City Council Meeting
06-13-22
Item 4.B.

Council Agenda Report

To: Mayor Grisanti and the Honorable Members of the City Council

Prepared by: Arthur Aladjadjian, Public Works Superintendent

Reviewed by: Rob Duboux, Public Works Director/City Engineer

Approved by: Steve McClary, Interim City Manager

Date prepared: May 12, 2022 Meeting date: June 13, 2022

Subject: 2022 Engineering and Traffic Survey (E&TS)

RECOMMENDED ACTION: 1) Approve and adopt the 2022 Engineering and Traffic Survey (E&TS) to establish speed limits (Speed Survey); 2) After the City Attorney reads the title, introduce on first reading Ordinance No. 500 amending Chapter 10.08 (Speed Limits) of the Malibu Municipal Code (MMC) to establish speed limits on City streets; and 3) Direct staff to schedule second reading and adoption of Ordinance No. 500 for the June 27, 2022 Regular City Council meeting.

FISCAL IMPACT: No additional appropriation is required. If Council moves forward with recommended action, the City will need to purchase and install new speed limits signs along the eleven (11) road segments identified. Sufficient funding for new road signage has been included in the Proposed Budget for Fiscal Year 2022-2023 in Account No. 100-3001-5120-00 (Street Maintenance).

WORK PLAN: This item was not included in the Adopted Work Plan for Fiscal year 2021-2022. This project is part of normal staff operations.

DISCUSSION: The Speed Survey is intended to serve as the basis for the establishment and enforcement of speed limits for street segments within the City of Malibu.

Speed surveys are required by Section 40802(a) of the California Vehicle Code (CVC) and the national Uniform Vehicle Code to enforce speed limits by radar. State law requires speed zones to be evaluated on a regular basis to ensure that the posted speed limits are justified for the road conditions. Engineering and traffic surveys may be extended to every seven (7) years or every fourteen (14) years if a registered engineer

evaluates the section of the highway and determines that no significant changes in roadway or traffic conditions have occurred as specified in Section 40802(c) of the California Vehicle Code (CVC).

Since the most recent Engineering and Traffic Survey was approved and adopted by the City in 2016, a new survey has been prepared in order to continue radar enforcement of speed limit violations through the utilization of current data in the new Speed Survey.

Speed limits are generally established at or near the 85% Percentile speed, which is defined as the speed at or below which 85 percent of traffic is moving. Speed limits established on this basis are in accordance with the CVC. The 2022 Speed Survey included the review and analysis of 46 road segments (locations) within the City limits. The survey includes field observations and an inventory of road geometrics, review of accident data, evaluation of surrounding land use, roadway crossings and other relevant information, such as roadway and roadside conditions that may contribute to special circumstances. The location and presence of existing speed limit signs were also reviewed and documented. Additionally, traffic counts were conducted for each road segment.

Table 3: Speed Survey Recommendations of the 2022 Speed Survey summarizes observations and data for the 46 City road segments. The analysis concluded that eleven (11) road segments justified a lower speed limit. The following are the road segments that justify a lower speed limit:

LOCATION No.	LOCATION	LIMITS OF LOCATION	EXISTING SPEED LIMIT	PROPOSED SPEED LIMIT
11	Civic Center Way	Malibu Canyon Road to Webb Way/Stuart Ranch Road	40	**35**
17	Dume Drive	Heathercliff Road to Cliffside Drive	30	**25**
18	Encinal Canyon Road	North City Limit to PCH	45	**40**
23	Heathercliff Road	Wandermere Road to Pt. Dume Club	30	**25**
26	Kanan Dume Road	North City Limit to Galahad Drive	50	**45**
27	Kanan Dume Road	Galahad Drive to PCH	50	**45**
30	Malibu Canyon Road	North City Limit to Malibu Knolls Road	45	**40**

31	Malibu Canyon Road	Malibu Knolls Road to PCH	45	**40**
35	Merritt Drive	Morning View Drive to Busch Drive	30	**25**
37	Morning View Drive	Via Cabrillo to PCH	30	**25**
40	Trancas Canyon Road	North City Limit to PCH	30	**25**

For Segment Nos. 11, 17, 18, 23, 26, 27, 30, 31, 35, 37 and 40, the speed limit is recommended to be decreased by 5 miles per hour (MPH) from the posted speed limit based on the speed data collected. All other road segments in the study are proposed to remain unchanged from the current posted speed limits as noted in the report.

It is important to note that the Speed Survey does not include Pacific Coast Highway (PCH) as it is owned, maintained, and regulated by the State of California. The Speed Survey also does not include any private roads within the City limits. Division 11, Chapter 7, of the California Vehicle Code defines the California Speed Laws. Speed limits are generally established at or near the 85th percentile speed, which is defined as the speed at or below which 85 percent of traffic is moving.

On October 8, 2021, Governor Newsom signed Assembly Bill 43 (AB 43). This new legislation gives cities throughout the state more control over deciding how speed limits should be set, including reducing the speed limits independent of the 85th Percentile Rule. Assembly Bill 43 would allow for lower speed limits based on an additional set of criteria as noted below (Ref: CVC 22358.7 and 22358.8):

> Upon completion of an engineering and traffic survey, if the local authority finds that the speed limit is still more than is reasonably safe, the local authority would be able to reduce the speed limit by an additional five miles per hour for the following reasons:
>
> a. If the portion of highway is designated as a safety corridor (local authority shall not deem more than one-fifth of their streets as safety corridors). The definition of a “safety corridor” is not available yet and will be defined by the Department of Transportation in the next revision of the California Manual on Uniform Traffic Control Devices
> b. If the portion of highway is adjacent to any land or facility that generates high concentrations of bicyclists or pedestrians, especially those from vulnerable groups such as children, seniors, persons with disabilities, and the unhoused. The Department of Transportation will determine what constitutes land or facilities that generate high concentrations of bicyclists and pedestrians in the next revision of the California Manual on Uniform Traffic Control Devices

c. Local authority may not lower a speed limit as authorized by this section until June 30, 2024, or until the Judicial Council has developed an online tool for adjudicating infraction violations statewide as specified in Article 7 (commencing with Section 68645) of Chapter 2 of Title 8 of the Government Code, whichever is sooner
d. Local authority may, by ordinance, retain the current speed limit or restore the immediately prior speed limit if that speed limit was established with an engineering and traffic survey and if a registered engineer has evaluated the section of highway and determined that no additional general-purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit

At this time, the City cannot implement the sections of AB 43 until June 30, 2024 or until the State provides additional guidelines and definitions. Staff will continue to monitor the status of AB 43 and implementation.

On May 4, 2022, the Draft 2022 Engineering and Traffic Survey was presented to the Public Safety Commission for review and comments. The Public Safety Commission recommended that the City Council adopt the 2022 Engineering and Traffic Survey and implement its speed limit recommendations.

MMC Section 10.08.030 establishes speed limits on various City streets. Therefore, staff recommends City Council approve the attached 2022 Engineering and Traffic Survey. In addition, adopt Ordinance No. 500 amending MMC Section 10.08.030 to implement the speed limit recommendations.

ATTACHMENTS:

1. Ordinance No. 500
2. 2022 Engineering and Traffic Survey (E&TS)

ORDINANCE NO. 500

AN ORDINANCE OF THE CITY OF MALIBU AMENDING CHAPTER 10.08 OF THE MALIBU MUNICIPAL CODE TO ESTABLISH SPEED LIMITS ON CITY STREETS

The City Council of the City of Malibu does ordain as follows:

SECTION 1. Section 10.08.030 of the Malibu Municipal Code is amended to read as follows:

10.08.030 Speed limits.

The prima facie speed limit on the following roads are hereby declared to be as follows:

1. BUSCH DRIVE between Calpine Drive and Merritt Drive, thirty (30) miles per hour.
2. CIVIC CENTER WAY between Malibu Canyon Road and Webb Way, thirty-five, (35) miles per hour.
3. CORRAL CANYON ROAD between City Limit and Pacific Coast Highway, thirty (30) miles per hour.
4. ENCINAL CANYON ROAD between North City Limit and Pacific Coast Highway, forty (40) miles per hour.
5. GUERNSEY AVENUE between Morning View Drive and Pacific Coast Highway, thirty (30) miles per hour.
6. KANAN DUME ROAD between North City Limit to Pacific Coast Highway, forty-five (45) miles per hour.
7. LATIGO CANYON ROAD between North City Limit to Pacific Coast Highway, thirty (30) miles per hour.
8. MALIBU CANYON ROAD between Pacific Coast Highway and North City Limit, forty (40) miles per hour.
9. MORNING VIEW DRIVE between Guernsey Avenue and Via Cabrillo, thirty (30) miles per hour.
10. PHILIP AVENUE between Morning View Drive and Cuthbert Road, thirty (30) miles per hour.
11. WESTWARD BEACH ROAD between Pacific Coast Highway and Birdview Avenue, thirty (30) miles per hour.

The prima facie speed limit for local streets and roads, twenty-five (25) miles per hour, shall apply to the following roads:

1. BIG ROCK DRIVE between Cool Oak Way and Pacific Coast Highway.
2. BIRDVIEW AVENUE between Westward Beach Road and Cliffside Drive.
3. BLUEWATER ROAD between Birdview Avenue and Dume Drive.
4. BONIFACE DRIVE between Portshead Road and Firnhill Drive.
5. BONSALL DRIVE between Portshead Road and Fernhill Drive.
6. BROAD BEACH ROAD between Pacific Coast Highway and Pacific Coast Highway.
7. BUSCH DRIVE between Merritt Drive and Pacific Coast Highway.

8. CARBON CANYON ROAD between Carbon Mesa Road and Pacific Coast Highway.
9. CARBON MESA ROAD between end of road and Carbon Canyon Road.
10. CIVIC CENTER WAY between Webb Way and Cross Creek Road.
11. CLIFFSIDE DRIVE between Birdview Avenue to end of road.
12. CROSS CREEK ROAD between Civic Center Way and Pacific Coast Highway.
13. CUTHBERT ROAD between Busch Drive and Harvester/Philip.
14. DUME DRIVE between Heathercliff Road and Cliffside Drive.
15. FERNHILL DRIVE between Wildlife Road and Grayfox Street.
16. FERNHILL DRIVE between Grayfox Street and Cliffside Drive.
17. HARVESTER ROAD between Busch Drive and Cuthbert Road.
18. HEATHERCLIFF ROAD between Wandermere Road and Point Dume Club/end of road.
19. HEATHERCLIFF ROAD between Pacific Coast Highway and Wandermere Road.
20. JOHN TYLER DRIVE between Pepperdine University Entrance and Pacific Coast Highway.
21. LAS FLORES CANYON ROAD between North City Limits and Pacific Coast Highway.
22. MALIBU COUNTRY DRIVE between John Tyler Drive (Private Road) and John Tyler Drive.
23. MALIBU ROAD between Pacific Coast Highway and West of Webb Way.
24. MALIBU ROAD between East of Webb Way and Pacific Coast Highway.
25. MERRITT DRIVE between Morning View Drive and Busch Drive.
26. MORNING VIEW DRIVE between Via Cabrillo and Pacific Coast Highway.
27. PORTSHEAD ROAD between Pacific Coast Highway and Boniface Drive.
28. PUERCO CANYON ROAD between Pacific Coast Highway and 1000 ft. North of Pacific Coast Highway.
29. RAMBLA PACIFICO between north of upper private gate and North City Limit.
30. RAMBLA PACIFICO between Pacific Coast Highway and 750 ft. North of Pacific Coast Highway.
31. RAMBLA VISTA between Pacific Coast Highway and Pacific Coast Highway.
32. TRANCAS CANYON Road between North City Limit and Pacific Coast Highway
33. WILDLIFE ROAD between Zumirez Drive and end of road.
34. ZUMIREZ DRIVE between Pacific Coast Highway and Terminus.

SECTION 2. The City Clerk shall certify the adoption of this ordinance.

PASSED, APPROVED AND ADOPTED this ____ day of ____ 2022.

_____
PAUL GRISANTI, Mayor

ATTEST:

_____
KELSEY PETTIJOHN, City Clerk
(seal)

Date: _____

APPROVED AS TO FORM:
THIS DOCUMENT HAS BEEN REVIEWED BY THE CITY ATTORNEY'S OFFICE
_____
JOHN COTTI, Interim City Attorney

FINAL REPORT

FOR THE

2022 ENGINEERING AND TRAFFIC SURVEY TO ESTABLISH SPEED LIMITS

May 2022

Prepared by:

Kimley»Horn

ATTACHMENT 2

CERTIFICATION

I, Srikanth Chakravarthy, do hereby certify that this Engineering and Traffic Survey for the City of Malibu was performed under my supervision. I certify that I am experienced in performing surveys of this type and duly registered in the State of California as a Professional Civil and Traffic Engineer.

Srikanth Chakravarthy
May 18, 2022
RCE# 73629
RTE# 2531

TABLE OF CONTENTS

List of Tables

Appendix

1.0 INTRODUCTION

This Engineering and Traffic Survey is intended to serve as the basis for the establishment and enforcement of speed limits for street segments within the City Malibu. This survey was authorized by the City and independently conducted by the private consulting firm Kimley-Horn. The existing speed limits were established based upon the 2016 Engineering and Traffic Survey. The study includes an evaluation of speed at 46 locations within the city, as well as Average Daily Traffic (ADT) and collision histories at key locations.

Engineering and traffic surveys for speed limits are conducted once every five (5) years by governing municipalities in order to comply with Section 40802(a) of the *California Vehicle Code (CVC)* and the national *Uniform Vehicle Code*. Assembly Bill (AB) No. 43, approved in October 2021, amends several sections of the CVC relating to traffic safety including section 40802. AB 43 extends the period that a speed limit justified by a traffic and engineering survey from seven (7) years to fourteen (14) years (previously ten years) if a traffic engineer evaluates the section of the highway and determines that no significant changes in roadway or traffic conditions have occurred, including, but not limited to, changes in adjoining property or land use, roadway width, or traffic volume.

The 2016 Engineering and Traffic Survey had expired in 2021. However, in September 2021, Kimley-Horn recommended that the findings in the 2016 Engineering and Traffic Survey are still valid and the existing speed limits shall govern until a new speed survey can be performed. The speed survey was delayed due to the Coronavirus (COVID-19) which caused a significant change in travel patterns and traffic volumes making it difficult to collect representative speed and other relevant data.

The current study will verify and recommend modifications for existing speed limits within the City of Malibu public right of way based on the data and results of this survey not including Pacific Coast Highway. This report documents the following:

- Current speed limits and speed zoning regulations
- Recent 3-year collision records prior to COVID-19
- Radar speed survey results for prevailing speeds
- Vehicle traffic, pedestrian traffic, bicycle traffic, traffic control, and roadside conditions not readily apparent to the driver, and
- Recommended speed limit changes

1.1 Regulations and Guidelines

Division 11, Chapter 7, of the California Vehicle Code defines the California Speed Laws was amended in 2021 by California Assembly Bill 43. Section 22352 of the CVC indicates that prima facie speed limits are 15 miles per hour (mph) at unprotected railroad grade crossings, highway intersections with sight restrictions, and on any alley. In addition, the prima facie speed

limit is 25 mph in residential and business districts, when approaching or passing a school building or grounds thereof or when passing a senior center or other facility primarily used by senior citizens. Division 1 of the CVC defines a business district and residence district in Section 235 and 515, respectively.

> "A 'business district' is that portion of a highway and the property contiguous thereto (a) upon one side of which highway, for a distance of 600 feet, 50 percent or more of the contiguous property fronting thereon is occupied by buildings in use for business, or (b) upon both sides of which highway, collectively, for a distance of 300 feet, 50 percent or more of the contiguous property fronting thereon is so occupied. A business district may be longer than the distances specified in this section if the above ratio of buildings in use for business to the length of the highway exists.[1]"

> "A 'residence district' is that portion of a highway and the property contiguous thereto, other than a business district, (a) upon one side of which highway, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures, or (b) upon both sides of which highway, collectively, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures. A residence district may be longer than one-quarter of a mile if the above ratio of separate dwelling houses or business structures to the length of the highway exists.[2]"

Section 22357(a) permits the establishment of speed limits greater than 25 mph based on the following text:

> "Whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare a prima facie speed limit of 30, 35, 40, 45, 50, 55, or 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe.[3]"

Therefore, the CVC allows local authorities to increase or decrease the prima facie limits by ordinance or resolution to appropriate limits as determined by an engineering and traffic survey. Posted speed limits not defined in the CVC or established by ordinance are not valid.

[1] California Department of Motor Vehicles, California Vehicle Code, Division 1, Section 235, 2011.
[2] California Department of Motor Vehicles, California Vehicle Code, Division 1, Section 515, 2011.
[3] California Department of Motor Vehicles, California Vehicle Code, Division 11. Chapter 7, Section 22357(a), 2011.

Section 22358.7, which was added by AB 43 and effective January 1, 2022, permits the local authority to reduce the speed limit by an additional five miles per hour after a completing an engineering and traffic survey for either of the following reasons:

> "(1) The portion of highway has been designated as a safety corridor. A local authority shall not deem more than one-fifth of their streets as safety corridors. (2) The portion of highway is adjacent to any land or facility that generates high concentrations of bicyclists or pedestrians, especially those from vulnerable groups such as children, seniors, persons with disabilities, and the unhoused."

The Department of Transportation in the next revision of the California MUTCD shall define "safety corridor" and what constitutes land or facilities that generate high concentrations of bicyclists and pedestrians. A local authority may not lower a speed limit as authorized by this section until June 30, 2024, or until the Judicial Council has developed an online tool for adjudicating infraction violations statewide as specified in Article 7 (commencing with Section 68645) of Chapter 2 of Title 8 of the Government Code, whichever is sooner. Currently, Los Angeles County does not have an online tool.

Section 22358.8, which was added by AB 43 and effective January 1, 2022, permits the local authority to retain the current speed limit or restore the immediately prior speed limit based on the following text:

> "If a local authority, after completing an engineering and traffic survey, finds that the speed limit is still more than is reasonable or safe, the local authority may, by ordinance, retain the current speed limit or restore the immediately prior speed limit if that speed limit was established with an engineering and traffic survey and if a registered engineer has evaluated the section of highway and determined that no additional general purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit. (b) This section does not authorize a speed limit to be reduced by any more than five miles per hour from the current speed limit nor below the immediately prior speed limit."

The CVC requires that speed surveys must be performed with the use of radar or other electronic devices at locations where speed limits are to be enforced with the use of radar. The current survey must be completed within five years as specified in Section 40802(a); seven years as specified in Section 40802(c), or fourteen years as specified in Section 40802(c), of the date of the preceding survey. A survey allowed to expire past the valid duration of the previous survey would constitute a speed trap as defined in Sections 40802(a) and 40802(b) of the CVC:

> "(1) A particular section of a highway measured as to distance and with boundaries marked, designated, or otherwise determined in order that the speed of a vehicle may be calculated by securing the time it takes the vehicle to travel the known distance.

(2) A particular section of a highway with a prima facie speed limit that is provided by this code or by local ordinance under paragraph (1) of subdivision (b) of Section 22352, or established under Section 22354, 22357, 22358, or 22358.3, if that prima facie speed limit is not justified by an engineering and traffic survey conducted within five years prior to the date of the alleged violation, and enforcement of the speed limit involves the use of radar or any other electronic device that measures the speed of moving objects. This paragraph does not apply to a local street, road, school zone, senior zone, or business activity district.

(b) (1) For purposes of this section, a local street or road is one that is functionally classified as "local" on the "California Road System Maps," that are approved by the Federal Highway Administration and maintained by the Department of Transportation. It may also be defined as a "local street or road" if it primarily provides access to abutting residential property and meets the following three conditions:

(A) Roadway width of not more than 40 feet.
(B) Not more than one-half of a mile of uninterrupted length. Interruptions shall include official traffic control signals as defined in Section 445.
(C) Not more than one traffic lane in each direction.

(2) For purposes of this section "school zone" means that area approaching or passing a school building or the grounds thereof that is contiguous to a highway and on which is posted a standard "SCHOOL" warning sign, while children are going to or leaving the school either during school hours or during the noon recess period. "School zone" also includes the area approaching or passing any school grounds that are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children if that highway is posted with a standard "SCHOOL" warning sign.[4]"

1.2 Requirements and Methodology of an Engineering and Traffic Survey

Speed zones are primarily established to protect the public from the unreasonable behavior of reckless, unreliable, or otherwise dangerous drivers. Speed limits are generally established at or near the 85th percentile speed, which is defined as the speed at or below which 85 percent of traffic is moving. Speed limits established on this basis conform to the consensus of those who drive on the roadways as to what speed is reasonable and safe and are not dependent on the judgment of one or a few individuals.

[4] California Department of Motor Vehicles, California Vehicle Code, Division 17. Chapter 2, Section 40802, 2011.

The Engineering and Traffic Survey, as defined in Section 627 of the CVC, must consider the prevailing speeds, collision records, pedestrian and bicycle activity, and roadway traffic and roadside conditions not readily apparent to the driver. Speed zones are also established to advise motorists of road conditions or hazards, which may not be readily apparent to a reasonable driver. For this reason, a field review of related road/traffic variables is conducted which is considered in combination with the statistical data and collision history of a particular roadway segment to determine a safe and reasonable speed limit. The specific procedures used in the performance of an Engineering and Traffic Study are outlined in the *2014 California MUTCD Rev 6*. The statistical factors used to analyze the collected speed survey data and additional factors as noted in the *2014 California MUTCD Rev 6* to consider are defined in the following section.

2.0 SPEED SURVEY EVALUATION

Forty-six (46) locations were evaluated by Kimley-Horn and included in this report. These roadway sections and limits of the sections are listed in Table 1. See **Figure 1** in Appendix B for the location of the project segments.

Table 1: Survey Locations and Limits

Location Number	Location Name	Limits (From)	Limits (To)
1	Big Rock Drive	Cool Oak Way	Pacific Coast Highway
2	Birdview Avenue	Westward Beach	Cliffside Drive
3	Boniface Drive	Portshead Road	Fernhill Drive
4	Bonsall Drive	Pacific Coast Highway	End of road
5	Portshead Road	Pacific Coast Highway	Boniface Drive
6	Broad Beach Road	Pacific Coast Highway	Pacific Coast Highway
7	Busch Drive	Calpine Drive	Merritt Drive
8	Busch Drive	Merritt Drive	Pacific Coast Highway
9	Carbon Canyon Road	Carbon Mesa	Pacific Coast Highway
10	Carbon Mesa	End of road	Carbon Canyon Road
11	Civic Center Way	Malibu Canyon Road	Webb Way
12	Civic Center Way	Webb Way	Cross Creek Road
13	Cliffside Drive	Birdview Avenue	End of road
14	Corral Canyon Road	North City Limit	Pacific Coast Highway
15	Cross Creek Road	Civic Center Way	Pacific Coast Highway
16	Cuthbert Road	Busch Drive	Harvester/Philip
17	Dume Drive	Heathercliff Road	Cliffside Drive
18	Encinal Canyon Road	North City Limit	Pacific Coast Highway
19	Fernhill Drive	Wildlife Road	Grayfox Street
20	Fernhill Drive	Grayfox Street	Cliffside Drive
21	Guernsey Avenue	Morning View Drive	Pacific Coast Highway
22	Harvester Road	Busch Drive	Cuthbert Road
23	Heathercliff Road	Wandermere Road	To Pt. Dume Club (Mobile Home Park)
24	Heathercliff Road	Pacific Coast Highway	Wandermere Road

Location Number	Location Name	Limits (From)	Limits (To)
25	John Tyler Drive	Pepperdine University Entrance	Pacific Coast Highway
26	Kanan Dume Road	North City Limit	Galahad Drive
27	Kanan Dume Road	Galahad Drive	Pacific Coast Highway
28	Las Flores Canyon Road	North City Limit	Pacific Coast Highway
29	Latigo Canyon Road	North City Limit	Pacific Coast Highway
30	Malibu Canyon Road	North City Limit	Malibu Knolls Road
31	Malibu Canyon Road	Malibu Knolls Road	Pacific Coast Highway
32	Malibu Country Drive	John Tyler Drive (Private)	John Tyler Drive
33	Malibu Road	Pacific Coast Highway	Webb Way (west of)
34	Malibu Road	Webb Way (east of)	Pacific Coast Highway
35	Merritt Drive	Morning View Drive	Busch Drive
36	Morning View Drive	Guernsey Avenue	Via Cabrillo
37	Morning View Drive	Via Cabrillo	Pacific Coast Highway
38	Phillip Avenue	Morning View Drive	Cuthbert Road
39	Rambla Vista	Pacific Coast Highway	Pacific Coast Highway
40	Trancas Canyon Road	North City Limit	Pacific Coast Highway
41	Westward Beach Road	Pacific Coast Highway	Birdview Avenue
42	Puerco Canyon Road	Pacific Coast Highway	1000' North of PCH
43	Zumirez Drive	Pacific Coast Highway	End of road
44	Rambla Pacifico	from North of private gate	to North City limits/County limits
45	Rambla Pacifico	Pacific Coast Highway	750' North of PCH/to private gate
46	Bluewater Road	Birdview Avenue	Dume Drive

2.1 Field Review

Speed data was collected using manual radar surveys and were performed by a sub-consultant to Kimley-Horn, National Data and Surveying Services (NDS), at 28 locations during "off-peak" hours on a weekday (Monday through Friday). NDS also collected the ADT data for the 28 project locations during a weekday (Tuesday, Wednesday, or Thursday). The radar surveys were collected in January 2021, October 2021, and February 2022, and ADT counts were collected in October 2021 through December 2021. Kimley-Horn in coordination with the City of Malibu identified 23 out of the total 46 locations as either residential or business district and therefore, Prima Facie speed limits were determined.

Each of the radar speed checks were made from an inconspicuously parked, unmarked vehicle. An effort was made to ensure that the presence of the vehicle in no way affected the speed of the traffic being surveyed. Field information from these speed surveys and other roadway characteristics were recorded on field data forms and later coded into spreadsheet-based software for analysis purposes. Chapter 2B of the *2014 California MUTCD Rev. 6* indicates that it is desirable to have a minimum sample of 100 vehicles for a speed zone survey for an arterial street. This may result in excessive survey periods for low volume roadways, and therefore speed samples were collected during a maximum period of 2 hours for low volume roadways.

Examples of the field data collected for the purposes of analyzing related roadway characteristics as they pertain to the determination of appropriate speed limits are listed below. The results of the field review for related roadway and traffic variables of specific street segments are summarized in the Engineering and Traffic Survey forms included in **Appendix C.**

1. Segment length, width, and alignment;
2. Level of pedestrian and bicycle activity;
3. Traffic flow characteristics;
4. Number of lanes and other channelization/striping factors;
5. Frequency of intersections, driveways, on-street parking, bike lanes;
6. Locations of stop signs, traffic signals, and other regulatory traffic control devices;
7. Roadway condition, bumps, and dips;
8. Land use and proximity of schools, parks/recreation areas and senior centers;
9. Uniformity with existing speed zones; and,
10. Any other unusual conditions or hazards not readily apparent to the driver.

2.2 Statistical Analysis Factors

Significant factors used to analyze the collected survey data are summarized below:

1. **85th Percentile Speed**. The Critical Speed, or the 85th percentile speed, is defined as that speed at or below which 85 percent of the traffic is moving. This factor is the primary guide in determining what speeds the majority of safe and reasonable drivers are traveling. Therefore, the practice is to set the speed limit to the nearest 5 mph increment

from the critical speed unless other factors require a lower limit. Speed limits set on this basis provide law enforcement officials with a means of controlling reckless or unreliable drivers who will not conform to what the majority finds reasonable.

2. **The 10-mph Pace.** The 10-mph Pace is the 10-mph increment range, which contains the largest number of recorded vehicles. The pace is a measure of the dispersion of speeds within the sample surveyed. Speed limits should normally be set to fall within the 10-mph pace. However, conditions not readily apparent to the driver or adhering to State mandated limits such as in Residence Districts may require setting speed limits below the 10-mph pace.

3. **50th Percentile Speed**. The Median Speed, or 50th Percentile Speed, represents the mid-point value within the range of recorded speeds for a particular roadway location. In other words, 50 percent of the vehicles travel faster than and 50 percent travel slower than, the median speed. This value is another measure of the central tendency of the vehicle speed distribution. Typically speed limits should not be set below the 50th Percentile Speed, since it would result in greater than 50-percent of the drivers exceeding the speed limit.

4. **15th Percentile Speed**. The 15th Percentile Speed is that speed at or below which 15 percent of the vehicles are traveling. This value is important in determining the minimum allowable speed limit, given that the vehicles traveling below this speed tend to obstruct the flow of traffic, thereby increasing the collision potential.

5. **Percent of Vehicles in Pace Speed**. The percent of vehicles in the 10-mph pace speed is an indication of the grouping of vehicular speeds. Ideally, if all vehicles were traveling at or about the same speed, there would be a reduced likelihood of vehicular collisions. In speed limit analysis, the higher the percent of vehicles within the pace speed, the more favorable the speed distribution. The percent of vehicles within the 10-mph pace is often between 60 and 90 percent.

2.3 Collision History

The Engineering and Traffic Survey forms summarize the recent collision information for each of the street segments. The collision information was obtained from the California Statewide Integrated Traffic Records System (SWITRS) Report by the City of Malibu from March 1st, 2017 to March 31, 2020. The collisions were reviewed and corridor related collisions (those not related to signalized intersections) were summarized for each segment by Kimley-Horn. Based upon the number of total collisions studied over the 3-year period (prior to COVID-19) and ADT counts, a collision rate per million vehicle miles was calculated for each segment. To provide a general comparison of the collision rates on the segments to expected collisions rates for similar types of local roadways, the collision rates for each segment were compared to the statewide

average rate listed in the 2018 Collision Data on California State Highways as listed in Table 2 (road miles, travel, collisions, collision rates) as listed in Table 2.

Table 2: 2018 California State Highways Collision Rates Based on Accident Data for the years 2016 through 2018

Highway Type	Area	Base Rate
Conventional 2 Lanes	Statewide	1.48
Conventional 3 Lanes	Statewide	1.48
Undivided 4 Lanes	Statewide	1.24
Divided 4 Lanes	Statewide	1.20

3.0 RESULTS AND RECOMMENDATIONS

The recommendations contained in this report are intended to establish prima facie speed limits. Prima facie limits attempt to advise the motorist and enforcement officers of the reasonable speed for a particular section of roadway for the prevailing conditions. In many cases, the recommendations made produce a uniform speed limit along the road. As a result, the speed limits in adjacent jurisdictions were considered as well as along the various street segments surveyed within the City of Malibu.

Figure 2 included in Appendix B illustrates the existing speed limit and the recommended speed limit for each project segment.

The Engineering and Traffic Survey Forms, presented in **Appendix C**, illustrate the results of an evaluation of the available data and indicate a recommended speed limit for each of the street segments surveyed. A summary of the data analysis, along with recommended speed limits can be found in **Table 3** followed by descriptions of the recommendations for each roadway segment with special conditions.

Table 3: Speed Survey Recommendations

Location Number	Location Name	Limit (From)	Limit (To)	**Existing Speed Limit (mph)**	**85th Percentile Speed (mph)**	**Recommended Speed Limit (mph)**	Justification
1	Big Rock Drive	Cool Oak Way	Pacific Coast Highway	25	31	25	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature
2	Birdview Avenue	Westward Beach	Cliffside Drive	25	-	25	Fronting residential; Prima Facie speed limit
3	Boniface Drive	Portshead Road	Fernhill Drive	25	-	25	Fronting residential; Prima Facie speed limit
4	Bonsall Drive	Pacific Coast Highway	end of road	Not Posted	-	25	Fronting residential; Prima Facie speed limit
5	Portshead Road	Pacific Coast Highway	Boniface Drive	25	-	25	Fronting residential; Prima Facie speed limit
6	Broad Beach Road	Pacific Coast Highway	Pacific Coast Highway	25	-	25	Fronting residential; Prima Facie speed limit
7	Busch Drive	Calpine Drive	Merritt Drive	30	34	30	85th percentile speed downgraded due to restricted sight distance from horizontal road curvature
8	Busch Drive	Merritt Drive	Pacific Coast Highway	25	34	25	Retain the current speed limit per CVC section 22358.8
9	Carbon Canyon Rd	Carbon Mesa	Pacific Coast Highway	25	33	25	Fronting residential; Prima Facie speed limit
10	Carbon Mesa	End of road	Carbon Canyon Road	25	32	25	85th percentile speed downgraded due to restricted sight distance from vertical road curvature.
11	**Civic Center Way**	**Malibu Canyon Rd**	**Webb Way**	**40**	**39**	**35**	**85th percentile speed downgraded due to restricted sight distance from horizontal road curvature, residential density, and no sidewalks**
12	Civic Center Way	Webb Way	Cross Creek Road	25	31	25	85th percentile speed downgraded due to high pedestrian activity
13	Cliffside Drive	Birdview Avenue	End of road	25	-	25	Fronting residential; Prima Facie speed limit
14	Corral Canyon Rd	North City Limit	Pacific Coast Highway	30	35	30	85th percentile speed downgraded due to restricted sight distance from vertical and horizontal road curvature
15	Cross Creek Rd	Civic Center Way	Pacific Coast Highway	Not Posted	15	25	Business District; Prima Facie

Bold Text = Recommend speed limit change for segment

Location Number	Location Name	Limit (From)	Limit (To)	**Existing Speed Limit (mph)**	**85th Percentile Speed (mph)**	**Recommended Speed Limit (mph)**	Justification
16	Cuthbert Road	Busch Drive	Harvester/Philip	Not Posted	-	25	Fronting residential; Prima Facie speed limit
17	**Dume Drive**	**Heathercliff Road**	**Cliffside Drive**	**30**	**30**	**25**	**Fronting residential; Prima Facie speed limit**
18	**Encinal Canyon Rd**	**North City Limit**	**Pacific Coast Highway**	**45**	**47**	**40**	**85th percentile speed downgraded due to restricted sight distance from horizontal and vertical curvature**
19	Fernhill Drive	Wildlife Road	Grayfox Street	25	30	25	85th percentile speed downgraded due to restricted sight distance from vertical road curvature
20	Fernhill Drive	Grayfox Street	Cliffside Drive	25	-	25	Fronting residential; Prima Facie speed limit
21	Guernsey Avenue	Morning View Drive	Pacific Coast Highway	30	29	30	85th percentile speed
22	Harvester Road	Busch Drive	Cuthbert Road	Not Posted	-	25	Fronting residential; Prima Facie speed limit
23	**Heathercliff Road**	**Wandermere Road**	**To Pt. Dume Club (Mobile Home Park)**	**30**	**-**	**25**	**Fronting residential; Prima Facie speed limit**
24	Heathercliff Road	Pacific Coast Highway	Wandermere Road	Not Posted	-	25	Fronting residential; Prima Facie speed limit
25	John Tyler Drive	Pepperdine University Entrance	Pacific Coast Highway	Not posted	24	25	85th percentile speed
26	**Kanan Dume Road**	**North City Limit**	**Galahad Drive**	**50**	**49**	**45**	**85th percentile speed downgraded due to restricted sight distance from vertical curvature**
27	**Kanan Dume Rd**	**Galahad Drive**	**Pacific Coast Highway**	**50**	**51**	**45**	**85th percentile speed downgraded due to restricted sight distance from vertical curvature**
28	Las Flores Canyon Road	North City Limit	Pacific Coast Highway	25	28	25	Fronting residential; Prima Facie speed limit
29	Latigo Canyon Road	North City Limit	Pacific Coast Highway	30	33	30	85th percentile speed downgraded due to restricted sight distance from vertical and horizontal road curvature
30	**Malibu Canyon Road**	**North City Limit**	**Malibu Knolls Road**	**45**	**44**	**40**	**85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature**

Bold Text = Recommend speed limit change for segment

Location Number	Location Name	Limit (From)	Limit (To)	Existing Speed Limit (mph)	85th Percentile Speed (mph)	Recommended Speed Limit (mph)	Justification
31	**Malibu Canyon Road**	**Malibu Knolls Road**	**Pacific Coast Highway**	**45**	**47**	**40**	**85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature**
32	Malibu Country Drive	John Tyler Drive (Private)	John Tyler Drive	Not Posted	-	25	Fronting residential; Prima Facie speed limit
33	Malibu Road	Pacific Coast Highway	Webb Way (west of)	25	-	25	Fronting residential; Prima Facie speed limit
34	Malibu Road	Webb Way (east of)	Pacific Coast Highway	25	-	25	Fronting residential; Prima Facie speed limit
35	**Merritt Drive**	**Morning View Drive**	**Busch Drive**	**30**	**25**	**25**	**85th percentile speed**
36	Morning View Drive	Guernsey Avenue	Via Cabrillo	30	33	30	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature
37	**Morning View Drive**	**Via Cabrillo**	**Pacific Coast Highway**	**30**	**15**	**25**	**Fronting residential; Prima Facie**
38	Phillip Avenue	Morning View Drive	Cuthbert Road	30	33	30	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical curvature
39	Rambla Vista	Pacific Coast Highway	Pacific Coast Highway	25	-	25	Fronting residential; Prima Facie speed limit
40	**Trancas Canyon Road**	**North City Limit**	**Pacific Coast Highway**	**30**	**25**	**25**	**85th percentile speed**
41	Westward Beach Road	Pacific Coast Highway	Birdview	30	35	30	85th percentile speed downgraded due to restricted sight distance from horizontal road curvature, high pedestrian activity, and high collision rate
42	Puerco Canyon Rd	Pacific Coast Highway	1000' North of PCH	Not posted	17	25	85th percentile speed
43	Zumirez Drive	Pacific Coast Highway	End of road	Not Posted	-	25	Fronting residential; Prima Facie speed limit

Bold Text = Recommend speed limit change for segment

Location Number	Location Name	Limit (From)	Limit (To)	**Existing Speed Limit (mph)**	**85th Percentile Speed (mph)**	**Recommended Speed Limit (mph)**	Justification
44	Rambla Pacifico	from north of private gate	to north City limits/County limits	Not Posted	-	25	Fronting residential; Prima Facie speed limit
45	Rambla Pacifico	Pacific Coast Highway	750' North of PCH/to private gate	25	28	25	85th percentile speed downgraded due to restricted sight distance due to horizontal and vertical road curvature
46	Bluewater Road	Birdview Avenue	Dume Drive	25	-	25	Fronting residential; Prima Facie speed limit

Bold Text = Recommend speed limit change for segment

3.1 Segments with Special Conditions

Pursuant to the 2014 California Manual on Uniform Traffic Control Devices (MUTCD) Rev 6, and the California Vehicle Code (CVC), the speed limit should be established at the first five-mile nearest to the 85th Percentile. The following segments surveyed have recommended speed limits that were below the first five-mile nearest to the 85th Percentile speed due to conditions not readily apparent to the driver and are justified in the Speed Survey Recommendations **Table 3** of this report.

Based on segment conditions and/or high collision data, it is recommended that the speed limits be changed at the following segments:

1. Location 11 – Civic Center Way between Malibu Canyon Road and Webb Way. This segment runs in the eastbound/westbound direction. The existing posted speed limit is 40 mph with one lane in each direction. ADT is 7,254 vehicles and the adjacent land use includes commercial and school. The 85th percentile is 39 mph which indicates a speed limit of 40 mph. Due to restricted sight distance from horizontal road curvature, residential density and the absence of sidewalks, a reduction of 5 mph is justified. Therefore, a speed limit of 35 mph is recommended.

2. Location 17 – Dume Drive between Heathercliff Road and Cliffside Drive. This segment runs northbound/southbound and has one lane in each direction. The existing posted speed limit is 30 mph. ADT is 1,173 vehicles and the adjacent land use consists of single family residential. The 85th percentile is 30 mph which indicates a speed limit of 30 mph. This segment can be classified as a residence district and therefore a Prima Facie speed limit of 25 mph is recommended.

3. Location 18 – Encinal Canyon Rd from North City Limit to Pacific Coast Highway. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 45 mph. ADT is 1,532 vehicles and the adjacent land use consists of single family residential and vacant space. The 85th percentile is 47 mph which indicates a speed limit of 45 mph. Due to restricted sight distance from vertical and horizontal road curvature, a reduction of 5 mph is justified. Therefore, a speed limit of 40 mph is recommended.

4. Location 23 – Heathercliff Road between Wandermere Road and Pt Dume Club. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 30 mph and adjacent land use consists of fronting residential. This segment can be classified as a residence district and therefore a Prima Facie speed limit of 25 mph is recommended.

5. Location 26 – Kanan Dume Road between North City Limit and Galahad Drive. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 50 mph. ADT is 9,723 vehicles and adjacent land use consists of single

family residential. The 85th percentile is 49 mph which indicates a speed limit of 50 mph. Due to restricted sight distance from vertical road curvature, a reduction of 5 mph is justified. Therefore, a speed limit of 45 mph is recommended.

6. Location 27 – Kanan Dume Road between Galahad Drive and Pacific Coast Highway. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 50 mph. ADT is 10,114 vehicles and adjacent land use consists of single family residential. The 85th percentile is 51 mph which indicates a speed limit of 50 mph. Due to restricted sight distance from vertical road curvature, a reduction of 5 mph is justified. Therefore, a speed limit of 45 mph is recommended.

7. Location 30 – Malibu Canyon Road from North City Limit to Malibu Knolls Road. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 45 mph. ADT is 20,558 vehicles and adjacent land use consists of single family residential. The 85th percentile is 44 mph which indicates a speed limit of 45 mph. Due to restricted sight distance from vertical and horizontal road curvature, a reduction of 5 mph is justified. Therefore, a speed limit of 40 mph is recommended.

8. Location 31 – Malibu Canyon Road from Malibu Knolls Road to Pacific Coast Highway. This is a northbound/southbound segment with two lanes in each direction. The existing posted speed limit is 45 mph. ADT is 20,927 vehicles and adjacent land use consists of vacant space owned. The 85th percentile is 47 mph which indicates a speed limit of 45 mph. Due to restricted sight distance from vertical and horizontal road curvature, a reduction of 5 mph is justified. Therefore, a speed limit of 40 mph is recommended.

9. Location 35 – Merritt Drive from Morning View Drive to Busch Drive. This segment runs eastbound/westbound and has one lane in each direction. The existing posted speed limit is 30 mph. ADT is 675 vehicles and adjacent land use consists of single family residential. The 85th percentile is 25 mph which indicates a speed limit of 25mph.

10. Location 37 – Morning View Drive from Via Cabrillo to Pacific Coast Highway. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 30 mph. ADT is 2,861 vehicles and adjacent land use consists of single family residential, church and school. The 85th percentile is 15 mph. This segment can be classified as a residence district and therefore a Prima Facie speed limit of 25 mph is recommended.

11. Location 40 – Trancas Canyon Road from North City Limit/Anacapa View Drive to Pacific Coast Highway. This is a northbound/southbound segment with one lane in each direction. The existing posted speed limit is 30 mph. ADT is 980 vehicles and adjacent land use consists of single family residential. The 85th percentile is 25 mph which indicates a speed limit of 25 mph.

APPENDIX “A”

SPEED RADAR CERTIFICATIONS

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT –

1. Jonathan Andrade of ATD Traffic/NDS Data has successfully completed a Radar Operator course. This was based upon the national standards as outlined by the National Highway Traffic Safety Administration, and the California Highway Patrol radar manual, and the radar program of the Alameda County Sheriff's Office. This instructor is Scott Miller, a deputy sheriff since 1995 and a California P.O.S.T. certified Radar and Laser Instructor since 2011.
2. Jonathan Andrade completed the classroom instruction and theory of Radar devices, case law, traffic and engineering surveys, FCC regulations, the California Vehicle Code and California case law as well as the test, set-up, operation and identification of erroneous readings.
3. Jonathan Andrade has demonstrated competence in test and set-up of the Radar device, in making accurate visual speed estimations and identifying erroneous reading in field settings.
4. Jonathan Andrade of ATD Traffic/NDS Data is hereby certified as having completed a course of instruction for the purposes of Radar operation for determining car counts and raw data for traffic and engineering surveys as our lined in sections 627, 21400, the 22350 series and the 40800 series of the California Vehicle Code, Chapter 8 of the former Cal Trans Manual and applicable sections of Chapter 2 of MUTCD issued January 13, 2012. This certification is awarded on the 6th Day of April 2017.

Scott Miller

POST INSTRUCTOR

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT –

1. Michael Ridriguez of ATD Traffic/NDS Data has successfully completed a Radar Operator course. This was based upon the national standards as outlined by the National Highway Traffic Safety Administration, and the California Highway Patrol radar manual, and the radar program of the Alameda County Sheriff's Office. This instructor is Scott Miller, a deputy sheriff since 1995 and a California P.O.S.T. certified Radar and Laser Instructor since 2011.
2. Michael Ridriguez completed the classroom instruction and theory of Radar devices, case law, traffic and engineering surveys, FCC regulations, the California Vehicle Code and California case law as well as the test, set-up, operation and identification of erroneous readings.
3. Michael Ridriguez has demonstrated competence in test and set-up of the Radar device, in making accurate visual speed estimations and identifying erroneous reading in field settings.
4. Michael Ridriguez of ATD Traffic/NDS Data is hereby certified as having completed a course of instruction for the purposes of Radar operation for determining car counts and raw data for traffic and engineering surveys as our lined in sections 627, 21400, the 22350 series and the 40800 series of the California Vehicle Code, Chapter 8 of the former Cal Trans Manual and applicable sections of Chapter 2 of MUTCD issued January 13, 2012. This certification is awarded on the 6th Day of April 2017.

Scott Miller

POST INSTRUCTOR

CERTIFICATE OF COMPLETION

THIS IS TO CERTIFY THAT –

1. Tyler Baker of ATD Traffic/NDS Data has successfully completed a Radar Operator course. This was based upon the national standards as outlined by the National Highway Traffic Safety Administration, and the California Highway Patrol radar manual, and the radar program of the Alameda County Sheriff's Office. This instructor is Scott Miller, a deputy sheriff since 1995 and a California P.O.S.T. certified Radar and Laser Instructor since 2011.
2. Tyler Baker completed the classroom instruction and theory of Radar devices, case law, traffic and engineering surveys, FCC regulations, the California Vehicle Code and California case law as well as the test, set-up, operation and identification of erroneous readings.
3. Tyler Baker has demonstrated competence in test and set-up of the Radar device, in making accurate visual speed estimations and identifying erroneous reading in field settings.
4. Tyler Baker of ATD Traffic/NDS Data is hereby certified as having completed a course of instruction for the purposes of Radar operation for determining car counts and raw data for traffic and engineering surveys as our lined in sections 627, 21400, the 22350 series and the 40800 series of the California Vehicle Code, Chapter 8 of the former Cal Trans Manual and applicable sections of Chapter 2 of MUTCD issued January 13, 2012. This certification is awarded on the 6th Day of April 2017.

Scott Miller

POST INSTRUCTOR

RHF Inc.
Radar Repair

TRAFFIC RADAR CERTIFICATION

TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
(NHTSA) National Highway and Traffic Safety Administration.
(IACP) International Association of Chiefs of Police

16202 Keats Circle
Westminster, Calif. 92683

R.H.F. is a certified independent testing and repair facility..

1	TEST ID	Date Received 10-31-18		Certification Number 73493						
2	DEVICE ID	Make: **Kustom Electronics**		Model: **Falcon and Road Runner**	Type (1-IV) **III**		Directional radar ☐ Yes ☑ No		Same direction ☐ Yes ☑ No	
		Counting unit S/N FF 2321		Antenna-1 S/N **N/A**			Antenna-2 S/N **N/A**			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)			PASS	FAIL
		High speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)				
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS			Lo fork		High fork			(PASS)	FAIL
		Stationary mode	Fork speed (mph)	**35**		**65**				
			Disp. Speed (mph)	35		65				
		Moving mode Opposite Direction	TARGET SPEED (Hi fork – Lo fork)	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
		Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
5	§ 2.6.1. / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) **13.6 V**		Antenna 1 Freq. GHz 24.104		Antenna 2 Freq. GHz **N/A**			(PASS)	FAIL
		Standard supply Voltage – 20% (V) **10.8 V**		Antenna 1 Freq. GHz 24.104		Antenna 2 Freq. GHz **N/A**				
		Standard supply voltage + 20% (V) **16.3 V**		Antenna 1 Freq. GHz 24.104		Antenna 2 Freq. GHz **N/A**				
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) **≤ 5**		Antenna 1 Power (mW/cm) .58		Antenna 2 Power (mW/cm) **N/A**			(PASS)	FAIL
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) **≤ 10.8 V**		LVA activates (V) 9.7		LVA deactivates (V) 10.6			(PASS)	FAIL
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal ☑ Yes ☐ No							(PASS)	FAIL
		B. Functioning audio volume-adjustment control ☑ Yes ☐ No								
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec. **32**		Test results 32					(PASS)	FAIL
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar ☐ Yes ☐ No ☑ N.A.							PASS	FAIL
		B. Selects only targets moving away from radar ☐ Yes ☐ No ☑ N.A.								
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)		Low speed spec. **20**		Lo speed disp. 20			(PASS)	FAIL
				Hi speed spec. **199**		Hi speed disp. 199				
		Moving Mode target channel (mph)		Low speed spec. **N/A**		Lo speed disp. **N/A**				
				Hi speed spec. **N/A**		Hi speed disp. **N/A**				
		Moving Mode: patrol channel (mph)		Low speed spec. **N/A**		Lo speed disp. **N/A**				
				Hi speed spec. **N/A**		Hi speed disp. **N/A**				
12	§ 2.13 / § 5.13 RFI TEST								(PASS)	FAIL
13	LABORATORY COMMENTS									
14	NHTSA/IACP CERTIFICATION	***This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802*** ☑ **PASS** ☐ **FAIL**								
		Certified by: Fred Burman **Date:** 10-31-18								
15	INVENTORY	☐ Fork Cert ☐ Manual ☐ 2nd Ant. ☐ Remote ☐ Bat. ☐ Carrying Case ☐ Other: (please list)								

RHF Inc.
Radar Repair

16202 Keats Circle
Westminster, Calif. 92683

TRAFFIC RADAR CERTIFICATION

TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
(NHTSA) National Highway and Traffic Safety Administration.
(IACP) International Association of Chiefs of Police

R.H.F. is a certified independent testing and repair facility..

1	TEST ID	Date Received 10-31-18		Certification Number 73496						
2	DEVICE ID	Make: **Kustom Electronics**		Model: **Falcon and Road Runner**		Type (1-IV) **III**		Directional radar ☐ Yes ☑ No	Same direction ☐ Yes ☑ No	
		Counting unit S/N FF8105		Antenna-1 S/N **N/A**				Antenna-2 S/N **N/A**		
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)			PASS	FAIL
		High speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)				
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS			Lo fork		High fork			PASS	FAIL
		Stationary mode	Fork speed (mph)	**35**		**65**				
			Disp. Speed (mph)	35		65				
		Moving mode Opposite Direction	TARGET SPEED (Hi fork – Lo fork)	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
		Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
5	§ 2.6.1. / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) **13.6 V**	Antenna 1 Freq. GHz 24.171		Antenna 2 Freq. GHz **N/A**				PASS	FAIL
		Standard supply Voltage – 20% (V) **10.8 V**	Antenna 1 Freq. GHz 24.171		Antenna 2 Freq. GHz **N/A**					
		Standard supply voltage + 20% (V) **16.3 V**	Antenna 1 Freq. GHz 24.171		Antenna 2 Freq. GHz **N/A**					
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) **≤ 5**	Antenna 1 Power (mW/cm) .63		Antenna 2 Power (mW/cm) **N/A**				PASS	FAIL
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) **≤ 10.8 V**	LVA activates (V) 9.3		LVA deactivates (V) 10.6				PASS	FAIL
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal ☑ Yes ☐ No							PASS	FAIL
		B. Functioning audio volume-adjustment control ☑ Yes ☐ No								
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec. **32**		Test results 32					PASS	FAIL
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar ☐ Yes ☐ No ☑ N.A.							PASS	FAIL
		B. Selects only targets moving away from radar ☐ Yes ☐ No ☑ N.A.								
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. **20**		Lo speed disp. 20				PASS	FAIL
			Hi speed spec. **199**		Hi speed disp. 199					
		Moving Mode target channel (mph)	Low speed spec. **N/A**		Lo speed disp. **N/A**					
			Hi speed spec. **N/A**		Hi speed disp. **N/A**					
		Moving Mode: patrol channel (mph)	Low speed spec. **N/A**		Lo speed disp. **N/A**					
			Hi speed spec. **N/A**		Hi speed disp. **N/A**					
12	§ 2.13 / § 5.13 RFI TEST								PASS	FAIL
13	LABORATORY COMMENTS									
14	NHTSA/IACP CERTIFICATION	***This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802*** ☑ **PASS** ☐ **FAIL**								
		Certified by: Fred Bauman **Date:** 10-31-18								
15	INVENTORY	☐ Fork Cert ☐ Manual ☐ 2nd Ant. ☐ Remote ☐ Bat. ☐ Carrying Case ☐ Other: (please list)								

RHF Inc.
Radar Repair

16202 Keats Circle
Westminster, Calif. 92683

TRAFFIC RADAR CERTIFICATION

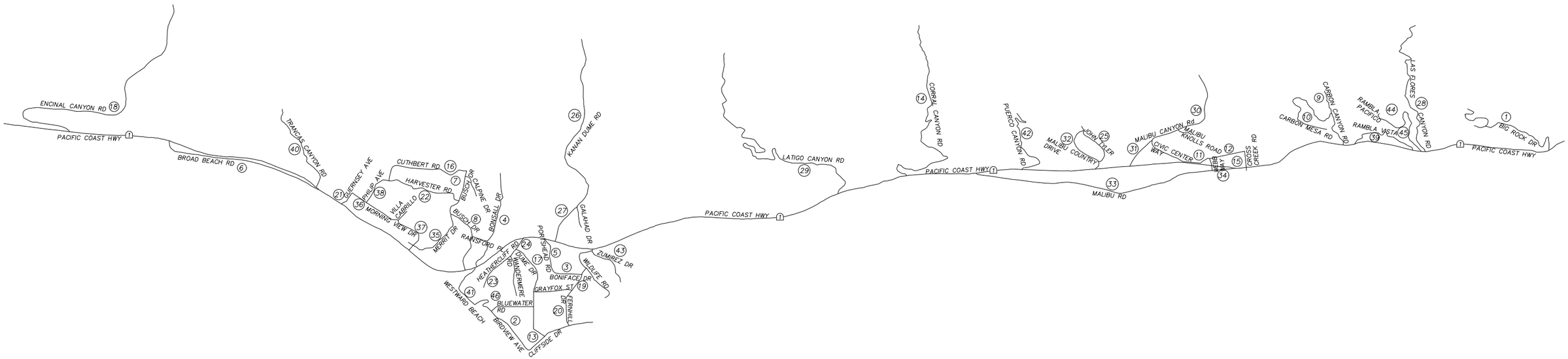
TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
(NHTSA) National Highway and Traffic Safety Administration.
(IACP) International Association of Chiefs of Police

R.H.F. is a certified independent testing and repair facility.

1	TEST ID	Date Received 10-31-18		Certification Number 73495						
2	DEVICE ID	Make: **Kustom Electronics**		Model: **Falcon and Road Runner**	Type (1-IV) **III**		Directional radar ☐ Yes ☑ No		Same direction ☐ Yes ☑ No	
		Counting unit S/N EF 10590		Antenna-1 S/N **N/A**			Antenna-2 S/N **N/A**			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)			PASS	FAIL
		High speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)				
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS			Lo fork		High fork			PASS	FAIL
		Stationary mode	Fork speed (mph)	**35**		**65**				
			Disp. Speed (mph)	35		65				
		Moving mode Opposite Direction	TARGET SPEED (Hi fork – Lo fork)	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
		Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) **N/A**		Displayed. (mph) **N/A**				
5	§ 2.6.1. / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) **13.6 V**	Antenna 1 Freq. GHz 24.180	Antenna 2 Freq. GHz **N/A**					PASS	FAIL
		Standard supply Voltage – 20% (V) **10.8 V**	Antenna 1 Freq. GHz 24.180	Antenna 2 Freq. GHz **N/A**						
		Standard supply voltage + 20% (V) **16.3 V**	Antenna 1 Freq. GHz 24.180	Antenna 2 Freq. GHz **N/A**						
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) **≤ 5**	Antenna 1 Power (mW/cm) .41	Antenna 2 Power (mW/cm) **N/A**					PASS	FAIL
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) **≤ 10.8 V**	LVA activates (V) 9.8	LVA deactivates (V) 10.9					PASS	FAIL
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal ☑ Yes ☐ No							PASS	FAIL
		B. Functioning audio volume-adjustment control ☑ Yes ☐ No								
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec. **32**		Test results 32					PASS	FAIL
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar ☐ Yes ☐ No ☑ N.A.							PASS	FAIL
		B. Selects only targets moving away from radar ☐ Yes ☐ No ☑ N.A.								
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. **20**	Lo speed disp. 20					PASS	FAIL
			Hi speed spec. **199**	Hi speed disp. 199						
		Moving Mode target channel (mph)	Low speed spec. **N/A**	Lo speed disp. **N/A**						
			Hi speed spec. **N/A**	Hi speed disp. **N/A**						
		Moving Mode: patrol channel (mph)	Low speed spec. **N/A**	Lo speed disp. **N/A**						
			Hi speed spec. **N/A**	Hi speed disp. **N/A**						
12	§ 2.13 / § 5.13 RFI TEST								PASS	FAIL
13	LABORATORY COMMENTS									
14	NHTSA/IACP CERTIFICATION	***This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802*** ☑ **PASS** ☐ **FAIL**								
		Certified by: Fred Bauman **Date:** 10-31-18								
15	INVENTORY	☐ Fork Cert ☐ Manual ☐ 2nd Ant. ☐ Remote ☐ Bat. ☐ Carrying Case ☐ Other: (please list)								

APPENDIX “B”

FIGURES



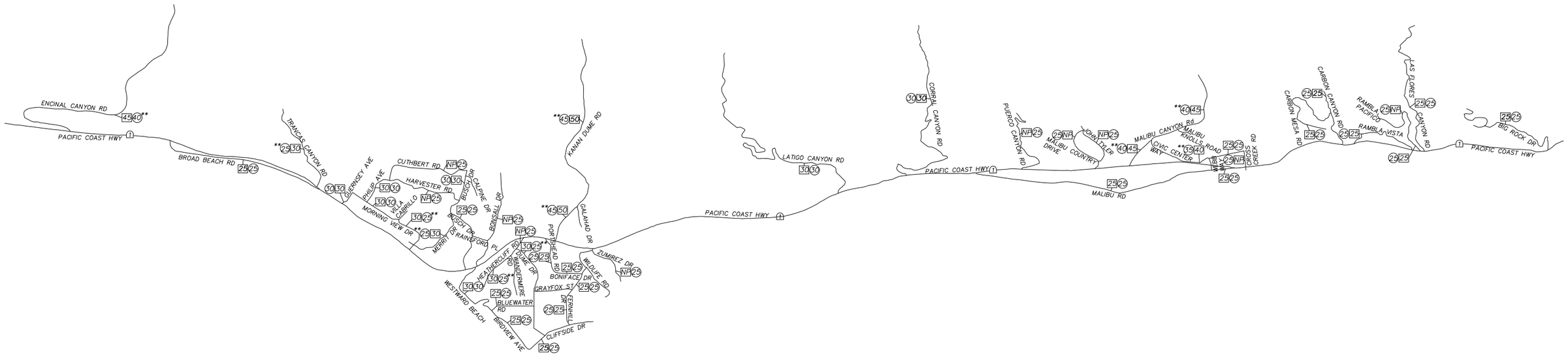
NOT TO SCALE

FIGURE 1 – SEGMENT REFERENCE NUMBERS

Kimley»Horn

CITY WIDE SPEED LIMIT STUDY

City of Malibu



LEGEND

- X — EXISTING SPEED LIMIT
- (X) — RECOMMENDED SPEED LIMIT
- ** — RECOMMENDED SPEED LIMIT CHANGE FOR SEGMENT

NORTH

NOT TO SCALE

FIGURE 2 – EXISTING AND RECOMMENDED SPEED LIMITS

APPENDIX “C”

ENGINEERING AND TRAFFIC SURVEY FORMS

CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

1

STREET	BIG ROCK DRIVE	**CERTIFICATION DATE:**	3/16/2022
FROM	Cool Oak Way	**TO**	Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/19/2021	**Posted Speed Limit**	25
Time of Speed Survey	9:00 A.M. to 10:30 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	25	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature	
85th Percentile Speed	31		
10 mph Pace Speed	22-31		
Percentage of Vehicles in Pace	62.9%	**Recommended Speed Limit**	**25**
Number of Survey Samples	105		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,480	0	**Date Counted**	10/26/2021
Number of Lanes	One lane in each direction			
Type of Traffic Control	Signalized at Pacific Coast Highway; stop-controlled at other intersections			
Crosswalks?	Only at Pacific Coast Highway			
Pedestrian Traffic	None present			
Bicycle Traffic	None present			
Truck Traffic	None present			
On-Street Parking	No			
Sidewalks?	No			
Driveways?	Some driveways along segment			

ROADWAY FACTORS

Length of Segment	6800'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; sharp turns, Speed Message Sign going down hill
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

CITY OF MALIBU

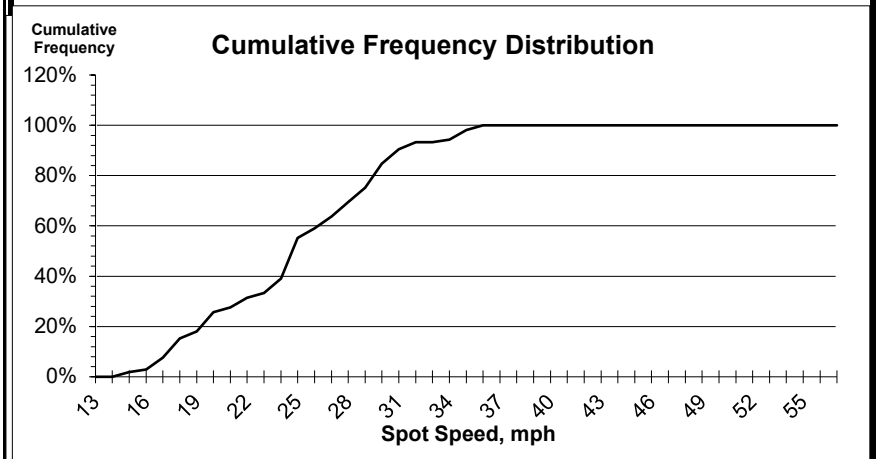
Client: KIMLEY-HORN
Street: Big Rock Drive
Spt.Spd. Location: Cool Oak Way to Pacific Coast Highway *Ref. # 1*

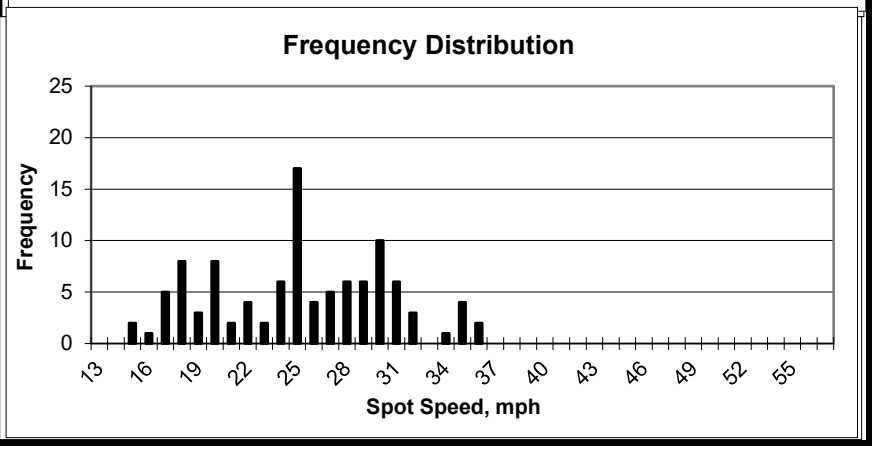
Speed	Frequency	Percent	Cumulative Percent
13		0.00%	0.00%
14		0.00%	0.00%
15	2	1.90%	1.90%
16	1	0.95%	2.86%
17	5	4.76%	7.62%
18	8	7.62%	15.24%
19	3	2.86%	18.10%
20	8	7.62%	25.71%
21	2	1.90%	27.62%
22	4	3.81%	31.43%
23	2	1.90%	33.33%
24	6	5.71%	39.05%
25	17	16.19%	55.24%
26	4	3.81%	59.05%
27	5	4.76%	63.81%
28	6	5.71%	69.52%
29	6	5.71%	75.24%
30	10	9.52%	84.76%
31	6	5.71%	90.48%
32	3	2.86%	93.33%
33	0	0.00%	93.33%
34	1	0.95%	94.29%
35	4	3.81%	98.10%
36	2	1.90%	100.00%
37		0.00%	100.00%
38		0.00%	100.00%
39		0.00%	100.00%
40		0.00%	100.00%
41		0.00%	100.00%
42		0.00%	100.00%
43		0.00%	100.00%
44		0.00%	100.00%
45		0.00%	100.00%
46		0.00%	100.00%
47		0.00%	100.00%
48		0.00%	100.00%
49		0.00%	100.00%
50		0.00%	100.00%
51		0.00%	100.00%
52		0.00%	100.00%
53		0.00%	100.00%
54		0.00%	100.00%
55		0.00%	100.00%
56		0.00%	100.00%
57		0.00%	100.00%
Total:	105	100%	

Date:	10/19/2021 **Day:** Tuesday
Weather:	Dry, clear
Hours:	9:00 A.M. **To** 10:30 A.M.
Recorder:	NDS
Posted Speed:	25 Pacific Coast Highway
Channelization:	Solid striping, 2-way traffic
Street Width:	22'
Comm./Resid.:	Residential
DIRECTION:	Eastbound / Westbound Combined

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	18
50th Percentile:	25
85th Percentile:	31
10 Mile Pace:	22 to 31
% of Samples in 10-Mile Pace:	62.86%
# in 10 MPH pace:	66
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

7

STREET BUSCH DRIVE
FROM Calpine Drive
TO Merritt Drive

CERTIFICATION DATE: 3/16/2022

SPEED FACTORS

Date of Speed Survey	10/21/2021
Time of Speed Survey	2:00 P.M. to 4:00 P.M.
50th Percentile Speed (Mean Speed)	30
85th Percentile Speed	34
10 mph Pace Speed	25-34
Percentage of Vehicles in Pace	88%
Number of Survey Samples	68

Posted Speed Limit 30

Speed Justification
85th percentile speed downgraded due to restricted sight distance from horizontal road curvature

Recommended Speed Limit **30**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,109
Date Counted	10/20/2021
Number of Lanes	One lane in each direction
Type of Traffic Control	Stop-controlled at intersecting streets
Crosswalks?	No
Bicycle Traffic	Minimal
Pedestrian Traffic	None present
Truck Traffic	Minimal
On-Street Parking	Street-adjacent parking available
Sidewalks?	No
Driveways?	Multiple

ROADWAY FACTORS

Length of Segment	2400'
Width	22'
Vertical Curve	Minimal
Horizontal Curve	Yes
Visibility	Restricted due to horizontal road curvature
Roadway Conditions	Fair; Speed reduction due to curve (15 mph)
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

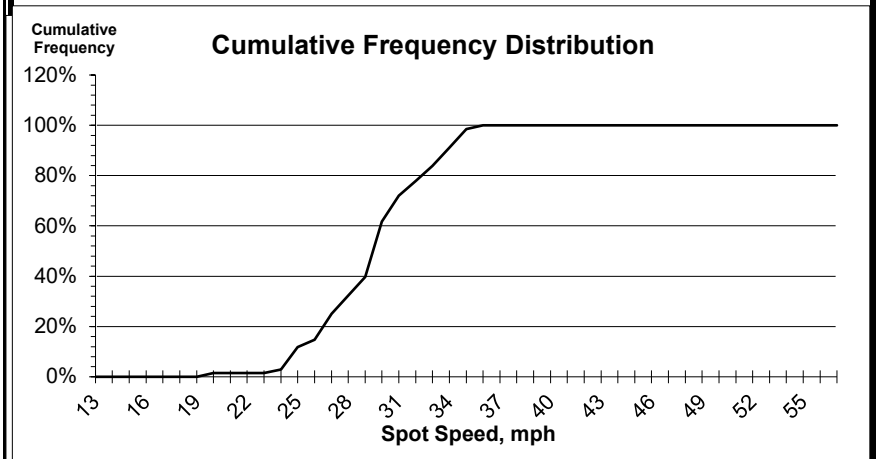
Client: KIMLEY-HORN
Street: Busch Drive
Spt.Spd. Location: Calpine Drive to Merritt Drive *Ref. # 7*

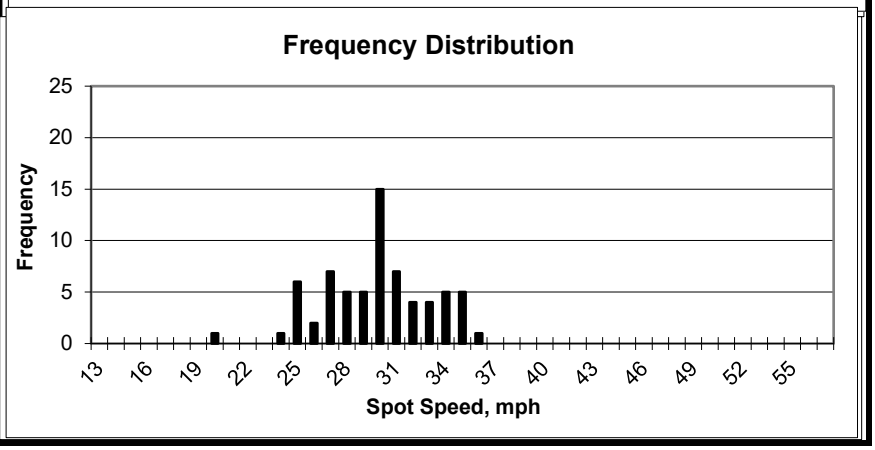
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	1	1.47%	1.47%
21	0	0.00%	1.47%
22	0	0.00%	1.47%
23	0	0.00%	1.47%
24	1	1.47%	2.94%
25	6	8.82%	11.76%
26	2	2.94%	14.71%
27	7	10.29%	25.00%
28	5	7.35%	32.35%
29	5	7.35%	39.71%
30	15	22.06%	61.76%
31	7	10.29%	72.06%
32	4	5.88%	77.94%
33	4	5.88%	83.82%
34	5	7.35%	91.18%
35	5	7.35%	98.53%
36	1	1.47%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	68	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	2:00 P.M.	**To**	4:00 P.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Solid striping 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	27
50th Percentile:	30
85th Percentile:	34
10 Mile Pace:	25 to 34
% of Samples in 10-Mile Pace:	88.24%
# in 10 MPH pace:	60
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

8

STREET BUSCH DRIVE
FROM Merritt Drive
TO Pacific Coast Highway

CERTIFICATION DATE: 3/25/2022

SPEED FACTORS

Date of Speed Survey	1/6/2021
Time of Speed Survey	1:30 P.M. to 2:45 P.M.
50th Percentile Speed (Mean Speed)	29
85th Percentile Speed	34
10 mph Pace Speed	25-34
Percentage of Vehicles in Pace	83%
Number of Survey Samples	200

Posted Speed Limit 25

Speed Justification
85th percentile downgraded due to high collision rate and restricted sight distance from vertical and horizontal road curvature. Retain current speed limit per CVC Section 22358.8.

Recommended Speed Limit **25**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	3
Collision Rate (ACC/MVM)	1.73
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,041
Date Counted	12/16/2021
Number of Lanes	One lane in each direction
Type of Traffic Control	Signalized at PCH, stop controlled for intersecting streets
Crosswalks?	At Pacific Coast Highway
Pedestrian Traffic	None present
Bicycle Traffic	None present
Truck Traffic	None present
On-Street Parking	Street-adjacent parking available along sections
Sidewalks?	None present
Driveways?	Moderate

ROADWAY FACTORS

Length of Segment	4100'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; Watch Downhill Speed Sign
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	25-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

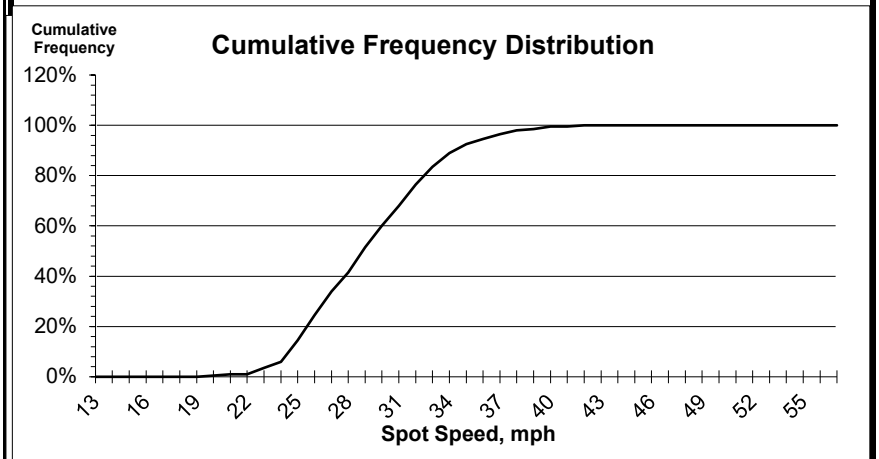
Client: KIMLEY-HORN
Street: Busch Drive
Spt.Spd. Location: Merrit Drive to Pacific Coast Highway *Ref. # 8*

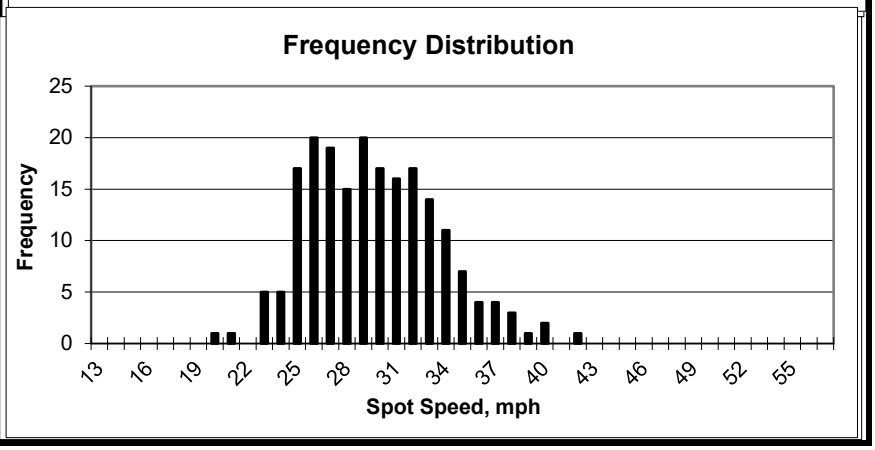
Speed	Frequency	Percent	Cumulative Percent
13		0.00%	0.00%
14		0.00%	0.00%
15		0.00%	0.00%
16		0.00%	0.00%
17		0.00%	0.00%
18		0.00%	0.00%
19		0.00%	0.00%
20	1	0.50%	0.50%
21	1	0.50%	1.00%
22		0.00%	1.00%
23	5	2.50%	3.50%
24	5	2.50%	6.00%
25	17	8.50%	14.50%
26	20	10.00%	24.50%
27	19	9.50%	34.00%
28	15	7.50%	41.50%
29	20	10.00%	51.50%
30	17	8.50%	60.00%
31	16	8.00%	68.00%
32	17	8.50%	76.50%
33	14	7.00%	83.50%
34	11	5.50%	89.00%
35	7	3.50%	92.50%
36	4	2.00%	94.50%
37	4	2.00%	96.50%
38	3	1.50%	98.00%
39	1	0.50%	98.50%
40	2	1.00%	99.50%
41		0.00%	99.50%
42	1	0.50%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	200	100%	

Date:	1/6/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	1:30 P.M.	**To**	2:45 P.M.
Recorder:	NDS		
Posted Speed:	30 mph		
Channelization:	Skip dash 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	26
50th Percentile:	29
85th Percentile:	34
10 Mile Pace:	25 to 34
% of Samples in 10-Mile Pace:	83.00%
# in 10 MPH pace:	166
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

9

STREET CARBON CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM Carbon Mesa **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	1/6/2021	**Posted Speed Limit**	25
Time of Speed Survey	9:30 A.M. to 11:30 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	28	Fronting residential; Prima Facie speed limit	
85th Percentile Speed	33		
10 mph Pace Speed	23-32		
Percentage of Vehicles in Pace	75%	**Recommended Speed Limit**	**25**
Number of Survey Samples	55		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	459	**Date Counted**	12/16/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Limited parking available at both sides of segment		
Sidewalks?	No		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	2200'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Good; notable Slow signs
Lighting	No
Adjacent Land Use	Single family residential; fire station

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

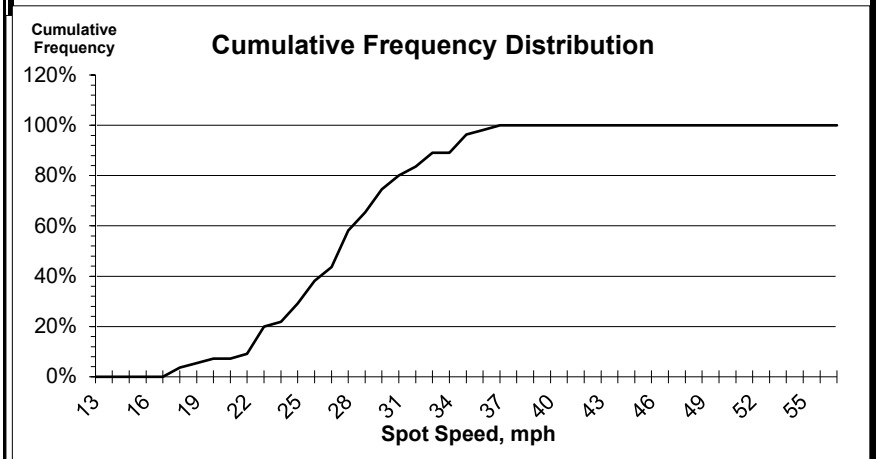
Client: KIMLEY-HORN
Street: Carbon Canyon Road
Spt.Spd. Location: Carbon Mesa to Pacific Coast Highway *Ref. # 9*

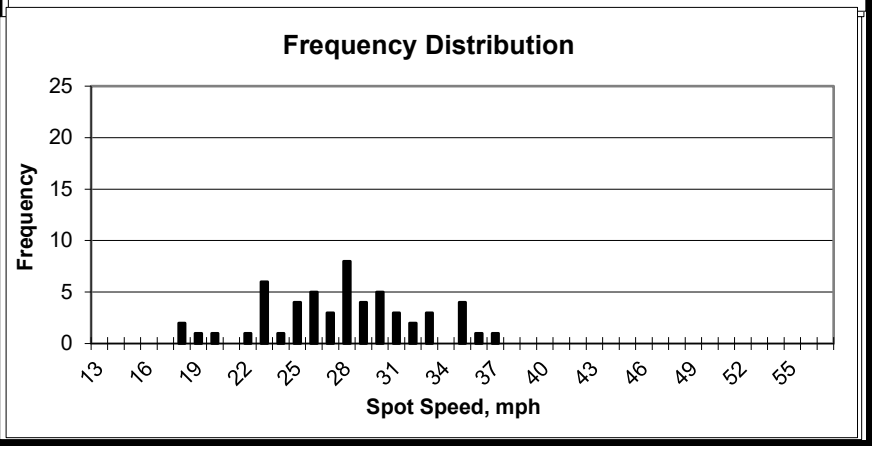
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	2	3.64%	3.64%
19	1	1.82%	5.45%
20	1	1.82%	7.27%
21	0	0.00%	7.27%
22	1	1.82%	9.09%
23	6	10.91%	20.00%
24	1	1.82%	21.82%
25	4	7.27%	29.09%
26	5	9.09%	38.18%
27	3	5.45%	43.64%
28	8	14.55%	58.18%
29	4	7.27%	65.45%
30	5	9.09%	74.55%
31	3	5.45%	80.00%
32	2	3.64%	83.64%
33	3	5.45%	89.09%
34	0	0.00%	89.09%
35	4	7.27%	96.36%
36	1	1.82%	98.18%
37	1	1.82%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	55	100%	

Date:	1/6/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	9:30 A.M.	**To**	11:30 A.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Solid striping 2-way traffic		
Street Width:	var		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	23		
50th Percentile:	28		
85th Percentile:	33		
10 Mile Pace:	23	to	32
% of Samples in 10-Mile Pace:	74.55%		
# in 10 MPH pace:	41		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

10

STREET CARBON MESA **CERTIFICATION DATE:** 3/16/2022
FROM End **TO** Carbon Canyon Road

SPEED FACTORS

Date of Speed Survey	1/6/2021
Time of Speed Survey	1:30 P.M. to 3:30 P.M.
50th Percentile Speed (Mean Speed)	25
85th Percentile Speed	32
10 mph Pace Speed	18-27
Percentage of Vehicles in Pace	70%
Number of Survey Samples	33

Posted Speed Limit 25

Speed Justification
85th percentile speed downgraded due to restricted sight distance from vertical road curvature.

Recommended Speed Limit **25**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	346
Date Counted	12/16/2021
Number of Lanes	One lane in each direction
Type of Traffic Control	Unsignalized
Crosswalks?	No
Pedestrian Traffic	Minimal
Bicycle Traffic	None present
Truck Traffic	None present
On-Street Parking	Limited street-adjacent parking available at both sides of segment
Sidewalks?	No
Driveways?	Multiple

ROADWAY FACTORS

Length of Segment	5300'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to vertical road curvature
Roadway Conditions	Fair; Sharp Turns
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

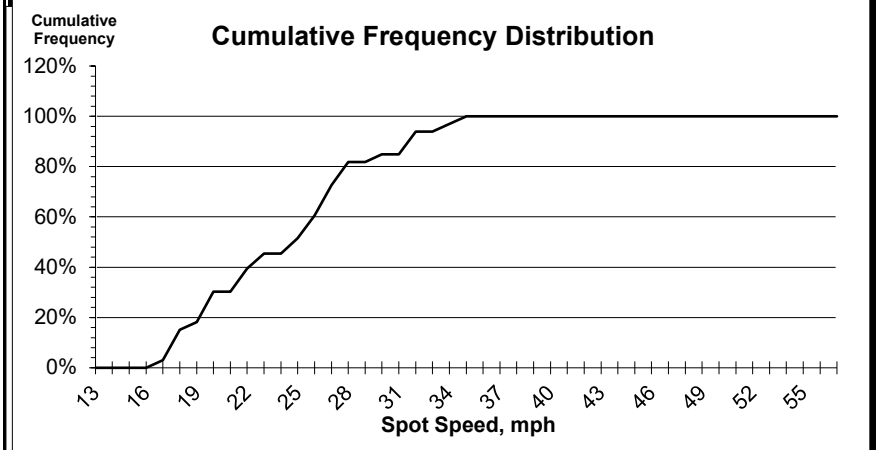
Client: KIMLEY-HORN
Street: Carbon Mesa
Spt.Spd. Location: Carbon Canyon Road to End *Ref. # 10*

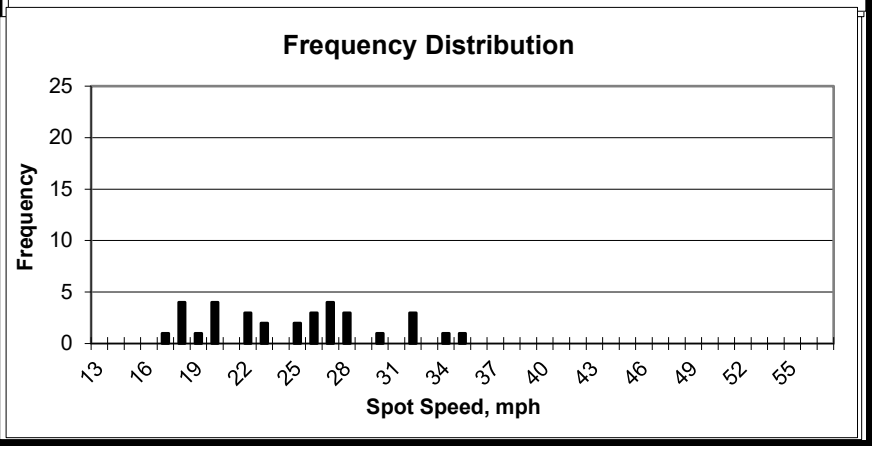
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	1	3.03%	3.03%
18	4	12.12%	15.15%
19	1	3.03%	18.18%
20	4	12.12%	30.30%
21	0	0.00%	30.30%
22	3	9.09%	39.39%
23	2	6.06%	45.45%
24	0	0.00%	45.45%
25	2	6.06%	51.52%
26	3	9.09%	60.61%
27	4	12.12%	72.73%
28	3	9.09%	81.82%
29	0	0.00%	81.82%
30	1	3.03%	84.85%
31	0	0.00%	84.85%
32	3	9.09%	93.94%
33	0	0.00%	93.94%
34	1	3.03%	96.97%
35	1	3.03%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	33	100%	

Date:	1/6/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	1:30 P.M.	**To**	3:30 P.M.
Recorder:	NDS		
Posted Speed:	25		
Channelization:	Solid 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	18		
50th Percentile:	25		
85th Percentile:	32		
10 Mile Pace:	18	to	27
% of Samples in 10-Mile Pace:	69.70%		
# in 10 MPH pace:	23		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

11

STREET CIVIC CENTER WAY **CERTIFICATION DATE:** 3/16/2022
FROM Malibu Canyon Road **TO** Webb Way

SPEED FACTORS

Date of Speed Survey	2/23/2022	**Posted Speed Limit**	40
Time of Speed Survey	1:00 P.M. to 2:20 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	32	85th percentile speed downgraded due to restricted sight distance from horizontal road curvature, residential density and no sidewalks	
85th Percentile Speed	39		
10 mph Pace Speed	28-37		
Percentage of Vehicles in Pace	56%	**Recommended Speed Limit**	**35**
Number of Survey Samples	136		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	6
Collision Rate (ACC/MVM)	1.11
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	7,254	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Malibu Canyon Rd and Winter Canyon Rd;stop-controlled at Vista Pacifica and Webb Way		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Minimal street-adjacent parking available		
Sidewalks?	No		
Driveways?	Minimal		

ROADWAY FACTORS

Length of Segment	3600'
Width	24'
Vertical Curve	Moderate
Horizontal Curve	Yes
Visibility	Restricted due to Horizontal road curvature
Roadway Conditions	Fair
Lighting	Yes, on south side of segment
Adjacent Land Use	School and commercial

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

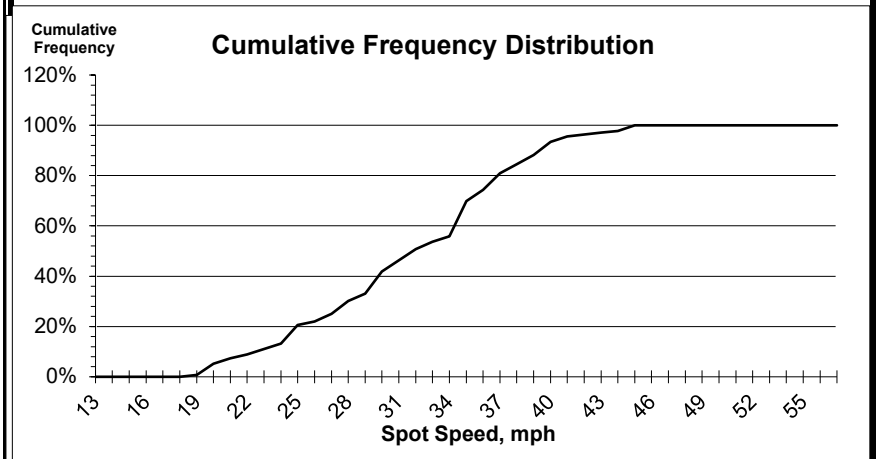
CITY OF MALIBU

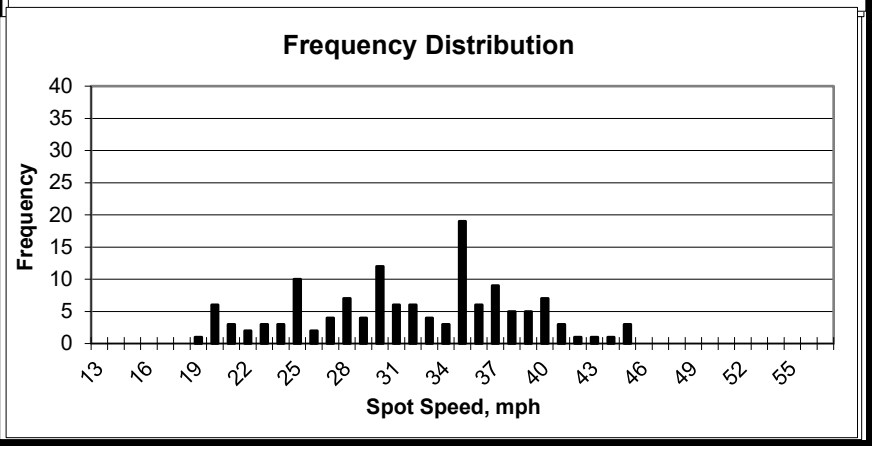
Client: KIMLEY-HORN
Street: Civic Center Way
Spt.Spd. Location: Malibu Canyon Road to Webb Way *Ref. # 11*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	1	0.74%	0.74%
20	6	4.41%	5.15%
21	3	2.21%	7.35%
22	2	1.47%	8.82%
23	3	2.21%	11.03%
24	3	2.21%	13.24%
25	10	7.35%	20.59%
26	2	1.47%	22.06%
27	4	2.94%	25.00%
28	7	5.15%	30.15%
29	4	2.94%	33.09%
30	12	8.82%	41.91%
31	6	4.41%	46.32%
32	6	4.41%	50.74%
33	4	2.94%	53.68%
34	3	2.21%	55.88%
35	19	13.97%	69.85%
36	6	4.41%	74.26%
37	9	6.62%	80.88%
38	5	3.68%	84.56%
39	5	3.68%	88.24%
40	7	5.15%	93.38%
41	3	2.21%	95.59%
42	1	0.74%	96.32%
43	1	0.74%	97.06%
44	1	0.74%	97.79%
45	3	2.21%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	136	100%	

Date:	2/23/2022	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	1:00 P.M.	**To**	2:20 P.M.
Recorder:	NDS		
Posted Speed:	40		
Channelization:	Painted median and solid 2-way traffic		
Street Width:	Var		
Comm./Resid.:	Residential		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:			
Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	25		
50th Percentile:	32		
85th Percentile:	39		
10 Mile Pace:	28	to	37
% of Samples in 10-Mile Pace:	55.88%		
# in 10 MPH pace:	76		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

12

STREET CIVIC CENTER WAY **CERTIFICATION DATE:** 3/16/2022
FROM Webb Way **TO** Cross Creek Road

SPEED FACTORS

Date of Speed Survey	10/19/2021	**Posted Speed Limit**	25
Time of Speed Survey	9:00 A.M. to 10:30 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	26	85th percentile speed downgraded due to high pedestrian activity	
85th Percentile Speed	31		
10 mph Pace Speed	22-31		
Percentage of Vehicles in Pace	77%	**Recommended Speed Limit**	**25**
Number of Survey Samples	103		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	2
Collision Rate (ACC/MVM)	1.27
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	4,222	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Webb Way, Stop-controlled at Cross Creek Road		
Crosswalks?	Multiple		
Pedestrian Traffic	High		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Street-adjacent at both sides of segment		
Sidewalks?	On both sides of segment		
Driveways?	Moderate		

ROADWAY FACTORS

Length of Segment	1800'
Width	33'
Vertical Curve	No
Horizontal Curve	No
Visibility	Fair
Roadway Conditions	TWLTL Striped median; bus stops; Ped Xing Sign
Lighting	No
Adjacent Land Use	Commercial, Park and Library

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

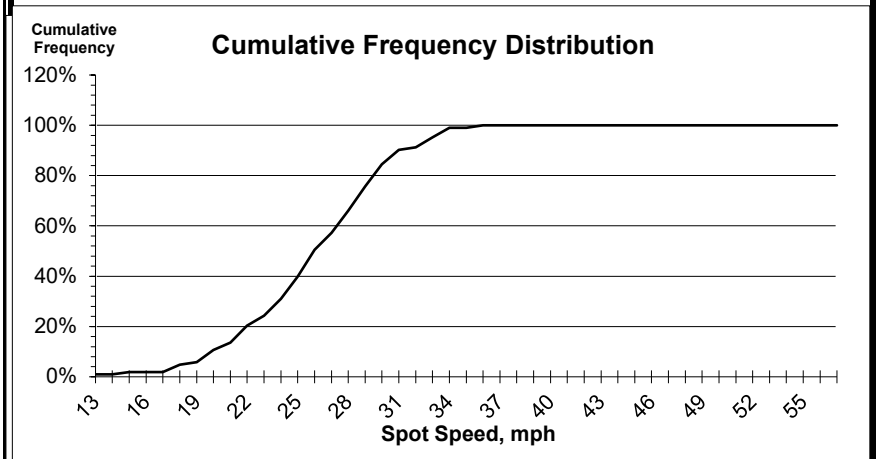
Client: KIMLEY-HORN
Street: Civic Center Way
Spt.Spd. Location: Webb Way to Cross Creek Road *Ref. # 12*

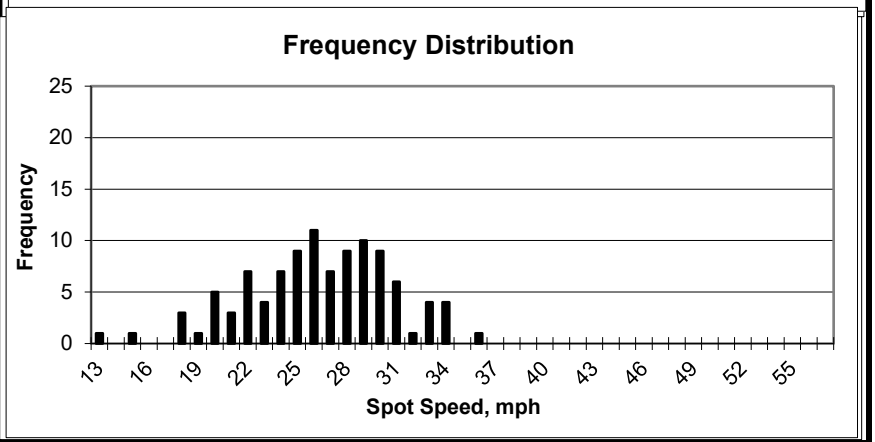
Speed	Frequency	Percent	Cumulative Percent
13	1	0.97%	0.97%
14	0	0.00%	0.97%
15	1	0.97%	1.94%
16	0	0.00%	1.94%
17	0	0.00%	1.94%
18	3	2.91%	4.85%
19	1	0.97%	5.83%
20	5	4.85%	10.68%
21	3	2.91%	13.59%
22	7	6.80%	20.39%
23	4	3.88%	24.27%
24	7	6.80%	31.07%
25	9	8.74%	39.81%
26	11	10.68%	50.49%
27	7	6.80%	57.28%
28	9	8.74%	66.02%
29	10	9.71%	75.73%
30	9	8.74%	84.47%
31	6	5.83%	90.29%
32	1	0.97%	91.26%
33	4	3.88%	95.15%
34	4	3.88%	99.03%
35	0	0.00%	99.03%
36	1	0.97%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	103	100%	

Date:	10/19/2021	**Day:**	Tuesday
Weather:	Dry, clear		
Hours:	9:00 A.M.	**To**	10:30 A.M.
Recorder:	NDS		
Posted Speed:	25		
Channelization:	Painted median and solid 2-way traffic		
Street Width:	33'		
Comm./Resid.:	Commercial		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	22		
50th Percentile:	26		
85th Percentile:	31		
10 Mile Pace:	22	to	31
% of Samples in 10-Mile Pace:	76.70%		
# in 10 MPH pace:	79		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

14

STREET CORRAL CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM City Limit **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/20/2021
Time of Speed Survey	12:30 P.M. to 2:00 P.M.
50th Percentile Speed (Mean Speed)	30
85th Percentile Speed	35
10 mph Pace Speed	27-36
Percentage of Vehicles in Pace	65%
Number of Survey Samples	103

Posted Speed Limit 30

Speed Justification
85th percentile speed downgraded due to restricted sight distance from vertical and horizontal road curvature

Recommended Speed Limit **30**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	1
Collision Rate (ACC/MVM)	0.44
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,403	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	Minimal		
Truck Traffic	None present		
On-Street Parking	Turnouts		
Sidewalks?	No		
Driveways?	No		

ROADWAY FACTORS

Length of Segment	7900'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; Sharp curves; 15mph advisory curve speed
Lighting	No
Adjacent Land Use	Residential, vacant, Trailhead

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

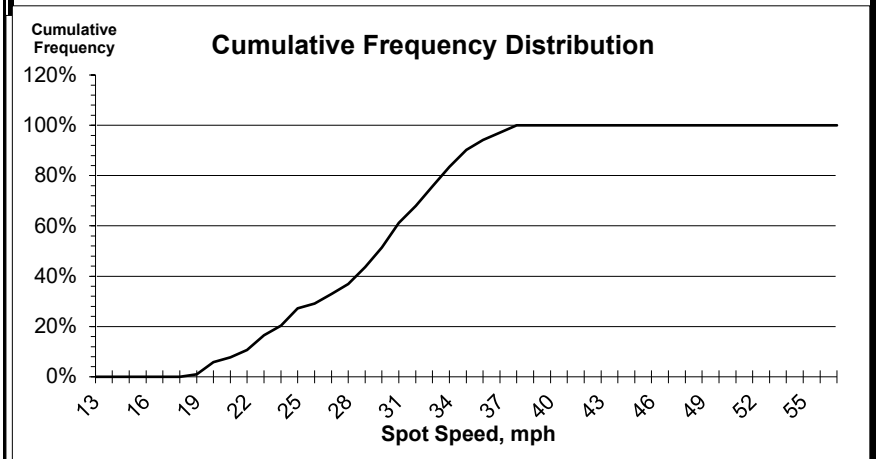
Client: KIMLEY-HORN
Street: Coral Canyon Road
Spt.Spd. Location: Pacific Coast Highway to City Limit *Ref. # 14*

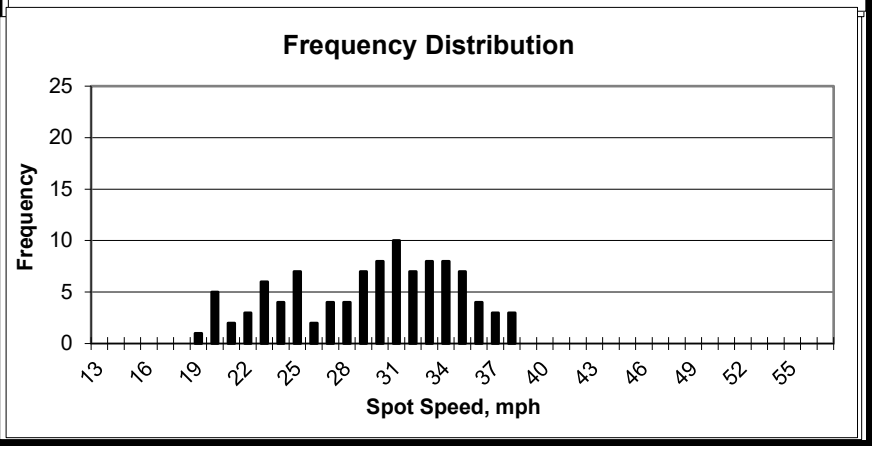
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	1	0.97%	0.97%
20	5	4.85%	5.83%
21	2	1.94%	7.77%
22	3	2.91%	10.68%
23	6	5.83%	16.50%
24	4	3.88%	20.39%
25	7	6.80%	27.18%
26	2	1.94%	29.13%
27	4	3.88%	33.01%
28	4	3.88%	36.89%
29	7	6.80%	43.69%
30	8	7.77%	51.46%
31	10	9.71%	61.17%
32	7	6.80%	67.96%
33	8	7.77%	75.73%
34	8	7.77%	83.50%
35	7	6.80%	90.29%
36	4	3.88%	94.17%
37	3	2.91%	97.09%
38	3	2.91%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	103	100%	

Date:	10/20/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	12:30 P.M.	**To**	2:00 P.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Skip dash 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	23
50th Percentile:	30
85th Percentile:	35
10 Mile Pace:	27 to 36
% of Samples in 10-Mile Pace:	65.05%
# in 10 MPH pace:	67
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

15

STREET	CROSS CREEK ROAD	**CERTIFICATION DATE:**	3/16/2022
FROM	Civic Center Way	**TO**	Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/19/2021	**Posted Speed Limit**	Not Posted
Time of Speed Survey	2:10 P.M. to 3:45 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	14	Business District; Prima Facie	
85th Percentile Speed	15		
10 mph Pace Speed	10-19		
Percentage of Vehicles in Pace	99%	**Recommended Speed Limit**	**25**
Number of Survey Samples	102		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	1
Collision Rate (ACC/MVM)	1.03
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	4,677	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway; stop-controlled at Civic Center Way		
Crosswalks?	Yes		
Pedestrian Traffic	High		
Bicycle Traffic	None present		
Truck Traffic	Minimal		
On-Street Parking	Street-adjacent at both sides of segment; moderate parking turnover		
Sidewalks?	At both sides of segment		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	1000'
Width	32'
Vertical Curve	No
Horizontal Curve	Minimal
Visibility	Fair
Roadway Conditions	Fair; bus stops; Ped Xing sign
Lighting	No
Adjacent Land Use	Commercial

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

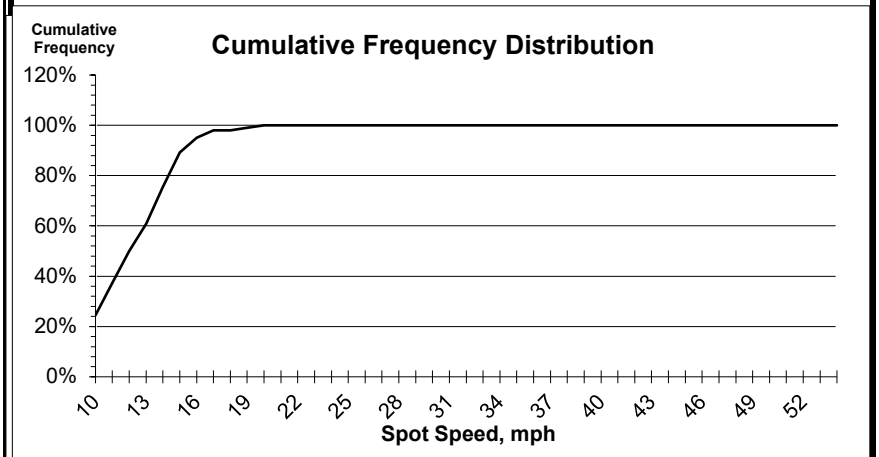
Client: KIMLEY-HORN
Street: Cross Creek Road
Spt.Spd. Location: Civic Center Way to Pacific Coast Highway *Ref. # 15*

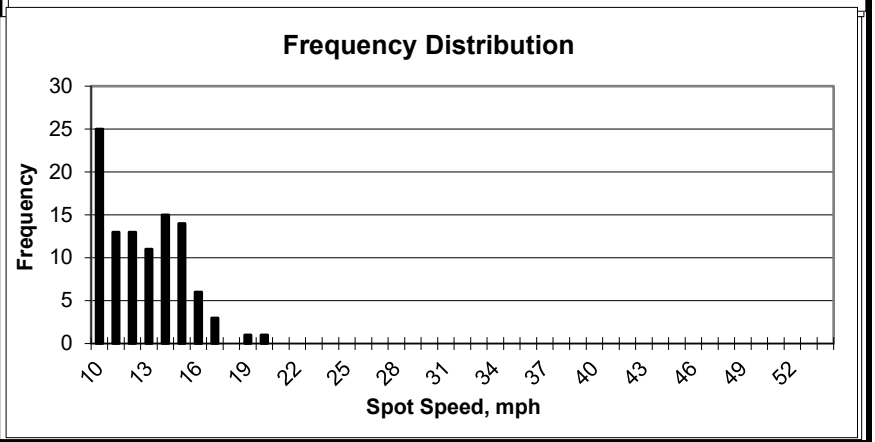
Speed	Frequency	Percent	Cumulative Percent
10	25	24.51%	24.51%
11	13	12.75%	37.25%
12	13	12.75%	50.00%
13	11	10.78%	60.78%
14	15	14.71%	75.49%
15	14	13.73%	89.22%
16	6	5.88%	95.10%
17	3	2.94%	98.04%
18	0	0.00%	98.04%
19	1	0.98%	99.02%
20	1	0.98%	100.00%
21	0	0.00%	100.00%
22	0	0.00%	100.00%
23	0	0.00%	100.00%
24	0	0.00%	100.00%
25	0	0.00%	100.00%
26	0	0.00%	100.00%
27	0	0.00%	100.00%
28	0	0.00%	100.00%
29	0	0.00%	100.00%
30	0	0.00%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
Total:	102	100%	

Date:	10/19/2021	**Day:**	Tuesday
Weather:	Dry, clear		
Hours:	2:10 P.M.	**To**	3:45 P.M.
Recorder:	NDS		
Posted Speed:	N/A		
Channelization:	Solid striping 2-way traffic		
Street Width:	32'		
Comm./Resid.:	Commercial		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	<10
50th Percentile:	14
85th Percentile:	15
10 Mile Pace:	10 to 19
% of Samples in 10-Mile Pace:	99.02%
# in 10 MPH pace:	101
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

17

STREET DUME DRIVE **CERTIFICATION DATE:** 3/16/2022
FROM Heathercliff Road **TO** Cliffside Drive

SPEED FACTORS

Date of Speed Survey	10/21/2021	**Posted Speed Limit**	30
Time of Speed Survey	9:00 A.M. to 11:00 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	25	Fronting residential; Prima Facie speed limit	
85th Percentile Speed	30		
10 mph Pace Speed	20-29		
Percentage of Vehicles in Pace	73%	**Recommended Speed Limit**	**25**
Number of Survey Samples	91		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	1
Collision Rate (ACC/MVM)	0.67
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,173	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	AWSC Stop-controlled		
Crosswalks?	No		
Pedestrian Traffic	Minimal		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Yes, low turnover		
Sidewalks?	Yes, DG along east side		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	6100'
Width	22'
Vertical Curve	Moderate
Horizontal Curve	Moderate
Visibility	Minimal restriction due to horizoantal road curvature
Roadway Conditions	Fair, regular speed humps
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

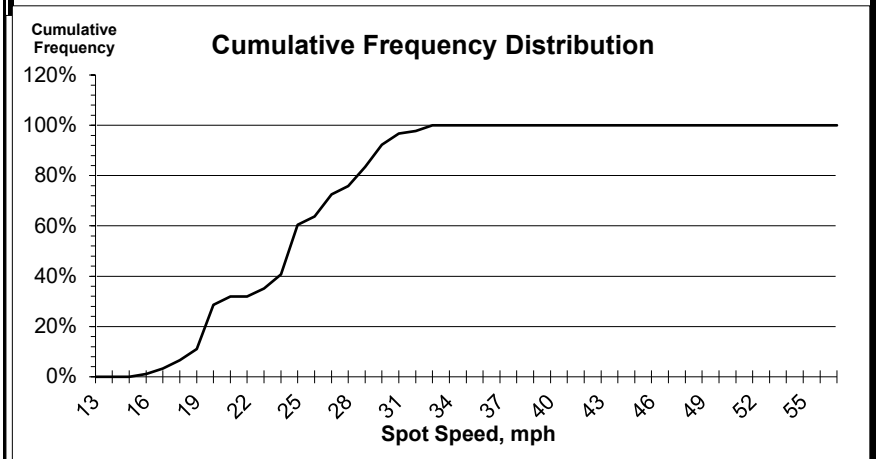
Client: KIMLEY-HORN
Street: Dume Drive
Spt.Spd. Location: Heathercliff Road to Cliffside Drive *Ref. # 17*

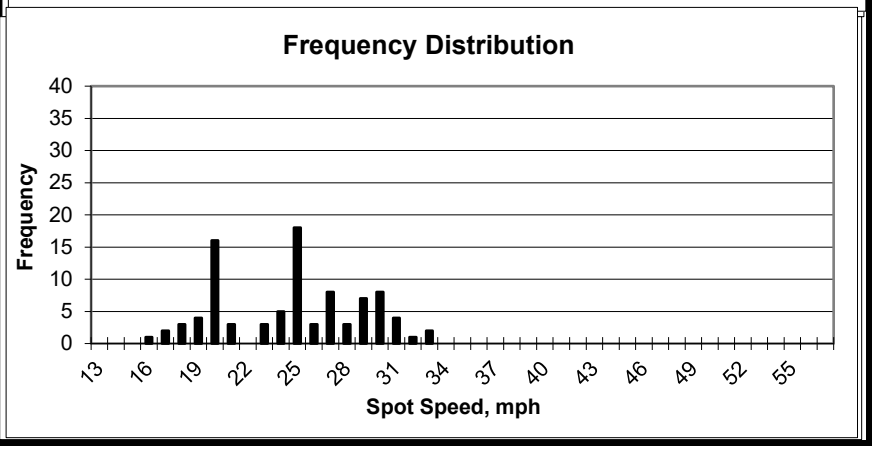
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	1	1.10%	1.10%
17	2	2.20%	3.30%
18	3	3.30%	6.59%
19	4	4.40%	10.99%
20	16	17.58%	28.57%
21	3	3.30%	31.87%
22	0	0.00%	31.87%
23	3	3.30%	35.16%
24	5	5.49%	40.66%
25	18	19.78%	60.44%
26	3	3.30%	63.74%
27	8	8.79%	72.53%
28	3	3.30%	75.82%
29	7	7.69%	83.52%
30	8	8.79%	92.31%
31	4	4.40%	96.70%
32	1	1.10%	97.80%
33	2	2.20%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	91	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	9:00 A.M.	**To**	11:00 A.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Solid striping 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	20
50th Percentile:	25
85th Percentile:	30
10 Mile Pace:	20 to 29
% of Samples in 10-Mile Pace:	72.53%
# in 10 MPH pace:	66
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

18

STREET ENCINAL CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM North City Limit **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/27/2021
Time of Speed Survey	12:00 P.M. to 2:00 P.M.
50th Percentile Speed (Mean Speed)	39
85th Percentile Speed	47
10 mph Pace Speed	35-44
Percentage of Vehicles in Pace	61%
Number of Survey Samples	114

Posted Speed Limit 45

Speed Justification
85th percentile speed downgraded due to restricted sight distance from horizontal and vertical curvature

Recommended Speed Limit **40**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	2
Collision Rate (ACC/MVM)	0.55
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,532	**Date Counted**	10/26/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	TWSC Stop-controlled at PCH		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	Minimal		
On-Street Parking	No		
Sidewalks?	No		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	11500'
Width	22'
Vertical Curve	Moderate
Horizontal Curve	Moderate
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; sharp curves; Curve speed restriction (35mph); Dip and Slow signs
Lighting	No
Adjacent Land Use	Single family residential; vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

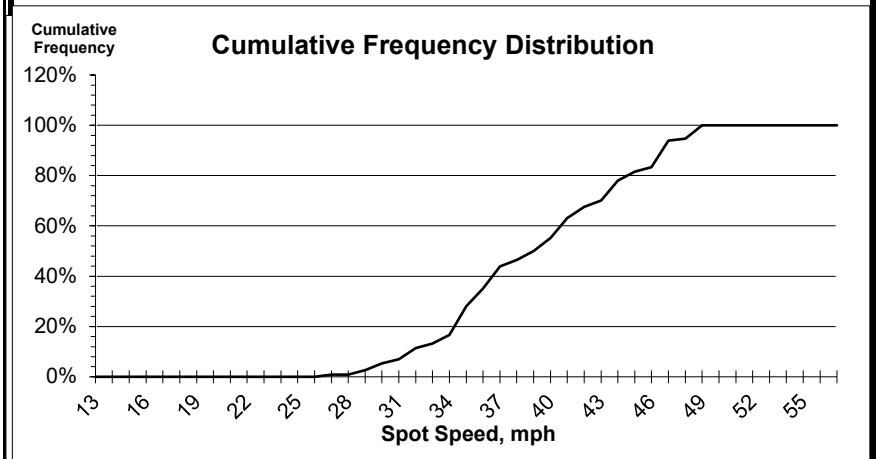
CITY OF MALIBU

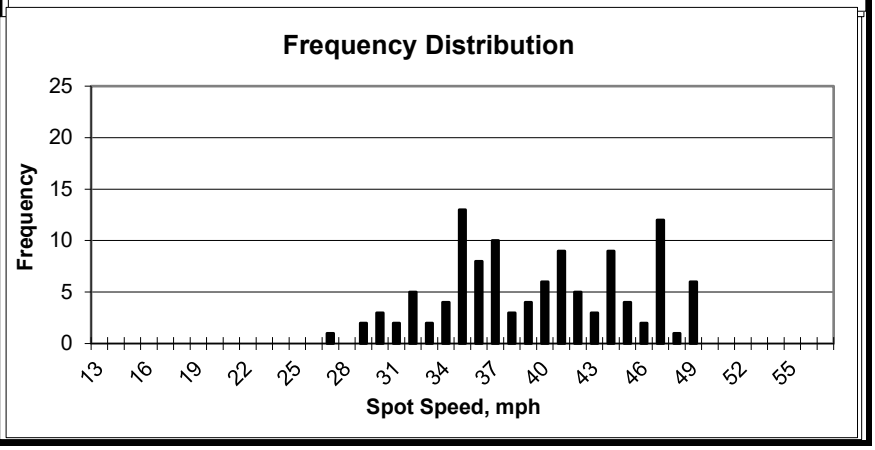
Client: KIMLEY-HORN
Street: Encinal Canyon Road
Spt.Spd. Location: Pacific Coast Highway to North City Limit *Ref. # 18*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	0	0.00%	0.00%
25	0	0.00%	0.00%
26	0	0.00%	0.00%
27	1	0.88%	0.88%
28	0	0.00%	0.88%
29	2	1.75%	2.63%
30	3	2.63%	5.26%
31	2	1.75%	7.02%
32	5	4.39%	11.40%
33	2	1.75%	13.16%
34	4	3.51%	16.67%
35	13	11.40%	28.07%
36	8	7.02%	35.09%
37	10	8.77%	43.86%
38	3	2.63%	46.49%
39	4	3.51%	50.00%
40	6	5.26%	55.26%
41	9	7.89%	63.16%
42	5	4.39%	67.54%
43	3	2.63%	70.18%
44	9	7.89%	78.07%
45	4	3.51%	81.58%
46	2	1.75%	83.33%
47	12	10.53%	93.86%
48	1	0.88%	94.74%
49	6	5.26%	100.00%
50		0.00%	100.00%
51		0.00%	100.00%
52		0.00%	100.00%
53		0.00%	100.00%
54		0.00%	100.00%
55		0.00%	100.00%
56		0.00%	100.00%
57		0.00%	100.00%
Total:	114	100%	

Date:	10/27/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	12:00 P.M.	**To**	2:00 P.M.
Recorder:	NDS		
Posted Speed:	45		
Channelization:	Solid striping 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:			
Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	34		
50th Percentile:	39		
85th Percentile:	47		
10 Mile Pace:	35	to	44
% of Samples in 10-Mile Pace:	61.40%		
# in 10 MPH pace:	70		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

19

STREET FERNHILL DRIVE **CERTIFICATION DATE:** 3/16/2022
FROM Wildlife Road **TO** Grayfox Street

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	25
Time of Speed Survey	2:10 P.M. to 3:40 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	26	85th percentile speed downgraded due to restricted sight distance from vertical road curvature	
85th Percentile Speed	30		
10 mph Pace Speed	19-28		
Percentage of Vehicles in Pace	69%	**Recommended Speed Limit**	**25**
Number of Survey Samples	100		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,477	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop controlled		
Crosswalks?	Crosswalks at Greyfox St		
Pedestrian Traffic	Minimal		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	No		
Sidewalks?	DG Sidewalk on Northwest side		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	1680'
Width	25'
Vertical Curve	Yes
Horizontal Curve	Minimal
Visibility	Restricted due to road curvature; School and speed hump Signs
Roadway Conditions	Fair
Lighting	No
Adjacent Land Use	Single Family Residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

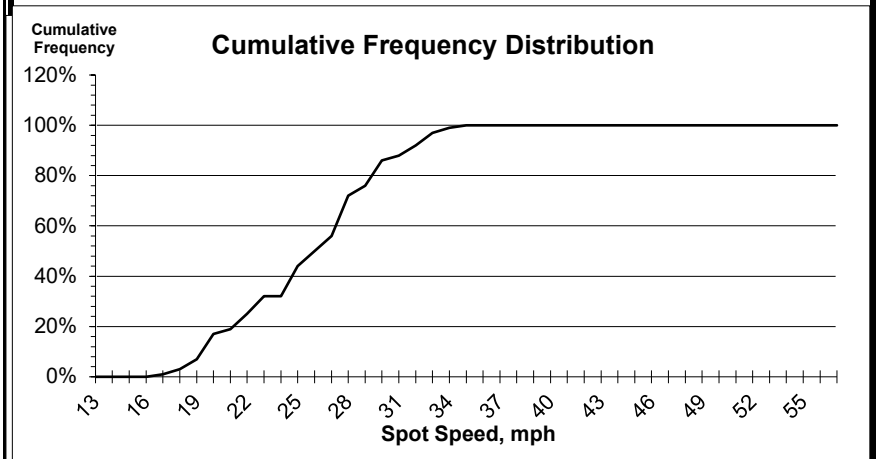
Client: KIMLEY-HORN
Street: Fernhill Drive
Spt.Spd. Location: Wildlife Road to Grayfox Street *Ref. # 19*

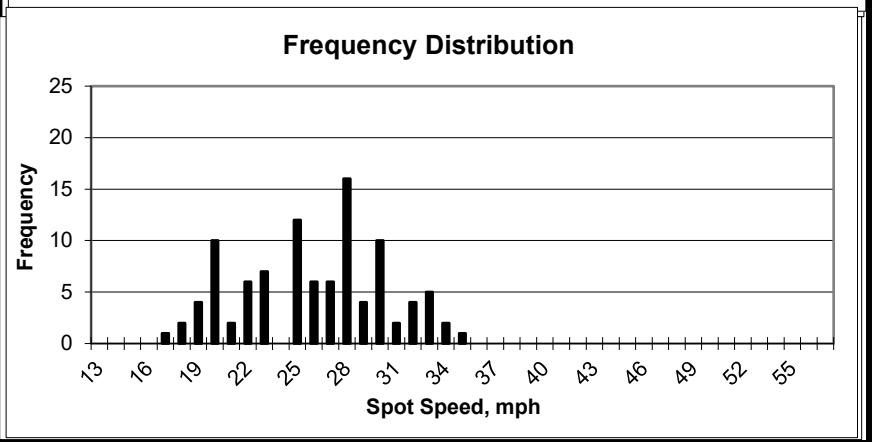
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	1	1.00%	1.00%
18	2	2.00%	3.00%
19	4	4.00%	7.00%
20	10	10.00%	17.00%
21	2	2.00%	19.00%
22	6	6.00%	25.00%
23	7	7.00%	32.00%
24	0	0.00%	32.00%
25	12	12.00%	44.00%
26	6	6.00%	50.00%
27	6	6.00%	56.00%
28	16	16.00%	72.00%
29	4	4.00%	76.00%
30	10	10.00%	86.00%
31	2	2.00%	88.00%
32	4	4.00%	92.00%
33	5	5.00%	97.00%
34	2	2.00%	99.00%
35	1	1.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	100	100%	

Date:	10/20/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	2:10 P.M.	**To**	3:40 P.M.
Recorder:	NDS		
Posted Speed:	25		
Channelization:	Solid striping 2-way traffic		
Street Width:	25'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	20		
50th Percentile:	26		
85th Percentile:	30		
10 Mile Pace:	19	to	28
% of Samples in 10-Mile Pace:	69.00%		
# in 10 MPH pace:	69		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

21

STREET GUERNSEY AVENUE **CERTIFICATION DATE:** 3/16/2022
FROM Morning View Drive **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/21/2021	**Posted Speed Limit**	30
Time of Speed Survey	10:30 A.M. to 12:00 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	21	85th percentile speed	
85th Percentile Speed	29		
10 mph Pace Speed	15-24		
Percentage of Vehicles in Pace	58%	**Recommended Speed Limit**	**30**
Number of Survey Samples	114		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,497	**Date Counted**	10/20/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled		
Crosswalks?	No		
Pedestrian Traffic	Low		
Bicycle Traffic	Low		
Truck Traffic	Minimal		
On-Street Parking	No		
Sidewalks?	Gravel Ped Path on east side		
Driveways?	Minimal		

ROADWAY FACTORS

Length of Segment	1000'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; "Share the Road" bike Lane
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

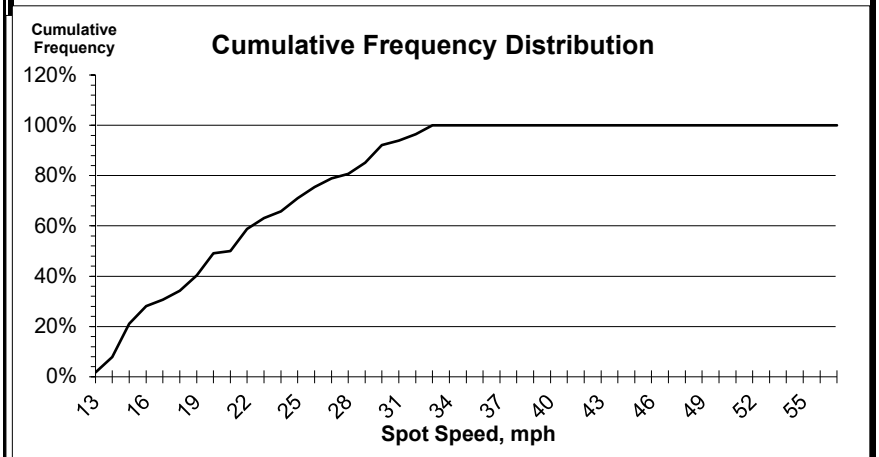
Client: KIMLEY-HORN
Street: Guernsey Avenue
Spt.Spd. Location: Morning View Drive to Pacific Coast Highway *Ref. # 21*

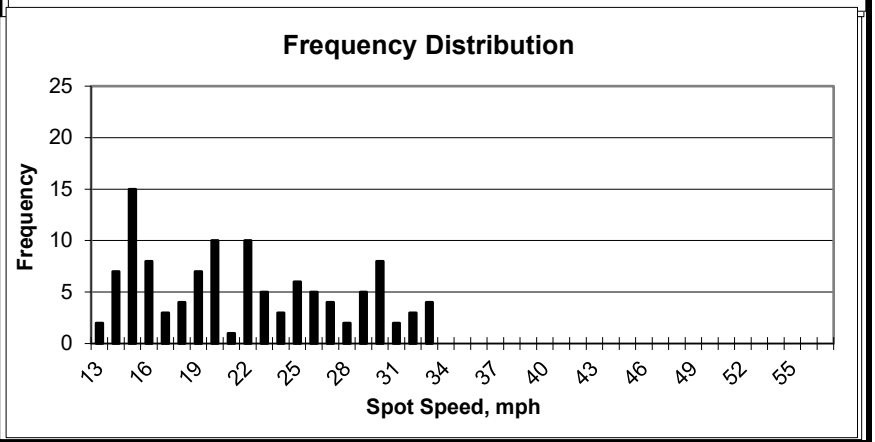
Speed	Frequency	Percent	Cumulative Percent
13	2	1.75%	1.75%
14	7	6.14%	7.89%
15	15	13.16%	21.05%
16	8	7.02%	28.07%
17	3	2.63%	30.70%
18	4	3.51%	34.21%
19	7	6.14%	40.35%
20	10	8.77%	49.12%
21	1	0.88%	50.00%
22	10	8.77%	58.77%
23	5	4.39%	63.16%
24	3	2.63%	65.79%
25	6	5.26%	71.05%
26	5	4.39%	75.44%
27	4	3.51%	78.95%
28	2	1.75%	80.70%
29	5	4.39%	85.09%
30	8	7.02%	92.11%
31	2	1.75%	93.86%
32	3	2.63%	96.49%
33	4	3.51%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	114	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	10:30 A.M.	**To**	12:00 P.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Skip dash 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	15
50th Percentile:	21
85th Percentile:	29
10 Mile Pace:	15 to 24
% of Samples in 10-Mile Pace:	57.89%
# in 10 MPH pace:	73
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

25

STREET JOHN TYLER DRIVE **CERTIFICATION DATE:** 3/16/2022
FROM Pepperdine University Entrance **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	Not posted
Time of Speed Survey	9:00 A.M. to 10:30 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	20	85th percentile speed	
85th Percentile Speed	24		
10 mph Pace Speed	15-24		
Percentage of Vehicles in Pace	83%	**Recommended Speed Limit**	**25**
Number of Survey Samples	104		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.24

TRAFFIC FACTORS

Average Daily Traffic	2,333	**Date Counted**	10/26/2021
Number of Lanes	Two lanes in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway; TWSC at Malibu Country Dr		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Restricted parking at both sides of segment		
Sidewalks?	Yes		
Driveways?	No		

ROADWAY FACTORS

Length of Segment	800'
Width	45'
Vertical Curve	Minimal
Horizontal Curve	Minimal
Visibility	Fair
Roadway Conditions	Fair; raised median; university entrance
Lighting	Yes
Adjacent Land Use	Single family residential; University

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

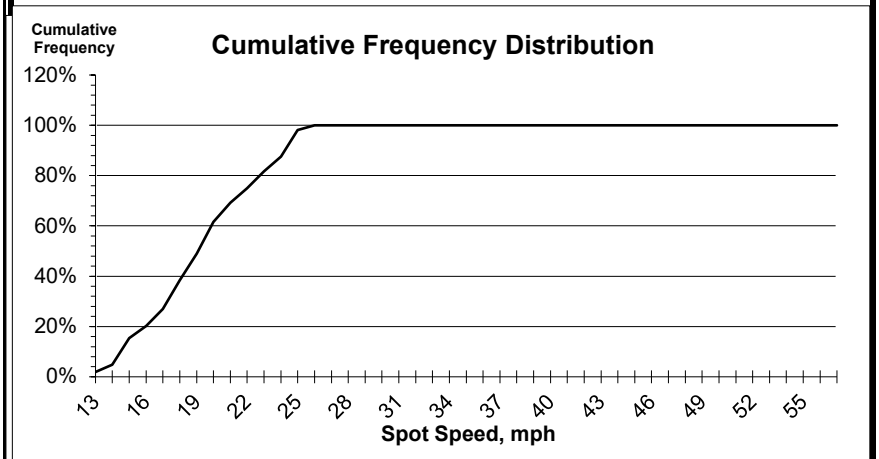
Client: KIMLEY-HORN
Street: John Tyler Drive
Spt.Spd. Location: Pepperdine University Entrance to Pacific Coast Highway *Ref. # 25*

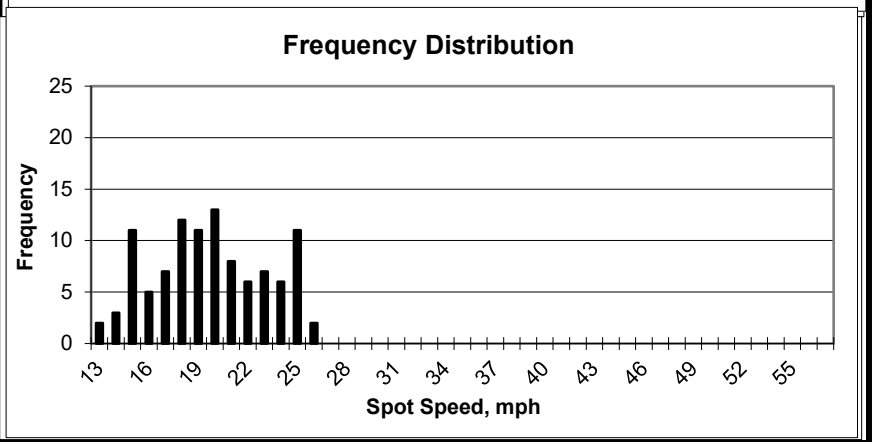
Speed	Frequency	Percent	Cumulative Percent
13	2	1.92%	1.92%
14	3	2.88%	4.81%
15	11	10.58%	15.38%
16	5	4.81%	20.19%
17	7	6.73%	26.92%
18	12	11.54%	38.46%
19	11	10.58%	49.04%
20	13	12.50%	61.54%
21	8	7.69%	69.23%
22	6	5.77%	75.00%
23	7	6.73%	81.73%
24	6	5.77%	87.50%
25	11	10.58%	98.08%
26	2	1.92%	100.00%
27	0	0.00%	100.00%
28	0	0.00%	100.00%
29	0	0.00%	100.00%
30	0	0.00%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	104	100%	

Date:	10/20/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	9:00 A.M.	**To**	10:30 A.M.
Recorder:	NDS		
Posted Speed:	N/A		
Channelization:	Raised median		
Street Width:	45'		
Comm./Resid.:	Residential and University		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	15
50th Percentile:	20
85th Percentile:	24
10 Mile Pace:	15 to 24
% of Samples in 10-Mile Pace:	82.69%
# in 10 MPH pace:	86
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

26

STREET KANAN DUME ROAD **CERTIFICATION DATE:** 3/16/2022
FROM North City Limit **TO** Galahad Drive

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	50
Time of Speed Survey	11:00 A.M. to 12:30 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	43	85th percentile speed downgraded due to restricted sight distance from vertical curvature	
85th Percentile Speed	49		
10 mph Pace Speed	41-50		
Percentage of Vehicles in Pace	57%	**Recommended Speed Limit**	**45**
Number of Survey Samples	101		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	4
Collision Rate (ACC/MVM)	0.42
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	9,723	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway; TWSC stop-controlled at Mt. Dume Ln and Galahad Dr		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	No		
Sidewalks?	No		
Driveways?	Multiple Residential		

ROADWAY FACTORS

Length of Segment	4700'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Fair; Slightly restricted due to road curvature
Roadway Conditions	Fair; striped TWLT median; 45 mph Advisory curve speed
Lighting	Yes
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

CITY OF MALIBU

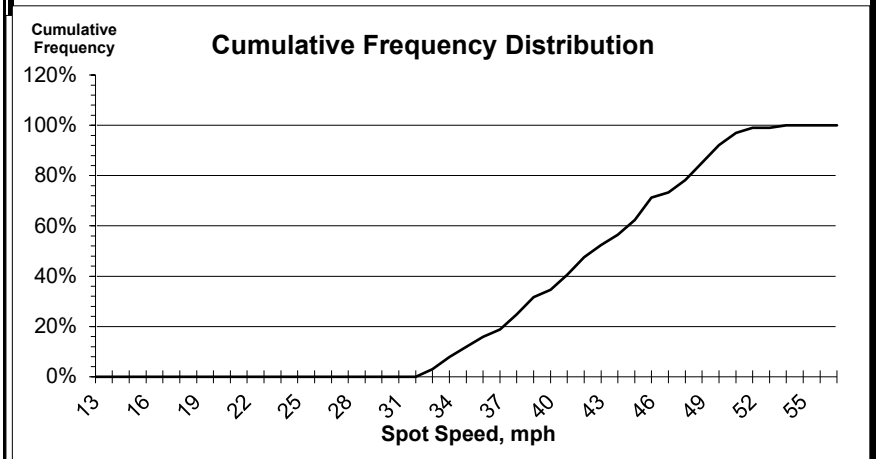
Client: KIMLEY-HORN
Street: Kanan Dume Road
Spt.Spd. Location: North City Limit to Galahad Drive *Ref. # 26*

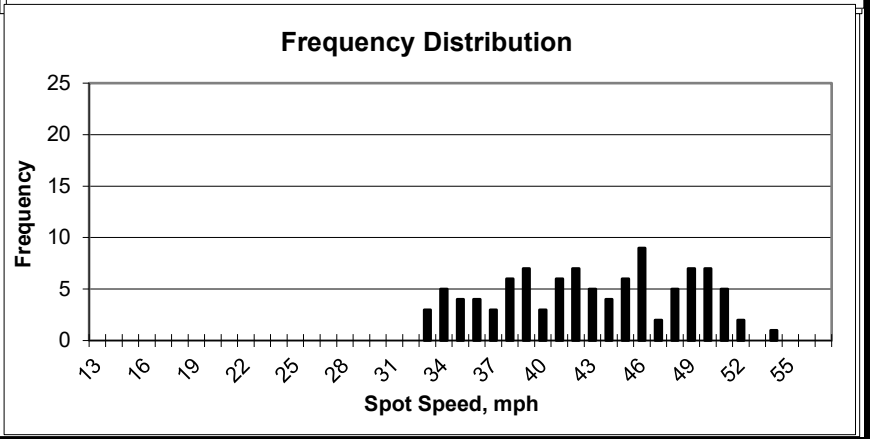
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	0	0.00%	0.00%
25	0	0.00%	0.00%
26	0	0.00%	0.00%
27	0	0.00%	0.00%
28	0	0.00%	0.00%
29	0	0.00%	0.00%
30	0	0.00%	0.00%
31	0	0.00%	0.00%
32	0	0.00%	0.00%
33	3	2.97%	2.97%
34	5	4.95%	7.92%
35	4	3.96%	11.88%
36	4	3.96%	15.84%
37	3	2.97%	18.81%
38	6	5.94%	24.75%
39	7	6.93%	31.68%
40	3	2.97%	34.65%
41	6	5.94%	40.59%
42	7	6.93%	47.52%
43	5	4.95%	52.48%
44	4	3.96%	56.44%
45	6	5.94%	62.38%
46	9	8.91%	71.29%
47	2	1.98%	73.27%
48	5	4.95%	78.22%
49	7	6.93%	85.15%
50	7	6.93%	92.08%
51	5	4.95%	97.03%
52	2	1.98%	99.01%
53	0	0.00%	99.01%
54	1	0.99%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	101	100%	

Date:	10/20/2021	**Day:**	Wednesday	
Weather:	Dry, clear			
Hours:	11:00 A.M.	**To**	12:30 P.M.	
Recorder:	NDS			
Posted Speed:	50			
Channelization:	Painted median			
Street Width:	36'			
Comm./Resid.:	Residential			
DIRECTION:	Northbound / Southbound Combined			

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	36		
50th Percentile:	43		
85th Percentile:	49		
10 Mile Pace:	41	to	50
% of Samples in 10-Mile Pace:	57.43%		
# in 10 MPH pace:	58		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

27

STREET KANAN DUME ROAD **CERTIFICATION DATE:** 3/16/2022
FROM Galahad Drive **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	50
Time of Speed Survey	11:00 A.M. to 12:30 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	45	85th percentile speed downgraded due to restricted sight distance from vertical curvature	
85th Percentile Speed	51		
10 mph Pace Speed	42-51		
Percentage of Vehicles in Pace	59%	**Recommended Speed Limit**	**45**
Number of Survey Samples	100		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	3
Collision Rate (ACC/MVM)	0.60
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	10,114	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway; TWSC stop-controlled at Mt. Dume Ln and Galahad Dr		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Yes		
Sidewalks?	No		
Driveways?	Multiple Residential		

ROADWAY FACTORS

Length of Segment	2400'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Fair, Slightly restricted due to road curvature
Roadway Conditions	Fair; striped TWLT median
Lighting	Yes, near PCH
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

CITY OF MALIBU

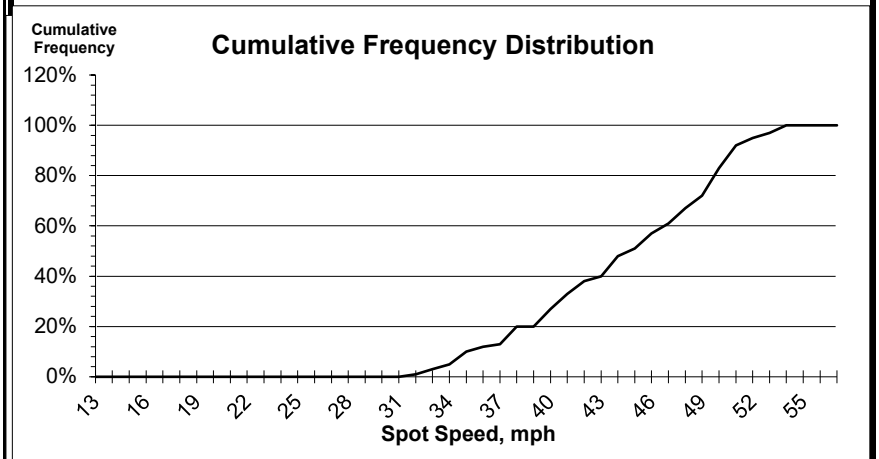
Client: KIMLEY-HORN
Street: Kanan Dume Road
Spt.Spd. Location: Galahad Drive to Pacific Coast Highway *Ref. # 27*

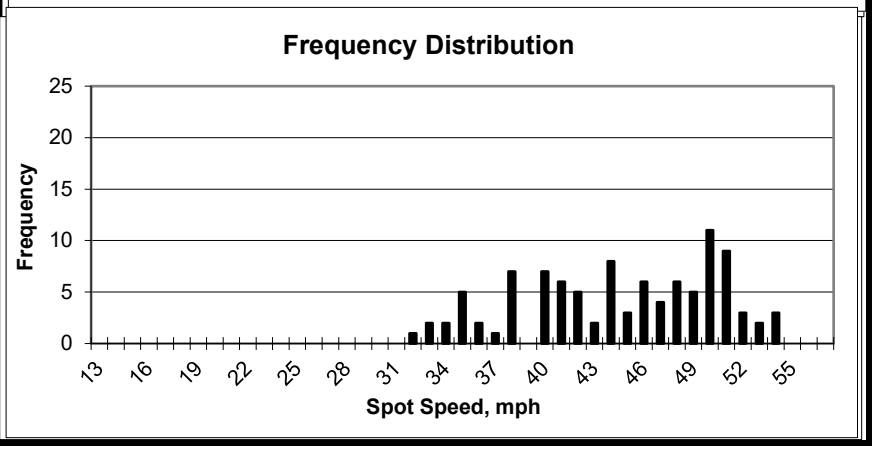
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	0	0.00%	0.00%
25	0	0.00%	0.00%
26	0	0.00%	0.00%
27	0	0.00%	0.00%
28	0	0.00%	0.00%
29	0	0.00%	0.00%
30	0	0.00%	0.00%
31	0	0.00%	0.00%
32	1	1.00%	1.00%
33	2	2.00%	3.00%
34	2	2.00%	5.00%
35	5	5.00%	10.00%
36	2	2.00%	12.00%
37	1	1.00%	13.00%
38	7	7.00%	20.00%
39	0	0.00%	20.00%
40	7	7.00%	27.00%
41	6	6.00%	33.00%
42	5	5.00%	38.00%
43	2	2.00%	40.00%
44	8	8.00%	48.00%
45	3	3.00%	51.00%
46	6	6.00%	57.00%
47	4	4.00%	61.00%
48	6	6.00%	67.00%
49	5	5.00%	72.00%
50	11	11.00%	83.00%
51	9	9.00%	92.00%
52	3	3.00%	95.00%
53	2	2.00%	97.00%
54	3	3.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	100	100%	

Date:	10/20/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	11:00 A.M.	**To**	12:30 P.M.
Recorder:	NDS		
Posted Speed:	50		
Channelization:	Painted median		
Street Width:	36'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	38		
50th Percentile:	45		
85th Percentile:	51		
10 Mile Pace:	42	to	51
% of Samples in 10-Mile Pace:	59.00%		
# in 10 MPH pace:	59		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

28

STREET LAS FLORES CANYON ROAD
FROM North City Limit
TO Pacific Coast Highway
CERTIFICATION DATE: 3/16/2022

SPEED FACTORS

Date of Speed Survey	10/19/2021
Time of Speed Survey	10:30 A.M. to 12:05 P.M.
50th Percentile Speed (Mean Speed)	24
85th Percentile Speed	28
10 mph Pace Speed	18-27
Percentage of Vehicles in Pace	79%
Number of Survey Samples	107

Posted Speed Limit 25

Speed Justification
85th percentile speed downgraded due to restricted sight distance from vertical and horizontal road curvature

Recommended Speed Limit **25**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	1
Collision Rate (ACC/MVM)	0.57
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,156
Date Counted	10/29/2021
Number of Lanes	One lane in each direction
Type of Traffic Control	Signalized at Pacific Coast Highway
Crosswalks?	At Pacific Coast Highway
Pedestrian Traffic	Moderate
Bicycle Traffic	None present
Truck Traffic	None present
On-Street Parking	Yes
Sidewalks?	No
Driveways?	Multiple

ROADWAY FACTORS

Length of Segment	3900'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature; School Zone Sign
Roadway Conditions	Good
Lighting	No
Adjacent Land Use	Single family residential; school

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

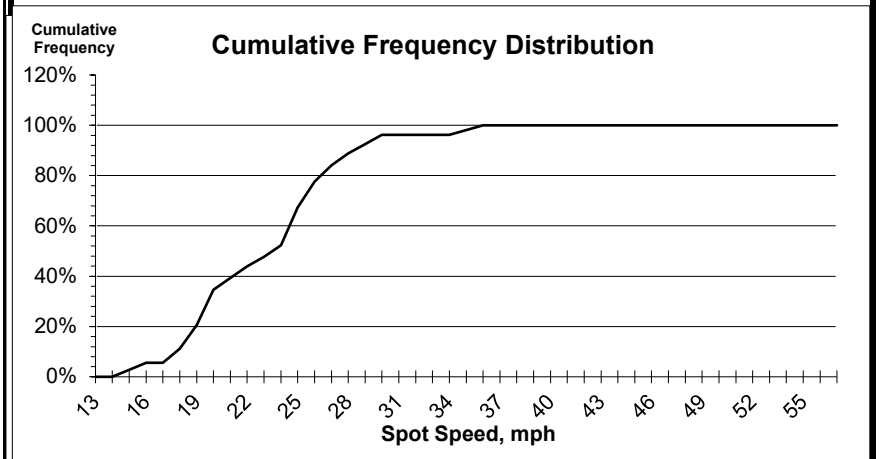
Client: KIMLEY-HORN
Street: Las Flores Canyon Road
Spt.Spd. Location: Pacific Coast Highway to North City Limit *Ref. # 28*

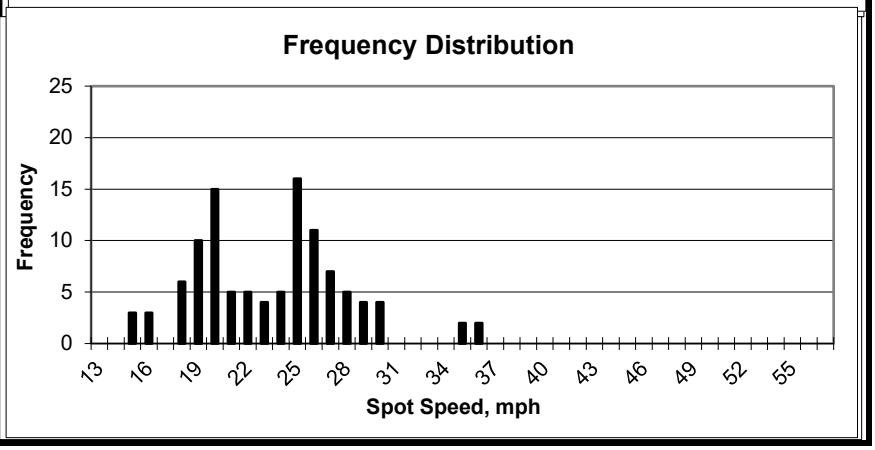
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	3	2.80%	2.80%
16	3	2.80%	5.61%
17	0	0.00%	5.61%
18	6	5.61%	11.21%
19	10	9.35%	20.56%
20	15	14.02%	34.58%
21	5	4.67%	39.25%
22	5	4.67%	43.93%
23	4	3.74%	47.66%
24	5	4.67%	52.34%
25	16	14.95%	67.29%
26	11	10.28%	77.57%
27	7	6.54%	84.11%
28	5	4.67%	88.79%
29	4	3.74%	92.52%
30	4	3.74%	96.26%
31	0	0.00%	96.26%
32	0	0.00%	96.26%
33	0	0.00%	96.26%
34	0	0.00%	96.26%
35	2	1.87%	98.13%
36	2	1.87%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	107	100%	

Date:	10/19/2021	**Day:**	Tuesday
Weather:	Dry, clear		
Hours:	10:30 A.M.	**To**	12:05 P.M.
Recorder:	NDS		
Posted Speed:	25		
Channelization:	Solid striping 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	19
50th Percentile:	24
85th Percentile:	28
10 Mile Pace:	18 to 27
% of Samples in 10-Mile Pace:	78.50%
# in 10 MPH pace:	84
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

29

STREET LATIGO CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM North City Limit **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	30
Time of Speed Survey	2:00 P.M. to 4:00 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	28	85th percentile speed downgraded due to restricted sight distance from vertical and horizontal road curvature	
85th Percentile Speed	33		
10 mph Pace Speed	26-35		
Percentage of Vehicles in Pace	74%	**Recommended Speed Limit**	**30**
Number of Survey Samples	57		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	3
Collision Rate (ACC/MVM)	1.23
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	931	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled at PCH		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	No		
Sidewalks?	No		
Driveways?	No		

ROADWAY FACTORS

Length of Segment	12600'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Fair; striped median
Roadway Conditions	Good; sharp turns
Lighting	No
Adjacent Land Use	Single family residential and vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

Client: KIMLEY-HORN
Street: Latigo Canyon Road
Spt.Spd. Location: North City Limit to Pacific Coast Highway *Ref. # 29*

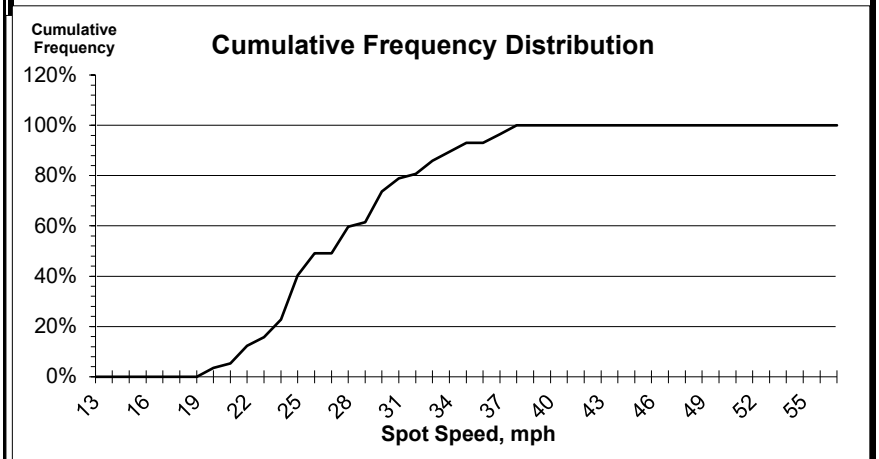
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	2	3.51%	3.51%
21	1	1.75%	5.26%
22	4	7.02%	12.28%
23	2	3.51%	15.79%
24	4	7.02%	22.81%
25	10	17.54%	40.35%
26	5	8.77%	49.12%
27	0	0.00%	49.12%
28	6	10.53%	59.65%
29	1	1.75%	61.40%
30	7	12.28%	73.68%
31	3	5.26%	78.95%
32	1	1.75%	80.70%
33	3	5.26%	85.96%
34	2	3.51%	89.47%
35	2	3.51%	92.98%
36	0	0.00%	92.98%
37	2	3.51%	96.49%
38	2	3.51%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	57	100%	

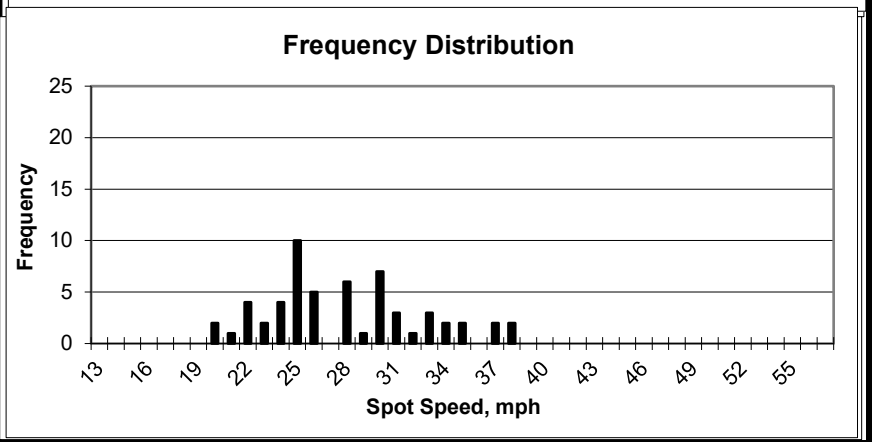
Date: 10/20/2021 **Day:** Wednesday
Weather: Dry, clear
Hours: 2:00 P.M. **To** 4:00 P.M.
Recorder: NDS
Posted Speed: 30
Channelization: Solid striping 2-way traffic
Street Width: 22'
Comm./Resid.: Residential
DIRECTION: Northbound / Southbound Combined

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	23
50th Percentile:	28
85th Percentile:	33
10 Mile Pace:	22 to 31
% of Samples in 10-Mile Pace:	73.68%
# in 10 MPH pace:	42

Comments:





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

30

STREET MALIBU CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM North City Limit **TO** Malibu Knolls Road

SPEED FACTORS

Date of Speed Survey	2/24/2022
Time of Speed Survey	1:00 P.M. to 2:15 P.M
50th Percentile Speed (Mean Speed)	37
85th Percentile Speed	44
10 mph Pace Speed	33-42
Percentage of Vehicles in Pace	67%
Number of Survey Samples	128

Posted Speed Limit 45

Speed Justification
85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature

Recommended Speed Limit **40**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	4
Collision Rate (ACC/MVM)	0.36
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	20,558
Date Counted	2/24/2022
Number of Lanes	One lane in each direction
Type of Traffic Control	Signalized at Civic Center Way; TWSC for Poller Rd, Harbor Vista Dr, and Malibu Knolls Rd
Crosswalks?	No
Pedestrian Traffic	None present
Bicycle Traffic	None present
Truck Traffic	Moderate
On-Street Parking	No
Sidewalks?	No
Driveways?	Minimal

ROADWAY FACTORS

Length of Segment	2600'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; striped median; 35mph advisory for curve
Lighting	Yes
Adjacent Land Use	Single family residential and church

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

Client: KIMLEY-HORN
Street: Malibu Canyon Road
Spt.Spd. Location: North City Limit to Malibu Knolls Road *Ref. # 30*

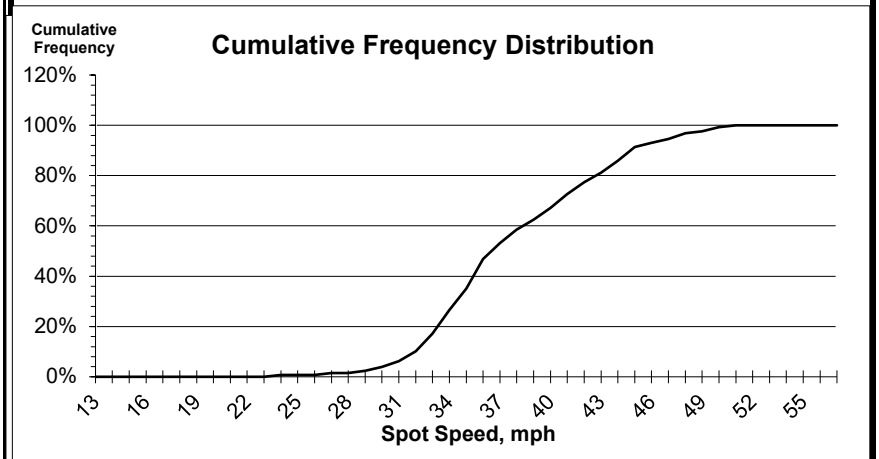
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	1	0.78%	0.78%
25	0	0.00%	0.78%
26	0	0.00%	0.78%
27	1	0.78%	1.56%
28	0	0.00%	1.56%
29	1	0.78%	2.34%
30	2	1.56%	3.91%
31	3	2.34%	6.25%
32	5	3.91%	10.16%
33	9	7.03%	17.19%
34	12	9.38%	26.56%
35	11	8.59%	35.16%
36	15	11.72%	46.88%
37	8	6.25%	53.13%
38	7	5.47%	58.59%
39	5	3.91%	62.50%
40	6	4.69%	67.19%
41	7	5.47%	72.66%
42	6	4.69%	77.34%
43	5	3.91%	81.25%
44	6	4.69%	85.94%
45	7	5.47%	91.41%
46	2	1.56%	92.97%
47	2	1.56%	94.53%
48	3	2.34%	96.88%
49	1	0.78%	97.66%
50	2	1.56%	99.22%
51	1	0.78%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	128	100%	

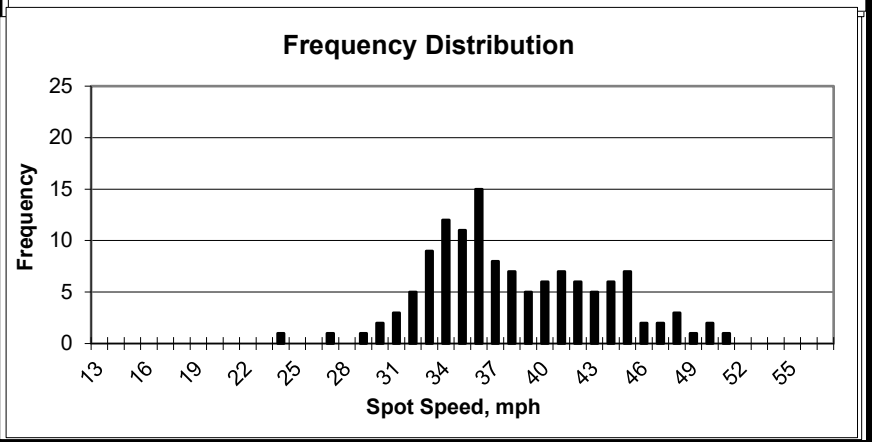
Date: 2/24/2022 **Day:** Thursday
Weather: Dry, clear
Hours: 1:00 P.M. **To** 2:15 P.M
Recorder: NDS
Posted Speed: 45
Channelization: Solid double and single striping 2-way traffic with LTLs
Street Width: Var
Comm./Resid.: Residential and church
DIRECTION: Eastbound / Westbound Combined

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	33
50th Percentile:	37
85th Percentile:	44
10 Mile Pace:	33 to 42
% of Samples in 10-Mile Pace:	67.19%
# in 10 MPH pace:	86

Comments:





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

31

STREET MALIBU CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM Malibu Knolls Road **TO** Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	2/24/2022	**Posted Speed Limit**	45
Time of Speed Survey	9:00 A.M. to 10:15 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	43	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature	
85th Percentile Speed	47		
10 mph Pace Speed	39-48		
Percentage of Vehicles in Pace	69%	**Recommended Speed Limit**	**40**
Number of Survey Samples	128		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	10
Collision Rate (ACC/MVM)	0.70
Expected Collisions (ACC/MVM)	1.24

TRAFFIC FACTORS

Average Daily Traffic	20,927	**Date Counted**	2/24/2022
Number of Lanes	Two lanes in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway and Civic Center Way		
Crosswalks?	Yes, at intersections		
Pedestrian Traffic	None present		
Bicycle Traffic	Low		
Truck Traffic	None present		
On-Street Parking	No		
Sidewalks?	Yes, northwest side of road		
Driveways?	No		

ROADWAY FACTORS

Length of Segment	3300'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Fair; striped median
Roadway Conditions	Fair; striped median; bus stops
Lighting	Yes
Adjacent Land Use	University, vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

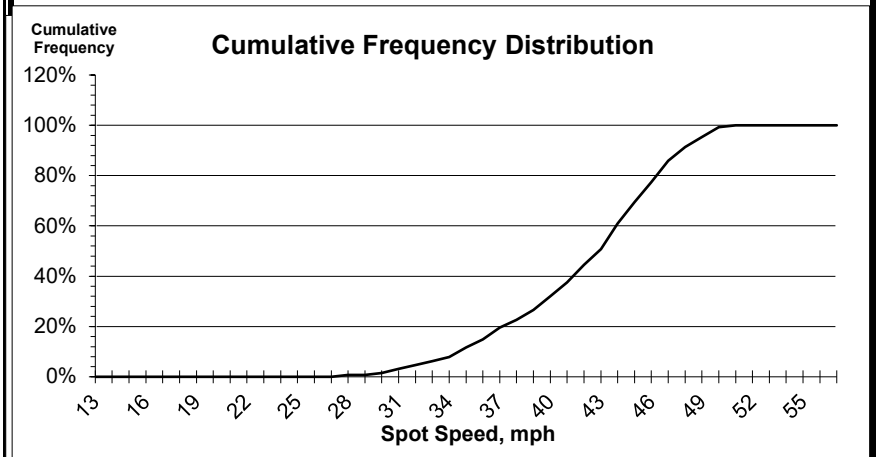
CITY OF MALIBU

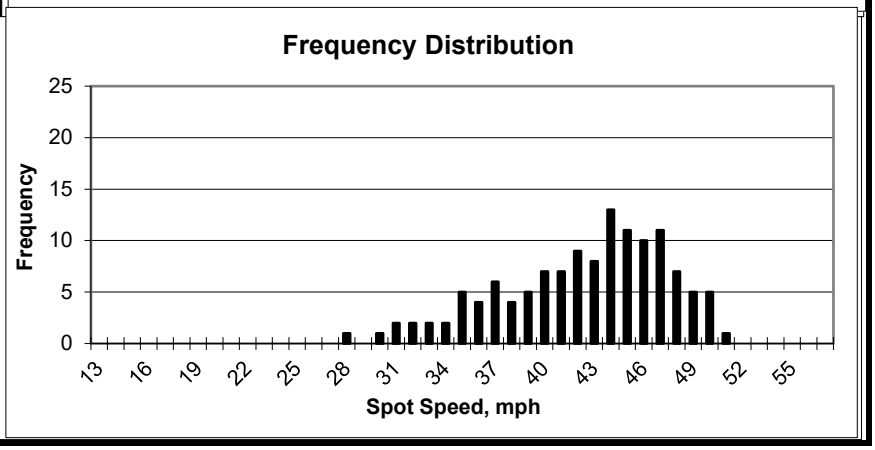
Client: KIMLEY-HORN
Street: Malibu Canyon Road
Spt.Spd. Location: Malibu Knolls Road to Pacific Coast Highway *Ref. # 31*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	0	0.00%	0.00%
25	0	0.00%	0.00%
26	0	0.00%	0.00%
27	0	0.00%	0.00%
28	1	0.78%	0.78%
29	0	0.00%	0.78%
30	1	0.78%	1.56%
31	2	1.56%	3.13%
32	2	1.56%	4.69%
33	2	1.56%	6.25%
34	2	1.56%	7.81%
35	5	3.91%	11.72%
36	4	3.13%	14.84%
37	6	4.69%	19.53%
38	4	3.13%	22.66%
39	5	3.91%	26.56%
40	7	5.47%	32.03%
41	7	5.47%	37.50%
42	9	7.03%	44.53%
43	8	6.25%	50.78%
44	13	10.16%	60.94%
45	11	8.59%	69.53%
46	10	7.81%	77.34%
47	11	8.59%	85.94%
48	7	5.47%	91.41%
49	5	3.91%	95.31%
50	5	3.91%	99.22%
51	1	0.78%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	128	100%	

Date:	2/24/2022	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	9:00 A.M.	**To**	10:15 A.M.
Recorder:	NDS		
Posted Speed:	45		
Channelization:	Double solid striping 2-way traffic		
Street Width:	Var		
Comm./Resid.:	University and vacant		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:			
Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	37		
50th Percentile:	43		
85th Percentile:	47		
10 Mile Pace:	39	to	48
% of Samples in 10-Mile Pace:	68.75%		
# in 10 MPH pace:	88		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

35

STREET MERRITT DRIVE **CERTIFICATION DATE:** 3/16/2022
FROM Morning View Drive **TO** Busch Drive

SPEED FACTORS

Date of Speed Survey	10/20/2021	**Posted Speed Limit**	30
Time of Speed Survey	9:00 A.M to 11:00 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	20	85th percentile speed	
85th Percentile Speed	25		
10 mph Pace Speed	16-25		
Percentage of Vehicles in Pace	76%	**Recommended Speed Limit**	**25**
Number of Survey Samples	66		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	675	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Street-adjacent in some areas along segment		
Sidewalks?	No		
Driveways?	Multiple Homes, Malibu Equestrian Park		

ROADWAY FACTORS

Length of Segment	3700'
Width	22'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair
Lighting	No
Adjacent Land Use	Single family residential; vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

CITY OF MALIBU

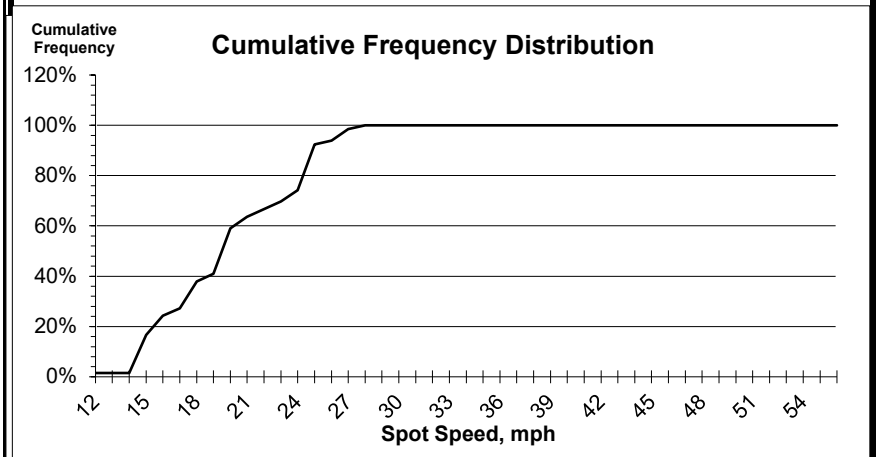
Client: KIMLEY-HORN
Street: Merritt Drive
Spt.Spd. Location: Morning View Drive to Busch Drive *Ref. # 35*

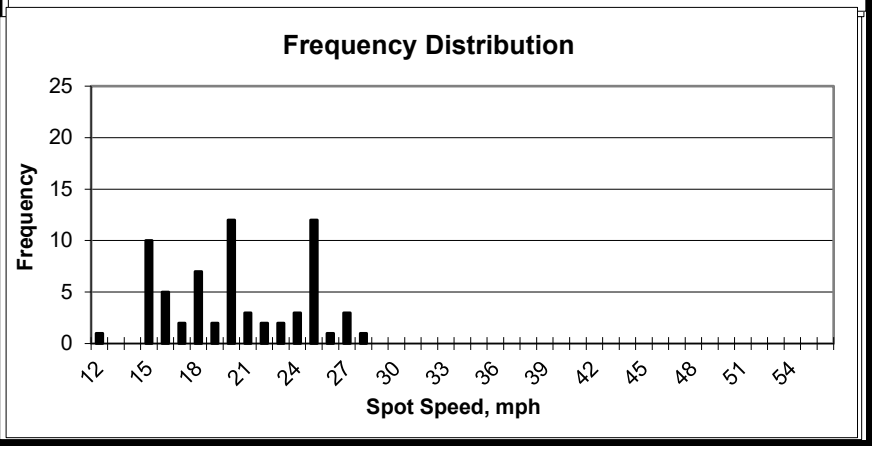
Speed	Frequency	Percent	Cumulative Percent
12	1	1.52%	1.52%
13	0	0.00%	1.52%
14	0	0.00%	1.52%
15	10	15.15%	16.67%
16	5	7.58%	24.24%
17	2	3.03%	27.27%
18	7	10.61%	37.88%
19	2	3.03%	40.91%
20	12	18.18%	59.09%
21	3	4.55%	63.64%
22	2	3.03%	66.67%
23	2	3.03%	69.70%
24	3	4.55%	74.24%
25	12	18.18%	92.42%
26	1	1.52%	93.94%
27	3	4.55%	98.48%
28	1	1.52%	100.00%
29	0	0.00%	100.00%
30	0	0.00%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
Total:	66	100%	

Date:	10/20/2021	**Day:**	Wednesday
Weather:	Dry, clear		
Hours:	9:00 A.M	**To**	11:00 A.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Skip dash and solid 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	15
50th Percentile:	20
85th Percentile:	25
10 Mile Pace:	16 to 25
% of Samples in 10-Mile Pace:	75.76%
# in 10 MPH pace:	50
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

36

STREET MORNING VIEW DRIVE **CERTIFICATION DATE:** 3/16/2022
FROM Guernsey Avenue **TO** Via Cabrillo

SPEED FACTORS

Date of Speed Survey	10/21/2021	**Posted Speed Limit**	30
Time of Speed Survey	9:00 A.M to 10:30 A.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	28	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical road curvature	
85th Percentile Speed	33		
10 mph Pace Speed	24-33		
Percentage of Vehicles in Pace	81%	**Recommended Speed Limit**	**30**
Number of Survey Samples	114		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	973	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled at Guemsey Ave and Phillip Ave		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	Low		
Truck Traffic	None present		
On-Street Parking	Street-adjacent		
Sidewalks?	Yes, in some areas on east side of segment		
Driveways?	Multiple; Single family home driveways		

ROADWAY FACTORS

Length of Segment	2500'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; Dip Sign
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

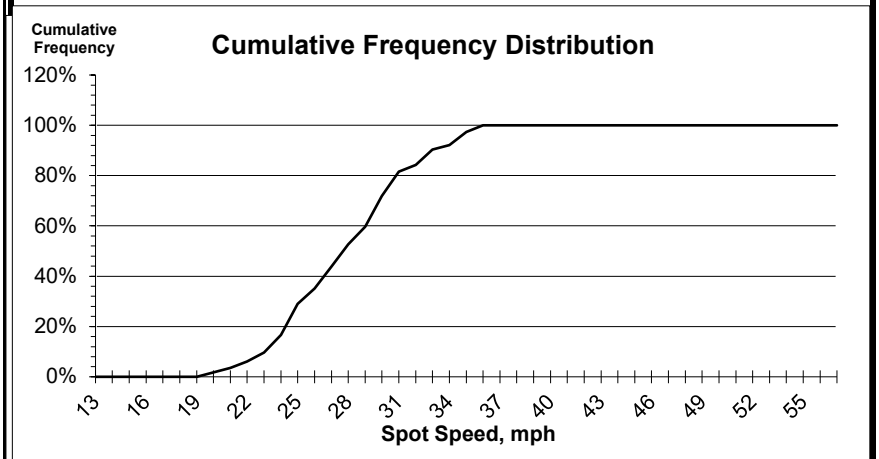
CITY OF MALIBU

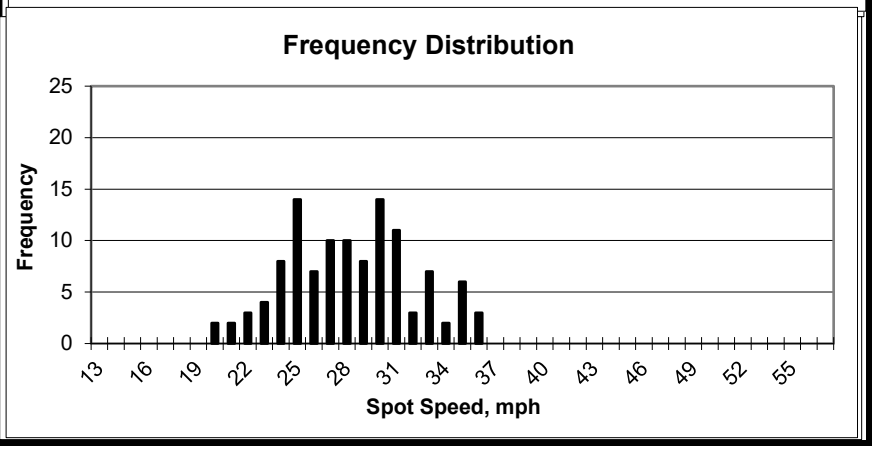
Client: KIMLEY-HORN
Street: Morning View Drive
Spt.Spd. Location: Guernsey Avenue to Via Cabrillo *Ref. # 36*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	0	0.00%	0.00%
19	0	0.00%	0.00%
20	2	1.75%	1.75%
21	2	1.75%	3.51%
22	3	2.63%	6.14%
23	4	3.51%	9.65%
24	8	7.02%	16.67%
25	14	12.28%	28.95%
26	7	6.14%	35.09%
27	10	8.77%	43.86%
28	10	8.77%	52.63%
29	8	7.02%	59.65%
30	14	12.28%	71.93%
31	11	9.65%	81.58%
32	3	2.63%	84.21%
33	7	6.14%	90.35%
34	2	1.75%	92.11%
35	6	5.26%	97.37%
36	3	2.63%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	114	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	9:00 A.M	**To**	10:30 A.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Solid striping 2-way traffic		
Street Width:	22'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:			
Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	24		
50th Percentile:	28		
85th Percentile:	33		
10 Mile Pace:	24	to	33
% of Samples in 10-Mile Pace:	80.70%		
# in 10 MPH pace:	92		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

37

STREET	MORNING VIEW DRIVE	**CERTIFICATION DATE:**	3/16/2022
FROM	Via Cabrillo	**TO**	Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/21/2021	**Posted Speed Limit**	30
Time of Speed Survey	12:00 P.M. to 2:00 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	14	Fronting residential; Prima Facie	
85th Percentile Speed	15		
10 mph Pace Speed	9-18		
Percentage of Vehicles in Pace	99%	**Recommended Speed Limit**	**25**
Number of Survey Samples	94		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,861	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway		
Crosswalks?	Yes, at Pacific Coast Highway and school driveways		
Pedestrian Traffic	Minimal		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Yes		
Sidewalks?	Yes		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	2600'
Width	30'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; "Share the Road" bike lane; 25mph School zone speed restriction
Lighting	No
Adjacent Land Use	Single family residential; church; school; vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

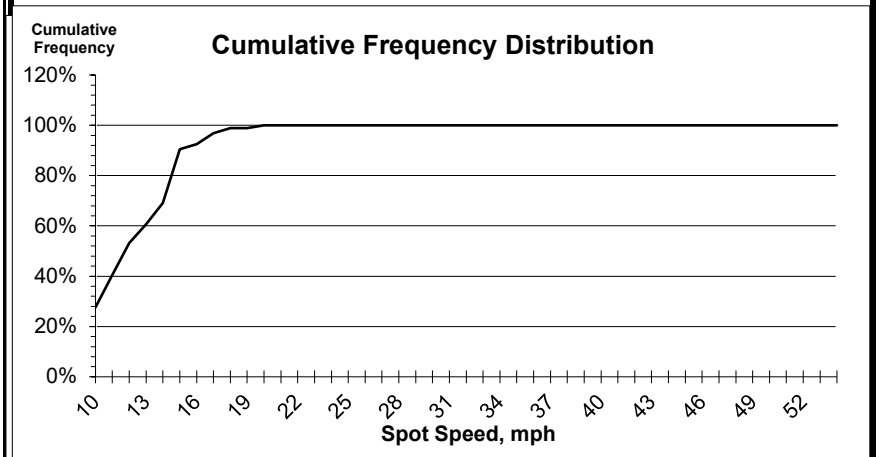
Client: KIMLEY-HORN
Street: Morning View Drive
Spt.Spd. Location: Via Cabrillo to Pacific Coast Highway *Ref. # 37*

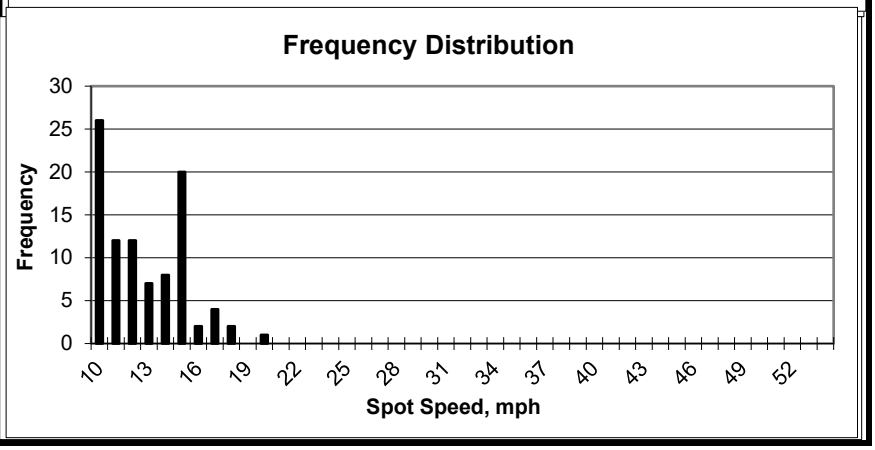
Speed	Frequency	Percent	Cumulative Percent
10	26	27.66%	27.66%
11	12	12.77%	40.43%
12	12	12.77%	53.19%
13	7	7.45%	60.64%
14	8	8.51%	69.15%
15	20	21.28%	90.43%
16	2	2.13%	92.55%
17	4	4.26%	96.81%
18	2	2.13%	98.94%
19	0	0.00%	98.94%
20	1	1.06%	100.00%
21	0	0.00%	100.00%
22	0	0.00%	100.00%
23	0	0.00%	100.00%
24	0	0.00%	100.00%
25	0	0.00%	100.00%
26	0	0.00%	100.00%
27	0	0.00%	100.00%
28	0	0.00%	100.00%
29	0	0.00%	100.00%
30	0	0.00%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
Total:	94	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	12:00 P.M.	**To**	2:00 P.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Solid striping 2-way traffic		
Street Width:	30'		
Comm./Resid.:	Rsidential, church, school and vacant		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	<10mph
50th Percentile:	14
85th Percentile:	15
10 Mile Pace:	9 to 18
% of Samples in 10-Mile Pace:	99.00%
# in 10 MPH pace:	93
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

38

STREET PHILIP AVENUE **CERTIFICATION DATE:** 3/16/2022
FROM Morning View Drive **TO** Cuthbert Road

SPEED FACTORS

Date of Speed Survey	10/21/2021	**Posted Speed Limit**	30
Time of Speed Survey	12:00 P.M. to 2:00 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	28	85th percentile speed downgraded due to restricted sight distance from horizontal and vertical curvature	
85th Percentile Speed	33		
10 mph Pace Speed	25-34		
Percentage of Vehicles in Pace	69%	**Recommended Speed Limit**	**30**
Number of Survey Samples	59		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	1,004	**Date Counted**	10/21/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Yes		
Sidewalks?	No		
Driveways?	Multiple		

ROADWAY FACTORS

Length of Segment	2300'
Width	24'
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

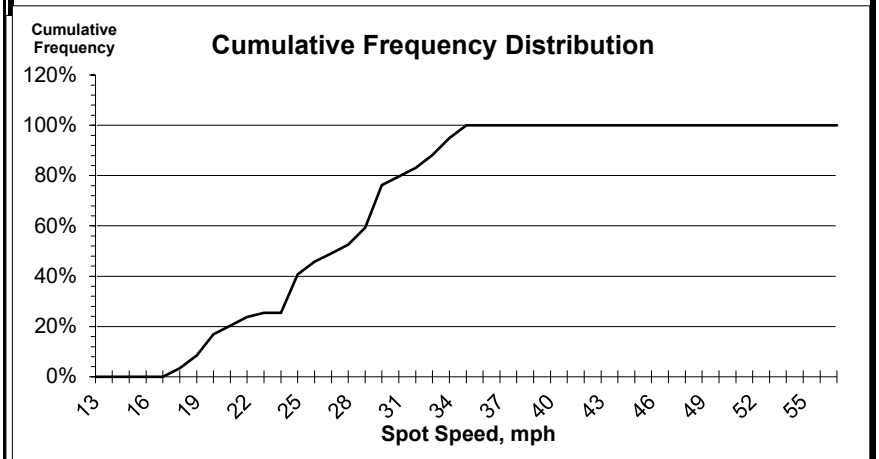
CITY OF MALIBU

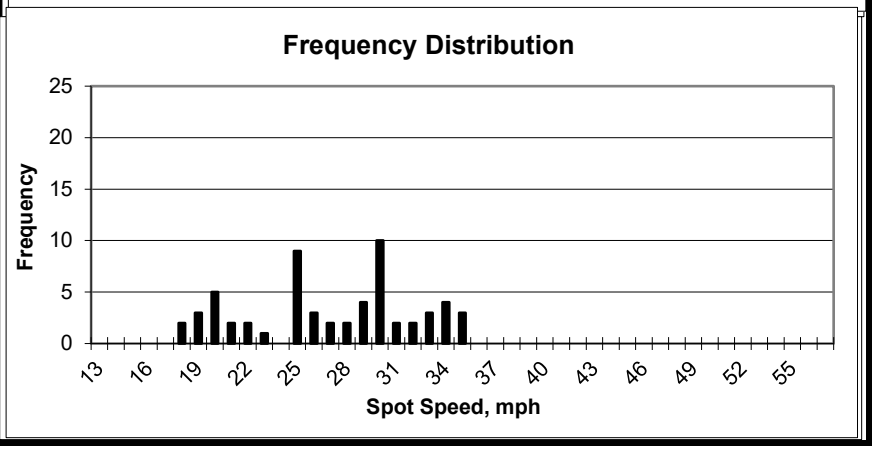
Client: KIMLEY-HORN
Street: Philip Avenue
Spt.Spd. Location: Morning View Drive to Cuthbert Road *Ref. # 38*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	0	0.00%	0.00%
16	0	0.00%	0.00%
17	0	0.00%	0.00%
18	2	3.39%	3.39%
19	3	5.08%	8.47%
20	5	8.47%	16.95%
21	2	3.39%	20.34%
22	2	3.39%	23.73%
23	1	1.69%	25.42%
24	0	0.00%	25.42%
25	9	15.25%	40.68%
26	3	5.08%	45.76%
27	2	3.39%	49.15%
28	2	3.39%	52.54%
29	4	6.78%	59.32%
30	10	16.95%	76.27%
31	2	3.39%	79.66%
32	2	3.39%	83.05%
33	3	5.08%	88.14%
34	4	6.78%	94.92%
35	3	5.08%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	59	100%	

Date:	10/21/2021	**Day:**	Thursday
Weather:	Dry, clear		
Hours:	12:00 P.M.	**To**	2:00 P.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Skip dash 2-way traffic		
Street Width:	24'		
Comm./Resid.:	Residential		
DIRECTION:	Eastbound / Westbound Combined		

DATA ANALYSIS:			
Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	20		
50th Percentile:	28		
85th Percentile:	33		
10 Mile Pace:	25	to	34
% of Samples in 10-Mile Pace:	69.49%		
# in 10 MPH pace:	41		
Comments:			





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

40

STREET	TRANCAS CANYON ROAD	**CERTIFICATION DATE:**	3/16/2022
FROM	North City Limit/Anacapa View Drive	**TO**	Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/29/2021	**Posted Speed Limit**	30
Time of Speed Survey	10:30 AM to 11:45 AM	**Speed Justification**	
50th Percentile Speed (Mean Speed)	20	85th percentile speed	
85th Percentile Speed	25		
10 mph Pace Speed	15-24		
Percentage of Vehicles in Pace	70%	**Recommended Speed Limit**	**25**
Number of Survey Samples	105		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	1
Collision Rate (ACC/MVM)	0.85
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	980	**Date Counted**	11/2/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway; stop-controlled at Principio Dr, Tapia Dr, and Vista Playa Dr		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	Moderate		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	Yes, at east side of segment		
Sidewalks?	At east side of segment		
Driveways?	Multiple, at east side of segment, Trancas Park Driveway		

ROADWAY FACTORS

Length of Segment	5800'
Width	30'
Vertical Curve	Yes; steeper and narrower after Trancas Park
Horizontal Curve	Yes
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; bus stops; Reduced speed curve signs
Lighting	No
Adjacent Land Use	Single family residential; vacant

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22	TE 2531
	Date	**State Registration Number**

CITY OF MALIBU

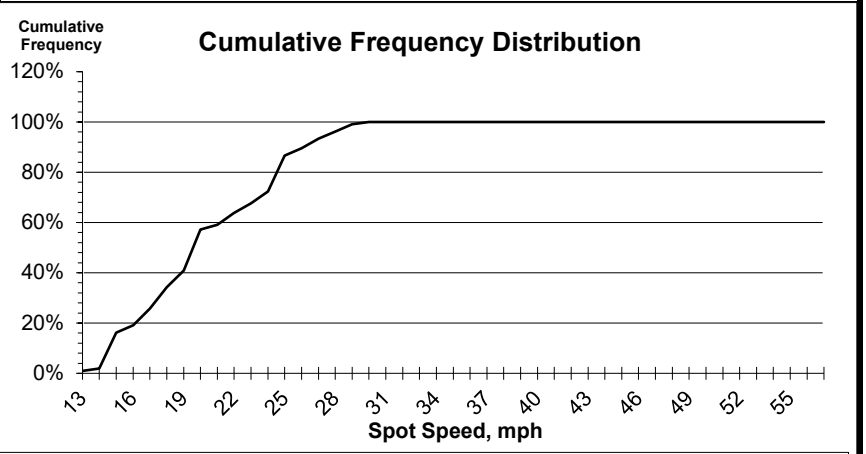
Client: KIMLEY-HORN
Street: Trancas Canyon Road
Spt.Spd. Location: Pacific Coast Highway to North City Limit *Ref. # 40*

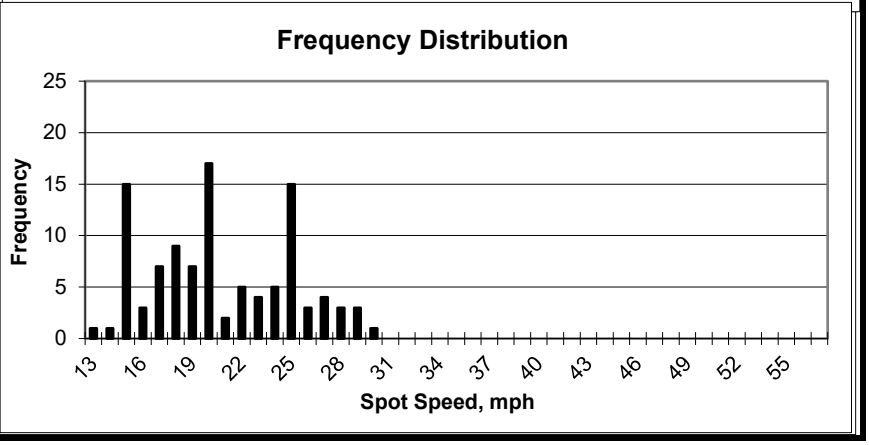
Speed	Frequency	Percent	Cumulative Percent
13	1	0.95%	0.95%
14	1	0.95%	1.90%
15	15	14.29%	16.19%
16	3	2.86%	19.05%
17	7	6.67%	25.71%
18	9	8.57%	34.29%
19	7	6.67%	40.95%
20	17	16.19%	57.14%
21	2	1.90%	59.05%
22	5	4.76%	63.81%
23	4	3.81%	67.62%
24	5	4.76%	72.38%
25	15	14.29%	86.67%
26	3	2.86%	89.52%
27	4	3.81%	93.33%
28	3	2.86%	96.19%
29	3	2.86%	99.05%
30	1	0.95%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	105	100%	

Date:	10/29/2021	**Day:**	Friday
Weather:	Dry, clear		
Hours:	10:30 AM	**To**	11:45 A.M.
Recorder:	NDS		
Posted Speed:	30		
Channelization:	Skip dash 2-way traffic		
Street Width:	30'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	15
50th Percentile:	20
85th Percentile:	25
10 Mile Pace:	15 to 24
% of Samples in 10-Mile Pace:	70.48%
# in 10 MPH pace:	75
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

41

STREET	WESTWARD BEACH ROAD	**CERTIFICATION DATE:**	3/16/2022
FROM	Pacific Coast Highway	**TO**	Birdview Avenue

SPEED FACTORS

Date of Speed Survey	10/21/2021
Time of Speed Survey	1:00 P.M. to 2:30 P.M.
50th Percentile Speed (Mean Speed)	28
85th Percentile Speed	35
10 mph Pace Speed	23-32
Percentage of Vehicles in Pace	52%
Number of Survey Samples	103

Posted Speed Limit 30

Speed Justification

85th percentile speed downgraded due to restricted sight distance from horizontal road curvature, high pedestrian activity, and high collision rate

Recommended Speed Limit **30**

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	4
Collision Rate (ACC/MVM)	3.30
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	2,335	**Date Counted**	10/29/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled		
Crosswalks?	No		
Pedestrian Traffic	High		
Bicycle Traffic	Moderate		
Truck Traffic	None present		
On-Street Parking	Street-adjacent at both sides of segment		
Sidewalks?	No		
Driveways?	Minimal		

ROADWAY FACTORS

Length of Segment	2500'
Width	22'
Vertical Curve	No
Horizontal Curve	Moderate
Visibility	Restricted due to road curvature
Roadway Conditions	Fair; bus stops
Lighting	No
Adjacent Land Use	Beach

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

Client: KIMLEY-HORN
Street: Westward Beach Road
Spt.Spd. Location: Pacific Coast Highway to Birdview Avenue *Ref. # 41*

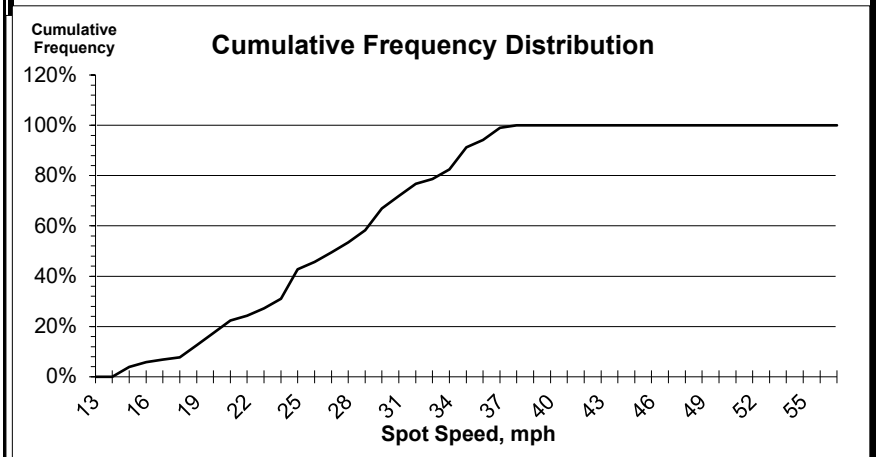
Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14		0.00%	0.00%
15	4	3.88%	3.88%
16	2	1.94%	5.83%
17	1	0.97%	6.80%
18	1	0.97%	7.77%
19	5	4.85%	12.62%
20	5	4.85%	17.48%
21	5	4.85%	22.33%
22	2	1.94%	24.27%
23	3	2.91%	27.18%
24	4	3.88%	31.07%
25	12	11.65%	42.72%
26	3	2.91%	45.63%
27	4	3.88%	49.51%
28	4	3.88%	53.40%
29	5	4.85%	58.25%
30	9	8.74%	66.99%
31	5	4.85%	71.84%
32	5	4.85%	76.70%
33	2	1.94%	78.64%
34	4	3.88%	82.52%
35	9	8.74%	91.26%
36	3	2.91%	94.17%
37	5	4.85%	99.03%
38	1	0.97%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	103	100%	

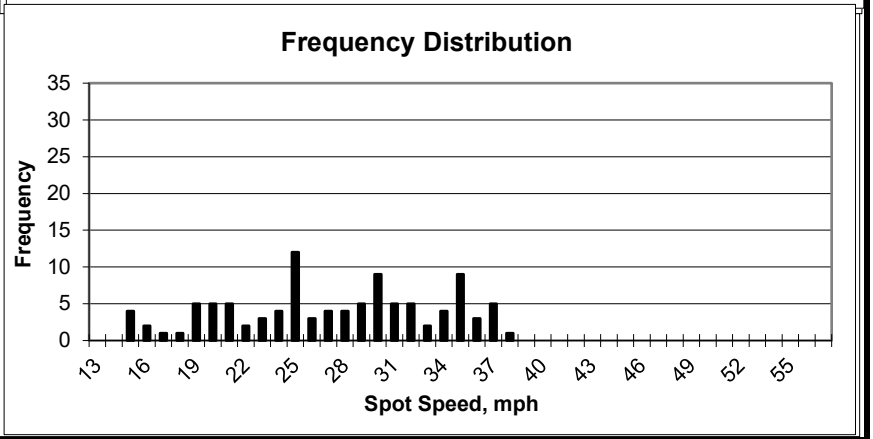
Date:	10/21/2021	**Day:**	Thursday	
Weather:	Dry, clear			
Hours:	1:00 P.M.	**To**	2:30 P.M.	
Recorder:	NDS			
Posted Speed:	30			
Channelization:	Skip dash and solid striping 2-way traffic			
Street Width:	var			
Comm./Resid.:	Beach			
DIRECTION:	Eastbound / Westbound Combined			

DATA ANALYSIS:

Mean Speed:	N/A		
Standard Deviation:	N/A		
Standard error of the mean:	N/A		
15th Percentile:	20		
50th Percentile:	28		
85th Percentile:	35		
10 Mile Pace:	23	to	32
% of Samples in 10-Mile Pace:	52.43%		
# in 10 MPH pace:	54		

Comments:





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

42

STREET PUERCO CANYON ROAD **CERTIFICATION DATE:** 3/16/2022
FROM Pacific Coast Highway **TO** 1000' North of Pacifc Coast Highway

SPEED FACTORS

Date of Speed Survey	10/29/2021	**Posted Speed Limit**	Not posted
Time of Speed Survey	12:00 P.M. to 2:00 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	14	85th percentile speed	
85th Percentile Speed	17		
10 mph Pace Speed	10-19		
Percentage of Vehicles in Pace	98%	**Recommended Speed Limit**	**25**
Number of Survey Samples	59		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	130	**Date Counted**	11/2/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Stop-controlled at Pacific Coast Highway		
Crosswalks?	No		
Pedestrian Traffic	None present		
Bicycle Traffic	None present		
Truck Traffic	None present		
On-Street Parking	On-street parking along certain sections and near end of road for trail		
Sidewalks?	No		
Driveways?	Minimal		

ROADWAY FACTORS

Length of Segment	1000'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restricted due to horizontal road curvature
Roadway Conditions	Fair
Lighting	No
Adjacent Land Use	Single family residential

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

16-Mar-22		TE 2531
Sri Chakravarthy	**Date**	**State Registration Number**

CITY OF MALIBU

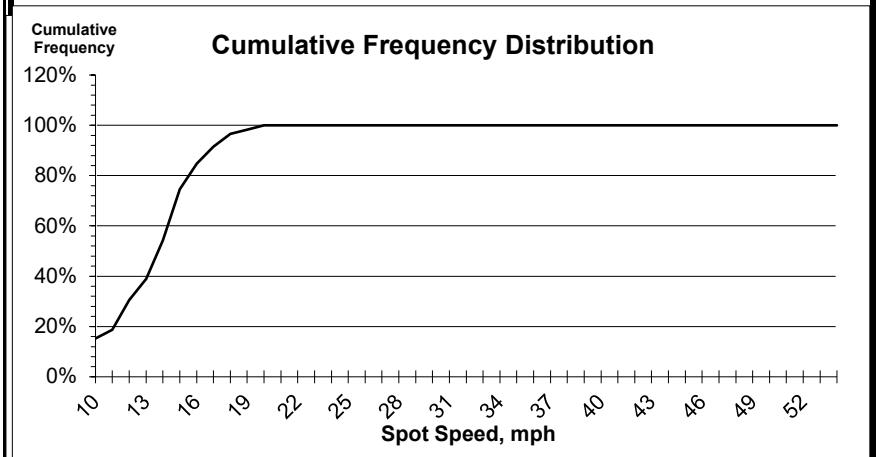
Client: KIMLEY-HORN
Street: Puerco Canyon Road
Spt.Spd. Location: Pacific Coast Highway to 1000' North of Pacific Coast Highway *Ref. # 42*

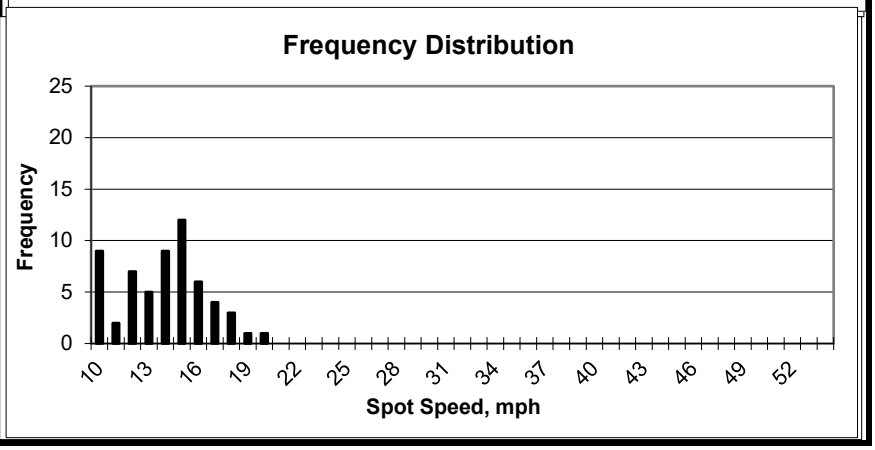
Speed	Frequency	Percent	Cumulative Percent
10	9	15.25%	15.25%
11	2	3.39%	18.64%
12	7	11.86%	30.51%
13	5	8.47%	38.98%
14	9	15.25%	54.24%
15	12	20.34%	74.58%
16	6	10.17%	84.75%
17	4	6.78%	91.53%
18	3	5.08%	96.61%
19	1	1.69%	98.31%
20	1	1.69%	100.00%
21	0	0.00%	100.00%
22	0	0.00%	100.00%
23	0	0.00%	100.00%
24	0	0.00%	100.00%
25	0	0.00%	100.00%
26	0	0.00%	100.00%
27	0	0.00%	100.00%
28	0	0.00%	100.00%
29	0	0.00%	100.00%
30	0	0.00%	100.00%
31	0	0.00%	100.00%
32	0	0.00%	100.00%
33	0	0.00%	100.00%
34	0	0.00%	100.00%
35	0	0.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
Total:	59	100%	

Date:	10/29/2021	**Day:**	Friday
Weather:	Dry, clear		
Hours:	12:00 P.M.	**To**	2:00 P.M.
Recorder:	NDS		
Posted Speed:	N/A		
Channelization:	No striping 2-way traffic		
Street Width:	30'		
Comm./Resid.:	Residential		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:

Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	<10mph
50th Percentile:	14
85th Percentile:	17
10 Mile Pace:	10 to 19
% of Samples in 10-Mile Pace:	98.31%
# in 10 MPH pace:	58
Comments:	





CITY OF MALIBU
ENGINEERING AND TRAFFIC SURVEY

45

STREET RAMBLA PACIFICO **CERTIFICATION DATE:** 3/16/2022
FROM Pacific Coast Highway **TO** 750' North of Pacific Coast Highway

SPEED FACTORS

Date of Speed Survey	10/29/2021	**Posted Speed Limit**	25
Time of Speed Survey	2:15 P.M. to 3:45 P.M.	**Speed Justification**	
50th Percentile Speed (Mean Speed)	23	85th percentile speed downgraded due to restricted sight distance due to horizontal and vertical road curvature	
85th Percentile Speed	28		
10 mph Pace Speed	17-26		
Percentage of Vehicles in Pace	65%	**Recommended Speed Limit**	**25**
Number of Survey Samples	100		

COLLISION HISTORY

Number of Years Studied	3
Total Collisions	0
Collision Rate (ACC/MVM)	0.00
Expected Collisions (ACC/MVM)	1.48

TRAFFIC FACTORS

Average Daily Traffic	462	**Date Counted**	11/2/2021
Number of Lanes	One lane in each direction		
Type of Traffic Control	Signalized at Pacific Coast Highway		
Crosswalks?	At Pacific Coast Highway		
Pedestrian Traffic	Yes		
Bicycle Traffic	None Present		
Truck Traffic	No		
On-Street Parking	Yes		
Sidewalks?	No		
Driveways?	Yes		

ROADWAY FACTORS

Length of Segment	750'
Width	Var
Vertical Curve	Yes
Horizontal Curve	Yes
Visibility	Restriction due to vertical and horizontal road curvature.
Roadway Conditions	Narrow Road
Lighting	No
Adjacent Land Use	Commercial

Field Study By KHA **Checked By** KHA

CERTIFICATION: I Sri Chakravarthy do hereby certify that this Engineering and Traffic Survey within the within the City of Malibu was performed under my supervision and is accurate and complete. I certify that City staff is experienced in performing surveys of this type. I am duly registered in the State of California as a Professional Engineer (Traffic).

Sri Chakravarthy	16-Mar-22 **Date**	TE 2531 **State Registration Number**

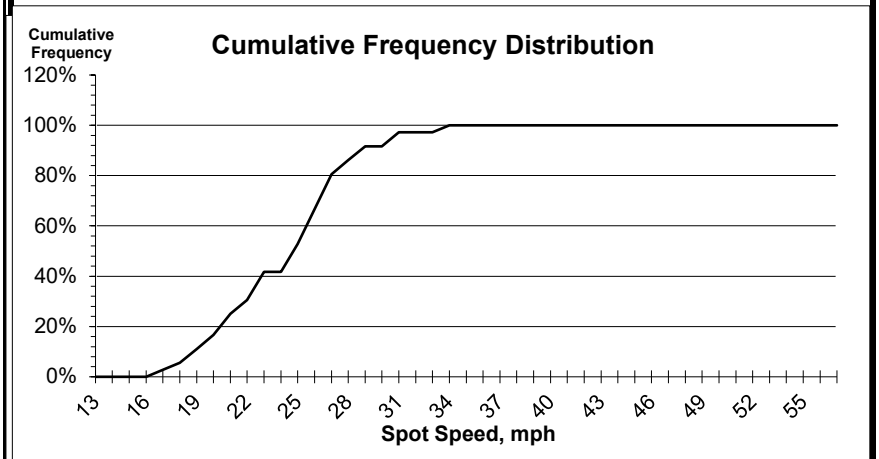
CITY OF MALIBU

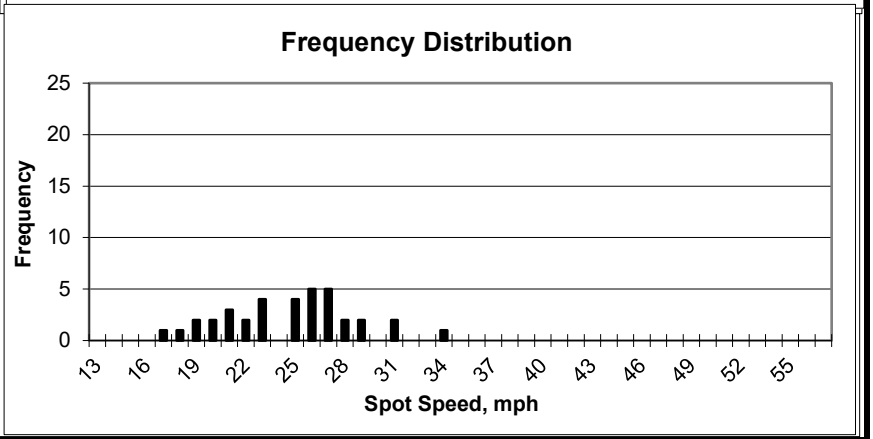
Client: KIMLEY-HORN
Street: Rambla Pacifico
Spt.Spd. Location: Pacific Coast Highway to 750' North of PCH *Ref. # 45*

Speed	Frequency	Percent	Cumulative Percent
13	0	0.00%	0.00%
14	0	0.00%	0.00%
15	9	9.00%	9.00%
16	3	3.00%	12.00%
17	5	5.00%	17.00%
18	5	5.00%	22.00%
19	6	6.00%	28.00%
20	11	11.00%	39.00%
21	3	3.00%	42.00%
22	3	3.00%	45.00%
23	5	5.00%	50.00%
24	4	4.00%	54.00%
25	19	19.00%	73.00%
26	4	4.00%	77.00%
27	4	4.00%	81.00%
28	5	5.00%	86.00%
29	3	3.00%	89.00%
30	7	7.00%	96.00%
31	2	2.00%	98.00%
32	1	1.00%	99.00%
33	0	0.00%	99.00%
34	0	0.00%	99.00%
35	1	1.00%	100.00%
36	0	0.00%	100.00%
37	0	0.00%	100.00%
38	0	0.00%	100.00%
39	0	0.00%	100.00%
40	0	0.00%	100.00%
41	0	0.00%	100.00%
42	0	0.00%	100.00%
43	0	0.00%	100.00%
44	0	0.00%	100.00%
45	0	0.00%	100.00%
46	0	0.00%	100.00%
47	0	0.00%	100.00%
48	0	0.00%	100.00%
49	0	0.00%	100.00%
50	0	0.00%	100.00%
51	0	0.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
Total:	100	100%	

Date:	10/29/2021	**Day:**	Friday
Weather:	Dry, clear		
Hours:	2:15 P.M.	**To**	3:45 P.M.
Recorder:	NDS		
Posted Speed:	25 Pacific Coast Highway		
Channelization:	Skip dash 2-way traffic		
Street Width:	Var		
Comm./Resid.:	Commercial		
DIRECTION:	Northbound / Southbound Combined		

DATA ANALYSIS:	
Mean Speed:	N/A
Standard Deviation:	N/A
Standard error of the mean:	N/A
15th Percentile:	17
50th Percentile:	23
85th Percentile:	28
10 Mile Pace:	17 to 26
% of Samples in 10-Mile Pace:	65.00%
# in 10 MPH pace:	65
Comments:	





APPENDIX “D”

ADT COUNTS

Prepared by NDS/ATD

VOLUME

Big Rock Dr Bet. Cool Oak Way & Pacific Coast Hwy

Day: Tuesday
Date: 10/26/2021

City: Malibu
Project #: CA21_020306_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	732	748	1,480

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
0:00			1	0	1	12:00			18	15	33
0:15			1	1	2	12:15			19	19	38
0:30			0	0	0	12:30			10	13	23
0:45			0	2	2	3	2	5	12:45				9	56	12	59	21	115
1:00			1	2	3	13:00			8	15	23
1:15			1	1	2	13:15			16	11	27
1:30			0	0	0	13:30			15	17	32
1:45			0	2	0	3	0	5	13:45				13	52	16	59	29	111
2:00			2	0	2	14:00			16	6	22
2:15			0	0	0	14:15			15	14	29
2:30			1	1	2	14:30			14	13	27
2:45			0	3	0	1	0	4	14:45				16	61	7	40	23	101
3:00			0	0	0	15:00			16	18	34
3:15			0	0	0	15:15			15	9	24
3:30			0	1	1	15:30			28	11	39
3:45			0	0	1	0	1	15:45				10	69	16	54	26	123
4:00			1	0	1	16:00			12	15	27
4:15			3	2	5	16:15			10	7	17
4:30			1	2	3	16:30			12	12	24
4:45			2	7	1	5	3	12	16:45				15	49	14	48	29	97
5:00			0	1	1	17:00			7	8	15
5:15			0	3	3	17:15			9	10	19
5:30			2	1	3	17:30			11	9	20
5:45			1	3	5	10	6	13	17:45				12	39	12	39	24	78
6:00			4	8	12	18:00			11	15	26
6:15			3	5	8	18:15			9	8	17
6:30			5	5	10	18:30			9	14	23
6:45			4	16	10	28	14	44	18:45				5	34	16	53	21	87
7:00			7	6	13	19:00			16	8	24
7:15			13	5	18	19:15			4	8	12
7:30			23	8	31	19:30			4	7	11
7:45			12	55	13	32	25	87	19:45				6	30	8	31	14	61
8:00			11	14	25	20:00			2	7	9
8:15			16	16	32	20:15			3	10	13
8:30			8	15	23	20:30			7	4	11
8:45			13	48	28	73	41	121	20:45				7	19	5	26	12	45
9:00			12	11	23	21:00			3	5	8
9:15			13	4	17	21:15			4	4	8
9:30			8	11	19	21:30			2	1	3
9:45			10	43	19	45	29	88	21:45				2	11	2	12	4	23
10:00			21	16	37	22:00			2	4	6
10:15			15	10	25	22:15			3	6	9
10:30			16	16	32	22:30			4	0	4
10:45			10	62	14	56	24	118	22:45				1	10	2	12	3	22
11:00			7	11	18	23:00			0	0	0
11:15			15	13	28	23:15			0	4	4
11:30			18	21	39	23:30			1	2	3
11:45			17	57	7	52	24	109	23:45				3	4	0	6	3	10
TOTALS				298	309	**607**	**TOTALS**				434	439	**873**
SPLIT %				49.1%	50.9%	**41.0%**	**SPLIT %**				49.7%	50.3%	**59.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	732	748	1,480

AM Peak Hour			11:30	8:00	**11:30**	**PM Peak Hour**			14:45	12:00	**15:00**
AM Pk Volume			72	73	**134**	**PM Pk Volume**			75	59	**123**
Pk Hr Factor			0.947	0.652	**0.859**	**Pk Hr Factor**			0.670	0.776	**0.788**
7 - 9 Volume	0	0	103	105	**208**	**4 - 6 Volume**	0	0	88	87	**175**
7 - 9 Peak Hour			7:30	8:00	**8:00**	**4 - 6 Peak Hour**			16:00	16:00	**16:00**
7 - 9 Pk Volume	0	0	62	73	**121**	**4 - 6 Pk Volume**	0	0	49	48	**97**
Pk Hr Factor	0.000	0.000	0.674	0.652	**0.738**	**Pk Hr Factor**	0.000	0.000	0.817	0.800	**0.836**

Prepared by NDS/ATD

VOLUME

Busch Dr Bet. Calpine Dr & Merritt Dr

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_002

DAILY TOTALS	NB	SB	EB	WB	Total
	1,041	1,068	0	0	2,109

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	0		0				0		12:00	28		22				50	
0:15	0		0				0		12:15	19		16				35	
0:30	0		0				0		12:30	19		19				38	
0:45	1	1	0				1	1	12:45	21	87	15	72			36	159
1:00	0		0				0		13:00	11		32				43	
1:15	0		0				0		13:15	15		26				41	
1:30	0		0				0		13:30	21		18				39	
1:45	0		0				0		13:45	17	64	27	103			44	167
2:00	0		0				0		14:00	26		27				53	
2:15	0		0				0		14:15	16		29				45	
2:30	0		0				0		14:30	14		24				38	
2:45	0		0				0		14:45	16	72	31	111			47	183
3:00	0		0				0		15:00	16		27				43	
3:15	0		0				0		15:15	13		45				58	
3:30	1		1				2		15:30	13		53				66	
3:45	0	1	1	2			1	3	15:45	14	56	29	154			43	210
4:00	0		1				1		16:00	16		28				44	
4:15	1		0				1		16:15	6		26				32	
4:30	0		0				0		16:30	11		14				25	
4:45	1	2	0	1			1	3	16:45	17	50	20	88			37	138
5:00	0		0				0		17:00	12		14				26	
5:15	0		1				1		17:15	11		14				25	
5:30	2		1				3		17:30	9		18				27	
5:45	3	5	1	3			4	8	17:45	10	42	11	57			21	99
6:00	9		1				10		18:00	8		12				20	
6:15	18		1				19		18:15	9		8				17	
6:30	27		7				34		18:30	7		6				13	
6:45	40	94	16	25			56	119	18:45	3	27	7	33			10	60
7:00	38		11				49		19:00	6		6				12	
7:15	29		10				39		19:15	6		4				10	
7:30	26		2				28		19:30	5		9				14	
7:45	33	126	6	29			39	155	19:45	4	21	6	25			10	46
8:00	22		14				36		20:00	4		4				8	
8:15	23		19				42		20:15	12		8				20	
8:30	31		18				49		20:30	4		6				10	
8:45	18	94	19	70			37	164	20:45	5	25	10	28			15	53
9:00	22		19				41		21:00	4		6				10	
9:15	20		20				40		21:15	4		6				10	
9:30	26		15				41		21:30	2		7				9	
9:45	17	85	12	66			29	151	21:45	2	12	1	20			3	32
10:00	19		25				44		22:00	4		1				5	
10:15	15		14				29		22:15	3		0				3	
10:30	14		16				30		22:30	4		1				5	
10:45	31	79	24	79			55	158	22:45	4	15	1	3			5	18
11:00	14		29				43		23:00	2		3				5	
11:15	19		29				48		23:15	0		0				0	
11:30	20		20				40		23:30	0		1				1	
11:45	28	81	17	95			45	176	23:45	0	2	0	4			0	6
TOTALS		568		370				938	TOTALS		473		698				1171
SPLIT %		60.6%		39.4%				44.5%	SPLIT %		40.4%		59.6%				55.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,041	1,068	0	0	2,109

AM Peak Hour	6:30	10:45				10:45	PM Peak Hour	12:00	14:45				14:45
AM Pk Volume	134	102				186	PM Pk Volume	87	156				214
Pk Hr Factor	0.838	0.879				0.845	Pk Hr Factor	0.777	0.736				0.811
7 - 9 Volume	220	99	0	0		319	4 - 6 Volume	92	145	0	0		237
7 - 9 Peak Hour	7:00	8:00				7:45	4 - 6 Peak Hour	16:30	16:00				16:00
7 - 9 Pk Volume	126	70	0	0		166	4 - 6 Pk Volume	51	88	0	0		138
Pk Hr Factor	0.829	0.921	0.000	0.000		0.847	Pk Hr Factor	0.750	0.786	0.000	0.000		0.784

Prepared by NDS/ATD

VOLUME

Civic Center Way Bet. Malibu Canyon Rd & Webb Way

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,874	4,380	7,254

AM Period	NB		SB		EB		WB		TOTAL	
0:00					1		6		7	
0:15					1		8		9	
0:30					4		8		12	
0:45					2	8	4	26	6	34
1:00					2		2		4	
1:15					2		2		4	
1:30					0		1		1	
1:45					0	4	0	5	0	9
2:00					2		1		3	
2:15					2		1		3	
2:30					0		0		0	
2:45					1	5	0	2	1	7
3:00					1		0		1	
3:15					1		2		3	
3:30					1		2		3	
3:45					0	3	2	6	2	9
4:00					0		2		2	
4:15					3		1		4	
4:30					4		3		7	
4:45					7	14	2	8	9	22
5:00					3		2		5	
5:15					24		3		27	
5:30					17		5		22	
5:45					25	69	14	24	39	93
6:00					14		13		27	
6:15					14		9		23	
6:30					11		16		27	
6:45					14	53	27	65	41	118
7:00					12		22		34	
7:15					9		22		31	
7:30					11		38		49	
7:45					15	47	41	123	56	170
8:00					50		87		137	
8:15					56		63		119	
8:30					33		60		93	
8:45					31	170	43	253	74	423
9:00					58		57		115	
9:15					58		52		110	
9:30					57		51		108	
9:45					59	232	49	209	108	441
10:00					49		49		98	
10:15					61		52		113	
10:30					58		64		122	
10:45					60	228	60	225	120	453
11:00					37		46		83	
11:15					36		63		99	
11:30					73		63		136	
11:45					51	197	64	236	115	433
TOTALS						1030		1182		2212
SPLIT %						46.6%		53.4%		30.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					51		55		106	
12:15					57		60		117	
12:30					63		58		121	
12:45					35	206	77	250	112	456
13:00					50		92		142	
13:15					34		78		112	
13:30					43		71		114	
13:45					49	176	70	311	119	487
14:00					44		76		120	
14:15					41		89		130	
14:30					49		104		153	
14:45					54	188	121	390	175	578
15:00					101		107		208	
15:15					66		128		194	
15:30					92		119		211	
15:45					73	332	110	464	183	796
16:00					45		130		175	
16:15					63		107		170	
16:30					68		99		167	
16:45					60	236	107	443	167	679
17:00					68		121		189	
17:15					70		104		174	
17:30					52		127		179	
17:45					73	263	91	443	164	706
18:00					47		117		164	
18:15					46		100		146	
18:30					30		70		100	
18:45					27	150	72	359	99	509
19:00					23		72		95	
19:15					34		77		111	
19:30					21		59		80	
19:45					21	99	41	249	62	348
20:00					22		32		54	
20:15					19		30		49	
20:30					21		36		57	
20:45					17	79	26	124	43	203
21:00					23		30		53	
21:15					8		27		35	
21:30					8		17		25	
21:45					11	50	13	87	24	137
22:00					14		16		30	
22:15					6		8		14	
22:30					11		9		20	
22:45					5	36	13	46	18	82
23:00					10		6		16	
23:15					10		13		23	
23:30					3		6		9	
23:45					6	29	7	32	13	61
TOTALS						1844		3198		5042
SPLIT %						36.6%		63.4%		69.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,874	4,380	7,254

AM Peak Hour			9:00	8:00	11:30
AM Pk Volume			232	253	474
Pk Hr Factor			0.983	0.727	0.871
7 - 9 Volume	0	0	217	376	593
7 - 9 Peak Hour			8:00	8:00	8:00
7 - 9 Pk Volume	0	0	170	253	423
Pk Hr Factor	0.000	0.000	0.759	0.727	0.772

PM Peak Hour			15:00	15:15	15:00
PM Pk Volume			332	487	796
Pk Hr Factor			0.822	0.937	0.943
4 - 6 Volume	0	0	499	886	1385
4 - 6 Peak Hour			16:30	16:45	16:45
4 - 6 Pk Volume	0	0	266	459	709
Pk Hr Factor	0.000	0.000	0.950	0.904	0.938

Prepared by NDS/ATD

VOLUME

Civic Center Way Bet. Webb Way & Cross Creek Rd

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,121	2,101	4,222

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			0		4		4		12:00			45		37		82	
0:15			1		3		4		12:15			44		43		87	
0:30			1		2		3		12:30			50		31		81	
0:45			1	3	1	10	2	13	12:45			31	170	35	146	66	316
1:00			2		1		3		13:00			52		54		106	
1:15			0		1		1		13:15			40		50		90	
1:30			1		0		1		13:30			55		52		107	
1:45			0	3	2	4	2	7	13:45			53	200	46	202	99	402
2:00			0		1		1		14:00			53		39		92	
2:15			1		1		2		14:15			56		69		125	
2:30			0		0		0		14:30			48		48		96	
2:45			1	2	0	2	1	4	14:45			14	171	18	174	32	345
3:00			1		1		2		15:00			64		52		116	
3:15			0		4		4		15:15			58		40		98	
3:30			1		0		1		15:30			44		47		91	
3:45			0	2	1	6	1	8	15:45			49	215	64	203	113	418
4:00			0		0		0		16:00			44		51		95	
4:15			1		1		2		16:15			54		40		94	
4:30			1		3		4		16:30			36		43		79	
4:45			1	3	5	9	6	12	16:45			45	179	44	178	89	357
5:00			0		10		10		17:00			40		32		72	
5:15			6		12		18		17:15			48		48		96	
5:30			6		15		21		17:30			31		26		57	
5:45			10	22	21	58	31	80	17:45			35	154	31	137	66	291
6:00			10		26		36		18:00			35		42		77	
6:15			10		24		34		18:15			41		28		69	
6:30			19		19		38		18:30			21		29		50	
6:45			18	57	20	89	38	146	18:45			22	119	23	122	45	241
7:00			7		9		16		19:00			21		25		46	
7:15			17		9		26		19:15			29		41		70	
7:30			21		10		31		19:30			15		30		45	
7:45			13	58	16	44	29	102	19:45			12	77	17	113	29	190
8:00			25		19		44		20:00			15		20		35	
8:15			29		23		52		20:15			24		15		39	
8:30			25		25		50		20:30			13		13		26	
8:45			28	107	25	92	53	199	20:45			12	64	9	57	21	121
9:00			37		23		60		21:00			2		13		15	
9:15			27		16		43		21:15			7		7		14	
9:30			36		20		56		21:30			6		9		15	
9:45			44	144	36	95	80	239	21:45			9	24	3	32	12	56
10:00			30		30		60		22:00			3		3		6	
10:15			26		29		55		22:15			6		1		7	
10:30			37		37		74		22:30			3		5		8	
10:45			45	138	38	134	83	272	22:45			1	13	3	12	4	25
11:00			40		31		71		23:00			1		4		5	
11:15			34		50		84		23:15			2		6		8	
11:30			58		42		100		23:30			1		1		2	
11:45			59	191	46	169	105	360	23:45			1	5	2	13	3	18
TOTALS				730		712		**1442**	**TOTALS**				1391		1389		**2780**
SPLIT %				50.6%		49.4%		**34.2%**	**SPLIT %**				50.0%		50.0%		**65.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,121	2,101	4,222

AM Peak Hour				11:30		11:15		**11:30**	**PM Peak Hour**				13:30		13:30		**13:30**
AM Pk Volume				206		175		**374**	**PM Pk Volume**				217		206		**423**
Pk Hr Factor				0.873		0.875		**0.890**	**Pk Hr Factor**				0.969		0.746		**0.846**
7 - 9 Volume	0	0		165		136		**301**	**4 - 6 Volume**	0	0		333		315		**648**
7 - 9 Peak Hour				8:00		8:00		**8:00**	**4 - 6 Peak Hour**				16:00		16:00		**16:00**
7 - 9 Pk Volume	0	0		107		92		**199**	**4 - 6 Pk Volume**	0	0		179		178		**357**
Pk Hr Factor	0.000	0.000		0.922		0.920		**0.939**	**Pk Hr Factor**	0.000	0.000		0.829		0.873		**0.939**

Prepared by NDS/ATD

VOLUME

Corral Canyon Rd Bet. North City Limit & Pacific Coast Hwy

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	689	714	1,403

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
0:00			1	1	2	12:00			12	15	27
0:15			1	2	3	12:15			16	20	36
0:30			3	0	3	12:30			12	15	27
0:45			0	0	0	12:45			13	17	30
			5	3	8				53	67	120
1:00			1	0	1	13:00			13	13	26
1:15			2	0	2	13:15			9	18	27
1:30			0	1	1	13:30			10	9	19
1:45			1	0	1	13:45			11	11	22
			4	1	5				43	51	94
2:00			0	0	0	14:00			12	16	28
2:15			1	1	2	14:15			13	14	27
2:30			0	0	0	14:30			13	12	25
2:45			0	0	0	14:45			13	17	30
			1	1	2				51	59	110
3:00			0	0	0	15:00			13	12	25
3:15			0	1	1	15:15			12	17	29
3:30			0	0	0	15:30			12	11	23
3:45			0	0	0	15:45			17	11	28
			0	1	1				54	51	105
4:00			0	0	0	16:00			12	10	22
4:15			0	0	0	16:15			14	20	34
4:30			1	1	2	16:30			17	11	28
4:45			0	0	0	16:45			10	11	21
			1	1	2				53	52	105
5:00			0	2	2	17:00			7	15	22
5:15			0	1	1	17:15			16	12	28
5:30			0	0	0	17:30			16	8	24
5:45			1	2	3	17:45			16	16	32
			1	5	6				55	51	106
6:00			2	3	5	18:00			12	15	27
6:15			1	4	5	18:15			15	17	32
6:30			4	7	11	18:30			13	7	20
6:45			6	4	10	18:45			4	2	6
			13	18	31				44	41	85
7:00			10	4	14	19:00			11	7	18
7:15			2	14	16	19:15			6	4	10
7:30			8	9	17	19:30			9	3	12
7:45			10	17	27	19:45			6	3	9
			30	44	74				32	17	49
8:00			7	19	26	20:00			10	2	12
8:15			11	21	32	20:15			15	4	19
8:30			15	9	24	20:30			6	5	11
8:45			17	10	27	20:45			5	1	6
			50	59	109				36	12	48
9:00			13	7	20	21:00			6	2	8
9:15			7	17	24	21:15			4	0	4
9:30			9	10	19	21:30			0	2	2
9:45			13	15	28	21:45			5	3	8
			42	49	91				15	7	22
10:00			12	10	22	22:00			1	7	8
10:15			10	13	23	22:15			3	0	3
10:30			7	11	18	22:30			0	3	3
10:45			9	16	25	22:45			1	2	3
			38	50	88				5	12	17
11:00			14	14	28	23:00			1	0	1
11:15			15	13	28	23:15			1	0	1
11:30			14	15	29	23:30			1	0	1
11:45			15	20	35	23:45			2	0	2
			58	62	120				5		5
TOTALS			243	294	**537**	**TOTALS**			446	420	**866**
SPLIT %			45.3%	54.7%	**38.3%**	**SPLIT %**			51.5%	48.5%	**61.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	689	714	1,403

AM Peak Hour			11:00	11:30	**11:30**	**PM Peak Hour**			15:45	12:00	**12:00**
AM Pk Volume			58	70	**127**	**PM Pk Volume**			60	67	**120**
Pk Hr Factor			0.967	0.875	**0.882**	**Pk Hr Factor**			0.882	0.838	**0.833**
7 - 9 Volume	0	0	80	103	**183**	**4 - 6 Volume**	0	0	108	103	**211**
7 - 9 Peak Hour			8:00	7:30	**7:45**	**4 - 6 Peak Hour**			17:00	16:15	**17:00**
7 - 9 Pk Volume	0	0	50	66	**109**	**4 - 6 Pk Volume**	0	0	55	57	**106**
Pk Hr Factor	0.000	0.000	0.735	0.786	**0.852**	**Pk Hr Factor**	0.000	0.000	0.859	0.713	**0.828**

Prepared by NDS/ATD

VOLUME

Cross Creek Rd Bet. Civic Center Way & Pacific Coast Hwy

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_006

DAILY TOTALS	NB	SB	EB	WB	Total
	2,395	2,282	0	0	4,677

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	4		0				4		12:00	46		50				96	
0:15	3		3				6		12:15	48		51				99	
0:30	2		2				4		12:30	46		49				95	
0:45	2	11	1	6			3	17	12:45	43	183	40	190			83	373
1:00	0		2				2		13:00	59		60				119	
1:15	1		0				1		13:15	52		44				96	
1:30	0		1				1		13:30	57		63				120	
1:45	2	3	0	3			2	6	13:45	51	219	53	220			104	439
2:00	1		0				1		14:00	44		49				93	
2:15	0		1				1		14:15	61		61				122	
2:30	0		0				0		14:30	51		55				106	
2:45	0	1	1	2			1	3	14:45	18	174	13	178			31	352
3:00	1		1				2		15:00	56		65				121	
3:15	3		0				3		15:15	43		66				109	
3:30	0		1				1		15:30	53		43				96	
3:45	1	5	0	2			1	7	15:45	60	212	58	232			118	444
4:00	0		0				0		16:00	48		57				105	
4:15	1		2				3		16:15	42		59				101	
4:30	5		1				6		16:30	37		38				75	
4:45	9	15	1	4			10	19	16:45	45	172	54	208			99	380
5:00	11		3				14		17:00	36		41				77	
5:15	16		4				20		17:15	51		57				108	
5:30	18		5				23		17:30	31		33				64	
5:45	28	73	7	19			35	92	17:45	32	150	41	172			73	322
6:00	34		6				40		18:00	42		45				87	
6:15	32		8				40		18:15	32		40				72	
6:30	24		12				36		18:30	25		30				55	
6:45	38	128	14	40			52	168	18:45	30	129	27	142			57	271
7:00	14		6				20		19:00	31		29				60	
7:15	12		17				29		19:15	39		28				67	
7:30	20		18				38		19:30	29		19				48	
7:45	22	68	14	55			36	123	19:45	18	117	13	89			31	206
8:00	26		20				46		20:00	23		19				42	
8:15	27		26				53		20:15	19		30				49	
8:30	34		21				55		20:30	15		12				27	
8:45	38	125	21	88			59	213	20:45	11	68	18	79			29	147
9:00	27		37				64		21:00	13		3				16	
9:15	24		29				53		21:15	6		14				20	
9:30	32		33				65		21:30	9		10				19	
9:45	41	124	47	146			88	270	21:45	4	32	12	39			16	71
10:00	44		30				74		22:00	4		7				11	
10:15	42		27				69		22:15	2		7				9	
10:30	35		38				73		22:30	4		3				7	
10:45	46	167	44	139			90	306	22:45	4	14	4	21			8	35
11:00	36		53				89		23:00	4		1				5	
11:15	56		34				90		23:15	7		4				11	
11:30	49		53				102		23:30	3		3				6	
11:45	48	189	58	198			106	387	23:45	2	16	2	10			4	26
TOTALS		909		702				**1611**	**TOTALS**		1486		1580				**3066**
SPLIT %		56.4%		43.6%				**34.4%**	**SPLIT %**		48.5%		51.5%				**65.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	2,395	2,282	0	0	4,677

AM Peak Hour	11:15	11:30				**11:30**	**PM Peak Hour**	13:00	15:00				**15:00**
AM Pk Volume	199	212				**403**	**PM Pk Volume**	219	232				**444**
Pk Hr Factor	0.888	0.914				**0.950**	**Pk Hr Factor**	0.928	0.879				**0.917**
7 - 9 Volume	193	143	0	0		**336**	**4 - 6 Volume**	322	380	0	0		**702**
7 - 9 Peak Hour	8:00	8:00				**8:00**	**4 - 6 Peak Hour**	16:00	16:00				**16:00**
7 - 9 Pk Volume	125	88	0	0		**213**	**4 - 6 Pk Volume**	172	208	0	0		**380**
Pk Hr Factor	0.822	0.846	0.000	0.000		**0.903**	**Pk Hr Factor**	0.896	0.881	0.000	0.000		**0.905**

Prepared by NDS/ATD

VOLUME

Dume Dr Bet. Heathercliff Rd & Cliffside Dr

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_007

DAILY TOTALS	NB	SB	EB	WB	Total
	543	630	0	0	1,173

AM Period	NB		SB		EB		WB		TOTAL	
0:00	0		1						1	
0:15	1		0						1	
0:30	0		0						0	
0:45	0	1	2	3					2	4
1:00	0		0						0	
1:15	0		0						0	
1:30	1		1						2	
1:45	0	1	2	3					2	4
2:00	0		1						1	
2:15	0		0						0	
2:30	0		0						0	
2:45	0		0	1					0	1
3:00	1		0						1	
3:15	0		0						0	
3:30	0		1						1	
3:45	0	1	0	1					0	2
4:00	1		0						1	
4:15	0		0						0	
4:30	0		0						0	
4:45	0	1	0						0	1
5:00	0		1						1	
5:15	0		1						1	
5:30	1		0						1	
5:45	2	3	1	3					3	6
6:00	3		3						6	
6:15	2		2						4	
6:30	5		6						11	
6:45	4	14	10	21					14	35
7:00	8		11						19	
7:15	8		7						15	
7:30	14		8						22	
7:45	4	34	11	37					15	71
8:00	15		17						32	
8:15	15		11						26	
8:30	12		16						28	
8:45	10	52	9	53					19	105
9:00	12		13						25	
9:15	10		9						19	
9:30	6		13						19	
9:45	11	39	9	44					20	83
10:00	11		10						21	
10:15	9		14						23	
10:30	9		6						15	
10:45	14	43	15	45					29	88
11:00	10		17						27	
11:15	19		10						29	
11:30	10		14						24	
11:45	12	51	12	53					24	104
TOTALS		240		264						**504**
SPLIT %		47.6%		52.4%						**43.0%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	13		17						30	
12:15	12		10						22	
12:30	12		17						29	
12:45	7	44	8	52					15	96
13:00	7		11						18	
13:15	4		6						10	
13:30	16		14						30	
13:45	11	38	16	47					27	85
14:00	16		9						25	
14:15	20		10						30	
14:30	15		14						29	
14:45	10	61	17	50					27	111
15:00	22		11						33	
15:15	19		12						31	
15:30	15		13						28	
15:45	13	69	16	52					29	121
16:00	5		12						17	
16:15	1		6						7	
16:30	0		1						1	
16:45	1	7	3	22					4	29
17:00	1		7						8	
17:15	2		14						16	
17:30	2		9						11	
17:45	4	9	11	41					15	50
18:00	5		17						22	
18:15	6		4						10	
18:30	1		3						4	
18:45	0	12	0	24					0	36
19:00	8		12						20	
19:15	6		5						11	
19:30	6		2						8	
19:45	2	22	6	25					8	47
20:00	3		4						7	
20:15	3		5						8	
20:30	4		4						8	
20:45	6	16	6	19					12	35
21:00	7		2						9	
21:15	3		6						9	
21:30	5		3						8	
21:45	3	18	6	17					9	35
22:00	1		1						2	
22:15	0		3						3	
22:30	0		6						6	
22:45	0	1	3	13					3	14
23:00	1		0						1	
23:15	1		3						4	
23:30	2		0						2	
23:45	2	6	1	4					3	10
TOTALS		303		366						**669**
SPLIT %		45.3%		54.7%						**57.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	543	630	0	0	1,173

AM Peak Hour	11:15	10:45			**10:45**
AM Pk Volume	54	56			**109**
Pk Hr Factor	0.711	0.824			**0.940**
7 - 9 Volume	86	90	0	0	**176**
7 - 9 Peak Hour	8:00	7:45			**8:00**
7 - 9 Pk Volume	52	55	0	0	**105**
Pk Hr Factor	0.867	0.809	0.000	0.000	**0.820**

PM Peak Hour	15:00	14:30			**15:00**
PM Pk Volume	69	54			**121**
Pk Hr Factor	0.784	0.794			**0.917**
4 - 6 Volume	16	63	0	0	**79**
4 - 6 Peak Hour	17:00	17:00			**17:00**
4 - 6 Pk Volume	9	41	0	0	**50**
Pk Hr Factor	0.563	0.732	0.000	0.000	**0.781**

Prepared by NDS/ATD

VOLUME

Encinal Canyon Rd Bet. North City Limit & Pacific Coast Hwy

Day: Tuesday
Date: 10/26/2021

City: Malibu
Project #: CA21_020306_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	793	739	1,532

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00			0		1		1		12:00			13		10		23	
0:15			1		0		1		12:15			11		16		27	
0:30			1		1		2		12:30			18		16		34	
0:45			0	2	0	2	0	4	12:45			7	49	10	52	17	101
1:00			2		2		4		13:00			17		16		33	
1:15			2		1		3		13:15			13		14		27	
1:30			0		1		1		13:30			17		12		29	
1:45			0	4	0	4	0	8	13:45			11	58	14	56	25	114
2:00			0		1		1		14:00			12		17		29	
2:15			0		0		0		14:15			16		7		23	
2:30			0		0		0		14:30			4		13		17	
2:45			0		0	1	0	1	14:45			13	45	14	51	27	96
3:00			0		0		0		15:00			10		23		33	
3:15			2		0		2		15:15			16		17		33	
3:30			0		0		0		15:30			21		16		37	
3:45			0	2	0		0	2	15:45			14	61	18	74	32	135
4:00			0		1		1		16:00			20		16		36	
4:15			0		0		0		16:15			12		17		29	
4:30			0		1		1		16:30			15		14		29	
4:45			1	1	0	2	1	3	16:45			19	66	18	65	37	131
5:00			4		0		4		17:00			19		12		31	
5:15			0		0		0		17:15			13		19		32	
5:30			5		0		5		17:30			6		22		28	
5:45			10	19	1	1	11	20	17:45			11	49	19	72	30	121
6:00			11		4		15		18:00			6		17		23	
6:15			9		4		13		18:15			7		24		31	
6:30			18		10		28		18:30			9		11		20	
6:45			29	67	9	27	38	94	18:45			7	29	8	60	15	89
7:00			11		11		22		19:00			5		5		10	
7:15			24		7		31		19:15			6		7		13	
7:30			21		4		25		19:30			6		7		13	
7:45			23	79	8	30	31	109	19:45			3	20	1	20	4	40
8:00			12		9		21		20:00			2		3		5	
8:15			19		8		27		20:15			0		2		2	
8:30			10		15		25		20:30			2		3		5	
8:45			11	52	5	37	16	89	20:45			2	6	4	12	6	18
9:00			14		12		26		21:00			1		2		3	
9:15			11		10		21		21:15			1		0		1	
9:30			20		15		35		21:30			1		2		3	
9:45			5	50	12	49	17	99	21:45			1	4	3	7	4	11
10:00			11		13		24		22:00			3		1		4	
10:15			19		16		35		22:15			1		3		4	
10:30			9		11		20		22:30			1		1		2	
10:45			11	50	13	53	24	103	22:45			1	6	7	12	8	18
11:00			22		4		26		23:00			2		0		2	
11:15			19		10		29		23:15			2		3		5	
11:30			16		17		33		23:30			1		5		6	
11:45			11	68	13	44	24	112	23:45			1	6	0	8	1	14
TOTALS				394		250		**644**	**TOTALS**				399		489		**888**
SPLIT %				61.2%		38.8%		**42.0%**	**SPLIT %**				44.9%		55.1%		**58.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	793	739	1,532

AM Peak Hour			6:45	9:30	**6:30**	**PM Peak Hour**			15:15	17:30	**15:15**
AM Pk Volume			85	56	**119**	**PM Pk Volume**			71	82	**138**
Pk Hr Factor			0.733	0.875	**0.783**	**Pk Hr Factor**			0.845	0.854	**0.932**
7 - 9 Volume	0	0	131	67	**198**	**4 - 6 Volume**	0	0	115	137	**252**
7 - 9 Peak Hour			7:15	7:45	**7:00**	**4 - 6 Peak Hour**			16:00	17:00	**16:00**
7 - 9 Pk Volume	0	0	80	40	**109**	**4 - 6 Pk Volume**	0	0	66	72	**131**
Pk Hr Factor	0.000	0.000	0.833	0.667	**0.879**	**Pk Hr Factor**	0.000	0.000	0.825	0.818	**0.885**

Prepared by NDS/ATD

VOLUME

Fernhill Dr Bet. Wildlife Road & Grayfox St

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_009

DAILY TOTALS	NB	SB	EB	WB	Total
	1,264	1,213	0	0	2,477

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	0		0				0		12:00	20		28				48	
00:15	0		1				1		12:15	26		20				46	
00:30	1		0				1		12:30	21		36				57	
00:45	2	3	2	3			4	6	12:45	21	88	27	111			48	199
01:00	0		0				0		13:00	23		29				52	
01:15	3		0				3		13:15	20		22				42	
01:30	0		0				0		13:30	20		19				39	
01:45	0	3	0				0	3	13:45	28	91	18	88			46	179
02:00	0		0				0		14:00	32		19				51	
02:15	0		0				0		14:15	31		18				49	
02:30	2		0				2		14:30	33		36				69	
02:45	0	2	1	1			1	3	14:45	46	142	31	104			77	246
03:00	0		0				0		15:00	48		24				72	
03:15	0		0				0		15:15	48		14				62	
03:30	0		0				0		15:30	38		25				63	
03:45	0		0				0		15:45	37	171	20	83			57	254
04:00	0		0				0		16:00	31		19				50	
04:15	0		0				0		16:15	19		24				43	
04:30	0		0				0		16:30	25		20				45	
04:45	0		0				0		16:45	26	101	29	92			55	193
05:00	2		0				2		17:00	21		18				39	
05:15	0		1				1		17:15	25		21				46	
05:30	0		1				1		17:30	21		9				30	
05:45	1	3	4	6			5	9	17:45	13	80	19	67			32	147
06:00	6		3				9		18:00	13		10				23	
06:15	3		2				5		18:15	17		12				29	
06:30	4		8				12		18:30	20		13				33	
06:45	4	17	23	36			27	53	18:45	11	61	12	47			23	108
07:00	11		26				37		19:00	8		6				14	
07:15	13		23				36		19:15	8		7				15	
07:30	14		14				28		19:30	5		4				9	
07:45	15	53	41	104			56	157	19:45	3	24	8	25			11	49
08:00	50		51				101		20:00	5		9				14	
08:15	38		25				63		20:15	2		6				8	
08:30	14		22				36		20:30	4		10				14	
08:45	13	115	27	125			40	240	20:45	2	13	8	33			10	46
09:00	20		20				40		21:00	3		7				10	
09:15	25		18				43		21:15	4		2				6	
09:30	17		24				41		21:30	4		1				5	
09:45	15	77	12	74			27	151	21:45	0	11	3	13			3	24
10:00	11		20				31		22:00	3		1				4	
10:15	27		25				52		22:15	1		4				5	
10:30	24		19				43		22:30	6		4				10	
10:45	16	78	18	82			34	160	22:45	2	12	3	12			5	24
11:00	29		27				56		23:00	7		2				9	
11:15	22		24				46		23:15	1		2				3	
11:30	27		24				51		23:30	1		2				3	
11:45	29	107	24	99			53	206	23:45	3	12	2	8			5	20
TOTALS		458		530				**988**	**TOTALS**		806		683				**1489**
SPLIT %		46.4%		53.6%				**39.9%**	**SPLIT %**		54.1%		45.9%				**60.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	1,264	1,213	0	0	2,477

AM Peak Hour	07:30	07:45						**07:45**	**PM Peak Hour**	14:45	12:30							**14:30**
AM Pk Volume	117	139						**256**	**PM Pk Volume**	180	114							**280**
Pk Hr Factor	0.585	0.681						**0.634**	**Pk Hr Factor**	0.938	0.792							**0.909**
7 - 9 Volume	168	229	0	0				**397**	**4 - 6 Volume**	181	159	0	0					**340**
7 - 9 Peak Hour	07:30	07:45						**07:45**	**4 - 6 Peak Hour**	16:00	16:00							**16:00**
7 - 9 Pk Volume	117	139	0	0				**256**	**4 - 6 Pk Volume**	101	92	0	0					**193**
Pk Hr Factor	0.585	0.681	0.000	0.000				**0.634**	**Pk Hr Factor**	0.815	0.793	0.000	0.000					**0.877**

Prepared by NDS/ATD

VOLUME

Guernsey Ave Bet. Morning View Dr & Pacific Coast Hwy

Day: Wednesday
Date: 10/20/2021

City: Malibu
Project #: CA21_020306_010

DAILY TOTALS	NB	SB	EB	WB	Total
	749	748	0	0	1,497

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0		12:00	14		21						35	
0:15	0		0						0		12:15	9		18						27	
0:30	0		0						0		12:30	11		11						22	
0:45	0		0						0		12:45	14	48	9	59					23	107
1:00	0		1						1		13:00	11		14						25	
1:15	0		0						0		13:15	11		16						27	
1:30	0		0						0		13:30	15		9						24	
1:45	0		0		1				0	1	13:45	13	50	7	46					20	96
2:00	1		0						1		14:00	16		24						40	
2:15	0		0						0		14:15	13		18						31	
2:30	0		0						0		14:30	10		11						21	
2:45	0	1	0						0	1	14:45	4	43	20	73					24	116
3:00	0		0						0		15:00	16		14						30	
3:15	0		0						0		15:15	11		16						27	
3:30	0		0						0		15:30	20		53						73	
3:45	0		0						0		15:45	7	54	45	128					52	182
4:00	0		0						0		16:00	15		15						30	
4:15	0		0						0		16:15	6		19						25	
4:30	0		0						0		16:30	4		20						24	
4:45	0		1		1				1	1	16:45	14	39	8	62					22	101
5:00	0		0						0		17:00	11		15						26	
5:15	0		1						1		17:15	6		7						13	
5:30	0		1						1		17:30	10		13						23	
5:45	2	2	0		2				2	4	17:45	14	41	9	44					23	85
6:00	3		2						5		18:00	8		15						23	
6:15	6		0						6		18:15	10		8						18	
6:30	19		1						20		18:30	5		8						13	
6:45	25	53	2		5				27	58	18:45	5	28	8	39					13	67
7:00	27		7						34		19:00	6		2						8	
7:15	19		6						25		19:15	10		2						12	
7:30	15		12						27		19:30	0		2						2	
7:45	19	80	11		36				30	116	19:45	4	20	4	10					8	30
8:00	24		13						37		20:00	5		6						11	
8:15	38		13						51		20:15	6		2						8	
8:30	19		38						57		20:30	2		1						3	
8:45	18	99	13		77				31	176	20:45	4	17	1	10					5	27
9:00	15		6						21		21:00	1		1						2	
9:15	10		9						19		21:15	1		4						5	
9:30	11		11						22		21:30	1		1						2	
9:45	9	45	12		38				21	83	21:45	4	7	0	6					4	13
10:00	8		14						22		22:00	2		0						2	
10:15	12		14						26		22:15	2		2						4	
10:30	19		9						28		22:30	0		0						0	
10:45	20	59	14		51				34	110	22:45	2	6	1	3					3	9
11:00	14		7						21		23:00	0		0						0	
11:15	12		18						30		23:15	2		1						3	
11:30	15		18						33		23:30	1		1						2	
11:45	12	53	12		55				24	108	23:45	1	4	0	2					1	6
TOTALS		392			266					658	TOTALS		357			482					839
SPLIT %		59.6%			40.4%					44.0%	SPLIT %		42.6%			57.4%					56.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	749	748	0	0	1,497

AM Peak Hour	7:45	8:00			8:00	PM Peak Hour	13:30	15:30			15:00
AM Pk Volume	100	77			176	PM Pk Volume	57	132			182
Pk Hr Factor	0.658	0.507			0.772	Pk Hr Factor	0.891	0.623			0.623
7 - 9 Volume	179	113	0	0	292	4 - 6 Volume	80	106	0	0	186
7 - 9 Peak Hour	7:45	8:00			8:00	4 - 6 Peak Hour	16:45	16:00			16:00
7 - 9 Pk Volume	100	77	0	0	176	4 - 6 Pk Volume	41	62	0	0	101
Pk Hr Factor	0.658	0.507	0.000	0.000	0.772	Pk Hr Factor	0.732	0.775	0.000	0.000	0.842

Prepared by NDS/ATD

VOLUME

John Tyler Dr Bet. Pepperdine University Entrance & Pacific Coast Hwy

Day: Tuesday
Date: 10/26/2021

City: Malibu
Project #: CA21_020306_011

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,025	1,308	2,333

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
0:00			0	0	0	12:00			16	26	42
0:15			0	0	0	12:15			15	21	36
0:30			0	0	0	12:30			39	30	69
0:45			0	0	0	12:45			30	100	13	90	43	190
1:00			0	0	0	13:00			15	20	35
1:15			0	0	0	13:15			20	16	36
1:30			0	0	0	13:30			19	21	40
1:45			0	0	0	13:45			12	66	24	81	36	147
2:00			0	0	0	14:00			12	24	36
2:15			0	0	0	14:15			12	14	26
2:30			0	0	0	14:30			15	22	37
2:45			0	0	0	14:45			6	45	15	75	21	120
3:00			0	0	0	15:00			11	23	34
3:15			0	0	0	15:15			11	22	33
3:30			0	0	0	15:30			13	28	41
3:45			0	0	0	15:45			22	57	34	107	56	164
4:00			0	0	0	16:00			14	57	71
4:15			0	0	0	16:15			2	35	37
4:30			0	0	0	16:30			11	28	39
4:45			0	0	0	16:45			18	45	45	165	63	210
5:00			0	0	0	17:00			10	71	81
5:15			0	0	0	17:15			17	55	72
5:30			0	0	0	17:30			24	43	67
5:45			0	0	0	17:45			19	70	40	209	59	279
6:00			0	0	0	18:00			15	34	49
6:15			0	0	0	18:15			14	18	32
6:30			3	1	4	18:30			14	22	36
6:45			4	7	2	3	6	10	18:45			9	52	29	103	38	155
7:00			15	7	22	19:00			11	31	42
7:15			8	4	12	19:15			8	16	24
7:30			30	7	37	19:30			13	15	28
7:45			46	99	5	23	51	122	19:45			5	37	20	82	25	119
8:00			28	15	43	20:00			7	20	27
8:15			45	11	56	20:15			6	16	22
8:30			43	7	50	20:30			8	18	26
8:45			31	147	7	40	38	187	20:45			5	26	20	74	25	100
9:00			26	7	33	21:00			7	17	24
9:15			25	4	29	21:15			6	11	17
9:30			41	6	47	21:30			6	19	25
9:45			30	122	16	33	46	155	21:45			12	31	18	65	30	96
10:00			9	18	27	22:00			4	19	23
10:15			9	15	24	22:15			0	0	0
10:30			16	14	30	22:30			1	1	2
10:45			12	46	14	61	26	107	22:45			1	6	1	21	2	27
11:00			11	21	32	23:00			2	2	4
11:15			14	15	29	23:15			0	0	0
11:30			17	13	30	23:30			0	0	0
11:45			24	66	24	73	48	139	23:45			1	3	1	3	2	6
TOTALS				487	233	**720**	**TOTALS**				538	1075	**1613**
SPLIT %				67.6%	32.4%	**30.9%**	**SPLIT %**				33.4%	66.6%	**69.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,025	1,308	2,333

AM Peak Hour			7:45	11:45	**7:45**	**PM Peak Hour**			12:30	16:45	**16:45**
AM Pk Volume			162	101	**200**	**PM Pk Volume**			104	214	**283**
Pk Hr Factor			0.880	0.842	**0.893**	**Pk Hr Factor**			0.667	0.754	**0.873**
7 - 9 Volume	0	0	246	63	**309**	**4 - 6 Volume**	0	0	115	374	**489**
7 - 9 Peak Hour			7:45	8:00	**7:45**	**4 - 6 Peak Hour**			17:00	16:45	**16:45**
7 - 9 Pk Volume	0	0	162	40	**200**	**4 - 6 Pk Volume**	0	0	70	214	**283**
Pk Hr Factor	0.000	0.000	0.880	0.667	**0.893**	**Pk Hr Factor**	0.000	0.000	0.729	0.754	**0.873**

Prepared by NDS/ATD

VOLUME

Kanan Dume Road Between North City Limit & Galahad Drive

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_012

DAILY TOTALS	NB	SB	EB	WB	Total
	4,806	4,917	0	0	9,723

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	8		5				13		12:00	67		87				154	
0:15	8		4				12		12:15	83		68				151	
0:30	7		6				13		12:30	80		67				147	
0:45	3	26	5	20			8	46	12:45	73	303	85	307			158	610
1:00	1		3				4		13:00	98		90				188	
1:15	1		4				5		13:15	91		84				175	
1:30	3		0				3		13:30	111		76				187	
1:45	2	7	2	9			4	16	13:45	85	385	83	333			168	718
2:00	1		3				4		14:00	118		74				192	
2:15	3		3				6		14:15	118		76				194	
2:30	1		2				3		14:30	133		83				216	
2:45	2	7	1	9			3	16	14:45	131	500	85	318			216	818
3:00	0		2				2		15:00	147		66				213	
3:15	1		0				1		15:15	131		89				220	
3:30	2		0				2		15:30	163		68				231	
3:45	2	5	2	4			4	9	15:45	150	591	75	298			225	889
4:00	0		1				1		16:00	119		66				185	
4:15	2		4				6		16:15	122		78				200	
4:30	3		0				3		16:30	89		67				156	
4:45	6	11	2	7			8	18	16:45	82	412	64	275			146	687
5:00	7		1				8		17:00	91		72				163	
5:15	9		6				15		17:15	108		64				172	
5:30	7		12				19		17:30	90		62				152	
5:45	2	25	19	38			21	63	17:45	75	364	73	271			148	635
6:00	9		23				32		18:00	87		49				136	
6:15	17		53				70		18:15	88		63				151	
6:30	25		80				105		18:30	70		42				112	
6:45	38	89	117	273			155	362	18:45	86	331	54	208			140	539
7:00	48		90				138		19:00	83		49				132	
7:15	49		97				146		19:15	48		46				94	
7:30	45		121				166		19:30	40		41				81	
7:45	34	176	144	452			178	628	19:45	22	193	28	164			50	357
8:00	49		135				184		20:00	31		24				55	
8:15	52		140				192		20:15	29		27				56	
8:30	62		121				183		20:30	22		37				59	
8:45	52	215	127	523			179	738	20:45	34	116	21	109			55	225
9:00	63		114				177		21:00	45		26				71	
9:15	61		113				174		21:15	25		15				40	
9:30	58		121				179		21:30	21		24				45	
9:45	62	244	99	447			161	691	21:45	15	106	31	96			46	202
10:00	56		67				123		22:00	21		16				37	
10:15	59		97				156		22:15	22		17				39	
10:30	82		69				151		22:30	14		24				38	
10:45	82	279	91	324			173	603	22:45	13	70	11	68			24	138
11:00	78		92				170		23:00	13		4				17	
11:15	81		67				148		23:15	11		8				19	
11:30	83		80				163		23:30	8		8				16	
11:45	70	312	99	338			169	650	23:45	7	39	6	26			13	65
TOTALS	1	1396		2444				**3840**	**TOTALS**		3410		2473				**5883**
SPLIT %		36.4%		63.6%				**39.5%**	**SPLIT %**		58.0%		42.0%				**60.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	4,806	4,917	0	0	9,723

AM Peak Hour	10:45	7:30					**8:00**		**PM Peak Hour**	15:00	12:45					**15:00**		
AM Pk Volume	324	540					**738**		**PM Pk Volume**	591	335					**889**		
Pk Hr Factor	0.976	0.938					**0.961**		**Pk Hr Factor**	0.906	0.931					**0.962**		
7 - 9 Volume	391	975	0	0			**1366**		**4 - 6 Volume**	776	546	0	0			**1322**		
7 - 9 Peak Hour	8:00	7:30					**8:00**		**4 - 6 Peak Hour**	16:00	16:15					**16:00**		
7 - 9 Pk Volume	215	540	0	0			**738**		**4 - 6 Pk Volume**	412	281	0	0			**687**		
Pk Hr Factor	0.867	0.938	0.000	0.000			**0.961**		**Pk Hr Factor**	0.844	0.901	0.000	0.000			**0.859**		

Prepared by NDS/ATD

VOLUME

Kanan Dume Rd Bet. Galahad Dr & Pacific Coast Hwy

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_013

DAILY TOTALS	NB	SB	EB	WB	Total
	5,007	5,107	0	0	10,114

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	9		5				14		12:00	68		87				155	
0:15	9		5				14		12:15	85		73				158	
0:30	7		7				14		12:30	84		70				154	
0:45	3	28	5	22			8	50	12:45	77	314	92	322			169	636
1:00	1		3				4		13:00	98		94				192	
1:15	1		5				6		13:15	96		89				185	
1:30	5		0				5		13:30	115		80				195	
1:45	3	10	2	10			5	20	13:45	91	400	84	347			175	747
2:00	1		3				4		14:00	120		75				195	
2:15	3		3				6		14:15	125		81				206	
2:30	1		2				3		14:30	145		85				230	
2:45	3	8	1	9			4	17	14:45	136	526	87	328			223	854
3:00	0		2				2		15:00	149		67				216	
3:15	1		0				1		15:15	138		95				233	
3:30	2		0				2		15:30	170		73				243	
3:45	2	5	2	4			4	9	15:45	156	613	74	309			230	922
4:00	0		1				1		16:00	126		65				191	
4:15	2		5				7		16:15	128		82				210	
4:30	3		0				3		16:30	93		72				165	
4:45	6	11	2	8			8	19	16:45	82	429	69	288			151	717
5:00	5		2				7		17:00	96		76				172	
5:15	11		10				21		17:15	116		64				180	
5:30	8		14				22		17:30	94		66				160	
5:45	5	29	18	44			23	73	17:45	78	384	72	278			150	662
6:00	10		26				36		18:00	92		52				144	
6:15	19		54				73		18:15	90		64				154	
6:30	24		85				109		18:30	74		40				114	
6:45	41	94	124	289			165	383	18:45	87	343	59	215			146	558
7:00	47		95				142		19:00	86		47				133	
7:15	49		102				151		19:15	46		46				92	
7:30	47		124				171		19:30	40		40				80	
7:45	38	181	147	468			185	649	19:45	25	197	31	164			56	361
8:00	52		136				188		20:00	30		28				58	
8:15	57		146				203		20:15	32		31				63	
8:30	65		123				188		20:30	26		39				65	
8:45	56	230	128	533			184	763	20:45	37	125	25	123			62	248
9:00	67		121				188		21:00	46		26				72	
9:15	64		115				179		21:15	23		16				39	
9:30	58		126				184		21:30	21		26				47	
9:45	65	254	103	465			168	719	21:45	17	107	31	99			48	206
10:00	59		66				125		22:00	23		17				40	
10:15	62		102				164		22:15	22		17				39	
10:30	82		70				152		22:30	14		26				40	
10:45	82	285	91	329			173	614	22:45	15	74	12	72			27	146
11:00	77		97				174		23:00	15		4				19	
11:15	86		72				158		23:15	12		8				20	
11:30	84		80				164		23:30	9		10				19	
11:45	70	317	104	353			174	670	23:45	7	43	6	28			13	71
TOTALS		1452		2534				**3986**	**TOTALS**		3555		2573				**6128**
SPLIT %		36.4%		63.6%				**39.4%**	**SPLIT %**		58.0%		42.0%				**60.6%**

DAILY TOTALS	NB	SB	EB	WB	Total
	5,007	5,107	0	0	10,114

AM Peak Hour	10:45	7:30				**7:45**	**PM Peak Hour**	15:00	12:45				**15:00**
AM Pk Volume	329	553				**764**	**PM Pk Volume**	613	355				**922**
Pk Hr Factor	0.956	0.940				**0.941**	**Pk Hr Factor**	0.901	0.944				**0.949**
7 - 9 Volume	411	1001	0	0		**1412**	**4 - 6 Volume**	813	566	0	0		**1379**
7 - 9 Peak Hour	8:00	7:30				**7:45**	**4 - 6 Peak Hour**	16:00	16:15				**16:00**
7 - 9 Pk Volume	230	553	0	0		**764**	**4 - 6 Pk Volume**	429	299	0	0		**717**
Pk Hr Factor	0.885	0.940	0.000	0.000		**0.941**	**Pk Hr Factor**	0.838	0.912	0.000	0.000		**0.854**

Prepared by NDS/ATD

VOLUME

Las Flores Canyon Rd Bet. North City Limit & Pacific Coast Hwy

Day: Friday
Date: 10/29/2021

City: Malibu
Project #: CA21_020306_014

DAILY TOTALS	NB	SB	EB	WB	Total
	1,132	1,024	0	0	2,156

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	5		0				5		12:00	33		14				47	
0:15	2		2				4		12:15	26		27				53	
0:30	3		0				3		12:30	22		20				42	
0:45	1	11	0	2			1	13	12:45	21	102	20	81			41	183
1:00	0		0				0		13:00	21		23				44	
1:15	1		1				2		13:15	24		19				43	
1:30	0		1				1		13:30	13		19				32	
1:45	0	1	0	2			0	3	13:45	17	75	18	79			35	154
2:00	0		1				1		14:00	19		21				40	
2:15	0		1				1		14:15	36		57				93	
2:30	0		0				0		14:30	31		19				50	
2:45	0		0	2			0	2	14:45	21	107	27	124			48	231
3:00	0		0				0		15:00	25		16				41	
3:15	0		0				0		15:15	19		16				35	
3:30	1		0				1		15:30	21		14				35	
3:45	0	1	0				0	1	15:45	16	81	31	77			47	158
4:00	1		0				1		16:00	15		18				33	
4:15	0		1				1		16:15	18		8				26	
4:30	0		1				1		16:30	16		19				35	
4:45	0	1	1	3			1	4	16:45	22	71	16	61			38	132
5:00	2		1				3		17:00	17		18				35	
5:15	4		1				5		17:15	12		18				30	
5:30	3		1				4		17:30	22		14				36	
5:45	4	13	3	6			7	19	17:45	11	62	16	66			27	128
6:00	3		4				7		18:00	14		12				26	
6:15	5		3				8		18:15	12		11				23	
6:30	10		3				13		18:30	15		6				21	
6:45	12	30	11	21			23	51	18:45	9	50	1	30			10	80
7:00	9		12				21		19:00	9		8				17	
7:15	18		13				31		19:15	13		9				22	
7:30	11		18				29		19:30	12		15				27	
7:45	20	58	16	59			36	117	19:45	9	43	3	35			12	78
8:00	24		20				44		20:00	8		4				12	
8:15	17		14				31		20:15	7		7				14	
8:30	16		11				27		20:30	9		4				13	
8:45	42	99	19	64			61	163	20:45	9	33	5	20			14	53
9:00	21		19				40		21:00	5		6				11	
9:15	14		19				33		21:15	6		4				10	
9:30	24		11				35		21:30	7		4				11	
9:45	19	78	19	68			38	146	21:45	8	26	8	22			16	48
10:00	12		21				33		22:00	9		5				14	
10:15	15		14				29		22:15	7		8				15	
10:30	17		17				34		22:30	7		8				15	
10:45	19	63	20	72			39	135	22:45	4	27	8	29			12	56
11:00	20		16				36		23:00	6		7				13	
11:15	18		20				38		23:15	8		4				12	
11:30	14		27				41		23:30	3		5				8	
11:45	31	83	21	84			52	167	23:45	0	17	1	17			1	34
TOTALS		438		383				821	TOTALS		694		641				1335
SPLIT %		53.3%		46.7%				38.1%	SPLIT %		52.0%		48.0%				61.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,132	1,024	0	0	2,156

AM Peak Hour	11:45	11:30					11:45		PM Peak Hour	14:15	14:00					14:15		
AM Pk Volume	112	89					194		PM Pk Volume	113	124					232		
Pk Hr Factor	0.848	0.824					0.915		Pk Hr Factor	0.785	0.544					0.624		
7 - 9 Volume	157	123	0	0			280		4 - 6 Volume	133	127	0	0			260		
7 - 9 Peak Hour	8:00	7:30					8:00		4 - 6 Peak Hour	16:15	16:30					16:45		
7 - 9 Pk Volume	99	68	0	0			163		4 - 6 Pk Volume	73	71	0	0			139		
Pk Hr Factor	0.589	0.850	0.000	0.000			0.668		Pk Hr Factor	0.830	0.934	0.000	0.000			0.914		

Prepared by NDS/ATD

VOLUME

Malibu Canyon Rd Bet. Malibu Knolls Rd & Potter Rd

Day: Thursday
Date: 2/24/2022

City: Malibu
Project #: CA22_020078_001

DAILY TOTALS	NB	SB	EB	WB	Total
	9,992	10,566	0	0	20,558

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	22		14						36		12:00	134		147						281	
00:15	13		12						25		12:15	135		137						272	
00:30	7		6						13		12:30	121		120						241	
00:45	19	61	7	39					26	100	12:45	148	538	134	538					282	1076
01:00	12		7						19		13:00	152		102						254	
01:15	3		3						6		13:15	146		176						322	
01:30	9		3						12		13:30	161		143						304	
01:45	6	30	2	15					8	45	13:45	173	632	128	549					301	1181
02:00	2		7						9		14:00	192		108						300	
02:15	2		3						5		14:15	191		119						310	
02:30	4		0						4		14:30	205		137						342	
02:45	4	12	3	13					7	25	14:45	210	798	123	487					333	1285
03:00	1		0						1		15:00	303		122						425	
03:15	3		3						6		15:15	243		118						361	
03:30	0		4						4		15:30	356		158						514	
03:45	4	8	2	9					6	17	15:45	347	1249	179	577					526	1826
04:00	2		3						5		16:00	309		152						461	
04:15	3		4						7		16:15	250		144						394	
04:30	1		10						11		16:30	303		203						506	
04:45	4	10	15	32					19	42	16:45	299	1161	162	661					461	1822
05:00	5		15						20		17:00	361		169						530	
05:15	6		23						29		17:15	296		170						466	
05:30	18		69						87		17:30	276		156						432	
05:45	19	48	95	202					114	250	17:45	253	1186	166	661					419	1847
06:00	30		117						147		18:00	257		139						396	
06:15	21		169						190		18:15	265		93						358	
06:30	16		234						250		18:30	210		94						304	
06:45	43	110	266	786					309	896	18:45	185	917	95	421					280	1338
07:00	48		270						318		19:00	149		73						222	
07:15	70		338						408		19:15	134		57						191	
07:30	82		345						427		19:30	117		61						178	
07:45	78	278	346	1299					424	1577	19:45	96	496	39	230					135	726
08:00	76		352						428		20:00	81		44						125	
08:15	84		347						431		20:15	71		35						106	
08:30	110		276						386		20:30	113		40						153	
08:45	78	348	338	1313					416	1661	20:45	91	356	45	164					136	520
09:00	77		268						345		21:00	113		43						156	
09:15	86		209						295		21:15	105		29						134	
09:30	96		220						316		21:30	59		27						86	
09:45	96	355	244	941					340	1296	21:45	56	333	24	123					80	456
10:00	79		182						261		22:00	46		19						65	
10:15	103		202						305		22:15	46		27						73	
10:30	86		173						259		22:30	54		17						71	
10:45	87	355	183	740					270	1095	22:45	42	188	15	78					57	266
11:00	98		155						253		23:00	31		14						45	
11:15	105		176						281		23:15	33		7						40	
11:30	120		175						295		23:30	21		7						28	
11:45	103	426	146	652					249	1078	23:45	12	97	8	36					20	133
TOTALS		2041		6041						8082	TOTALS		7951		4525						12476
SPLIT %		25.3%		74.7%						39.3%	SPLIT %		63.7%		36.3%						60.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	9,992	10,566	0	0	20,558

AM Peak Hour	11:45		07:30						07:30		PM Peak Hour	15:30		16:30						16:30	
AM Pk Volume	493		1390						1710		PM Pk Volume	1262		704						1963	
Pk Hr Factor	0.913		0.987						0.992		Pk Hr Factor	0.886		0.867						0.926	
7 - 9 Volume	626		2612		0		0		3238		4 - 6 Volume	2347		1322		0		0		3669	
7 - 9 Peak Hour	07:45		07:30						07:30		4 - 6 Peak Hour	16:30		16:30						16:30	
7 - 9 Pk Volume	348		1390		0		0		1710		4 - 6 Pk Volume	1259		704		0		0		1963	
Pk Hr Factor	0.791		0.987		0.000		0.000		0.992		Pk Hr Factor	0.872		0.867		0.000		0.000		0.926	

Prepared by NDS/ATD

VOLUME

Malibu Canyon Rd Bet. Malibu Knolls Rd & PCH

Day: Thursday
Date: 2/24/2022

City: Malibu
Project #: CA22_020078_002

DAILY TOTALS	NB	SB	EB	WB	Total
	10,188	10,739	0	0	20,927

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	23		12						35		12:00	144		149						293	
00:15	12		15						27		12:15	131		146						277	
00:30	7		6						13		12:30	129		128						257	
00:45	20	62	4	37					24	99	12:45	157	561	143	566					300	1127
01:00	13		9						22		13:00	141		100						241	
01:15	2		3						5		13:15	153		180						333	
01:30	11		3						14		13:30	167		138						305	
01:45	6	32	2	17					8	49	13:45	168	629	141	559					309	1188
02:00	0		5						5		14:00	203		113						316	
02:15	3		5						8		14:15	204		124						328	
02:30	3		0						3		14:30	191		141						332	
02:45	4	10	3	13					7	23	14:45	213	811	132	510					345	1321
03:00	1		0						1		15:00	302		129						431	
03:15	5		3						8		15:15	257		131						388	
03:30	0		3						3		15:30	371		161						532	
03:45	4	10	4	10					8	20	15:45	346	1276	165	586					511	1862
04:00	2		3						5		16:00	307		171						478	
04:15	3		4						7		16:15	269		137						406	
04:30	1		10						11		16:30	294		196						490	
04:45	4	10	15	32					19	42	16:45	304	1174	188	692					492	1866
05:00	6		15						21		17:00	360		173						533	
05:15	7		22						29		17:15	308		176						484	
05:30	19		65						84		17:30	278		153						431	
05:45	20	52	93	195					113	247	17:45	250	1196	172	674					422	1870
06:00	29		117						146		18:00	267		139						406	
06:15	20		169						189		18:15	270		90						360	
06:30	19		221						240		18:30	211		101						312	
06:45	43	111	274	781					317	892	18:45	185	933	95	425					280	1358
07:00	54		263						317		19:00	151		72						223	
07:15	73		344						417		19:15	135		61						196	
07:30	84		344						428		19:30	118		59						177	
07:45	79	290	340	1291					419	1581	19:45	98	502	42	234					140	736
08:00	85		378						463		20:00	80		46						126	
08:15	87		340						427		20:15	76		36						112	
08:30	105		268						373		20:30	109		39						148	
08:45	83	360	339	1325					422	1685	20:45	98	363	43	164					141	527
09:00	78		280						358		21:00	112		48						160	
09:15	91		216						307		21:15	104		27						131	
09:30	102		224						326		21:30	62		27						89	
09:45	103	374	243	963					346	1337	21:45	52	330	23	125					75	455
10:00	74		193						267		22:00	49		18						67	
10:15	112		197						309		22:15	51		28						79	
10:30	93		187						280		22:30	52		16						68	
10:45	96	375	182	759					278	1134	22:45	43	195	17	79					60	274
11:00	97		163						260		23:00	30		13						43	
11:15	112		176						288		23:15	33		7						40	
11:30	119		187						306		23:30	21		8						29	
11:45	107	435	141	667					248	1102	23:45	13	97	7	35					20	132
TOTALS		2121		6090						8211	TOTALS		8067		4649						12716
SPLIT %		25.8%		74.2%						39.2%	SPLIT %		63.4%		36.6%						60.8%

DAILY TOTALS	NB	SB	EB	WB	Total
	10,188	10,739	0	0	20,927

AM Peak Hour	11:45	07:15				07:30	PM Peak Hour	15:30	16:30				16:30
AM Pk Volume	511	1406				1737	PM Pk Volume	1293	733				1999
Pk Hr Factor	0.887	0.930				0.938	Pk Hr Factor	0.871	0.935				0.938
7 - 9 Volume	650	2616	0	0		3266	4 - 6 Volume	2370	1366	0	0		3736
7 - 9 Peak Hour	08:00	07:15				07:30	4 - 6 Peak Hour	16:30	16:30				16:30
7 - 9 Pk Volume	360	1406	0	0		1737	4 - 6 PK Volume	1266	733	0	0		1999
Pk Hr Factor	0.857	0.930	0.000	0.000		0.938	Pk Hr Factor	0.879	0.935	0.000	0.000		0.938

Prepared by NDS/ATD

VOLUME

Malibu Canyon Rd Bet. Civic Center Way & Pacific Coast Hwy

Day: Saturday
Date:

City: Malibu
Project #: CA21_020306_017

DAILY TOTALS	NB	SB	EB	WB	Total
	5,973	6,974	0	0	12,947

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	20		17				37		12:00	105		42				147	
0:15	22		18				40		12:15	87		49				136	
0:30	28		10				38		12:30	99		33				132	
0:45	20	90	13	58			33	148	12:45	93	384	41	165			134	549
1:00	14		24				38		13:00	102		49				151	
1:15	13		11				24		13:15	101		47				148	
1:30	15		10				25		13:30	100		60				160	
1:45	12	54	8	53			20	107	13:45	119	422	61	217			180	639
2:00	5		11				16		14:00	117		100				217	
2:15	9		7				16		14:15	119		103				222	
2:30	8		10				18		14:30	125		111				236	
2:45	7	29	7	35			14	64	14:45	144	505	125	439			269	944
3:00	7		3				10		15:00	156		129				285	
3:15	1		2				3		15:15	167		145				312	
3:30	9		2				11		15:30	193		114				307	
3:45	1	18	3	10			4	28	15:45	150	666	103	491			253	1157
4:00	3		4				7		16:00	155		132				287	
4:15	6		4				10		16:15	151		125				276	
4:30	1		3				4		16:30	141		155				296	
4:45	3	13	9	20			12	33	16:45	152	599	138	550			290	1149
5:00	2		2				4		17:00	140		146				286	
5:15	12		7				19		17:15	145		167				312	
5:30	2		10				12		17:30	146		175				321	
5:45	3	19	16	35			19	54	17:45	153	584	118	606			271	1190
6:00	15		10				25		18:00	148		141				289	
6:15	9		22				31		18:15	177		106				283	
6:30	10		29				39		18:30	150		83				233	
6:45	20	54	39	100			59	154	18:45	111	586	77	407			188	993
7:00	37		218				255		19:00	40		34				74	
7:15	51		243				294		19:15	45		27				72	
7:30	68		228				296		19:30	31		40				71	
7:45	63	219	224	913			287	1132	19:45	23	139	14	115			37	254
8:00	104		253				357		20:00	45		20				65	
8:15	117		278				395		20:15	24		18				42	
8:30	102		242				344		20:30	39		20				59	
8:45	75	398	211	984			286	1382	20:45	26	134	35	93			61	227
9:00	53		157				210		21:00	35		18				53	
9:15	60		135				195		21:15	30		18				48	
9:30	55		133				188		21:30	24		25				49	
9:45	65	233	137	562			202	795	21:45	31	120	16	77			47	197
10:00	71		140				211		22:00	16		35				51	
10:15	52		123				175		22:15	22		12				34	
10:30	66		134				200		22:30	36		26				62	
10:45	67	256	103	500			170	756	22:45	19	93	16	89			35	182
11:00	50		104				154		23:00	17		13				30	
11:15	76		94				170		23:15	14		12				26	
11:30	84		122				206		23:30	23		13				36	
11:45	84	294	90	410			174	704	23:45	10	64	7	45			17	109
TOTALS		1677		3680				5357	TOTALS		4296		3294				7590
SPLIT %		31.3%		68.7%				41.4%	SPLIT %		56.6%		43.4%				58.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	5,973	6,974	0	0	12,947

AM Peak Hour	8:00	7:45						7:45	PM Peak Hour	15:00	16:45							16:45
AM Pk Volume	398	997						1383	PM Pk Volume	666	626							1209
Pk Hr Factor	0.850	0.897						0.875	Pk Hr Factor	0.863	0.894							0.942
7 - 9 Volume	617	1897	0	0				2514	4 - 6 Volume	1183	1156	0	0					2339
7 - 9 Peak Hour	8:00	7:45						7:45	4 - 6 Peak Hour	16:00	16:45							16:45
7 - 9 Pk Volume	398	997	0	0				1383	4 - 6 Pk Volume	599	626	0	0					1209
Pk Hr Factor	0.850	0.897	0.000	0.000				0.875	Pk Hr Factor	0.966	0.894	0.000	0.000					0.942

Prepared by NDS/ATD

VOLUME

Merritt Dr Bet. Morning View Dr & Busch Dr

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_018

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	308	367	675

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00					0		1		1		12:00					6		2		8	
0:15					1		1		2		12:15					5		9		14	
0:30					0		0		0		12:30					2		10		12	
0:45					1	2	0	2	1	4	12:45					6	19	9	30	15	49
1:00					0		1		1		13:00					7		7		14	
1:15					0		0		0		13:15					10		11		21	
1:30					0		0		0		13:30					8		7		15	
1:45					1	1	1	2	2	3	13:45					8	33	3	28	11	61
2:00					0		0		0		14:00					2		6		8	
2:15					0		0		0		14:15					2		10		12	
2:30					0		0		0		14:30					5		8		13	
2:45					0		0		0		14:45					6	15	6	30	12	45
3:00					0		0		0		15:00					5		12		17	
3:15					0		0		0		15:15					5		9		14	
3:30					0		0		0		15:30					11		25		36	
3:45					0		1	1	1	1	15:45					9	30	11	57	20	87
4:00					1		0		1		16:00					5		6		11	
4:15					0		0		0		16:15					9		10		19	
4:30					0		0		0		16:30					8		15		23	
4:45					0	1	1	1	1	2	16:45					1	23	6	37	7	60
5:00					0		0		0		17:00					6		3		9	
5:15					1		0		1		17:15					4		5		9	
5:30					1		1		2		17:30					1		3		4	
5:45					0	2	0	1	0	3	17:45					1	12	4	15	5	27
6:00					0		1		1		18:00					8		6		14	
6:15					1		2		3		18:15					5		11		16	
6:30					4		0		4		18:30					3		2		5	
6:45					4	9	1	4	5	13	18:45					0	16	2	21	2	37
7:00					7		2		9		19:00					5		3		8	
7:15					5		0		5		19:15					4		1		5	
7:30					2		4		6		19:30					0		3		3	
7:45					4	18	4	10	8	28	19:45					1	10	0	7	1	17
8:00					4		9		13		20:00					3		1		4	
8:15					4		6		10		20:15					2		0		2	
8:30					7		11		18		20:30					1		2		3	
8:45					8	23	3	29	11	52	20:45					0	6	1	4	1	10
9:00					8		7		15		21:00					1		2		3	
9:15					7		5		12		21:15					1		1		2	
9:30					5		4		9		21:30					0		0		0	
9:45					3	23	7	23	10	46	21:45					0	2	0	3	0	5
10:00					8		6		14		22:00					3		1		4	
10:15					5		5		10		22:15					1		0		1	
10:30					5		3		8		22:30					0		0		0	
10:45					7	25	8	22	15	47	22:45					0	4	0	1	0	5
11:00					6		9		15		23:00					0		0		0	
11:15					12		13		25		23:15					1		0		1	
11:30					11		9		20		23:30					0		0		0	
11:45					4	33	8	39	12	72	23:45					0	1	0		0	1
TOTALS						137		134		271	TOTALS						171		233		404
SPLIT %						50.6%		49.4%		40.1%	SPLIT %						42.3%		57.7%		59.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	308	367	675

AM Peak Hour			10:45	10:45	10:45	PM Peak Hour			15:30	15:00	15:00
AM Pk Volume			36	39	75	PM Pk Volume			34	57	87
Pk Hr Factor			0.750	0.750	0.750	Pk Hr Factor			0.773	0.570	0.604
7 - 9 Volume	0	0	41	39	80	4 - 6 Volume	0	0	35	52	87
7 - 9 Peak Hour			8:00	7:45	8:00	4 - 6 Peak Hour			16:15	16:00	16:00
7 - 9 Pk Volume	0	0	23	30	52	4 - 6 Pk Volume	0	0	24	37	60
Pk Hr Factor	0.000	0.000	0.719	0.682	0.722	Pk Hr Factor	0.000	0.000	0.667	0.617	0.652

Prepared by NDS/ATD

VOLUME

Morning View Dr Bat. Guernsey Ave & Via Cabrillo

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_019

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	445	528	973

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00					0		1		1		12:00					9		7		16	
0:15					0		0		0		12:15					4		11		15	
0:30					0		0		0		12:30					5		4		9	
0:45					0		0	1	0	1	12:45					11	29	5	27	16	56
1:00					0		0		0		13:00					9		11		20	
1:15					0		0		0		13:15					2		7		9	
1:30					0		0		0		13:30					3		2		5	
1:45					0		0		0		13:45					11	25	6	26	17	51
2:00					0		1		1		14:00					6		3		9	
2:15					0		0		0		14:15					12		8		20	
2:30					0		0		0		14:30					10		7		17	
2:45					0		0	1	0	1	14:45					9	37	6	24	15	61
3:00					0		0		0		15:00					4		7		11	
3:15					0		0		0		15:15					12		10		22	
3:30					0		0		0		15:30					11		56		67	
3:45					0		0		0		15:45					11	38	36	109	47	147
4:00					0		0		0		16:00					6		8		14	
4:15					0		0		0		16:15					13		9		22	
4:30					0		0		0		16:30					3		6		9	
4:45					0		0		0		16:45					3	25	9	32	12	57
5:00					2		0		2		17:00					10		9		19	
5:15					1		1		2		17:15					5		7		12	
5:30					2		0		2		17:30					4		4		8	
5:45					2	7	0	1	2	8	17:45					3	22	5	25	8	47
6:00					3		1		4		18:00					11		9		20	
6:15					5		1		6		18:15					2		7		9	
6:30					2		3		5		18:30					1		0		1	
6:45					1	11	13	18	14	29	18:45					6	20	4	20	10	40
7:00					7		6		13		19:00					4		4		8	
7:15					8		14		22		19:15					4		3		7	
7:30					6		15		21		19:30					0		3		3	
7:45					10	31	9	44	19	75	19:45					0	8	0	10	0	18
8:00					17		9		26		20:00					0		5		5	
8:15					35		23		58		20:15					6		3		9	
8:30					16		39		55		20:30					5		6		11	
8:45					13	81	13	84	26	165	20:45					7	18	3	17	10	35
9:00					7		9		16		21:00					2		1		3	
9:15					6		6		12		21:15					0		1		1	
9:30					4		6		10		21:30					2		3		5	
9:45					13	30	3	24	16	54	21:45					0	4	1	6	1	10
10:00					8		5		13		22:00					0		0		0	
10:15					6		5		11		22:15					2		1		3	
10:30					9		3		12		22:30					0		1		1	
10:45					10	33	9	22	19	55	22:45					0	2	0	2	0	4
11:00					4		6		10		23:00					1		0		1	
11:15					9		10		19		23:15					0		0		0	
11:30					7		6		13		23:30					0		0		0	
11:45					3	23	13	35	16	58	23:45					0	1	0		0	1
TOTALS						216		230		446	TOTALS						229		298		527
SPLIT %						48.4%		51.6%		45.8%	SPLIT %						43.5%		56.5%		54.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	445	528	973

AM Peak Hour			8:00	8:00	8:00	PM Peak Hour			15:30	15:15	15:15
AM Pk Volume			81	84	165	PM Pk Volume			41	110	150
Pk Hr Factor			0.579	0.538	0.711	Pk Hr Factor			0.788	0.491	0.560
7 - 9 Volume	0	0	112	128	240	4 - 6 Volume	0	0	47	57	104
7 - 9 Peak Hour			8:00	8:00	8:00	4 - 6 Peak Hour			16:15	16:15	16:15
7 - 9 Pk Volume	0	0	81	84	165	4 - 6 Pk Volume	0	0	29	33	62
Pk Hr Factor	0.000	0.000	0.579	0.538	0.711	Pk Hr Factor	0.000	0.000	0.558	0.917	0.705

Prepared by NDS/ATD

VOLUME

Morning View Dr Bet. Via Cabrillo & Pacific Coast Hwy

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_020

DAILY TOTALS	NB	SB	EB	WB	Total
	1,453	1,408	0	0	2,861

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	1		0				1		12:00	12		11				23	
0:15	0		0				0		12:15	9		42				51	
0:30	0		0				0		12:30	16		11				27	
0:45	0	1	0				0	1	12:45	22	59	19	83			41	142
1:00	0		0				0		13:00	6		11				17	
1:15	0		0				0		13:15	7		7				14	
1:30	0		0				0		13:30	7		14				21	
1:45	0		0				0		13:45	13	33	17	49			30	82
2:00	1		1				2		14:00	14		14				28	
2:15	0		0				0		14:15	12		18				30	
2:30	0		0				0		14:30	11		16				27	
2:45	0	1	0	1			0	2	14:45	21	58	34	82			55	140
3:00	1		0				1		15:00	36		17				53	
3:15	0		1				1		15:15	51		26				77	
3:30	0		0				0		15:30	75		88				163	
3:45	1	2	0	1			1	3	15:45	32	194	89	220			121	414
4:00	0		0				0		16:00	22		55				77	
4:15	0		0				0		16:15	20		33				53	
4:30	0		0				0		16:30	14		24				38	
4:45	1	1	0				1	1	16:45	15	71	21	133			36	204
5:00	2		0				2		17:00	22		23				45	
5:15	12		2				14		17:15	8		23				31	
5:30	7		5				12		17:30	16		17				33	
5:45	5	26	0	7			5	33	17:45	27	73	11	74			38	147
6:00	6		4				10		18:00	12		34				46	
6:15	11		4				15		18:15	10		24				34	
6:30	18		3				21		18:30	6		13				19	
6:45	26	61	9	20			35	81	18:45	8	36	3	74			11	110
7:00	27		1				28		19:00	2		17				19	
7:15	33		8				41		19:15	2		12				14	
7:30	32		8				40		19:30	3		10				13	
7:45	47	139	11	28			58	167	19:45	1	8	11	50			12	58
8:00	67		25				92		20:00	8		16				24	
8:15	182		85				267		20:15	3		13				16	
8:30	126		129				255		20:30	3		15				18	
8:45	65	440	68	307			133	747	20:45	4	18	12	56			16	74
9:00	22		15				37		21:00	2		13				15	
9:15	20		14				34		21:15	3		2				5	
9:30	13		16				29		21:30	3		3				6	
9:45	17	72	25	70			42	142	21:45	4	12	4	22			8	34
10:00	16		8				24		22:00	2		1				3	
10:15	20		16				36		22:15	2		2				4	
10:30	17		19				36		22:30	0		2				2	
10:45	16	69	14	57			30	126	22:45	0	4	3	8			3	12
11:00	15		14				29		23:00	1		2				3	
11:15	23		14				37		23:15	2		1				3	
11:30	11		20				31		23:30	3		2				5	
11:45	18	67	12	60			30	127	23:45	2	8	1	6			3	14
TOTALS		879		551				1430	TOTALS		574		857				1431
SPLIT %		61.5%		38.5%				50.0%	SPLIT %		40.1%		59.9%				50.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,453	1,408	0	0	2,861

AM Peak Hour	8:00	8:00					8:00		PM Peak Hour	15:00	15:30					15:15		
AM Pk Volume	440	307					747		PM Pk Volume	194	265					438		
Pk Hr Factor	0.604	0.595					0.699		Pk Hr Factor	0.647	0.744					0.672		
7 - 9 Volume	579	335	0	0			914		4 - 6 Volume	144	207	0	0			351		
7 - 9 Peak Hour	8:00	8:00					8:00		4 - 6 Peak Hour	17:00	16:00					16:00		
7 - 9 Pk Volume	440	307	0	0			747		4 - 6 Pk Volume	73	133	0	0			204		
Pk Hr Factor	0.604	0.595	0.000	0.000			0.699		Pk Hr Factor	0.676	0.605	0.000	0.000			0.662		

Prepared by NDS/ATD

VOLUME

Philip Ave Bet. Morning View Dr & Cuthbert Rd

Day: Thursday
Date: 10/21/2021

City: Malibu
Project #: CA21_020306_021

DAILY TOTALS	NB	SB	EB	WB	Total
	477	527	0	0	1,004

AM Period	NB		SB		EB		WB		TOTAL	
0:00	1		0						1	
0:15	0		0						0	
0:30	0		0						0	
0:45	0	1	0						0	1
1:00	1		0						1	
1:15	0		0						0	
1:30	0		0						0	
1:45	0	1	0						0	1
2:00	0		0						0	
2:15	0		0						0	
2:30	0		0						0	
2:45	0		0						0	
3:00	1		1						2	
3:15	0		0						0	
3:30	0		0						0	
3:45	0	1	0	1					0	2
4:00	0		0						0	
4:15	0		1						1	
4:30	0		0						0	
4:45	0		2	3					2	3
5:00	0		0						0	
5:15	1		1						2	
5:30	0		2						2	
5:45	2	3	0	3					2	6
6:00	6		3						9	
6:15	7		3						10	
6:30	13		1						14	
6:45	31	57	2	9					33	66
7:00	15		7						22	
7:15	19		6						25	
7:30	10		8						18	
7:45	16	60	7	28					23	88
8:00	12		6						18	
8:15	11		14						25	
8:30	14		9						23	
8:45	13	50	15	44					28	94
9:00	11		9						20	
9:15	15		6						21	
9:30	9		8						17	
9:45	6	41	11	34					17	75
10:00	11		11						22	
10:15	8		10						18	
10:30	6		12						18	
10:45	11	36	11	44					22	80
11:00	7		9						16	
11:15	7		15						22	
11:30	7		10						17	
11:45	12	33	14	48					26	81
TOTALS		283		214						497
SPLIT %		56.9%		43.1%						49.5%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	8		12						20	
12:15	7		9						16	
12:30	7		7						14	
12:45	9	31	11	39					20	70
13:00	6		10						16	
13:15	6		12						18	
13:30	1		7						8	
13:45	2	15	13	42					15	57
14:00	3		9						12	
14:15	8		15						23	
14:30	7		10						17	
14:45	5	23	19	53					24	76
15:00	5		17						22	
15:15	6		19						25	
15:30	5		13						18	
15:45	10	26	11	60					21	86
16:00	6		9						15	
16:15	11		17						28	
16:30	4		12						16	
16:45	3	24	7	45					10	69
17:00	10		7						17	
17:15	6		4						10	
17:30	3		7						10	
17:45	3	22	5	23					8	45
18:00	3		6						9	
18:15	3		2						5	
18:30	5		3						8	
18:45	0	11	3	14					3	25
19:00	4		5						9	
19:15	2		2						4	
19:30	3		2						5	
19:45	2	11	0	9					2	20
20:00	5		1						6	
20:15	4		6						10	
20:30	9		6						15	
20:45	2	20	7	20					9	40
21:00	0		1						1	
21:15	0		1						1	
21:30	2		1						3	
21:45	2	4	0	3					2	7
22:00	2		1						3	
22:15	2		1						3	
22:30	0		1						1	
22:45	2	6	0	3					2	9
23:00	0		1						1	
23:15	0		0						0	
23:30	1		1						2	
23:45	0	1	0	2					0	3
TOTALS		194		313						507
SPLIT %		38.3%		61.7%						50.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	477	527	0	0	1,004

AM Peak Hour	6:30	11:15			6:45
AM Pk Volume	78	51			98
Pk Hr Factor	0.629	0.850			0.742
7 - 9 Volume	110	72	0	0	182
7 - 9 Peak Hour	7:00	8:00			8:00
7 - 9 Pk Volume	60	44	0	0	94
Pk Hr Factor	0.789	0.733	0.000	0.000	0.839

PM Peak Hour	15:30	14:45			14:45
PM Pk Volume	32	68			89
Pk Hr Factor	0.727	0.895			0.890
4 - 6 Volume	46	68	0	0	114
4 - 6 Peak Hour	16:15	16:00			16:15
4 - 6 Pk Volume	28	45	0	0	71
Pk Hr Factor	0.636	0.662	0.000	0.000	0.634

Prepared by NDS/ATD

VOLUME

Trancas Canyon Rd Bet. North City Limit/Anacapa View Dr & Pacific Coast Hwy

Day: Tuesday
Date: 11/2/2021

City: Malibu
Project #: CA21_020306_022

DAILY TOTALS	NB	SB	EB	WB	Total
	488	492	0	0	980

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0		12:00	7		10						17	
0:15	0		0						0		12:15	6		9						15	
0:30	0		0						0		12:30	4		10						14	
0:45	0		0						0		12:45	6	23	10	39					16	62
1:00	0		0						0		13:00	6		7						13	
1:15	0		0						0		13:15	11		3						14	
1:30	0		0						0		13:30	8		6						14	
1:45	0		0						0		13:45	8	33	5	21					13	54
2:00	0		0						0		14:00	15		8						23	
2:15	0		0						0		14:15	6		10						16	
2:30	0		0						0		14:30	8		13						21	
2:45	0		0						0		14:45	9	38	14	45					23	83
3:00	1		0						1		15:00	12		19						31	
3:15	0		0						0		15:15	5		15						20	
3:30	0		1						1		15:30	9		16						25	
3:45	0	1	0	1					0	2	15:45	15	41	15	65					30	106
4:00	0		0						0		16:00	14		12						26	
4:15	1		1						2		16:15	24		15						39	
4:30	1		2						3		16:30	11		11						22	
4:45	0	2	1	4					1	6	16:45	11	60	7	45					18	105
5:00	0		0						0		17:00	9		12						21	
5:15	1		0						1		17:15	9		6						15	
5:30	1		0						1		17:30	8		11						19	
5:45	2	4	5	5					7	9	17:45	10	36	7	36					17	72
6:00	1		2						3		18:00	5		6						11	
6:15	3		3						6		18:15	6		18						24	
6:30	10		0						10		18:30	5		5						10	
6:45	8	22	5	10					13	32	18:45	8	24	5	34					13	58
7:00	3		3						6		19:00	3		2						5	
7:15	3		5						8		19:15	4		0						4	
7:30	4		6						10		19:30	6		3						9	
7:45	9	19	7	21					16	40	19:45	5	18	1	6					6	24
8:00	7		3						10		20:00	3		0						3	
8:15	6		14						20		20:15	2		0						2	
8:30	11		10						21		20:30	3		0						3	
8:45	12	36	7	34					19	70	20:45	1	9	2	2					3	11
9:00	12		6						18		21:00	2		1						3	
9:15	9		6						15		21:15	3		2						5	
9:30	5		12						17		21:30	1		1						2	
9:45	9	35	10	34					19	69	21:45	0	6	1	5					1	11
10:00	12		11						23		22:00	0		2						2	
10:15	9		11						20		22:15	1		1						2	
10:30	8		7						15		22:30	2		0						2	
10:45	13	42	6	35					19	77	22:45	1	4	1	4					2	8
11:00	8		6						14		23:00	0		1						1	
11:15	7		12						19		23:15	1		2						3	
11:30	10		9						19		23:30	2		1						3	
11:45	7	32	15	42					22	74	23:45	0	3	0	4					0	7
TOTALS		193		186						379	TOTALS		295		306						601
SPLIT %		50.9%		49.1%						38.7%	SPLIT %		49.1%		50.9%						61.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	488	492	0	0	980

AM Peak Hour	8:30	11:15			9:30	PM Peak Hour	15:45	15:00			15:30
AM Pk Volume	44	46			79	PM Pk Volume	64	65			120
Pk Hr Factor	0.917	0.767			0.859	Pk Hr Factor	0.667	0.855			0.769
7 - 9 Volume	55	55	0	0	110	4 - 6 Volume	96	81	0	0	177
7 - 9 Peak Hour	8:00	7:45			8:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	36	34	0	0	70	4 - 6 Pk Volume	60	45	0	0	105
Pk Hr Factor	0.750	0.607	0.000	0.000	0.833	Pk Hr Factor	0.625	0.750	0.000	0.000	0.673

Prepared by NDS/ATD

VOLUME

Westward Beach Rd Bet. Pacific Coast Hwy & Birdview Ave

Day: Friday
Date: 10/29/2021

City: Malibu
Project #: CA21_020306_023

DAILY TOTALS	NB	SB	EB	WB	Total
	1,165	1,170	0	0	2,335

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	2		4				6		12:00	33		22				55	
0:15	4		0				4		12:15	35		25				60	
0:30	2		3				5		12:30	11		31				42	
0:45	2	10	1	8			3	18	12:45	21	100	26	104			47	204
1:00	2		2				4		13:00	30		27				57	
1:15	4		0				4		13:15	14		28				42	
1:30	1		2				3		13:30	22		27				49	
1:45	1	8	0	4			1	12	13:45	16	82	24	106			40	188
2:00	0		1				1		14:00	19		22				41	
2:15	3		1				4		14:15	24		16				40	
2:30	2		2				4		14:30	27		28				55	
2:45	0	5	1	5			1	10	14:45	20	90	22	88			42	178
3:00	0		0				0		15:00	27		26				53	
3:15	1		0				1		15:15	29		19				48	
3:30	0		0				0		15:30	26		26				52	
3:45	0	1	0				0	1	15:45	18	100	23	94			41	194
4:00	2		0				2		16:00	31		18				49	
4:15	1		0				1		16:15	33		23				56	
4:30	0		1				1		16:30	24		11				35	
4:45	1	4	0	1			1	5	16:45	16	104	20	72			36	176
5:00	0		2				2		17:00	16		32				48	
5:15	1		0				1		17:15	14		26				40	
5:30	0		2				2		17:30	28		21				49	
5:45	0	1	4	8			4	9	17:45	15	73	31	110			46	183
6:00	2		5				7		18:00	27		29				56	
6:15	3		2				5		18:15	35		24				59	
6:30	2		11				13		18:30	21		13				34	
6:45	6	13	13	31			19	44	18:45	20	103	7	73			27	176
7:00	2		12				14		19:00	24		8				32	
7:15	8		11				19		19:15	13		7				20	
7:30	14		10				24		19:30	13		11				24	
7:45	9	33	8	41			17	74	19:45	11	61	7	33			18	94
8:00	8		13				21		20:00	11		3				14	
8:15	12		10				22		20:15	15		3				18	
8:30	11		15				26		20:30	12		9				21	
8:45	12	43	17	55			29	98	20:45	7	45	6	21			13	66
9:00	11		14				25		21:00	10		4				14	
9:15	9		18				27		21:15	6		8				14	
9:30	6		21				27		21:30	9		7				16	
9:45	6	32	15	68			21	100	21:45	12	37	5	24			17	61
10:00	12		21				33		22:00	13		6				19	
10:15	19		19				38		22:15	7		5				12	
10:30	18		27				45		22:30	9		6				15	
10:45	24	73	26	93			50	166	22:45	6	35	4	21			10	56
11:00	17		16				33		23:00	8		5				13	
11:15	18		24				42		23:15	4		1				5	
11:30	34		30				64		23:30	4		3				7	
11:45	21	90	30	100			51	190	23:45	6	22	1	10			7	32
TOTALS		313		414				727	TOTALS		852		756				1608
SPLIT %		43.1%		56.9%				31.1%	SPLIT %		53.0%		47.0%				68.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	1,165	1,170	0	0	2,335

AM Peak Hour	11:30	11:45			11:30	PM Peak Hour	15:30	12:30			17:30
AM Pk Volume	123	108			230	PM Pk Volume	108	112			210
Pk Hr Factor	0.879	0.871			0.898	Pk Hr Factor	0.818	0.903			0.890
7 - 9 Volume	76	96	0	0	172	4 - 6 Volume	177	182	0	0	359
7 - 9 Peak Hour	7:30	8:00			8:00	4 - 6 Peak Hour	16:00	17:00			17:00
7 - 9 Pk Volume	43	55	0	0	98	4 - 6 Pk Volume	104	110	0	0	183
Pk Hr Factor	0.768	0.809	0.000	0.000	0.845	Pk Hr Factor	0.788	0.859	0.000	0.000	0.934

Prepared by NDS/ATD

VOLUME

Puerco Canyon Rd Bet. Pacific Coast Hwy & 1000' N/O Pacific Coast Hwy

Day: Tuesday
Date: 11/2/2021

City: Malibu
Project #: CA21_020306_024

DAILY TOTALS	NB	SB	EB	WB	Total
	65	65	0	0	130

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0		12:00	1		1						2	
0:15	0		0						0		12:15	0		0						0	
0:30	0		0						0		12:30	1		0						1	
0:45	0		0						0		12:45	2	4	0	1					2	5
1:00	0		0						0		13:00	1		2						3	
1:15	0		0						0		13:15	1		1						2	
1:30	0		0						0		13:30	0		0						0	
1:45	0		0						0		13:45	0	2	2	5					2	7
2:00	0		0						0		14:00	1		1						2	
2:15	0		0						0		14:15	0		0						0	
2:30	1		1						2		14:30	1		2						3	
2:45	0	1	0	1					0	2	14:45	0	2	3	6					3	8
3:00	0		0						0		15:00	1		2						3	
3:15	0		0						0		15:15	0		5						5	
3:30	0		0						0		15:30	1		5						6	
3:45	0		0						0		15:45	1	3	3	15					4	18
4:00	0		0						0		16:00	0		3						3	
4:15	0		0						0		16:15	1		2						3	
4:30	0		0						0		16:30	0		2						2	
4:45	1	1	0						1	1	16:45	0	1	0	7					0	8
5:00	0		0						0		17:00	1		0						1	
5:15	0		0						0		17:15	0		0						0	
5:30	0		0						0		17:30	1		1						2	
5:45	1	1	0						1	1	17:45	1	3	0	1					1	4
6:00	2		0						2		18:00	1		1						2	
6:15	1		0						1		18:15	0		1						1	
6:30	5		0						5		18:30	0		1						1	
6:45	8	16	2	2					10	18	18:45	2	3	0	3					2	6
7:00	4		1						5		19:00	0		0						0	
7:15	1		0						1		19:15	0		0						0	
7:30	1		0						1		19:30	1		0						1	
7:45	3	9	0	1					3	10	19:45	0	1	0						0	1
8:00	3		3						6		20:00	0		0						0	
8:15	1		2						3		20:15	0		0						0	
8:30	0		1						1		20:30	1		1						2	
8:45	0	4	0	6					0	10	20:45	0	1	0	1					0	2
9:00	3		2						5		21:00	0		0						0	
9:15	0		3						3		21:15	0		0						0	
9:30	0		0						0		21:30	0		0						0	
9:45	2	5	2	7					4	12	21:45	0		0						0	
10:00	0		1						1		22:00	0		0						0	
10:15	0		1						1		22:15	0		0						0	
10:30	1		1						2		22:30	0		0						0	
10:45	2	3	3	6					5	9	22:45	0		0						0	
11:00	1		0						1		23:00	0		0						0	
11:15	3		3						6		23:15	0		0						0	
11:30	1		0						1		23:30	0		0						0	
11:45	0	5	0	3					0	8	23:45	0		0						0	
TOTALS		45		26						**71**	**TOTALS**		20		39						**59**
SPLIT %		63.4%		36.6%						**54.6%**	**SPLIT %**		33.9%		66.1%						**45.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	65	65	0	0	130

AM Peak Hour	6:15	9:00			**6:15**	**PM Peak Hour**	12:30	15:15			**15:00**
AM Pk Volume	18	7			**21**	**PM Pk Volume**	5	16			**18**
Pk Hr Factor	0.563	0.583			**0.525**	**Pk Hr Factor**	0.625	0.800			**0.750**
7 - 9 Volume	13	7	0	0	**20**	**4 - 6 Volume**	4	8	0	0	**12**
7 - 9 Peak Hour	7:00	7:45			**7:30**	**4 - 6 Peak Hour**	17:00	16:00			**16:00**
7 - 9 Pk Volume	9	6	0	0	**13**	**4 - 6 Pk Volume**	3	7	0	0	**8**
Pk Hr Factor	0.563	0.500	0.000	0.000	**0.542**	**Pk Hr Factor**	0.750	0.583	0.000	0.000	**0.667**

Prepared by NDS/ATD

VOLUME

Rambla Pacifico St Bet. Pacific Coast Hwy & 750' N/O Pacific Coast Hwy

Day: Tuesday
Date: 11/2/2021

City: Malibu
Project #: CA21_020306_025

DAILY TOTALS	NB	SB	EB	WB	Total
	222	240	0	0	462

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0						0		12:00	6		5						11	
0:15	0		0						0		12:15	5		4						9	
0:30	0		1						1		12:30	6		3						9	
0:45	0		0	1					0	1	12:45	7	24	7	19					14	43
1:00	0		0						0		13:00	8		4						12	
1:15	0		0						0		13:15	1		4						5	
1:30	0		0						0		13:30	4		6						10	
1:45	0		0						0		13:45	4	17	1	15					5	32
2:00	0		0						0		14:00	3		3						6	
2:15	0		0						0		14:15	3		6						9	
2:30	0		0						0		14:30	3		5						8	
2:45	1	1	1	1					2	2	14:45	7	16	6	20					13	36
3:00	0		0						0		15:00	2		2						4	
3:15	0		0						0		15:15	0		1						1	
3:30	0		0						0		15:30	9		5						14	
3:45	0		0						0		15:45	3	14	2	10					5	24
4:00	0		0						0		16:00	8		4						12	
4:15	0		0						0		16:15	2		2						4	
4:30	0		0						0		16:30	3		4						7	
4:45	0		0						0		16:45	8	21	1	11					9	32
5:00	0		0						0		17:00	4		4						8	
5:15	0		0						0		17:15	4		9						13	
5:30	1		1						2		17:30	4		6						10	
5:45	1	2	1	2					2	4	17:45	4	16	5	24					9	40
6:00	0		0						0		18:00	3		2						5	
6:15	0		0						0		18:15	4		2						6	
6:30	2		1						3		18:30	0		0						0	
6:45	1	3	2	3					3	6	18:45	0	7	3	7					3	14
7:00	0		3						3		19:00	0		2						2	
7:15	2		4						6		19:15	4		0						4	
7:30	0		2						2		19:30	3		1						4	
7:45	3	5	4	13					7	18	19:45	5	12	2	5					7	17
8:00	2		8						10		20:00	0		0						0	
8:15	6		4						10		20:15	2		5						7	
8:30	9		8						17		20:30	3		3						6	
8:45	3	20	8	28					11	48	20:45	1	6	2	10					3	16
9:00	6		8						14		21:00	0		1						1	
9:15	6		4						10		21:15	0		0						0	
9:30	3		4						7		21:30	2		1						3	
9:45	1	16	6	22					7	38	21:45	3	5	2	4					5	9
10:00	3		5						8		22:00	4		1						5	
10:15	5		7						12		22:15	2		2						4	
10:30	6		9						15		22:30	1		1						2	
10:45	2	16	2	23					4	39	22:45	0	7	0	4					0	11
11:00	3		4						7		23:00	0		1						1	
11:15	2		5						7		23:15	1		2						3	
11:30	5		0						5		23:30	0		1						1	
11:45	2	12	5	14					7	26	23:45	1	2	0	4					1	6
TOTALS		75		107						182	TOTALS		147		133						280
SPLIT %		41.2%		58.8%						39.4%	SPLIT %		52.5%		47.5%						60.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	222	240	0	0	462

AM Peak Hour	8:15	8:00			8:15	PM Peak Hour	12:15	17:00			12:15
AM Pk Volume	24	28			52	PM Pk Volume	26	24			44
Pk Hr Factor	0.667	0.875			0.765	Pk Hr Factor	0.813	0.667			0.786
7 - 9 Volume	25	41	0	0	66	4 - 6 Volume	37	35	0	0	72
7 - 9 Peak Hour	7:45	8:00			8:00	4 - 6 Peak Hour	16:00	17:00			16:45
7 - 9 Pk Volume	20	28	0	0	48	4 - 6 Pk Volume	21	24	0	0	40
Pk Hr Factor	0.556	0.875	0.000	0.000	0.706	Pk Hr Factor	0.656	0.667	0.000	0.000	0.769

Prepared by National Data & Surveying Services

VOLUME

Busch Dr Bet. Meritt Dr & PCH

Day: Thursday
Date: 12/16/2021

City: Malibu
Project #: CA21_050024_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,020	1,021	2,041

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00					0		0		0		12:00					23		20		43	
00:15					1		0		1		12:15					19		21		40	
00:30					0		0		0		12:30					22		23		45	
00:45					0	1	0		0	1	12:45					47	111	23	87	70	198
01:00					0		0		0		13:00					28		29		57	
01:15					0		0		0		13:15					36		23		59	
01:30					1		0		1		13:30					13		14		27	
01:45					0	1	0		0	1	13:45					30	107	22	88	52	195
02:00					0		0		0		14:00					20		19		39	
02:15					0		0		0		14:15					26		12		38	
02:30					0		0		0		14:30					28		13		41	
02:45					0		0		0		14:45					26	100	13	57	39	157
03:00					0		0		0		15:00					27		14		41	
03:15					0		0		0		15:15					42		27		69	
03:30					0		0		0		15:30					37		14		51	
03:45					0		0		0		15:45					20	126	13	68	33	194
04:00					1		1		2		16:00					19		11		30	
04:15					0		0		0		16:15					18		17		35	
04:30					0		0		0		16:30					18		15		33	
04:45					1	2	0	1	1	3	16:45					15	70	13	56	28	126
05:00					0		1		1		17:00					16		8		24	
05:15					0		2		2		17:15					11		13		24	
05:30					3		4		7		17:30					9		11		20	
05:45					0	3	5	12	5	15	17:45					11	47	10	42	21	89
06:00					2		12		14		18:00					7		12		19	
06:15					1		13		14		18:15					8		5		13	
06:30					3		22		25		18:30					8		8		16	
06:45					6	12	26	73	32	85	18:45					9	32	9	34	18	66
07:00					7		36		43		19:00					8		10		18	
07:15					15		22		37		19:15					3		5		8	
07:30					12		29		41		19:30					4		5		9	
07:45					10	44	20	107	30	151	19:45					8	23	4	24	12	47
08:00					17		24		41		20:00					7		4		11	
08:15					19		23		42		20:15					8		1		9	
08:30					16		23		39		20:30					4		5		9	
08:45					22	74	25	95	47	169	20:45					2	21	9	19	11	40
09:00					10		17		27		21:00					2		4		6	
09:15					21		19		40		21:15					1		3		4	
09:30					19		20		39		21:30					0		1		1	
09:45					20	70	26	82	46	152	21:45					0	3	5	13	5	16
10:00					21		17		38		22:00					5		5		10	
10:15					19		20		39		22:15					2		2		4	
10:30					21		16		37		22:30					0		3		3	
10:45					27	88	19	72	46	160	22:45					0	7	2	12	2	19
11:00					21		22		43		23:00					1		0		1	
11:15					19		19		38		23:15					1		0		1	
11:30					14		18		32		23:30					1		0		1	
11:45					21	75	20	79	41	154	23:45					0	3	0		0	3
TOTALS						370		521		891	TOTALS						650		500		1150
SPLIT %						41.5%		58.5%		43.7%	SPLIT %						56.5%		43.5%		56.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,020	1,021	2,041

AM Peak Hour			10:00	06:45	08:00	PM Peak Hour			12:30	12:30	12:30
AM Pk Volume			88	113	169	PM Pk Volume			133	98	231
Pk Hr Factor			0.815	0.785	0.899	Pk Hr Factor			0.707	0.845	0.825
7 - 9 Volume	0	0	118	202	320	4 - 6 Volume	0	0	117	98	215
7 - 9 Peak Hour			08:00	07:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	74	107	169	4 - 6 Pk Volume	0	0	70	56	126
Pk Hr Factor	0.000	0.000	0.841	0.743	0.899	Pk Hr Factor	0.000	0.000	0.921	0.824	0.900

Prepared by National Data & Surveying Services

VOLUME

Carbon Canyon Rd Bet. Carbon Mesa Rd & PCH

Day: Thursday
Date: 12/16/2021

City: Malibu
Project #: CA21_050024_002

DAILY TOTALS	NB	SB	EB	WB	Total
	221	238	0	0	459

AM Period	NB		SB		EB		WB		TOTAL	
00:00	0		0						0	
00:15	0		1						1	
00:30	0		0						0	
00:45	0		0	1					0	1
01:00	0		0						0	
01:15	0		0						0	
01:30	0		0						0	
01:45	0		0						0	
02:00	0		0						0	
02:15	0		0						0	
02:30	0		0						0	
02:45	0		0						0	
03:00	0		0						0	
03:15	0		0						0	
03:30	0		0						0	
03:45	0		0						0	
04:00	0		0						0	
04:15	0		0						0	
04:30	0		0						0	
04:45	0		0						0	
05:00	0		0						0	
05:15	0		0						0	
05:30	2		0						2	
05:45	0	2	1	1					1	3
06:00	2		0						2	
06:15	0		0						0	
06:30	6		2						8	
06:45	6	14	1	3					7	17
07:00	4		0						4	
07:15	1		1						2	
07:30	1		2						3	
07:45	2	8	0	3					2	11
08:00	1		2						3	
08:15	2		3						5	
08:30	7		4						11	
08:45	9	19	5	14					14	33
09:00	7		2						9	
09:15	3		3						6	
09:30	8		1						9	
09:45	5	23	12	18					17	41
10:00	5		7						12	
10:15	1		12						13	
10:30	3		4						7	
10:45	4	13	6	29					10	42
11:00	5		6						11	
11:15	2		4						6	
11:30	10		7						17	
11:45	7	24	3	20					10	44
TOTALS		103		89						192
SPLIT %		53.6%		46.4%						41.8%

PM Period	NB		SB		EB		WB		TOTAL	
12:00	7		8						15	
12:15	3		9						12	
12:30	5		12						17	
12:45	3	18	7	36					10	54
13:00	7		5						12	
13:15	2		7						9	
13:30	11		0						11	
13:45	4	24	9	21					13	45
14:00	3		7						10	
14:15	4		5						9	
14:30	2		10						12	
14:45	3	12	8	30					11	42
15:00	9		5						14	
15:15	2		8						10	
15:30	3		5						8	
15:45	5	19	5	23					10	42
16:00	4		4						8	
16:15	0		2						2	
16:30	6		6						12	
16:45	3	13	3	15					6	28
17:00	1		3						4	
17:15	1		0						1	
17:30	2		1						3	
17:45	2	6	2	6					4	12
18:00	2		1						3	
18:15	1		2						3	
18:30	0		0						0	
18:45	5	8	1	4					6	12
19:00	2		3						5	
19:15	1		0						1	
19:30	0		4						4	
19:45	3	6	0	7					3	13
20:00	4		3						7	
20:15	0		1						1	
20:30	0		0						0	
20:45	0	4	0	4					0	8
21:00	0		0						0	
21:15	2		0						2	
21:30	1		0						1	
21:45	1	4	2	2					3	6
22:00	2		0						2	
22:15	0		1						1	
22:30	1		0						1	
22:45	1	4	0	1					1	5
23:00	0		0						0	
23:15	0		0						0	
23:30	0		0						0	
23:45	0		0						0	
TOTALS		118		149						267
SPLIT %		44.2%		55.8%						58.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	221	238	0	0	459

AM Peak Hour	08:45	09:45			11:30	PM Peak Hour	13:00	12:00			12:00
AM Pk Volume	27	35			54	PM Pk Volume	24	36			54
Pk Hr Factor	0.750	0.729			0.794	Pk Hr Factor	0.545	0.750			0.794
7 - 9 Volume	27	17	0	0	44	4 - 6 Volume	19	21	0	0	40
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	19	14	0	0	33	4 - 6 Pk Volume	13	15	0	0	28
Pk Hr Factor	0.528	0.700	0.000	0.000	0.589	Pk Hr Factor	0.542	0.625	0.000	0.000	0.583

Prepared by National Data & Surveying Services

VOLUME

Carbon Mesa Rd W/O Carbon Canyon rd

Day: Thursday
Date: 12/16/2021

City: Malibu
Project #: CA21_050024_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	172	174	346

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			6	8	14
00:15			0	0	0	12:15			6	3	9
00:30			0	0	0	12:30			9	3	12
00:45			0	0	0	12:45			5	26	2	16	7	42
01:00			0	0	0	13:00			2	5	7
01:15			0	0	0	13:15			5	2	7
01:30			0	0	0	13:30			0	10	10
01:45			0	0	0	13:45			8	15	1	18	9	33
02:00			0	0	0	14:00			3	2	5
02:15			0	0	0	14:15			5	4	9
02:30			0	0	0	14:30			7	2	9
02:45			0	0	0	14:45			5	20	3	11	8	31
03:00			0	0	0	15:00			5	6	11
03:15			0	0	0	15:15			8	1	9
03:30			0	0	0	15:30			3	3	6
03:45			0	0	0	15:45			4	20	5	15	9	35
04:00			0	0	0	16:00			3	3	6
04:15			0	0	0	16:15			2	1	3
04:30			0	0	0	16:30			3	3	6
04:45			0	0	0	16:45			2	10	3	10	5	20
05:00			0	0	0	17:00			3	0	3
05:15			0	0	0	17:15			0	1	1
05:30			0	1	1	17:30			1	2	3
05:45			1	1	0	1	1	2	17:45			2	6	2	5	4	11
06:00			0	2	2	18:00			1	1	2
06:15			0	0	0	18:15			0	1	1
06:30			2	6	8	18:30			0	0	0
06:45			2	4	6	14	8	18	18:45			1	2	4	6	5	8
07:00			0	4	4	19:00			3	2	5
07:15			3	1	4	19:15			0	1	1
07:30			1	1	2	19:30			2	0	2
07:45			0	4	1	7	1	11	19:45			0	5	3	6	3	11
08:00			1	0	1	20:00			1	0	1
08:15			2	2	4	20:15			1	1	2
08:30			3	4	7	20:30			0	0	0
08:45			3	9	4	10	7	19	20:45			0	2	0	1	0	3
09:00			0	7	7	21:00			0	0	0
09:15			3	3	6	21:15			0	2	2
09:30			2	6	8	21:30			0	1	1
09:45			6	11	4	20	10	31	21:45			1	1	1	4	2	5
10:00			6	1	7	22:00			0	2	2
10:15			7	1	8	22:15			1	0	1
10:30			3	1	4	22:30			0	1	1
10:45			5	21	3	6	8	27	22:45			0	1	1	4	1	5
11:00			4	5	9	23:00			0	0	0
11:15			3	0	3	23:15			0	0	0
11:30			4	10	14	23:30			0	0	0
11:45			3	14	5	20	8	34	23:45			0	0	0
TOTALS				64	78	142	TOTALS				108	96	204
SPLIT %				45.1%	54.9%	41.0%	SPLIT %				52.9%	47.1%	59.0%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	172	174	346

AM Peak Hour			11:45	11:30	11:30	PM Peak Hour			12:00	12:45	12:00
AM Pk Volume			24	26	45	PM Pk Volume			26	19	42
Pk Hr Factor			0.667	0.650	0.804	Pk Hr Factor			0.722	0.475	0.750
7 - 9 Volume	0	0	13	17	30	4 - 6 Volume	0	0	16	15	31
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	9	10	19	4 - 6 Pk Volume	0	0	10	10	20
Pk Hr Factor	0.000	0.000	0.750	0.625	0.679	Pk Hr Factor	0.000	0.000	0.833	0.833	0.833