



Brockton Avenue Restriping Project - Update

Public Works Department

City Council Meeting

December 6, 2016

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BACKGROUND

1. Land Use Committee project reviews:
 - A. Reviewed original proposal on 4/22/13 and requested traffic studies and collision data.
 - B. Reviewed study and collision data on 10/2/13 and recommended City Council approval.
2. City Council approved project on 10/22/13
3. Project was completed 11/14.



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PROJECT COMPONENTS

1. Reduced travel lanes from 4 to 2
2. Installed two-way left-turn lane
3. Installed Class II bike lanes
4. Allowed parking where widths permitted



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PROJECT COMPONENTS CONT

5. Utilized coordination and protected / permissive phasing to optimize traffic flow
6. Slurry sealed roadway
7. Provided infill and repair of sidewalk, curb and gutters



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PROJECT BENEFITS

1. Enhanced motorist safety by improving sight distance, discouraging speeding, and moving left-turns away from thru traffic.
2. Preserved emergency response times.
3. Improved pedestrian safety by minimizing exposure across travel lanes.
4. Increased cyclist use and safety by installing Class II bike lanes with buffers.



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ACHIEVED TOTAL COLLISION REDUCTIONS

1. Hit Object & Overturned:	↓	100%
2. Head-On, Other, Not Stated:	↓	100%
3. Sideswipes:	↓	67%
4. Broadsides:	↓	50%
5. Pedestrian:	↑	15%
6. Rear Ends:	↑	31%
7. Bicyclist Involved:	↑	67%
Total Collisions:	↓	35%



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BROCKTON AVENUE PEDESTRIAN AND BICYCLIST ACTIVITY

Date	Day of the Week	@ Bandini Avenue		@ Terracina Drive	
		# of Pedestrians	# of Bicyclists	# of Pedestrians	# of Bicyclists
6/9/16	Thursday	112	81	57	37
6/11/16	Saturday	163	82	24	40
6/12/16	Sunday	113	112	42	22



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BROCKTON PARKING DEMAND STUDY

NORTHBOUND SEGMENT: Regular RCC Session / Finals Week / Semester Break	7:30 am	10:00 am	1:00 pm	4:00 pm
Jurupa to Maplewood	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
Maplewood to Garden Home	0 / 0 / 0	0 / 0 / 0	0 / 1 / 0	0 / 0 / 0
Garden Home to Rosewood	1 / 1 / 0	2 / 1 / 0	0 / 0 / 0	0 / 0 / 0
Rosewood to Oakwood	3 / 2 / 0	0 / 2 / 0	1 / 0 / 0	1 / 0 / 1
Oakwood to Linwood	0 / 0 / 0	0 / 0 / 0	1 / 0 / 0	0 / 0 / 0
Linwood to Bandini	0 / 0 / 1	0 / 0 / 1	0 / 0 / 1	0 / 0 / 1
Bandini to Elmwood	0 / 0 / 1	0 / 0 / 0	0 / 0 / 0	0 / 0 / 0
Elmwood to Beechwood	1 / 2 / 1	1 / 2 / 1	0 / 2 / 1	0 / 2 / 1
Beechwood to Chapman	0 / 0 / 0	0 / 1 / 0	0 / 0 / 0	0 / 0 / 0
Chapman to Larchwood	0 / 1 / 0	3 / 0 / 0	2 / 2 / 0	3 / 3 / 0
Larchwood to Ramona	2 / 3 / 0	2 / 2 / 0	2 / 1 / 0	3 / 2 / 0
Ramona to Terracina	9 / 7 / 0	26 / 15 / 0	17 / 22 / 0	18 / 12 / 0
Terracina to Rice	0 / 2 / 0	5 / 2 / 0	2 / 3 / 0	2 / 2 / 0
Rice to Tequesquite	1 / 0 / 0	8 / 0 / 0	4 / 2 / 0	4 / 3 / 0
Tequesquite to 14 th	3 / 4 / 3	7 / 11 / 6	7 / 12 / 7	3 / 5 / 3
Total	20 / 22 / 6	54 / 36 / 8	36 / 45 / 9	34 / 29 / 6



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BROCKTON PARKING DEMAND STUDY

SOUTHBOUND SEGMENT: Regular RCC Session / Finals Week / Semester Break	7:30 am	10:00 am	1:00 pm	4:00 pm
14 th to Tequesquite	0/0/0	0/0/0	0/0/0	0/0/0
Tequesquite to Alta Vista	3/2/1	8/3/5	6/4/4	5/6/4
Alta Vista to Homewood	0/0/0	0/0/0	0/0/0	0/0/0
Homewood to Ramona	1/1/0	10/1/0	8/0/0	5/1/0
Ramona to Larchwood	0/0/1	2/0/1	1/0/1	1/1/1
Larchwood to Highland	0/0/0	0/0/0	0/0/0	0/0/0
Highland to Beechwood	0/0/0	0/0/0	0/0/0	0/0/0
Beechwood to Elmwood	0/0/0	0/0/0	0/0/0	0/0/0
Elmwood to Bandini	0/0/0	0/0/0	0/0/0	0/0/0
Bandini to Linwood	1/1/1	2/0/2	1/0/1	0/0/1
Linwood to Oakwood	0/1/1	0/0/0	0/1/0	0/0/1
Oakwood to Rosewood	3/3/2	3/2/2	4/2/2	2/2/2
Rosewood to Edgewood	1/2/1	1/1/1	1/2/0	1/3/1
Edgewood to Maplewood	2/2/3	2/3/3	1/2/3	1/2/1
Maplewood to Rubidoux	0/0/0	0/0/0	0/0/0	0/0/0
Rubidoux to Jurupa	0/0/0	0/0/0	0/0/0	0/0/0
Total	11/12/10	28/10/14	22/11/11	15/15/12



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IMPACTS TO REDWOOD DRIVE

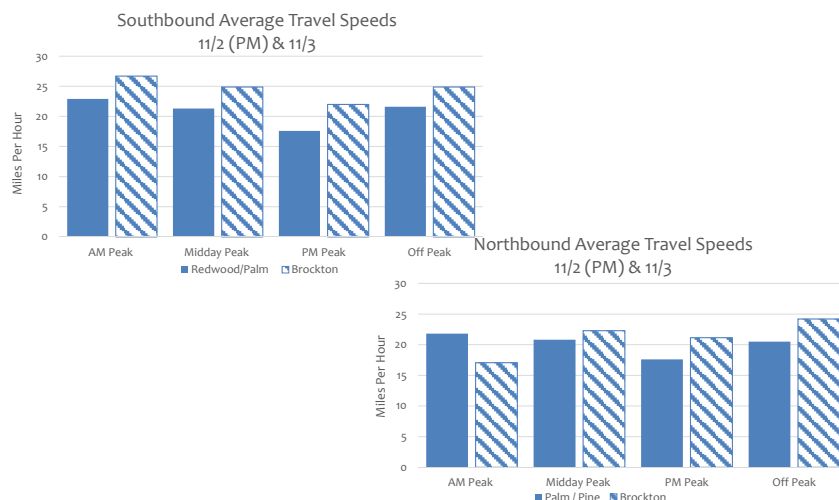
1. Initial 32% increase in traffic on Redwood after Brockton Ave. project completion
2. Subsequent 15% reduction in traffic on Redwood within the past 6 months
3. Fluctuations in traffic volumes may be attributed to events at Ryan Bonominio & Mt. Rubidoux Parks
4. Shorter travel times on Redwood may also encourage motorists to utilize this corridor



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BROCKTON / REDWOOD / PINE AVERAGE TRAVEL SPEED DATA

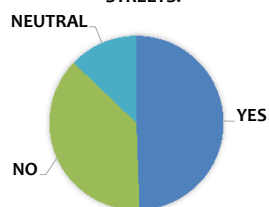


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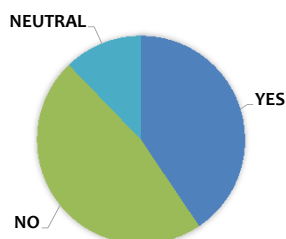
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SURVEY DATA

HAS THE TWO-WAY-LEFT-TURN LANE MADE IT
EASIER TO ENTER / EXIT DRIVEWAYS & SIDE-
STREETS?



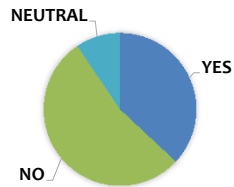
STUDY AREA STATISTICS - SHOULD THE CITY
MAINTAIN BIKE LANES?



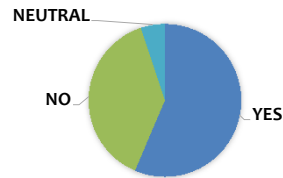
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SURVEY DATA

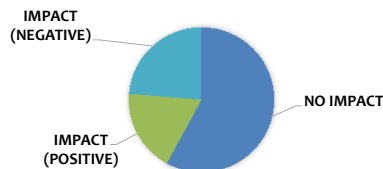
RESIDENT / MOTORIST STATISTICS - HAS THE PROJECT BEEN BENEFICIAL OVERALL?



BUSINESS SURVEY STATISTICS - HAS THE PROJECT BEEN BENEFICIAL OVERALL?



BUSINESS STUDY AREA STATISTICS - HAS THE PROJECT IMPACTED YOUR BUSINESS?



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PRELIMINARY FINDINGS

Brockton Restriping Project has resulted in:

1. 29% reduction in accidents
2. Slight reduction in 85th% speeds from 41 MPH to 38 MPH.
3. Increased traffic volumes on Brockton Ave suggesting that the new configuration is comfortable to motorists and operating at an acceptable level.



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CONTINUED STAFF MONITORING

Continued monitoring by Traffic Engineering staff to:

1. Assess the need for signal timing adjustments.
2. Determine if additional striping improvements are warranted.
3. Ensure optimal performance.
4. Maximize efficiency for all users.



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RECOMMENDATION

That City Council receive and file the post construction traffic study data.



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