

**6952 FIORDLAND LINK
COACH VEHICLE OPERATING COST CALCULATION
In accordance with Transfund PEM Procedures (Sep 2002)**

50	\$0.41
60	\$0.42
80	\$0.46
90	\$0.48
	\$0.04
	16.1
	\$0.05
	17.4
	\$0.10
	19.8
	\$0.12
	20.9
	\$0.11
	14.1
	\$0.0162

Bus Base Running Costs (c/km) - zero grade, 50km/h
 Bus Base Running Costs (c/km) - zero grade, 60km/h
 Bus Base Running Costs (c/km) - zero grade, 80km/h
 Bus Base Running Costs (c/km) - zero grade, 90km/h
 Speed Cycle Change cost (50 - 0 - 50) (c/cycle)
 Speed Cycle Change cost (60 - 0 - 60) (c/cycle)
 Speed Cycle Change additional time (60 - 0 - 60) (sec/cycle)
 Speed Cycle Change cost (80 - 0 - 80) (c/cycle)
 Speed Cycle Change additional time (80 - 0 - 80) (sec/cycle)
 Speed Cycle Change cost (90 - 0 - 90) (c/cycle)
 Speed Cycle Change additional time (90 - 0 - 90) (sec/cycle)
 Speed Cycle Change cost (90 - 20 - 90) (c/cycle)
 Speed Cycle Change additional time (90 - 20 - 90) (sec/cycle)
 Fuel Costs when stopped (\$/min)

Annual Average Coach Movement (vpd) 40
 Percentage of market share to FEL 0%

Section #	SH	Description	Length (km)	Average Coach Travel Speed (km/h)	Minimum Coach Speed (km/h)	Average Delay (sec)	Base Cost (\$/veh/km)	Sector Base Cost (\$/veh)	Speed Cycle Change Cost (\$/veh)	Speed Cycle Change Time (sec/veh)	Delay Cost (\$/veh)	Total Cost (\$/veh)	Coach Volume (two-way)(veh/day)	Total Cost (\$/day)	CO ₂ cost (\$/day)
1	6A	Central Queenstown - 80km/h limit	2.0	50			\$0.41	\$0.83				\$0.83	40	33.29	\$1.66
2	6A	80km/h limit - 60km/h limit (Frankton)	4.1	80			\$0.46	\$1.87				\$1.87	40	74.84	\$3.74
3	6A	Frankton 60km/h - roundabout	0.2	60			\$0.42	\$0.09				\$0.09	40	3.54	\$0.18
4	6A	Frankton Roundabout	NA		0	20			\$0.05	17.4	\$0.01	\$0.06	40	2.56	\$0.00
5	6	Roundabout - Kawarau Falls Bridge	1.6	80			\$0.46	\$0.74				\$0.74	40	29.67	\$1.48
6	6	Kawarau Falls One-lane Bridge	0.1		0	20	\$0.46	\$0.41			\$0.01	\$0.11	40	4.23	\$0.00
7	6	Bridge - 100km/h limit Peninsula Road	0.9	80			\$0.48	\$6.20				\$6.20	40	248.04	\$12.40
8	6	Peninsula Road - Wye Ck Bridge	13.0	90			\$0.48	\$6.20				\$6.20	40	248.04	\$12.40
9	6	Wye Creek Bridge	NA		0	20			\$0.12	20.9	\$0.01	\$0.13	40	5.24	\$0.00
10	6	Wye Ck - Kingston	25.0	90			\$0.48	\$11.93				\$11.93	40	477.00	\$23.85
11	6	Kingston 80km/h section	1.0	80			\$0.46	\$0.46				\$0.46	40	18.20	\$0.91
12	6	Kingston - Garston	17.0	90			\$0.48	\$8.11				\$8.11	40	324.36	\$16.22
13	6	Garston 80km/h section	1.0	80			\$0.46	\$0.46				\$0.46	40	18.20	\$0.91
14	6	Garston - Athol	10.2	90			\$0.48	\$4.85				\$4.85	40	193.85	\$9.69
15	6	Athol 80km/h section	1.5	80			\$0.46	\$0.68				\$0.68	40	27.30	\$1.37
16	6	Athol - Five Rivers	16.8	90			\$0.48	\$8.01				\$8.01	40	320.54	\$16.03
17	6	Five Rivers Junction	NA		0	20			\$0.11	14.1	\$0.01	\$0.12	40	4.65	\$0.00
18	97	Five Rivers - Mossburn	27.3	90			\$0.48	\$13.02				\$13.02	40	520.88	\$26.04
19	97	Mossburn 50km/h section	0.8	50			\$0.41	\$0.31				\$0.31	40	12.30	\$0.62
20	97	Mossburn SH97/94 Junction	NA		0				\$0.04	16.1	\$0.00	\$0.04	40	1.77	\$0.00
21	94	Mossburn 50km/h section	0.8	50			\$0.41	\$0.31				\$0.31	40	12.30	\$0.62
22	94	Mossburn - Te Anau	56.3	90			\$0.48	\$26.86				\$26.86	40	1074.20	\$53.71
23	94	Te Anau 50km/h section	3.0	50			\$0.41	\$1.23				\$1.23	40	49.20	\$2.46
24	94	Te Anau - Te Anau Downs	26.5	90			\$0.48	\$12.64				\$12.64	40	505.62	\$25.28

Daily \$3,978 \$198
 Annually \$1,392,380 \$69,296

209 km