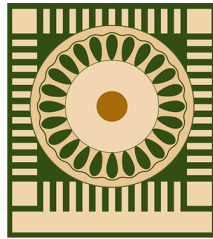


CITY OF HAYWARD

Hayward City Hall
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HEART OF THE BAY

Agenda

Wednesday, May 23, 2018

4:00 PM

Conference Room 2A

Council Infrastructure Committee

CALL TO ORDER**PLEDGE OF ALLEGIANCE****ROLL CALL****PUBLIC COMMENTS:**

(The Public Comment section provides an opportunity to address the City Council Committee on items not listed on the agenda as well as items on the agenda. The Committee welcomes your comments and requests that speakers present their remarks in a respectful manner, within established time limits, and focus on issues which directly affect the City or are within the jurisdiction of the City. As the Committee is prohibited by State law from discussing items not listed on the agenda, any comments on items not on the agenda will be taken under consideration without Committee discussion and may be referred to staff.)

REPORTS/ACTION ITEMS

1. [RPT 18-098](#) Mission Boulevard Corridor Improvements Phase 3 Project Update

 Attachments: [Attachment I Staff Report](#)
2. [RPT 18-096](#) Neighborhood Traffic Calming Program Update

 Attachments: [Attachment I Staff Report](#)
 [Attachment II NTCP Summary](#)
3. [RPT 18-099](#) FY 2018 and FY 2019 New Sidewalks Project - Review of Muir Street Issues

 Attachments: [Attachment I Staff Report](#)
 [Attachment II Muir St Petition](#)
 [Attachment III Muir St Photos](#)
4. Update on CIP Project(s) (Oral Report)

FUTURE AGENDA ITEMS**COMMITTEE MEMBER/STAFF ANNOUNCEMENTS AND REFERRALS****ADJOURNMENT**



CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
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File #: RPT 18-098

DATE: May 23, 2018

TO: Council Infrastructure Committee

FROM: Interim Director of Public Works

SUBJECT

Mission Boulevard Corridor Improvements Phase 3 Project Update

RECOMMENDATION

That the Committee comments on the design for the Mission Boulevard Corridor Improvements Phase 3 Project.

SUMMARY

During the January 24, 2018, Council Infrastructure Committee (CIC) meeting, staff provided an update on the Mission Boulevard Corridor Improvements Phase 3 Project. Given the limited available right-of-way the design incorporated bike lane sharing a travel lane. An alternative was also presented to provide bike facilities off Mission Boulevard on adjacent parallel streets. The Committee was not in favor of either design and asked that additional studies and considerations be made to include separate bike lanes on Mission Boulevard, including limiting travel lanes to one in each direction, plus a turn lane at intersections. Staff has analyzed that alternative and developed additional ones for the Committee's consideration.

ATTACHMENTS

Attachment I Staff Report



DATE: May 23, 2018

TO: Council Infrastructure Committee

FROM: Interim Director of Public Works

SUBJECT: Mission Boulevard Corridor Improvements Phase 3 Project Update

RECOMMENDATION

That the Committee comments on the design for the Mission Boulevard Corridor Improvements Phase 3 Project.

SUMMARY

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BACKGROUND

On November 27, 2007, Council approved Phase 1 of the Route 238 Corridor Improvement Project, which covered roadway and street improvements on Mission Boulevard from A Street to Industrial Parkway and Foothill Boulevard from Mission Boulevard to Apple Avenue and certified the Final Environmental Impact Report (FEIR) for the project. Subsequently, Caltrans relinquished portions of State Routes 92, 185, and 238 to the City within the Phase 1 project limits. During relinquishment discussions, the City and Caltrans agreed that Caltrans would relinquish, and the City would accept, a majority of the remaining state highways within City boundaries after the Phase 1 project was completed, and after sufficient Local Area Transportation Improvement Program (LATIP) funding became available to improve these additional highway segments. Construction of the Phase 1 project was completed in January 2014. LATIP funds totaling \$30 million were approved by the California Transportation Commission (CTC) for use on the project. The CTC allocated \$8.1 million of this amount for project expenses, and subsequently \$2 million for the design of Phase 2 and 3. Phases 2 and 3 are a continuation of the Phase 1 project. Phases 2 and 3 will improve Mission Boulevard from

Industrial Parkway to the south City limit near Blanche Street, and from A Street to the north City limit at Rose Street, respectively.

At the CTC meeting on October 19, 2017, the remaining \$19.9 million was allocated for the construction of Phase 2, and for Adaptive Signal Timing on Jackson Street. At that meeting, the CTC relinquished the remaining portions of State Routes 238 (Mission Boulevard from Industrial Parkway to south City limit), 92 (Jackson Street from Atherton Street to Santa Clara Street), and 185 (Mission Boulevard from A Street to north City limit).

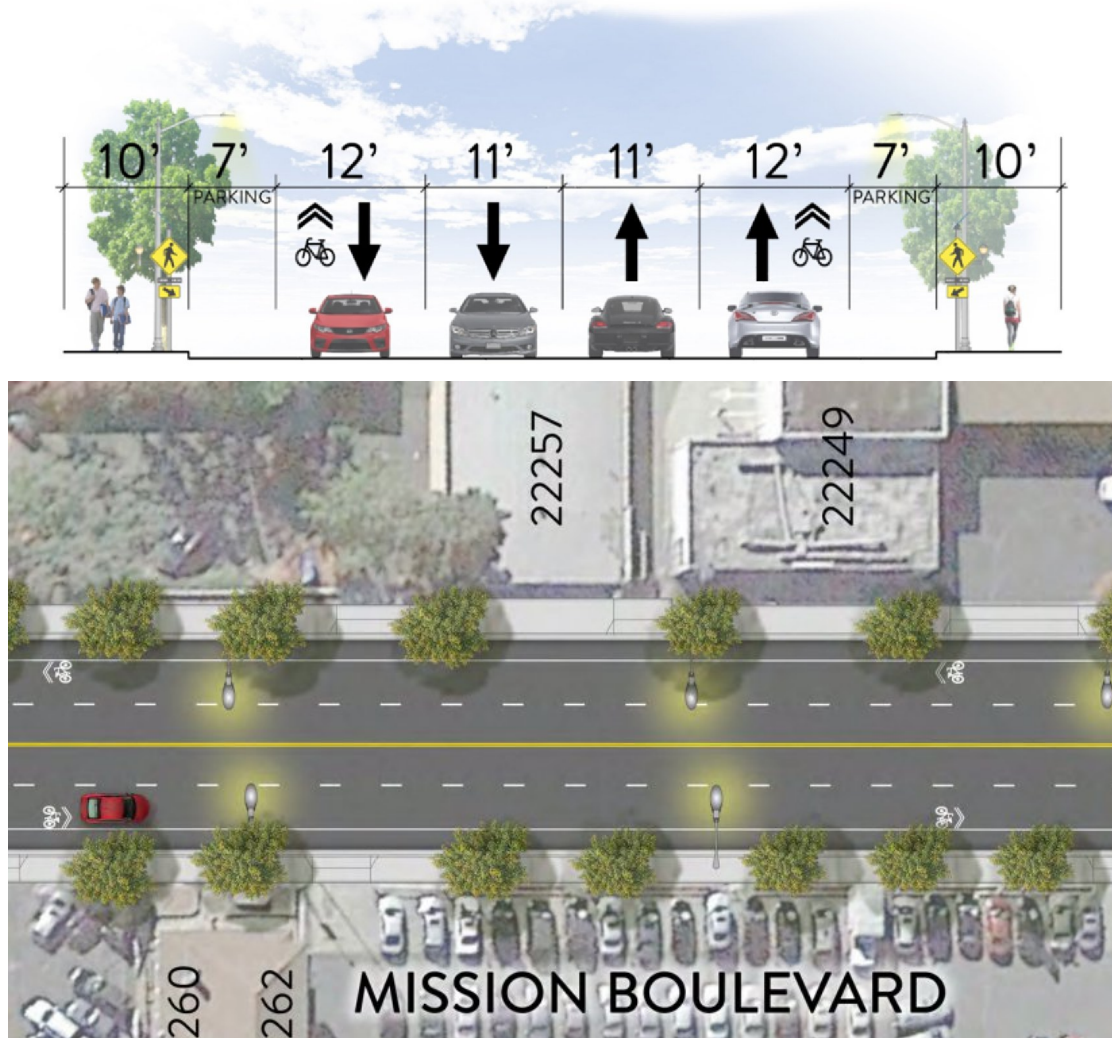
On October 28, 2014, Council approved an agreement with BKF Engineers for professional services to begin design work for Phase 2 and initiate preliminary designs for Phase 3. The design of Phases 2 and 3 incorporate the Council's Complete Streets policy with infrastructure to make safe and convenient travel along and across Mission Boulevard for all users, including pedestrians, bicyclists, transit users, and motorists.

Since design work began, the project has proceeded through several phases including design completion, bid document preparation for Phase 2, and 35% design completion for Phase 3 by BKF Engineers. On April 11, 2017, Council approved an agreement with Mark Thomas & Company, Inc., for professional services to complete the design for Phase 3. This report focuses on the Phase 3 Improvement project.

On January 24, 2018, staff presented the 65% plans for the Phase 3 improvements. These included the following:

- Reconstruction of existing sidewalks, curbs and gutters, valley gutters, and driveways that are in poor condition or deficient
- New street trees in between the curb and sidewalk
- Adjust existing driveways to conform to the new sidewalks, curbs, and gutters
- Adjust pavement, modify, and add new storm drain inlets to improve drainage
- Rehabilitate existing pavement using Cold In-place Recycling (CIR), and a new pavement overlay (CIR method reuses the existing pavement as base material thereby conserving new raw material resources and reducing greenhouse gases with reduced hauling)
- Upgrade intersections to comply with the latest ADA accessibility standards
- Upgrade existing traffic signal at Sunset Boulevard with Adaptive Traffic Management System technology to improve signal timing by adapting to traffic conditions in real time
- New signage and relocation of bus stops
- New fiber optic lines within the project limits
- New LED and dimmable street lighting
- Undergrounding of existing overhead utility lines
- Lane widening for shared use with bicyclists
- Improve crosswalks at uncontrolled crossings with bulb outs and flashing beacons
- New gateway entry features at Rose Street

The typical section of the 65% plans shown below made accommodations to all users. The configuration for each direction on Mission Boulevard provided 10-foot wide sidewalk, 7-foot wide parking, 12-foot wide shared lane for motorist, and bicyclists and a 11-foot wide lane. The 12-foot shared lane is not ideal due to potential conflict between buses and bicyclists. Mission Boulevard is constricted by an 80-foot right-of-way making the integration of bike lanes difficult unless space is taken from another user. Presently, the sidewalk is approximately 10-feet wide, which is appropriate for a major corridor with businesses.



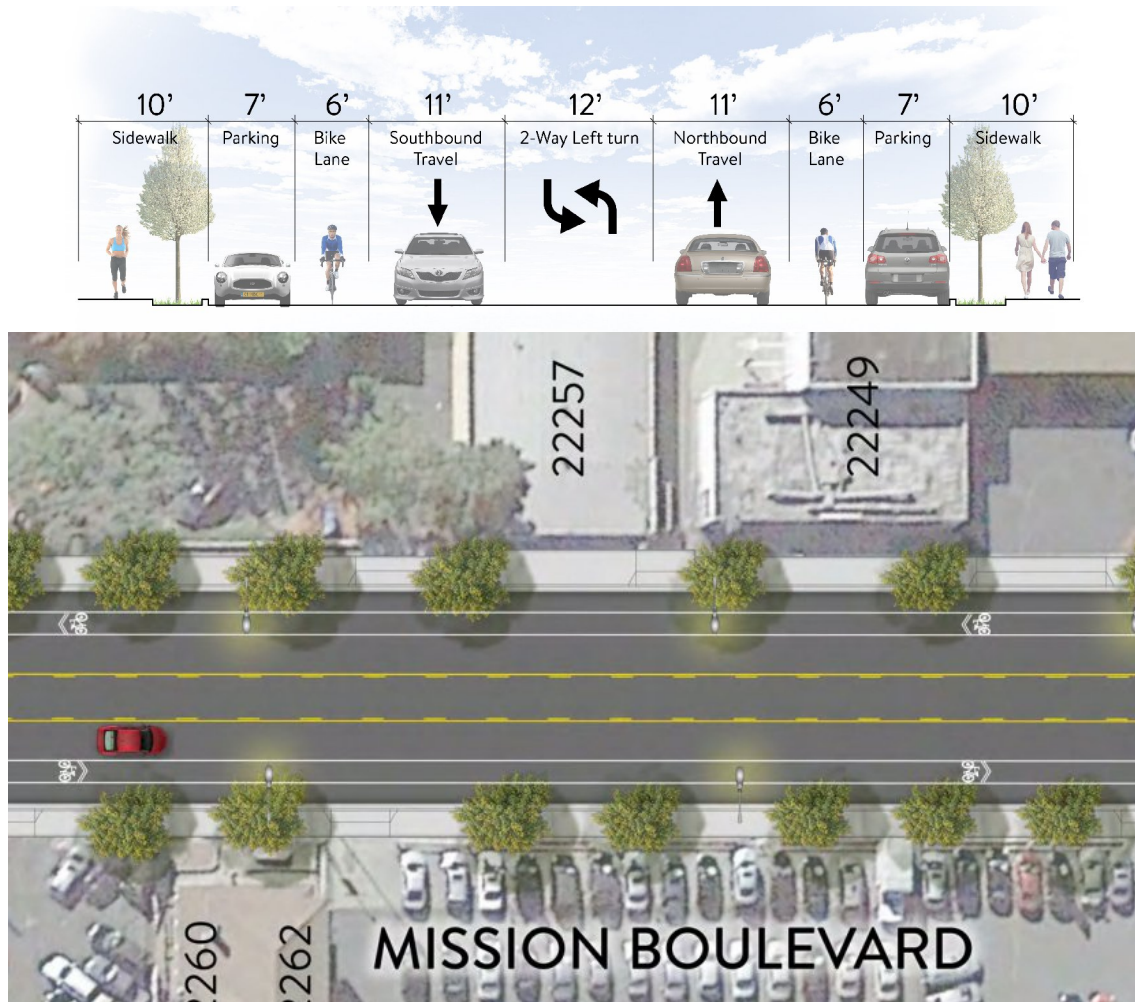
A design consideration was to route bike facilities off Mission Boulevard to parallel streets of Main and Montgomery; however, the Committee's desire was for this project to be a Complete Streets project, with bike facilities provided on Mission Boulevard. The Committee suggested that staff explore the idea of a single travel lane in each direction with turn lanes at intersections, along with a separate bike lane, and parking on each side.

DISCUSSION

Staff has developed this and other design options to provide a separate bike lane on Mission Boulevard for the Committee's consideration.

Alternative 1: Reducing motorist travel lane from two to one in each direction

This option would change the number of travel lanes from two lanes to one lane in each direction with a middle, two-way left turn lane, and would allow space for 6-foot bike lanes shown below. On-street parking and generally 10-foot wide sidewalks on both sides will be maintained, much like the existing conditions.



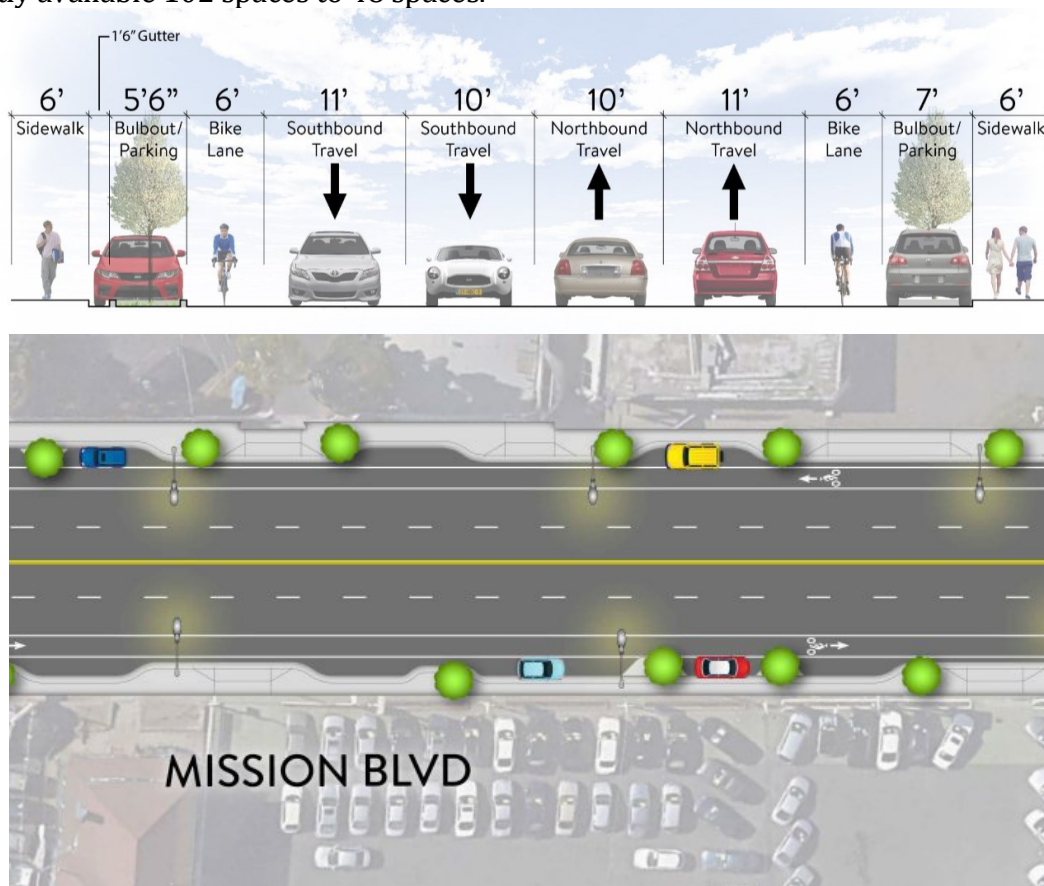
To assess the impacts of reducing the travel lanes from two to one, traffic volume counts and analysis of the impacts to the roadway network around the project limits were performed by a consultant for an independent evaluation on the following:

- 1) Existing Conditions (two travel lanes in each direction)
- 2) Existing plus Project Conditions (one travel lane in each direction)
- 3) Projected 2040-year traffic demands with existing conditions
- 4) Projected 2040-year traffic demands with Project Conditions

Based on the analysis conducted for the four scenarios, the study demonstrated that the level of service at intersections for Scenarios 1 and 2 were acceptable; however, further traffic simulations were performed for scenarios 2, 3, and 4. Congestion would significantly increase for Scenarios 2, 3, and 4. Under these scenarios, Mission Boulevard would experience substantial queueing and higher delays during commute hours. In addition, side streets, such as Peralta and Montgomery would also see an increase in neighborhood cut-through traffic, queueing, and delays.

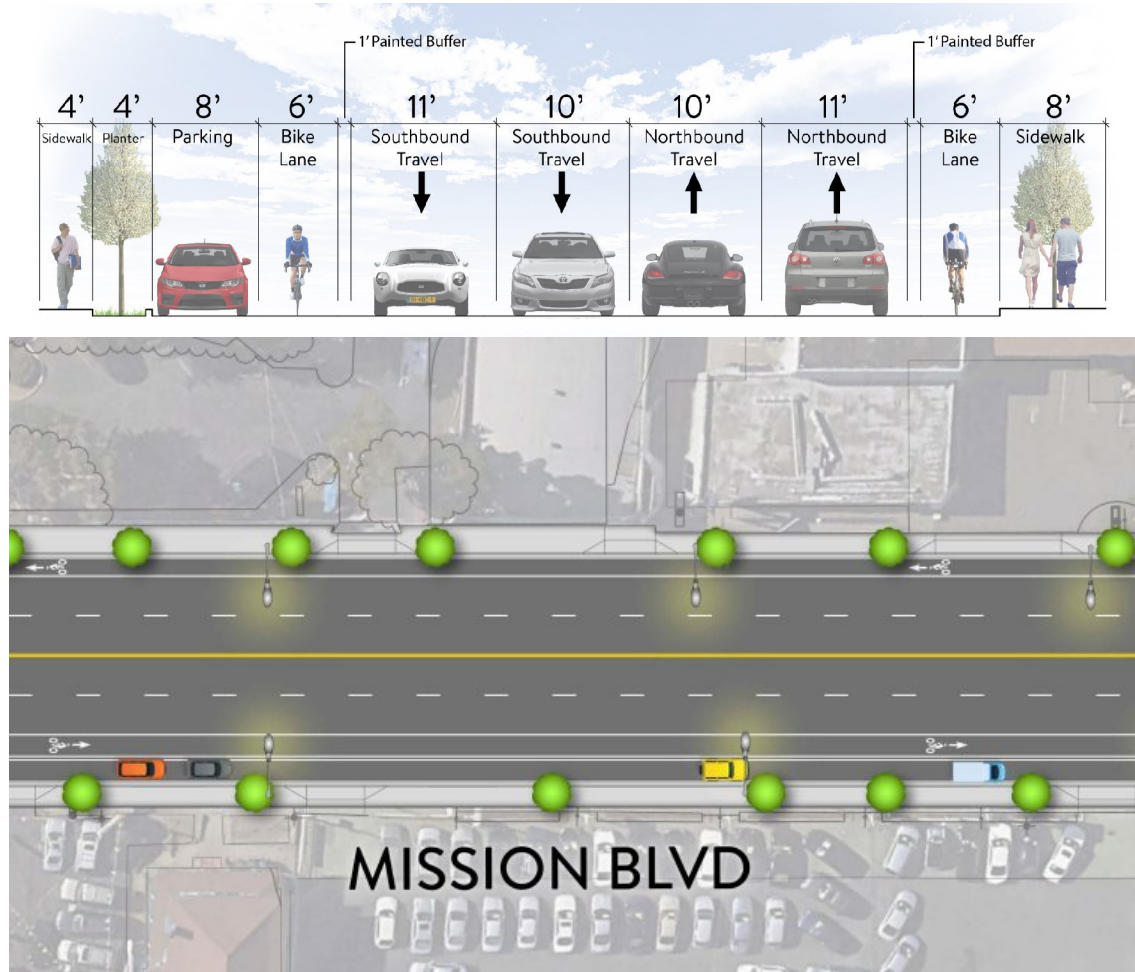
Alternative 2: Maintain 2-lanes motorist travel with 6-foot wide sidewalk

This alternative would keep bike lanes on Mission Boulevard within the 80-foot right-of-way by providing 6-foot wide sidewalks and 6-foot bike lanes as shown in the section below. While the minimum width of bike lanes is 5-feet, 6-foot wide bike lanes provide bicyclists the added safety from parked cars which is requested by Bike East Bay. The outside travel lane of 11-feet is necessary and requested by AC Transit since Mission Boulevard is a bus and truck route. Six-foot-wide sidewalks would not allow enough width to plant trees within the sidewalk area, so some trees would be planted in detached bulb out tree wells. The bulb out tree wells would take space away from on street parking. Alternative 2 accommodates parking on both sides of Mission Boulevard; however, it reduces the number of on street parking from the currently available 102 spaces to 48 spaces.



Alternative 3: Maintain 2-lanes motorist travel with 8-foot wide sidewalk

One of the disadvantages to Alternative 2 is the 6-foot wide sidewalk. For this section of Mission Boulevard with buildings that accommodate retail, restaurant, office, and residential uses, wider sidewalk may be desirable. Alternative 3 provides 8-foot wide sidewalks with trees planted within the sidewalk area. To accommodate this added width, parking is restricted to one side and alternates from block to block. Alternative 3 reduces the number of on street parking spaces to 50. Note that the width of the parking is 8-feet, and an additional 1-foot painted buffer is intended to provide added safety for bicyclists.



Each of the alternatives has its own advantages and disadvantages. Below is a summary of the benefits of the alternatives from the stakeholders' perspective. As examples, the alternatives with wider sidewalks would be beneficial to pedestrians and transit users. Bicyclists would benefit from alternatives with separate bike lanes.

	Stakeholder Benefit				
Alternative	Pedestrian	Bicyclist	Transit Users	Motorist	Businesses
Base	Better	Worse	Better	Better	Better
1 (one lane)	Better	Better	Better	Worse	Worse
2 (6' SW)	Worse	Better	Worse	Better	Worse
3 (8' SW)	Neutral	Better	Neutral	Better	Neutral

In addition to stakeholders, there are other factors to consider. Below is a summary of other benefits to each alternative.

	Other Benefit					
Alternative	Safety (bus/bike conflicts)	Traffic Handling Capacity	On-Street Parking	Impact to Local Streets	Street Trees	Street Furniture
Base	Worse	Better	Better	Better	Better	Better
1 (one lane)	Better	Worse	Better	Worse	Better	Better
2 (6' SW)	Better	Better	Worse	Better	Neutral	Worse
3 (8' SW)	Better	Better	Worse	Better	Better	Neutral

ECONOMIC IMPACT

When completed, this improvement project will make it easier for residents and visitors to walk, bike, drive, or take transit to their destinations which may help stimulate the local economy. Each of the alternatives may have different impacts to businesses. The Base and Alternative 3 with wider 8 to 10-foot sidewalk will allow space for street furniture and potential outdoor dining. The Base and Alternative 1 keep on-street parking in its current condition and will not have a negative impact to businesses. The reduction of on-street parking for Alternatives 2 and 3 is substantial and may have an impact on businesses along the project. The design will take this into consideration to maximize the number of spaces to the extent possible.

FISCAL IMPACT

Phases 2 and 3 will be funded by LATIP funds, matching funds from Measure BB and Rule 20A allocations for Underground District Nos. 29 and 30. The estimated funding breakdown is as follows:

Funding Source	Amount
LATIP	\$21,900,000
ACTC	\$19,500,000
Rule 20A	\$1,580,000 ¹
Total	\$42,980,000

¹ * The City's current Rule 20A allocation is \$2,900,000. An estimated 50% of this allocation is available for City costs to construct the joint utility trench with conduit and utility boxes. An estimated 50% will be used by PG&E for the wire, transformers and other equipment costs for materials and installation. Another estimated \$130,000 will be contributed by Comcast for their share of the joint trench cost.

The estimated project costs are as follows:

Phase 2	Estimated Cost
Design	\$2,557,384
Utility Undergrounding	\$2,000,000
Construction (including ACO & PLA/CWA)	\$24,942,616
Construction Admin, Inspection, Testing	\$3,000,000
Phase 2 Project Total	\$32,500,000

Phase 3	Estimated Cost
Design	\$1,000,000
Utility Undergrounding	\$5,000,000
Construction	\$8,000,000
Construction Admin, Inspection, Testing	\$1,000,000
PLA/CWA	\$500,000
Phase 3 Project Total	\$15,500,000

Phase 2 and 3 Project Total	\$48,000,000
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When the alternative is selected and refined, an updated cost estimate will be provided for Phase 3 with the next phase of design, and ultimately when the Phase 3 project receives construction bids.

STRATEGIC INITIATIVES

This agenda item supports the Complete Streets Strategic Initiative. The purpose of the Complete Streets initiative is to build streets that are safe, comfortable, and convenient for everyone regardless of age or ability, including motorists, pedestrians, bicyclists and public transportation riders. This item supports the following goals and objectives:

Goal 1: Prioritize safety for all modes of travel.

Objective 3: Ensure that roadway construction include complete streets elements.

Goal 2: Provide Complete Streets that balance the diverse needs of users of the public right-of-way.

Objective 1: Increase walking, biking, transit usage, carpooling and other sustainable modes of transportation by designing and retrofitting streets to accommodate all modes.

SUSTAINABILITY FEATURES

1. Water:

The project includes the installation of drought tolerant plants to reduce water usage.

2. Environment:

This project has implemented Bay-Friendly Landscaping techniques to use native and climate appropriate plants for the median islands and sidewalk planters. The project will be reviewed for Bay-Friendly certification after the project design is complete. Permeable pavers will also be used to treat storm water runoff from the sidewalk and filter pollution from the storm water before entering the San Francisco Bay. This project will use Cold In-place Recycling (CIR) to rehabilitate the pavement.

This project includes bike lanes which may encourage residents and visitors to ride bikes as an alternative mode of transportation.

3. Energy:

This project includes street lights with energy efficient LED lighting and dimming features to provide electricity and maintenance cost savings.

PUBLIC CONTACT

The first community meeting for Phase 3 was held on October 12, 2016. During that meeting, a few business owners preferred that little to no trees be planted due to business sign blockage and difficult egress from their businesses. The location of the new trees will take business signs, sight distances, and egress concerns into consideration.

The community in the Downtown and Prospect Hill neighborhoods were invited to attend the project update meeting on January 24, 2018. An attendee had concerns with safety for bicyclists on the shared bicyclist/motorist lane, especially since Mission Boulevard is a bus route. These alternatives addressed this concern.

Staff will invite the community and businesses to discuss the proposed designs and provide their feedback.

NEXT STEPS

The following is the tentative schedule for this project:

Complete Design	January 2019
Begin Construction	July 2019
Complete Construction	May 2020

This schedule is highly dependent on the responsiveness of the utility companies, such as PG&E and AT&T to provide the necessary support in a timely fashion since Rule 20B undergrounding design is performed by the utility companies.

Maintaining this schedule would facilitate the advertising of the project during the winter when the City is more likely to receive better bids.

Following this meeting, staff will incorporate Committee's comments, and will conduct a community meeting. Staff may return to the Committee for an update. Ultimately, if an alternative is recommended for approval, staff will go before Council for the approval of plans and specifications and call for construction bids.

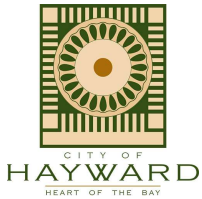
Prepared by: Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Interim Director of Public Works

Approved by:

A handwritten signature in black ink, appearing to read 'K. McAdoo', is positioned above a horizontal line.

Kelly McAdoo, City Manager



CITY OF HAYWARD

Hayward City Hall
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File #: RPT 18-096

DATE: May 23, 2018

TO: Council Infrastructure Committee

FROM: Interim Director of Public Works

SUBJECT

Neighborhood Traffic Calming Program Update

RECOMMENDATION

That Council reviews and comments on the recommended strategies and policies for the proposed Neighborhood Traffic Calming Program (NTCP).

SUMMARY

The proposed NTCP provides a robust and comprehensive approach to address neighborhood traffic safety concerns. By utilizing this comprehensive approach, staff can address the concerns with the most effective and least intrusive solutions first and employ other tactics and tools when appropriate.

In September 2016, prior to the formation of the Council Infrastructure Committee (CIC), the NTCP was discussed before the City Council in a work session. Council was generally in favor of the program. Given the extensive time gap, staff is bringing this item to CIC for the Committee's review and comment before the item is scheduled on the City Council agenda later this year for adoption.

ATTACHMENTS

Attachment I	Staff Report
Attachment II	NTCP Summary



DATE: May 23, 2018

TO: Council Infrastructure Committee

FROM: Interim Director of Public Works

SUBJECT: Neighborhood Traffic Calming Program Update

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BACKGROUND

Hayward residents frequently voice traffic safety concerns to staff and elected officials. Speeding through residential neighborhoods, cut-through traffic, and bicycle and pedestrian safety continues to be sources of concern for the community. Although City staff continues to address these issues, the lack of a comprehensive traffic calming program has resulted in an uneven approach in implementing traffic calming strategies. In the absence of a broad range of policies, residents have typically requested the installation of speed lumps, STOP signs or police enforcement, some of which are not necessarily warranted, practical or effective. To overcome these issues, the NTCP was developed. The NTCP will provide a well-defined toolbox to effectively utilize the most appropriate solutions combined with flexible policies to better address neighborhood traffic calming concerns.

The purpose of the program is to develop a guide for City staff, elected officials and residents to become acclimated with the policies and procedures for the successful implementation of traffic calming strategies, evaluation and prioritization criteria and processes that will benefit Hayward residents and businesses.

DISCUSSION

A comprehensive NTCP can bring added value to the City, including fulfilling its overall transportation vision and priorities as outlined in various planning documents and City Council directives. This proposed program is supportive of the Mobility element M-4.7 (Neighborhood Traffic Calming) and M-10 (Traffic Calming Measures) of the City's 2040 General Plan. Implementation of a NTCP would bring numerous benefits that include improved driver awareness and attention, modified driver behavior to achieve long term benefits, enhanced safety for all users; auto, transit, bicyclist and pedestrians and enhanced livability of residential neighborhoods.

To eliminate inconsistencies in the application of traffic calming strategies, the NTCP is formulated based on a collaborative approach of extensive public outreach and benchmarking (i.e. a comparative assessment of other cities in the Bay Area with similar programs). A well-crafted NTCP and active engagement of neighborhoods are key to documenting traffic related problems and jointly developing solutions that benefit a community minimizing the risk of creating unintended consequences. One primary objective of the program is to help mitigate the City's traffic related issues by developing a robust traffic calming toolbox that will assist in addressing the community's concerns.

A comprehensive summary of the NTCP was developed to provide the community with information about key policies, procedures, implementation processes, and the types of measures considered to address various issues. This document will be published online and made available to the public once adopted by Council.

Key development goals of the NTCP are:

- Utilize a four "E's" approach – Education, Empowerment, Enforcement and Engineering to expand the available strategies to address traffic calming concerns
- Formulate effective policies that can be applied consistently throughout the City while reviewing traffic related concerns, and making necessary improvements
- Develop a systematic process to prioritize allocation of limited City funds to traffic calming improvements
- Address traffic safety concerns with the most effective and least intrusive solutions first and seek out costlier and more disruptive physical improvements only when appropriate through a tiered approach.

Four “E’s” Of Traffic Calming:

In the early days of traffic calming programs, agencies were narrowly focused on Engineering solutions. Over time, additional strategies were tried, tested and implemented. These concepts included Education, Enforcement, and Empowerment as detailed in the City’s proposed NTCP, and briefly discussed below:

Education: The intent of this component is to educate the community to safely use public streets and enjoy their travel experience. It is also intended to inform the public of the pros and cons of various traffic calming devices, their applicability, and associated impacts and costs. In the next five years, it is anticipated that the City would adopt a Street Smarts program, which is a traffic safety campaign whose primary goal is to educate drivers, bicyclists, and pedestrians on issues related to traffic safety through outreach programs.

Enforcement: The NTCP provides options for enforcement to ensure that effective deployment of resources continues in a collaborative manner. The program explores various enforcement strategies while remaining fully cognizant of the effectiveness, resource constraints, and the public image of enforcement efforts. The issuance of warning citations, targeted enforcement and the utilization of radar speed trailers are specific examples.

Engineering: Engineering solutions would include physical improvements, roadway diet strategies (i.e. lane narrowing), signage and physical improvements. Pros and cons of each strategy along with an approximate cost range, as well as a thorough description of the evaluation process and project prioritization criteria will be provided as part of the overall program.

Empowerment: While traditional traffic calming strategies rely heavily on “Three E’s”, the fourth “E” (Empowerment) has proven to be far more effective and the least expensive. The NTCP recommends effective public empowerment strategies where community members take an active role in solving neighborhood traffic related problems, such as the PACE car program that allows residents/communities to commit to driving the speed limit. This fourth “E” can also provide residents with the tools necessary to conduct safety education workshops and meetings in their neighborhood without the City’s direct participation.

Implementation Process:

The NTCP aims to address traffic and safety related concerns through collaborative partnership with the community. Hayward citizens are active and well engaged in various City services and programs. Staff will continue to accept traffic related concerns from the community and will conduct necessary field reviews, complete investigations, receive community feedback, design improvements, and identify funding for necessary improvements. A formal petition process is proposed in key stages of the implementation process to garner the support of the neighborhood. The draft NTCP implementation process

flow chart included in Attachment II is intended to provide a clear, graphical representation so that the public can clearly understand the process. The key steps of the proposed process are described below.

Identification of Solutions:

The NTCP proposes a three-tier system to classify problematic traffic conditions and associated remedies. Each tier incorporates elements of one or more of the 4E's. Through this system, traffic safety observations made by the public are assessed and assigned a level of severity. A three-tier system allows for implementation of traffic calming measures in a timely manner, allowing problems to be resolved with routine solutions. When dealing with more complex issues, the process allows for effective management and allocation of resources by prioritizing project areas.

The traffic safety solutions are presented in three tiers:

- Tier I – Low-cost improvements that require little or no engineering design and construction (i.e., edgeline/centerline striping).
- Tier II – Improvements that require some engineering analysis, design, and construction (i.e., flashing beacons).
- Tier III – Requires extensive analysis, design, community outreach, and funding (i.e., traffic circles).

Tier I measures can be quickly implemented, cost-effective and promote awareness while Tiers II and III measures involve comprehensive analysis and design. By utilizing this broader approach, the City intends to begin addressing traffic calming concerns with the most effective and least intrusive solution first, such as Tier I, and seek out more costly improvements only when appropriate and feasible, such as Tier II and Tier III.

Prioritization:

The City has limited financial and staff resources, and the number of requests for improvements far exceeds the number of projects that can be funded and accomplished in a given year. Therefore, the goal of the program is to seek out low-cost/high-return improvements and maximize the use of available resources before implementing high-cost alternatives. Establishing a project priority list is essential to allocating resources more appropriately. The NTCP outlines a priority system that places heavy emphasis on speeds, accidents, volumes, schools, and pedestrian generators pertinent to traffic calming. With a prioritization system, the City can budget funding more efficiently and provide improvements at the most needed locations.

ECONOMIC IMPACT

The action taken for this agenda report will not result in physical development, purchase or service. Any physical work will depend upon future Council action.

FISCAL IMPACT

In the past several years, the City's total budget for traffic calming ranged from \$130,000 to \$140,000. Unfortunately, requests far outpaced the available resources needed to address each potential improvement. While this program provides a well-defined set of traffic calming measures, it can only be as successful as the level of funding that is allocated to it. The NTCP outlines several methods proposed to help reduce the on-going funding challenges. Those methods may include:

- *CIP Budget*: Increase funding for traffic calming so that more projects on the priority list can be accommodated in a timelier fashion.
- *Grants*: Regional and state transportation agencies may have grant programs that support traffic calming and neighborhood vitalization efforts. For example: Metropolitan Transportation Commission's (MTC) Transportation for Livable Communities (TLC) Program provides funding for eligible community-driven projects that benefit broader neighborhoods (not one or two blocks). These funds, however, are not guaranteed and require a minimum of one year's lead time to realize.
- *Community Funding/Public Private Partnerships*: Public Agencies are exploring the option of community funded projects. Some agencies do not require but encourage community participation to fully or partially fund traffic calming projects.

Although additional funding will make the NTCP more effective, no level of funding will eliminate speeding in any community. The goal of the NTCP is to mitigate this behavior where possible.

STRATEGIC INITIATIVES

This agenda item supports the Complete Streets Strategic Initiative. The purpose of the Complete Streets initiative is to build streets that are safe, comfortable, and convenient for travel for everyone, regardless of age or ability, including motorists, pedestrians, bicyclists, and public transportation riders. This item supports the following goal and objective:

Goal 2: Balance the diverse needs of users of the public right-of-way.

Objective 1: Increase walking, biking, transit usage, carpooling, and other sustainable modes of transportation by designing and retrofitting streets to accommodate all modes.

SUSTAINABILITY FEATURES

The project will provide for complete streets that balance the diverse needs of users of the public right-of-way by reducing speeds and fostering a pedestrian and bicycle friendly environment.

PUBLIC CONTACT

Active engagement of the community was deemed to be an invaluable component in the overall development of the NTCP. In addition to the ongoing feedback received through the City's existing community involvement mechanisms, staff held two well-attended community workshops in October 2015 (at City Hall) and November 2015 (at Matt Jimenez Community Center). In these meetings, residents reiterated their concerns regarding speeding and pedestrian safety, while expressing their appreciation for the City starting this study.

Staff presented the draft NTCP to Council on September 20, 2016. Council members were in general agreement with the proposed NTCP policies. Minor changes to prioritizing criteria were made based on Council recommendations.

In anticipation of the adoption of the NTCP, staff has conducted experiments based on Lean Innovation principles utilizing the components of this program to gauge feedback from the community and overall effectiveness of the proposed program. During this period, staff implemented a tiered approach to the community's traffic safety concerns. Using this approach, staff addressed numerous speeding and traffic safety concerns.

NEXT STEPS

Following receipt of feedback from the committee, staff will incorporate the recommendations in a final NTCP and present to Council for adoption in June 2018.

Prepared by: Fred Kelley, Transportation Manager

Recommended by: Alex Ameri, Interim Director of Public Works

Approved by:



Kelly McAdoo, City Manager

City of Hayward Neighborhood Traffic Calming Program Summary



September 2016



This summary provides key information you need
to get a full understanding of Hayward's
Neighborhood Traffic Calming Program (NTCP)

Angled parking and corner bulbouts at B Street and Mission Boulevard



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Petition & Application	25

Traffic circle at Orchard Avenue and Joyce Street



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High visibility crosswalk on B Street

WHAT IS NTCP?

The City of Hayward has developed its first comprehensive Neighborhood Traffic Calming Program that will provide a well-defined toolkit to utilize the most proper and effective solutions with community outreach and collaboration. This document is developed as a guide for the City Staff, elected officials and residents to become acclimated to the policies and procedures for successful implementation of traffic calming solutions that will benefit Hayward residents and businesses with a variety of traffic safety related concerns.

Traffic calming involves strategies and solutions that may reduce vehicular speeds and cut through traffic; improve safety for all users, and enhance quality of life for residents in City's the neighborhoods. The Program will benefit the City in various perspectives, including:

- Improve driver attention and awareness, and attempt to change driving behavior that brings long term benefits
- Enhance safety for all users – auto, transit, bicyclists, and pedestrians
- Encourage non-auto modes of transportation such as walking and bicycling
- Encourage citizen involvement with neighborhood traffic management in the City
- Provide a fair and consistent process to address public concerns about speeding
- Enhance livability of residential neighborhoods

THE FOUR E'S

The Program explores traffic calming strategies and solutions in the four categories – Education, Empowerment, Enforcement, and Engineering.

- **Education** – Strategies and solutions through a variety of educational events and materials to convey the importance of neighborhood traffic safety, such as the Street Smart Program.
- **Empowerment** – Strategies involve community members to take initiative in solving traffic related problems.
- **Enforcement** – Solutions involve compliance of traffic regulation and enforcing violated traffic activities.
- **Engineering** – Physical improvements on street configurations, signage improvements, and other special treatments.



Speed lumps on Belmont Avenue.

THE THREE TIERS

The traffic calming solutions are presented in three Tiers:

- **Tier I** – Low-cost improvements that require little or no engineering design and construction.
- **Tier II** – Improvements that require some engineering analysis, design, and construction.
- **Tier III** – Requires extensive analysis, design, community outreach, and funding.

Detailed traffic calming measures and their evaluation thresholds are provided in this document starting from **Page 5**.

ROLES AND RESPONSIBILITIES

The City

The City is responsible for maintaining a transportation system that provides safe access for various travel modes. The City's Public Works - Engineering and Transportation Department will continue to accept traffic related concerns from the community and utilize the most appropriate approaches identified in this document.

The Community

The Community acts as the informant to the City, sharing any traffic related issues and concerns that negatively affect their safety, comfort, and livability. To make this program successful, it is important that the community becomes more engaged in understanding the traffic calming issues and identifying solutions that are beneficial to the community, without negatively impacting other neighborhoods within the City.

IDENTIFICATION OF SOLUTIONS

Public Works staff identifies all potential solutions upon receipt of a complaint. The problem is filtered by severity into one of the three available tiers of solutions (Tier I, Tier II or Tier III). The screening process is the first step for any traffic safety concern, as it will determine what types of strategies are available to remedy the problem and the level of community engagement.

The easily addressed and simple solutions are included in Tier I, where solutions are low-cost and do not require extensive data collection, analysis, design or community engagement. Tier II and III strategies are implemented where Tier I solutions are not likely to be effective. Such strategies require additional data collection, engineering analysis, design, community engagement, petitions, etc. Typically, Tier II and III solutions require much higher staffing resources and funding, and take longer from project inception to completion. Such solutions may also provide benefits that last for longer duration than most Tier I improvements.



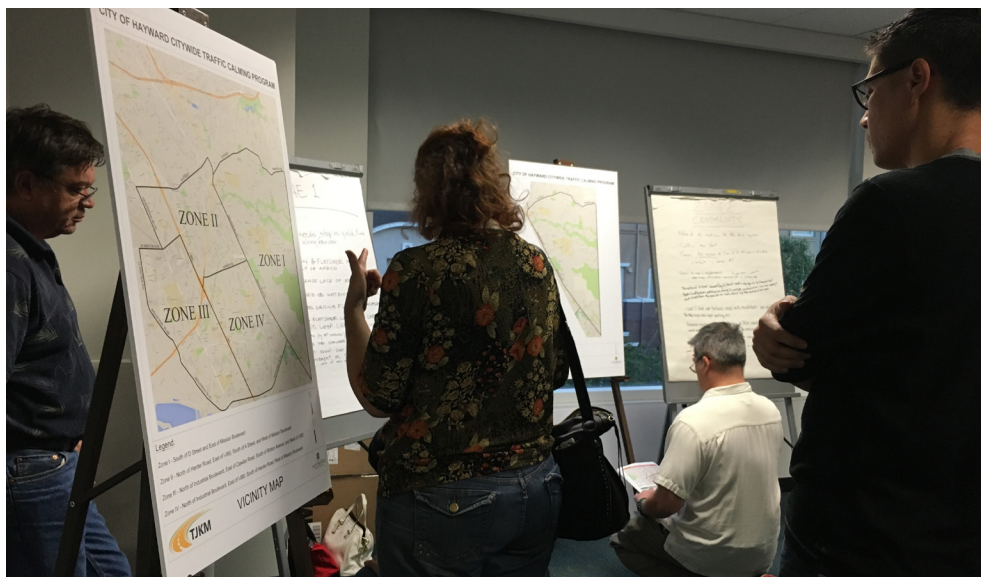
Corner bulbouts on Dixon Street and Valle Vista Avenue.

City of Hayward Neighborhood Traffic Calming Program Summary

COMMUNITY ENGAGEMENT AND SUPPORT

A complete petition process is developed to standardize traffic calming implementation procedures to make City's long-term administration efficient and systematic.

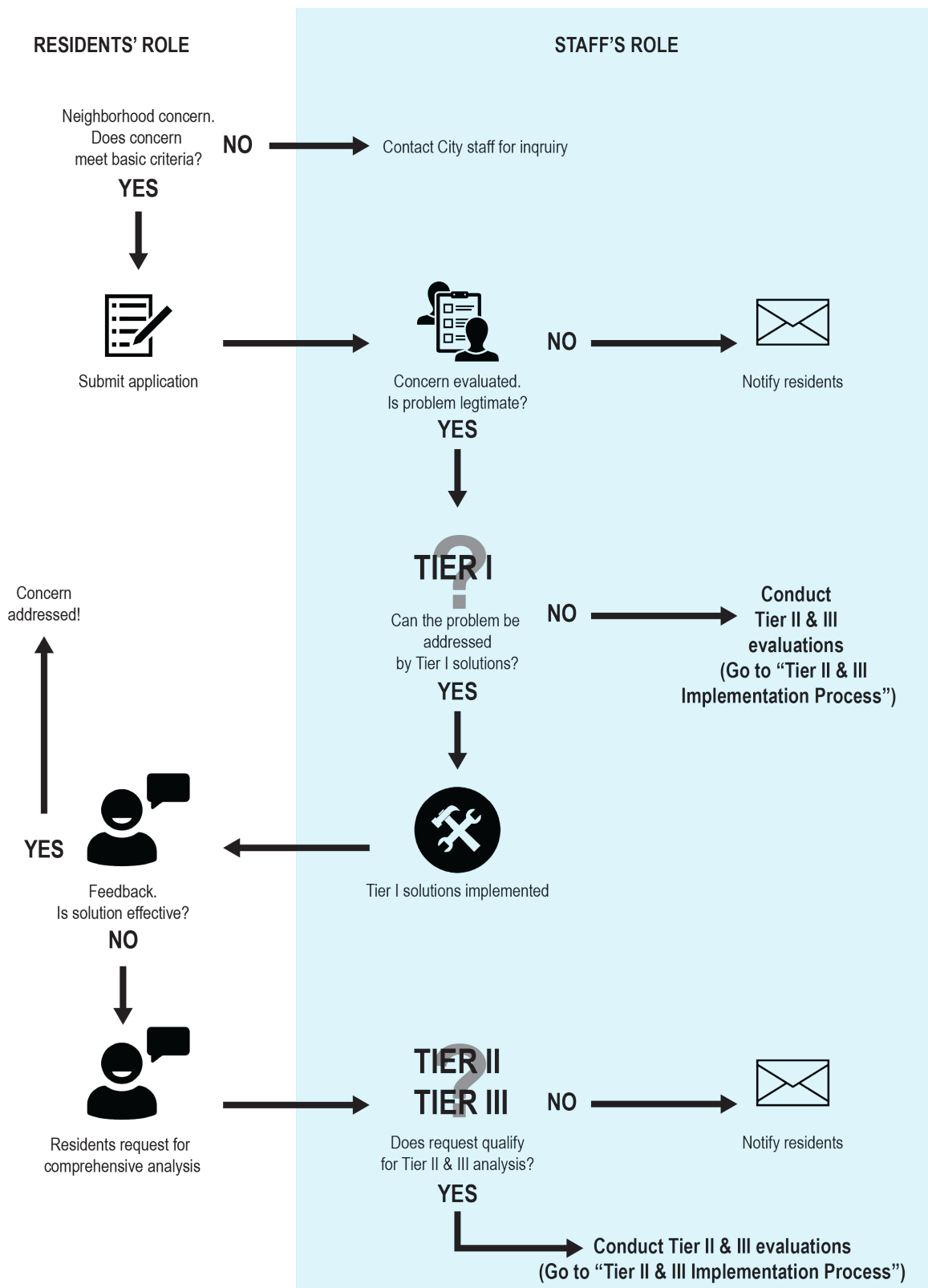
Initial Application and Petition Forms are attached in this document. An Initial Application is required prior to beginning any evaluation. This will assure that the problem being addressed is not just a "perceived" problem by one individual; it is a concern commonly shared by a few residents. The Initial Application will result in follow up evaluation, studies and identification of solutions through community engagement. Once a solution is identified, a formal petition process may be required for any Tier II or Tier III improvements. The following flow charts illustrate roles and actions to be taken if any concern is raised from the community.



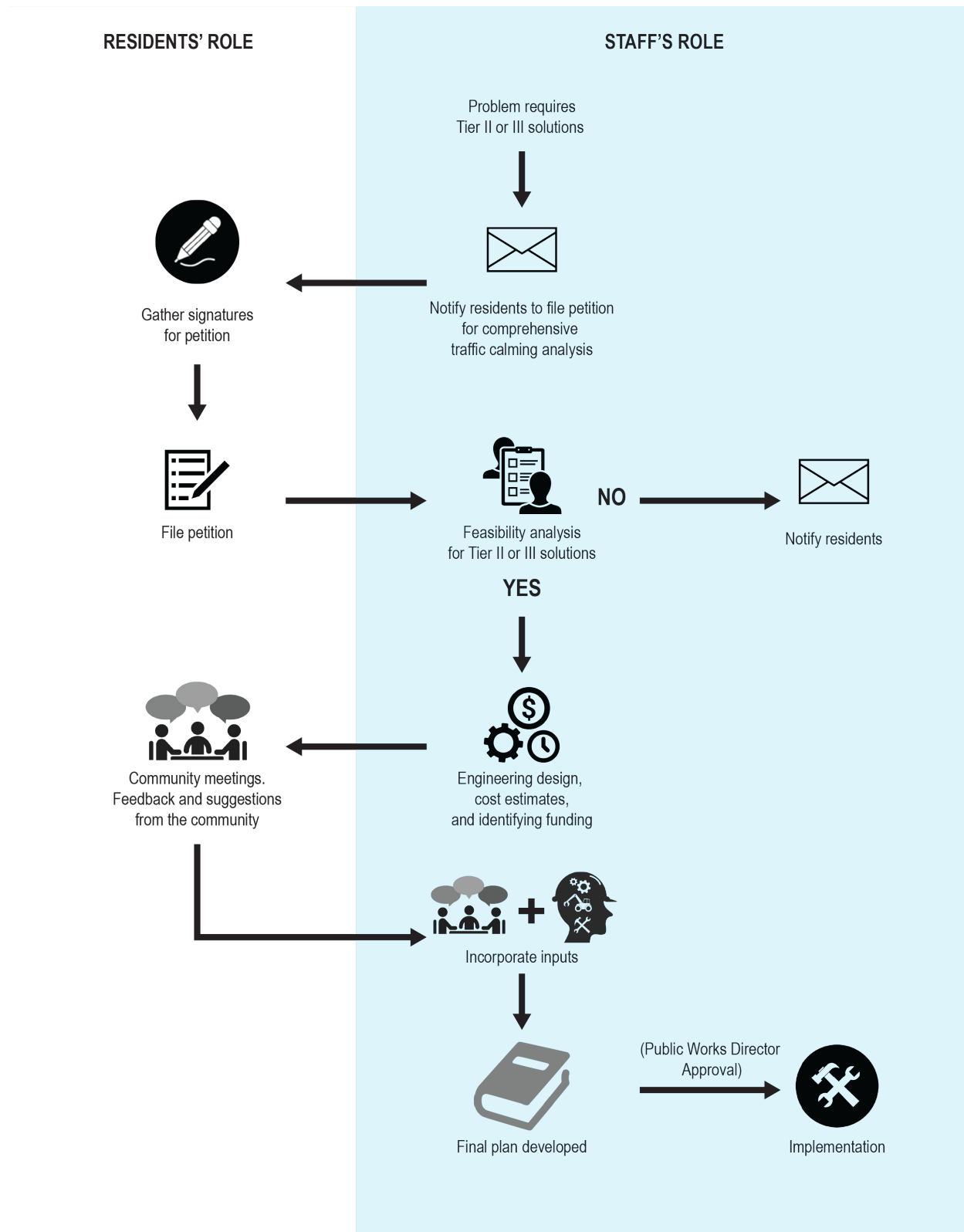
DECISION MAKING FLOW CHARTS

The decision making flow charts demonstrate how a traffic safety concern is notified to the City staff and how the staff and the community play their roles in improving traffic safety and enhancing quality of living in their neighborhoods.

NTCP DECISION MAKING PROCESS (TIER I)



NTCP DECISION MAKING PROCESS (TIER II AND III)



LIST OF MEASURES & DETAILS

This section summarizes the list of feasible traffic calming solutions for the Hayward neighborhoods, as well as illustrations that provide conceptual idea of each measure.



Regular Flashing Beacon on Second Street.

TRAFFIC CALMING MEASURES AND CRITERIA

#	Types of Measures	Type of Problem					Residential			Non-Residential		Roadway Classification		Bus or Emergency Response Route	Other Considerations	Approximate Cost
		Speeding	Traffic Volume	Vehicle Accidents	Pedestrian Safety	Noise	Midblock	Intersection	Boundary of Area	Midblock	Intersection	Local Streets	Collectors			
TIER I	1.1 Edgeline/Centerline Striping											ADT < 8,000; Speed Limit ≤ 35 mph; Street width ≥ 15 feet	ADT < 10,000; Speed Limit ≤ 35 mph; Street width ≥ 15 feet		None	\$0.50 - \$1.00 per linear foot of striping
	1.2 Targeted Speed Enforcement											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$5,000 - \$15,000
	1.3 Speed Legends											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$250 - \$ 500
	1.4 Signage											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$250 - \$500
	1.5 Botts Dots / Raised Reflectors											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$1,500 - \$2,000
	1.6 High Visibility Crosswalks											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$3.00 - \$4.50 per linear foot of striping
TIER II	2.1 Increased Patrol and Warning/Citations											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	Varies
	2.2 Speed Feedback Signs											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$5,000 - \$15,000
	2.3 Flashing Beacons											ADT < 8,000; Speed Limit ≤ 35 mph	ADT < 10,000; Speed Limit ≤ 35 mph		None	\$15,000 - \$25,000
	2.4 Road Diet											ADT < 8,000; Width ≥ 48 feet; Speed Limit ≤ 35 mph	ADT < 10,000; Width ≥ 48 feet; Speed Limit ≤ 35 mph		None	Varies
	2.5 Angled Parking											ADT < 3,200; Width ≥ 48 feet; Speed Limit ≤ 35 mph	ADT < 4,000; Width ≥ 48 feet; Speed Limit ≤ 35 mph		Not with bike lanes	Varies
TIER III	3.1 Pace Car Program											Petition Process	Petition Process		None	Varies
	3.2 Bulbouts											ADT < 16,000; Speed Limit ≤ 35 mph	ADT < 20,000; Speed Limit ≤ 35 mph		None	≥ \$50,000 per intersection
	3.3 Two-Lane Chokers											ADT < 16,000; Speed Limit ≤ 35 mph; Length ≥ 1,500 feet	ADT < 20,000; Speed Limit ≤ 35 mph; Length ≥ 1,500 feet		None	\$25,000 - \$50,000
	3.4 Center Island Narrowing/Pedestrian Refuges											ADT < 16,000; Speed Limit ≤ 35 mph	ADT < 20,000; Speed Limit ≤ 35 mph		None	Varies
	3.5 Traffic Circles											ADT < 6,000; Speed Limit ≤ 35 mph	ADT < 7,500; Speed Limit ≤ 35 mph		Grade ≤ 8%	≥ \$25,000
	3.6 Roundabouts (Single-Lane)											ADT < 16,000; Speed Limit ≤ 45 mph	ADT < 20,000; Speed Limit ≤ 45 mph		Grade ≤ 6%	≥ \$50,000
	3.7 Lateral Shifts											ADT < 8,000; Speed Limit ≤ 35 mph; Street width ≥ 15 feet	ADT < 10,000; Speed Limit ≤ 35 mph; Street width ≥ 15 feet		Grade ≤ 10%	Varies
	3.8 Chicanes											ADT < 4,000; Speed Limit ≤ 35 mph; Length ≥ 1,500 feet; Street width ≥ 15 feet	ADT < 5,000; Speed Limit ≤ 35 mph; Length ≥ 1,500 feet; Street width ≥ 15 feet		Grade ≤ 8%	\$25,000 - \$50,000
	3.9 Speed Lumps											ADT < 3,200; Speed Limit ≤ 25 mph;	ADT < 4,000; Speed Limit ≤ 25 mph;		Grade ≤ 8%	\$7,000 - \$10,000 per location
	3.10 Raised Crosswalks											ADT < 6,000; Speed Limit ≤ 35 mph	ADT < 7,500; Speed Limit ≤ 35 mph		Grade ≤ 8%	\$10,000 - \$20,000
	3.11 Raised Intersections											ADT < 6,000; Speed Limit ≤ 35 mph	ADT < 7,500; Speed Limit ≤ 35 mph		Grade ≤ 8%	≥ \$50,000 will vary
	3.12 Diagonal Diverters											ADT < 5,000; > 25% non-local traffic			None	25000
	3.13 Partial Closures											ADT < 5,000; > 25% non-local traffic			None	≥ \$25,000
	3.14 Full Closures											ADT < 5,000; > 25% non-local traffic			None	≥ \$25,000
	3.15 Forced Turn Islands											ADT < 4,000; > 25% non-local traffic	ADT < 5,000; > 25% non-local traffic		None	25000

LEGEND:



Appropriate



May be considered



Not Appropriate



Not Applicable

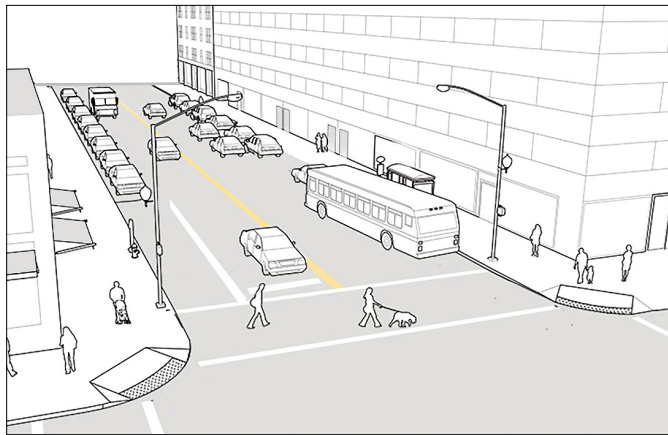


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EDGE/CENTERLINE STRIPING

TIER I

Edge/Centerline striping creates narrowed roadways to slow vehicle speeds.



Suitable for:

- Residential streets
- Collector streets

Not Suitable for:

- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph. • Street width greater than or equal to 15 feet.	\$0.50 - \$1.00 per linear foot of striping	City's discretion to approve, provided that criteria are met.

TARGETED SPEED ENFORCEMENT

TIER I

A portable speed feedback sign setup on-street to alert drivers to vehicle speeds.



Suitable for:

- School zones
- Residential streets
- Collector streets
- Locations with speeding concerns
- High pedestrian activity areas

Not Suitable for:

- Intersections
- Significant roadway curvature

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$5,000 - \$15,000	City's discretion to approve, provided that criteria are met.

SPEED LEGENDS

TIER I

Speed legends are used to inform drivers of the current speed limit.



Suitable for:

- Residential streets
- Collector streets

Not Suitable for:

- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$250 - \$ 500	City's discretion to approve, provided that criteria are met.

SIGNAGE

TIER I

Signage improves awareness to speed limits, pedestrian crossings, and other potential hazards.



Suitable for:

- School zones
- Residential streets
- Collector streets
- Locations with speeding concerns
- High pedestrian activity areas
- Significant roadway curvature

Not Suitable for:

- Intersections

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$250 - \$500	City's discretion to approve, provided that criteria are met.

BOTTS DOTS/RAISED REFLECTORS

TIER I

Botts dots provide tactile feedback to drivers moving across travel lanes or approaching intersections.



Suitable for:

- School zones
- Residential streets
- Collector streets
- T-intersections

Not Suitable for:

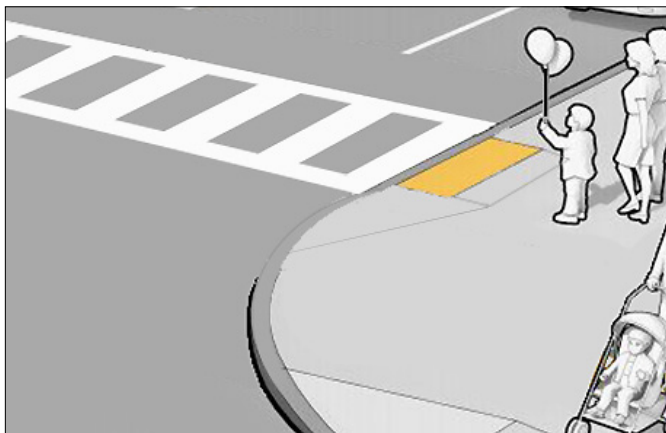
- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$1,500 - \$2,000	60% residents need to approve

HIGH VISIBILITY CROSSWALKS

TIER I

Ladder markings and defined crosswalk widths heighten awareness of pedestrian crossings.



Suitable for:

- School zones
- Residential streets
- Collector streets
- Arterial streets
- Mid-block crossings
- Intersection crosswalks
- High pedestrian activity areas

Not Suitable for:

- Low pedestrian volume locations

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$3.00 - \$4.50 per linear foot of striping	City's discretion to approve, provided that criteria are met.

INCREASED PATROL AND WARNING/CITATIONS TIER II

Increased patrol and warning/citations can effectively reduce speeding and inappropriate driving.



Suitable for:

- Residential streets
- Collector streets
- Locations with speeding concerns

Not Suitable for:

- N/A

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph	Varies	City's discretion to approve, provided that criteria are met.

SPEED FEEDBACK SIGNS

TIER II

Speed feedback signs are permanently installed to alert drivers of their speeds versus posted limits.



Suitable for:

- School zones
- Residential streets
- Collector streets
- Arterial streets
- Locations with speeding concerns
- High pedestrian activity areas

Not Suitable for:

- Intersections
- Significant roadway curvature

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$5,000 - \$15,000	City's discretion to approve, provided that criteria are met.

FLASHING BEACONS

TIER II

Flashing beacons warn drivers of pedestrians at an uncontrolled crossing.



Suitable for:

- School Zones
- Mixed-use areas
- Residential streets
- Collector streets

Not Suitable for:

- N/A

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph.	\$15,000 - \$25,000	City's discretion to approve, provided that criteria are met.

ROAD DIET

TIER II

A road diet reduces the number of travel lanes to accommodate other modes and slow vehicle speeds.



Suitable for:

- Wide residential streets
- Collector streets
- Downtown areas
- High pedestrian activity area
- High bicycle traffic
- Locations with speeding concerns

Not Suitable for:

- Narrow roadways

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Street width greater than or equal to 48 feet. • Speed limit below or equal to 35 mph	Varies	City's discretion to approve, provided that criteria are met.

ANGLED PARKING

TIER II

Angled parking narrows travel lanes to slow vehicle speed and increases parking supply.



Suitable for:

- Downtown areas
- Commercial areas
- Mixed-Use areas
- Residential streets
- Collector streets

Not Suitable for:

- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 4,000. • Speed limit below or equal to 35 mph. • Street width greater than or equal to 48 feet.	Varies	City's discretion to approve, provided that criteria are met.

PACE CAR PROGRAM

TIER III

A community-driven program focusing on raising awareness to speed reduction in the neighborhoods.



Suitable for:

- Downtown streets
- Residential streets
- Collector streets
- High pedestrian activity areas

Not Suitable for:

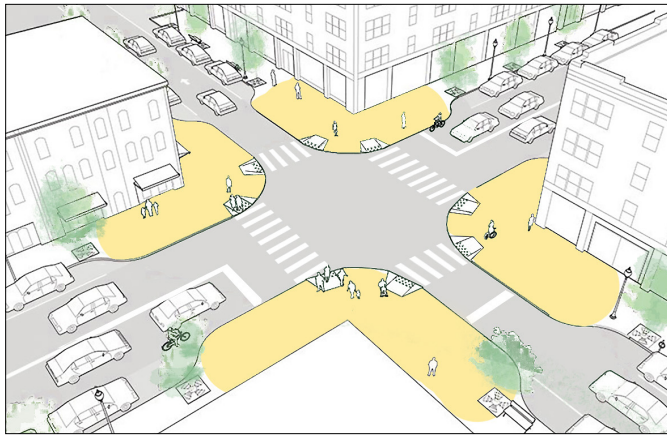
- Low pedestrian activity areas

Implementation Threshold	Approximate Cost	Approval
• Petition Process	Varies	City's discretion to approve, provided that criteria are met.

BULBOUTS

TIER III

Bulbouts are curb-extensions that slow vehicle speeds with the impression of a narrowed roadway.



Suitable for:

- Downtown streets
- Residential streets
- Collector streets
- Arterial streets
- High pedestrian activity areas
- Long pedestrian crossing distances

Not Suitable for:

- Low pedestrian activity areas
- Narrow streets
- High truck volumes

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 20,000. • Speed limit below or equal to 35 mph.	≥ \$50,000 per intersection	City's discretion to approve, provided that criteria are met.

TWO LANE CHOKERS

TIER III

Two lane chokers function similarly to bulbouts but at mid-block locations.



Suitable for:

- Wide streets
- High cut-through volumes

Not Suitable for:

- Emergency access routes
- High on-street parking demand
- High bicycle volumes

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 20,000. • Speed limit below or equal to 35 mph. • Street length greater than or equal to 1,500 feet.	\$25,000 - \$50,000	City's discretion to approve, provided that criteria are met.

CENTER ISLAND NARROWING/PEDESTRIAN REFUGE TIER III

Concrete medians that define travel lanes and secure pedestrian right-of-way.



Suitable for:

- Wide residential streets
- Collector streets
- Mid-block crossings
- Long crossing distances
- High pedestrian activity areas
- Locations with speeding concerns

Not Suitable for:

- Narrow roadways

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 20,000. • Speed limit below or equal to 35 mph.	Varies	City's discretion to approve, provided that criteria are met.

TRAFFIC CIRCLES TIER III

Traffic Circles require drivers to slowly maneuver through an intersection.



Suitable for:

- Residential streets
- Collector streets
- Locations with speeding concerns
- High accident rate

Not Suitable for:

- Horizontal curvature
- Vertical curvature

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 7,500. • Speed limit below or equal to 35 mph.	≥ \$25,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

ROUNDBABOUTS (SINGLE LANE)

TIER III

Roundabouts require drivers to slowly maneuver through an intersection operating with yield control.



Suitable for:

- Collector streets
- Arterial streets
- Locations with speeding concerns
- High accident rate

Not Suitable for:

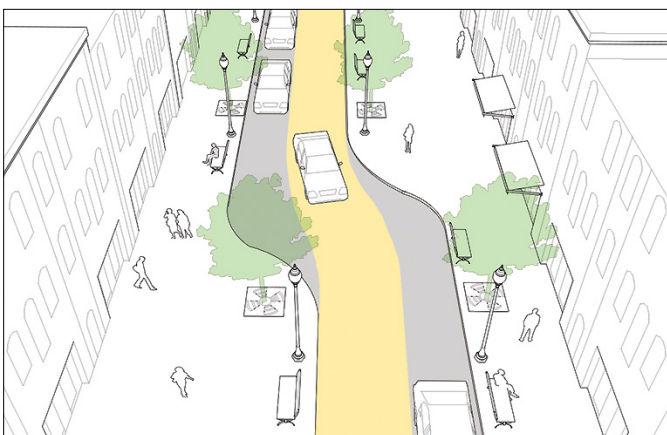
- Horizontal curvature
- Vertical curvature

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 20,000. • Speed limit below or equal to 45 mph.	≥ \$50,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

LATERAL SHIFTS

TIER III

Lateral shifts force drivers to make slight maneuvers, resulting in slower vehicle speeds.



Suitable for:

- Residential streets
- Collector streets
- Arterial Streets
- Locations with speeding concerns

Not Suitable for:

- High vehicle volumes

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 10,000. • Speed limit below or equal to 35 mph. • Street width greater than or equal to 15 feet.	Varies	60% residents need to approve + City's discretion to approve, provided that criteria are met.

CHICANES

TIER III

Chicanes functions similarly to lateral shifts and require less roadway reconfigurations.



Suitable for:

- Wide residential streets
- Wide Collector streets

Not Suitable for:

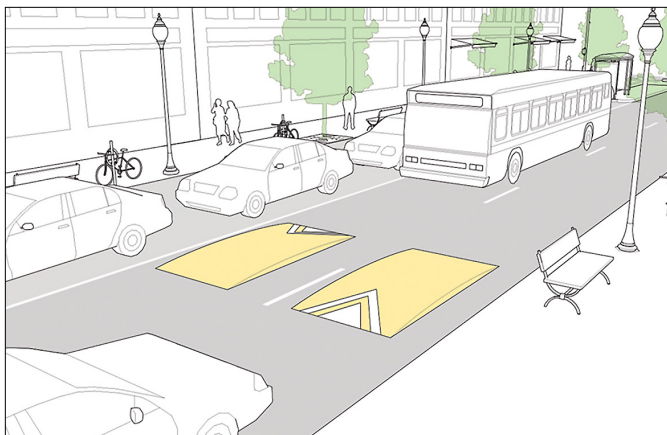
- Arterial streets
- Emergency access routes
- High on-street parking demand
- High bicycle traffic

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 5,000. • Speed limit below or equal to 35 mph. • Street length greater than or equal to 1,500 feet. • Street width greater than or equal to 15 feet.	\$25,000 - \$50,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

SPEED LUMPS

TIER III

Speed lumps slow driver speeds with vertical roadway deflections.



Suitable for:

- Residential streets
- Persistent speeding
- High cut-through volumes

Not Suitable for:

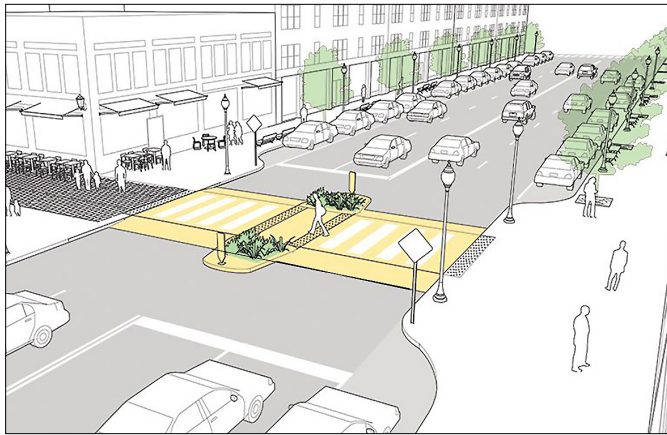
- Collector streets
- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 4,000. • Speed limit below or equal to 25 mph.	\$7,000 - \$10,000 per location	60% residents need to approve + City's discretion to approve, provided that criteria are met.

RAISED CROSSWALKS

TIER III

Raised crosswalks slow driver speeds with vertical deflections and emphasis of pedestrian right-of-way.



Suitable for:

- School zones
- Residential streets
- Mid-block crossings
- High pedestrian activity areas

Not Suitable for:

- Arterial streets
- Intersections

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 7,500. • Speed limit below or equal to 35 mph. • Grade below or equal to 8 percent.	\$10,000 - \$20,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

RAISED INTERSECTIONS

TIER III

Raised intersections slow drivers speed by emphasizing a "shared zone" with pedestrians and bicyclists.



Suitable for:

- Downtown areas
- High pedestrian activity areas
- High vehicle speeds

Not Suitable for:

- Residential streets
- Collector streets
- Arterial streets

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 7,500. • Speed limit below or equal to 35 mph.	≥ \$50,000 will vary	60% residents need to approve + City's discretion to approve, provided that criteria are met.

DIAGONAL DIVERTERS

TIER III

Diagonal diverters reduce traffic entering neighborhoods by permanently detouring certain routes.



Suitable for:

- Residential streets
- Locations with speeding concerns
- Limited access desired

Not Suitable for:

- Arterial streets
- Collector streets if significant traffic diversion anticipated

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 5,000. • Greater than 25% non-local traffic.	\$25,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

PARTIAL CLOSURES

TIER III

Partial closures reduce traffic entering neighborhoods by permanently restricting one direction of traffic.



Suitable for:

- Residential streets
- Locations with speeding concerns
- Limited access desired

Not Suitable for:

- Arterial streets
- Collector streets if significant traffic diversion anticipated

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 5,000. • Greater than 25% non-local traffic.	$\geq$ \$25,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

FULL CLOSURES

TIER III

Full closures reduce traffic entering neighborhoods by permanently restricting vehicular access.



Suitable for:

- Residential streets
- Locations with speeding concerns
- Limited access desired

Not Suitable for:

- Arterial streets
- Collector streets if significant traffic diversion anticipated

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 5,000. • Greater than 25% non-local traffic.	≥ \$25,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

FORCED TURN ISLANDS

TIER III

Raised concrete islands separate turning traffic from through traffic when approaching an intersection.



Suitable for:

- Residential streets
- Collector streets
- Locations with speeding concerns
- Limited access desired

Not Suitable for:

- N/A

Implementation Threshold	Approximate Cost	Approval
• Average Daily Traffic Volumes below 5,000. • Greater than 25% non-local traffic.	\$25,000	60% residents need to approve + City's discretion to approve, provided that criteria are met.

PRIORITIZATION

Limited funds available to address the number of requests received by the City staff, far exceeds what can realistically be funded in a given year. Establishing a project priority list is essential to allocating resources more effectively. To develop a prioritization list, the NTCP proposes to incorporate an established process that places emphasis on speeds, accidents, volumes, schools, and pedestrian generators pertinent to traffic calming. With this process in place, the City will look to first fund those projects which are most critical to public safety. The proposed process and scoring criteria can be found below in the table.

Criteria		Point Definitions	Points Available
Primary	85th percentile speed	2 points for every 1 MPH above the posted speed limit (85th percentile speed must be at least 5 MPH over the posted speed limit to be considered for traffic calming)	30
	Crash History	3 points for each preventable crash within the last three years	30
Secondary	Vicinity to Schools	7.5 points per school if street fronts or provides access to a school, or if street is a designated Safe Route to School	15
	Pedestrian Generators	10 points if location is within 1,000 feet of a major transit access point or a civic facility; or peak hour pedestrian volume at any adjacent intersections exceeds 100	10
	Traffic Volumes	1 point for 0 – 500 average daily traffic 2 points for 501 – 1,000 average daily traffic 3 points for 1,001 – 1,500 average daily traffic 4 points for 1,501 – 2,000 average daily traffic 5 points for > 2,000 average daily traffic	5
	Cut-through Traffic	2 points if at least 25% of traffic volume is cut-through; 1 points for each additional 5% (Up to 40% max)	5
	Additional Concerns	1 point if visibility restrictions result from roadway geometry; 1 point if segment is a designated Bike Route or pedestrian corridor; 1 point if street has no sidewalks; 1 point if segment is > 1,000 feet in length; 1 point if segment is > 40 feet in width	5
Total			100

PETITION & APPLICATION

A petition and application is included in this section. For more information please visit our website at www.hayward-ca.gov or contact City of Hayward Public Works at (510) 583-4781





Step 1: APPLICATION FOR EVALUATION NEIGHBORHOOD TRAFFIC CALMING PROGRAM

Primary Contact Information

_____ Name	_____ Email Address	_____ Phone Number
_____ Street Address		_____ Zip Code

Locations and Concerns

_____ Street Name	from _____ Cross Street	to _____ Cross Street
_____ Street Name	from _____ Cross Street	to _____ Cross Street
_____ Street Name	from _____ Cross Street	to _____ Cross Street

Types of Concerns (Select all that apply):

- | | | |
|--|---|--|
| ☐ Excessive Traffic | ☐ Speeding | ☐ Illegal Parking |
| ☐ Cut-through Traffic | ☐ Limited Visibility | |
| ☐ Other concerns: _____ | | |

Please provide more detailed information about your concerns in this area:

*The City staff will evaluate the existing conditions and develop solutions as necessary. The goal of the Neighborhood Traffic Calming Program is to maintain effective traffic operations and enhance neighborhood safety.

Neighborhood Support

To initiate an evaluation for traffic calming, you must obtain signatures from at least 20 percent of the property owners within the block/blocks where traffic calming evaluation is being requested. For example, if there are 20 addresses in the block, at least four signatures must be collected. If needed, please use an additional sheet of paper to collect more signatures. For more information, please visit www.hayward-ca.gov/NTCP, email at NTCP@hayward-ca.gov, or call (510) 583-4781. The Engineering & Transportation staff will review and respond to your inquiries in a timely manner.

Print Name	Street Number / Street Name	Signature
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Next Step

Submit the completed form via email to:

NTCP@hayward-ca.gov
Subject Line: "Traffic Calming
Application"

OR

Submit the completed form via mail to:

City of Hayward Public Works - Engineering &
Transportation
777 B Street, 2nd Floor, Hayward, CA 94541

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Step 2: PETITION FOR NEIGHBORHOOD TRAFFIC CALMING PROGRAM

The City staff has conducted an evaluation in response to the application submitted on _____ (mm/dd/yyyy).
The evaluation shows that the following traffic calming measures may improve traffic operations and enhance neighborhood safety:

Locations			Measures
_____	from	_____ to _____	_____
Street Name		Cross Street Cross Street	
_____	from	_____ to _____	_____
Street Name		Cross Street Cross Street	
_____	from	_____ to _____	_____
Street Name		Cross Street Cross Street	

We, the undersigned, hereby petition the City of Hayward to proceed with the installation of these traffic calming measures on the listed locations. Include the Primary Contact signature in #1. **NOTE: Your signature on this petition form indicates you support for the above mentioned improvements in the neighborhood.**

#	Print Name	Street Number / Street Name	Signature
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
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CITY OF HAYWARD

Hayward City Hall
777 B Street
Hayward, CA 94541
www.Hayward-CA.gov

File #: RPT 18-099

DATE: May 23, 2018

TO: Council Infrastructure Committee

FROM: Interim Director Public Works

SUBJECT

FY 2018 and FY 2019 New Sidewalks Project - Review of Muir Street Issues

RECOMMENDATION

That the Committee reviews and comments on the Muir Street issues for the FY 2018 and FY 2019 New Sidewalks Project.

SUMMARY

The FY 2018 and FY 2019 New Sidewalks Project calls for three locations for new sidewalks: Calhoun Street, corner of Whitesell Street and Depot Road, and Muir Street. Tampa Street is currently under consideration; however, due to an upcoming Weekes Community Park renovation project by the Hayward Area Recreation and Park District, it may not be included in this round.

Residents on Muir Street have filed a petition against the project over issues regarding deferred improvement agreements, sidewalk conflicting with existing fences and trees, reduction in parking and travel lane width, keeping non-standard driveways in place, and conflicts with PG&E utility poles. City Staff met with several residents and have agreed on resolutions for most issues; however, some issues remain.

The project budget is \$1,565,000. The funding is from Measure BB and Measure B allocations.

ATTACHMENTS

Attachment I	Staff Report
Attachment II	Muir St. Petition
Attachment III	Muir St. Photos



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BACKGROUND

The FY 2018 and FY 2019 New Sidewalks Project identifies three locations for new sidewalks:

1. Calhoun Street, north side of the street along St. Clements church
2. Southeast corner of Depot Road and Whitesell Street
3. Muir Street, between Orchard Avenue and Frederic Street, on both sides of the street.

Muir Street requires the installation of approximately 1,190' of new sidewalk, driveways, and curb and gutter. In December 2017, City staff sent a preliminary notice to residents and

property owners along the street with information regarding the new sidewalks project. In February 2018, City staff met with residents to discuss concerns about the various issues regarding the project. In March 2018, residents submitted a petition protesting the project due to several issues. Staff and the residents have managed to identify solutions to resolve most of the issues; however, the unresolved ones are being presented to the Committee for review and comment.

The following are the issues that have a proposed resolution:

1. Deferred Improvement Agreements

Only two properties located at 24965 and 25101 Muir Street are subject to deferred improvement agreements that require property owners to pay for improvements, such as sidewalk, driveway, and curb and gutter in front of their property. The property owners have expressed concerns about their agreements primarily due to the age of the agreements (one was executed almost 38 years ago), and the fact that one of the property owners had not been made aware of the agreement. Staff requests a special exception to waive deferred improvement agreements for these two properties. If approved, this issue will be resolved.

2. Redesign Project to Include Sidewalk Abutting Curb and Gutter

Property owners have expressed concerns with the original design of: curb and gutter, 4' planter area, and 4' sidewalk. This design may conflict with several existing fences, gates, and trees that encroach on to the City right-of-way, and significantly reduce front yards.

The resolution to mitigate these issues is to redesign the facilities to: curb and gutter, 5' sidewalk, and remaining portion up to City right-of-way to be utilized as an extension of the front yard. This will prevent relocation of most existing fences, trees, and mitigates front yard size reduction.

3. Reduction in Parking and Travel Lane Width

Muir Street has 34'-wide travel way and allows parking on both sides of the street. Property owners are currently accustomed to parking vehicles partially on pavement and partially on pervious area to widen the travel lanes. The project will add curb and gutter and force vehicles to fully park on the street, and reduce the travel lanes widths on Muir Street. Property owners expressed concerns with the potential increase of damage to parked cars due to narrow travel lanes. After discussions with City staff, property owners have agreed to accept and adjust to this change.

DISCUSSION

City staff and Muir Street Residents have the following outstanding issues to resolve:

1. Non-Standard Driveways

Property owners of 24965, 24979, and 25011 Muir Street have asked to keep the existing non-standard driveways in front of their properties without modifications, and have new improvements conform to the existing driveways. The driveways are in fair condition, but staff recommends installing standard driveways to assure consistency with City standards in the public right-of-way and mitigate risk to the City.

2. Utility Pole Conflicts

Muir Street contains several utility pole conflicts: one PG&E utility pole is located in the middle of the driveway of 25101 Muir Street, and three PG&E utility poles do not have sufficient clearance between the face of the curb and the centerline of utility pole which can make opening car doors parked next to utility poles challenging. Staff will request that PG&E relocate the poles. The project budget and schedule will heavily depend on the cost and schedule for PG&E to relocate these poles. The City needs to decide whether to wait until PG&E relocates the poles, or make an exception and build the project around utility poles.

ECONOMIC IMPACT

This project is fully funded by the City's Capital Improvement Program.

FISCAL IMPACT

The estimated project funding sources are as follows:

- | | |
|--------------------|---------------------------|
| • 213 - Measure BB | \$715,000 |
| • 211 - Measure B | <u>\$850,000</u> |
| | <i>Total:</i> \$1,565,000 |

STRATEGIC INITIATIVES

This agenda item supports the Complete Streets Strategic Initiative. The purpose of the Complete Streets Strategic Initiative is to build streets that are safe, comfortable and convenient for travel for everyone, regardless of age or ability, including motorist, pedestrians, bicyclists, and public transportation riders. This item supports the following goals and objective:

Goal 1: Prioritize safety for all modes of travel.

Goal 2: Provide Complete Streets that balance the diverse needs of users of the public right-of-way.

Objective 1: Increase walking, biking, transit usage, carpooling, and other sustainable modes of transportation by designing and retrofitting streets to accommodate all modes.

SUSTAINABILITY FEATURES

This project will improve existing the pedestrian system (General Plan Policy M-5.2) on Muir Street, Calhoun Street, Depot Road, and Whitesell Street, and serves to balance the diverse needs of users of the public right-of-way.

PUBLIC CONTACT

Staff sent letters to the affected property owners notifying them of the proposed work and preliminary schedule. Staff has met with residents on Muir Street several times to discuss their concerns.

NEXT STEPS

Fall 2018:	Council approval of plans, specifications, and call for bids
Winter 2018:	Bid Opening and Award of Contract
March 2019:	Start of Construction
July 2019:	End of Construction

Prepared by: Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Interim Director of Public Works

Approved by:



Kelly McAdoo, City Manager

To: Hayward City Council Members

From: Residents / Property Owners Muir St.

RE: New Sidewalk Project- Muir St – Deferred Improvement Agreement

Date: March 4, 2018

The undersigned residents and property owners of Muir St respectfully petition Hayward City Council and Public Works department.

As property owners and tax payers we reserve the right to have full disclosure in writing of the exact location of the curbs, gutters, and sidewalks that impact our private property.

We welcome the installation of curbs and sidewalks but we strongly oppose the current plan.

Please see exhibit A, attached to this document. Yama Farouqi, Associate Civil Engineer – Public Works – Engineering & Transportation informed current residents and property owners via a certified letter which did not include any specifics about the project dated nor consideration of approval from current property owners.

It appears, this “deferred” project includes approval from owners who resided in said properties more than twenty (20) years ago. Therefore, the approval from those owners should be considered null and void. The measurements came to our attention after Mr. Farouqi was taking measurements of the street at the end of February, 2018.

Furthermore, we petition the Public Works Department to install the four (4) feet sidewalks to be installed right beside and conjoined with the curb and gutter so as not to unnecessarily encroach on our front yards.

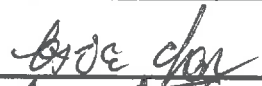
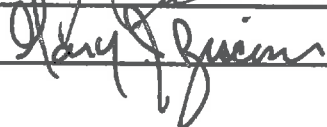
In addition, existing concrete driveways are not to be disturbed or modified in any way and should be left intact as they are. We are concerned about destruction to private fences, private parking, and potential increase in crime due to proximity of sidewalk to our windows and homes.

The current owners of Muir St properties are extremely concerned due to the outcome of Meekland Street sidewalk project which impacted parking and encroachment on their front yards.

The County of Alameda, State of California, and United States of America is founded on democracy where each citizen is guaranteed a voice by the constitution. The Hayward City Council members have a positive record of community collaboration.

We respectfully request Hayward City Council members review the "Deferred Agreement" documents obtained by the City of Hayward more than twenty (20) years ago, approve our requested changes, and provide a public forum for the current owners so we may have a voice in the planning phase of the project which impacts our private property lines.

Sincerely,

Name:	Signature:	Date:
JERALD BECKER		3-5-18
VALDEA BECKER		3-5-18
George Chen		3-6-18
Maria Tunder		3-11-18
Martin Ali		3-11-18
Lori Bobbitt		3-11-18
RUPINDER KAOR		03-11-18
ELIZABETH Le		03-11-18
Jashanpreet Singh		03/11/18
GARY ZICCONI		03/11/18

To: Hayward City Council Members

From: Residents / Property Owners Muir St.

RE: New Sidewalk Project- Muir St – Deferred Improvement Agreement -

CC: Department of Public Works
Yami Farouqui – Associate Civil Engineer -Public Works Department
777 B Street, Hayward, Ca. 94541

Exhibit
A

February 5, 2018

CURRENT RESIDENT/PROPERTY OWNER

SUBJECT: *New Sidewalks Project – Muir Street – Deferred Improvement Agreement*

Dear CURRENT RESIDENT/PROPERTY OWNER:

The City of Hayward is currently working on the design plans to provide new sidewalks on Muir Street. This project consists of adding new sidewalk, driveways, concrete curb and gutter where it currently does not exist. Construction is preliminarily scheduled to begin late summer of 2018.

There is a deferred improvement agreement between the City and the property owner. Please review the attachment and contact me to further discuss this agreement.

Thank You,



Yama Farouqi
Associate Civil Engineer - Public Works – Engineering & Transportation
510-583-4761
yama.farouqi@hayward-ca.gov

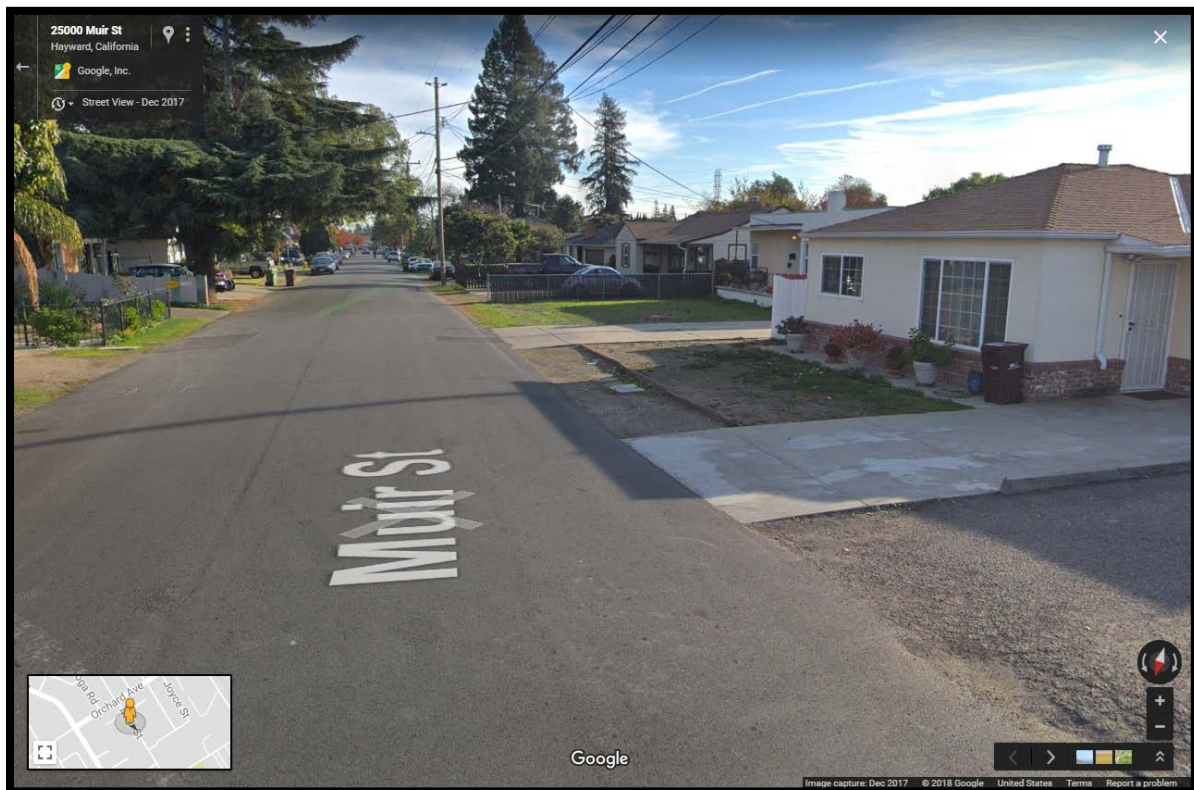
Attachment: Deferred Improvement Agreement

FY 2018 and FY 2019 New Sidewalks Project Muir Street Issues



24965 Muir Street

Property Owner Requests to Keep Existing Non-Standard Driveway



24979 & 25011 Muir Street

Property Owners Request to Keep Existing Non-Standard Driveway



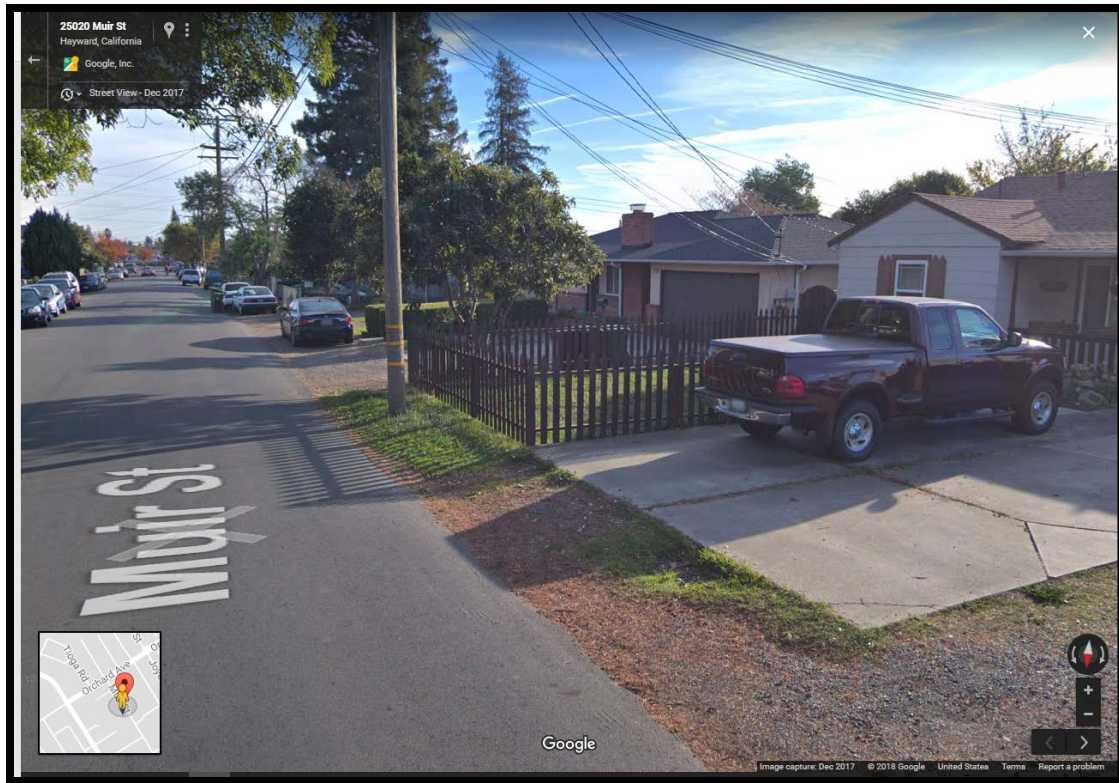
25101 Muir Street

Pole in Middle of Existing Driveway.



25101 Muir Street

Clearance Between Pole Centerline to Face of Curb: 0.80'. City Standard Details Requires 2.0' Clearance.



25023 Muir Street

Clearance Between Pole Centerline to Face of Curb: 0.70'. City Standard Details Requires 2.0' Clearance.



24965 Muir Street

Clearance Between Pole Centerline to Face of Curb: 1.23'. City Standard Details Requires 2.0' Clearance.



24959 Muir Street

Clearance Between Pole Centerline to Face of Curb: 1.73'. City Standard Details Requires 2.0' Clearance.



Example of Existing Pole with Less than 2' Clearance Between Centerline of Pole and Face of Curb



Example of Existing Pole with 2' Clearance Between Centerline of Pole and Face of Curb