



Disaster and Fire Safety Commission

ACTION CALENDAR

December 10, 2019

*(Continued from December 3, 2019)*

To: Honorable Mayor and Members of the City Council

From: Disaster and Fire Safety Commission

Submitted by: Gradiva Couzin, Chairperson, Disaster and Fire Safety Commission

Subject: Recommendation to Immediately Fund and Implement the Safe Passages Program and Additional Actions to Ensure Emergency Equipment Access to All Parts of the City

RECOMMENDATION

The recommendation as stated above from the Disaster and Fire Safety Commission (DFSC) to the Council includes the following seven components:

1. Allocate full funding of the Fire Department's Safe Passages Program;
2. Initiate immediate action;
3. Recognize that parking restrictions are necessary on some streets for the health and well-being of Berkeley residents;
4. Establish priorities for enacting parking restrictions;
5. Develop a departmental coordinated team effort;
6. Inform the public; and
7. Document and distribute the extent of the access and egress problem.

FISCAL IMPACTS OF RECOMMENDATION

Exact costs and staff time are to be determined. This program is expected to require a substantial investment of staff time from multiple departments, including the City Attorney, Fire Department, Public Works and the Police Department - Parking Enforcement.

CURRENT SITUATION AND ITS EFFECTS

**1. Funding the Fire Department's Safe Passages Program:**

On February 5, 2019: At a Council Work Session, Fire Chief Brannigan described the Fire Department's Safe Passages Program as follows:

"The Berkeley Safe Passages pilot program is designed to blend traditional parking restrictions with innovative road markings and signage. Many roads in Fire Zones 2 and 3 are too narrow for parking and safe passage of vehicles when emergencies arise. Three locations will be selected to demonstrate Keep Clear corridors, no parking zones,

and pedestrian access so that staff and the public can evaluate the efficacy and impact of Safe Passage corridors.”

The Chief listed three actions that needed to be done for the Safe Passages Program:

- Identify, paint, and provide signage for new “Keep Clear” pinch points on streets
- Expand “No Parking” areas throughout dangerously narrow streets
- Identify funding for additional capacity for parking enforcement

**2. There is a clear historic need for immediate action:**

There is consensus among fire officials throughout California that while the risk of fire is high throughout the entire year, and communities must be ever vigilant, the months in the fall are the times of the greatest danger.

This is born out historically as shown by the following list of the top 10 most destructive wildfires in California ranked by structures (homes, commercial properties, barns, garages, sheds, etc.) destroyed since 1900. Please note that 80% occurred in the months of October through December:

<u>Destroyed</u>	<u>Date</u>	<u>Deaths</u>	<u>Structures</u>
1. Camp Fire (Butte)	Nov 2018	86	18,804
2. Tubbs Fire (Napa, Sonoma)	Oct 2017	22	5,636
3. Tunnel Fire (Alameda)	Oct 1991	25	2,900
4. Cedar Fire (San Diego)	Oct 2003	15	2,820
5. Valley Fire (Lake, Napa, Sonoma)	Sept 2015	4	1,955
6. Witch Fire (San Diego)	Oct 2007	2	1,650
7. Woolsey Fire (Ventura)	Nov 2018	3	1,643
8. Carr Fire (Shasta, Trinity)	July 2018	8	1,614
9. Nuns (Sonoma)	Oct 2017	3	1,355
10. Thomas (Ventura, Santa Barbara)	Dec 2017	2	1,063

The 1923 fire in Berkeley occurred on September 17<sup>th</sup> and, according to notarized affidavits at the time, the first house to be destroyed was at 125 Shasta Road

(presumably this address was in the upper portion of Shasta Road), and the second was at 1350 Tamalpais Road. The fire destroyed around 640 structures of which 584 were homes and depending on which article is sourced, it burned to around Oxford or to Hearst at Shattuck before the strong northeasterly wind shifted. Most articles about this fire state that it was stopped only because of the wind shift. The origin of the fire is said to have come into Berkeley from Wildcat Canyon, somewhere around Inspiration Point, or possibly close to where Fire Station 7 is now located, 3000 Grizzly Peak Blvd. It is interesting to note that while the origin of this fire was never determined, one of the factors mentioned was that the City Council had declined that year to pay for the usual allocation to fund a fire break along the City's northern border.

At that time, the City of Berkeley had a total population of 56,000. Today's current population is approximately 122,000.

In addition, Berkeley is among those communities in the State that are at high risk from earthquakes. It is likely that fires will occur after such an event. The Hayward Fault runs north to south in the eastern part of our community. This area, known as the Alquist-Priolo Zone, is well-mapped. The vulnerable mapped quake areas also include identified liquefaction zones in West Berkeley. According to the USGS website, they have found evidence of 11 major earthquakes along the Hayward Fault over the past 1,900 years: The last six (in years 1134, 1317, 1475, 1629, 1725 and 1856) occurred at average intervals of 150 years. The 150<sup>th</sup> year anniversary following the 1856 quake occurred on October 21, 2018. In 1856, there were 24,000 residents living in the area, today there are close to 3 million, which places the Hayward Fault in the category of being highly dangerous due to potential death and injuries to residents and the adverse economic impacts to the communities that lie within the fault area. It is important to note that the USGS website states much can be done to prevent loss of life and reduce economic impact, IF local jurisdictions and populations take action to prepare ahead of time.

**3. The importance of enacting as official City policy in all appropriate documents the recognition that parking restrictions on streets that impede emergency equipment access are necessary for the health and well-being of Berkeley residents:**

Although full documentation is difficult to establish, it can be established that the City has known of emergency equipment access problems for at least 41 years. In March 1978, a 29-year old woman lost her life and world-renowned conductor George Cleve suffered severe burns when fire equipment was hampered in responding to a house fire on Tamalpais Road. Despite years of knowing about the access problem and numerous recommendations and referrals, some, but not all narrow streets in Berkeley have had parking restrictions enacted. Examples of that history are as follows:

On June 24, 2005, Berkeley attorney, Paul M. Schwartz wrote a letter "placing the City of Berkeley on notice" about hazardous conditions that continued to exist on Tamalpais

Road. He wrote that when two cars are parked across from one another, fire equipment access is denied, that blockages caused by dumpsters and construction equipment exist, and he suggested ways to alleviate such situations. He wrote that this was “a formal request” for the City to “create a parking plan for this street that assures the safety of all individuals and protection of property.”

On February 9, 2016 the Council approved a January 12, 2016 recommendation from DFSC requesting that they:

“refer to staff the Design of a parking restriction program in the Hills Fire Zone to ensure access for emergency vehicles and to allow for safe evacuations in an emergency and to hold public meetings to get community input in the design of such a program

That report stated:

“Today we are 24 years after the devastating Oakland Hills Fire and 50 years after concern was first expressed for the safety of residents given the conditions that will save lives in the Berkeley Hills”

On November 28, 2017 the City Council asked the DFSC and the City Manager’s Office to explore developing a five-year plan for expanded disaster preparedness services which specifically included limiting parking to one side of streets narrower than 26 feet.

On January 30, 2018: The City Council asked the City Manager to study and evaluate in consultation with relevant Commissions several fire safety and prevention measures which included a “red curb program to address specific identified conditions on streets that are impassable by Emergency Vehicles or present unusual ingress or egress challenges.”

On March 28, 2018: The DFSC recommended that the City Council review some 80 items listed on a spread sheet regarding wildfires. Eight of the items pertained to parking, one of which was identified as “immediate priority” which is to:

Item 9: Enforce CVC 22514 for stopping or parking near a fire hydrant, including adding proper signage and/or red paint.

The other seven parking-related items are:

#8: Design and Propose a tailored red-curb program to address specific identified conditions on streets impassable by emergency vehicles or present ingress or egress challenges.

#10: Complete installation of blue reflectors marking location of fire hydrants.

#11: Have Beat Police Officers ticket hydrant infractions when making rounds in the hills fire zone.

#12: Adopt parking restrictions on narrow streets in hills fire zone.

#13: Limit parking one side of street narrower than 26 feet.

#14: Restrict parking on red flag days, similar to the LA Red Flag restricted parking program.

#15: Have traffic control personnel randomly canvass hills fire zones to ensure parking compliance.

On February 27, 2019: The DFSC approved submitting comments for the Local Hazard Mitigation Plan update to “recommend coordination with other City plans including the General Plan, the Climate Action Plan and Zero Waste Plan, addition of maps including narrow streets and pinch points and improving the plan’s maps via the City’s GIS portal, inclusion of a transparent process to real homeless, ESL and disabled population and inclusion of a list of priority goals for each of the upcoming years of the 5-year plan.”

There can be no doubt that many streets in Berkeley’s Hazardous Fire Zones are too narrow and/or winding to accommodate both unrestricted on-street parking and access by emergency response vehicles, and while parked cars are the main culprit intruding on access, the problem is exacerbated by lack of sidewalks, on-street storage of trash bins and intruding vegetation, and construction and delivery vehicles. Additionally, even in areas where parking has been restricted, there have been instances of non-compliance, particularly involving parking that hinders access to fire hydrants. This situation creates a life-safety hazard in the hills in all emergency situations, but especially in a wildfire scenario, when rapid evacuation of residents will be necessary.

#### **4. Establish priorities for enacting parking restrictions:**

As parking restrictions on narrow streets that impede emergency equipment access involve a large area, it is recommended that a ranking system be created. Such a system would place a higher priority on locations within Hazardous Fire Zones which have particularly dangerous conditions and designation of streets that are established as, or will be, potential evacuation routes. Since not all work will be able to be done at the same time, the purpose of such ranking will be to enable the City to proceed in an orderly fashion which will first place such restrictions on streets where they will be most effective in saving lives.

#### **5. Develop a departmental coordinated team effort**

Enactment and implementation of a program of ensuring emergency access to all properties in the City of Berkeley will require coordination among many Departments.

Particularly Police, Public Works, Zero Waste and Transportation. It is recommended that the Fire Department have the lead position in such an effort but that the duties and responsibilities of each department in the team be fully defined.

Further, deadlines for completion of tasks must be established in order to receive progress reports from appropriate departments at regular intervals until the completion especially of:

- installing signs and other markers which indicate No Parking or Stopping Zones around fire hydrants
- installing pavement markers to identify hydrant locations – particularly important for guiding mutual aid responders who are unfamiliar with Berkeley streets
- developing and implementation of the enforcement of new parking restrictions, including ticketing and towing

Enforcement of restrictions by the Police Department is of high import because the public must fully understand that violation of parking regulations is of such seriousness that it will be enforced consistently. Additionally, over and above those issues, there needs to be a definition of Police Department responsibility in an early evacuation plan for vulnerable residents (seniors and disabled) who may require not only early notice but also auto-related assistance in evacuation, as well as use of the announcement system in police cars as an integral part of the City's alert system both for red flag days and impending fire danger.

## **6. Inform the Public**

It is recommended that the City institute a broad public outreach campaign which includes direct mailing to property owners with instructions to notify any tenants of properties or in homes of affected properties, all rental agencies including those that offer short term rentals such as Abnb, all job and home care placement agencies, and all news and social media that the City is undertaking a program of new parking restrictions in the Hazardous Fire Zones and other areas which impede emergency access vehicles.

## **7. Assess and document the extent of the access and egress problem**

Produce a current and accurate map that displays:

- all narrow streets without parking restrictions along with their width
- all narrow streets with parking restrictions already in place

- “pinch-points” on other streets that constrain emergency equipment access
- major streets and “collector” streets planned for use in evacuation
- include pathways if technically possible within such a map. If not possible, attach a separate map identifying the exact location of pathways
- indications of the priority ranking as that information becomes available

This map shall be available to the public and kept up to date as the status changes. As a visual example, this map will assist residents to understand the need for parking restrictions. It will also serve as an information tool that would be helpful to residents during an emergency.

#### BACKGROUND

During the Council discussion of the 2020-2021 budget, the Council received a recommendation from the Council Committee on Budget and Finance that funding for the Safe Passages Program should be deferred and that the City should seek grants for this program. The City’s website indicates that the recommendation from the Council Committee was adopted, but that the Safe Passages Program would be reviewed again in November 2019 and grant funding would be considered.

Because of concerns generated by the disastrous recent wildfires around our City and the increased fire danger due to the heavy vegetation fuel level generated by rains earlier in the year, the Fire Department began to evaluate and document the problem of emergency equipment access on the many narrow roads in the City’s designated high fire risk areas. While that process has begun, it has been significantly hampered by the lack of adequate staffing. The DFSC also points out that seeking grant funding to do this work would take a considerable amount of time before any action would occur.

#### ENVIRONMENTAL SUSTAINABILITY

More parking restrictions in residential areas of the City may have a positive environmental impact by reducing the use of private vehicles for transportation.

In addition to potentially saving lives and property, providing improved access for firefighting equipment may reduce the spread of house-fires and wildland-urban interface fires, reducing the pollution, hazardous waste, loss of habitat, and other environmental damage caused by uncontrolled fire

RATIONALE FOR RECOMMENDATION

As seen in the years of background and the multiple times that parking restrictions have been recommended by the DFSC and by Council, we believe there appears to be a consensus that narrow streets that impede emergency vehicle access are a threat to life safety in Berkeley, and that parking restrictions are needed to address this problem.

Given the many years that the City has been aware of this problem, it is perplexing that no action has been taken to complete what needs to be done, nor has funding been allocated for the Safe Passages program. This issue must not be delayed any further. It is time to recognize the reality of the often-repeated statement that “it is impossible to evacuate everyone safely at the same time,” and with that recognition, take immediate action.

ALTERNATIVE ACTIONS CONSIDERED

In the DFSC recommendation from 2016, “Restrict Parking in the Hills Hazardous Fire Area” numerous alternative actions were considered and discussed with staff, following models used in other jurisdictions including LA, Pasadena, Santa Barbara, and Mill Valley.

CITY MANAGER

The City Manager refers the recommendations of the Commission’s Report to the budget process.

CONTACT PERSON

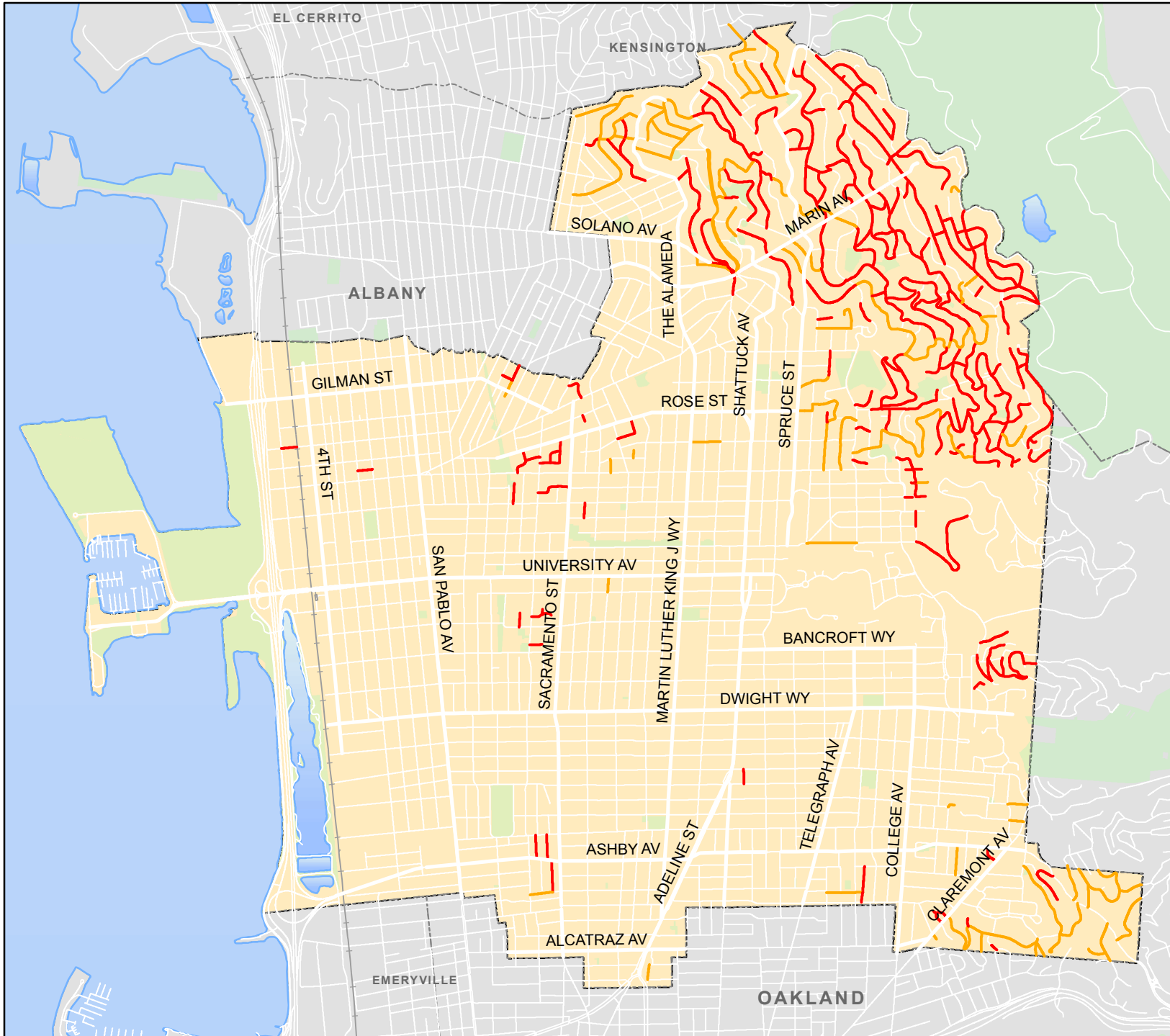
Keith May, Secretary, Disaster and Fire Safety Commission, 510-981-5508

Attachments:

1: Fire Access Map: Streets with Pavement Width Less than 26 Feet



# FIRE ACCESS MAP



- Pavement Width  
Less than 24 ft
- Pavement Width  
Less than 26 ft
- Parks
- City Limits

This map is for reference purposes only.

Care was taken in the creation of this map, but it is provided "AS IS". Please contact the City of Berkeley to verify map information or to report any errors.

October 2, 2015

0 1,000 2,000 Feet

**CITY OF BERKELEY**  
Land Use Planning Division  
Dept of Planning & Development  
2120 Milvia Street, 2nd Floor  
Berkeley, CA 94704

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
ACACIA AVE (5-98)	CRAGMONT AVE	EUCLID AVE	2	R	22	500
ACROFT CT (1400-1499)	ACTON ST	DEAD END (ACTON ST)	2	R	20	270
ACTON CIR (2-7)	DEAD END (ACTON CRESCENT)	ACTON CRESCENT	2	R	21	120
ACTON CIR (1401-1480)	ACTON ST	EAST DEAD END (ACTON ST)	2	R	21	470
AJAX PL (1-20)	AJAX LANE	SUMMIT RD	2	R	20	240
ALAMO AVE (5-98)	SPRUCE ST	HALKIN LANE	2	R	20	840
ALTA RD (20-60)	SPRUCE ST	CRAGMONT AVE	2	R	22	390
ALVARADO RD (145-617)	BRIDGE RD	NORTH CITY LIMIT AB WILLOW WK	2	R	24	1890
ALVARADO RD (1-59)	TUNNEL RD	NORTH CITY LIMIT	2	R	24	770
ALVARADO RD (111-142)	NORTH CITY LIMIT	BRIDGE RD	2	R	24	450
ARCADE AVE (1-6)	GRIZZLY PEAK BLVD	FAIRLAWN DR	2	R	23	310
ARCH ST	SPRUCE ST	SCENIC AVE	2	R	25	820
ARDEN RD (9-100)	MOSSWOOD RD	PANORAMIC WAY	2	R	15	610
ARLINGTON AVE (700-974)	THOUSAND OAKS BLVD	THE CIRCLE	2	C	25	2940
ATLAS PL (1-10)	HILL RD	SUMMIT RD	2	R	20	200
AVALON AVE (3016-3017)	CLAREMONT BLVD	CLAREMONT AVE	2	R	25	300
AVENIDA DR (27-33)	OLYMPUS AVE	QUEENS RD	2	R	20	145
AVENIDA DR (1-27)	CAMPUS DR	OLYMPUS AVE	2	R	23	300
AVENIDA DR (41-191)	QUEENS RD	GRIZZLY PEAK BLVD	2	R	18	1315
AVIS RD (20-68)	SAN ANTONIO AVE	SAN LUIS RD	2	R	16	440
BATAAN AVE (900-920)	7TH ST	8TH ST	2	R	22	330
BATEMAN ST (3015-3071)	WEBSTER ST	108 N/O PRINCE ST.	2	R	14	411
BONNIE LN (10-95)	HILLDALE AVE	MARIN AVE	2	R	18	750
BRET HARTE RD (12-51)	KEITH AVE	CREGMONT AVE	2	R	21	300
BRET HARTE RD (131-198)	CRAGMONT AVE	KEELER RD	2	R	17	750
BROOKSIDE CT (152-156)	DEAD END NR BROOKSIDE DR	BROOKSIDE DR	2	R	22	110
BROOKSIDE DR (110-190)	CLAREMONT AVE	CLAREMONT AVE	2	R	22	535
BUENA AVE (1705-1738)	MCGEE AVE	CYPRESS ST	2	R	23	400
BUENA VISTA WAY	DELMAR AVE	260' NORTH OF PRIVATE PROP	2	R	22	470
BUENA VISTA WAY (2500-3025)	EUCLID AVE	DEL MAR AVE	2	R	24	3775
CAMPUS DR (1205-1238)	SHASTA RD	QUAIL AVE	2	R	22	370
CAMPUS DR (1250-1298)	QUAIL AVE	GLENDALE AVE	2	R	22	385
CAMPUS DR (1405-1456)	DELMAR AVE	AVENIDA DRIVE	2	R	21	525
CAMPUS DR (1462-1511)	AVENIDA DR	PARNASSUS RD	2	R	22	540
CAMPUS DR (1521-1590)	PARNASSUS RD	DEAD END, U C PLOT 82	2	R	19	760
CAMPUS DR (1300-1405)	GLENDALE AVE	DELMAR AVE	2	R	22	1090
CANYON RD (15-67)	RIM ROAD (UC CAMPUS)	DEAD END	2	R	15	583
CAPISTRANO AVE (1901-1937)	THE ALAMEDA	CONTRA COSTA AVE	2	R	16	1075
CATHERINE DR (1420-1475)	KEONCREST DR	KEONCREST DR	2	R	23	410
CEDAR ST (2710-2716)	LA LOMA AVE	END ABOVE LA VEREDA	2	R	12	515
CLAREMONT CRES (1-26)	ASHBY AVE	CLAREMONT AVE	2	R	20	410

## Streets with Pavement Width less than 26 feet

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
CODORNICES RD (40-100)	DEAD END (EUCLID AVE)	EUCLID AVE	2	R	15	600
COLORADO AVE (42-99)	VERMONT AVE	MICHIGAN AVE	2	R	24	260
COLORADO AVE (24-32)	BOYNTON AVE	VERMONT AVE	2	R	24	250
COLUMBIA CIR (1-22)	COLUMBIA PATH	FAIRLAWN DR	2	R	21	230
COMSTOCK CT (1526-1537)	JAYNES ST	CEDAR ST	2	R	24	300
CONTRA COSTA AVE (712-929)	YOSEMITE RD	SOLAND	2	R	18	2775
CONTRA COSTA AVE (939)	SOLANO	LOS ANGELES AVE	2	R	24	150
CORONA CT (2310-2358)	ARCH ST	DEAD END (ARCH ST)	2	R	22	320
CRAGMONT AVE (1000-1032)	SANTA BARBARA RD	EUCLID AVE	2	R	22	830
CRAGMONT AVE (900-996)	MARIN AVE	SANTA BARBARA RD	2	R	23	1110
CRAGMONT AVE (1041-1099)	EUCLID AVE	BRET HARTE RD	2	R	20	1420
CRAGMONT AVE (1100-1106)	BRET HARTE RD	SHASTA RD	2	R	21	1625
CRAGMONT AVE (471-897)	GRIZZLY PEAK BLVD	MARIN AVE	2	C	22	4100
CRAGMONT AVE	SPRUCE ST	MARIN AVE	2	R	24	1050
CRESTON RD (600-798)	GRIZZLY PEAK BLVD	SUNSET LANE	2	R	22	1910
CRESTON RD (821-1097)	SUNSET LANE	GRIZZLY PEAK BLVD	2	R	22	1910
CYCLOTRON RD	HIGHLAND PL	DEAD END (CYCLOTRON RD)	2	R	23	140
CYPRESS ST (1404-1417)	ROSE ST	BUENA AVE	2	R	22	325
DEL MAR AVE (2-100)	BUENA VISTA WAY	GLENDALE AVE	2	R	21	795
DOHR ST (2905-2950)	RUSSELL ST	ASHBY AVE	2	R	22	489
EL CAMINO REAL (1-118)	DOMINGO AVE	THE UPLANDS	2	R	25	1840
EL CAMINO REAL (151-220)	THE UPLANDS	DEAD END ABOVE THE UPLANDS	2	R	24	320
EL PORTAL CT (5-11)	DEAD END (LA LOMA AVE)	LA LOMA AVE	2	R	18	250
EOLA ST (1702-1715)	VIRGINIA ST	FRANCISCO ST	2	R	22	325
ETON CT (1-15)	CLAREMONT AVE	DEAD END (CLAREMONT AVE)	2	R	25	150
EUCALYPTUS RD (1-29)	HILLCREST RD	SOUTH CITY LIMIT	2	R	25	440
EUCLID AVE	BEG OF DIVIDED ROAD	END OF DIVIDED ROAD	2	R	18	850
EUCLID AVE	CRAGMONT AVE	HILLDALE AVE	2	R	20	1240
FAIRLAWN DR (249-293)	AVENIDA DR	OLYMPUS DR	2	R	20	615
FAIRLAWN DR (9-231)	QUEENS RD	AVENIDA DR	2	R	21	1645
FOREST LN (1-95)	HILLDALE AVE	KEELER AVE	2	R	19	520
FOREST LN (106-263)	KEELER AVE	CRESTON RD	2	R	22	1160
FOUNTAIN WALK (1011)	SANTA BARBARA RD	SPRUCE ST	2	R	23	1150
GARBER ST (2710-3020)	CLAREMONT BLVD	EAST CITY LIMIT (TANGLEWOOD)	2	R	24	4505
GLEN AVE (1202-1299)	EUNICE ST	CORNER BETWEEN SUMMER/ARCH	2	R	22	620
GLEN AVE (2201-2323)	CORNER BETWEEN SUMMER/ARCH	SPRUCE ST	2	R	24	380
GLENDALE AVE (1400-1444)	LA LOMA AVE	DEL MAR AVE	2	R	22	875
GREENWOOD TER (1-1491)	ROSE ST	BUENA VISTA WAY	2	R	17	850
GRIZZLY PEAK BLVD	FAIRLAWN DR	GRIZZLY PEAK BLVD	2	R	24	700
HALKIN LN (27-70)	SPRUCE ST	CRAGMONT AVE	2	R	20	515
HAWTHORNE TER (2501-2535)	LE ROY AVE	EUCLID AVE	2	R	22	365

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
HAWTHORNE TER (1400-1598)	EUCLID AVE	CEDAR ST	2	R	24	1465
HEARST AVE (2309-2451)	ARCH ST	EUCLID AVE	2	A	25	1160
HIGH CT (1101-1151)	DEAD END	OAK ST	2	R	24	710
HIGHLAND PL (1730-1771)	LE CONTE AVE	RIDGE RD	2	R	13	280
HILGARD AVE (2709)	LA LOMA AVE	LA VEREDA	2	R	10	180
HILGARD AVE (2725-2808)	LA VEREDA	DEAD END	2	R	24	340
HILL CT (2501-2525)	EUCLID AVE	DEAD END (EUCLID AVE)	2	R	14	310
HILL RD (80-185)	DEAD END NR AJAX LANE	GRIZZLY PEAK BLVD (SOUTH)	2	R	17	510
HILL RD (11-75)	SHASTA RD	DEAD END	2	R	14	530
HILLCREST CT (2-18)	THE FOOTWAY	HILLCREST RD	2	R	20	190
HILLCREST RD	CLAREMONT AVE	ROANOK RD	2	R	25	3150
HILLCREST RD (6-240)	ROANOK RD	DEAD END ABOVE ROANOK RD	2	R	24	390
HILLDALE AVE (900-998)	MARIN AVE	REGAL RD	2	R	20	1265
HILLDALE AVE (630-876)	GRIZZLY PEAK BLVD	MARIN AVE	2	R	21	1870
HILLSIDE CT (11-23)	DEAD END (HILLSIDE AVE)	HILLSIDE AVE	2	R	16	290
HILLVIEW RD (1100-1149)	WOODSIDE RD	PARK HILLS RD	2	R	22	1265
HOPKINS CT (2-39)	ALBINA AVE	HOPKINS ST	2	R	22	570
JEFFERSON AVE (2015-2060)	UNIVERSITY AVE	ADDISON ST	2	R	24	335
JUANITA WAY (1505-1569)	ROSE ST	CEDAR ST	2	R	23	595
KEELER AVE (1064-1099)	STERLING AVE	BRET HARTE RD	2	R	18	400
KEELER AVE (1000-1049)	MILLER AVE	POPPY LANE	2	R	18	600
KEELER AVE (900-998)	MARIN AVE	MILLER AVE	2	R	19	1025
KEELER AVE (700-893)	GRIZZLY PEAK BLVD	MARIN AVE	2	R	20	1350
KEELER AVE (1101-1199)	BRET HARTE RD	SHASTA RD	2	R	23	1760
KEITH AVE (1001-1067)	SPRUCE ST	EUCLID AVE	2	C	22	1472
KEITH AVE (1075-1202)	EUCLID AVE	SHASTA RD	2	C	25	2570
KENTUCKY AVE (433-494)	MARYLAND AVE	MICHIGAN AVE	2	R	18	840
KEONCREST DR (1410-1558)	ROSE ST	ACTON ST	2	R	23	950
LA LOMA AVE (1343-1401)	QUARRY RD	ROSE ST	2	C	22	400
LA VEREDA RD (1550-1595)	LA LOMA AVE	CEDAR ST	2	R	15	550
LA VEREDA RD (1601-1736)	CEDAR ST	DEAD END ABOVE VIRGINIA ST	2	R	15	820
LATHAM LN (125-130)	CRESTON RD	OVERLOOK RD	2	R	21	275
LATHAM LN (11-70)	MILLER AVE	GRIZZLY PEAK	2	R	21	550
LINCOLN ST (1400-1483)	ACTON ST	SACRAMENTO ST	2	R	22	750
LOS ANGELES AVE (1928-1992)	THE CIRCLE	CONTRA COSTA AVE	2	R	24	845
M L KING JR WAY (3333-3359)	63RD ST	MARTIN LUTHER KING JR WAY	2	R	24	520
MAGNOLIA ST (2930-2970)	ASHBY AVE	WEBSTER ST	2	R	24	660
MARIN AVE (2314-2457)	SPRUCE ST	EUCLID AVE	2	C	23	1050
MARIN AVE (2520-2637)	EUCLID AVE	GRIZZLY PEAK BLVD	2	C	23	1078
MARIN AVE (2006-2275)	THE CIRCLE	SPRUCE ST	2	C	23	1646
MENDOCINO AVE (811-965)	ARLINGTON AVE	LOS ANGELES AVE	2	R	22	1650

## Streets with Pavement Width less than 26 feet

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
MENLO PL (1-51)	THOUSAND OAKS BLVD	SANTA ROSA AVE	2	R	25	490
MENLO PL (53-90)	SANTA ROSA AVE	THE ALAMEDA	2	R	24	450
MICHIGAN AVE (401-500)	MARYLAND AVE	SPRUCE ST	2	R	24	1480
MIDDLEFIELD RD (1000-1019)	THE CROSSWAYS	THE SHORTCUT	2	R	21	360
MIDDLEFIELD RD (1020-1050)	THE SHORTCUT	PARK HILLS RD	2	R	21	410
MILLER AVE (959-1190)	HILLDALE AVE	SHASTA RD	2	R	21	3510
MILLER RD	HILLDALE AVE	SHASTA RD	2	R	21	3510
MIRAMONTE CT (1358-1367)	ADA ST	SOUTH DEAD END (ADA ST)	2	R	21	180
MONTROSE RD (1-44)	SAN LUIS RD	SANTA BARBARA RD	2	R	23	375
MONTROSE RD (101-194)	SANTA BARBARA RD	SPRUCE ST	2	R	24	640
MOSSWOOD RD (1-48)	PANORAMIC WAY	DEAD END ABOVE ARDEN RD	2	R	15	800
MUIR WAY (3-16)	GRIZZLY PEAK BLVD	PARK HILLS RD	2	R	25	385
NORTH ST (1501-1515)	NORTH DEAD END (JAYNES ST)	JAYNES ST	2	R	24	155
NORTHAMPTON AVE (4-98)	SANTA BARBARA RD	SPRUCE ST	2	R	23	1150
NORTHBRAE TUNNEL	SANTA BARBARA RD	SPRUCE ST	2	R	23	1150
NORTHGATE AVE (1-99)	DEAD END (NORTHGATE PATH)	SHASTA RD	2	R	21	880
OAK ST (2301-2395)	ARCH ST	HIGH CT	2	R	24	660
OAK ST (2410)	DEAD END	OAK ST	2	R	24	710
OAKRIDGE RD (10-92)	TUNNEL RD	DEAD END (OAK RIDGE STEPS)	2	R	17	1200
OLYMPUS AVE (1530-1590)	FAIRLAWN DR	DEAD END (U C PLOT 82)	2	R	21	760
OLYMPUS AVE (1451-1520)	AVENIDA DR	FAIRLAWN DR	2	R	21	1140
OVERLOOK RD (964-1072)	END NORTH OF THE CROSSWAYS	PARK HILLS RD	2	R	22	1715
OXFORD ST (807-850)	INDIAN ROCK AVE	MARIN AVE	2	R	23	975
OXFORD ST (900-1053)	MARIN AVE	LOS ANGELES AVE	2	R	23	1400
PAGE ST (648)	2ND ST	RAILROAD TRACKS	2	R	16	345
PALM CT (2817-2828)	KELSEY ST	DEAD END (KELSEY ST)	2	R	25	150
PANORAMIC WAY (1-61)	CANYON RD	1ST TURN	2	R	17	670
PANORAMIC WAY (62-130)	1ST TURN	ARDEN RD	2	R	15	1215
PANORAMIC WAY (136-367)	ARDEN RD	EAST CITY LIMIT	2	R	15	1695
PARK HILLS RD (1002-1042)	WILDCAT CANYON RD	MIDDLEFIELD RD	2	R	22	850
PARK HILLS RD (1141-1180)	PARK GATE	SHASTA RD	2	R	22	920
PARK HILLS RD (1051-1131)	MIDDLEFIELD RD	PARK GATE	2	R	22	1305
PARNASSUS CT (5-12)	PARNASSUS RD	DEAD END (PARNASSUS RD)	2	R	22	210
PARNASSUS RD (2-100)	DEL MAR AVE	CAMPUS DR	2	R	24	1145
POPLAR ST (10-190)	CRAGMONT AVE	HILLDALE AVE	2	R	20	1240
POPPY LN (8-80)	HILLDALE AVE	KEELER AVE	2	R	22	860
PRINCE ST (1401-1490)	ACTON ST	STANTON ST	2	R	24	523
PRINCE ST (2436-2511)	DANA ST	BATEMAN ST	2	R	24	771
QUAIL AVE (60-90)	CAMPUS DR	QUEENS RD	2	R	21	325
QUAIL AVE (1-39)	NORTHGATE AVE	CAMPUS DR	2	R	21	340
QUEENS RD (1200-1260)	SHASTA RD	QUAIL AVE	2	R	22	640

Streets with Pavement Width less than 26 feet

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
QUEENS RD (1263-1345)	QUAIL AVE	FAIRLAWN DR	2	R	21	880
QUEENS RD (1355-1444)	FAIRLAWN DR	AVENIDA DR	2	R	21	1075
REGAL RD (931-990)	EUCLID AVE	CRAGMONT AVE	2	R	22	1325
REGAL RD (801-894)	SPRUCE ST	MARIN AVE	2	R	24	1050
REGAL RD (900-925)	MARIN AVE	EUCLID AVE	2	R	24	550
ROANE	EUCLID AVE	CRAGMONT AVE	2	R	22	1325
ROANOKE RD (20-46)	HILLCREST RD & THE UPLANDS	SOUTH CITY LIMIT	2	R	24	300
ROBLE CT (5-40)	DEAD END (ROBLE RD)	ROBLE RD	2	R	24	430
ROBLE RD (6-59)	TUNNEL RD	SOUTH CITY LIMIT (ROBLE CT)	2	R	24	920
ROCK LN (1-95)	POPLAR ST	CRAGMONT AVE	2	R	22	800
ROSE ST (2555-2707)	LE ROY AVE	LA LOMA AVE	2	R	15	750
ROSE ST (2224-2333)	SPRUCE ST	SCENIC AVE	2	R	25	820
ROSEMONT AVE (1-10)	CRESTON RD	VISTAMONT AVE	2	R	23	460
ROSLYN CT (2-19)	THE SOUTH CROSSWAYS	CHABOLYN TERRACE	2	R	20	150
RUGBY AVE (355-371)	NORTH CITY LIMIT (VERMONT)	VERMONT AVE	2	R	25	210
SAN ANTONIO AVE (1901-1940)	ARLINGTON AVE	300 FT +/- EAST OF AVIS RD	2	R	17	525
SAN ANTONIO AVE (1800-1891)	SAN RAMON AVE & THE ALAMEDA	ARLINGTON AVE	2	R	24	865
SAN BENITO RD (900-954)	MARIN AVE	SPRUCE ST	2	R	24	810
SAN DIEGO RD (743-824)	SOUTHAMPTON AVE	INDIAN ROCK AVE	2	R	19	1850
SAN FERNANDO AVE (614-686; 1930)	ARLINGTON AVE	YOSEMITE RD	2	R	24	1055
SAN JUAN AVE (1815-1895)	SANTA CLARA AVE	SAN FERNANDO AVE	2	R	24	900
SAN LUIS RD (501-846)	ARLINGTON AVE	INDIAN ROCK AVE	2	R	22	3430
SAN MATEO RD (7-96)	DEAD END (SOMERSET PL)	INDIAN ROCK AVE	2	R	24	780
SAN MIGUEL AVE (600-630)	THOUSAND OAKS BLVD	SANTA ROSA AVE	2	R	22	470
SAN RAMON AVE (1800-1895)	SAN ANTONIO AVE & THE ALAMEDA	SAN FERNANDO AVE	2	R	24	1060
SANTA BARBARA RD (501-630)	ARLINGTON AVE	FLORIDA AVE	2	R	23	1040
SANTA BARBARA RD (551-699)	SPRUCE ST	CRAGMONT AVE	2	R	24	605
SANTA BARBARA RD (900-948)	MARIN AVE	SPRUCE ST	2	R	24	510
SANTA CLARA AVE (945; 951-993)	SAN RAMON AVE	THOUSAND OAKS BLVD	2	R	24	870
SANTA ROSA AVE (551-699)	MENLO PLACE	SAN LORENZO AVE	2	R	22	1735
SCENIC AVE (1350-1589)	ROSE ST	CEDAR ST	2	R	24	1720
SENIOR AVE (3-48)	FAIRLAWN DR	GRIZZLY PEAK BLVD	2	R	24	700
SHASTA RD (2701-2737)	TAMALPAIS RD	KEITH AVE	2	R	20	565
SHASTA RD (3000-3085)	PARK GATE	EAST CITY LIMIT (GOLF COURSE)	2	C	20	565
SHASTA RD (2601-2699)	TAMALPAIS RD AND ROSE ST	TAMALPAIS RD	2	R	22	1540
SHASTA RD (2800-2827)	CRAGMONT AVE	KEELER AVE	2	C	25	680
SHASTA RD (2834-2925)	KEELER AVE	QUEENS RD	2	C	24	1315
SHASTA RD (2931-2998)	QUEENS RD	GRIZZLY PEAK BLVD	2	C	25	1130
SHASTA RD (2740-2798)	KEITH AVE	CRAIGMONT AVE	2	C	24	1000
SHATTUCK AVE (800-840)	INDIAN ROCK AVE	MARIN AVE	2	R	24	615
SHATTUCK AVE (900-964)	MARIN AVE	LOS ANGELES AVE	2	R	24	950

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
SOLANO AVE	SANTA BARBARA RD	SPRUCE ST	2	R	23	1150
SOMERSET PL (30-49)	SOUTHAMPTON AVE	DEAD END (JOHN HINKEL PARK)	2	R	22	425
SOMERSET PL (2)	ARLINGTON AVE	SAN LUIS RD	2	R	24	2050
SOUTHAMPTON AVE (221-260)	SAN LUIS RD	SANTA BARBARA RD	2	R	22	4000
SOUTHAMPTON AVE (11-180)	ARLINGTON AVE	SAN LUIS RD	2	R	24	2050
SPRING WAY (1402-1418)	DEAD END	SCENIC AVE	2	R	18	260
STANTON ST (2907-2952)	RUSSELL ST	ASHBY AVE	2	R	22	560
STANTON ST (3001-3053)	ASHBY AVE	PRINCE ST	2	R	23	706
STERLING AVE (1050-1195)	KELLER	SHASTA RD	2	R	20	2310
STEVENSON AVE (5-69)	GRIZZLY PEAK BLVD	MILLER AVE	2	R	24	520
STODDARD WAY (25-40)	DEAD END	GRIZZLY PEAK BLVD	2	R	20	260
SUMMIT LN (6-12)	SUMMIT RD NR GRIZZLY PEAK	DEAD END	2	R	6	180
SUMMIT RD	AJAX LANE	ATLAS PL	2	R	20	240
SUMMIT RD (1500-1545)	GRIZZLY PEAK BLVD	END SOUTH OF GRIZZLY PEAK BL	2	R	18	740
SUMMIT RD (1300-1498)	ATLAS PL	GRIZZLY PEAK BLVD	2	R	23	2530
SUNSET LN (50-70)	WOODMONT RD	WILDCAT CANYON RD	2	R	17	318
SUNSET LN (4-6)	GRIZZLY PEAK BLVD	WOODMONT RD	2	R	17	344
TAMALPAIS RD (1-190)	SHASTA RD	ROSE ST	2	R	22	2075
TEVLIN ST (1200-1306)	NORTH CITY LIMIT	WATKINS ST	2	R	18	300
TEVLIN ST (1248-1305)	WATKINS ST	END SOUTH OF GILMAN ST	2	R	25	425
THE ALAMEDA (500-597)	SAN ANTONIO AVE	THOUSAND OAKS BLVD	2	R	24	1385
THE BRIDGE RD (9-30)	ALVARADO RD	TUNNEL RD	2	R	24	450
THE CRESCENT (2-60)	PARK HILLS RD (NORTH)	PARK HILLS RD (SOUTH)	2	R	20	1020
THE CROSSWAYS (202-209)	OVERLOOK RD	MIDDLEFIELD RD	2	R	21	230
THE SHORT CUT	MIDDLEFIELD RD	PARK HILLS RD	2	R	22	200
THE SPIRAL (304-319)	DEAD END	WILDCAT CANYON RD	2	R	25	305
THE UPLANDS (220-305)	EL CAMINO REAL	TUNNEL RD	2	R	25	1048
THOUSAND OAKS BLVD (1601-1665)	COLUSA AVE	VINCENTE AVE	2	C	20	380
THOUSAND OAKS BLVD (1666-1797)	VINCENTE AVE	THE ALAMEDA	2	C	24	850
TOMLEE DR (1355-1380)	JUANITA WAY	ACTON ST	2	R	23	330
TWAIN AVE (1-71)	KEELER AVE	STERLING AVE	2	R	18	740
VALLEJO ST (6-52)	THE ALAMEDA	SAN RAMON AVE	2	R	24	460
VALLEY ST (2150-2183)	NORTH DEAD END (ALLSTON)	ALLSTON WAY	2	R	23	375
VASSAR AVE (350-399)	NORTH CITY LIMIT (KENTUCKY)	KENTUCKY AVE	2	R	23	375
VASSAR AVE (401-486)	KENTUCKY AVE	SPRUCE ST	2	R	24	1160
VERMONT AVE (424-499)	MARYLAND AVE	COLORADO AVE	2	R	25	750
VERMONT AVE (300-420)	DEAD END (VERMONT)	MARYLAND	2	R	24	780
VICENTE RD (1-95)	EAST CITY LIMIT NR GRAND VIEW	TUNNEL RD	2	R	24	1310
VICENTE RD (150-181)	ALVARADO RD	EAST CITY LIMIT NR GRAND VIEW	2	R	24	550
VINCENTE AVE (750-814)	COLUSA AVE	PERALTA AVE	2	R	24	1000
VINCENTE AVE (451-595)	NORTH END (VINCENTE WALK)	THOUSAND OAKS BLVD	2	R	24	1400

**TOTAL LENGTH (FEET) 231,679**

Street Name	Beginning Location	Ending Location	Lanes	Fire Code	Pavement Width (ft)	Pavement Length (ft)
VINE ST	COLUSA AVE	PERALTA AVE	2	R	24	1000
VIRGINIA GDNS (1-22)	NORTH DEAD END (CEDAR)	VIRGINIA ST	2	R	20	470
VIRGINIA ST (2701-2711)	LA LOMA AVE	DEAD END (AT LA VEREDA)	2	R	17	220
VISALIA AVE (1500-1598)	WEST CITY LIMIT (NEILSON)	COLUSA AVE	2	R	24	325
VISALIA AVE (1606-1697)	COLUSA AVE	VINCENTE AVE	2	R	24	890
VISTAMONT AVE (520-669)	WOODMONT AVE	WOODMONT AVE NR SUNSET LANE	2	R	18	2410
WALKER ST (2701-2708)	DERBY ST	WARD ST	2	R	18	330
WATKINS ST (1341-1350)	NEILSON ST	TEVLIN ST	2	R	22	250
WHITAKER AVE (1-99)	MILLER AVE	STERLING AVE	2	R	18	550
WILSON CIR (2-14; 1579)	OLYMPUS DR	WILSON WALK	2	R	23	180
WOODMONT AVE (515-581)	WILDCAT CANYON & GRIZZLY PEAK	ROSEMONT AVE	2	R	20	1355
WOODMONT AVE (600-691)	ROSEMONT AVE	SUNSET LANE	2	R	20	1700
WOODMONT AVE (800)	SUNSET LANE	DEAD END	2	R	12	1950
WOODMONT CT (1-5)	WOODMONT AVE (NORTH)	WOODMONT AVE (SOUTH)	2	R	23	285
WOODSIDE RD (1051-1155)	THE CRESCENT	PARK HILLS RD	2	R	22	1450
YOSEMITE RD (1800-1891)	THE ALAMEDA	SAN FERNANDO AVE	2	R	24	870