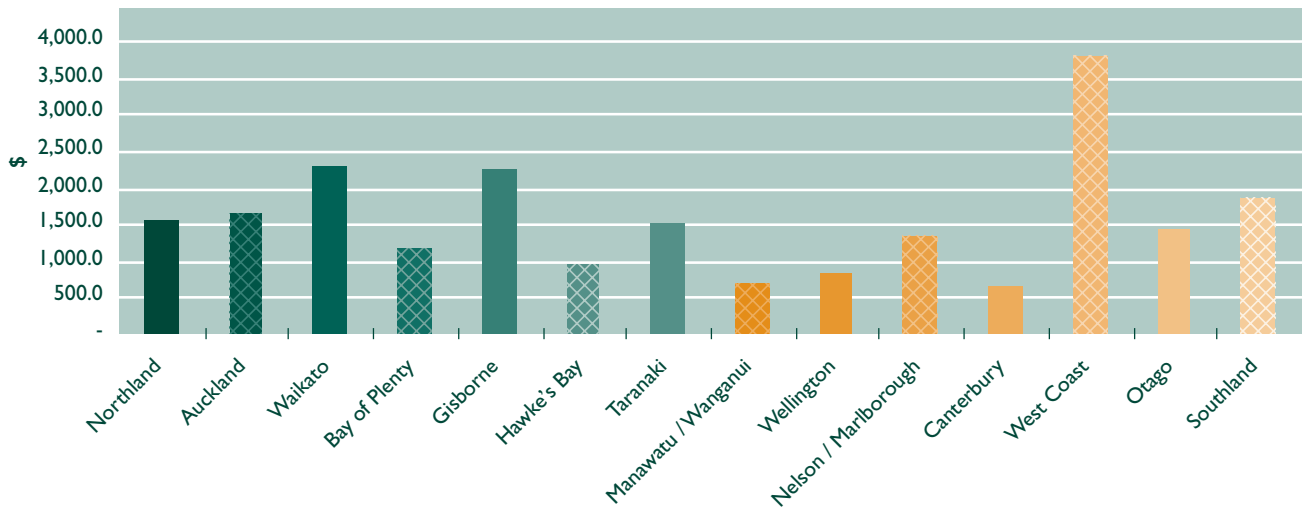
Priority	Region	Project Name	Estimated Construction Cost (\$ million)	Expected Construction Start Date
1	Canterbury	SH1 : Glasnevin Weighstation and Effluent Disposal	1.7	2003/04
2	Auckland	SH20 : Mt Roskill Extension	139.0	2003/04
3	Auckland	SH1 : Esmonde Rd Interchange	32.0	2003/04
4	Auckland	SH1 : North Shore Busway (Stages 1 & 2)	95.0	2003/04
5	Bay of Plenty	SH29 : Hewletts Rd/Maunganui Rd Intersection	23.5	2003/04
6	Wellington	SH1 : Inner City Bypass	30.0	2003/04
7	Waikato	SH1 : Longswamp to Rangiriri Safety Improvement	6.5	2003/04
8	Waikato	SH2 : Mangatawhiri Deviation	23.0	2004/05
9	Canterbury	SH1 : Normanby Realignment	6.6	2003/04
10	Wellington	SH1 : Kapiti Western Link Road (Stage 1)	24.6	2006/07
11	Waikato	SH1 : Avalon Drive Bypass	21.4	2004/05
12	Bay of Plenty	SH2 : Domain Rd Intersection	4.2	2003/04
13	Otago	SH1 : Tumaia to Waikouaiti Realignment	4.3	2004/05
14	Waikato	SH5 : Tapapa Curves Realignment	7.6	2003/04
15	Northland	SH1 : Mangamuka to Rangiahua Slip Repairs	3.3	2004/05
16	Wellington	SH2 : Rimutaka Corner Easing (Muldoons)	4.7	2006/07
17	Wellington	SH1 : MacKays Overbridge	12.0	2003/04
18	Hawkes Bay	SH50 : Meeanee Rd Interchange	5.0	2004/05
19	Wellington	SH1 : Transmission Gully – Early Planting	0.3	2003/04
20	Wellington	SH1 : Transmission Gully – Preliminary Investigation	0.3	2003/04
21	Auckland	SH18 : Hobsonville Deviation	89.3	2005/06
22	Wellington	SH2 : Dowse to Petone Interchange	56.1	2005/06
23	Canterbury	SH74 : Main North Road 4-Laning (Stage 2)	11.4	2005/06
24	Auckland	SH20 : Manukau Extension	147.0	2006/07
25	Auckland	SH1 : Waiouru Interchange	10.0	2006/07
26	Auckland	SH1 : ALPURT (Sector B2)	149.0	2006/07
27	Auckland	Active Traffic Management System (Stage 3)	4.4	2006/07
28	Nelson-Marl.	SH1 : Awatere Bridge Replacement	8.5	2006/07
29	Auckland	SH1 : Newmarket Viaduct	80.0	2007/08
30	Auckland	SH16 : Newton Rd to Western Springs Auxiliary Lane	10.0	2007/08
31	Auckland	SH1 : Market Rd to Green Lane Auxiliary Lane	2.0	2008/09
32	Auckland	SH1 : Harbour Bridge To City	125.0	2009/10
33	Waikato	SH1 : Te Rapa Bypass	46.0	2008/09
34	Auckland	SH20 : Manukau Harbour Crossing	100.0	2009/10
35	Auckland	SH20 : Avondale Extension	600.0	2010/11
36	Auckland	SH16 : Te Atatu Interchange Westbd Off-Ramp Upgrade	3.0	2009/10
37	Auckland	SH1 : Northcote to Sunnynook Auxiliary Lane	5.0	2010/11
38	Canterbury	SH73 : Christchurch Southern Motorway Extension	67.1	2010/11
39	Taranaki	SH3 : Bell Block Bypass	8.1	2010/11
40	Taranaki	SH3 : Mangaone Hill 4-Laning	4.4	2010/11
41	Nelson-Marl.	SH6 : Nelson Southern Link	12.1	2010/11
42	Northland	SH1 : Katetoke to Oakleigh Safety Improvement	3.5	2010/11
43	Mana-Wang	SH1 : Hihitahi Bluffs Realignment	12.4	2010/11
44	Waikato	SH2 : Maramarua Deviation	15.0	2010/11
45	Waikato	SH25 : Kopu Bridge Replacement	26.5	2010/11
46	Northland	SH1 : Waitiki Landing to Cape Reinga Seal Extension	4.8	2010/11
47	Waikato	SH1 : East Taupo Arterial	14.6	2010/11
48	Wellington	Active Traffic Management System (Expansion)	10.3	2010/11
49	Auckland	SH1 : Green Lane Interchange	2.2	2010/11
50	Bay of Plenty	SH29 : Hewletts Rd 4-Laning	10.0	2010/11
51	Auckland	SH16 : Te Atatu Rd to Royal Rd 6-Laning	20.0	2011/12
52	Auckland	SH1 : Auckland Harbour Bridge Storm Water Upgrade	3.0	2011/12
53	Waikato	SH1 : Ngaruawahia Bypass	61.8	2012/13
54	Waikato	SH1 : Cambridge Bypass (2 Lanes)	25.0	2012/13

Figure 1

10-year Expenditure by Region



10-year Expenditure per Person



10-year Expenditure per 100,000 vkt (vehicle kilometres travelled)

