

PROGRAM FOR ARTERIAL SYSTEM SYNCHRONIZATION (PASS) FY12/13 CYCLE

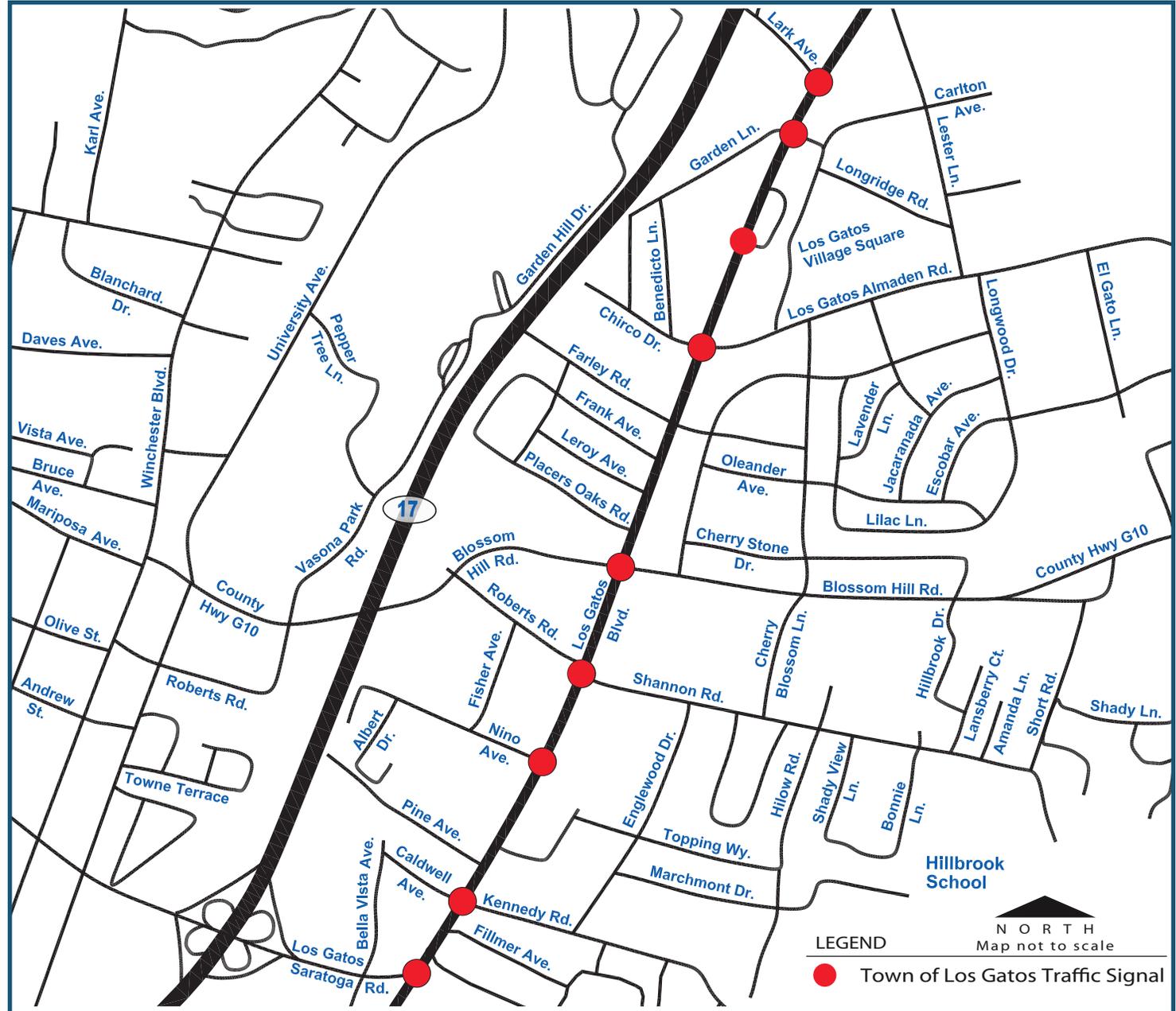
Los Gatos Blvd ■ Traffic Signal Timing Project

Town of Los Gatos | Metropolitan Transportation Commission

PROJECT OVERVIEW

The Town of Los Gatos received a Program for Arterial Synchronization (PASS) grant from the Metropolitan Transportation Commission to conduct a signal timing study for nine signals along Los Gatos Boulevard between Saratoga Road and Lark Avenue. The goal of this project was to facilitate traffic progression along Los Gatos Boulevard; and to update the signal timing plans to achieve operational efficiency of the traffic signals. The project objective was to develop traffic signal coordination timing plans for the AM, school PM, and PM peak periods.

These new timing plans effectively serve the heavy directional traffic of the corridor, which varies for the AM and the PM commute peak periods. Specifically, traffic congestion along Los Gatos Blvd between Saratoga Rd and Lark Ave has been reduced significantly. Other intrinsic benefits that were derived from investing in the project include minimizing motorists' frustration by reducing traffic congestion and delay.



...PROJECT OVERVIEW

This PASS project involved the completion of the following major tasks: collecting traffic volumes and turning movement counts -- including bike and pedestrian counts -- at all project intersections; analyzing this traffic data including collision data to develop optimized signal timing plans; implementing and fine-tuning the plans in the field; and conducting travel time surveys to analyze the performance of the new timing plans.

BENEFITS TO VARIOUS MODES



BENEFITS TO PEDESTRIANS:

The Walk timing and Flash Don't Walk clearance timing parameters were updated to provide adequate time for children and seniors to safely cross the intersections, and to adhere to the 2012 CA MUTCD walking speed of 3.5 feet/second.



BENEFITS TO TRANSIT:

Based on the transit travel time runs, the project resulted in an average of 9% increase in speed and an average of 4% savings in travel time for the buses serving the corridor. These results show that optimizing signal timings on a regular basis provides significant benefits to the users and transit operators.



BENEFITS TO TRAFFIC SAFETY:

To enhance traffic safety, the yellow clearance timing parameters were updated based on posted speed limits along the study corridor, and all red clearance timing parameters were reviewed.

Project Costs

Consultant Costs (Weekday Peak Coordination Plans)	\$27,900
Other Project Costs (Communication Equipment, etc.)	\$0
Agency Staff Costs (Estimate)	\$6,975
Total Costs	\$34,875

Project Benefits

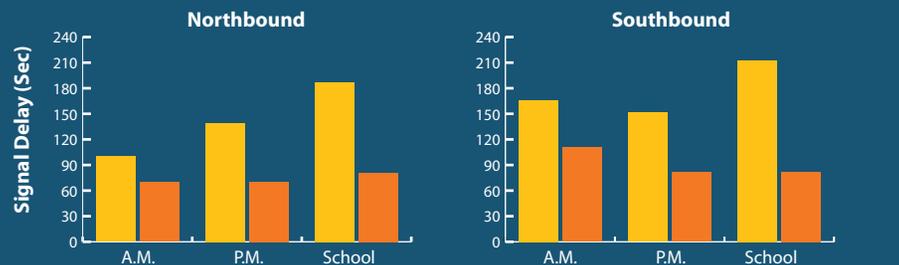
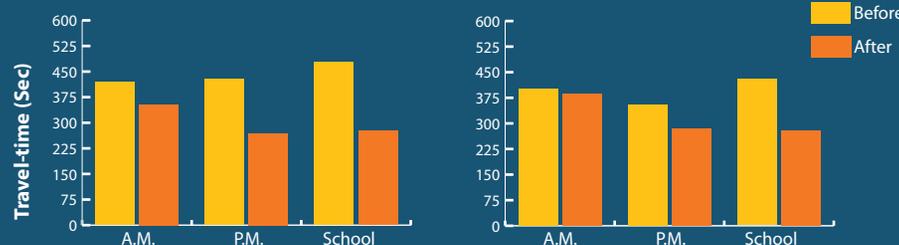
Measures	Annual Average		Lifetime (5 Years)	
	Savings	Monetized Savings	Savings	Monetized Savings
Travel Time Savings	28,979 hrs.	\$553,147	144,896 hrs.	\$2,765,734
Fuel Consumption Savings	55,232 gal.	\$221,964	276,161 gal.	\$1,109,822
ROG Emissions Reduction	0.41 tons	\$520	2.06 tons	\$2,598
NOx Emissions Reduction	0.52 tons	\$9,313	2.59 tons	\$46,563
PM10 Emissions Reduction	0.08 tons	\$11,327	0.39 tons	\$56,635
CO Emissions Reduction	2.4 tons	\$186	12.01 tons	\$928
Total Lifetime Benefits				\$3,982,280
Transit Travel Time Savings	52 hrs.	\$988	259 hrs.	\$4,938
Total Lifetime Benefits with Transit				\$3,987,219

Overall Project Benefits

	Auto	Transit
Average Decrease in Travel Time	28%	4%
Average Speed Increase	42%	9%
Average Fuel Savings	22%	N/A
Average Reduction in Signal Delay	47%	N/A
Average Reduction in Number of Stops	45%	N/A

Overall Benefit-Cost Ratio

114:1



Los Gatos Blvd

PROJECT BENEFITS SUMMARY



Average Reduction in Auto Signal Delay: 47%

Average Reduction in Number of Stops: 45%

Auto Fuel Consumption Savings: 22% or 276,161 gallons



Total Emissions Reduced (ROG, Nox, PM10, CO): 17.05 tons

Auto Travel Time Savings: 28% or 144,896 hours



Average Transit Travel Time Savings: 4% or 259 hours

Overall Project Benefit-cost Ratio = 114:1



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