

Travel Time Savings Summary

NOTE: Actual bus travel time savings may differ from below and total savings are anticipated to be less than the sum of individual improvements. The savings below are provided for comparison of alternatives.

ESTIMATED TIME SAVINGS PER IMPROVEMENT

IMPROVEMENT	SAVINGS (min)
Bus Stop Removal/Consolidation	1.0 - 1.3
Bus Lanes	2.4 - 2.7
Queue Jump Lanes	< 0.1
Intersection Reconfiguration at Harvard/Columbia/Mt. Pleasant	0.1 - 0.3
Fleet Mix Upgraded with Low-Floor and Articulated Buses	0.5 - 0.6
Off-Board Fare Payment	1.7 - 2.0 (S1, S2, S4) 1.0 - 1.7 (S9)
SmarTrip Card Top-Off	0.3 - 0.5
All-Door Boarding	0.8 - 0.9 (S1, S2, S4) 0.4 - 0.7 (S9)
S1 Converted to Limited Stop Service	2.6
Remove Midday Parking	1.7 - 1.9

ESTIMATED TOTAL TRAVEL TIME SAVINGS PER TRIP

ROUTE	SOUTHBOUND AM PEAK (min)			NORTHBOUND PM PEAK (min)		
	S1	S2/S4	S9	S1	S2/S4	S9
Existing	23.6	24.9	21.6	16.7*	21.0	18.0
Alternative 1	7.0	4.4	1.4	6.9	4.3	2.5
Alternative 2	4.9	5.2	2.9	4.8	4.9	2.9
Alternative 3	4.0	4.2	3.7	4.3	4.4	4.9

*Low value due to small sample size. Actual value is likely similar to the S2/S4 existing travel time.

ESTIMATED DWELL TIMES

ROUTE	SOUTHBOUND (min)		NORTHBOUND (min)	
	S1/S2/S4	S9	S1/S2/S4	S9
Existing	5.0	2.7	4.9	3.2
Alternative 1	2.9	1.6	3.0	2.1
Alternative 2	3.8	2.5	3.6	3.0
Alternative 3	4.0	1.6	3.9	2.1

ESTIMATED CHANGE IN VEHICLE TRAVEL TIME

ALTERNATIVE	SOUTHBOUND AM PEAK (min)	NORTHBOUND AM PEAK (min)	NORTHBOUND PM PEAK (min)	SOUTHBOUND PM PEAK (min)
Alternative 1	(-4.6)	(-0.1)	(-0.7)	(-3.5)
Alternative 2	8.2	25.7	10.1	31.3
Alternative 3	1.2	12.4	5.1	8.0