



TRAFFIC ACTION PLAN

Central Neighborhood

CITY OF SAN MATEO

Draft January 2017

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Introduction

The Central 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.

Central was the sixth neighborhood selected to work with the City to develop a Neighborhood Traffic Action Plan based on their prompt response to City staff. The neighborhood is roughly bounded on the north by 4th Avenue, Highway 101 to the east, 10th Avenue to the south; and South Delaware Street on the west. Within the neighborhood are mainly single family homes and commercial business along South Amphlett Boulevard which fronts Highway 101. Sunnybrae Elementary School is just south of the neighborhood and has impacts on circulation within its boundaries. In addition, the Downtown District and Central Park are just to the northeast of the neighborhood. The roadways are in a north-south and east-west grid pattern and are classified as local roadways except for South Delaware Street and South Humboldt Street which are classified as arterials and 9th Avenue and South Grant Street which are classified as collector roadways. The speed limit within the neighborhood is 25 mph except for South Amphlett Boulevard which is posted at 35 mph. Generally, major intersections are controlled by traffic signals or all-way stop signs. 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 Central Traffic Forum Steering Committee (TFSC), comprised of volunteer residents from the neighborhood, to meet on May 11, 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
- Roadway Conduct
- Unique Neighborhood Concerns

The following are overall strategies that will be used to address the key issues in the Central Neighborhood:

- 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
- 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
- Unique Neighborhood Concerns
 - Verification of unique neighborhood concern
 - Periodic police enforcement
 - Installation of appropriate traffic control devices if education and enforcement are not effective

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 Central 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, and are shown in Table 1. These improvements will be implemented on an ongoing basis. The Central 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, *Neighborhood Recommendations and Implementation* which describes the specific recommendations by location and summarizes potential opportunities for funding.

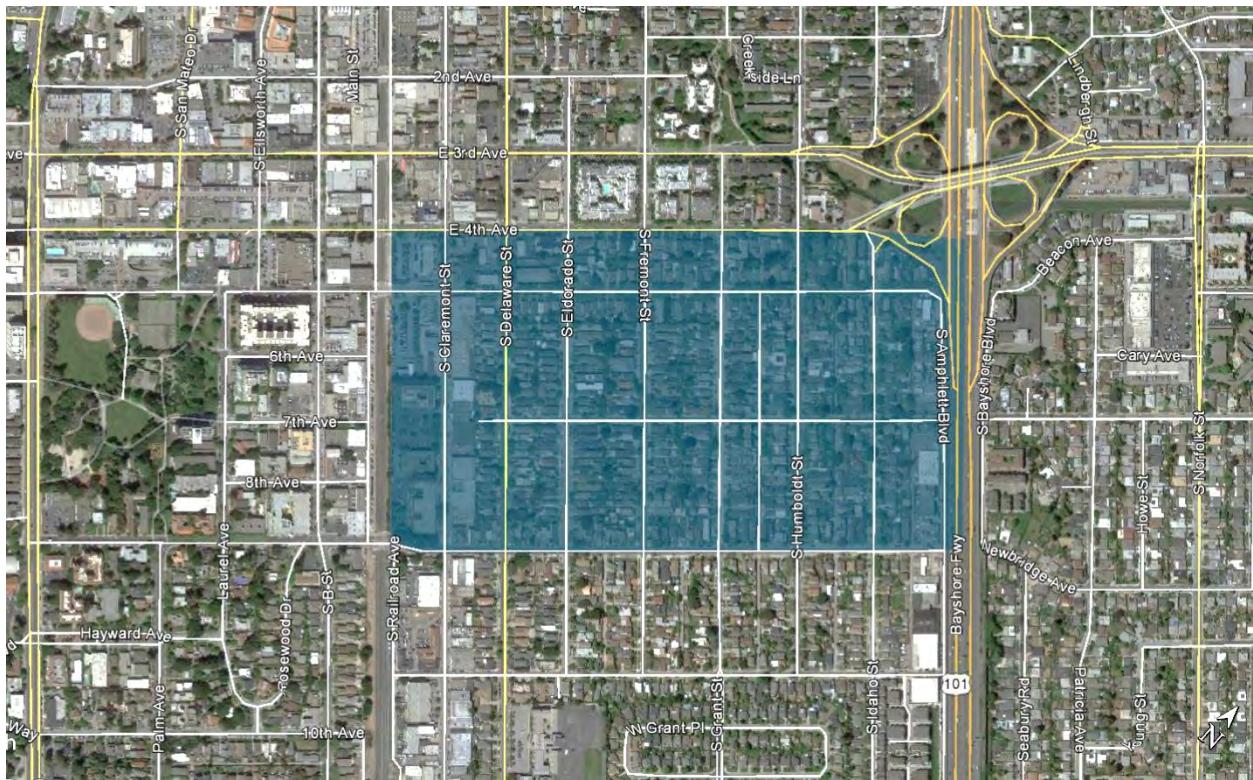


Figure 1 – Central Neighborhood Planning Boundary

The Traffic Forum Process

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 Central, there were 10 Police-related concerns and 32 Public Works concerns. Of the 32 traffic concerns, four 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 Central TFSC on May 11, 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 Central TFSC was comprised of four residents who participated in the development of the top ten list.

Traffic Forum Steering Committee Members			
Laurie Watanuki	Michael Weinhauer	Stoddard Lambertson	PK Kilty

On July 13, 2016, the Central TFSC submitted their top ten traffic concerns to the City for review. 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

Location	Interest/Reasons	Improvements	Status
S. Grant Ave	Speeding (S. Grant is a thoroughfare. People are using S. Grant to get from the YMCA/Trader Joes to 4th Ave. and 101.)	<ul style="list-style-type: none"> Place the portable radar board in both directions Conduct targeted police enforcement during times when the 85th percentile speed is greater than 32 mph. Conduct speed survey, volume counts, and review collisions in one year. Evaluate progress. 	Week of 2/29/16 - Placed portable radar feedback board on southbound S. Grant between 9 th and 10 th , and northbound S. Grant between 9 th and 10 th . The southbound 85 th percentile speed is 26 mph. The northbound 85 th percentile speed is 25 mph. (Posted 25 mph)
Central Area	Unique Neighborhood Concern (Street condition is terrible and slows traffic way down. Specific locations: 10th Ave. from S. Claremont to S. Amphlett, S. Idaho between 5th and 7 th .)	Engineering staff continues to inspect the pavement conditions in this area and recommend annual projects in the CIP.	<ul style="list-style-type: none"> The following streets are estimated to finish construction by Winter 2017 (yellow): Eldorado St (E. 4th to E. 5th) The following streets are estimated to finish construction by Summer 2018 (green): E. 4th Ave (S. Eldorado to S. Idaho, Idaho St (E. 4th to 7th), 10th Ave (S. Grant to S. Claremont and S. Idaho to S. Amphlett)
S. Grant Ave/E. 4 th Ave Intersection	Roadway Conduct (Confusion about who has right of way at intersection)	Install sign indicating cross traffic does not stop on northbound S. Grant at 4th. Engineering put in SR#54239 for sign to be installed.	Sign was installed by City crews in March 2016.
S. Idaho St (between E. 4th and 9th)	Speeding (Speeding on S. Idaho due to access to 101 SB. There is no crosswalk at 9th/Idaho. Drivers don't stop at stop signs at Idaho/5th. Near Fire Station, pedestrian signs are not clearly visible.)	<ul style="list-style-type: none"> Engineering submitted SR#54925 to install speed signs/legends on Idaho between 7th and 9th. S. Idaho will be repaved by Summer 2018. Additional improvements will be implemented as part of repaving. 	<ul style="list-style-type: none"> Sign/legends will be installed by City crews. Pavement project is in design.

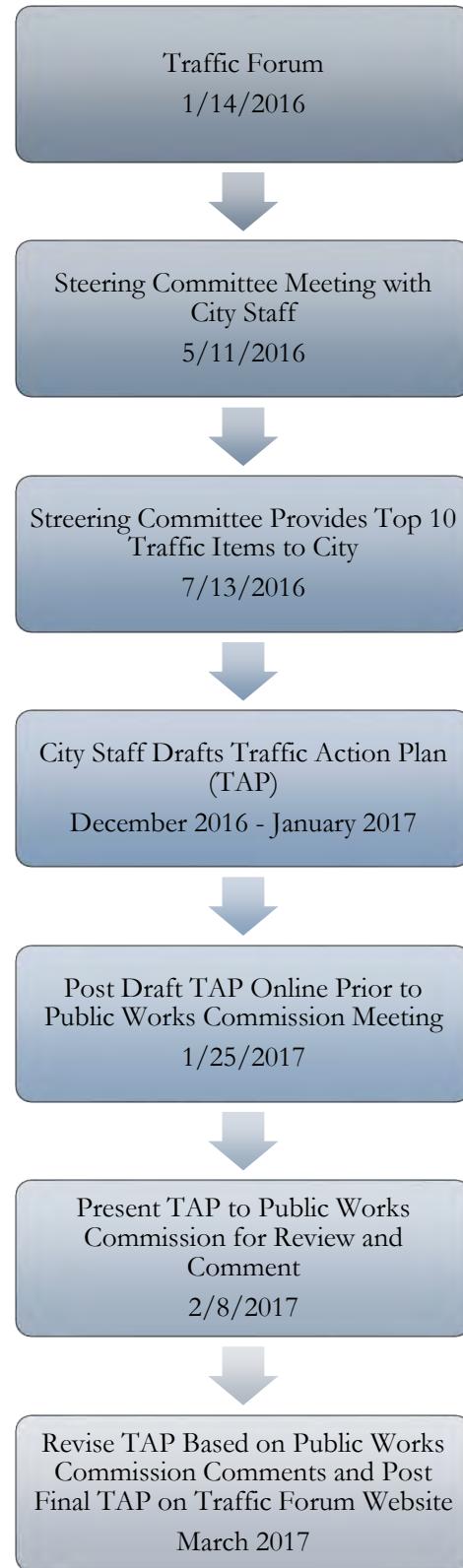


Figure 2 - Traffic Action Plan Development Flowchart

Neighborhood Traffic Issues

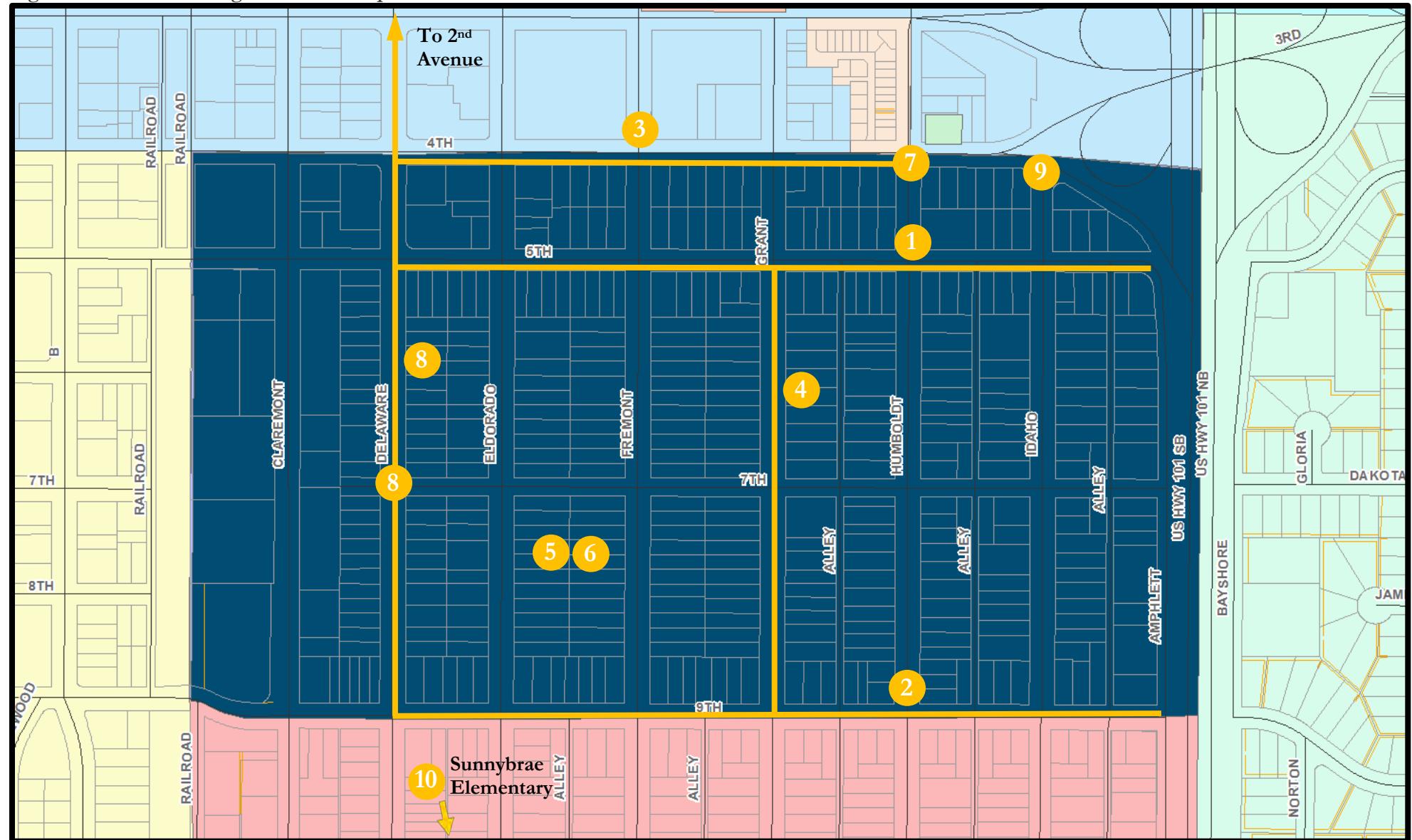
The Central Traffic Forum Steering Committee identified their top ten traffic concerns based on information provided to them at the City meeting on May 11, 2016.

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 – Central Top Ten Traffic Concerns

Neighborhood Priority	Location	Interests and Reasons
1	E. 5th Avenue (S. Delaware St to S. Amphlett Blvd)	Cut-through & Speeding (TFSC recommends: 5th / Delaware - curb extensions to reduce cut-through traffic on 5th Avenue; Traffic circles - at 5th/Fremont, 5th/Humboldt [small], 5th/Idaho, keep all 4-way stop signs at existing locations.)
2	9 th Avenue	Cut-through & Speeding (TFSC recommends: Traffic circles - at 9th/ Delaware (or at a minimum curb extensions on south side of 9th at this location), 9th/Eldorado, 9th/Fremont, 9th/Humboldt [small], 9th/Idaho, keep all 4-way stop signs at existing locations.)
3	E. 4 th Avenue	Speeding (TFSC recommends: Install traffic signals where none exist and 25 mph signs between Delaware and S. Humboldt.)
4	S. Grant Street	Cut-through & Speeding (TFSC recommends: median from 9th Avenue to 5th Avenue - <u>requested a grant for Sustainable Streets Plan</u>)
5	Central Area	Unique Neighborhood Concern (TFSC requests the installation of pedestrian lights at 34 locations throughout Central, with priority for 7 th Ave [S. Amphlett to Delaware] due to car burglaries, S. Fremont [9 th to 5 th Aves] due to tripping, and 500 block of 5 th Ave due to pedestrian route to downtown.)
6	Central Area	Roadway Conduct (TFSC requests additional “No Truck” signs at 5 th /Humboldt [Southeast corner], 4 th /Humboldt [Southwest corner], 5 th /Idaho [Northwest corner], and 9 th /Delaware [Southeast corner]. Trucks are not using designated truck routes.)
7	E. 4 th Avenue/S. Humboldt Avenue	Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 12 over the last 3 years.)
8	S. Delaware Avenue/7 th Avenue intersection S. Delaware Avenue (2 nd Avenue to 9 th Avenue)	Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 26 over the last 3 years on Delaware between 2 nd and 9 th Avenues. Requesting all-way stops and flashing beacon at Delaware/7 th intersection.)
9	E. 4 th Avenue/S. Idaho Avenue	Cut-Through (TFSC recommends closure of the S. Idaho ingress to the neighborhood due to issues with metering lights and redirection of traffic.)
10	Sunnybrae Elementary	Roadway Conduct (TFSC recommends applying for Safe Routes to School program within a 1-mile radius of Sunnybrae Elementary to increase pedestrian safety.)

Figure 3 - Central Steering Committee Top Ten Traffic Concerns



Legend

Neighborhood Priority

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Street Segment of Concern

Neighborhood Recommendations and Implementation

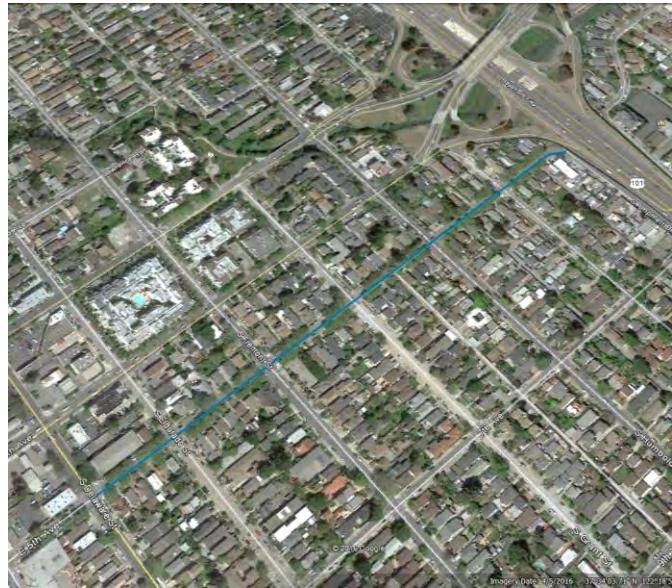
The following section presents the recommendations, listed by location. A detailed discussion is presented first followed by the recommendation in Table 3, as well as presented on a map for illustration.

1 – E. 5th Avenue from S. Delaware Street to S. Amphlett Boulevard

Issue: Cut-through & Speeding (TFSC recommends: 5th / Delaware - curb extensions to reduce cut-through traffic on 5th Avenue; Traffic circles - at 5th/Fremont, 5th/Humboldt (small), 5th/Idaho, keep all 4-way stop signs at existing locations.)

Discussion and Analysis:

E. 5th Avenue between S. Delaware and S. Amphlett. is a centerline-striped two-way roadway and is classified as a local roadway according to the San Mateo General Plan Street Classification. It is not an emergency, bus or truck route. The segment length is roughly 2,000 feet (about 1/3 mile) with a posted speed limit of 25 mph. There is a traffic signal on E. 5th at S. Delaware. All-way stop controlled intersections are located on E. 5th at S. El Dorado Street (with a mini traffic circle), S. Fremont Street, S. Grant Street S. Humboldt Street, and S. Idaho Street. There is a stop on the S. Amphlett northbound approach at E. 5th Avenue. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with commercial located at S. Amphlett and S. Delaware. Sidewalks are on either side of the roadway and pedestrian traffic is moderate as this segment provides a connection between the neighborhood and the downtown area. E. 5th Avenue carries approximately 1,500 vehicles per day along this segment. The volume decreases as you drive eastbound with most cars turning at Humboldt in order to access the freeway US-101 on/off ramps. “Sharrows” are located on E. 5th between S. Grant and S. Delaware.



Historically, speeding complaints have been received from the neighborhood and addressed with increased police enforcement and the construction of a traffic circle on E. 5th at S. El Dorado. The following table summarizes speed and volume data collected on the segment:

Date	Segment	Posted Speed Limit (mph)	85th Percentile Speed Limit (mph)	ADT
January 2014	S. Grant St to S Humboldt St	25	24.0	2250
January 2014	S. Humboldt to S. Idaho St	25	24.9	1516
2008	S. Humboldt to S. Idaho St	25	25.6	1458
January 2014	S Idaho St. to S. Amphlett St	25	24.2	1140
January 2008	S Idaho St. to S. Amphlett St	25	26.3*	-

*Eastbound direction only.

Five speed surveys were completed along E. 5th Avenue between January 2008 and January 2014. The segment with the highest 85th percentile speed was eastbound between S. Idaho and S. Amphlett. None of the segments on E. 5th exceed 30 mph. Vehicle speeds and volume appear to decrease as you approach the eastern end of the segment. This is likely due to having all-way stop signs at every intersection, as well as, the majority of vehicles turning prior to S. Idaho to access the US-101 freeway.

The highest number of collisions on this segment of E. 5th Avenue is at the signalized intersection with S. Delaware. In the last 3 years, 5 collisions have occurred, all, but one, are related to not yielding to traffic at the signal. One collision involved a bicyclist.

It was noted during field investigations that the centerline is faded and needs to be repainted.

The TFSC recommended installation traffic circles on S. 5th at S. Fremont, S. Humboldt and S. Idaho. However, traffic circles are not installed in combination with all-way stop signs. The speeds on E. 5th are below 30 mph, likely due to the existing all-way stops at every intersection. If traffic circles are desired, the existing all-way stops will be removed.

E. 5th at S. Delaware marks the entrance to the residential area of Central. In order to heighten driver awareness that they are entering a neighborhood, it is recommended to install curb extensions on the eastside of E. 5th at S. Delaware. This may also help reduce the cut-through on E. 5th to access the freeway.

Recommendations:

- Repaint faded centerline on E. 5th Avenue. This should be coordinated with upcoming street projects.
- Install curb extensions on the eastside of E. 5th at S. Delaware that allow for bicyclists to safely continue on the bike route.
- Traffic circles are not recommended. The existing all-way stop signs appear to be lowering speeds and the number of vehicles on the segment.

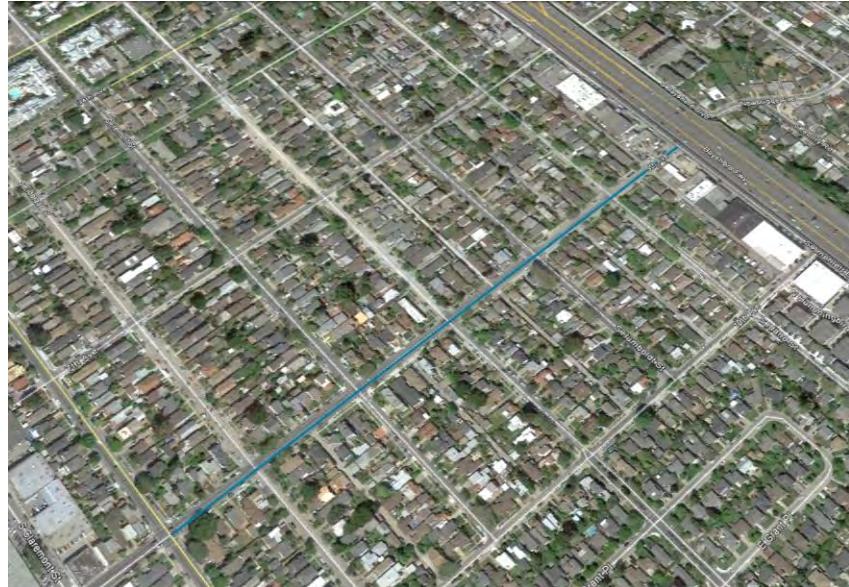
2 – 9th Avenue from S. Delaware Street to S. Amphlett Boulevard

Issue: Cut-through & Speeding (TFSC recommends: Traffic circles - at 9th/ Delaware (or, at a minimum, curb extensions on south side of 9th at this location), 9th/Eldorado, 9th/Fremont, 9th/Humboldt (small), 9th/Idaho, keep all 4-way stop signs at existing locations.)

Discussion and Analysis:

9th Avenue between S. Delaware and S. Amphlett. is a centerline striped two-way roadway and is classified as a collector according to the San Mateo General Plan Street Classification. This segment is not a truck route, but becomes one between S. Delaware and El Camino Real. The segment length is roughly 2,000 feet (about 1/3 mile) with a posted speed limit of 25 mph.

There is a traffic signal on 9th at S. Delaware. All-way stop controlled intersections are located on 9th at S. Fremont Street, S. Grant Street, and S. Humboldt Street. There is a stop on the S. Idaho Street and S. Eldorado Street north/southbound approaches at 9th Avenue. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with commercial located at S. Amphlett and S. Delaware. Sidewalks are on either side of the roadway and pedestrian traffic is moderate as this segment provides a connection between the neighborhood and the downtown area. 9th Avenue carries approximately 650 vehicles per day along this segment. The volume decreases as you drive eastbound with most cars turning at Humboldt in order to access the freeway US-101 on/off ramps. Class II bike facilities (marked bike lanes) are located on 9th for the entire segment.



Historically, speeding complaints have been received from the neighborhood and addressed with increased police enforcement. The following table summarizes speed and volume data collected on the segment:

Date	Segment	Posted Speed Limit (mph)	85th Percentile Speed Limit (mph)	ADT
April 2008	S. Humboldt to S. Idaho St	25	30.6	875
February 2014	S. Idaho St. to S. Amphlett St	25	25.6	426

Two speed surveys were completed along 9th Avenue between April 2008 and February 2014. Similar to E. 5th Avenue, vehicle speeds and volume appear to decrease as you approach the eastern end of the

segment. The majority of vehicles appear to be turning prior to S. Idaho, potentially to access the US-101 freeway.

The highest number of collisions on this segment of 9th Avenue is at the signalized intersection with S. Delaware. In the last 3 years, 4 collisions have occurred, all, but one, are related to not yielding to traffic at the signal. One collision involved driving under the influence (DUI).

The TFSC recommended installation traffic circles on 9th at S. Delaware, S. Eldorado, S. Fremont, S. Humboldt and S. Idaho. However, traffic circles are not installed in combination with all-way stop signs. The speeds on 9th are below 31 mph, likely due to the existing all-way stops at almost all intersection. If traffic circles are desired, the existing all-way stops will be removed.

9th Avenue at S. Delaware marks the entrance to the residential area of Central. In order to heighten driver awareness that they are entering a neighborhood, it is recommended to install curb extensions on the eastside of 9th at S. Delaware. This may also help reduce the cut-through on 9th to access the freeway.

Recommendations:

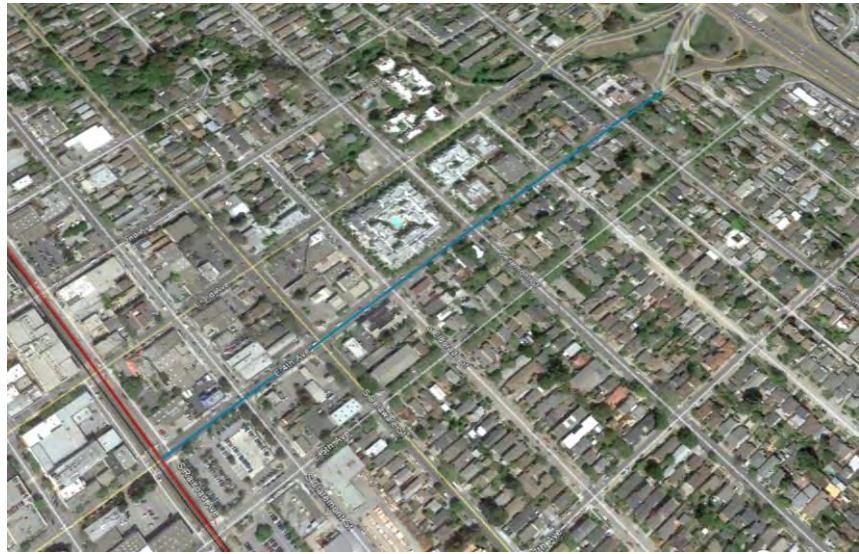
- Repaint faded crosswalks and red curbs on 9th. This should be coordinated with upcoming street projects.
- Install curb extensions on the eastside of 9th at S. Delaware that allow for bicyclists to safely continue on the bike lanes.
- Place the portable radar board in both directions prior to the installation of the curb extensions.
- Traffic circles are not recommended. The existing all-way stop signs appear to be lowering speeds and the number of vehicles on the segment.
- Because 9th 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.
- Conduct speed survey, volume counts, and review collisions after the installation of the curb extension is completed. Evaluate progress.

3 – E. 4th Avenue (S. Delaware St to S. Humboldt)

Issue: Speeding (TFSC recommends: Install traffic signals where none exist and 25 mph signs between Delaware and S. Humboldt.)

Discussion and Analysis:

E. 4th Avenue between S. Delaware and S. Humboldt. is one-way in the eastern direction with two lanes for the majority of the segment. E. 4th is classified as an arterial roadway according to the San Mateo General Plan Street Classification. It is a truck route on this segment as it leads directly to the southbound US-101 on ramp. The segment length is roughly 1,400 feet (about 1/3 mile) with a posted speed limit of 30 mph.



There is a traffic signal on E. 4th at S. Delaware, S. Fremont and S. Humboldt. There are stop signs on the north/southbound approaches at E. 4th Avenue at S. Eldorado and S. Grant. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential with commercial located at S. Delaware. Sidewalks are on either side of the roadway and pedestrian/bicycle traffic is moderate as this segment provides a connection between the Class I bridge over US-101 and the downtown area. E. 4th Avenue carries approximately 22,000 vehicles per day along this segment. The volume increases as you drive eastbound in order to access the freeway US-101 on/off ramps. There are no bike facilities on the segment; however, a green bike box and bike lane through the Humboldt intersection is recommended per the City's Bicycle Master Plan.

This segment is typically congested during peak hours, which minimizes speeding. The following table summarizes speed data collected on the segment:

Date	Segment	Posted Speed Limit (mph)	85 th Percentile Speed Limit (mph)
February 2014	S. Humboldt to S. Fremont (One way EB)	30	32.0

The posted speed limit is 30 mph based on a radar survey, which is used to enforce the speed limit. Posting of speed limits and enforcement must comply with the California Vehicle Code (CVC) and the California Manual on Uniform Traffic Control Devices (CA MUTCD). Speed limits cannot be reduced based on public demand unless the radar survey indicates that it should be lowered.

The highest number of collisions on this segment of E. 4th Avenue is at the signalized intersection with S. Humboldt. The number of accidents has decreased due to the red light camera at the intersection. In the last 3 years, 14 collisions have occurred, with the primary collision factors (PCF) mainly identified as unsafe lane change, unsafe speed, and improper turning. Two collisions involved driving under the influence (DUI). The accidents involving unsafe speeds were during off peak hours between 10 pm and midnight.

Recommendations:

- Conduct traffic signal warrant studies at unsignalized intersections. If warranted, request project funding through the Capital Improvement Program FY 18/19 for PSE, including coordination with existing signals.
- Coordinate existing signals and review adjustments to lower speeding on segment during off-peak hours.
- Recommending pedestrian scale street lights on E. 4th between S. Delaware and S. Humboldt (per Citywide Pedestrian Master Plan). Project funding will be requested through the Capital Improvement Program.

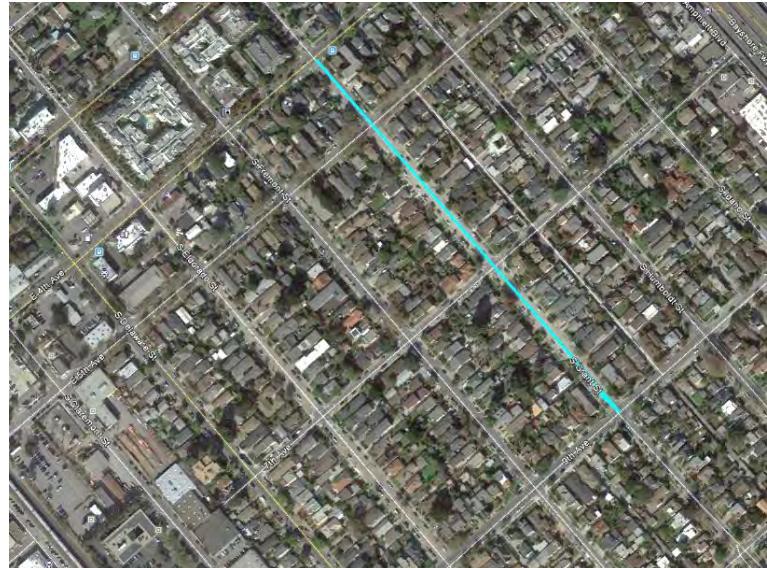
4 – S. Grant Street (E. 5th Ave to 9th Ave)

Issue: Cut-through & Speeding (TFSC recommends: median from 9th Avenue to 5th Avenue - requested a grant for Sustainable Streets Plan)

Discussion and Analysis:

S. Grant Street between E. 5th and 9th is a two-way roadway and is classified as a collector according to the San Mateo General Plan Street Classification. It is not a truck route. The segment length is roughly 1,250 feet (about 1/4 mile) with a posted speed limit of 25 mph.

All-way stop exist on S. Grant at 9th, 7th, and E. 5th. Parking is allowed on both sides of the street and there are many driveways. Surrounding land use is residential. Sidewalks are on either side of the roadway and pedestrian/bicycle traffic is moderate. S. Grant Avenue carries approximately 3,000 vehicles per day along this segment. There are no bike facilities on the segment; however, a Class III bicycle route is recommended per the City's Bicycle Master Plan.



Historically, speeding complaints have been received from the neighborhood on S. Grant between 9th and Concar Drive. As a result, there have been no speed surveys conducted between E. 5th and 9th. The following table summarizes speed and volume data collected on S. Grant between 9th and 10th which is the closest segment:

Date	Segment	Posted Speed Limit (mph)	85th Percentile Speed Limit (mph)	ADT
May 2016	9 th Ave to 10 th Ave	25	28.8	2,730

There have been no collisions on this segment of S. Grant Avenue in the last three years.

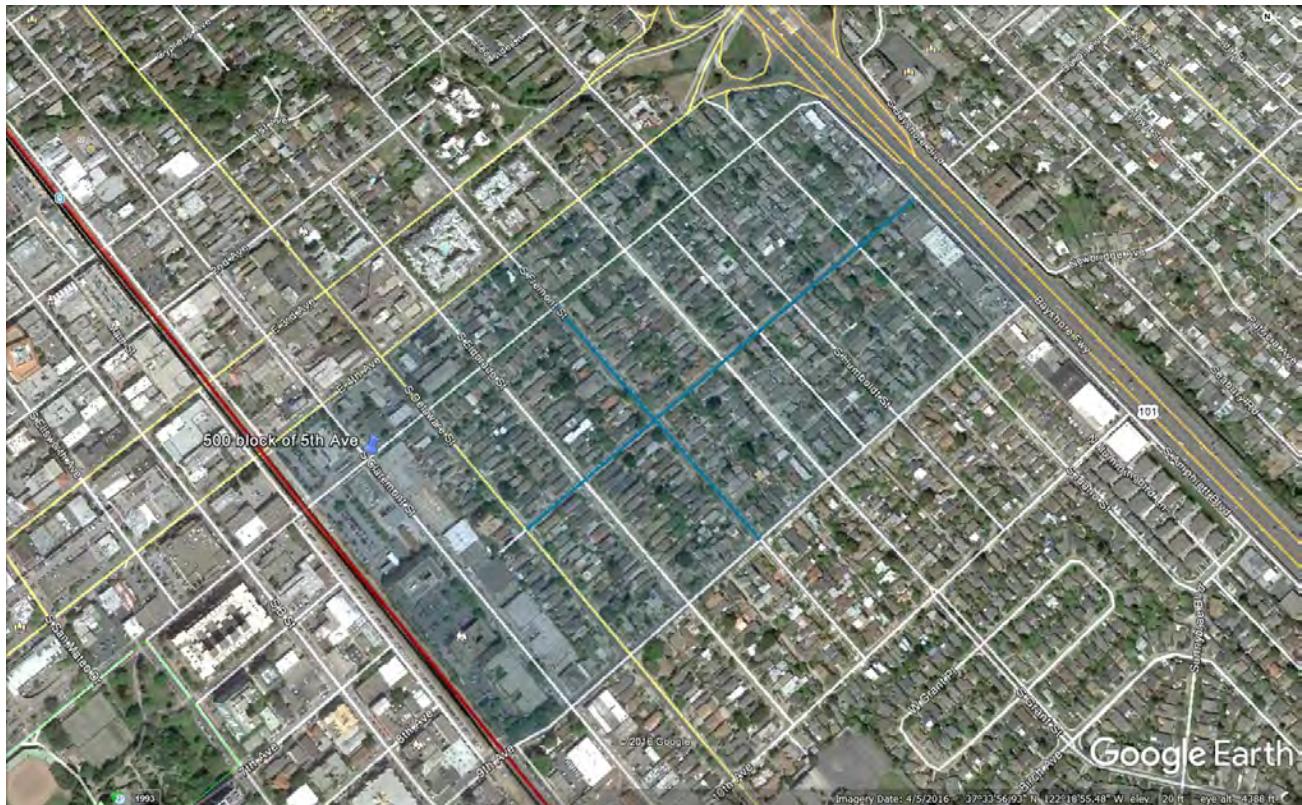
The TFSC recommended installation of a median from 9th Avenue to 5th Avenue per the recommendation of the Sustainable Streets Plan. However, a median would restrict access to many driveways, potentially changing the traffic circulation onto parallel streets or increasing the amount of U-turns at the intersections. Staff recommends installation of Class II bike lanes on the entire segment instead of a bike route as proposed in the Bicycle Master Plan. This improvement along with installation of a centerline will decrease the roadway width and provide for safer access by cyclist.

Recommendations:

- Repaint faded crosswalks and red curb. This should be coordinated with upcoming street projects.
- Install a class II bike facility (marked bike lane) on segment and centerline striping.
- Recommending pedestrian scale street lights on S. Grant between E. 3rd Ave to Bermuda Dr (per Citywide Pedestrian Master Plan). Project funding will be requested through the Capital Improvement Program.

5 – Central Area

Issue: Unique Neighborhood Concern (TFSC requests the installation of pedestrian lights at 34 locations throughout Central, with priority for 7th Ave [S. Amphlett to Delaware] due to car burglaries, S. Freemont [9th to 5th Aves] due to tripping, and 500 block of 5th Ave due to pedestrian route to downtown.)



Discussion and Analysis:

The neighborhood is roughly bounded on the north by 4th Avenue, Highway 101 to the east, 10th Avenue to the south; and South Delaware Street on the west. Within the neighborhood are mainly single family homes and commercial business along South Amphlett Boulevard which fronts Highway 101. Sunnybrae Elementary School is just south of the neighborhood and has impacts on circulation within its boundaries. In addition, the Downtown District and Central Park are just to the northeast of the neighborhood. 4th Avenue provides access to Highway 101 and areas east of Highway 101. The roadways are in a north-south and east-west grid pattern and are classified as local roadways except for South Delaware Street and South Humboldt Street which are classified as arterials and 9th Avenue and South Grant Street which are classified as collector roadways. The speed limit within the neighborhood is 25 mph except for E.4th Avenue, which is posted at 30 mph and South Amphlett Boulevard, which is posted at 35 mph. Generally, major intersections are controlled by traffic signals or all-way stop signs.

Ideally, street lights should be placed every 200'-300' in order to provide sufficient lighting for the roadway. San Mateo recently completed a project that replaced the existing high pressure sodium (HPS)

lamps with LED. The LED luminaires are energy-efficient, cost less, and provide better lighting. In the Central area, lights are typically placed at intersections and mid-block.

There are existing pedestrian level lighting along the E. 3rd and E. 4th corridor, as well as in the Downtown.

Recommendations:

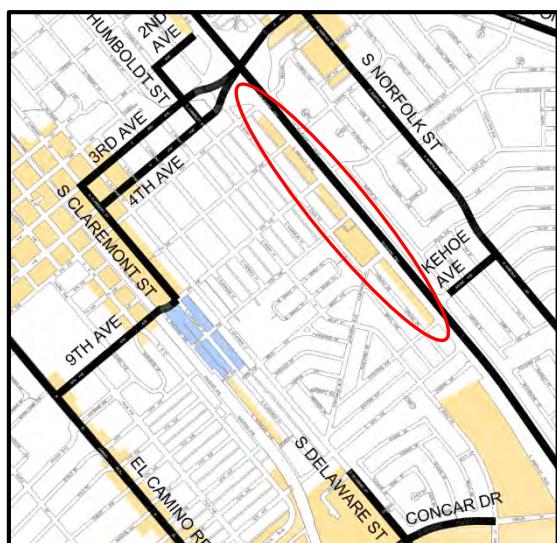
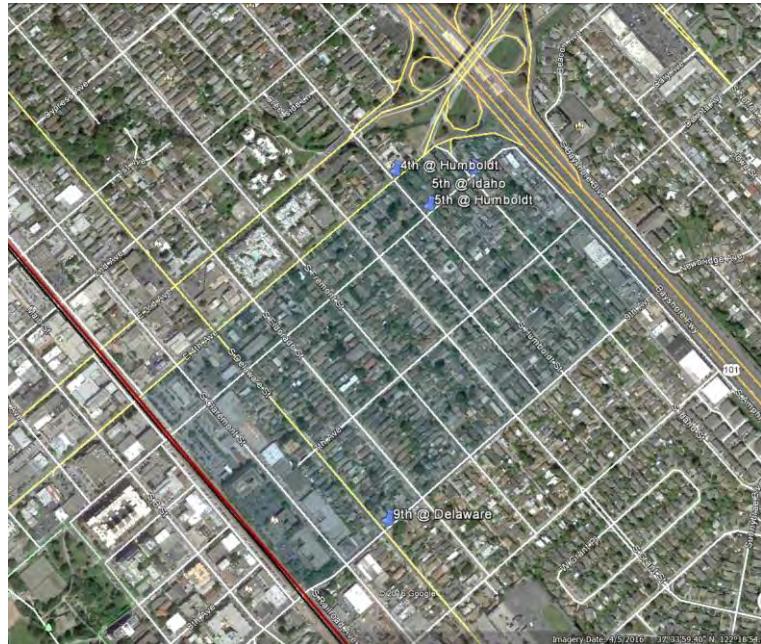
- Recommending pedestrian scale street lights on E. 4th between S. Fremont and S. Idaho (per Citywide Pedestrian Master Plan). There is existing lighting on the majority of the E. 4th corridor, with a small gap between S. Fremont and S. Idaho. Project funding will be requested through the Capital Improvement Program.
- Recommending pedestrian scale street lights on S. Grant between E. 5th Ave to Bermuda Dr (per Citywide Pedestrian Master Plan). There is existing lighting on S. Grant between 2nd and E. 5th. Project funding will be requested through the Capital Improvement Program.
- Future lighting recommendations will be requested upon completion of first two segments. Recommendations will be based on Citywide Pedestrian Plan.

6 – Central Area

Issue: Roadway Conduct (TFSC requests additional “No Truck” signs at 5th/Humboldt [Southeast corner], 4th/Humboldt [Southwest corner], 5th/Idaho [Northwest corner], and 9th/Delaware [Southeast corner]. Trucks are not using designated truck routes.)

Discussion and Analysis:

The neighborhood is roughly bounded on the north by 4th Avenue, Highway 101 to the east, 10th Avenue to the south; and South Delaware Street on the west. Within the neighborhood are mainly single family homes and commercial business along South Amphlett Boulevard which fronts Highway 101. Sunnybrae Elementary School is just south of the neighborhood and has impacts on circulation within its boundaries. In addition, the Downtown District and Central Park are just to the northeast of the neighborhood. The roadways are in a north-south and east-west grid pattern and are classified as local roadways except for South Delaware Street and South Humboldt Street which are classified as arterials, and 9th Avenue and South Grant Street which are classified as collector roadways. The speed limit within the neighborhood is 25 mph except for South Amphlett Boulevard, which is posted at 35 mph. Generally, major intersections are controlled by traffic signals or all-way stop signs.



Existing truck routes within the City can be seen on the City’s website (<http://www.cityofsanmateo.org/DocumentCenter/Home/View/4306>). A portion of this map is shown in the image to the left. This map shows existing truck routes near the Central neighborhood along Highway 101, 4th Avenue between S. Claremont Street and Highway 101, S. Claremont Street between 3rd and 9th Avenues, and S. Delaware Street between Garvey Way and 25th Avenue. Additionally, the City Council adopted the Truck Route Study and Policy in 2008 (<http://www.cityofsanmateo.org/DocumentCenter/Home/View/4306>) which analyzed existing truck routes and made recommendations for new routes based on street classification, the location of commercial businesses, and other relevant factors. Currently, because no truck routes exist that direct truck traffic to the S. Amphlett Blvd. commercial business area

(circled in red), per the San Mateo City Charter and Municipal Code, truck traffic is allowed to deviate from truck routes “only at the intersection with the street nearest to the destination point.”

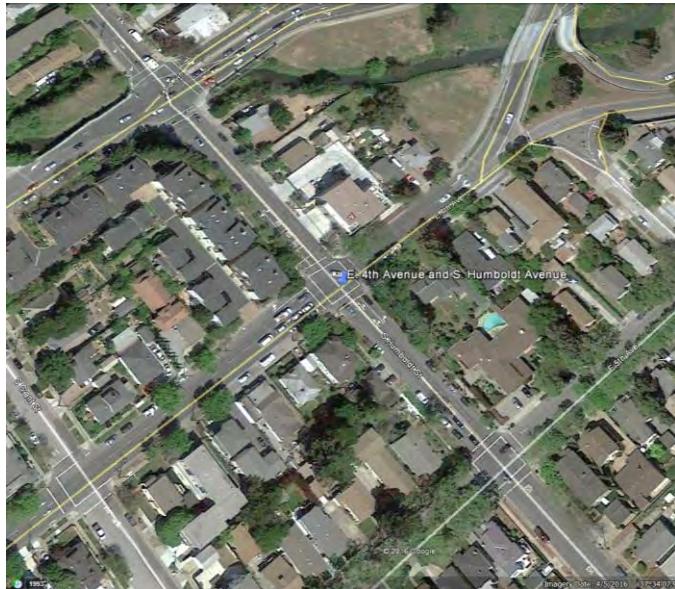
Recommendations:

- City staff will review the Truck Route Study and Policy document to ensure conformance with recommendations.
- Additional signage will be installed if proposed signage from the Truck Route Study and Policy is missing, or if additional signage would further enforce designated truck routes.

7 – E. 4th Avenue/S. Humboldt Avenue

Issue: Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 12 over the last 3 years.)

Discussion and Analysis:



The intersection of E. 4th Avenue and S. Humboldt Street is controlled by a traffic signal and both roadways are classified as arterials according to the San Mateo General Plan Street Classification. E. 4th Avenue is an eastbound one-way roadway with two lanes between S. Delaware Street and S. Grant Street, and three lanes between S. Grant Street and Highway 101. E. 4th Avenue carries approximately 22,000 vehicles per day, and has a posted speed limit of 30 mph. S. Humboldt Street is a two-way roadway with a striped centerline median. It carries approximately 4,500 vehicles per day and has a posted speed limit of 25 mph. A red light enforcement camera is installed on the east side of the intersection to capture eastbound red light violations.

Traffic collisions for the past four years were reviewed by City staff. The majority of collisions were related to factors not correctable by engineering measures. Additionally, it should be noted that no collision reports were taken at the intersection in 2016.

Recommendations:

- Existing signage will be reviewed at the intersection. Additional signage will be installed where necessary.
- Traffic signal timing will be reviewed and updated where necessary.
- Coordinate existing signal with others on the corridor and review adjustments to lower speeding on segment.

8 – S. Delaware Street/7th Avenue & S. Delaware Street between 2nd Avenue to 9th Avenue

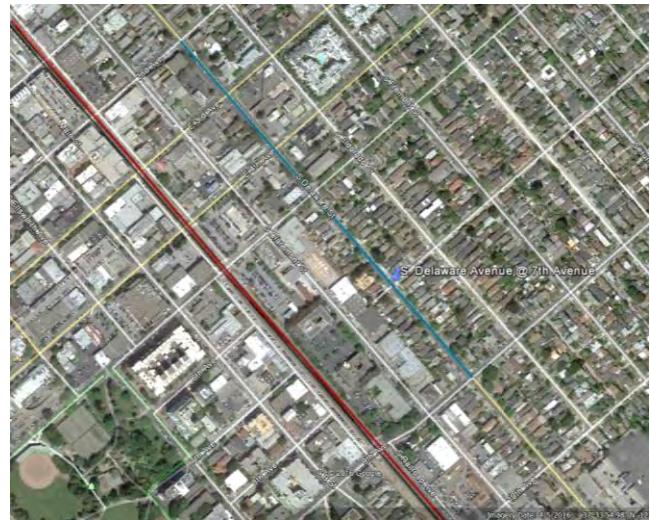
Issue: Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 26 over the last 3 years on Delaware between 2nd and 9th Avenues. Requesting all-way stops and flashing beacon at Delaware/7th intersection.)

Discussion and Analysis:

S. Delaware Avenue between Peninsula Avenue and E. 25th Avenue is classified as an arterial on the San Mateo General Plan Street Classification map. It is a two-lane roadway with a striped centerline between E. 5th and 9th Avenues with Class II bike lanes along both directions of the roadway. S. Delaware Street between 2nd and E. 5th Avenues is a four-lane roadway with left-turn pockets at the signalized intersections.

Recommendations:

- Install high visibility crosswalks on S. Delaware Street at 2nd, E. 3rd, E. 4th, E. 5th, and 9th Avenues per the Citywide Pedestrian Master Plan.
- Existing signage will be reviewed at the intersection. Additional signage will be installed where necessary.
- Traffic signal timing will be reviewed and updated where necessary.
- Install pedestrian scale street lights on S. Delaware Street between 2nd and 9th Avenues per the Citywide Pedestrian Master Plan. Project funding will be requested through the Capital Improvement Program.
- Flashing beacon and all-way stop signs are not recommended at 7th Avenue because 7th Avenue does not connect westerly beyond S. Delaware Street. Pedestrians are encouraged to cross S. Delaware Street at E. 5th Avenue or 9th Avenue in signal-controlled marked crosswalks.
- Annual review of accidents and recommendations for improvements to be included in the Capital Improvement Program.



9 – E. 4th Avenue/S. Idaho Street

Issue: Cut-Through (TFSC recommends closure of the S. Idaho ingress to the neighborhood due to issues with metering lights and redirection of traffic.)

Discussion and Analysis:

E. 4th Avenue at S. Idaho Street is a one-way street leading to the on-ramp to southbound Highway 101. S. Idaho Street is a two-way street and contains a median island at E. 4th Avenue, which allows eastbound right-turns onto S. Idaho Street from E. 4th Avenue, and northbound right-turns from S. Idaho Street onto the E. 4th Avenue freeway on-ramp.

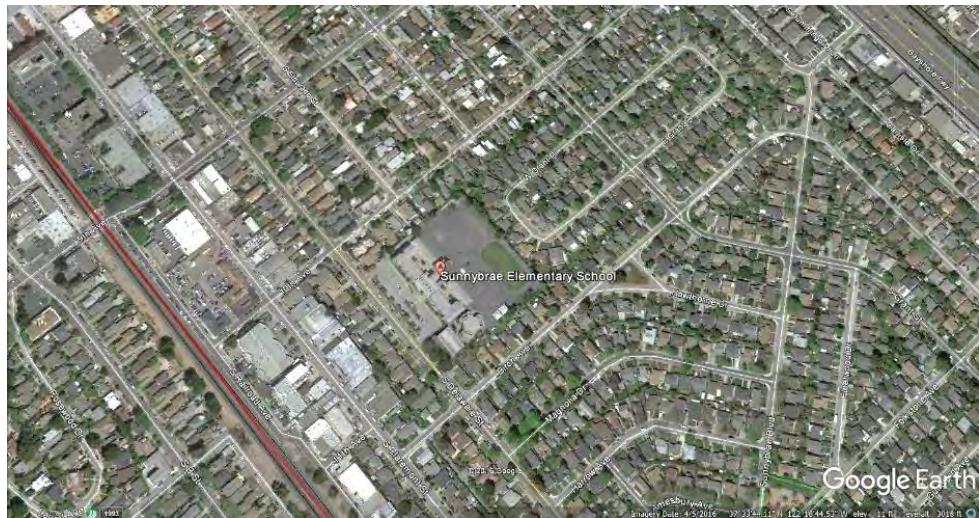
Recommendations:

- Install cul-de-sac on S. Idaho Street at E. 4th Avenue to reduce cut-through traffic to and from E. 4th Avenue. Project will require Caltrans permit and approval. Project will be coordinated with existing street project on E. 4th Avenue pending Caltrans approval timeline. Project funding will be requested through the Capital Improvement Program.



10 – Sunnybrae Elementary

Issue: Roadway Conduct (TFSC recommends applying for Safe Routes to School program within a 1-mile radius of Sunnybrae Elementary to increase pedestrian safety.)



Discussion and Analysis:

Sunnybrae Elementary School is bounded by S. Delaware Street to the west, 10th Avenue to the north, W. Grant Place to the east, and Birch Avenue to the south. Students are able to access the school from S. Delaware Street and W. Grant Place.

Recommendations:

- The City has applied and received grant funding for a Safe Routes to School project scheduled to begin construction in Spring 2017. Proposed improvements include:
 - 10th Avenue/S. Delaware Street – pedestrian refuge, rectangular rapid-flashing beacon, high-visibility crosswalk
 - Birch Avenue/S. Delaware Street – bulb-outs, high-visibility crosswalks
 - W. Grant Place – bulb-outs at school entrance
- No further action required at this time.

Table 3 - Top Ten List with Funding Sources

Neighborhood Priority	Location	Key Issues (Interests and Reasons)	Improvements	Potential Funding Source	Estimated Cost
1	E. 5th Avenue (S. Delaware St to S. Amphlett Blvd)	Cut-through & Speeding (TFSC recommends: 5th / Delaware - curb extensions to reduce cut-through traffic on 5th Avenue; Traffic circles - at 5th/Fremont, 5th/Humboldt (small), 5th/Idaho, keep all 4-way stop signs at existing locations.)	<ul style="list-style-type: none"> ➤ Repaint faded centerline on E. 5th Avenue. This should be coordinated with upcoming street projects. ➤ Install curb extensions on the eastside of E. 5th at S. Delaware that allow for bicyclists to safely continue on the bike route. ➤ Traffic circles are not recommended. The existing all-way stop signs appear to be lowering speeds and the number of vehicles on the segment. 	Measure S (TBD)	\$150,000 capital & \$15,000 staff (one-time)
2	9th Avenue (S. Delaware St to S. Amphlett Blvd)	Cut-through & Speeding (TFSC recommends: Traffic circles - at 9th/ Delaware (or at a minimum curb extensions on south side of 9th at this location), 9th/Eldorado, 9th/Fremont, 9th/Humboldt (small), 9th/Idaho, keep all 4-way stop signs at existing locations.)	<ul style="list-style-type: none"> ➤ Repaint faded crosswalks and red curbs on 9th. This should be coordinated with upcoming street projects. ➤ Install curb extensions on the eastside of 9th at S. Delaware that allow for bicyclists to safely continue on the bike lanes. ➤ Place the portable radar board in both directions prior to the installation of the curb extensions. ➤ Traffic circles are not recommended. The existing all-way stop signs appear to be lowering speeds and the number of vehicles on the segment. ➤ Because 9th is classified as a collector street in the Circulation Element of the General Plan, it does not qualify for <i>Step 2</i> devices as defined by the current NTMP. The City is in the process of reviewing and updating the NTMP to potentially allow <i>Step 2</i> devices on residential collector streets. ➤ Conduct speed survey, volume counts, and review collisions after the installation of the curb extension is completed. Evaluate progress. 	Measure S (TBD)	\$75,000 capital & \$10,000 staff (one-time)
3	E. 4th Avenue (S. Delaware St to S. Humboldt)	Speeding (TFSC recommends: Install traffic signals where none exist and 25 mph signs between Delaware and S. Humboldt.)	<ul style="list-style-type: none"> ➤ Conduct traffic signal warrant studies at unsignalized intersections. If warranted, request project funding through the Capital Improvement Program FY 18/19 for PSE, including coordination with existing signals. ➤ Coordinate existing signals and review adjustments to lower speeding on segment during off-peak hours. ➤ Recommending pedestrian scale street lights on E. 4th between S. Delaware and S. Humboldt (per Citywide Pedestrian Master Plan). Project funding will be requested through the Capital Improvement Program. 	Measure S (TBD)	\$75,000 capital & \$15,000 staff (one-time) – Studies/ Signal Coordination; \$2M capital & \$200,000 staff (one-time) – Ped Lighting; \$10,000/yr on-going
4	S. Grant Street (E. 5 th Ave to 9 th Ave)	Cut-through & Speeding (TFSC recommends: median from 9th Avenue to 5th Avenue - requested a grant for Sustainable Streets Plan)	<ul style="list-style-type: none"> ➤ Repaint faded crosswalks and red curb. This should be coordinated with upcoming street projects. ➤ Install a class II bike facility (marked bike lane) on segment and centerline striping, ➤ Recommending pedestrian scale street lights on S. Grant between E. 3rd Ave to Bermuda Dr (per Citywide Pedestrian Master Plan). Project funding will be requested through the Capital Improvement Program. 	Measure S (TBD)	\$100,000 capital & \$10,000 staff (one-time) - painting/striping; \$3.5M capital & \$300,000 staff (one-time) – Ped Lighting; \$10,000/yr on-going
5	Central Area	Unique Neighborhood Concern (TFSC requests the installation of pedestrian lights at 34 locations throughout Central, with priority for 7th Ave (S. Amphlett to Delaware) due to car burglaries, S. Fremont (9th to 5th Aves) due to tripping, and 500 block of 5th Ave due to pedestrian route to downtown.	<ul style="list-style-type: none"> ➤ Recommending pedestrian scale street lights on E. 4th between S. Fremont and S. Idaho (per Citywide Pedestrian Master Plan). There is existing lighting on the majority of the E. 4th corridor, with a small gap between S. Fremont and S. Idaho. Project funding will be requested through the Capital Improvement Program. ➤ Recommending pedestrian scale street lights on S. Grant between E. 5th Ave to Bermuda Dr (per Citywide Pedestrian Master Plan). There is existing lighting on S. Grant between 2nd and E. 5th. Project funding will be requested through the Capital Improvement Program. ➤ Future lighting recommendations will be requested upon completion of first two segments. Recommendations will be based on Citywide Pedestrian Plan. 	Measure S (TBD)	Costs included above
6	Central Area	Roadway Conduct (TFSC requests additional “No Truck” signs at 5th/Humboldt (Southeast corner), 4th/Humboldt (Southwest corner), 5th/Idaho (Northwest corner), and 9th/Delaware (Southeast corner. Trucks are not using designated truck routes.)	<ul style="list-style-type: none"> ➤ City staff will review the Truck Route Study and Policy document to ensure conformance with recommendations. ➤ Additional signage will be installed if proposed signage from the Truck Route Study and Policy is missing, or if additional signage would further enforce designated truck routes. 	Measure S (TBD)	\$1,000 capital & \$500 staff (one-time)
7	E. 4th Avenue/S. Humboldt Avenue	Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 12 over the last 3 years.)	<ul style="list-style-type: none"> ➤ Existing signage will be reviewed at the intersection. Additional signage will be installed where necessary. ➤ Traffic signal timing will be reviewed and updated where necessary. ➤ Coordinate existing signal with others on the corridor and review adjustments to lower speeding on segment. 	Measure S (TBD)	\$1,000 staff (one-time)

8	S. Delaware Avenue/7th Avenue intersection S. Delaware Avenue (2nd Avenue to 9th Avenue)	Unique Neighborhood Concern (TFSC indicates that this intersection has had a high number of accidents. 26 over the last 3 years on Delaware between 2nd and 9th Avenues. Requesting all-way stops and flashing beacon at Delaware/7th intersection.)	<ul style="list-style-type: none"> ➤ Install high visibility crosswalks on S. Delaware Street at 2nd, E. 3rd, E. 4th, E. 5th, and 9th Avenues per the Citywide Pedestrian Master Plan. ➤ Existing signage will be reviewed at the intersection. Additional signage will be installed where necessary. ➤ Traffic signal timing will be reviewed and updated where necessary. ➤ Install pedestrian scale street lights on S. Delaware Street between 2nd and 9th Avenues per the Citywide Pedestrian Master Plan. Project funding will be requested through the Capital Improvement Program. ➤ Flashing beacon and all-way stop signs are not recommended at 7th Avenue because 7th Avenue does not connect westerly beyond S. Delaware Street. Pedestrians are encouraged to cross S. Delaware Street at E. 5th Avenue or 9th Avenue in signal-controlled marked crosswalks. ➤ Annual review of accidents and recommendations for improvements to be included in the Capital Improvement Program. 	Measure S (TBD)	\$35,000 capital & \$1,000 staff (one-time) – c/w; \$1M capital & \$100,000 staff (one-time) – Ped Lighting; \$10,000/yr on-going
9	E. 4th Avenue/S. Idaho Avenue	Cut-Through (TFSC recommends closure of the S. Idaho ingress to the neighborhood due to issues with metering lights and redirection of traffic.)	<ul style="list-style-type: none"> ➤ Install cul-de-sac on S. Idaho Street at E. 4th Avenue to reduce cut-through traffic to and from E. 4th Avenue. Project will require Caltrans permit and approval. Project will be coordinated with existing street project on E. 4th Avenue pending Caltrans approval timeline. Project funding will be requested through the Capital Improvement Program. 	Measure S (TBD)	\$150,000 capital & \$15,000 staff (one-time)
10	Sunnybrae Elementary	Roadway Conduct (TFSC recommends applying for Safe Routes to School program within a 1 mile radius of Sunnybrae Elementary to increase pedestrian safety.)	<ul style="list-style-type: none"> ➤ City has applied and received grant funding for a Safe Routes to School project scheduled to begin construction in Spring 2017. Proposed improvements include: <ul style="list-style-type: none"> ➤ 10th Avenue/S. Delaware Street – pedestrian refuge, rectangular rapid-flashing beacon, high-visibility crosswalk ➤ Birch Avenue/S. Delaware Street – bulb-outs, high-visibility crosswalks ➤ W. Grant Place – bulb-outs at school entrance ➤ No further action required at this time. 	-	\$0

Funding Summary:

- \$642,500 - Staff and Study Costs: Includes one-time cost for analysis and evaluation
- \$7,086,000 - Capital Costs: Includes construction costs such as traffic signal improvements and sign installations
- \$30,000 – Annual Costs: Includes on-going costs for pedestrian lighting maintenance and PG&E, as well as targeted or strategic police enforcement