IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

A RESOLUTION APPROVING THE 2020 NEIGHBORHOOD TRAFFIC CALMING PROGRAM AND PRIORITY LIST

In February 15, 2017, staff submitted a white paper titled *Traffic Behavior and Enforcement* to the City Council during their Goals and Priorities Workshop, to make suggestions on enhancing existing traffic management program. The City Council directed staff to investigate the possibility of streamlining the Traffic Calming Program considering citywide traffic behavior and cut-through routes, and a more proactive approach as opposed to reactive approach in addressing speeding and cut-through traffic concerns in residential neighborhoods.

The 2020 Neighborhood Traffic Calming Program was developed in response to Council direction to be a more efficient, comprehensive, and data driven process to help achieve the goal of improving quality of life in residential neighborhoods by reducing cut through traffic and speeding. A Priority List for implementing traffic calming devices was developed following the process and criteria included in the 2020 Neighborhood Traffic Calming Program.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Livermore that the 2020 Neighborhood Traffic Calming Program, attached hereto as Exhibit A, and the Priority List for implementing traffic calming devices, attached hereto as Exhibit B, are approved.

BE IT FURTHER RESOLVED that the 2020 Neighborhood Traffic Calming Program replaces the Neighborhood Traffic Calming Program, adopted March 18, 2002 (Resolution No. 2002-62), revised February 9, 2004 (Resolution No. 2004-38).

On motion of Council Member Carling, seconded by Council Member Coomber, the foregoing resolution was passed and adopted on September 28, 2020, by the following vote:

AYES:

Council Members Carling, Coomber, Vice Mayor Woerner,

Mayor Marchand

NOES:

None

ABSENT:

Council Member Munro

ABSTAIN:

None

ATTEST

Marie Weber

City Clerk

APPROVED AS TO FORM:

Tara Muganti

Tara Mazzanti

Assistant City Attorney

Date: September 30, 2020

Exhibit A- 2020 Neighborhood Traffic Calming Program

Exhibit B- 2020 Neighborhood Traffic Calming Program Priority List

CITY OF LIVERMORE 2020 NEIGHBORHOOD TRAFFIC CALMING PROGRAM

INTRODUCTION

Quality of life in residential neighborhoods is adversely affected by speeding vehicles and commute traffic using neighborhood streets to avoid congestion on arterial roadways. The 2020 Traffic Calming Program is intended to reduce speeding and cut-through traffic in residential neighborhoods. A citywide data-driven approach is used to help identify priorities and streamline the implementation process.

BACKGROUND

In 2002, Council approved the Neighborhood Traffic Calming Program, which included Traffic Education, Engineering and Enforcement as Tier 1 measures, and installation of traffic calming devices as Tier 2 measures. The aim of the Neighborhood Traffic Calming Program was to strengthen the Traffic Education, Engineering and Enforcement program by adding a Tier 2 component and providing one comprehensive program that guides the use of additional engineering tools, commonly known as traffic calming devices, in responding to neighborhood traffic issues.

The Neighborhood Traffic Calming Program was implemented from 2002 until it was suspended in 2009, due to funding constraints and limited resources. The program had modest success implementing traffic calming devices on 7 residential streets. However, the program was inefficient and required significant resources to implement. Since that time, traditional Traffic Education, Engineering and Enforcement program continues to be the main tool in addressing traffic safety concerns with some success. However, neighborhood residents continue to express concerns about cut-through traffic and speeding, while frequent speed enforcement in residential areas can be a challenge given police resources and priorities.

On February 15, 2017, staff submitted a White Paper, titled Traffic Behavior and Enforcement, to the City Council Goals & Priorities Workshop, which identified alternatives to the Traffic Calming Program, including using a data driven approach to identify the cutthrough traffic impacts and ways to streamline the process. Council directed staff to investigate the possibility of streamlining the TCP considering citywide traffic behavior and cut-through routes and using a more proactive approach as opposed to reactive approach in addressing such neighborhood concerns. The aim of the 2020 Traffic Calming Program is to focus efforts on locations with high cut-through traffic, accident, and speed locations from a city-wide view, using a data driven analysis approach and a streamlined implementation process.

PURPOSE STATEMENT

The purpose of the 2020 Neighborhood Traffic Calming Program is to proactively improve livability and quality of life within residential neighborhoods through the deployment of traffic calming devices on locations with high cut-through traffic, accident, and speed locations.

GOALS AND OBJECTIVES

The City of Livermore continually strives to ensure overall safety, protect its neighborhoods and improve the quality of life for its residents. Traffic conditions on residential streets certainly affect neighborhood livability and one's sense of community. Traffic that is traveling at inappropriate speeds and commuter traffic that is inappropriately using residential roadways can adversely affect a resident's quality of life.

However, implementing traffic calming measures is not a solution for all speeding and cutthrough traffic woes. Each neighborhood may have its own unique set of problems that must be analyzed to identify solutions. This program was developed to guide City staff and inform residents about the processes and procedures for implementing traffic calming measures on residential streets. Under this policy, staff will work with residents to identify traffic issues in their neighborhoods and seek appropriate solutions.

The goal of the 2020 Neighborhood Traffic Calming Program is to implement measures approved by a consensus of the neighborhood to affect driver behavior in such a way that improves safety and the quality of life for residents, pedestrians, bicyclists and motorists. This goal is to be balanced with the City's goal to provide quick emergency response times for emergency vehicles including fire trucks, police and ambulances.

The objectives are as follows:

- Make efficient use of City resources by periodically conducting a citywide traffic behavior study and prioritizing streets city-wide with speeding and cut-through traffic.
- Reduce vehicle speeds on residential streets.
- Discourage cut-through traffic.
- Promote conditions that encourage bicycle and pedestrian travel.
- Provide clear guidelines of the process to evaluate traffic calming measures.

COMPATIBILITY WITH GENERAL PLAN

This program is consistent with and assists in achieving the goals and policies identified in the Circulation Element of the City's General Plan adopted by the City Council in February 9, 2004 and amended in 2014. The goals, objectives, and policies identified in the Circulation Element include:

- Goal CIR-2 Promote multi-modal transportation.
 - Objective CIR-2.4 Provide a pedestrian network that encourage walking for transportation and recreation.

- Policy 1. The City shall ensure the safe and convenient movement of pedestrians throughout the City and within neighborhoods.
- Goal CIR-3 Identify and develop a circulation system consistent with the Land Use Element.
 - o Objective CIR-3.3 Minimize local cut-through traffic in residential neighborhoods.
 - Policy 1. The City shall provide adequate capacity to the extent possible on major and collector streets to prevent traffic diversion of local cut-through traffic onto neighborhood streets.
 - Policy 2. The City shall consider using traffic calming methods to reduce local cut-through traffic, where appropriate.
- Goal CIR-6 Protect neighborhood quality and community character through circulation planning.
 - Objective CIR-6.1 Use circulation improvements to enhance Livermore's community character and maintain the quality of life in residential neighborhoods.
 - Policy 1. The City shall provide a street system that minimizes traffic on local streets in order to create and preserve a high-quality residential environment.

INTRODUCTION TO TRAFFIC CALMING DEVICES

The Institute of Transportation Engineers defines traffic calming as follows: "Traffic calming is the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users". Traffic calming devices can generally be divided into 4 categories: 1) Vertical deflection, 2) Horizontal shifts, 3) Constrictions and 4) Diverters & Closures. Examples of each of these devices are shown in Appendix B, "Traffic Calming Toolbox".

Vertical deflection devices deflect the path of a vehicle in a vertical direction. These measures require motorists to slow considerably to minimize the impact when the vehicle passes over the device. Vertical deflection devices include speed humps, raised crosswalks and raised intersections.

Horizontal shift devices shift the path of a vehicle in a horizontal direction, forcing motorists to slow to maneuver around the devices. Horizontal shifts have a secondary effect in that they tend to break up the straight sight lines of a roadway, which in turn slows motorists by reducing the comfortable speed of travel. Examples include traffic circles, chicanes, and medians.

Constriction devices narrow the roadway and slow motorists by reducing the comfortable speed of travel. Constrictions include curb extensions, neckdowns and chokers. Other

types of more passive constrictions are on-street parking, narrowed lanes and the addition of bicycle lanes.

Traffic diverters, street closures, and turn restrictions are another type of traffic calming measure. These are generally measures that alter the transportation circulation system by prohibiting access to existing streets.

Some agencies have had traffic calming programs for several decades now. Many of these programs have been successful. However, some agencies have since set up traffic calming removal programs and set moratoriums on implementing new devices. This movement is largely contributed to the proliferation of extremely restrictive traffic calming devices across an agency without due regard for the movement of traffic and the cumulative impacts. Therefore, it is particularly important to determine the need and appropriateness of devices as part of the traffic calming program in order to reduce the likelihood of later implementing a traffic calming removal program.

POLICY STATEMENTS

1. Emergency Response

A critical concern about the use of traffic calming devices is the delay it may create for emergency response vehicles, including fire engines, ambulances and law enforcement vehicles. It is important to be aware of the trade-offs when making decisions about the use of traffic calming devices. The more aggressive devices for slowing traffic will slow emergency vehicle response as well, and in some cases may cause safety concerns.

The City's policy for fire services is to respond to medical and structure fire incidents within 7 minutes, 90% of the time, as measured from receipt of the 911 call, to the fire unit arrival at the incident. The City currently meets this goal. It is important to point out that fire trucks respond to many life threatening medical emergencies, such as heart attack victims, in addition to fire emergencies. Often, a fire truck is the first to respond to a medical emergency, since there are fire stations located throughout the City. Fire stations have been spaced as far apart as is practical, while still meeting the response time goal, so as to avoid having too many fire stations. Thus, to areas at the limits of current response times, any significant traffic calming devices will cause response time failures.

Recognizing the importance of achieving this emergency response time goal as a necessary service to the public, all traffic calming devices will be designed to accommodate all emergency vehicles and to minimize its impacts on emergency vehicle response times. Most arterial and collector streets are considered primary emergency vehicle response routes and are used to access various parts of the city from the fire stations. In order to minimize impacts to emergency vehicle response times, particular attention should be paid to the types of devices used on collector streets. Devices that considerably limit or restrict emergency vehicle access on collector streets will not be allowed.

- Traffic calming measures shall be designed to accommodate all emergency vehicles and to minimize their impacts on emergency vehicle response times. (Policy 1)
- Traffic calming measures shall be limited on primary response routes. (Policy 2)
- The Fire Department and the Police Department should be involved in the development of the traffic calming measures in neighborhoods and should approve all proposed plans. (Policy 3)

2. Traffic Calming Devices

There are a few basic types of traffic calming devices that have different effects on the motoring public. It is important to understand how each type of device works and its impacts on motorists and emergency vehicles. The following discussion is divided to explain each type of device and the associated policies.

Horizontal shift devices include traffic circles, chicanes, and medians. Constriction devices include curb extensions, neckdowns and chokers. Both horizontal shift and constriction devices slow traffic by physically forcing motorists to maneuver around the devices. The use of landscaping within these devices not only enhances the aesthetics of the streetscape but also increases their effectiveness by breaking up the motorist's line of sight, which reduces the comfortable speed of travel. Therefore, these devices, when used in conjunction with one another, are effective for a longer stretch of roadway rather then just in the immediate vicinity of the device. These devices also tend to have relatively lower impacts on emergency response times in that the vehicles can continue to move around the devices without stopping. However, use of these devices usually requires prohibition of on-street parking adjacent to the device.

- Horizontal shift and constriction devices such as medians, traffic circles, chokers and chicanes are acceptable traffic calming devices. (Policy 4)
- Residents fronting the proposed devices must approve any required parking restrictions. (Policy 5)

Vertical deflection devices include speed lumps, speed humps, speed tables, and raised crosswalks and intersections. The vertical deflection devices that are included in this program are raised crosswalks at existing midblock applications and the speed lump. Speed lumps are similar to speed humps, except they are divided into three lumps with one foot of space between each lump. The space between the lumps is specifically designed to accommodate the axle width of fire trucks. All other vehicles with smaller axle widths have to go over the humps from at least one side of the vehicle. Speed lumps are typically 12 to 14 feet long and 3 inches high.

One of the concerns associated with speed lumps is the potential increased noise in the immediate area where the speed lumps are installed because of braking and accelerating

vehicles. It is important that residents immediately adjacent to the speed lumps concur to their installation.

- Speed lump is the approved vertical deflection device. Raised crosswalk may be considered an option at existing midblock crosswalk locations provided it will not significantly impact response times of emergency response vehicles such as fire engines. (Policy 6)
- Residents fronting the proposed speed lump must approve the installation. (Policy
 7)

Time of Day Turn Restrictions prohibit certain turning movements (e.g., right turn, left turn or U turn) at intersections during specific times of day. Careful analysis should be made when using this measure to prevent significant traffic diversion.

 Time of day turn restrictions may be considered for unusual circumstances only if found to not adversely impact any other residential neighborhoods. (Policy 8)

Diverters and street closures are measures that alter the existing transportation circulation system. In developing a solution it is important not to shift the problem to another neighborhood. Diverters and street closures can cause a tremendous amount of traffic diversion over a wide area. These types of measures have impacts that would need to be evaluated in a greater scope than just within a particular neighborhood. The impacts would include the environmental impacts due to changing the transportation circulation system. Many cities have policies that ban or discourage street closures. For these reasons, diverters and street closures are not recommended as traffic calming measures. However the use of diverters and street closures may be used outside of this program and should be evaluated as part of a larger area-wide study if their use is to be considered.

Diverters and street closures shall not be used as part of this program. (Policy 9)

Stop signs are not traffic calming devices. Residents, however, often request stop signs in an effort to calm traffic. Although residents believe that stop signs will reduce vehicle speeds, studies have shown that vehicle speeds after the vehicle has passed through the stop controlled intersection are as high, and occasionally higher, than without a stop sign, as motorists try to "make up" time lost at the stop sign. The acceleration and deceleration near stop signs generates noise and adversely affect air quality.

Inappropriate use of stop signs also creates significant adverse impact to emergency vehicles. Emergency vehicles are required to verify that a stop controlled intersection is clear of vehicles prior to entering. Many times this means that the emergency vehicle must nearly come to a stop. The delay to an emergency vehicle at a stop sign is similar to that caused by a vertical deflection device.

Stop signs are traffic control devices that should be used when appropriate to assign right-of-way to conflicting traffic movements, not to calm traffic. Stop signs should be installed only at locations where conditions meet established criteria, which has been the past practice of the City. Studies have shown that stop signs that do not meet established criteria (known as unwarranted stop signs) have a higher violation rate. Unwarranted stop signs also create disrespect of traffic control devices in general and affects behavior at other stop controlled intersections. It is for these many reasons that unwarranted stop signs are not to be used in this program.

• Unwarranted stop signs shall not be used as a part of this program. (Policy 10)

3. Maintenance

Many traffic calming devices alter the geometry of the roadway. Poorly designed traffic calming devices could interfere with street sweeping and other existing maintenance activities. This could have a negative effect on the appearance of the neighborhood and the residents' quality of life.

- Traffic calming devices shall be designed to minimize adverse impacts to street sweeping and other maintenance activities. (Policy 11)
- The development of traffic calming devices should be coordinated with the Maintenance Department. (Policy 12)

4. Residential Focus

This program is focused on residential areas since the purpose of the program is to improve quality of life of residents. Only local residential and residential 2-lanecollector streets will be considered in this program. Arterial streets are specifically excluded from this program because the nature of arterial streets is to move large numbers of vehicles in a relatively free-flowing manner. Actually, non-neighborhood traffic is encouraged to use arterial streets in order to reduce cut-through traffic in the neighborhoods.

Diverted traffic must also be considered when evaluating traffic calming measures. In developing a solution for one traffic problem, it is important not to shift the problem to another neighborhood or other residential streets within the neighborhood. Therefore, it is necessary to identify a neighborhood boundary to study the effects of proposed traffic calming devices.

Neighborhood participation is important in order to develop a consensus of the issues that adversely affect the neighborhood, evaluate the pros and cons of the various traffic calming measures and ensure that the issues are adequately addressed. It is essential to consider a wide range of perspectives and observations in addition to engineering data. The program is designed so that residents can become actively involved in defining the problem(s) and in the decision-making process in order to have a sense of ownership of the outcome.

In addition to neighborhood participation, it is important that the process reflects the opinions of a majority of the residents and not just a few vocal residents. This is implemented through the use of a petition. In order to implement the proposed traffic calming devices, at least 60% of the households within the neighborhood is required to sign a petition to show positive response on the implementation of the proposed traffic calming devices. A neighborhood meeting will be held to discuss the traffic calming program and the proposed traffic calming devices and locations prior to requiring the 60% petition.

- Traffic calming measures will only be considered on local residential and residential
 2-lane collector streets. (Policy 13)
- Traffic calming measures shall not be used on arterial streets or non-residential streets. (Policy 14)
- Minimize diverted traffic to other local or residential collector streets. (Policy 15)
- City staff will identify neighborhood study areas in order to evaluate the potential of diverted traffic. (Policy 16)
- Require a positive response from at least 60% of the households within the identified neighborhood boundary to approve the permanent installation of traffic calming devices. (Policy 17)

5. Minimum Criteria and Prioritization Criteria

The need to prioritize projects arises when the demand for traffic calming exceeds City resources. This includes staff time to work on the project as well as construction funding. A common approach used by most other cities to efficiently utilize city resources is to prioritize projects so that the neighborhoods with the greater problems are addressed first. Since most neighborhood traffic problems involve speeding vehicles or a high cut-through volume of vehicles relative to the street type, these criteria are weighted heavier in the ranking, especially cut-through volume of vehicles. Another factor that is considered in defining the extent of the problem is the average annual reported accidents. Also, the impact traffic will have on a neighborhood depends upon the character of the street in the neighborhood and the amount of pedestrian activity within the neighborhood. Streets that have a greater percentage of fronting homes, schools parks or other public facilities are impacted more than streets that are lined with backing lot treatments. Neighborhoods that have a higher number of pedestrian generators, such as parks, schools and other public facilities, will be impacted greater than those neighborhoods without pedestrian generators.

In addition to prioritizing projects, it is necessary to provide some minimum criteria that must be met in order for a neighborhood to qualify for traffic calming measures. These minimum criteria ensure that City staff and financial resources are used efficiently by not spending resources on streets that do not have a significant traffic problem and to avoid creating unmet expectations by having a long list of projects that may never get built. These minimum criteria are based on vehicle speeds and cut-through volumes.

For the purposes of the minimum and prioritization criteria, the data collected will be rounded up to the nearest whole number.

- The minimum criteria to be used to determine if a street is eligible for traffic calming devices if at least one of the follow criteria is met: (Policy 18)
 - o Cut-through Volume Average daily cut-through traffic is at least 250 vehicles
 - Speed 85th percentile speed (critical speed) is at least 8 mph above the posted speed limit
- The prioritization scoring criteria allows 45 maximum points and is as follows (Policy 19):

Cut-Through Volume - Scores calculated in the "Citywide Traffic Behavior Study" (20 points maximum)

Speed

85th percentile speed (critical speed)	Points
5 mph and less above posted speed limit	0
6 mph above posted speed limit	2
7 mph above posted speed limit	4
8 mph above posted speed limit	6
9 mph above posted speed limit	8
10 mph above posted speed limit	10 maximum

Accident History - One point per accident susceptible to correction by traffic calming device, using the average annual accidents over past 3 years (5 points maximum)

Fronting Homes

Percentage of the street that has fronting homes	Points
25% or less	0
25 - 40 %	1
41 - 60%	2
61 - 75%	3
76 – 90%	4
91 – 100%	5 maximum

Pedestrian Generators (such as parks, schools, public facilities, not including

homes)*

Number of pedestrian generators within neighborhood boundary	Points
1	1
2	2
3	3
4	4
5 or more	5 maximum

^{*} Elementary, middle and high schools will be weighted double points in this category.

6. Traffic Calming Device Removal

Although there are many policies and steps incorporated in the program to avoid the scenario whereby a neighborhood requests to have traffic calming devices removed, it is acknowledged that this may occur. In order for traffic calming devices to be removed from a neighborhood, similar process of neighborhood meeting and consensus requirements should be met. A neighborhood meeting would be held to discuss the issues and the impacts of traffic calming removal. A petition to garner 60% approval would need to be circulated within the original neighborhood boundary that installed the traffic calming device initially. The costs of removing traffic calming devices would be paid 100% by the residents. Therefore, it would require a 51% approval of the property owners to pass an assessment district vote to fund the removal costs.

- Require a positive response from at least 60% of the households within the original neighborhood boundary to remove traffic calming device. (Policy 20)
- Residents shall pay for 100% of the costs to remove traffic calming devices. (Policy 21)

NEIGHBORHOOD TRAFFIC CALMING PROCESS

The process begins once the City receives a request a resident to initiate a traffic study in a residential neighborhood due to concerns about traffic. The process is divided into two distinct tiers, with Tier 1 being Traffic Education, Enforcement and Engineering Program and Tier 2 being the Neighborhood Traffic Calming Program.

First, staff will conduct a Tier 1 analysis. This may include data collection including traffic counts, speed survey, collision history and pedestrian observations. Staff may recommend that the identified problem may be easily reduced or alleviated with Tier 1 implementation measures. Tier 1 implementation measures are usually low cost tools, primarily consisting of education, enforcement and some engineering. Tier 1 implementation measures include:

targeted enforcement

- · improving sight distance by trimming landscaping
- · appropriate additional signing, striping or pavement markings
- educational outreach
- placement of the radar speed trailer

If Tier 1 measures do not have a positive effect on traffic and the resident still has a concern, the resident can request to move the request forward to Tier 2. If staff does not recommend the use of Tier 1 measures or the Tier 1 measures have already been implemented without the desired effect, the request may move directly to Tier 2.

Tier 2 involves completing a citywide traffic behavior study. Based on the evaluation results and the speed survey, in order for a request to be considered for Tier 2, the existing traffic conditions must meet the minimum criteria as stated in Policy 18. If these minimum criteria are not met, the request may not proceed for Tier 2 analysis.

The request is then prioritized among other requests utilizing the prioritization criteria asstated in Policy 19. Prioritizing requests provides clear guidelines to staff on how to manage the limited resources effectively by dealing with neighborhoods that have the most pressing issues first.

At the beginning of each fiscal year, the top projects on the priority list will be selected for study during that year, depending upon the availability of funding. Once the project is selected for study, then staff determines a neighborhood boundary to identify the limits of the analysis. In addition, based on the details of the initial request, staff will develop best-fit alternative for implementation of traffic calming devices and its fiscal impact.

A neighborhood meeting will then be held and all of the residents within the boundary will be notified. The purpose of this meeting is to listen to the concerns of the residents, discuss the traffic calming program and process, the conceptual implementation plan of the traffic calming devices and the potential fiscal impacts. This will mostly be an educational meeting, both for staff to learn the concerns of the residents and for the residents to learn of the traffic calming process and its implications as well as the conceptual implementation plan of the traffic calming devices. This meeting is purposely held prior to the circulation of the petition so that the residents are more educated about the process that they are being asked to support. At this meeting, it is required that a neighborhood captain or neighborhood working group be identified in order to coordinate the future outreach efforts within the neighborhood.

City staff will modify the conceptual plan incorporating applicable comments received during the community meeting. The revised plan will be provided to the neighborhood captain or neighborhood working group to collect the signatures.

Since traffic calming measures impact many people in the neighborhood and the measures

tend to be costly, it is necessary to determine if there is adequate support for the process before continuing. Therefore, a petition with signatures from at least 60% of the households within the neighborhood boundary is required to approve the proposed traffic calming project. The neighborhood captain or the neighborhood working group will need to coordinate this effort. If less than 60% of the households sign the petition, the proposed project may not proceed. For the purposes of this program, a household is defined as any owned or rented living unit with its own street address, regardless of how many people live in each unit. Each household is represented by one signature. In addition, 100% of property owners next to any traffic calming devices need to approve the device installation.

Once the required neighborhood approvals are in place, plans and specifications will be prepared. The project will be advertised for construction. The City Council will consider approving the project at the time of award of the construction contract. It is expected that construction would be completed within 12 months of City Council approval.

2020 Neighborhood Traffic Calming Program Priority List

				Points	S		
Roadway	DailyTrips	Cut-Through Traffic	Speed	Accident History	Fronting Homes	Pedestrian Generators	Final Points
Arrowhead Avenue	1,277	20.0	2	0	5	2	29.0
Central Avenue	1,812		0	1	3	2	26.0
Del Monte Street	1,582		0	0	5	3	25.4
Bluebell Drive	17,675		4	1	5	2	23.5
Scott Street	851	7.4	9	1	2	1	20.4
Dalton Avenue	4,879	20.0	0	0	0	0	20.0
College Ave West of L Street	6,327	8.9	2	-	5	2	18.9
L Street	7,556		2	2	9	ļ	18.2
Fordham Way	1,157	13.2	0	0	5	0	18.2
Northfront Rd West of Vasco Road			0	-	0	0	18.0
Junction Avenue	3,011	3.9	4	1	5	4	17.9
College Ave East of L Street	6,327	10.6	0	1	5	- 1	17.6
Crestmont Avenue	897		9	0	9	0	16.9
Alameda Drive	782	1.3	8	1	2	1	16.3
P Street	12,297		0	1	9	l l	16.0
Sunflower Court	4,812	10.7	2	0	2	0	14.7
Lexington Way	1,677	2.6	0	0	5	0	14.7
Heather Lane	3,241	5.3	4	0	9	0	14.3
Herman Avenue	3,152	11.2	2	0	0	ļ	14.2
Pestana Way	294		9	0	5	2	14.0
Wall Street	2,081	1.4	4	2	4	2	13.4
Lomitas Avenue	1,215	4.2	4	0	4	Į.	13.2
Garaventa Ranch Road	3,152	8.1	0	1	1	3	13.1
Superior Drive	1,025	8.7	0	0	9	0	12.8
Scenic Avenue	3,586	3.9	0	1	5	7	11.9
Encino Drive	2,725	2.2	4	0	5	0	11.2
Mines Road	4,522	6.1	2	2	0	0	10.1
Vancouver Way	1,845	2.5	0		2	0	8.5

- 1. Normandy Circle, Alden Lane, Camella Drive, Alexander Street, Sonoma Avenue, Norma Way and Murdell Lane do not meet the minimum criteria.
 2. P Street and L Street have more than two travel lanes. The Traffic Calming Program excludes streets with over two travel lanes for traffic calming devices installation.