

# **Calculator to Estimate Contract Payment Under the Bus Cost Model**

**(October 2010 Values)**  
(October 2010 Capital and Interest Values)

**Example calculation based on average large bus contract**

<b>Summary (ex GST)</b>	<b>Example</b>	<b>Your Figures</b>
<i>Daily Kilometres</i>	<i>95</i>	
<i>Bus Size</i>	<i>Large</i>	
<i>Average Speed (km/hr)</i>	<i>40</i>	
Fixed Operating Costs	\$12,698	
Capital Cost	\$18,412	
Driver's Wages	\$13,320	
Vehicle Operating Costs	\$14,884	
Return on Capital Allowance	\$2,294	
<b>Contract Total (ex GST)</b>	<b>\$61,607</b>	
<i>GST Rate</i>	<i>10%</i>	
GST on Fixed Operating Costs	\$1,270	
GST on Capital Allowance	\$1,841	
GST on Drivers Wages	\$1,332	
GST on Vehicle Operating Costs	\$1,488	
GST on Return on Capital Allowance	\$229	
Total GST	\$6,161	
<b>Contract Total (inc GST)</b>	<b>\$67,768</b>	

**Fixed Operating Costs (exc GST)**

Administration Wage Rate (\$/week)	\$733.30 per week		
Weekly Hours	38.0 hours		
Casual Rate Loading	20%		
Administration Wage Rate (\$/hr)	\$23.16 per hour		
Labour On Costs (Super, LSL, Workers Comp)	15%		
Administration Hours (per month)	11.0		
Insurance (% of Average Bus Value)	1.20%	or	\$541 <i>whichever is the greater</i>
Distance to Inspection Station (km)	20		
Bus Cleaning (hrs/wk)	1.5		

Cost Item	BCM Agreed Value	Includes GST	Value at October 2010 (\$)			
			Extra large	Large	Medium	Small
<u>Insurance &amp; Registration</u>						
MAIB Insurance Premium	894.00	Yes	812.73			
Comprehensive Vehicle Insurance		No	1395.90	1356	813	1437
Depot Insurance	120.24	Yes	109.31			
Public Liability Insurance	1091.48	Yes	992.25			
Vehicle Registration	505.55	No	505.55			
<u>Safety Costs</u>						
Biannual DIER Safety Inspection						
- Vehicle Check	196.00	Yes	178.18			
- Brake Efficiency test	172.10	yes	156.45			
- Remote Inspection	108.99	Yes	99.09			
Travel to DIER Inspection Station (<40 km)	73.34	No	73.34			
Fire Safety Inspection	28.50	No	28.50			
<u>Operating &amp; Maintenance</u>						
Depot/Garaging Costs	1247.94	No	1247.94			
Depot Operating Cost	119.94	No	119.94			
Depot Maintenance Cost	239.83	No	239.83			
Bus Cleaning Consumables	318.57	Yes	289.61			
Bus Cleaning Labour		No	1366.20			
<u>Administration</u>						
Administration/Customer Service		No	3515.69			
Accounting Fees	625.00	Yes	568.18			
Bank Charges	300.00	No	300.00			
Administration Consumables	95.94	Yes	87.22			
Phone/Fax Line - Business Line Complete						
- Rental	419.40	Yes	381.27			
- Call Charges (70/month @ 22 cents)	184.80	Yes	168.00			
Office Furniture and Equipment	101.94	No	101.94			
<b>Sub-Total Fixed Operating Costs</b>			<b>\$12,737</b>	<b>\$12,698</b>	<b>\$12,154</b>	<b>\$12,778</b>

Distance to Inspection Station		
0		\$73
40		\$266
80		\$610

**Bus Capital Cost (exc GST)**

	Extra Large 25	Large 25	Medium 20	Small 10		UFSO 20
Maximum Age						
- Avg Purchase Price Motor Registry 2007-2010 - 13 - 16 yr old (Large & X-Large), 8-12 yr old (Medium & UFSO), New Quote for Small	83,834	80,535	41,514	105,850		192,334
- Refurbishment	32,491	32,491	26,202	13,884		0
Capital Allowance	\$116,325	\$113,026	\$67,716	\$119,734		\$192,334
Residual Value	\$13,500	\$13,500	\$16,000	\$28,000		\$50,000
Cost of Finance	8.29%	8.29%	8.29%	9.92%		8.29%
Cost of Equity Capital	22%	22%	22%	22%		22%
% Debt Financed	80%	80%	90%	100%		80%
Weighted Cost of Capital	11.03%	11.03%	9.66%	9.92%		11.03%

\* Provisional figures for bus capital cost only. Subject to change prior to offer of New Service Contract

Bus Age at Purchase	Extra Large	Large	Medium	Small		UFSO
0	\$18,973	\$18,412	\$9,840	\$17,656		\$29,717
1	\$18,973	\$18,412	\$9,840	\$17,068		\$29,717
2	\$18,973	\$18,412	\$9,840	\$16,494		\$29,717
3	\$18,973	\$18,412	\$9,840	\$15,933		\$29,717
4	\$18,973	\$18,412	\$9,840	\$15,386		\$29,717
5	\$18,973	\$18,412	\$9,840	\$14,852		\$29,717
6	\$18,973	\$18,412	\$9,840	\$14,333		\$29,717
7	\$18,973	\$18,412	\$9,840	\$13,828		\$29,717
8	\$18,973	\$18,412	\$9,840	\$13,338		\$29,717
9	\$18,973	\$18,412	\$9,840	\$12,861		\$29,717
10	\$18,973	\$18,412	\$9,840	\$12,861		\$29,717
11	\$18,973	\$18,412	\$9,519	\$0		\$28,680
12	\$18,973	\$18,412	\$9,205	\$0		\$27,668
13	\$18,973	\$18,412	\$8,899	\$0		\$26,682
14	\$18,973	\$18,412	\$8,600	\$0		\$25,721
15	\$18,973	\$18,412	\$8,308	\$0		\$24,787
16	\$18,223	\$17,686	\$8,024	\$0		\$23,880
17	\$17,492	\$16,979	\$7,747	\$0		\$22,999
18	\$16,780	\$16,289	\$7,478	\$0		\$22,146
19	\$16,086	\$15,618	\$7,217	\$0		\$21,320
20	\$15,411	\$14,964	\$7,217	\$0		\$21,320
21	\$14,756	\$14,330	\$0	\$0		\$0
22	\$14,119	\$13,714	\$0	\$0		\$0
23	\$13,503	\$13,118	\$0	\$0		\$0
24	\$12,906	\$12,540	\$0	\$0		\$0
25	\$12,906	\$12,540	\$0	\$0		\$0
26	\$0	\$0	\$0	\$0		\$0

Note: The payment when first entering into a New Service Contract is based on the age of the bus at the time of signing the contract. The capital payment for the period over which the bus is within the permitted age does not reduce. It does not decline as the bus age increases. For example if a large bus is purchased at 19 years of age, then for the next 6 years the contract payment will include the amount of \$12,016 for bus capital.

**Drivers Wages (ex GST)**

Driver Weekly Rate	\$627.00 per week
Weekly Hours	38.0 hours
Casual Rate Loading	20%
Driver Hourly Rate	\$19.80 per hour
Minimum Call Out Hours*	1.0 hours
Labour On Costs (Super, LSL, Workers Comp)	15%
Morning Inspection Time	15 mins
Afternoon Waiting Time	10 mins
Round Time up to Nearest Minutes	15 mins
Average Speed	40 km/hr
Contract Days	195

\* Does not include morning inspection or afternoon waiting times.

Daily Kilometres (Loaded plus Unloaded)	Wage Cost*
20	\$11,100
25	\$11,100
30	\$11,100
35	\$11,100
40	\$11,100
45	\$11,100
50	\$11,100
55	\$11,100
60	\$11,100
65	\$11,100
70	\$11,100
75	\$11,100
80	\$11,100
85	\$12,210
90	\$13,320
95	\$13,320
100	\$13,320
105	\$14,430
110	\$15,541
115	\$15,541
120	\$15,541
125	\$16,651
130	\$17,761
135	\$17,761
140	\$17,761
145	\$18,871
150	\$19,981
155	\$19,981
160	\$19,981
165	\$21,091
170	\$22,201
175	\$22,201
180	\$22,201
185	\$23,311
190	\$24,421
195	\$24,421
200	\$24,421
205	\$25,531
210	\$26,641
215	\$26,641
220	\$26,641
225	\$27,751

\* Note that each contract will be paid according to its actual average speed and these figures are illustrative only

**Vehicle Operating Costs (ex GST)**

	Extra Large	Large	Medium	Small
Fuel Consumption (l/100km)	35.1	32.9	21.8	15.5
Contract Location*	North			
Gross Fuel Cost (BP Card)	124.31 c/l			
Fuel Grants Scheme Rebate	16.44 c/l			
Net Fuel Cost (c/l ex GST)	107.87			
Variable Operating Costs (cents/km)	49.77	44.86	37.82	28.89

\* The North West is used in this example. Please note the different fuel prices shown below the table.

**Daily Kilometres (Loaded plus Unloaded)**

20	\$3,418	\$3,133	\$2,392	\$1,779
25	\$4,272	\$3,917	\$2,990	\$2,224
30	\$5,127	\$4,700	\$3,588	\$2,668
35	\$5,981	\$5,484	\$4,186	\$3,113
40	\$6,836	\$6,267	\$4,784	\$3,558
45	\$7,690	\$7,050	\$5,383	\$4,003
50	\$8,544	\$7,834	\$5,981	\$4,447
55	\$9,399	\$8,617	\$6,579	\$4,892
60	\$10,253	\$9,400	\$7,177	\$5,337
65	\$11,108	\$10,184	\$7,775	\$5,781
70	\$11,962	\$10,967	\$8,373	\$6,226
75	\$12,817	\$11,750	\$8,971	\$6,671
80	\$13,671	\$12,534	\$9,569	\$7,116
85	\$14,526	\$13,317	\$10,167	\$7,560
90	\$15,380	\$14,101	\$10,765	\$8,005
95	\$16,234	\$14,884	\$11,363	\$8,450
100	\$17,089	\$15,667	\$11,961	\$8,895
105	\$17,943	\$16,451	\$12,559	\$9,339
110	\$18,798	\$17,234	\$13,157	\$9,784
115	\$19,652	\$18,017	\$13,755	\$10,229
120	\$20,507	\$18,801	\$14,353	\$10,673
125	\$21,361	\$19,584	\$14,951	\$11,118
130	\$22,215	\$20,367	\$15,550	\$11,563
135	\$23,070	\$21,151	\$16,148	\$12,008
140	\$23,924	\$21,934	\$16,746	\$12,452
145	\$24,779	\$22,718	\$17,344	\$12,897
150	\$25,633	\$23,501	\$17,942	\$13,342
155	\$26,488	\$24,284	\$18,540	\$13,787
160	\$27,342	\$25,068	\$19,138	\$14,231
165	\$28,197	\$25,851	\$19,736	\$14,676
170	\$29,051	\$26,634	\$20,334	\$15,121
175	\$29,905	\$27,418	\$20,932	\$15,565
180	\$30,760	\$28,201	\$21,530	\$16,010
185	\$31,614	\$28,984	\$22,128	\$16,455
190	\$32,469	\$29,768	\$22,726	\$16,900
200	\$34,178	\$31,335	\$23,922	\$17,789
205	\$35,032	\$32,118	\$24,520	\$18,234
210	\$35,887	\$32,901	\$25,119	\$18,679
215	\$36,741	\$33,685	\$25,717	\$19,123
220	\$37,595	\$34,468	\$26,315	\$19,568
225	\$38,450	\$35,251	\$26,913	\$20,013

BP Fuel Card Cost (c/l)	ex GST	inc GST
South	123.24	135.56
North	123.02	135.32
North west	123.14	135.45
Bass Strait Islands	129.68	142.65

**Return on Capital Allowance\* (ex GST)**

Return on Capital	15.25%
Working Capital (% of Operating Costs)**	3.10%
Working Capital (% of Capital Cost)	4.10%
Infrastructure Costs	\$6,039
Tools	\$1,313
Contingencies	\$2,626
Short Term Bus Hire (weeks)	2

Daily Kilometres (Loaded plus Unloaded)	Extra Large	Large	Medium	Small
20	\$2,131	\$2,119	\$1,982	\$2,092
25	\$2,141	\$2,128	\$1,989	\$2,098
30	\$2,152	\$2,138	\$1,997	\$2,103
35	\$2,163	\$2,148	\$2,004	\$2,109
40	\$2,173	\$2,158	\$2,012	\$2,114
45	\$2,184	\$2,168	\$2,019	\$2,120
50	\$2,195	\$2,178	\$2,027	\$2,126
55	\$2,206	\$2,187	\$2,034	\$2,131
60	\$2,216	\$2,197	\$2,042	\$2,137
65	\$2,227	\$2,207	\$2,049	\$2,142
70	\$2,238	\$2,217	\$2,057	\$2,148
75	\$2,249	\$2,227	\$2,064	\$2,153
80	\$2,259	\$2,237	\$2,072	\$2,159
85	\$2,284	\$2,260	\$2,093	\$2,178
90	\$2,309	\$2,284	\$2,115	\$2,198
95	\$2,319	\$2,294	\$2,122	\$2,204
100	\$2,330	\$2,304	\$2,130	\$2,209
105	\$2,355	\$2,328	\$2,151	\$2,229
110	\$2,379	\$2,351	\$2,173	\$2,248
115	\$2,390	\$2,361	\$2,180	\$2,254
120	\$2,401	\$2,371	\$2,188	\$2,259
125	\$2,425	\$2,395	\$2,209	\$2,279
130	\$2,450	\$2,418	\$2,231	\$2,298
135	\$2,461	\$2,428	\$2,238	\$2,304
140	\$2,471	\$2,438	\$2,246	\$2,310
145	\$2,496	\$2,462	\$2,267	\$2,329
150	\$2,521	\$2,486	\$2,288	\$2,349
155	\$2,532	\$2,495	\$2,296	\$2,354
160	\$2,542	\$2,505	\$2,303	\$2,360
165	\$2,567	\$2,529	\$2,325	\$2,379
170	\$2,592	\$2,553	\$2,346	\$2,399
175	\$2,602	\$2,563	\$2,354	\$2,404
180	\$2,613	\$2,572	\$2,361	\$2,410
185	\$2,638	\$2,596	\$2,383	\$2,429
190	\$2,662	\$2,620	\$2,404	\$2,449
195	\$2,684	\$2,640	\$2,419	\$2,460
200	\$2,694	\$2,649	\$2,427	\$2,466
205	\$2,719	\$2,673	\$2,448	\$2,485
210	\$2,744	\$2,697	\$2,470	\$2,505
215	\$2,754	\$2,707	\$2,477	\$2,510
220	\$2,765	\$2,717	\$2,485	\$2,516

\* Presumes that bus is purchased at minimum age for given bus size

\*\* Presumes continued payments at end of the month. If payments made at beginning of month rate changes to 1%

Do not Touch!!!!

Extra Large	Large	Medium	Small	
	2	3	4	5
	2	3	5	7

Index Changes

	Fuel Price (ex ( Maintenance/P Labour	CPI
Jun-06	126.46	133.1
Dec-06	133.21	137.6
Jun-07	117.15	138.3
Dec-07	123.06	136.7
Jul-08	159.50	135.9