



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

# **PROGRAM FOR ARTERIAL SYSTEM SYNCHRONIZATION (PASS)**

**FY21/22 CYCLE**

## **PROGRAM SUMMARY**

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# PASS FY21/22 Cycle Program Summary

#	County	Project Sponsors	# of Traffic Signals	Timing Plans/Services	Project Consultant
1	AL	Alameda County	12	Weekday AM/midday/PM peaks	DKS Associates
2	CC	City of Clayton	9	Weekday AM/PM peaks	Kimley-Horn and Associates
3	AL	City of Fremont	36	Weekday AM/midday/PM school/PM peaks, Weekend peak/off-peak	Kimley-Horn and Associates
4	MR	Marin County	12	Weekday and Weekend AM/midday/PM peaks, advanced programming/fine-tuning	DKS Associates
5	SM	City of Millbrae	18	Weekday AM/midday/PM peaks	DKS Associates
6	SM	City of San Mateo	10	Weekday AM/midday/PM peaks	DKS Associates
<b>Total Signals</b>			<b>97</b>		

Note: AL = Alameda, CC = Contra Costa, MR = Marin, SM = San Mateo

## Benefit/Cost Summary\*:

**Total Lifetime Benefits: \$8,630,732**

**Total Program Costs: \$651,005**

**Overall Program Benefit/Cost Ratio: 13:1**

\*Program benefits are assumed to be 100% on the first day after implementation of the new timing plans, declining steadily to zero by the end of the fifth year.

## LIFETIME (5 YRS) PROGRAM BENEFITS:



Auto Travel Time Savings: 9% (312,000 hrs.)



Average Increase in Auto Speed: 15%








Fuel Consumption Savings: 3% (150,000 gal.)



Total Emissions Reduced: 19 tons  
(ROG, NOx, PM2.5, CO)

# PASS FY21/22 Cycle Summary of Benefits

Lifetime (5 Years) Project Benefits	Alameda County	Clayton	Fremont	Marin County	Millbrae	San Mateo
<b>Benefit/Cost Ratio</b>	<b>10</b>	<b>8</b>	<b>14</b>	<b>18</b>	<b>13</b>	<b>9</b>
 <b>Auto Travel Time Savings (%)</b>	7%	16%	12%	11%	5%	3%
<b>Auto Travel Time Savings (hours)</b>	17,712	11,275	175,296	59,978	32,934	14,711
 <b>Average Reduction in Auto Signal Delay (%)</b>	28%	52%	52%	41%	-9% (increase)	-29% (increase)
<b>Average Reduction in Number of Stops (%)</b>	9%	45%	45%	19%	-26% (increase)	51%
 <b>Average Speed Before (mph)</b>	21	29	26	21	20	13
<b>Average Speed After (mph)</b>	23	34	30	24	21	14
 <b>Fuel Consumption Savings (%)</b>	1%	6%	3%	1%	2%	2%
<b>Fuel Consumption Savings (gallons)</b>	5,516	6,712	92,951	19,668	16,942	8,441
 <b>Total Emissions Reduction (tons)</b>	1.52	0.58	10.75	5.71	1.39	-0.75 (increase)