

## Proposed Regional Transport Programme Summary (April 2006)

### Passenger Transport

Corridor	Years 1-10	Years 11-20	20+ years
Region wide	1120	1195	
Wairarapa	31	19	
Hutt	0	173	
Wellington	66	66	
Western	117	30	312
<b>Sub total</b>	<b>1334</b>	<b>1484</b>	<b>312</b>

### Roading

Corridor	Years 1-10	Years 11-20	20+ years
Region wide	38	38	
Wairarapa	10	0	
Hutt	360	268	89
Wellington	103	250	
Western	1214	107	60
TGM loan repayment	48	465	
<b>Sub total</b>	<b>1773</b>	<b>1127</b>	<b>149</b>
<b>Total</b>	<b>3107</b>	<b>2611</b>	<b>461</b>

### Ten Year Funding Summary

Source	PT	Road	Total
N	692	264	956
L	421	72	493
R	70	151	221
C1	94	130	223
C2	47	208	255
C3	0	405	405
Loan (tolls)	0	115	115
Crown loan	11	428	439
	<b>1334</b>	<b>1773</b>	<b>3107</b>

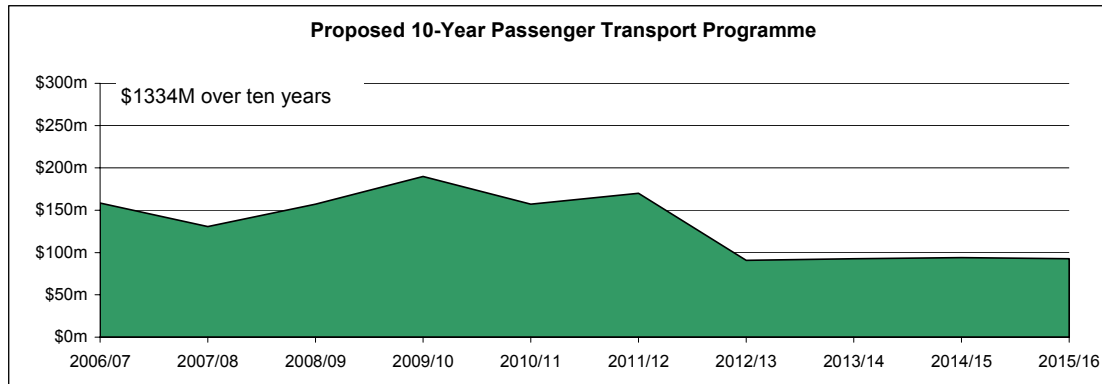
### Funding Gaps

	Years 1-10	Years 11-20	Total	
Debt funded roading	543	0	543	(428 Crown loan, 115 toll loan)
Road funds to be determined	0	363	363	
<b>Current funding shortfall</b>	<b>543</b>	<b>363</b>	<b>906</b>	

### Notes and assumptions

- Estimates used in this analysis are the best available at the time of writing. However, the scope, cost and timing of programme elements will change as better information is developed. Processes which can have significant impact on stated costs and timing include Long Term Council Community Plans, State Highway Plan, National Land Transport Programme.
- Estimates in tables are \$M 2005 values.
- There is no allowance for escalation. Therefore over time the funding gap will grow because costs will increase but most funding streams, particularly C, will not.
- Local share presents affordability issues for Western Link Rd (KCDC), Grenada to Gracefield Stages 1 (WCC) and 2 (HCC). We have addressed this by raising the subsidy rate for Kapiti's Western Link Rd to 90% which reflects its high regional priority, by raising the subsidy rate for Grenada to Gracefield to 75% and by deferring Hutt's Cross Valley Link.
- A number of estimates are possibly conservative, notably SH58 TGM-SH2 and Grenada to Gracefield stage 1. These may add 100+M to the programme cost.
- N funding is allocated annually based on need by Land Transport NZ via the National Land Transport Programme process. A ten year forecast is available but is unreliable as evidenced by the current State Highway Forecast (SHF). We have assumed a level of N funding over the next ten years as being about mid way between the N level for Wellington advised by LTNZ last year (an optimistic view) and a pessimistic level implied by the current SHF.

**Proposed Passenger Transport Programme (April 2006)**



**Planned cash flow**

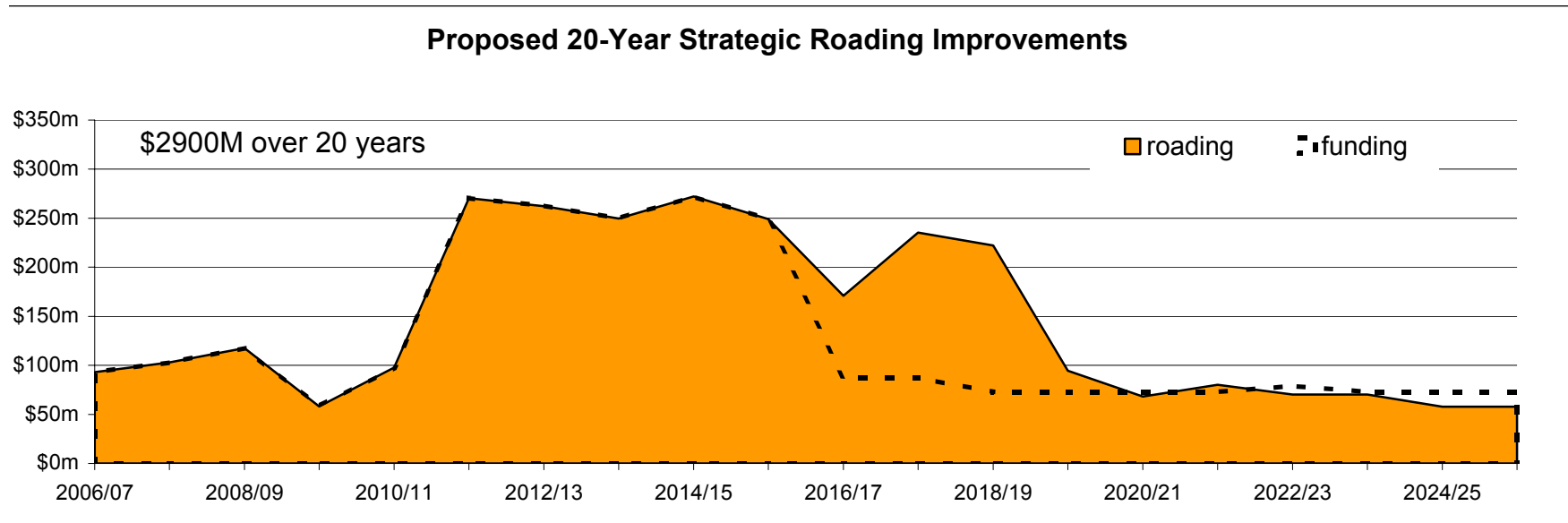
Passenger Transport Activities	Total Cost \$M	Planned cash flow									
		1 2006/07	2 2007/08	3 2008/09	4 2009/10	5 2010/11	6 2011/12	7 2012/13	8 2013/14	9 2014/15	10 2015/16
1 RS Capex - SW Wairarapa	26.4	26.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 Rolling Stock CAPEX	272.3	48.0	36.8	58.4	84.0	22.9	22.1	0.1	0.1	0.1	0.1
3 Station etc CAPEX	37.2	8.6	5.9	4.0	3.1	2.8	2.8	2.4	2.5	2.5	2.6
4 Station etc OPEX incl real time	26.8	2.6	2.5	2.9	2.6	2.7	2.7	2.7	2.7	2.7	2.7
5 Track Infrastructure OPEX	33.5	0.7	1.8	2.2	2.9	3.2	4.0	4.7	4.7	4.7	4.7
6 Rail heavy maintenance	48.1	4.6	4.6	4.7	4.8	4.8	4.9	4.9	4.9	4.9	4.9
7 Rail Operating Contract OPEX	137.9	17.7	18.0	18.2	14.8	14.7	11.4	11.3	11.3	11.3	9.1
8 Rail Admin incl service design & marketing	19.4	2.1	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0
9 Trolley Overhead OPEX	15.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
10 Trolley Operations	50.6	4.6	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
11 Bus Real Time + integrated ticketing CAPEX	6.7	0.2	0.1	0.0	4.8	0.9	0.2	0.2	0.2	0.2	0.2
12 Bus & Ferry Infrastructure OPEX	34.2	2.8	3.2	3.4	4.0	4.4	3.3	3.2	3.3	3.3	3.3
13 Bus & Ferry Operations Contracts	274.4	25.4	25.6	26.1	26.6	27.2	27.7	28.2	28.7	29.2	29.7
14 Metlink	43.5	4.6	4.4	4.2	4.3	4.3	4.3	4.3	4.4	4.4	4.4
15 Total Mobility Scheme	21.6	1.7	1.9	2.0	2.1	2.3	2.3	2.3	2.3	2.3	2.3
16 Total Mobility Hoists	1.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
17 Total Mobility expansion from MoT review	15.0	0.9	1.0	1.1	1.3	1.4	1.5	1.7	1.8	2.0	2.2
18 TDM travel plans	10.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
19 Regional Transport Planning	27.4	3.2	2.4	2.6	2.5	2.5	2.6	2.5	2.8	3.1	3.2
20 Wairarapa service improvements	4.6		0.3	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.6
21 Porirua interchange	10.0									beyond 10 years	
22 Lindale rail station	10.0		0.3	0.7	9.0						
23 Raumati rail station	5.0	0.2	0.2	4.6							
24 MacKays - Lindale double track	62.0	0.5	0.5	0.5	1.5	17.0	42.0				
25 Western Corridor rolling stock	40.0					24.0	16.0				
26 Bus service increases	20.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.5	3.0	3.0
28 Additional cost of access HRC review	90.0		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
29 Electrification to Waikanae	40.0									to be confirmed	
30 Pukerua Bay - Paekakariki double track	272.0									to be confirmed	
31 Hutt Corridor rail improvements	173.0									beyond 10 years	
<b>Total Identified Costs</b>	<b>1829</b>	<b>159</b>	<b>131</b>	<b>157</b>	<b>190</b>	<b>157</b>	<b>170</b>	<b>91</b>	<b>93</b>	<b>94</b>	<b>93</b>
less costs beyond 10 years	495										
<b>Total 10 year costs</b>	<b>1334</b>										

**Recommended funding allocation**

Passenger Transport Activities	Land Transport NZ share					Local Share					
	FAR	N	R	C1	C2	Loan	C1	C2	GW	TA	
1 RS Capex - SW Wairarapa	60%	15.9				10.6					
2 Rolling Stock CAPEX	60%	163.4					55.0			53.9	
3 Station etc CAPEX	60%	22.3								14.9	
4 Station etc OPEX incl real time	60%	16.1								10.7	
5 Track Infrastructure OPEX	60%	20.1								13.4	
6 Rail heavy maintenance	60%	28.9							19.2		
7 Rail Operating Contract OPEX	60%	82.7							55.2		
8 Rail Admin incl service design & marketing	60%	11.7							7.8		
9 Trolley Overhead OPEX	50%			7.5			2.5			5.3	
10 Trolley Operations	50%	25.3							25.3		
11 Bus Real Time + integrated ticketing CAPEX	50%			3.3					3.3		
12 Bus & Ferry Infrastructure OPEX	50%	17.1							17.1		
13 Bus & Ferry Operations Contracts	50%	137.2							137.2		
14 Metlink	50%	21.8							21.8		
15 Total Mobility Scheme	60%	13.0							8.6		
16 Total Mobility Hoists	60%	1.0							0.6		
17 Total Mobility expansion from MoT review	100%	15.0									
18 TDM travel plans	53%			5.4			4.8				
19 Regional Transport Planning	30%	8.2							19.2		
20 Wairarapa service improvements	50%	2.3							2.3		
21 Porirua interchange	0%										
22 Lindale rail station	60%		6.0						4.0		
23 Raumati rail station	60%		3.0						2.0		
24 MacKays - Lindale double track	60%		37.2						24.8		
25 Western Corridor rolling stock	60%		24.0						16.0		
26 Bus service increases	50%			10.0			5.0			5.0	
28 Additional cost of access HRC review	100%	90.0									
29 Electrification to Waikanae										to be confirmed	
30 Pukerua Bay - Paekakariki double track										to be confirmed	
31 Hutt Corridor rail improvements										beyond 10 years	
<b>Total Identified Costs</b>		692	70	26	0	11	67	47	318	103	0



## Proposed Strategic Roding Improvements (April 2006)



## Proposed Strategic Roding Improvements (April 2006)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	1-10 yr	11-20 yr	
<b>Total cost</b>																							
<b>Road Activities</b>																							
1 SH block programme	60.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	30.0	30.0
2 TDM, walking & cycling	10.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5.0	5.0
3 TDM, traffic management	5.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.5	2.5
4 Inner City Bypass	13.7	13.7																				13.7	-
5 Waterloo Quay rail grade separation	22.3				0.3	11.0	11.0															22.3	-
6 Terrace Tunnel tidal flow	20.0			20.0																		20.0	-
7 Ngauranga – Aotea capacity improvement	20.0			20.0																		20.0	-
8 Basin Reserve Interchange	27.0								6.0	8.0	13.0											27.0	-
9 Basin - Airport capacity	250.0											80.0	80.0	90.0								-	250.0
10 Dowse to Petone	73.2	33.1	31.0	9.1																		73.2	-
11 SH2/58 Grade Separation	36.6		1.0	0.6	5.0	15.0	15.0															36.6	-
12 Grenada - Gracefield Stage 1 to Petone	180.0	3.0	2.0	1.0	1.0	15.0	20.0	40.0	50.0	48.0												180.0	-
13 Grenada - Gracefield Stage 2 CVL	60.0											30.0	30.0									-	60.0
14 Melling Interchange	68.0														8.0	20.0	20.0	20.0				-	68.0
15 SH58 SH2-summit 4 laning	99.2										0.6	0.6	25.0	40.0	33.0							0.6	98.6
16 Petone - Ngauranga incl cyclelane	60.0					20.0	20.0	20.0														60.0	-
17 SH2/Kennedy Good Interchange	21.4													10.0	11.4							-	21.4
18 SH2 Hutt Intersection Safety Improvements	10.0		2.0	2.0	2.0	2.0																10.0	-
19 Akatarawa Upgrade	20.0															10.0	10.0					-	20.0
20 MacKays Overbridge	2.5	1.7	0.9																			2.5	-
21 TDM, Western Corridor ATMS+HOV	5.0	0.5	0.5	4.0																		5.0	-
22 Centennial Highway median barrier	16.8	12.0	4.8																			16.8	-
23 Western Link Road – Stage 1	107.1	19.0	27.1	25.9	17.5	9.5	8.2															107.1	-
24 Western Link Road – Stage 3	19.2		4.3	6.5	8.4																	19.2	-
25 Western Link Road – Stage 2	42.4				0.1	1.6	12.0	19.1	9.5													42.4	-
26 Pukerua Bay safety improvements	2.0	1.0	1.0																			2.0	-
27 Paekakariki traffic signals	1.0	1.0																				1.0	-
28 TGM preparation	84.0	4.0	20.0	20.0	20.0	20.0																84.0	-
29 Transmission Gully Motorway construction	887.2						177.4	177.4	177.4	177.4	177.4											887.2	-
30 TGM debt servicing	513.1								0.9	16.0	31.2	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	46.5	48.1	464.9
31 SH58 upgrade TGM to SH2	44.0												22.0	22.0								-	44.0
32 Otaihangā interchange (2 lane)	35.0							1.0	1.0	18.0	15.0											35.0	-
33 Waikanae upgrade	60.0					1.0	1.0	1.0	1.0	8.0	10.0	28.0	10.0									12.0	48.0
34 Tawa interchange	15.0																			7.5	7.5	-	15.0
35 Rimutaka Corner Easing (Muldoon's)	9.7	0.2	4.7	4.8																		9.7	-
<b>Total Costs</b>	<b>2900</b>	<b>93</b>	<b>103</b>	<b>118</b>	<b>58</b>	<b>98</b>	<b>270</b>	<b>262</b>	<b>250</b>	<b>272</b>	<b>249</b>	<b>171</b>	<b>235</b>	<b>222</b>	<b>95</b>	<b>68</b>	<b>80</b>	<b>70</b>	<b>70</b>	<b>58</b>	<b>58</b>	<b>1,773</b>	<b>1,127</b>
<b>Funding Sources</b>																							
N (estimate)	71.6	56.2	29.3	16.8	8.9	13.7	11.1	7.0	17.0	32.2	48	48	48	48	48	48	48	48	48	48	264	480	744
R	9.2	18.3	58.7	11.8	11.9	15.3	9.1	7.1	4.1	5.4	15	15	15	15	15	15	15	15	15	15	151	150	301
C1 strategic roading	0.1	1.1	0.6	5.0	35.4	35.6	21.1	5.8	7.3	10.2											122	0	122
C1 TDM Walk & Cycle	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8											8	0	8
C2 western corridor roading	4.7	2.9	4.7	0.7	10.8	15.4	53.9	38.1	53.7	23.0											208	0	208
C3 western corridor roading	4.0	20.0	20.0	20.0	20.0	177.4	144.0	0.0	0.0	0.0											405	0	405
Crown loan	0.0	0.0	0.0	0.0	0.0	0.0	10.9	177.4	177.4	62.4											428	0	428
Loan funded from tolls	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.0											115	0	115
T (TGM tolls)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10	10	10	10	10	10	10	10	10	10	0	100	100
L (WCC 25% P-G & 47% Waterloo Q)	0.8	0.5	0.3	0.4	8.9	10.2	10.0	12.5	12.0	0.0	0	0	0	0	0	0	0	0	0	0	55	0	55
L (HCC, 47% VFC & 6m Melling Br)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14	14	0	0	0	6	0	0	0	0	0	34	34
L (KCDC, 10% WLR)	1.9	3.1	3.2	2.6	1.1	2.0	1.9	1.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	17	0	17
<b>Total Annual Funding</b>	<b>93</b>	<b>103</b>	<b>118</b>	<b>58</b>	<b>98</b>	<b>270</b>	<b>263</b>	<b>250</b>	<b>272</b>	<b>249</b>	<b>87</b>	<b>87</b>	<b>73</b>	<b>73</b>	<b>73</b>	<b>73</b>	<b>79</b>	<b>73</b>	<b>73</b>	<b>73</b>	<b>1773</b>	<b>764</b>	<b>2537</b>
<b>Funding Gaps</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(84)</b>	<b>(148)</b>	<b>(149)</b>	<b>(22)</b>	<b>5</b>	<b>(7)</b>	<b>9</b>	<b>3</b>	<b>15</b>	<b>15</b>	<b>0</b>	<b>(363)</b>	<b>(363)</b>