



# TRAFFIC ACTION PLAN

Sunnybrae Neighborhood

CITY OF SAN MATEO

Draft December 2016

# Table of Contents

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Introduction .....	1
The Traffic Forum Process .....	4
Neighborhood Traffic Issues .....	7
Neighborhood Recommendations and Implementation .....	9

# Introduction

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The Sunnybrae Neighborhood Traffic Action Plan is a cooperative effort between City staff and residents to develop a list of projects to improve safety, mobility and livability of the neighborhood. The process to develop the plan was designed to give residents an opportunity to actively work with the City to identify key transportation issues, evaluate potential solutions and develop a list of prioritized recommendations which could be used to guide both short and long term improvements to the neighborhood.

Recognizing the impact traffic can have on the livability of neighborhoods, San Mateo Public Works initiated a planning effort to work with each of the City's 28 neighborhoods to develop plans that would address neighborhood transportation issues specific to each community. The recommendations in these plans will be used to guide future pedestrian, bicycle and traffic improvements and help identify potential mitigation measures for larger projects being planned in San Mateo.

Sunnybrae was the second neighborhood selected to work with the City to develop a Neighborhood Traffic Action Plan based on their response to City staff. The neighborhood is roughly bounded on the north by 9<sup>th</sup> Avenue, Highway 101 to the east, 16<sup>th</sup> Avenue and Haddon Drive to the south; and South Railroad Avenue on the west. Within the neighborhood are mainly single family homes and Sunnybrae Elementary School. Commercial uses are along portions of South Claremont Avenue and South Railroad Avenue. The study area is shown in Figure 1.

The planning process commenced on January 14, 2016 with the Traffic Forum meeting. The City developed a prioritization table based on comments received at the Traffic Forum. The City invited the Sunnybrae Traffic Forum Steering Committee (TFSC), comprised of volunteer residents from the neighborhood, to meet on May 16, 2016 where they received an information packet containing various neighborhood studies and statistics. The steering committee was asked to use the prioritization table as well as the information provided by the City to rank their top ten concerns. Each of these concerns can be categorized into these key issues:

- Speeding
- Cut-Through Traffic/Congestion
- School Issues
- Roadway Conduct

The following are overall strategies that will be used to address the key issues in the Baywood Neighborhood and are further discussed in the *City Staff Evaluation Process* located at [www.cityofsanmateo.org/traffic](http://www.cityofsanmateo.org/traffic):

- Speeding
  - Verification of speeding issue through the use of speed surveys
  - Portable radar board to inform drivers of their speeds
  - Strategic police enforcement where the violation threshold *is* met
  - Targeted enforcement where the violation threshold *is not* met
  - Installation of appropriate traffic calming measures per the Neighborhood Traffic Management Program (NTMP) guidelines if education and enforcement are not effective

- Cut-Through Traffic/Congestion
  - Cut-through traffic study to be completed on local/residential street to determine the total percentage of cut-through volume
  - NTMP guidelines will determine if these thresholds are met and if mitigation is needed
- School issues
  - City staff, including Public Works and Police Departments, will meet with schools to discuss and develop strategies regarding traffic circulation issues.
- Roadway conduct
  - Verify condition of existing traffic markings and traffic control devices and propose new markings and devices as needed
  - Volunteer Traffic Safety Corps to report observed violations
  - Use of variable message boards for driver education
  - Strategic police enforcement when recommended

The Traffic Forum Task Force, consisting of staff from the offices of the City Manager, Police, Fire, Public Works, and Planning, used the TFSC's top ten list to develop and prioritize recommendations to create the Baywood Neighborhood Traffic Action Plan (TAP). The draft TAP will then be posted online for review prior to the Public Works Commission meeting. The Public Works Commission will review and provide comments on the TAP. City staff will incorporate the Public Works Commission's comments to finalize the document and post it on the City's Traffic Forum website.

The City has already completed some improvements in the neighborhood based on feedback received from the Traffic Forum, as shown in Table 1 in the next section. These improvements will be implemented on an on-going basis. The Sunnybrae Neighborhood Traffic Action Plan is considered an active working plan, and the City recognizes that new issues and concerns will arise in the future. As a result, it is recommended that the plan be revisited periodically to update and revise recommendations as needed.

The following chapters of the plan include *The Traffic Forum Process* which describes the process and timeline for developing the plan, *Neighborhood Traffic Issues* which identifies the top ten traffic issues by the Steering Committee, and *Neighborhood Recommendations and Implementation* which describes the specific recommendations by location and summarizes potential opportunities for funding.



Figure 1 - Sunnybrae Neighborhood Planning Boundary

## The Traffic Forum Process

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The planning effort began with a series of ten Citywide traffic forums conducted January through May 2016. The purpose of the forums was to receive neighborhood feedback on transportation issues. City staff gathered traffic concerns from each neighborhood and compiled the information into meeting notes. From the meeting notes, prioritization tables were developed for individual neighborhoods. Each issue was given a unique identification number and entered into the table, which would enable staff to track each response and future follow-up actions. Solutions that required no additional community coordination were implemented, such as trimming vegetation, sign installation, or speed enforcement. For Sunnybrae, there were 13 Police-related concerns, 31 Public Works-related, and 4 Planning-related concerns. Of the 48 traffic concerns, nine are currently being addressed by City staff and are shown on Table 1.

The City asked for volunteers from each neighborhood to serve on a Traffic Forum Steering Committee (TFSC) to work with City staff to identify their top ten traffic issues. The Police and Public Works Departments met with the Sunnybrae TFSC on May 16, 2016 and were provided information packets which included their neighborhood's meeting notes, Peak Democracy feedback, collision data, relevant traffic studies, and prioritization tables created by the City. They were asked to use this data to create a top ten list of traffic concerns in their neighborhood.

The Sunnybrae TFSC was comprised of three residents who participated in the development of the top ten list.

Traffic Forum Steering Committee Members		
Rami Khoury	Karen Toda	Tim Toda

On May 24, 2016, the Sunnybrae TFSC submitted their traffic concerns to the City for review. The TFSC only provided eight items for the City to consider. Using this list, City staff created the Traffic Action Plan (TAP). The draft TAP will be posted online prior to the Public Works Commission meeting. The Public Works Commission will review and provide comments on the TAP. City staff will revise the TAP to include the Public Works Commission's comments and finalize the document. The final TAP will then be posted online.

The flowchart in Figure 2 depicts the development of the traffic action plan and proposed schedule.

Table 1 – Resident Requests In-Progress

Site/Location	Interest/Reasons	Actions	Status
<b>Sunnybrae Blvd/ Carlisle Drive</b>	Safety. Intersection is uncontrolled. Visibility is very poor and speeds on Sunnybrae are too fast. Suggest speed bumps on Sunnybrae or stop sign at Birch/Sunnybrae to slow Sunnybrae traffic	Traffic counts needed to analyze intersection for two- or three-way stop signs.	Traffic counts will be conducted in early 2017.
<b>Sunnybrae Blvd/ S. Idaho Street</b>	Blind Y, too fast, accident concerns, not clear who has right-of-way	The intersection will be evaluated for traffic control using either stop or yield signs.	Traffic counts will be conducted in early 2017.
<b>Sunnybrae Blvd/ S. Idaho Street</b>	Add crosswalk across Sunnybrae on east side of intersection due to safety	The intersection will be evaluated for traffic control using either stop or yield signs.	Traffic counts will be conducted in early 2017.
<b>Sunnybrae Blvd/ Guildford Avenue</b>	Safety, visibility	Engineering will evaluate the intersection for red curb to improve the visibility.	Red curb recommended north of Guildford on east side of Sunnybrae.
<b>S. Grant Avenue/ 10th Avenue</b>	Visibility, trees, shrubs, safety issue, parked cars	A stop sign warrant analysis was completed for this location. It was found that an all-way stop is not recommended due to the low volume of the minor street (10 <sup>th</sup> Avenue). However, red curb will be installed on all four corners to improve visibility for drivers approaching S. Grant Avenue from either side of 10 <sup>th</sup> Avenue.	Red curb recommended on all four corners of intersection to improve visibility for drivers on 10 <sup>th</sup> Avenue approaching S. Grant Avenue.
<b>S. Grant Avenue (Folkstone Avenue to Concar Drive)</b>	Congested time to get from one end to other, pedestrians running between Trader Joes and office park, need crosswalks or signs pointing to crosswalk	Caltrain's Norfolk Area shuttle has a stop at S. Grant Avenue and Betty Lane. City staff recommends installing a mid-block crosswalk with new pedestrian warning signs on the north leg of this intersection. A new pedestrian ramp and additional red curb adjacent to the crosswalk will be required, which will help improve pedestrian visibility. Capital costs for these improvements are estimated to be \$20,000.	Funding source required for recommended improvements.
<b>S. Grant Avenue/ Concar Drive</b>	Unnecessary protected left turn SB on S. Grant to Concar. Consider revising stop light for left turn for SB S. Grant with protected left turn onto EB Concar. Cars cannot turn right on red. Suggested configuration is combined left-thru lane, and a dedicated right-turn lane.	Intersection turning movement counts are required to determine the intersection volumes. Southbound lanes will be appropriately striped based on the count data. If the southbound movement is re-striped, it would require signal improvements. Capital costs for these improvements could range between \$10,000 and \$50,000.	Traffic counts will be conducted in early 2017.
<b>S. Amphlett Blvd/ S. Idaho Street</b>	Install red zone on NW corner to allow visibility	S. Amphlett Blvd. and Idaho Street do not intersect. The City is assuming that this request was actually for the intersection of Sunnybrae Blvd. and S. Amphlett Blvd.	Red curb installed in September 2016.
<b>S. Humboldt Street/ E. 4th Avenue</b>	Right turn onto 4th, striping issue, confusion/safety, turn from NB S. Humboldt right to 4th should have more dots to define lanes. 2 lanes turn right and people drift between 3 lanes on 4th towards 101 East. Suggest add lane dots or other ways to guide cars.	Existing sign visibility and additional sign verbiage being reviewed to clarify movements to drivers. Additional or replacement roadway pavement markers or lane striping also being reviewed.	Existing signage to be relocated back from the intersection to enhance signage visibility.

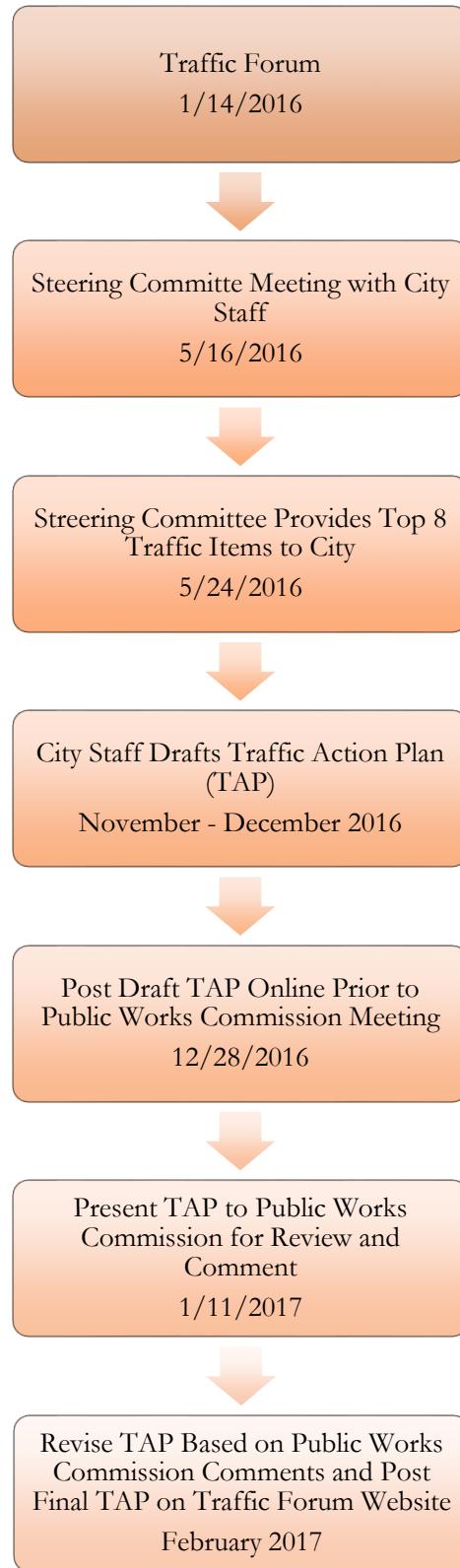


Figure 2 - Traffic Action Plan Development Flowchart

# Neighborhood Traffic Issues

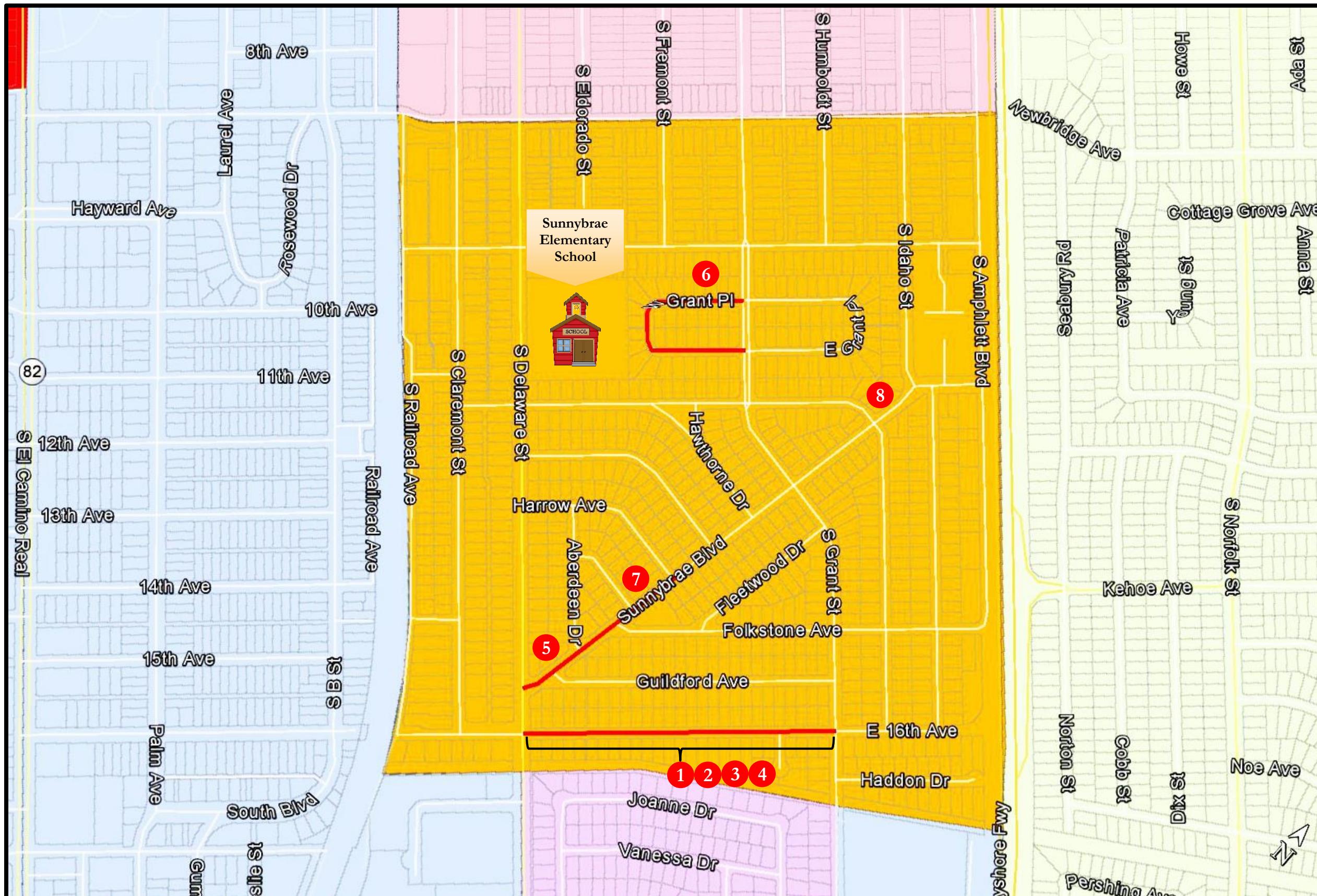
The Sunnybrae Traffic Forum Steering Committee identified their top eight traffic concerns based on information provided to them at the City meeting on May 16, 2016.

The following section presents the issues, listed by location, first in a table format, as well as presented on a map for illustration.

Table 2 - Sunnybrae Top Traffic Concerns

Neighborhood Priority	Location	Interests and Reasons
1	E. 16th Avenue (S. Grant Street to S. Delaware Street)	Speeding
2	E. 16th Avenue/ S. Delaware Street	Roadway Conduct (Proposed traffic signal at this location is not desired, reevaluate options)
3	E. 16th Avenue (S. Delaware Street to Carlisle Drive)	Safety (Improve street lighting by replacing existing with LEDs)
4	E. 16th Avenue (S. Grant Street to S. Delaware Street)	Cut-Through Traffic
5	Sunnybrae Boulevard near S. Delaware Street	Speeding (Cars speed on Sunnybrae to S. Delaware)
6	W. Grant Place (Sunnybrae Elementary School)	School Issues (W. Grant is being utilized as a school drop-off zone. The existing street width cannot accommodate two-way traffic at existing volumes.)
7	Sunnybrae Boulevard/ Folkstone Avenue	Speeding and Roadway Conduct (Speeding at Sunnybrae at Folkstone, non-compliance with existing stop sign)
8	Sunnybrae Boulevard/ Birch Avenue	Speeding (Add stop signs on Sunnybrae to reduce speeding on Sunnybrae)

Figure 3 - Sunnybrae Traffic Forum Steering Committee Top Eight Traffic Concerns

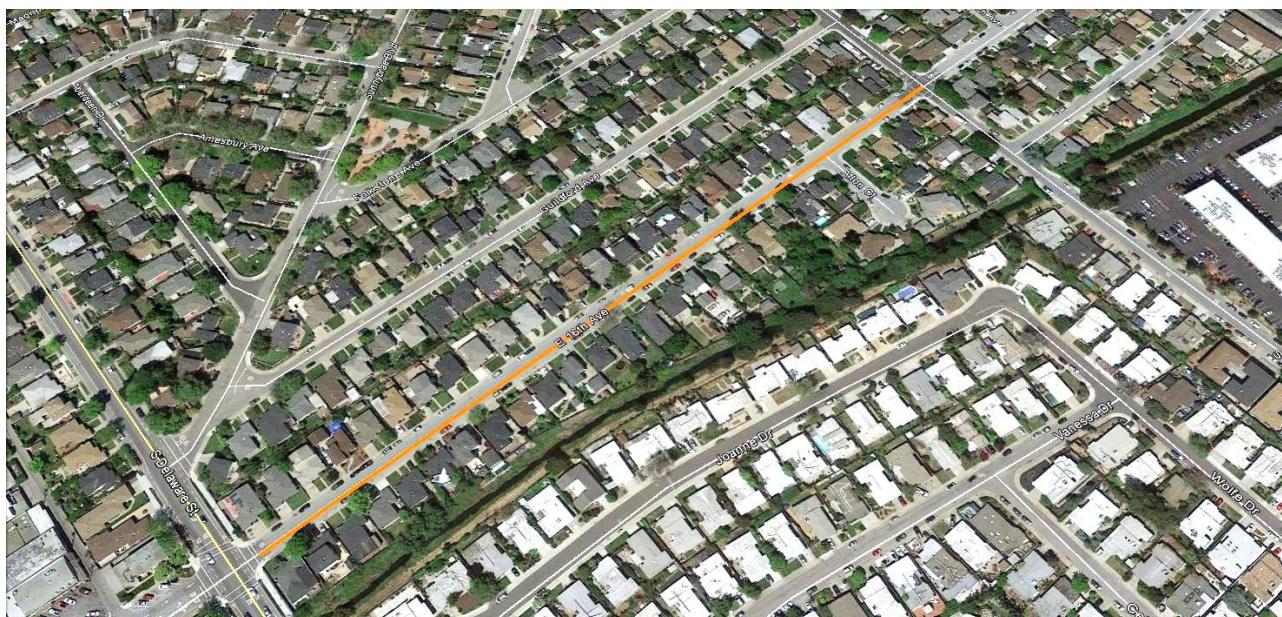


# Neighborhood Recommendations and Implementation

The City will utilize the process outlined in the “City Staff Evaluation Process” located at [www.sanmateo.org/traffic](http://www.sanmateo.org/traffic) to evaluate the neighborhood’s top ten concerns. The following section lists the top ten concerns followed by City recommendations for each item. Table 3 shows a summary of the concerns and recommendations, as well as cost estimates for the recommended neighborhood improvements.

## 1 – E. 16<sup>th</sup> Avenue from S. Grant Street to S. Delaware Street

Issue: Speeding



### Discussion and Analysis:

E. 16<sup>th</sup> Avenue between S. Grant Street and S. Delaware St. is an unstriped two-way roadway and is classified as a collector roadway according to the San Mateo General Plan Street Classification. The segment length is 1,360 feet (1/4 mile) with a posted speed limit of 25 mph. There are all-way stop controlled intersections located at each end of the segment. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with Sunnybrae Elementary School located at the north end of the neighborhood. Sidewalks are on either side of the roadway and pedestrian traffic is moderate as this segment provides a connection between an adjacent arterial and collector roadway. E. 16<sup>th</sup> Avenue carries approximately 1,000 vehicles per day along this segment.

Historically, speeding complaints have been received from the neighborhood and addressed with increased police enforcement. The following table summarizes current speed survey data, as well as the most recent historical surveys.

Date	<u>E. 16<sup>th</sup> Avenue Segment</u>	Posted Speed Limit (mph)	85 <sup>th</sup> Percentile Speed Limit (mph)
October 2016	S. Grant St. to S. Delaware St.	25	29.7
August 2014	S. Grant St. to S. Delaware St.	25	30.6
October 2012	S. Grant St. to S. Delaware St.	25	24.5

Three speed surveys were completed along E. 16<sup>th</sup> Avenue between October 2012 and October 2016. The highest 85<sup>th</sup> percentile speed was 5.6 mph above the posted 25 mph as shown in the 2014 speed survey. The most recent speed survey was reviewed and there were no time periods where the 85<sup>th</sup> percentile was greater than 32 mph.

Recommendations:

- Place the portable radar board in both directions
- Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.

## 2 – E. 16<sup>th</sup> Avenue at S. Delaware Street

Issue: Roadway Conduct (Proposed traffic signal at this location is not desired, reevaluate options)

Discussion and Analysis:

E. 16<sup>th</sup> Avenue and S. Delaware Street is an all-way stop controlled intersection. E. 16<sup>th</sup> Ave is classified as a collector roadway and S. Delaware Street is classified as an arterial roadway according to the San Mateo General Plan Street Classification. The adjacent E. 16<sup>th</sup> Avenue and Sunnybrae Boulevard intersection is a “Tee” intersection with stop controls on the Sunnybrae Boulevard leg. Sunnybrae Boulevard is classified as a collector roadway. The posted speed limit is 25 mph for both roadways.



In February 2016, Hexagon Transportation Consultants, Inc. prepared a signal warrant analysis at the S. Delaware Street/Sunnybrae Boulevard and S. Delaware Street/E 16<sup>th</sup> Ave intersections. The S. Delaware Street/E. 16<sup>th</sup> Avenue intersection met Condition A of *Warrant 1, Eight-Hour Vehicle Volume* as defined in the California Manual on Uniform Traffic Control Devices (CA MUTCD) found here: [http://www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-Chap4C\\_rev1.pdf#page=3](http://www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-Chap4C_rev1.pdf#page=3). As discussed in the Section 4C.02 of the CA MUTCD, “The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.” Additionally, due to the close proximity of the S. Delaware Street/Sunnybrae Boulevard intersection to S. Delaware Street/E. 16<sup>th</sup> Avenue, both intersections will be signalized and operate together.

Recommendations:

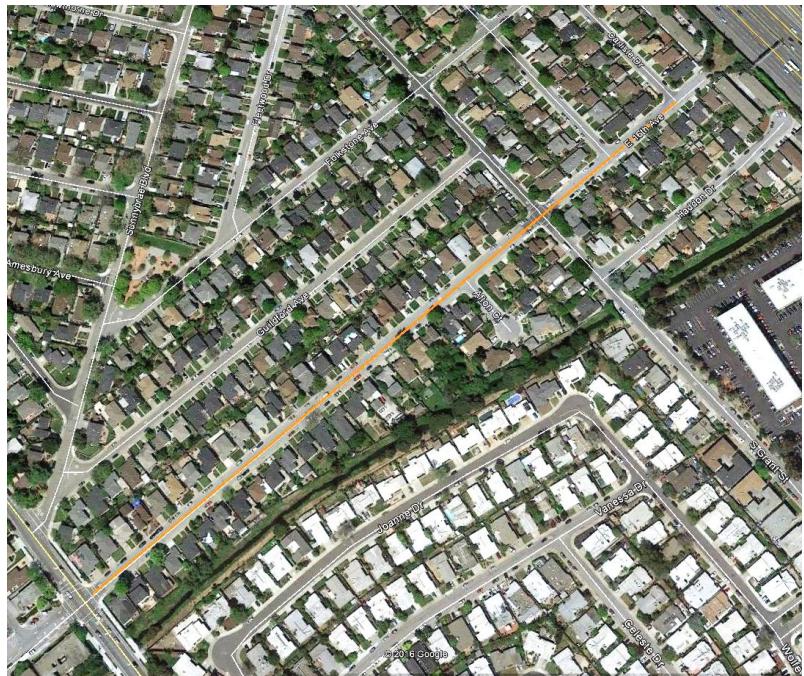
- The City will proceed with the design and construction of traffic signals at the S. Delaware St at Sunnybrae Blvd. and S. Delaware St. at E. 16<sup>th</sup> Ave. intersections.
- Following installation of the traffic signal, the City will reevaluate travel speeds on E. 16<sup>th</sup> Avenue and Sunnybrae Boulevard to determine if traffic calming improvements are needed.

### 3 – E. 16<sup>th</sup> Avenue from S. Delaware Street to Carlisle Drive

Issue: Safety (Improve street lighting by replacing existing with LEDs)

Discussion and Analysis:

E. 16<sup>th</sup> Avenue between S. Delaware St. and Carlisle Drive is an unstriped two-way roadway and is classified as a collector roadway according to the San Mateo General Plan Street Classification. The segment length is approximately 2,000 feet with a posted speed limit of 25 mph. There are all-way stop controlled intersections located at S. Delaware St/E. 16<sup>th</sup> Avenue and E. 16<sup>th</sup> Avenue/S. Grant St. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with Sunnybrae Elementary School located at the north end of the neighborhood. Sidewalks are on either side of the roadway and pedestrian traffic is moderate as this segment provides a connection between an adjacent arterial and collector roadway. E. 16<sup>th</sup> Avenue carries approximately 1,000 vehicles per day along this segment.



Recommendations:

- The existing street lighting on E. 16<sup>th</sup> Avenue from S. Delaware Street to Carlisle Drive were upgraded to LED fixtures in July 2016. No further action required.

#### 4 – E. 16<sup>th</sup> Avenue between S. Grant Street to S. Delaware Street

Issue: Cut-Through Traffic



#### Discussion and Analysis:

E. 16<sup>th</sup> Avenue between S. Grant Street and S. Delaware St. is an unstriped two-way roadway and is classified as a collector roadway according to the San Mateo General Plan Street Classification and the posted speed limit of 25 mph. There are all-way stop-controlled intersections located at each end of the segment. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with Sunnybrae Elementary School located at the north end of the neighborhood. Sidewalks are on either side of the roadway and pedestrian traffic is moderate as this segment provides a connection between an adjacent arterial and collector roadway. E. 16<sup>th</sup> Avenue carries around 1,000 vehicles per day along this segment.

#### Recommendations:

- City staff to conduct origin-destination study to determine percentage of cut-through traffic. Because E. 16<sup>th</sup> Avenue is classified as a collector street in the Circulation Element of the General Plan, it does not qualify for *Step 2* devices as defined by the current NTMP. The City is in the process of reviewing and updating the NTMP to potentially allow *Step 2* devices on residential collector streets.

## 5 – Sunnybrae Boulevard near S. Delaware Street

Issue: Speeding (Cars speed on Sunnybrae to S. Delaware)

Discussion and Analysis:

Sunnybrae Boulevard in the vicinity of South Delaware Street is classified as a collector roadway according to the San Mateo General Plan Street Classification. Sunnybrae Boulevard is mainly an unstriped two-way roadway with parking and sidewalks on both sides. The posted speed limit is 25 mph. In the westbound direction of Sunnybrae Boulevard, there are stop signs at South Grant Street, Amesbury Avenue, and South Delaware Street. In the eastbound direction, there are stop signs at Folkstone Avenue and South Grant Street.

Historically, speeding complaints have been received from the neighborhood and addressed with increased police enforcement. The following table summarizes current speed survey data, as well as historical surveys completed within the last five years.

Date	<u>Sunnybrae Boulevard Segment</u>	Posted Speed Limit (mph)	85 <sup>th</sup> Percentile Speed Limit (mph)
August 2012	S. Grant Street to Birch Avenue	25	26.2
August 2012	Idaho Street to Birch Avenue	25	23.6
August 2012	Harrow Avenue to Magnolia Drive	25	29.0
October 2016	S. Grant Street to Birch Avenue	25	26.6
October 2016	Harrow Avenue to Magnolia Drive	25	28.5

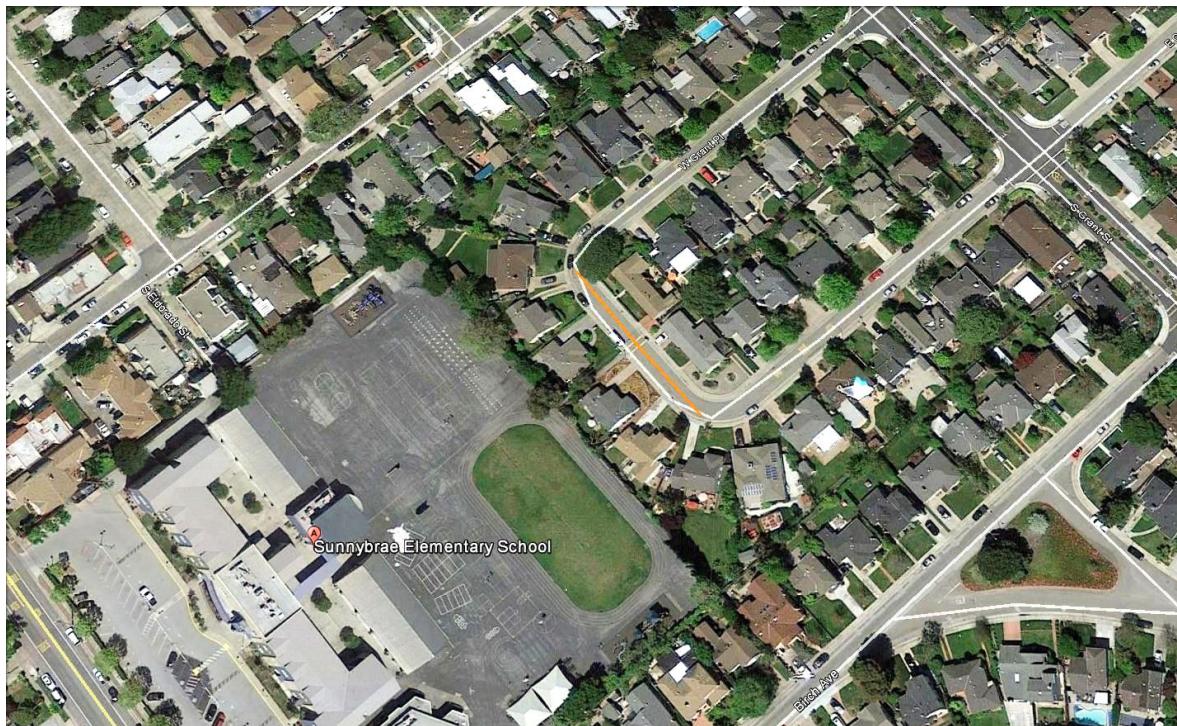
Five speed surveys were completed along Sunnybrae Boulevard between August 2012 and October 2016. The segment with the highest speed is between Harrow Avenue and Magnolia Drive and are consistent for both speed studies conducted at that location. However, the 85<sup>th</sup> percentile speeds do not exceed 30 mph. The most recent speed survey was reviewed and there were no time periods where the 85<sup>th</sup> percentile was greater than 32 mph.

Recommendations:

- Place the portable radar board in both directions
- Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.

## 6 – W. Grant Place near Sunnybrae Elementary School

Issue: School Issues (W. Grant is being utilized as a school drop-off zone. The existing street width cannot accommodate two-way traffic at existing volumes.)



### Discussion and Analysis:

W. Grant Place is an unstriped two-way local roadway according to the San Mateo General Plan Street Classification. It has a travel way width of 24 feet. There is parking and sidewalks on both sides of the roadway. Access to the adjacent Sunnybrae Elementary School also exists from this roadway. The roadway is lined with single family homes and driveways.

The Safe Routes to School project for Sunnybrae Elementary will construct a 2' bulb-out on the northeast side of W. Grant Place across from the school entrance. Additionally, pedestrian ramps will be constructed on both sides the roadway and a high-visibility crosswalk will be installed.

### Recommendations:

- Public Works will work with the Fire Department, other City departments, and the adjacent property owners to propose a one-way street conversion for both West and East Grant Place.
- City staff will work with Sunnybrae Elementary School to further improve the drop-off and pick-up circulation plan for the school.

## 7 – Sunnybrae Boulevard at Folkstone Avenue

Issue: Speeding and Roadway Conduct (Speeding at Sunnybrae and Folkstone, non-compliance with existing stop sign)

Discussion and Analysis:

Sunnybrae Boulevard in the vicinity of Folkstone Avenue is classified as a collector roadway according to the San Mateo General Plan Street Classification. Sunnybrae Boulevard is mainly an unstriped two-way roadway with parking and sidewalks on both sides. The posted speed limit is 25 mph. In the westbound direction of Sunnybrae Boulevard, there are stop signs at South Grant Street, Amesbury Avenue, and South Delaware Street. In the eastbound direction, there are stop signs at Folkstone Avenue and South Grant Street. Folkstone Avenue is an off-set intersection with Amesbury Avenue at Sunnybrae Boulevard. The neighborhood consists of single family homes with a small neighborhood park at the corner of Sunnybrae Boulevard and Folkstone Avenue.



Recommendations:

- Staff to receive list from TFSC on top stop sign violation locations PD to review. PD will use the provided information and their Volunteer Traffic Safety Corps to determine where targeted police enforcement is required.
- Place the portable radar board in both directions
- Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.

## 8 – Sunnybrae Boulevard at Birch Avenue

Issue: Speeding (Add stop signs on Sunnybrae to reduce speeding)

Discussion and Analysis:

Sunnybrae Boulevard in the vicinity of Birch Avenue is classified as a collector roadway according to the San Mateo General Plan Street Classification. Sunnybrae Boulevard is mainly an unstriped two-way roadway with parking and sidewalks on both sides. The posted speed limit is 25 mph. In the westbound direction of Sunnybrae Boulevard, there are stop signs at South Grant Street, Amesbury Avenue, and South Delaware Street. In the eastbound direction, there are stop signs at Folkstone Avenue and South Grant Street. The neighborhood consists of single family homes with a higher density planned unit development at the east end of Sunnybrae Boulevard.



Per City Council-approved *Stop Sign Policy and Procedures* document (approved February 2009) and Section 2B.04 *Right-of-Way at Intersections* in the California Manual on Uniform Traffic Control Devices found here: <http://www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-Chap2B.pdf#page=3>, “YIELD or STOP signs should not be used for speed control.”

Recommendations:

- Stop signs are not recommended for speed control on Sunnybrae Boulevard
- Place the portable radar board in both directions
- Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.

Table 3 - Top Eight List with Funding Sources

Neighborhood Priority	Location	Key Issues (Interests and Reasons)	Recommendations	Potential Funding Source	Estimated Cost
1	E. 16th Avenue (S. Grant Street to S. Delaware Street)	Speeding	<ul style="list-style-type: none"> <li>➤ Place the portable radar board in both directions</li> <li>➤ Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.</li> </ul>	Citywide Traffic Calming (466600); PD operating budget	\$500 staff (one-time); \$2,000/yr on-going
2	E. 16th Avenue/ S. Delaware Street	Roadway Conduct (Proposed traffic signal at this location is not desired, reevaluate options)	<ul style="list-style-type: none"> <li>➤ The City will proceed with the design and construction of traffic signals at the S. Delaware St at Sunnybrae Blvd. and S. Delaware St. at E. 16th Ave. intersections.</li> <li>➤ Following installation of the traffic signal, the City will reevaluate travel speeds on E. 16th Avenue and Sunnybrae Boulevard to determine if traffic calming improvements are needed.</li> </ul>	Citywide Traffic Signals (466004); Citywide Traffic Calming (466600)	\$400,000- \$600,000 capital; \$500 staff (one-time)
3	E. 16th Avenue (S. Delaware Street to Carlisle Drive)	Safety (Improve street lighting by replacing existing with LEDs)	<ul style="list-style-type: none"> <li>➤ The existing street lighting on E. 16<sup>th</sup> Avenue from S. Delaware Street to Carlisle Drive were upgraded to LED fixtures in July 2016. No further action required.</li> </ul>	-	\$0
4	E. 16th Avenue (S. Grant Street to S. Delaware Street)	Cut-Through Traffic	<ul style="list-style-type: none"> <li>➤ City staff to conduct origin-destination study to determine percentage of cut-through traffic. Because E. 16th Avenue is classified as a collector street in the Circulation Element of the General Plan, it does not qualify for Step 2 devices as defined by the current NTMP. The City is in the process of reviewing and updating the NTMP to potentially allow Step 2 devices on residential collector streets.</li> </ul>	Citywide Traffic Calming (466600)	\$5,000 study (one-time)
5	Sunnybrae Boulevard near S. Delaware Street	Speeding (Cars speed on Sunnybrae to S. Delaware)	<ul style="list-style-type: none"> <li>➤ Per the most recent speed survey, the average 85th percentile speeds do not exceed 30 mph. Therefore, the roadway segment does not qualify for Step 1 or Step 2 devices.</li> <li>➤ The highest speeds are occurring between 11 am-12 pm and 3-4 pm with 85th percentile speeds at approximately 31 mph. Targeted police enforcement will be conducted during these times.</li> <li>➤ Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.</li> </ul>	Citywide Traffic Calming (466600); PD operating budget	\$500 staff (one-time); \$2,000/yr on-going
6	W. Grant Place (Sunnybrae Elementary School)	School Issues (W. Grant is being utilized as a school drop-off zone. The existing street width cannot accommodate two-way traffic at existing volumes.)	<ul style="list-style-type: none"> <li>➤ Public Works will work with the Fire Department, other City departments, and the adjacent property owners to propose a one-way street conversion for both West and East Grant Place.</li> <li>➤ City staff will work with Sunnybrae Elementary School to further improve the drop-off and pick-up circulation plan for the school.</li> </ul>	Citywide Traffic Calming (466600)	\$5,000 capital; \$2,500 staff (one-time)
7	Sunnybrae Boulevard/ Folkstone Avenue	Speeding and Roadway Conduct (Speeding at Sunnybrae at Folkstone, non-compliance with existing stop sign)	<ul style="list-style-type: none"> <li>➤ Staff to receive list from TFSC on top stop sign violation locations PD to review. PD will use the provided information and their Volunteer Traffic Safety Corps to determine where targeted police enforcement is required.</li> <li>➤ Place the portable radar board in both directions</li> <li>➤ Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.</li> </ul>	Citywide Traffic Calming (466600); PD operating budget	\$500 staff (one-time); \$2,000/yr on-going
8	Sunnybrae Boulevard/ Birch Avenue	Speeding (Add stop signs on Sunnybrae to reduce speeding on Sunnybrae)	<ul style="list-style-type: none"> <li>➤ Stop signs are not recommended for speed control on Sunnybrae Boulevard</li> <li>➤ Place the portable radar board in both directions</li> <li>➤ Conduct speed survey, volume counts, and review collision history in one year. Evaluate progress.</li> </ul>	Citywide Traffic Calming (466600); PD operating budget	\$500 staff (one-time); \$2,000/yr on-going

### Funding Summary:

- \$10,000 - Staff and Study Costs: Includes one-time cost for analysis and evaluation
- \$405,000 - \$605,000 - Capital Costs: Includes construction costs such as traffic signal improvements and sign installations
- \$8,000 – Annual Costs: Includes on-going costs for targeted and strategic police enforcement