

From BRT to Better Buses: Applying Individual Elements of BRT To Improve Service

Presentation to TRB Bus Committee, January 25, 2011

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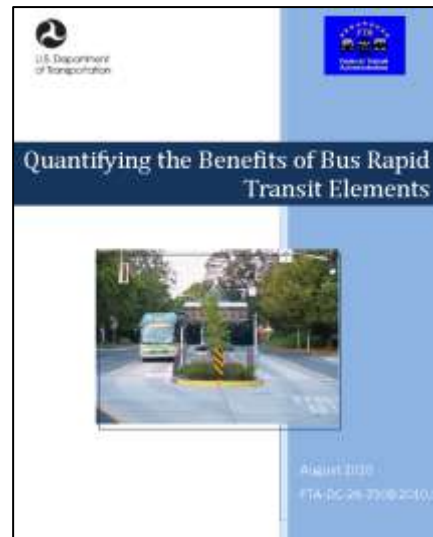
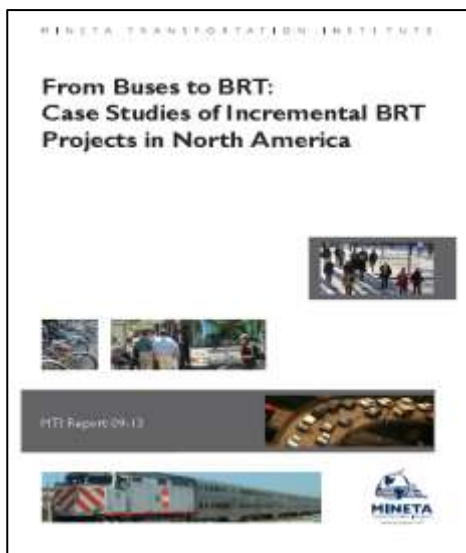
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Both reports at <http://www.bettertransport.info/brt>

The Two Dimension of Incremental BRT

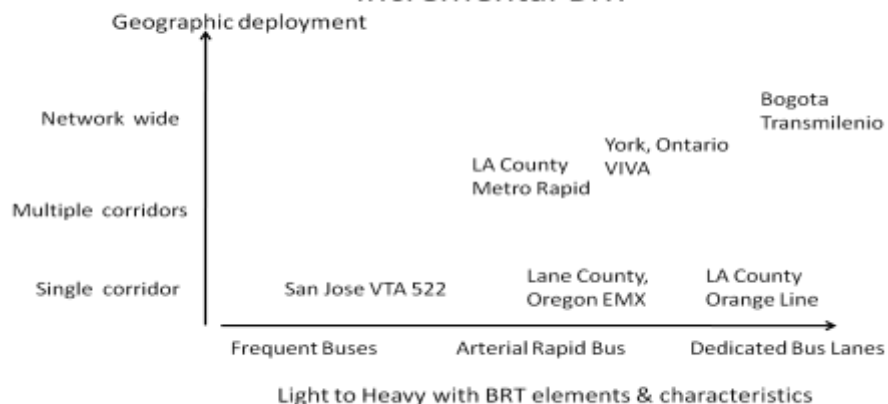


Table 1 Performance of Five BRT Development Experiences

	L.A. Metro Orange Line	Lane County EMX Green Line	York Viva	VTA Route 522 Rapid	L.A. Metro Rapid
	Median busway with TSP	Median busway with TSP	On-street running with TSP	On-street running with TSP	On-street running with TSP
Route miles	13.5	4	50	26	450
Cost per mile (millions)	\$26	\$6.1	CA\$3.4	\$0.13	\$0.24
Cost per new daily rider	\$16,700	\$9,100	CA\$6,600	\$1,100	\$620



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Summary Results



Characteristic	Effect	Confidence Level
Station density (Stations per mile)	1.4 - 2.2 minute increase in route time per station added per mile	95% in all six data sets
Use of low floor buses	8.2 - 9.8 minute decrease in route time where fleets consist of all low floor buses	95% in four of the six data sets
Dedicated bus lanes	6.1 - 7.0 minute increase in route time where no dedicated bus lanes are used compared with a high level of dedicated bus lanes	95% in two of the six data sets
Transit signal priority	Varied across data sets and levels of TSP density, showing both increases and decreases in route time	95% in three of the six data sets
Number of boarding doors	0.7 - 11.8 minute increase in route time for one boarding door compared with two boarding doors	95% confident in one data set; 90% confident in another data set

Conclusion points to available development strategy: Individual BRT elements providing cost-effective improvements to existing routes network wide when implemented on the many non-BRT routes.