



Brockton Avenue Restriping Project - Update

Public Works Department

Transportation Committee

February 8, 2018

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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
4. Prior project update was provided to Council on 12/6/16



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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
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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POST-CONSTRUCTION VS. 36 MO. HISTORICAL AVG. COLLISION STATISTICS

| | | |
|------------------------|---|------|
| 1. Hit Object: | ↓ | 24% |
| 2. Head-On: | ↓ | 57% |
| 3. Sideswipes: | ↓ | 70% |
| 4. Broadsides: | ↓ | 32% |
| 5. Other / Not Stated | ↓ | 100% |
| 6. Pedestrian: | ↑ | 28% |
| 7. Rear Ends: | ↑ | 7% |
| 8. Bicyclist Involved: | ↑ | 78% |
| 9. Overturned: | ↑ | 67% |
| Total Collisions: | ↓ | 24% |



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POST PROJECT PEDESTRIAN INCIDENTS

5 Total Incidents

- Right-turn motorists failed to yield the right of way at signalized intersection (3 incidents)
- 1 incident is under investigation
- RPD officer was unable to determine fault based on conflicting statements (Skateboarder at signalized intersection)



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POST PROJECT BICYCLE INCIDENTS

8 Total Incidents

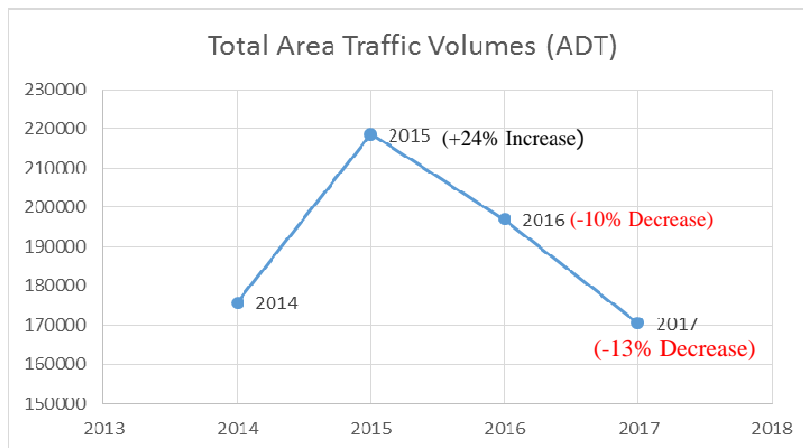
- Motorists failed to yield the right of way at signalized intersections (2 incidents)
- Bicyclist riding on wrong side of road
- Bicyclist veered onto oncoming traffic attempting to cross the road (2 incidents)
- SB right-turn motorist vs SB thru bicyclist – RPD could not determine fault
- Bicyclist failed to yield right-of-way (2 incidents)



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AREA TRAFFIC VOLUME DATA



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2017 BROCKTON AVENUE PEDESTRIAN AND BICYCLIST ACTIVITY

| Date | Day of the Week | @ Bandini Avenue | | @ Terracina Drive | |
|----------|-----------------|------------------|-----------------|-------------------|-----------------|
| | | # of Pedestrians | # of Bicyclists | # of Pedestrians | # of Bicyclists |
| 10/26/17 | Thursday | 142 | 75 | 207 | 21 |
| 10/28/17 | Saturday | 106 | 66 | 38 | 38 |
| 10/29/17 | Sunday | 113 | 75 | 34 | 34 |



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36-MONTH AFTER-PROJECT FINDINGS

- Brockton Restriping Project has resulted in:
 1. 24% reduction in total accidents – broadside and head-on type accidents were reduced at a higher rate than anticipated
 2. Increases in pedestrian / cyclists involved incidents are not attributed to project improvements
 3. Normalized traffic volumes - a 13% reduction in 2017 vs. 2016 figures and overall 3% drop compared to pre-project 2014 totals
 4. Continued moderate use of Class II bike lanes and sidewalk facilities



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36-MONTH AFTER-PROJECT FINDINGS

- Brockton Restriping Project has resulted in:
 5. Signal synchronization and Protected/Permissive Phasing optimized progression along Brockton and deterred traffic diversion
 6. 85th Speed was minimally impacted as it decreased from 41 mph to 38 mph
 7. On-street parking fluctuates near the Terracina Dr blocks. Reduces impacts to residential streets and is similar to the pre-project configuration.
 8. Redwood Dr continues to experience elevated traffic volumes



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ADDITIONAL IMPROVEMENTS TO BE CONSIDERED

1. Removal of a southbound through lane to install a Two-way Left-turn Lane between Tequesquite Ave & 14th St
2. Work with Redwood Dr residents to assess potential traffic calming measures (speed feedback signs, timed turn restrictions, pilot project to deploy traffic circles)



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RECOMMENDATIONS

1. Retain existing striping / configuration on Brockton Ave; and
2. Receive and file the post construction traffic study data.



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