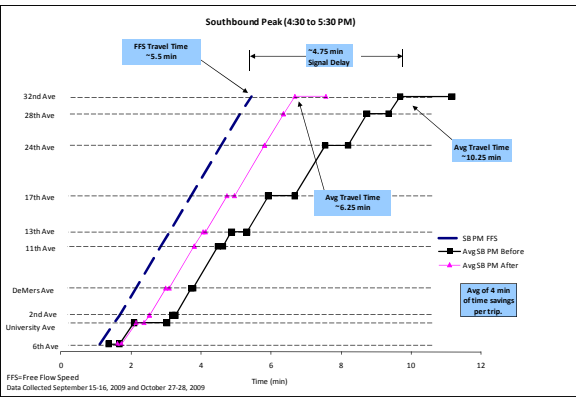
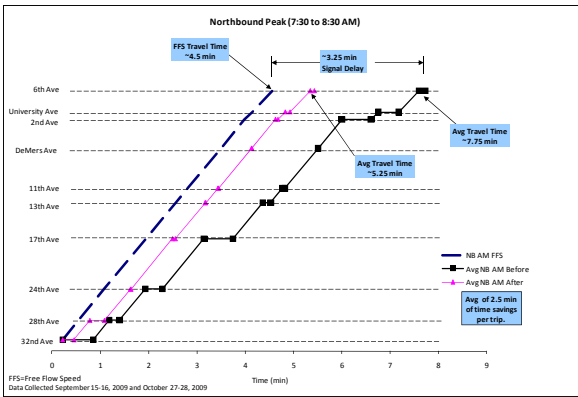


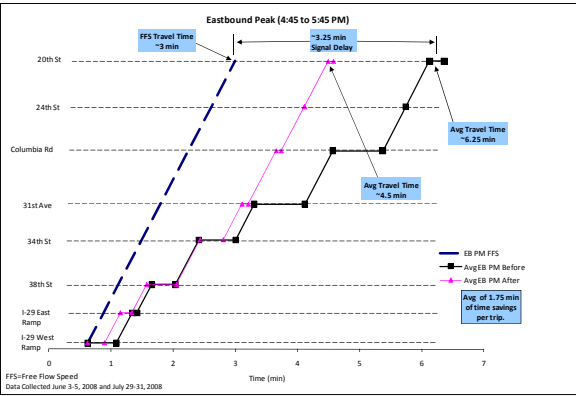
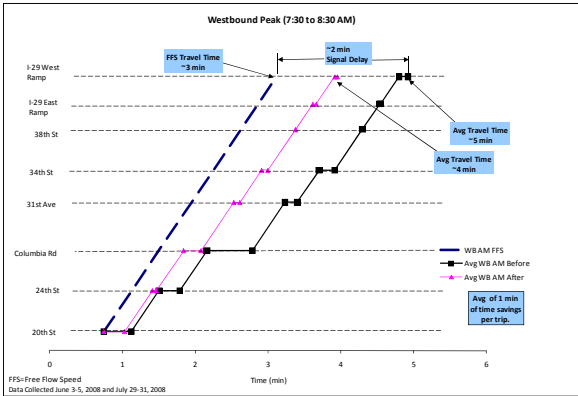
Travel Time Studies

Travel time studies are conducted to help assess the performance of the corridor and quantify delays. The studies are performed over several days and collected during both the AM and PM peak periods.

The results of the critical AM and PM peak hour directions of travel are shown to the right.



Columbia Road Travel Time Studies



32nd Avenue Travel Time Studies

Corridor Performance

The improvement to an overall corridor's performance is quantified through the reduction in overall intersection delay, reduction in vehicle stops and reduction in fuel consumption. An anticipated safety benefit can be quantified through the reduction of motorists approaching in the Dilemma Zone (motorists approaching on the yellow light).

The results of the before and after corridor performance for 32nd Avenue and Columbia Road are tabulated to the right.

Columbia Road Corridor Performance

		Daily Benefit (Weekday)				Annual Net Reduction ¹
		Before	After	Net Reduction	Percent Improvement	
User Costs ³	Stops (no. of veh)	173,808	145,749	28,059	16.1%	7,042,684
	Delay (hr)	1,777	1,566	211	11.9%	52,871
	Fuel Consumption (gal)	4,520	4,327	193	4.3%	48,456
	Dilemma Zone ² (veh)	8,454	5,878	2,577	30.5%	646,702
	Columbia Road - Benefit to Cost Ratio					31 : 1

32nd Avenue Corridor Performance

		Daily Benefit (Weekday)				Annual Net Reduction ¹
		Before	After	Net Reduction	Percent Improvement	
User Costs ³	Stops (no. of veh)	113,313	87,636	25,678	22.7%	6,445,053
	Delay (hr)	951	886	65	6.9%	16,369
	Fuel Consumption (gal)	5,871	5,287	583	9.9%	146,428
	Dilemma Zone ² (veh)	6,462	4,125	2,337	36.2%	586,587
	32nd Avenue - Benefit to Cost Ratio					31 : 1

¹ Total weekday days (261) were reduced by 10 to account for Holidays. 251 total days included. Saturday and Sundays were not included as part of the Benefit/Cost Analysis.
² Dilemma Zone is a safety measure and is equal to the number of vehicles arriving on "yellow" indication and presented with a decision to stop or go.
³ Measures of effectiveness or MOE (Stops, Delay, Fuel Consumption and Dilemma Zone) measured using Synchro/SimTraffic Modeling Software.

Columbia Road and 32nd Avenue – Before/After Results