



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

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

## **FY 18/19 CYCLE**

### **PROGRAM SUMMARY**

MTC Contact:

Robert Rich

PASS Program Manager

Tel: 415.778.6621

Email: [RRich@BayAreaMetro.gov](mailto:RRich@BayAreaMetro.gov)

# PASS FY2018/19 Cycle Program Summary

#	County	Project Sponsors	# of Traffic Signals	Timing Plans/Services	Project Consultant
1	AL	City of Berkeley	20	Weekday Peaks and Mid / Weekend Peaks and Mid	DKS Associates
2	SC	City of Campbell	15	Weekday Peaks and Mid/ Weekend Peaks	Iteris, Inc.
3	SC	City of Cupertino	12	Weekday Peaks and Mid / Weekend Peaks	Iteris, Inc.
4	SOL	City of Fairfield	37	Weekday Peaks, Mid and School / Weekend Peaks / TSP and Ramp Metering Timing	TJKM Transportation Consultants
5	MR	Marin County	13	Weekday Peaks, Mid and Off-Peak / Weekend Peaks	DKS Associates
6	SC	City of Palo Alto	19	Weekday Peaks and Mid / Weekend Peaks	TJKM Transportation Consultants
7	CC	City of Pittsburg	16	Weekday Peaks and School	TJKM Transportation Consultants
8	CC	City of Richmond	15	Weekday Peaks and Schools, Weekend Peaks	Iteris, Inc.
9	CC	West Contra Costa Transportation Advisory Committee (WCCTAC)	110	Weekend Peaks, Weekday Peaks, Special Event Plans	Kimley-Horn and Associates, Inc.
<b>Total Signals</b>			<b>257</b>		

Note: AL = Alameda, CC = Contra Costa, MR = Marin, SC = Santa Clara,  
SOL = Solano County

## Benefit/Cost Summary\*:

**Total Lifetime Benefits: \$86,183,833**

**Total Program Costs: \$1,415,050**

**Overall Program Benefit/Cost Ratio: 61:1**

\*The 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 fourth year.

## LIFETIME (5 YRS) PROGRAM BENEFITS:



Auto Travel Time Savings: 23% (3.2 million hrs.)



Average Increase in Auto Speed: 38%








Fuel Consumption Savings: 16% (3.1 million gal.)



Total Emissions Reduced: 124 tons  
(ROG, NOx, PM2.5, CO)

# PASS FY2018/19 Cycle Summary of Benefits

Lifetime (5 Years) Project Benefits		Berkeley	Campbell	Cupertino	Fairfield	Marin County	Palo Alto	Pittsburg	Richmond	WCCTAC
<b>Benefit/Cost Ratio</b>		<b>29</b>	<b>59</b>	<b>25</b>	<b>61</b>	<b>27</b>	<b>379</b>	<b>77</b>	<b>18</b>	<b>12</b>
	<b>Auto Travel Time Savings (%)</b>	13%	26%	21%	23%	7%	56%	31%	15%	15%
	<b>Auto Travel Time Savings (hours)</b>	140,809	154,172	55,672	384,749	90,730	1,957,061	159,204	68,782	186,986
	<b>Average Reduction in Auto Signal Delay (%)</b>	25%	56%	56%	59%	17%	39%	63%	56%	36%
	<b>Average Reduction in Number of Stops (%)</b>	11%	47%	47%	47%	13%	30%	44%	47%	34%
	<b>Average Increase in Speed (%)</b>	18%	27%	32%	48%	10%	107%	69%	12%	22%
	<b>Fuel Consumption Savings (%)</b>	7%	21%	18%	19%	6%	21%	27%	12%	11%
	<b>Fuel Consumption Savings (gallons)</b>	236,548	475,100	142,999	561,355	308,457	674,311	214,829	225,520	302,323
	<b>Total Emissions Reduction (tons)</b>	7.7	19.4	5.9	22.8	12.3	24.0	8.7	11.4	12.1