



CHAIR CARLOS HERNANDEZ
VICE CHAIR FRANCISCO ARRIZON
COMMISSIONER DEE AKEMON
COMMISSIONER NICOLE MOHR
COMMISSIONER RUDY TRUJILLO

TRANSPORTATION AND SAFETY COMMISSION
REGULAR MEETING NOTICE AND AGENDA
NOVEMBER 3, 2021 – 6 PM

CITY HALL COUNCIL CHAMBERS
117 MACNEIL STREET
SAN FERNANDO, CA 91340

WATCH THE MEETING: Live stream with audio and video, via YouTube Live at:

<https://www.youtube.com/c/CityOfSanFernando>

CALL TO ORDER/ROLL CALL

Chair Carlos Hernandez
Vice Chair Francisco Arrizon
Commissioner Dee Akemon
Commissioner Nicole Mohr
Commissioner Rudy Trujillo

PLEDGE OF ALLEGIANCE

APPROVAL OF AGENDA

DECORUM AND ORDER

City Commissioners are appointed by City Council and must be free to discuss issues confronting the city in an orderly environment. Public members attending City Commission meetings shall observe the same rules of order and decorum applicable to the City Council ([SF Procedural Manual](#)). Any person making impertinent derogatory or slanderous remarks or who becomes boisterous while addressing a City Commission or while attending a City Commission meeting, may be removed from the room if the Presiding Officer so directs the Sergeant-At-Arms and such person may be barred from further audience before the City Commission.

TRANSPORTATION AND SAFETY COMMISSION

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PUBLIC STATEMENTS – WRITTEN/ORAL

There will be a three (3) minute limitation per each member of the audience who wishes to make comments relating to Commission Business. Anyone wishing to speak, please fill out the white form located at the Council Chambers podium, and submit it to the Commission Chair. When addressing the Commission please speak into the microphone and voluntarily state your name and address.

CONSENT CALENDAR

Items on the Consent Calendar are considered routine and may be disposed of by a single motion to adopt staff recommendation. If the Transportation and Safety Commission wishes to discuss any item, it should first be removed from the Consent Calendar.

1. REQUEST TO APPROVE MEETING MINUTES OF SEPTEMBER 1, 2021 – REGULAR MEETING

ADMINISTRATIVE REPORTS

- 1. DISCUSSION AND CONSIDERATION OF RECOMMENDATIONS FROM THE PUBLIC SAFETY COMMISSION AD HOC COMMITTEE RELATED TO ESTABLISHING A PUBLIC SAFETY COMMISSION**
- 2. CONSIDERATION TO RECOMMEND APPROVAL OF ENGINEERING AND TRAFFIC SURVEY FOR SPEED LIMITS 2021 TO ALLOW FOR SPEED RADAR ENFORCEMENT ON CITY STREETS**
- 3. UPDATE ON SAFE ROUTES TO SCHOOL PROJECTS – CYCLES 1 AND 2**

GENERAL COMMISSION COMMENTS

STAFF COMMUNICATION

- 1. SAFE AND ACTIVE STREETS PLAN**
- 2. RECENT TRAFFIC STUDIES IN THE CITY – UPDATE**
- 3. PEDESTRIAN ENFORCEMENT FINDINGS (LT. HANCHETT)**
- 4. SAN FERNANDO MALL BOLLARD INSTALLATION PROJECT**

TRANSPORTATION AND SAFETY COMMISSION

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ADJOURNMENT

I hereby certify under penalty of perjury under the laws of the State of California that the foregoing agenda was posted on the City Hall bulletin board not less than 72 hours prior to the meeting.

Maria Padilla, Executive Assistant

Signed and Posted: October 29, 2021 (4:00 p.m.)

Agendas and complete Agenda Packets (including staff reports and exhibits related to each item) are posted on the City's Internet Web site (www.sfcity.org). These are also available for public reviewing prior to a meeting at the Public Works Department Public Counter. Any public writings distributed by the Transportation & Safety Commission to at least a majority of the Commissioners regarding any item on this regular meeting agenda will also be made available at the Public Works Department Public Counter located at 117 Macneil Street, San Fernando, CA, 91340 during normal business hours. In addition, the City may also post such documents on the City's Web Site at www.sfcity.org. In accordance with the Americans with Disabilities Act of 1990, if you require a disability-related modification/ accommodation to attend or participate in this meeting, including auxiliary aids or services please call the Public Works Department Office at (818) 898-1222 at least 48 hours prior to the meeting.



CITY OF SAN FERNANDO
TRANSPORTATION AND SAFETY COMMISSION

REGULAR MEETING
MINUTES
SEPTEMBER 1, 2021
ZOOM MEETING STREAMED ON YOUTUBE

THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS TAKEN BY THE TRANSPORTATION & SAFETY COMMISSION. VIDEO AND AUDIO OF THE ACTUAL MEETING ARE AVAILABLE FOR LISTENING AT: <https://www.youtube.com/c/CityOfSanFernando>

CALL TO ORDER/ROLL CALL

Commissioner Mohr called the meeting to order at 6:00 p.m. Executive Assistant, Maria Padilla, called the roll call.

The following persons were recorded as present:

PRESENT:

Chair Carlos Hernandez and Commissioners Dee Akemon, Nicole Mohr, and Rudy Trujillo

ABSENT:

Vice Chair Francisco Arrizon

ALSO PRESENT:

Director of Public Works Matt Baumgardner and Executive Assistant Maria Padilla

PLEDGE OF ALLEGIANCE

Commissioner Mohr led the Pledge of Allegiance.

APPROVAL OF AGENDA

Commissioner Trujillo motioned to approve the agenda for the September 1, 2021 Transportation and Safety Commission meeting. Commissioner Akemon seconded the motion. The motion carried with the following votes:

| | |
|----------|---|
| AYES: | D. Akemon, C. Hernandez, N. Mohr, and R. Trujillo - 4 |
| NOES: | None |
| ABSENT: | F. Arrizon - 1 |
| ABSTAIN: | None |

TRANSPORTATION AND SAFETY COMMISSION

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PUBLIC STATEMENTS – WRITTEN/ORAL

None

CONSENT CALENDAR

Commissioner Mohr motioned to approve the minutes for the August 4, 2021 Transportation & Safety Commission meeting. Commissioner Hernandez seconded the motion. The motion carried with the following votes:

| | |
|----------|---|
| AYES: | D. Akemon, C. Hernandez, N. Mohr, and R. Trujillo - 4 |
| NOES: | None |
| ABSENT: | F. Arrizon - 1 |
| ABSTAIN: | None |

ADMINISTRATIVE REPORTS

- 1. BEAUTIFICATION PROGRAM REVIEW–** Matt Baumgardner provided background on the program. Councilmember Cindy Montañez presented the concept. The goal of the Beautification Program is to clean up the neighborhood. The Commission provided input and feedback.
- 2. REORGANIZATION OF THE COMMISSION – SELECTION OF CHAIR AND VICE CHAIR (IF NECESSARY) –** Calls for nominations of Chair: Commissioner Trujillo nominated Carlos Hernandez as Chair, seconded by Commissioner Mohr. Commissioner Hernandez accepted the nomination. Commissioner Mohr motioned to close nominations. Commissioner Akemon seconded by The motion carried with the following votes:

| | |
|----------|---|
| AYES: | D. Akemon, C. Hernandez, N. Mohr, and R. Trujillo - 4 |
| NOES: | None |
| ABSENT: | F. Arrizon - 1 |
| ABSTAIN: | None |

- 3. DISCUSSION REGARDING THE LOCATION OF STOPS ALONG THE CITY OF SAN FERNANDO TROLLEY ROUTE –** Mr. Baumgardner provided informational report on location of stops along the trolley route. Request for a potential new stop was brought up at a recent Council meeting. The route was last modified in 2012. The Commission directed staff to review current route, collect data from the service provider on ridership, frequency, inventory of existing stops, resources and surveys. Item to be brought back at a future meeting.

TRANSPORTATION AND SAFETY COMMISSION

Regular Meeting Minutes – September 1, 2021

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GENERAL COMMISSION COMMENTS

Commissioner Trujillo saddened to learn of the passing of Gilbert Tewksbury.

Commissioner Mohr wished the City a happy birthday and is proud to be part of the City.

Commissioner Akemon attended an event at the mall and was happy to see restaurants filled and stores being checked out.

Chair Hernandez appreciates the different viewpoints that were presented.

Commission congratulated Chair Hernandez on being appointed chair.

STAFF COMMUNICATION

1. **SAFE AND ACTIVE STREETS PLAN** – Chair Hernandez and Matt Baumgardner provided update.
2. **RECENT TRAFFIC STUDIES IN THE CITY - UPDATE** - Matt Baumgardner provided update on the studies that were done at Fourth and Fermoore, Fifth and Fermoore, the installation of flashing beacons at Huntington/Griffith, and installation of No Overnight Parking signs at City lots. Collection of data for Wolfskill has been completed but is pending interpretation and analysis. Recommendations for Wolfskill should be presented at next meeting. I

ADJOURNMENT

Commissioner Mohr motioned to adjourn the meeting at 7:50 p.m. Commissioner Akemon seconded the motion. The motion carried with the following votes:

| | |
|----------|---|
| AYES: | D. Akemon, C. Hernandez, N. Mohr, and R. Trujillo - 4 |
| NOES: | None |
| ABSENT: | F. Arrizon - 1 |
| ABSTAIN: | None |

To: Chair Carlos Hernandez and Commissioners

From: Nick Kimball, City Manager

Date: November 3, 2021

Subject: Discussion and Consideration of Recommendations from the Public Safety Commission Ad Hoc Committee Related to Establishing a Public Safety Commission

RECOMMENDATION:

It is recommended that the Transportation and Safety Commission:

- a. Discuss the Public Safety Commission Ad Hoc Committee's recommendations; and
- b. Provide feedback to staff, as appropriate.

BACKGROUND:

1. On June 15, 2020, then Vice Mayor Hector A. Pacheco submitted an agenda report to City Council recommending the creation of a Public Safety Commission Ad Hoc Committee to study the possible establishment of a Public Safety Commission. City Council approved the request and appointed Mayor Joel Fajardo and Vice Mayor Pacheco to serve on the newly formed Ad Hoc Committee.
2. The Ad Hoc Committee met on multiple occasions to discuss possible organization, roles and responsibilities of a Public Safety Commission.
3. On January 4, 2021, City Council approved reorganization of the City Council Ad Hoc Committees and appointed Vice Mayor Mendoza and Councilmember Pacheco to the Public Safety Commission Ad Hoc Committee.
4. On September 2, 2021, after several meetings, the Ad Hoc Committee finalized recommendations to City Council related to the organization, roles and responsibilities of a Public Safety Commission.

5. On October 4, 2021, City Council discussed the recommendations of the Ad Hoc Committee and directed staff to present these recommendations and seek input from the Transportation and Safety Commission at its regularly scheduled November meeting.

ANALYSIS:

In response to the civil unrest that followed the death of George Floyd at the hands of a Minneapolis Police Officer and subsequent Black Lives Matter demonstrations, the City Council formed an Ad Hoc Committee to work with staff to develop recommendations that demonstrate the City's commitment to safe streets, humane policing and transparency in governance by establishing a Public Safety Commission. Through a Public Safety Commission, the San Fernando Police Department and San Fernando community members would be provided with a forum to strengthen community-policing approach through collaboration, respect and transparency while sharing public safety information with the broader public.

After discussing various alternatives, the Ad Hoc Committee recommends that City Council direct staff to prepare an ordinance to rename the current Transportation and Safety Commission to the Transportation and Public Safety Commission and add certain Public Safety advisory roles and responsibilities to their existing roles and responsibilities.

In addition to their current Traffic Safety responsibilities, a re-formed Traffic and Public Safety Commission (TPS Commission) would act as an advisory body receiving information and providing feedback to gain better understanding of Police operations through presentations related to annual/monthly crime statistics, public safety policies (e.g. "Use of Force" and "Immigration Enforcement" policies), annual training programs, and other new policies and/or initiatives prior to final City Council decisions.

A re-formed TPS Commission would also assist with planning and marketing of various public safety events, such as National Night Out, Neighborhood Watch, Business Watch and other community events that support increased public safety in San Fernando.

A sample ordinance for the City of San Marino Public Safety Commission is included as Attachment "A" as the City Council may wish to adopt similar roles and responsibilities for a re-formed TPS Commission.

BUDGET IMPACT:

There is no impact to the budget by discussing this item. There would be a minimal cost for the City Attorney to prepare an ordinance as well as additional staff costs in the Police Department to assist with staffing for a Public Safety Commission. It is estimated that it would require

Discussion and Consideration of Recommendations from the Public Safety Commission Ad Hoc Committee Related to Establishing a Public Safety Commission

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approximately 2 hours per month for the Executive Assistant and 2 – 4 hours per month of other police personnel to prepare reports and present to the Commission.

CONCLUSION:

It is recommended that the Transportation and Safety Commission discuss the Public Safety Commission Ad Hoc Committee's recommendations and provide direction, as appropriate.

ATTACHMENT:

- A. City of San Marino Municipal Code, Article 14: Public Safety Commission

CITY OF SAN MARINO

ARTICLE 14 PUBLIC SAFETY COMMISSION

SECTION:

[02.14.01](#): Creation And Composition

[02.14.02](#): Appointment And Term

[02.14.03](#): Vacancies

[02.14.04](#): Chairperson And Vice Chairperson

[02.14.05](#): Compensation And Expenses

[02.14.06](#): Meetings

[02.14.07](#): Secretary To Commission; Records

[02.14.08](#): Advisory Board To The City Council

02.14.01: CREATION AND COMPOSITION:

There is hereby created the Public Safety Commission, which shall consist of five (5) members and one alternate. Each member shall be an elector of the City. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.02: APPOINTMENT AND TERM:

Members and the alternate member of the Public Safety Commission shall be appointed by the Mayor with the approval of the Council.

Members and the alternate member of the commission shall serve terms of four (4) years, with terms commencing July 1 of the year of appointment; except, that of the Commissioners first appointed, two (2) members and the alternate member shall serve terms of two (2) years and three (3) members shall serve terms of four (4) years. Thereafter, all Commissioners shall serve a term of four (4) years and until a successor has been appointed.

The City Council may remove any member of the commission at any time. Vacancies shall be filled by appointment for the unexpired portion of the remaining time in the same manner as the original appointment.

No Commissioner may serve more than two (2) consecutive terms; however, after waiting a period of at least two (2) years following the end of the second term, a Commissioner may be reappointed to not more than two (2) additional consecutive terms.

No member serving on the Public Safety Commission shall be permitted more than two (2) excused absences per fiscal year. No unexcused absences are allowed. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.03: VACANCIES:

Vacancies to the Public Safety Commission shall be filled by appointment of the Mayor with the approval of the Council, after complying with any waiting period required by law. Appointment to fill a vacancy shall be for the remainder of the unexpired term. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.04: CHAIRPERSON AND VICE CHAIRPERSON:

The members of the Public Safety Commission shall select a Chairperson and a Vice Chairperson from among its members as established by City Council resolution. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.05: COMPENSATION AND EXPENSES:

Members of the Public Safety Commission shall serve without compensation.

Expenses of members of the commission in attendance at meetings related to their duties as members of the Public Safety Commission shall be paid for by the City when such attendance is approved by the Council. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.06: MEETINGS:

The Public Safety Commission shall meet on the first Monday of each and every calendar month at the hour of seven o'clock (7:00) P.M. in the Barth Room of the Crowell Library.

(Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018; amd. Ord. O-20-1361, 4-8-2020)

02.14.07: SECRETARY TO COMMISSION; RECORDS:

The Police Chief shall be the Secretary of the commission. All proceedings and actions by the commission shall be public records, and the Secretary shall record and preserve them.

All officers, departments and department heads of the City shall cooperate and render all reasonable and necessary assistance to the Public Safety Commission. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)

02.14.08: ADVISORY BOARD TO THE CITY COUNCIL:

The Public Safety Commission shall act solely as an advisory board to the City Council and an advocate for public safety and traffic services with respect to matters relating to public safety, including understanding police and fire operations, crime prevention, emergency preparedness, traffic and transportation, and any other matters which may be assigned to it from time to time by the City Council, and shall study and make recommendations as to such matters directly to the City Council in an advisory capacity. Unless expressly authorized by the City Council, the commission shall not represent itself to be acting for or on behalf of the City Council, nor shall it commit the officers, employees, or staff of the City in any manner or to any course of action. To the contrary, the commission shall act as a study center and clearinghouse for advisory action to the City Council. (Ord. 0-18-1334, 2-14-2018, eff. 3-16-2018)



AGENDA REPORT

To: Chair Carlos Hernandez and Commissioners

From: Matt Baumgardner, Director of Public Works
Patsy Orozco, Civil Engineering Assistant II

Date: November 3, 2021

Subject: Consideration to Recommend Approval of Engineering and Traffic Survey for Speed Limits 2021 to Allow for Speed Radar Enforcement on City Streets

RECOMMENDATION:

It is recommended that the Transportation and Safety Commission review and recommend approval of the Engineering and Traffic Survey Report for Speed Limits 2021, establishing speed limit zones in the City.

BACKGROUND:

The California Vehicle Code requires that the City conduct an Engineering and Traffic Survey of local streets every seven (7) years, with the option to extend the survey for three (3) additional years if no changes exist. This requirement helps to ensure the proper posting of speed limits and also enables the Police Department to utilize radar or other electronic speed measuring devices for speed enforcement efforts. The City's existing surveys are set to expire in 2022. To meet this requirement, staff coordinated an analysis to evaluate the existing speed zones within the City of San Fernando.

ANALYSIS:

The California Vehicle Code (CVC) establishes that roadway speed limits are to be set based on specific criteria. These are called prima facie speed limits or posted speed limits. A blanket speed limit of fifteen (15) miles per hour (mph) is established on all alleys, blind intersections, and at blind railroad crossings. A twenty five (25) mph speed limit may be established under the following conditions: 1) On any business or residential district; 2) At school zones, when children are present, and; 3) In senior zones.

The California Department of Transportation requires that the criteria set forth in the California Manual on Uniform Traffic Control Devices (CA MUTCD) be utilized in the establishment of speed limits. This manual requires that a speed limit be set closest to the 85th percentile

Consideration to Approve Citywide Engineering and Traffic Survey to Allow for Speed Radar Enforcement on City Streets

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speeds. The 85th percentile speed is the speed at or below which 85% of the traffic travels. This threshold represents what is historically found to be a safe and reasonable speed for most drivers based on common roadway conditions. Speed limits cannot be set arbitrarily low, as this would create violators of the majority drivers and would not command the respect of the public.

Based on data collected in an engineering and traffic survey, a speed limit is established at the nearest 5-mile per hour increment to the 85th percentile speed. The CA MUTCD does allow for certain conditions to warrant lower speeds, if necessary. In reviewing speed zones and making recommendations, several criteria are considered, including the 85th percentile of existing speed conditions, accident histories, roadway conditions, pedestrian activities, and speed limits in neighboring jurisdictions.

A copy of the Engineering and Traffic Survey Report for Speed Limits 2021 is included with this report (Attachment "A"). The report was completed under the direction of a licensed traffic engineer and includes a significant amount of data collection including speed sampling, a review of accident histories, roadway conditions, traffic characteristics and land use. Based on a review of this information, the survey includes the recommendation of increasing speeds on two (2) of the street segments surveyed as follows:

| Street | From | To | Existing Speed | Recommended Speed | Justification |
|-------------|----------------|------------------|----------------|-------------------|-----------------------------|
| Park Ave. | First St. | Fourth St. | 15 | 25 | 85 th Percentile |
| Maclay Ave. | Glenoaks Blvd. | North City Limit | 30 | 35 | 85 th Percentile |

Based on the survey results, these two (2) street segments are recommended for an increased speed based on 85th percentile speed threshold levels. After reviewing the survey, it its recommended the Transportation and Safety Commission recommended that the City Council adopt the speed limit zones contained in the Engineering and Traffic Survey Report for Speed Limits 2021.

BUDGET IMPACT:

Funding for this survey was included in the City's approved Fiscal Year 2021-2022 budget.

Consideration to Approve Citywide Engineering and Traffic Survey to Allow for Speed Radar Enforcement on City Streets

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CONCLUSION:

It is recommended that the Transportation and Safety Commission review the findings and recommend City Council approve Engineering and Traffic Survey, allowing for the proper enforcements of speed limits in the City.

ATTACHMENT:

A. Engineering and Traffic Survey Report for Speed Limits 2021

Tom Brohard and Associates

October 15, 2021

Ms. Patsy Orozco
Civil Engineering Assistant II
City of San Fernando
117 Macneil Street
San Fernando, California 91340-2993

Subject: Engineering and Traffic Survey Report for Speed Limits, 2021

Dear Ms. Orozco:

As authorized, Tom Brohard and Associates has prepared this Engineering and Traffic Survey Report for Speed Limits, 2021, for the City of San Fernando. This work has been conducted in accordance with and in compliance with provisions in the California Vehicle Code (CVC) and the California Manual on Uniform Traffic Control Devices (California MUTCD 2014 Edition).

A total of 32 street segments were initially surveyed in 2005 as required to establish enforceable speed limits in the City. Each street segment requiring an engineering and traffic survey was identified from the City's Functional Classification Maps filed with the California Department of Transportation.

Engineering and traffic surveys have included measurement of vehicle speeds, traffic volumes, and reviews of roadway design, adjacent development, and traffic collisions. Each engineering and traffic survey was initially valid for seven years, with an extension of three years allowed if there were no significant changes in adjacent development, roadway width, and/or number of travel lanes.

Over the years, some roadway conditions have changed in the City such as the Maclay Avenue Streetscape and the Glenoaks Boulevard Roadway Improvement Projects. With changed roadway conditions, new traffic volume, speed, and collision data have been collected. For other roadway segments where no significant changes were found when roadway conditions were reviewed after seven years, the surveys were extended for three years up to 10 years, the maximum allowable. After 10 years, the engineering and traffic surveys expire, and all new data is required to reestablish an enforceable speed limit.

The following procedure has been followed to establish enforceable speed limits:

- 1) For each of the 32 street segments, calculation of collision rates from the 2018, 2019, and 2020 collision histories from SWITRS (State-Wide Integrated Traffic Records System), together with comparison of these calculated rates to those experienced on similar streets in California.
- 2) Review of all 32 street segments using the most recent Google Earth aerial photography to determine if roadway conditions had changed since the last engineering and traffic survey.

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Engineering and Traffic Survey Report for Speed Limits, 2021
October 15, 2021

- 3) Collection of new vehicle speed and traffic volume data for the nine street segments nearing expiration at 10 years old as well as for the two segments of Glenoaks Boulevard where roadway conditions had changed.
- 4) Analyze data and develop recommended speed limits based on the California Vehicle Code and the California Manual on Uniform Traffic Control Devices, 2014 Edition.

INTRODUCTION

This Engineering and Traffic Survey Report for Speed Limits, 2021, is intended to serve as the basis for the reestablishment and continued enforcement of speed limits for selected streets. This report was authorized by the City of San Fernando and independently conducted by the private traffic engineering consulting firm of Tom Brohard and Associates. Traffic speeds and traffic volumes were collected by Counts Unlimited, a professional traffic data collection company.

Engineering and traffic surveys for speed limits must be regularly conducted by governing municipalities in California to comply with provisions of the California Vehicle Code (CVC). Since the 1970's, Section 40802 of the CVC requires that these surveys be performed at locations where speed limits are enforced with the use of radar or other electronic speed measuring devices. Without a valid engineering and traffic survey, the roadway segment is considered to be a "speed trap". Should that occur, then all testimony and evidence by the enforcing police officer is inadmissible in a court of law, and the speeding ticket is dismissed. State law also requires that enforcement personnel receive periodic training and that their speed measuring devices also be calibrated periodically.

PURPOSE OF SPEED LIMITS

The setting of speed limits can be controversial and requires a rational and defensible determination to maintain public confidence. For many years, speed limits have been set near the 85th percentile speed, a speed that statistically represents the upper limit of what is considered reasonable and prudent behavior. As with most laws, speed limits must depend on voluntary compliance of the greater majority of motorists. Speed limits cannot be set arbitrarily low, as this would create violators of the majority of drivers and would not command the respect of the public.

PROVISIONS OF THE SPEED TRAP LAW

CVC Section 40802 defines a "Speed Trap" as a section of highway which has a speed limit that is not justified by current engineering and traffic survey, and the enforcement of the speed limit involves the use of radar or any other electronic device. CVC Section 40802 defining "Speed Traps" does not apply to a local

street, road, or school zone, but rather applies to all highways that appear on the latest Functional Classification Maps submitted to Caltrans by the local agency.

REQUIRED METHODOLOGY FOR ESTABLISHING SPEED LIMITS

Speed limits in California are governed by the California Vehicle Code (CVC). CVC Section 627 defines the required components of an engineering and traffic survey for a street segment as considering each of the following three items:

- 1) Prevailing speeds as determined by traffic engineering measurements.
- 2) Collision records.
- 3) Highway, traffic, and roadside conditions not readily apparent to the driver.

The California MUTCD, 2014 Edition, provides requirements for engineering and traffic surveys (see enclosure). While engineers have previously had some latitude for engineering judgment in setting speed limits, the current policies and procedures are rigid and even explain how to round up or round down as indicated below. The current procedure requires that the speed limit normally be established at the 5 MPH increment closest to the 85th percentile speed (85% of vehicles travelling at that speed or less) on the street segment, and provides the following options to explain the application of the required rounding procedures:

- Option 1, Example 1 (Rounding Down) - If the 85th percentile speed in a speed survey for a location was 37 MPH, then the speed limit would initially be established at 35 MPH since it is the closest 5 MPH increment to the 37 MPH speed. However, the 35 MPH speed limit could then be reduced further by 5 MPH to 30 MPH if conditions and justification for using the lower speed limit are documented in the engineering and traffic survey and approved by a registered Civil or Traffic Engineer.
- Option 1, Example 2 (Rounding Up) - If the 85th percentile speed in a speed survey for a location was 33 MPH, then the speed limit would initially be established at 35 MPH since it is the closest 5 MPH increment to the 33 MPH speed. However, the 35 MPH speed limit could then be reduced further by 5 MPH to 30 MPH if conditions and justification for using the lower speed limit are documented in the engineering and traffic survey and approved by a registered Civil or Traffic Engineer.
- Option 2, Example 3 (Alternative to Rounding Up) - If the 85th percentile speed in a speed survey for a location was 33 MPH, then the speed limit can be established at 30 MPH rather than rounding up, but no further reductions can be applied (as in Option 1 above).

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October 15, 2021

In the two examples for Option 1 above, the established speed limit can be reduced by 5 MPH if the conditions and justification for using this lower speed limit are documented in the engineering and traffic survey and approved by a registered Civil or Traffic Engineer. Justifications used to reduce the speed limit by 5 MPH involve either a collision rate significantly greater than experienced on other similar roadways, or very unusual roadside conditions that are not readily apparent to motorists.

TRAFFIC VOLUMES AND SPEED MEASUREMENTS FOR SURVEYS

Where the engineering and traffic survey was nearing 10 years old and where roadway conditions had changed (Glenoaks Boulevard), traffic volumes were counted, and vehicle speeds were measured on each of these 11 street segments by Counts Unlimited, a professional traffic data collection company. This traffic data was collected under clear and dry weather conditions. Traffic data was recorded on Wednesday, September 22, 2021, by machines every 15 minutes and summarized every hour over 24 hours by direction of travel. The total daily traffic volumes in both directions were then used to calculate the collision rate for each street segment. Data sheets of the traffic volumes counted, and the vehicle speeds recorded for each of the new surveys are enclosed.

Traffic speeds of all vehicles observed over the 24 hours were simultaneously measured at each location on September 22, 2021. These speed measurements provide a complete sampling of all vehicles counted over the 24 hours. The following measurements were then calculated from the data:

- 1) Average Speed – This speed represents the arithmetic average of the speeds recorded at the particular location.
- 2) 85th Percentile Speed – This is the speed at or below which 85 percent of the traffic was observed. It is the primary measurement as this value represents the top speed of the majority of safe, reasonable motorists. Speed limits are typically established within a range of 5 miles per hour of this speed.
- 3) 10 Mile Pace Speed – This is the 10 mile per hour speed range that contains the largest number of vehicles that were observed. It provides a measure of the dispersion of speeds within the sample surveyed. The top of the 10-mile pace speed typically coincides with the 85th percentile speed.

COLLISION HISTORIES FOR ENGINEERING AND TRAFFIC SURVEYS

Available collision records from the State-Wide Integrated Traffic Records System (SWITRS) were obtained for the three-year period from January 1, 2018, through December 31, 2020. All collisions outside the intersection areas as well as sideswipe collisions, parked vehicle collisions, and solo vehicle hitting fixed

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October 15, 2021

object collisions were identified. Using the daily traffic volumes collected by Counts Unlimited and the roadway segment length, the annual average collision rate for each segment was calculated as follows:

$$\frac{(\text{No. of collisions}) \times (1,000,000)}{(\text{Daily Volume}) \times (365 \text{ Days}) \times (\text{Segment Length}) \times (3 \text{ Years})}$$

The calculated collision rate for each street segment over the three-year period was then compared to state-wide collision rates for similar streets in California, with the results shown on the enclosed spreadsheet "Collision Rates".

DISCUSSION OF SPEED LIMIT CONSIDERATIONS/RECOMMENDATIONS

New Survey Sheets for 11 Street Segments

Speed limit recommendations contained in this report are based upon the California MUTCD 2014 Edition Section 2B.13 and the 2021 CVC which establish policies and procedures for setting speed limits in California. While engineers previously had some latitude for engineering judgment in setting speed limits, the current policies and procedures are rigid and even explain how to round up or round down as indicated above. Individual engineering and traffic survey sheets for each of the 11 street segments (nine of which were expiring at nearly 10 years old and the two locations on Glenoaks Boulevard where roadway conditions changed) are enclosed. These survey sheets include summaries of the measured traffic speeds, roadway design and traffic characteristics, and analysis of collisions.

The results of the traffic engineering analyses of each of the 11 street segments are summarized below as follows:

➤ Increase of Speed Limits (Two Street Segments)

- Survey #19 - Maclay Avenue from North City Limit to Glenoaks Boulevard – Increase existing 30 MPH speed limit to 35 MPH – The 85th percentile speed on September 22, 2021, was 39 MPH. Option #2, Example #3 requires rounding up to 40 MPH, and then a reduction of 5 MPH to 35 is applied with the collision rate double the state-wide average. A further reduction to 30 MPH would make about 85% of motorists in violation and is not supported under present speed zoning parameters.
- Survey #25 - Park Avenue from Fourth Street to First Street – Increase existing 15 MPH speed limit to 25 MPH - The 85th percentile speed on September 22, 2021, was 29 MPH. Option #2, Example #3 requires rounding up to 30 MPH, and then a reduction of 5 MPH to 25 MPH is applied with a slightly higher than the state-wide average collision rate. A further reductions back to 15 MPH would make 85% of motorists in violation and cannot be supported under present parameters.

➤ **No Change in Speed Limits (Nine Street Segments)**

- Arroyo Avenue from North City limit to Glenoaks Boulevard – Retain existing 35 MPH speed limit when children are not present
- Glenoaks Boulevard from West City limit to Maclay Avenue – Retain existing 40 MPH speed limit
- Glenoaks Boulevard from Maclay Avenue to East City limit – Retain existing 40 MPH speed limit
- Harding Avenue from North City limit to Glenoaks Boulevard – Retain existing 25 MPH speed limit
- Harding Avenue from Glenoaks Avenue to Fourth Street – Retain existing 25 MPH speed limit
- Harding Avenue from Fourth Street to First Street – Retain existing 25 MPH speed limit
- Maclay Avenue from Glenoaks Boulevard to Fourth Street – Retain existing 30 MPH speed limit when children are not present
- Maclay Avenue from Fourth Street to Truman Street – Retain existing 25 MPH speed limit
- Orange Grove Avenue from Glenoaks Boulevard to Fourth Street – Retain existing 25 MPH speed limit

Updated Surveys on 21 Street Segments

Two street segments on San Fernando Road have experienced significantly higher than average state-wide collision rates for the last three years. The previously measured 85th percentile speeds of 38 MPH and 33 MPH together with the requirements for rounding up at the present time to 40 MPH and 35 MPH respectively do not allow further speed limit reductions of 5 MPH from the present 35 MPH and 30 MPH posted speed limits.

New data including speed measurements will be required for both of these segments as well as the other 19 street segments in this grouping during the next resurvey in about three years. At that time, it may be possible to reduce the speed limit on San Fernando Road to 30 MPH west of San Fernando Mission Boulevard and 25 MPH east of Kittridge Street if the collision history remains higher than the state-wide average.

Assembly Bill 43 has just made a number of significant changes in setting speed limits (see Page 8). As a new additional consideration to reduce the speed limit, it may be possible to declare San Fernando Road as a “safety corridor” depending on how that will be exactly defined by Caltrans. Yet another option could involve consideration of a “road diet” where the existing four through travel lanes with on-street parking on both sides would be restriped to provide one through travel lane in each direction separated by a continuous two-way left turn lane, together with on-street parking and striped bicycle lanes on both sides. At the present time, no changes in the posted speed limits are recommended on any of the 21 street segments listed below.

➤ **No Change in Speed Limits (21 Street Segments)**

- Arroyo Avenue from Glenoaks Boulevard to Fifth Street – Retain existing 30 MPH posted speed limit
- Brand Boulevard from Glenoaks Boulevard to Fourth Street - Retain existing 30 MPH posted speed limit when children are not present
- Brand Boulevard from Fourth Street to Truman Street – Retain existing 35 MPH speed limit when children are not present
- Brand Boulevard from Truman Street to South City Limit – Retain existing 35 MPH posted speed limit
- Chatsworth Drive from San Fernando Road to South City Limit - Retain existing 30 MPH posted speed limit
- Eighth Street from West City Limit to Maclay Avenue - Retain existing 25 MPH posted speed limit
- Fifth Street from West City Limit to Maclay Avenue - Retain existing 30 MPH posted speed limit
- Fifth Street from Maclay Avenue to East City Limit - Retain existing 30 MPH posted speed limit when children are not present
- First Street from Hubbard Street to Maclay Avenue - Retain existing 30 MPH posted speed limit
- Fourth Street from West City Limit to Maclay Avenue - Retain existing 30 MPH posted speed limit
- Fourth Street from Maclay Avenue to East City Limit - Retain existing 30 MPH posted speed limit
- Hubbard Street from North City Limit at Fourth Street to South City Limit at San Fernando Road – Retain existing 35 MPH posted speed limit
- San Fernando Mission Boulevard from Truman Street to South City Limit - Retain existing 35 MPH posted speed limit when children are not present
- Orange Grove Avenue from North City Limit to Glenoaks Boulevard – Retain existing 25 MPH posted speed limit
- San Fernando Road from West City Limit to San Fernando Mission Boulevard - Retain existing 35 MPH posted speed limit
- San Fernando Road (Mall) from San Fernando Mission Boulevard to Kittridge Street – Retain 20 MPH posted speed limit
- San Fernando Road from Kittridge Street to East City Limit - Retain existing 30 MPH posted speed limit
- Seventh Street from West City Limit to Maclay Avenue - Retain existing 25 MPH posted speed limit
- Truman Street from West City Limit to Maclay Avenue - Retain existing 35 MPH posted speed limit
- Truman Street from Maclay Avenue to East City Limit - Retain existing 35 MPH posted speed limit
- Workman Street from San Fernando Road to South City Limit - Retain existing 25 MPH posted speed limit

CALIFORNIA ASSEMBLY BILL 43

On October 8, 2021, the Governor signed Assembly Bill 43 modifying and also adding provisions to the CVC relating to establishment of enforceable speed limits (see enclosure). This Bill requires Caltrans, the California Department of Transportation, to modify the California MUTCD and develop an on-line tool to include additional considerations and criteria for further reduction of speed limits by 5 MPH to be considered after June 30, 2024, based on these new criteria:

- CVC 22358.6 allows a local authority to round down to the next lowest 5 MPH increment near the 85th percentile speed where prior methodology required rounding up to the next lowest 5 MPH increment.
- CVC 22358.7 allows a local authority to reduce the speed limit by designating the highway as a “safety corridor” or if the highway is adjacent to any facility that generates high concentrations of bicyclists or pedestrians “...especially those from vulnerable groups such as children, seniors, persons with disabilities, and the unhoused.” Up to 25% of the highways within a local agency may be designated as “safety corridors.”

Other CVC modifications created by Assembly Bill 43 extend the engineering review interval out to 14 years rather than the currently required 7 or 10 years.

The new as well as the revised and updated survey sheets have all been prepared to accordance with current requirements that do not include additional alternatives within Assembly Bill 43 that became law on October 8, 2021. Before June 30, 2024, the new law directs Caltrans to define “safety corridor” and develop an on-line tool for use by local agencies in setting speed limits.

SUMMARY OF NEXT STEPS

Please share this report with the San Fernando Police Department. I would be pleased to discuss their comments with you, and the Public Works and Police Departments prior to the Transportation & Safety Commission Meeting on November 3, 2021. I also plan to respond to questions during the Commission meeting via Zoom.

This report and adoption of a Resolution by the City Council on December 6, 2021, of the recommendations for the two speed limit increases identified in this report should be considered. That action, if approved, together with periodic training and equipment calibration, will enable the City of San Fernando Police Department to continue to deploy enforcement using radar, laser, or other electronic devices for at least the next three years.

Ms. Patsy Orozco, Civil Engineering Assistant II
Engineering and Traffic Survey Report for Speed Limits, 2021
October 15, 2021

The opportunity to provide these services to the City of San Fernando is sincerely appreciated. Should questions arise or if further information or assistance is needed, please contact me at your convenience.

Respectfully submitted,

Tom Brohard and Associates

Tom Brohard

Tom Brohard
Principal



Enclosures

- 2018 – 2020 Collision Rates for 32 Street Segments
- 2021 Traffic Volume and Vehicle Speed Data for 11 New Surveys
- 2014 California MUTCD Provisions for Setting Speed Limits
- 2021 Engineering and Traffic Survey Sheets for 32 Surveys
- AB43 Revisions to Establishing Speed Limits

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 1

Street: Arroyo Avenue

Limits: North City Limit to Glenoaks Boulevard

Existing Speed Limit: 35 MPH; 25 MPH When Children Are Present (high school)

SPEEDS

Location of Survey: S/o Borden Avenue

Date Measured: 9/22/2021

Mean Speed (Average): 30 MPH

Critical Speed (85th Percentile): 38 MPH

10 Mile Pace Speed: 26 to 35 MPH

Percentages Related to Pace Speed: 50% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 64' north of Seventh St.; 36' south of Seventh St.

Number of travel lanes (both directions): Two thru lanes

Segment Length: 0.55 miles

Average Daily Traffic: 9,700 vehicles

Date Measured: 9/22/2021

Existing Conditions: Straight alignment; industrial development and on street parking allowed both sides, industrial development both sides; High school and no parking on west side

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)

Total Number of Midblock Collisions: 3 collisions

Calculated Collision Rate: 0.51 collisions per million vehicle miles

Statewide Average Collision Rate: 1.61 collisions per million vehicle miles

Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 38 MPH should initially be rounded up to 40 MPH but the speed limit can be established at 35 MPH in Option 2, Example 3, retaining the existing speed limit of 35 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 2
Street: Arroyo Avenue
Limits: Glenoaks Boulevard to Fifth Street
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: S/o De Garmo Avenue Date Measured: 11/6/2014
Mean Speed (Average): 24 MPH Critical Speed (85th Percentile): 29 MPH
10 Mile Pace Speed: 21 thru 30 MPH Posted Speed Limit 30 MPH
Percentage Related to Pace Speed: 60% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of travel lanes (both directions): Two thru lanes
Segment Length: 0.25 miles
Average Daily Traffic: 3,100 vehicles Date Measured: 11/13/2014
Existing Conditions: Industrial development on both sides with on street parking allowed; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 2 collisions
Calculated Collision Rate: 2.36 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 3
Street: Brand Boulevard
Limits: Glenoaks Boulevard to Fourth Street
Existing Speed Limit: 30 MPH; 25 MPH When Children Are Present (elementary school)

SPEEDS

Location of Survey: S/o De Garmo Avenue Date Measured: 11/6/2014
Mean Speed (Average): 29 MPH Critical Speed (85th Percentile): 31 MPH
10 Mile Pace Speed: 23 thru 32 MPH
Percentage Related to Pace Speed: 83% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of travel lanes (both directions): Two thru lanes
Segment Length: 0.50 miles
Average Daily Traffic: 5,200 vehicles Date Measured: 11/13/2014
Existing Conditions: Residential development on both sides with on-street parking; straight alignment except for horizontal curve at Library Street

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 5 collisions
Calculated Collision Rate: 1.76 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH, when children are not present. This Survey expires in Year 2024, three years from the date below but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 4
Street: Brand Boulevard
Limits: Fourth Street to Truman Street
Existing Speed Limit: 35 MPH; 25 MPH When Children Are Present (middle school)

SPEEDS

Location of Survey: N/o First Street Date Measured: 11/6/2014
Mean Speed (Average): 33 MPH Critical Speed (85th Percentile): 37 MPH
10 Mile Pace Speed: 28 thru 37 MPH
Percentage Related to Pace Speed: 73% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 56 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.30 miles
Average Daily Traffic: 10,100 vehicles Date Measured: 11/18/2014
Existing Conditions: Mixed development on both sides; some midblock on street parking; straight alignment; at grade railroad crossing; San Fernando Middle School on east side

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 7 collisions
Calculated Collision Rate: 2.11 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average.

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH when children are not present. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 5
Street: Brand Boulevard
Limits: Truman Street to South City Limit
Existing Speed Limit: 35 MPH

SPEEDS

Location of Survey: S/o Hollister Street Date Measured: 11/6/2014
Mean Speed (Average): 33 MPH Critical Speed (85th Percentile): 37 MPH
10 Mile Pace Speed: 29 thru 38 MPH
Percentage Related to Pace Speed: 71% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 96 feet and variable Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.60 miles
Average Daily Traffic: 14,000 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development toward north and fronting residential toward south; on street parking on both sides; wide landscaped raised median; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 24 collisions
Calculated Collision Rate: 2.61 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 6
Street: Chatsworth Drive
Limits: San Fernando Road to South City Limit
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: S/o Hollister Street Date Measured: 11/6/2014
Mean Speed (Average): 29 MPH Critical Speed (85th Percentile): 33 MPH
10 Mile Pace Speed: 25 thru 34 MPH
Percentage Related to Pace Speed: 72% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.55 miles
Average Daily Traffic: 3,100 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development toward north and fronting residential development toward south; on street parking on both sides; straight alignment; school crossings at several intersections toward south end

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 5 collisions
Calculated Collision Rate: 2.68 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 7
Street: Eighth Street
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: E/o Fermoore Street Date Measured: 11/6/2014
Mean Speed (Average): 25 MPH Critical Speed (85th Percentile): 27 MPH
10 Mile Pace Speed: 20 thru 29 MPH
Percentage Related to Pace Speed: 86% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.78 miles
Average Daily Traffic: 1,200 vehicles Date Measured: 11/13/2014
Existing Conditions: Fronting residential development with on street parking on both sides;
straight alignment; speed humps

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 2 collisions
Calculated Collision Rate: 1.95 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 25 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 8
Street: Fifth Street
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: E/o Fermoore Street Date Measured: 11/6/2014
Mean Speed (Average): 30 MPH Critical Speed (85th Percentile): 34 MPH
10 Mile Pace Speed: 26 thru 35 MPH
Percentage Related to Pace Speed: 72% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.70 miles
Average Daily Traffic: 2,800 vehicles Date Measured: 11/13/2014
Existing Conditions: Fronting residential development with on street parking on both sides; commercial on both sides at east end; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 6 collisions
Calculated Collision Rate: 2.80 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 9
Street: Fifth Street
Limits: Maclay Avenue to East City Limit
Existing Speed Limit: 30 MPH; 25 MPH When Children Are Present (elementary school)

SPEEDS

Location of Survey: E/o Newton Street Date Measured: 11/6/2014
Mean Speed (Average): 28 MPH Critical Speed (85th Percentile): 32 MPH
10 Mile Pace Speed: 24 thru 33 MPH
Percentage Related to Pace Speed: 81% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.55 miles
Average Daily Traffic: 3,600 vehicles Date Measured: 11/13/2014
Existing Conditions: School on south side east of Maclay Avenue, fronting residential with on street parking on both sides to the east; industrial development with on street parking on both sides to the east; straight alignment; bridge connection at east end

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 5 collisions
Calculated Collision Rate: 2.31 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH when children are not present. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 10
Street: First Street
Limits: Hubbard Street to Maclay Avenue
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: E/o Orange Grove Avenue Date Measured: 11/6/2014
Mean Speed (Average): 31 MPH Critical Speed (85th Percentile): 34 MPH
10 Mile Pace Speed: 25 thru 34 MPH
Percentage Related to Pace Speed: 77% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 to 44 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.70 miles
Average Daily Traffic: 3,400 vehicles Date Measured: 11/13/2014
Existing Conditions: Industrial development with on street parking on both sides; commercial development with parking on both sides at east end; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 7 collisions
Calculated Collision Rate: 2.69 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 11
Street: Fourth Street
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: E/o Fermoore Street Date Measured: 11/6/2014
Mean Speed (Average): 30 MPH Critical Speed (85th Percentile): 34 MPH
10 Mile Pace Speed: 26 thru 35 MPH
Percentage Related to Pace Speed: 74% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.75 miles
Average Daily Traffic: 4,400 vehicles Date Measured: 11/13/2014
Existing Conditions: Residential development with on street parking on both sides; commercial development with on street parking on both sides at east end; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 7 collisions
Calculated Collision Rate: 1.94 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 12
Street: Fourth Street
Limits: Maclay Avenue to East City Limit
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: E/o Newton Street Date Measured: 11/6/2014
Mean Speed (Average): 28 MPH Critical Speed (85th Percentile): 31 MPH
10 Mile Pace Speed: 24 thru 33 MPH
Percentage Related to Pace Speed: 86% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.55 miles
Average Daily Traffic: 5,900 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development at west end, then residential development, and then park and industrial development at east end; on street parking both sides throughout; straight alignment with bridge over wash at east end

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 9 collisions
Calculated Collision Rate: 2.53 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 13
Street: Glenoaks Boulevard
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 40 MPH (also 40 MPH posted speed limit to West in City of Los Angeles)

SPEEDS

Location of Survey: W/o Fermore Street Date Measured: 9/22/2021
Mean Speed (Average): 33 MPH Critical Speed (85th Percentile): 39 MPH
10 Mile Pace Speed: 31 thru 40 MPH
Percentages Related to Pace Speed: 53% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.73 miles
Average Daily Traffic: 18,400 vehicles Date Measured: 9/22/2021
Existing Conditions: On 4/5/2021, City Council accepted a major street improvement project that resulted in changed roadway conditions; commercial development at west and east ends; mixed development in center area; left turn lanes with raised medians at major intersections and at west end; on street parking allowed in areas without left turn lanes; left turns and cross traffic prohibited at Alexander and at Hagar; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 26 collisions
Calculated Collision Rate: 1.77 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 39 MPH should be rounded up to 40 MPH, retaining the existing speed limit of 40 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 14

Street: Glenoaks Boulevard

Limits: Maclay Avenue to East City Limit

Existing Speed Limit: 40 MPH (also 40 MPH posted speed limit to East in City of Los Angeles)

SPEEDS

Location of Survey: E/o Newton Street

Date Measured: 9/22/2021

Mean Speed (Average): 35 MPH

Critical Speed (85th Percentile): 43 MPH

10 Mile Pace Speed: 31 to 40 MPH

Percentages Related to Pace Speed: 51% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet

Number of Lanes (Both Directions): Four thru lanes

Segment Length: 0.55 miles

Average Daily Traffic: 19,100 vehicles

Date Measured: 9/22/2021

Existing Conditions: On 4/5/2021, City Council accepted major street improvement project that resulted in changed roadway conditions; commercial development at west end and industrial development at east end, residential development in center section; left turn lanes with raised medians at major intersections; on street parking allowed in areas without left turn lanes; bridge over wash at east end; straight alignment.

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)

Total Number of Midblock Collisions: 21 collisions

Calculated Collision Rate: 1.83 collisions per million vehicle miles

Statewide Average Collision Rate: 1.34 collisions per million vehicle miles

Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 43 MPH should initially be rounded up to 45 MPH but the speed limit can be established at 40 MPH in Option 2, Example 3, retaining the existing speed limit of 40 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 15
Street: Harding Avenue
Limits: North City Limit to Glenoaks Boulevard
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: S/o Eighth Street Date Measured: 9/22/2021
Mean Speed (Average): 22 MPH Critical Speed (85th Percentile): 28 MPH
10 Mile Pace Speed: 21 to 30 MPH
Percentages Related to Pace Speed: 60% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.53 miles
Average Daily Traffic: 1,700 vehicles Date Measured: 9/21/2021
Existing Conditions: Adjacent fronting residential development with on street parking allowed on both sides; straight alignment; speed humps

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 3 collisions
Calculated Collision Rate: 3.04 collisions per million vehicles
Statewide Average Collision Rate: 1.61 collisions per million vehicles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 28 MPH should initially be rounded up to 30 MPH but the speed limit can be established at 25 MPH in Option 2, Example 3, retaining the existing speed limit of 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 16
Street: Harding Avenue
Limits: Glenoaks Boulevard to Fourth Street
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: S/o Library Street Date Measured: 9/22/2021
Mean Speed (Average): 27 MPH Critical Speed (85th Percentile): 32 MPH
10 Mile Pace Speed: 21 to 30 MPH
Percentages Related to Pace Speed: 62% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.50 miles
Average Daily Traffic: 1,400 vehicles Date Measured: 9/22/2021
Existing Conditions: Adjacent fronting residential development with on street parking allowed on both sides; straight alignment; one speed hump north of Fourth Street

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 2 collisions
Calculated Collision Rate: 2.61 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 32 MPH should initially be rounded down to 30 MPH and the speed limit can be established at 25 MPH in Option 1, Example 1, retaining the existing speed limit of 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 17
Street: Harding Avenue
Limits: Fourth Street to First Street
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: N/o Second Street Date Measured: 9/22/2021
Mean Speed (Average): 23 MPH Critical Speed (85th Percentile): 29 MPH
10 Mile Pace Speed: 21 to 30 MPH
Percentages Related to Pace Speed: 58% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 40 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.25 miles
Average Daily Traffic: 1,340 vehicles Date Measured: 9/22/2021
Existing Conditions: Adjacent fronting residential development with on street parking allowed on both sides; industrial development at south end; straight alignment; speed humps

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 1 collision
Calculated Collision Rate: 2.73 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 29 MPH should initially be rounded up to 30 MPH but the speed limit can be established at 25 MPH in Option 1, Example 2, retaining the existing speed limit of 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 18
Street: Hubbard Street
Limits: North City Limit at Fourth Street to South City Limit at San Fernando Road
Existing Speed Limit: 35 MPH

SPEEDS

Location of Survey: N/o Second Street Date Measured: 11/6/2014
Mean Speed (Average): 34 MPH Critical Speed (85th Percentile): 39 MPH
10 Mile Pace Speed: 29 thru 38 MPH
Percentage Related to Pace Speed: 75% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 64 feet and variable Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.40 miles
Average Daily Traffic: 23,400 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development at Glenoaks Boulevard; fronting residential development to the north and south; left turn lanes at intersections and midblock; on street parking in certain areas; straight alignment; posted 35 MPH speed limit to the North and South in the City of Los Angeles

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 27 collisions
Calculated Collision Rate: 2.63 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 19
Street: Maclay Avenue
Limits: North City Limit to Glenoaks Boulevard
Existing Speed Limit: 30 MPH (also 30 MPH posted speed limit to North in City of Los Angeles)

SPEEDS

Location of Survey: N/o Lucas Street Date Measured: 9/22/2021
Mean Speed (Average): 33 MPH Critical Speed (85th Percentile): 39 MPH
10 Mile Pace Speed: 31 to 40 MPH
Percentages Related to Pace Speed: 55% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet Number of Lanes (Both Directions): Four thru lanes midblock; three at ends
Segment Length: 0.52 miles
Average Daily Traffic: 14,600 vehicles Date Measured: 9/22/2021
Existing Conditions: Commercial development on both sides; on street parking allowed on both sides with bulb outs; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 24 collisions
Calculated Collision Rate: 2.69 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: Double the statewide rate

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 39 MPH should initially be rounded up to 40 MPH but the speed limit can be established at 35 MPH in Option 2, Example 3, increasing the existing speed limit of 30 MPH to 35 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 20
Street: Maclay Avenue
Limits: Glenoaks Boulevard to Fourth Street
Existing Speed Limit: 30 MPH; 25 MPH When Children Are Present (elementary school)

SPEEDS

Location of Survey: N/o Fourth Street Date Measured: 9/22/2021
Mean Speed (Average): 29 MPH Critical Speed (85th Percentile): 34 MPH
10 Mile Pace Speed: 26 to 35 MPH
Percentages Related to Pace Speed: 62% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet Number of Lanes (Both Directions): Four thru lanes midblock; three at ends
Segment Length: 0.50 miles
Average Daily Traffic: 13,200 vehicles Date Measured: 9/22/2021
Existing Conditions: Commercial development with parallel parking and bulb outs on both sides; straight alignment; streetscape project

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 17 collisions
Calculated Collision Rate: 2.35 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 34 MPH should initially be rounded up to 35 MPH but the speed limit can be established at 30 MPH in Option 2, Example 3, retaining the existing speed limit of 30 MPH when children are not present. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 21
Street: Maclay Avenue
Limits: Fourth Street to Truman Street
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: N/o First Street Date Measured: 9/22/2021
Mean Speed (Average): 19 MPH Critical Speed (85th Percentile): 27 MPH
10 Mile Pace Speed: 16 to 25 MPH
Percentages Related to Pace Speed: 52% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 34 feet and variable Number of Lanes (Both Directions): Two thru lanes from Fourth Street to First Street; four thru lanes from First Street to Truman Street
Segment Length: 0.30 miles
Average Daily Traffic: 12,500 vehicles Date Measured: 9/22/2021
Existing Conditions: Commercial development on both sides; angle parking on west side and parallel parking with bulb outs on east side; straight alignment; streetscape project

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 9 collisions
Calculated Collision Rate: 2.19 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 27 MPH should initially be rounded down to 25 MPH, retaining the existing speed limit of 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 22
Street: San Fernando Mission Boulevard
Limits: Truman Street to South City Limit
Existing Speed Limit: 35 MPH; 25 MPH When Children Are Present (elementary school)

SPEEDS

Location of Survey: S/o Hollister Street Date Measured: 11/6/2014
Mean Speed (Average): 29 MPH Critical Speed (85th Percentile): 33 MPH
10 Mile Pace Speed: 24 thru 33 MPH
Percentage Related to Pace Speed: 81% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.58 miles
Average Daily Traffic: 10,700 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development on both sides for majority of length; some fronting residential development on both sides at south end; left turn lanes and no on street parking from Pico Street north; no left turn lanes and parking allowed on both sides from Pico Street south; straight alignment.

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 13 collisions
Calculated Collision Rate: 1.91 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH when children are not present. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 23
Street: Orange Grove Avenue
Limits: North City Limit to Glenoaks Boulevard
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: N/o Lucas Street Date Measured: 11/6/2014
Mean Speed (Average): 28 MPH Critical Speed (85th Percentile): 31 MPH
10 Mile Pace Speed: 24 thru 33 MPH
Percentage Related to Pace Speed: 84% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.55 miles
Average Daily Traffic: 2,700 vehicles Date Measured: 11/13/2014
Existing Conditions: Fronting residential development with parking allowed on both sides except immediately north of Glenoaks Boulevard to accommodate left turn lane; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 4 collisions
Calculated Collision Rate: 2.46 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 25 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 24
Street: Orange Grove Avenue
Limits: Glenoaks Boulevard to Fourth Street
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: N/o Library Street Date Measured: 9/22/2021
Mean Speed (Average): 23 MPH Critical Speed (85th Percentile): 28 MPH
10 Mile Pace Speed: 21 to 30 MPH
Percentages Related to Pace Speed: 66% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.50 miles
Average Daily Traffic: 1,250 vehicles Date Measured: 9/22/2021
Existing Conditions: Fronting residential development with parking allowed on both sides;
industrial development with parking allowed on both sides at First Street; straight alignment;
speed humps

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 1 collision
Calculated Collision Rate: 1.46 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 28 MPH should initially be rounded up to 30 MPH but the speed limit can be established at 25 MPH in Option 2, Example 3, retaining the existing speed limit of 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 25
Street: Park Avenue
Limits: Fourth Street to First Street
Existing Speed Limit: 15 MPH

SPEEDS

Location of Survey: S/o Fourth Street Date Measured: 9/22/2021
Mean Speed (Average): 22 MPH Critical Speed (85th Percentile): 29 MPH
10 Mile Pace Speed: 16 to 25 MPH
Percentages Related to Pace Speed: 49% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 34 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.25 miles
Average Daily Traffic: 2,800 vehicles Date Measured: 09/22/2021
Existing Conditions: Residential development on west side; park along east side; on street angle parking along entire west side and most of east side northerly from south end; on street parallel parking on east side at north end; straight alignment; midblock crosswalk at midpoint; speed humps and raised median

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 2 collisions
Calculated Collision Rate: 2.61 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the 2014 California MUTCD, this Engineering and Traffic Survey including the analysis of new speed measurements and traffic volumes as well as current collision characteristics indicates that the 85th percentile speed of 29 MPH should initially be rounded up to 30 MPH, but the speed limit can be established at 25 MPH in Option 2, Example 3, increasing the speed limit from 15 MPH to 25 MPH. This Survey requires reevaluation in Year 2028, seven years from the date below, but may be reviewed in Year 2024 or earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 26
Street: San Fernando Road
Limits: West City Limit to San Fernando Mission Boulevard
Existing Speed Limit: 35 MPH

SPEEDS

Location of Survey: E/o Huntington Street Date Measured: 11/6/2014
Mean Speed (Average): 34 MPH Critical Speed (85th Percentile): 38 MPH
10 Mile Pace Speed: 28 thru 37 MPH
Percentage Related to Pace Speed: 71% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.60 miles
Average Daily Traffic: 8,800 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial and industrial development with on street parking on both sides; no separate left turn lanes striped; straight alignment; marked pedestrian crosswalks at Huntington Street and at Kalisher Street

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 26 collisions
Calculated Collision Rate: 4.50 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: Much higher than average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are much higher than the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 27
Street: San Fernando Road (Mall)
Limits: San Fernando Mission Boulevard to Kittridge Street
Existing Speed Limit: 20 MPH

SPEEDS

Location of Survey: E/o Maclay Avenue Date Measured: 11/6/2014
Mean Speed (Average): 21 MPH Critical Speed (85th Percentile): 24 MPH
10 Mile Pace Speed: 17 thru 26 MPH
Percentage Related to Pace Speed: 84% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 24 feet and variable Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.25 miles
Average Daily Traffic: 4,900 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development on both sides; narrow meandering roadway with angle parking alternating from north side to south side

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 4 collisions
Calculated Collision Rate: 2.98 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 20 MPH on this narrow street. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 28
Street: San Fernando Road
Limits: Kittridge Street to East City Limit
Existing Speed Limit: 30 MPH

SPEEDS

Location of Survey: E/o Chatsworth Street Date Measured: 11/6/2014
Mean Speed (Average): 30 MPH Critical Speed (85th Percentile): 33 MPH
10 Mile Pace Speed: 24 thru 33 MPH
Percentage Related to Pace Speed: 78% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 60 feet and variable Number of Lanes (Both Directions): Two thru lanes west of Chatsworth Drive; four thru lanes east of Chatsworth Drive
Segment Length: 0.33 miles
Average Daily Traffic: 6,100 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development with on street parking allowed on both sides; marked pedestrian crosswalks at Chatsworth Drive and midblock to the east; horizontal curve east of Jessie Street

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 9 collisions
Calculated Collision Rate: 4.08 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: Much higher than average.

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are much higher than the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 30 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 29
Street: Seventh Street
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: E/o Fermoore Street Date Measured: 11/6/2014
Mean Speed (Average): 25 MPH Critical Speed (85th Percentile): 27 MPH
10 Mile Pace Speed: 20 thru 29 MPH
Percentage Related to Pace Speed: 86% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.75 miles
Average Daily Traffic: 1,900 vehicles Date Measured: 11/13/2014
Existing Conditions: Fronting residential development with on street parking allowed on both sides; commercial development on both sides at Maclay Avenue; straight alignment; speed humps

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 4 collisions
Calculated Collision Rate: 2.56 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 25 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 30
Street: Truman Street
Limits: West City Limit to Maclay Avenue
Existing Speed Limit: 35 MPH

SPEEDS

Location of Survey: W/o Huntington Street Date Measured: 11/6/2014
Mean Speed (Average): 35 MPH Critical Speed (85th Percentile): 40 MPH
10 Mile Pace Speed: 31 thru 40 MPH
Percentage Related to Pace Speed: 75% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 64 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.70 miles
Average Daily Traffic: 12,100 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial and industrial development on both sides; left turn lanes east of Workman Street with no on street parking; on street parking on both sides west of Workman Street; horizontal curve east of Workman Street, otherwise straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 20 collisions
Calculated Collision Rate: 2.16 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 31
Street: Truman Street
Limits: Maclay Avenue to East City Limit
Existing Speed Limit: 35 MPH

SPEEDS

Location of Survey: E/o Kittridge Street Date Measured: 11/6/2014
Mean Speed (Average): 33 MPH Critical Speed (85th Percentile): 37 MPH
10 Mile Pace Speed: 29 thru 38 MPH
Percentage Related to Pace Speed: 78% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 64 feet Number of Lanes (Both Directions): Four thru lanes
Segment Length: 0.45 miles
Average Daily Traffic: 16,800 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development on both sides; left turn lanes with no on street parking allowed except for short midblock segment east of Brand Boulevard which provides on street parking; horizontal curves east of Brand Boulevard

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 22 collisions
Calculated Collision Rate: 2.66 collisions per million vehicle miles
Statewide Average Collision Rate: 1.34 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 35 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**CITY OF SAN FERNANDO
ENGINEERING AND TRAFFIC SURVEY
TO ESTABLISH AN ENFORCABLE SPEED LIMIT**

Survey No.: 32
Street: Workman Street
Limits: San Fernando Road to South City Limit
Existing Speed Limit: 25 MPH

SPEEDS

Location of Survey: S/o Pico Street Date Measured: 11/6/2014
Mean Speed (Average): 25 MPH Critical Speed (85th Percentile): 27 MPH
10 Mile Pace Speed: 21 thru 30 MPH
Percentage Related to Pace Speed: 89% within pace

ROADWAY DESIGN AND TRAFFIC CHARACTERISTICS

Width: 36 feet Number of Lanes (Both Directions): Two thru lanes
Segment Length: 0.55 miles
Average Daily Traffic: 5,300 vehicles Date Measured: 11/13/2014
Existing Conditions: Commercial development with on street parking allowed on both sides at north end and on west side at south end; residential development with on street parking allowed on both sides for rest of segment; straight alignment

COLLISION CHARACTERISTICS

Collision Period Analyzed: 1/1/2018 thru 12/31/2020 (3 years)
Total Number of Midblock Collisions: 9 collisions
Calculated Collision Rate: 2.82 collisions per million vehicle miles
Statewide Average Collision Rate: 1.61 collisions per million vehicle miles
Calculated Collision Rate Compared to Statewide Average Rate: About average

SURVEY RESULTS

Recommendation: The January 20, 2015, Engineering and Traffic Survey collected new traffic data summarized above including vehicle speeds and traffic volumes. The current update of this survey found that roadway characteristics have not changed, and the traffic collision characteristics for the last three years are about equal to the statewide average rate. In accordance with applicable provisions of the California Vehicle Code and Section 2B.13 of the California MUTCD 2014 Edition, this Engineering and Traffic Survey retains the speed limit of 25 MPH. This Survey expires in Year 2024, three years from the date below, but may be reviewed earlier in accordance with Assembly Bill 43 approved on October 8, 2021.

Prepared by: Tom Brohard, PE
California Civil Engineer #C24577
California Traffic Engineer #TR724
Date: _____

**2018 - 2020 Collision Rates
For 32 Street Segments**

| | Street | Limits | Traffic Volume | 2018 - 2020 Collisions | Roadway Length | Collision Rate* | Expected Rate* | Higher Than Expected? |
|----|--------------------------|--|----------------|------------------------|----------------|-----------------|----------------|-----------------------|
| 1 | Arroyo Avenue | North City Boundary to Glenoaks Boulevard | 9,700 | 3 | 0.55 | 0.51 | 1.61 | |
| 2 | Arroyo Avenue | Glenoaks Boulevard to Fifth Street | 3,100 | 2 | 0.25 | 2.36 | 1.61 | |
| 3 | Brand Boulevard | Glenoaks Boulevard to Fourth Street | 5,200 | 5 | 0.50 | 1.76 | 1.61 | |
| 4 | Brand Boulevard | Fourth Street to Truman Street | 10,100 | 7 | 0.30 | 2.11 | 1.61 | |
| 5 | Brand Boulevard | Truman Street to South City Boundary | 14,000 | 24 | 0.60 | 2.61 | 1.34 | |
| 6 | Chatsworth Drive | San Fernando Road to South City Boundary | 3,100 | 5 | 0.55 | 2.68 | 1.61 | |
| 7 | Eighth Street | West City Boundary to Maclay Avenue | 1,200 | 2 | 0.78 | 1.95 | 1.61 | |
| 8 | Fifth Street | West City Boundary to Maclay Avenue | 2,800 | 6 | 0.70 | 2.80 | 1.61 | |
| 9 | Fifth Street | Maclay Avenue to East City Boundary | 3,600 | 5 | 0.55 | 2.31 | 1.61 | |
| 10 | First Street | Hubbard Street to Maclay Avenue | 3,400 | 7 | 0.70 | 2.69 | 1.61 | |
| 11 | Fourth Street | West City Boundary to Maclay Avenue | 4,400 | 7 | 0.75 | 1.94 | 1.61 | |
| 12 | Fourth Street | Maclay Avenue to East City Boundary | 5,900 | 9 | 0.55 | 2.53 | 1.61 | |
| 13 | Glenoaks Boulevard | West City Boundary to Maclay Avenue | 18,400 | 26 | 0.73 | 1.77 | 1.34 | |
| 14 | Glenoaks Boulevard | Maclay Avenue to East City Boundary | 19,100 | 21 | 0.55 | 1.83 | 1.34 | |
| 15 | Harding Avenue | North City Boundary to Glenoaks Boulevard | 1,700 | 3 | 0.53 | 3.04 | 1.61 | |
| 16 | Harding Avenue | Glenoaks Boulevard to Fourth Street | 1,400 | 2 | 0.50 | 2.61 | 1.61 | |
| 17 | Harding Avenue | Fourth Street to First Street | 1,340 | 1 | 0.25 | 2.73 | 1.61 | |
| 18 | Hubbard Street | North City Boundary to South City Boundary | 23,400 | 27 | 0.40 | 2.63 | 1.34 | |
| 19 | Maclay Avenue | North City Boundary to Glenoaks Boulevard | 14,800 | 24 | 0.55 | 2.69 | 1.34 | |
| 20 | Maclay Avenue | Glenoaks Boulevard to Fourth Street | 13,200 | 17 | 0.50 | 2.35 | 1.34 | |
| 21 | Maclay Avenue | Fourth Street to First Street | 12,500 | 9 | 0.30 | 2.19 | 1.34 | |
| 22 | Mission Boulevard | Truman Street to South City Boundary | 10,700 | 13 | 0.58 | 1.91 | 1.34 | |
| 23 | Orange Grove Avenue | North City Boundary to Glenoaks Boulevard | 2,700 | 4 | 0.55 | 2.46 | 1.61 | |
| 24 | Orange Grove Avenue | Glenoaks Boulevard to Fourth Street | 1,250 | 1 | 0.50 | 1.46 | 1.61 | |
| 25 | Park Avenue | Fourth Street to First Street | 2,800 | 2 | 0.25 | 2.61 | 1.61 | |
| 26 | San Fernando Road | West City Boundary to Mission Boulevard | 8,800 | 26 | 0.60 | 4.50 | 1.34 | Yes |
| 27 | San Fernando Road (Mall) | Mission Boulevard to Brand Boulevard | 4,900 | 4 | 0.25 | 2.98 | 1.61 | |
| 28 | San Fernando Road | Brand Boulevard to East City Boundary | 6,100 | 9 | 0.33 | 4.08 | 1.34 | Yes |
| 29 | Seventh Street | West City Boundary to Maclay Avenue | 1,900 | 4 | 0.75 | 2.56 | 1.61 | |
| 30 | Truman Street | West City Boundary to Maclay Avenue | 12,100 | 20 | 0.70 | 2.16 | 1.34 | |
| 31 | Truman Street | Maclay Avenue to East City Boundary | 16,800 | 22 | 0.45 | 2.66 | 1.34 | |
| 32 | Workman Street | San Fernando Road to South City Boundary | 5,300 | 9 | 0.55 | 2.82 | 1.61 | |

*Collisions Per Million
Vehicle Miles

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of San Fernando

Arroyo Avenue

B/ Bordon Street - Glenoaks Boulevard

24 Hour Directional Speed Survey

Northbound

SFD002
Site Code: 999-21500

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 7 | 7 | 4 | 4 | 8 | 8 | 36 | 40 | 41 | 45 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 2 | 8 | 2 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 03:00 | 0 | 2 | 2 | 2 | 2 | 4 | 4 | 13 | 13 | 19 | 19 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 04:00 | 2 | 0 | 0 | 2 | 2 | 12 | 12 | 41 | 41 | 37 | 37 | 30 | 30 | 9 | 9 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 137 |
| 05:00 | 9 | 3 | 3 | 14 | 14 | 25 | 25 | 53 | 53 | 36 | 36 | 15 | 15 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| 06:00 | 10 | 4 | 4 | 17 | 17 | 50 | 50 | 48 | 48 | 24 | 24 | 8 | 8 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 |
| 07:00 | 40 | 20 | 20 | 69 | 69 | 154 | 154 | 74 | 74 | 20 | 20 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 381 |
| 08:00 | 58 | 17 | 17 | 41 | 41 | 56 | 56 | 48 | 48 | 16 | 16 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 242 |
| 09:00 | 11 | 12 | 12 | 14 | 14 | 49 | 49 | 41 | 41 | 30 | 30 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 |
| 10:00 | 11 | 8 | 8 | 25 | 25 | 60 | 60 | 49 | 49 | 32 | 32 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 191 |
| 11:00 | 8 | 9 | 9 | 12 | 12 | 32 | 32 | 60 | 60 | 43 | 43 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 177 |
| 12 PM | 16 | 11 | 11 | 8 | 8 | 40 | 40 | 59 | 59 | 36 | 36 | 13 | 13 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 186 |
| 13:00 | 8 | 4 | 4 | 16 | 16 | 49 | 49 | 64 | 64 | 37 | 37 | 6 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 186 |
| 14:00 | 19 | 10 | 10 | 13 | 13 | 70 | 70 | 68 | 68 | 42 | 42 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 228 |
| 15:00 | 57 | 11 | 11 | 52 | 52 | 100 | 100 | 55 | 55 | 14 | 14 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 297 |
| 16:00 | 36 | 8 | 8 | 22 | 22 | 58 | 58 | 80 | 80 | 39 | 39 | 7 | 7 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 254 |
| 17:00 | 17 | 3 | 3 | 18 | 18 | 48 | 48 | 69 | 69 | 51 | 51 | 15 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 223 |
| 18:00 | 17 | 3 | 3 | 11 | 11 | 47 | 47 | 61 | 61 | 34 | 34 | 8 | 8 | 2 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 185 |
| 19:00 | 4 | 1 | 1 | 5 | 5 | 26 | 26 | 31 | 31 | 26 | 26 | 8 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 |
| 20:00 | 4 | 0 | 0 | 2 | 2 | 20 | 20 | 26 | 26 | 23 | 23 | 9 | 9 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 88 |
| 21:00 | 0 | 0 | 0 | 2 | 2 | 6 | 6 | 15 | 15 | 14 | 14 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| 22:00 | 2 | 0 | 0 | 1 | 1 | 9 | 9 | 12 | 12 | 9 | 9 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 23:00 | 1 | 0 | 0 | 0 | 0 | 4 | 4 | 8 | 8 | 15 | 15 | 6 | 6 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| Total | 330 | 126 | 126 | 353 | 353 | 936 | 936 | 992 | 992 | 609 | 609 | 185 | 185 | 41 | 41 | 10 | 10 | 3 | 3 | 3 | 3 | 2 | 2 | 0 | 0 | 2 | 2 | 3592 |

Daily

15th Percentile : 21 MPH
50th Percentile : 30 MPH
85th Percentile : 37 MPH
95th Percentile : 41 MPH

Statistics

Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 1928
Percent in Pace : 53.7%
Number of Vehicles > 55 MPH : 10
Percent of Vehicles > 55 MPH : 0.3%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of San Fernando
Arroyo Avenue
B/ Bordon Street - Glenoaks Boulevard
24 Hour Directional Speed Survey
Southbound

SFD002
Site Code: 999-21500

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
|------------|-----|-----|-----|-----|------|------|------|------|------|------|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 1 | 0 | 0 | 3 | 4 | 4 | 5 | 10 | 8 | 14 | 7 | 10 | 7 | 4 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 01:00 | 2 | 0 | 0 | 1 | 5 | 5 | 6 | 13 | 8 | 18 | 7 | 8 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 02:00 | 0 | 0 | 0 | 1 | 6 | 6 | 5 | 13 | 13 | 24 | 18 | 8 | 10 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 03:00 | 1 | 0 | 0 | 2 | 5 | 5 | 5 | 13 | 13 | 24 | 28 | 8 | 10 | 10 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 |
| 04:00 | 3 | 1 | 1 | 4 | 15 | 15 | 15 | 32 | 32 | 19 | 13 | 13 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |
| 05:00 | 3 | 3 | 3 | 21 | 31 | 31 | 31 | 44 | 44 | 39 | 17 | 17 | 7 | 7 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 168 |
| 06:00 | 14 | 13 | 13 | 33 | 45 | 45 | 45 | 96 | 96 | 57 | 24 | 24 | 3 | 3 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 289 |
| 07:00 | 80 | 20 | 20 | 71 | 127 | 127 | 127 | 105 | 105 | 51 | 10 | 10 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 469 |
| 08:00 | 144 | 38 | 38 | 24 | 27 | 27 | 27 | 34 | 34 | 19 | 9 | 9 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 298 |
| 09:00 | 9 | 10 | 10 | 18 | 70 | 70 | 70 | 109 | 109 | 70 | 22 | 22 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315 |
| 10:00 | 16 | 3 | 3 | 17 | 69 | 69 | 69 | 119 | 119 | 57 | 19 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300 |
| 11:00 | 9 | 4 | 4 | 15 | 70 | 70 | 70 | 134 | 134 | 68 | 20 | 20 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 324 |
| 12 PM | 8 | 4 | 4 | 11 | 49 | 49 | 49 | 98 | 98 | 85 | 31 | 31 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 290 |
| 13:00 | 14 | 11 | 11 | 24 | 83 | 83 | 83 | 116 | 116 | 64 | 17 | 17 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 336 |
| 14:00 | 9 | 2 | 2 | 5 | 61 | 61 | 61 | 139 | 139 | 90 | 23 | 23 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 |
| 15:00 | 175 | 40 | 40 | 44 | 78 | 78 | 78 | 62 | 62 | 30 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 434 |
| 16:00 | 114 | 33 | 33 | 55 | 85 | 85 | 85 | 128 | 128 | 78 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 503 |
| 17:00 | 26 | 18 | 18 | 23 | 119 | 119 | 119 | 169 | 169 | 134 | 38 | 38 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 531 |
| 18:00 | 19 | 3 | 3 | 21 | 85 | 85 | 85 | 152 | 152 | 139 | 27 | 27 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 454 |
| 19:00 | 4 | 0 | 0 | 6 | 25 | 25 | 25 | 82 | 82 | 86 | 38 | 38 | 14 | 14 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 263 |
| 20:00 | 3 | 0 | 0 | 1 | 15 | 15 | 15 | 47 | 47 | 60 | 31 | 31 | 12 | 12 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 175 |
| 21:00 | 0 | 1 | 1 | 0 | 8 | 8 | 8 | 20 | 20 | 42 | 26 | 26 | 10 | 10 | 5 | 5 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 114 |
| 22:00 | 1 | 0 | 0 | 0 | 4 | 4 | 4 | 22 | 22 | 32 | 15 | 15 | 11 | 11 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 |
| 23:00 | 1 | 0 | 0 | 0 | 4 | 4 | 4 | 11 | 11 | 10 | 21 | 21 | 19 | 19 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 71 |
| Total | 656 | 204 | 204 | 400 | 1090 | 1090 | 1090 | 1763 | 1763 | 1293 | 468 | 468 | 139 | 139 | 43 | 43 | 13 | 13 | 4 | 4 | 1 | 1 | 0 | 0 | 1 | 6075 |

Daily
15th Percentile : 20 MPH
50th Percentile : 31 MPH
85th Percentile : 39 MPH
95th Percentile : 43 MPH

Statistics
Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 3056
Percent in Pace : 50.3%
Number of Vehicles > 55 MPH : 19
Percent of Vehicles > 55 MPH : 0.3%

Counts Unlimited, Inc.

PO Box 1178

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Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD002
Site Code: 999-21500

City of San Fernando
Arroyo Avenue
B/ Bordon Street - Glenoaks Boulevard
24 Hour Directional Speed Survey
Northbound, Southbound

| Start Time | 1 | 15 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|-----|-----|-----|-----|------|------|------|-----|-----|----|----|----|----|----|----|-------|
| 09/22/21 | 1 | 15 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | |
| 01:00 | 2 | 0 | 0 | 10 | 1 | 8 | 18 | 22 | 11 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 79 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 12 | 9 | 9 | 13 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 03:00 | 1 | 2 | 2 | 4 | 1 | 12 | 21 | 20 | 11 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 71 |
| 04:00 | 5 | 1 | 1 | 6 | 4 | 9 | 26 | 43 | 33 | 11 | 2 | 3 | 0 | 0 | 0 | 0 | 134 |
| 05:00 | 12 | 6 | 6 | 35 | 6 | 27 | 73 | 56 | 43 | 12 | 2 | 0 | 2 | 0 | 0 | 0 | 227 |
| 06:00 | 24 | 17 | 17 | 50 | 14 | 56 | 97 | 75 | 32 | 9 | 3 | 0 | 1 | 0 | 0 | 0 | 326 |
| 07:00 | 120 | 40 | 40 | 140 | 50 | 95 | 144 | 81 | 32 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 453 |
| 08:00 | 202 | 55 | 55 | 65 | 140 | 281 | 179 | 71 | 14 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 850 |
| 09:00 | 20 | 22 | 22 | 32 | 65 | 83 | 82 | 35 | 13 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 540 |
| 10:00 | 27 | 11 | 11 | 42 | 32 | 119 | 150 | 100 | 28 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 479 |
| 11:00 | 17 | 13 | 13 | 27 | 42 | 129 | 168 | 89 | 23 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 491 |
| 12 PM | 24 | 15 | 15 | 19 | 27 | 102 | 194 | 111 | 29 | 5 | 2 | 0 | 0 | 1 | 0 | 0 | 501 |
| 13:00 | 22 | 15 | 15 | 40 | 18 | 89 | 157 | 121 | 44 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 476 |
| 14:00 | 28 | 12 | 12 | 40 | 18 | 132 | 180 | 101 | 23 | 5 | 3 | 0 | 0 | 0 | 0 | 1 | 522 |
| 15:00 | 232 | 51 | 51 | 96 | 18 | 131 | 207 | 132 | 27 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 561 |
| 16:00 | 150 | 41 | 41 | 77 | 96 | 178 | 117 | 44 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 731 |
| 17:00 | 43 | 21 | 21 | 41 | 41 | 143 | 208 | 117 | 16 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 757 |
| 18:00 | 36 | 6 | 6 | 32 | 32 | 167 | 238 | 185 | 53 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 754 |
| 19:00 | 8 | 1 | 1 | 11 | 11 | 132 | 213 | 173 | 35 | 8 | 2 | 0 | 1 | 1 | 0 | 0 | 639 |
| 20:00 | 7 | 0 | 0 | 3 | 3 | 51 | 113 | 112 | 46 | 15 | 6 | 2 | 0 | 0 | 0 | 0 | 365 |
| 21:00 | 0 | 1 | 1 | 2 | 2 | 35 | 73 | 83 | 40 | 14 | 5 | 2 | 0 | 1 | 0 | 0 | 263 |
| 22:00 | 3 | 0 | 0 | 1 | 1 | 14 | 35 | 56 | 29 | 12 | 5 | 1 | 1 | 0 | 0 | 0 | 156 |
| 23:00 | 2 | 0 | 0 | 0 | 0 | 13 | 34 | 41 | 19 | 11 | 5 | 2 | 0 | 0 | 0 | 0 | 129 |
| Total | 986 | 330 | 330 | 753 | 753 | 2026 | 2755 | 1902 | 653 | 180 | 53 | 16 | 7 | 3 | 0 | 3 | 9667 |

Daily
15th Percentile : 20 MPH
50th Percentile : 31 MPH
85th Percentile : 38 MPH
95th Percentile : 43 MPH

Statistics
Mean Speed(Average) : 30 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 4781
Percent in Pace : 49.5%
Number of Vehicles > 55 MPH : 29
Percent of Vehicles > 55 MPH : 0.3%

Counts Unlimited, Inc.

City of San Fernando
Glenoaks Boulevard
W/ Fermoore Street
24 Hour Directional Speed Survey
Eastbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

SFD011
Site Code: 999-21500

| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|----|-----|------|------|------|------|-----|----|----|----|----|----|-----|-------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | |
| 09/22/21 | 0 | 0 | 3 | 13 | 28 | 18 | 5 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 69 |
| 01:00 | 1 | 0 | 2 | 7 | 11 | 13 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 02:00 | 0 | 0 | 1 | 6 | 11 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 03:00 | 0 | 1 | 0 | 4 | 20 | 11 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 44 |
| 04:00 | 0 | 0 | 1 | 27 | 47 | 27 | 14 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 127 |
| 05:00 | 3 | 0 | 6 | 39 | 125 | 65 | 20 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 273 |
| 06:00 | 4 | 0 | 10 | 79 | 200 | 113 | 81 | 37 | 11 | 2 | 1 | 0 | 0 | 0 | 538 |
| 07:00 | 17 | 2 | 7 | 100 | 426 | 225 | 120 | 26 | 6 | 0 | 0 | 0 | 0 | 0 | 929 |
| 08:00 | 6 | 0 | 7 | 75 | 314 | 163 | 91 | 37 | 5 | 0 | 1 | 0 | 0 | 0 | 699 |
| 09:00 | 9 | 3 | 9 | 61 | 154 | 126 | 79 | 23 | 5 | 3 | 0 | 0 | 0 | 0 | 472 |
| 10:00 | 9 | 0 | 14 | 83 | 144 | 126 | 50 | 16 | 6 | 1 | 0 | 0 | 0 | 0 | 449 |
| 11:00 | 7 | 1 | 6 | 54 | 153 | 127 | 74 | 21 | 3 | 3 | 0 | 0 | 0 | 0 | 449 |
| 12 PM | 11 | 1 | 9 | 63 | 191 | 131 | 95 | 18 | 6 | 2 | 1 | 0 | 0 | 0 | 528 |
| 13:00 | 9 | 1 | 18 | 51 | 188 | 130 | 72 | 17 | 9 | 0 | 0 | 0 | 0 | 0 | 495 |
| 14:00 | 14 | 1 | 8 | 76 | 203 | 155 | 95 | 27 | 8 | 0 | 0 | 0 | 0 | 0 | 587 |
| 15:00 | 14 | 1 | 5 | 106 | 272 | 169 | 77 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 664 |
| 16:00 | 16 | 2 | 18 | 80 | 259 | 188 | 71 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 651 |
| 17:00 | 7 | 0 | 11 | 104 | 251 | 140 | 78 | 18 | 4 | 1 | 0 | 0 | 0 | 0 | 614 |
| 18:00 | 7 | 1 | 17 | 148 | 199 | 110 | 58 | 19 | 3 | 0 | 1 | 0 | 0 | 0 | 563 |
| 19:00 | 8 | 0 | 21 | 89 | 212 | 89 | 29 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 459 |
| 20:00 | 3 | 3 | 8 | 87 | 178 | 94 | 15 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 397 |
| 21:00 | 4 | 1 | 1 | 53 | 103 | 62 | 25 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 259 |
| 22:00 | 0 | 2 | 8 | 37 | 69 | 40 | 15 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 184 |
| 23:00 | 0 | 0 | 5 | 18 | 54 | 32 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 120 |
| Total | 149 | 20 | 195 | 1460 | 3812 | 2362 | 1180 | 355 | 81 | 17 | 4 | 1 | 0 | 0 | 9636 |

Daily
15th Percentile : 28 MPH
50th Percentile : 33 MPH
85th Percentile : 40 MPH
95th Percentile : 44 MPH

Statistics
Mean Speed(Average) : 35 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 6174
Percent in Pace : 64.1%
Number of Vehicles > 55 MPH : 22
Percent of Vehicles > 55 MPH : 0.2%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD011
Site Code: 999-21500

City of San Fernando

Glenns Boulevard

W/ Fermeore Street

24 Hour Directional Speed Survey

Westbound

| Start Time | 15 | 16 | 20 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|-----|------|------|------|------|------|-----|-----|----|----|----|----|----|----|-------|
| 09/22/21 | 0 | 1 | 1 | 11 | 28 | 21 | 11 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 01:00 | 0 | 2 | 2 | 2 | 4 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 |
| 02:00 | 1 | 0 | 0 | 2 | 14 | 5 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 03:00 | 0 | 3 | 1 | 1 | 13 | 7 | 0 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 28 |
| 04:00 | 0 | 1 | 1 | 9 | 32 | 13 | 8 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 71 |
| 05:00 | 2 | 7 | 7 | 27 | 40 | 33 | 22 | 12 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 149 |
| 06:00 | 3 | 2 | 2 | 15 | 42 | 51 | 48 | 45 | 21 | 9 | 1 | 0 | 0 | 0 | 0 | 237 |
| 07:00 | 26 | 7 | 40 | 40 | 76 | 120 | 106 | 72 | 22 | 11 | 0 | 0 | 0 | 0 | 0 | 480 |
| 08:00 | 25 | 36 | 56 | 56 | 93 | 126 | 152 | 51 | 11 | 4 | 1 | 0 | 0 | 0 | 0 | 555 |
| 09:00 | 9 | 5 | 24 | 24 | 45 | 92 | 99 | 46 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 341 |
| 10:00 | 3 | 5 | 34 | 34 | 46 | 80 | 104 | 50 | 19 | 9 | 0 | 0 | 0 | 0 | 0 | 350 |
| 11:00 | 9 | 16 | 40 | 40 | 86 | 85 | 119 | 60 | 17 | 4 | 2 | 1 | 0 | 0 | 0 | 439 |
| 12 PM | 15 | 22 | 57 | 57 | 97 | 115 | 112 | 44 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 479 |
| 13:00 | 5 | 10 | 47 | 47 | 82 | 116 | 127 | 70 | 23 | 1 | 2 | 0 | 0 | 0 | 0 | 483 |
| 14:00 | 19 | 18 | 59 | 59 | 93 | 113 | 167 | 72 | 18 | 2 | 2 | 0 | 0 | 0 | 1 | 564 |
| 15:00 | 64 | 76 | 131 | 131 | 160 | 175 | 97 | 35 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 752 |
| 16:00 | 87 | 69 | 138 | 138 | 186 | 180 | 81 | 30 | 2 | 5 | 0 | 1 | 0 | 0 | 0 | 779 |
| 17:00 | 64 | 63 | 138 | 138 | 156 | 198 | 114 | 32 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 769 |
| 18:00 | 46 | 51 | 106 | 106 | 186 | 173 | 81 | 18 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 671 |
| 19:00 | 79 | 60 | 108 | 108 | 94 | 75 | 52 | 21 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 494 |
| 20:00 | 30 | 37 | 67 | 67 | 94 | 78 | 51 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 375 |
| 21:00 | 4 | 23 | 70 | 70 | 80 | 73 | 26 | 17 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 296 |
| 22:00 | 4 | 6 | 29 | 29 | 62 | 38 | 24 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 174 |
| 23:00 | 1 | 6 | 16 | 16 | 26 | 28 | 16 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| Total | 496 | 526 | 1227 | 1227 | 1835 | 2008 | 1628 | 718 | 207 | 61 | 12 | 3 | 0 | 0 | 1 | 8722 |

Daily
15th Percentile : 21 MPH
50th Percentile : 30 MPH
85th Percentile : 39 MPH
95th Percentile : 43 MPH

Statistics
Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 3843
Percent in Pace : 44.1%
Number of Vehicles > 55 MPH : 16
Percent of Vehicles > 55 MPH : 0.2%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD011
Site Code: 999-21500

City of San Fernando
Glenoaks Boulevard
W/ Fermoore Street
24 Hour Directional Speed Survey
Eastbound, Westbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
|------------|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 0 | 0 | 1 | 1 | 14 | 4 | 41 | 49 | 29 | 18 | 9 | 4 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 147 |
| 01:00 | 1 | 1 | 2 | 0 | 4 | 3 | 11 | 24 | 14 | 4 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 02:00 | 1 | 1 | 0 | 0 | 3 | 3 | 20 | 16 | 14 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 |
| 03:00 | 0 | 0 | 4 | 4 | 1 | 1 | 17 | 27 | 11 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| 04:00 | 0 | 0 | 1 | 1 | 10 | 10 | 59 | 60 | 35 | 18 | 18 | 11 | 11 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 198 |
| 05:00 | 5 | 5 | 7 | 7 | 33 | 33 | 79 | 158 | 87 | 32 | 32 | 14 | 14 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 422 |
| 06:00 | 7 | 7 | 2 | 2 | 25 | 25 | 121 | 251 | 161 | 126 | 126 | 58 | 58 | 20 | 20 | 3 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 775 |
| 07:00 | 43 | 43 | 9 | 9 | 47 | 47 | 176 | 546 | 331 | 192 | 192 | 48 | 48 | 17 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1409 |
| 08:00 | 31 | 31 | 36 | 36 | 63 | 63 | 168 | 440 | 315 | 142 | 142 | 48 | 48 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1254 |
| 09:00 | 18 | 18 | 8 | 8 | 33 | 33 | 106 | 246 | 225 | 125 | 125 | 41 | 41 | 8 | 8 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 813 |
| 10:00 | 12 | 12 | 5 | 5 | 48 | 48 | 129 | 224 | 230 | 100 | 100 | 35 | 35 | 15 | 15 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 799 |
| 11:00 | 16 | 16 | 17 | 17 | 46 | 46 | 140 | 238 | 246 | 134 | 134 | 38 | 38 | 7 | 7 | 0 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 888 |
| 12 PM | 26 | 26 | 23 | 23 | 66 | 66 | 160 | 306 | 243 | 139 | 139 | 32 | 32 | 8 | 8 | 0 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1007 |
| 13:00 | 14 | 14 | 11 | 11 | 65 | 65 | 133 | 304 | 257 | 142 | 142 | 40 | 40 | 10 | 10 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 978 |
| 14:00 | 33 | 33 | 19 | 19 | 67 | 67 | 169 | 316 | 322 | 167 | 167 | 45 | 45 | 10 | 10 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1151 |
| 15:00 | 78 | 78 | 77 | 77 | 136 | 136 | 266 | 447 | 266 | 112 | 112 | 31 | 31 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1416 |
| 16:00 | 103 | 103 | 71 | 71 | 156 | 156 | 266 | 439 | 269 | 101 | 101 | 16 | 16 | 7 | 7 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1430 |
| 17:00 | 71 | 71 | 63 | 63 | 149 | 149 | 260 | 449 | 254 | 110 | 110 | 21 | 21 | 5 | 5 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1383 |
| 18:00 | 53 | 53 | 52 | 52 | 123 | 123 | 334 | 372 | 191 | 76 | 76 | 29 | 29 | 3 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1234 |
| 19:00 | 87 | 87 | 60 | 60 | 129 | 129 | 183 | 287 | 141 | 50 | 50 | 12 | 12 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 953 |
| 20:00 | 33 | 33 | 40 | 40 | 75 | 75 | 181 | 256 | 145 | 30 | 30 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 772 |
| 21:00 | 8 | 8 | 24 | 24 | 71 | 71 | 133 | 176 | 88 | 42 | 42 | 9 | 9 | 1 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 555 |
| 22:00 | 4 | 4 | 8 | 8 | 37 | 37 | 99 | 107 | 64 | 24 | 24 | 12 | 12 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 358 |
| 23:00 | 1 | 1 | 6 | 6 | 21 | 21 | 44 | 82 | 48 | 11 | 11 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 221 |
| Total | 645 | 645 | 546 | 546 | 1422 | 1422 | 3295 | 5820 | 3990 | 1898 | 1898 | 562 | 562 | 142 | 142 | 29 | 29 | 29 | 7 | 7 | 1 | 1 | 0 | 0 | 1 | 18358 |

Daily
15th Percentile : 25 MPH
50th Percentile : 32 MPH
85th Percentile : 39 MPH
95th Percentile : 44 MPH

Statistics
Mean Speed(Average) : 33 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 9810
Percent in Pace : 53.4%
Number of Vehicles > 55 MPH : 38
Percent of Vehicles > 55 MPH : 0.2%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD012
Site Code: 999-21500

City of San Fernando

Glenoaks Boulevard

E/ Newton Street

24 Hour Directional Speed Survey

Eastbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
|------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|-----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 2 | 1 | 1 | 0 | 1 | 1 | 9 | 16 | 16 | 27 | 27 | 16 | 12 | 7 | 7 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 85 |
| 01:00 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 16 | 16 | 13 | 13 | 12 | 7 | 7 | 7 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 62 |
| 02:00 | 0 | 4 | 4 | 0 | 0 | 2 | 4 | 9 | 9 | 18 | 18 | 7 | 7 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| 03:00 | 8 | 0 | 0 | 0 | 0 | 1 | 9 | 13 | 13 | 30 | 30 | 25 | 25 | 6 | 6 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 97 |
| 04:00 | 8 | 4 | 4 | 0 | 0 | 3 | 15 | 63 | 63 | 73 | 73 | 41 | 41 | 21 | 21 | 16 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 249 |
| 05:00 | 22 | 6 | 6 | 8 | 8 | 23 | 46 | 132 | 132 | 123 | 123 | 75 | 75 | 29 | 29 | 13 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 481 |
| 06:00 | 25 | 5 | 5 | 21 | 21 | 50 | 137 | 194 | 194 | 175 | 175 | 77 | 77 | 21 | 21 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 713 |
| 07:00 | 91 | 59 | 59 | 100 | 100 | 131 | 204 | 188 | 188 | 83 | 83 | 23 | 23 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 886 |
| 08:00 | 28 | 15 | 15 | 21 | 21 | 70 | 144 | 220 | 220 | 154 | 154 | 77 | 77 | 13 | 13 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 748 |
| 09:00 | 12 | 4 | 4 | 19 | 19 | 38 | 114 | 138 | 138 | 165 | 165 | 86 | 86 | 15 | 15 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 599 |
| 10:00 | 8 | 3 | 3 | 8 | 8 | 38 | 98 | 162 | 162 | 142 | 142 | 82 | 82 | 16 | 16 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 565 |
| 11:00 | 7 | 4 | 4 | 3 | 3 | 25 | 69 | 173 | 173 | 150 | 150 | 66 | 66 | 16 | 16 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 522 |
| 12 PM | 11 | 2 | 2 | 4 | 4 | 39 | 120 | 181 | 181 | 136 | 136 | 53 | 53 | 13 | 13 | 5 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 568 |
| 13:00 | 13 | 8 | 8 | 15 | 15 | 35 | 75 | 204 | 204 | 148 | 148 | 68 | 68 | 14 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 586 |
| 14:00 | 15 | 9 | 9 | 13 | 13 | 41 | 89 | 216 | 216 | 167 | 167 | 61 | 61 | 20 | 20 | 6 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 639 |
| 15:00 | 31 | 15 | 15 | 40 | 40 | 96 | 186 | 184 | 184 | 95 | 95 | 24 | 24 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 681 |
| 16:00 | 14 | 5 | 5 | 16 | 16 | 71 | 156 | 211 | 211 | 124 | 124 | 38 | 38 | 16 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 651 |
| 17:00 | 25 | 26 | 26 | 44 | 44 | 71 | 143 | 185 | 185 | 106 | 106 | 35 | 35 | 9 | 9 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 652 |
| 18:00 | 24 | 22 | 22 | 30 | 30 | 68 | 151 | 177 | 177 | 79 | 79 | 36 | 36 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 591 |
| 19:00 | 6 | 6 | 6 | 19 | 19 | 56 | 130 | 153 | 153 | 70 | 70 | 35 | 35 | 11 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 490 |
| 20:00 | 4 | 0 | 0 | 17 | 17 | 30 | 112 | 121 | 121 | 96 | 96 | 40 | 40 | 11 | 11 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 437 |
| 21:00 | 2 | 2 | 2 | 1 | 1 | 13 | 41 | 105 | 105 | 74 | 74 | 41 | 41 | 15 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 296 |
| 22:00 | 1 | 0 | 0 | 4 | 4 | 10 | 36 | 51 | 51 | 58 | 58 | 23 | 23 | 22 | 22 | 6 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 216 |
| 23:00 | 2 | 1 | 1 | 3 | 3 | 3 | 21 | 35 | 35 | 43 | 43 | 30 | 30 | 17 | 17 | 6 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 166 |
| Total | 359 | 201 | 201 | 387 | 387 | 916 | 2116 | 3147 | 3147 | 2349 | 2349 | 1071 | 1071 | 322 | 322 | 113 | 37 | 37 | 10 | 10 | 0 | 0 | 1 | 11029 |

Daily

15th Percentile : 28 MPH
 50th Percentile : 37 MPH
 85th Percentile : 44 MPH
 95th Percentile : 49 MPH

Statistics

Mean Speed(Average) : 37 MPH
 10 MPH Pace Speed : 36-45 MPH
 Number in Pace : 5496
 Percent in Pace : 49.8%
 Number of Vehicles > 55 MPH : 161
 Percent of Vehicles > 55 MPH : 1.5%

Counts Unlimited, Inc.

City of San Fernando
Glenoaks Boulevard
E/ Newton Street
24 Hour Directional Speed Survey
Westbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

SFD012
Site Code: 999-21500

| Start Time | 1 15 | 16 20 | 21 25 | 26 30 | 31 35 | 36 40 | 41 45 | 46 50 | 51 55 | 56 60 | 61 65 | 66 70 | 71 75 | 76 999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 09/22/21 | 1 | 0 | 0 | 10 | 14 | 18 | 21 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 74 |
| 01:00 | 0 | 0 | 1 | 3 | 4 | 7 | 9 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 28 |
| 02:00 | 0 | 0 | 2 | 4 | 7 | 9 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 36 |
| 03:00 | 2 | 0 | 0 | 2 | 8 | 10 | 9 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 35 |
| 04:00 | 0 | 0 | 2 | 5 | 19 | 23 | 18 | 8 | 3 | 1 | 0 | 0 | 1 | 0 | 80 |
| 05:00 | 7 | 2 | 2 | 16 | 41 | 35 | 32 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 148 |
| 06:00 | 6 | 3 | 13 | 21 | 66 | 63 | 23 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 207 |
| 07:00 | 11 | 4 | 15 | 78 | 165 | 113 | 42 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 440 |
| 08:00 | 6 | 4 | 23 | 116 | 186 | 131 | 49 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 526 |
| 09:00 | 5 | 5 | 18 | 57 | 102 | 83 | 40 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 327 |
| 10:00 | 5 | 1 | 9 | 47 | 136 | 116 | 40 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 362 |
| 11:00 | 11 | 4 | 29 | 78 | 111 | 95 | 47 | 10 | 4 | 1 | 0 | 0 | 0 | 0 | 390 |
| 12 PM | 10 | 3 | 14 | 81 | 139 | 117 | 49 | 7 | 2 | 3 | 0 | 0 | 0 | 0 | 425 |
| 13:00 | 9 | 4 | 25 | 71 | 133 | 109 | 51 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 414 |
| 14:00 | 12 | 13 | 26 | 79 | 165 | 141 | 52 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 495 |
| 15:00 | 23 | 11 | 55 | 182 | 240 | 109 | 33 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 659 |
| 16:00 | 48 | 32 | 52 | 193 | 250 | 161 | 50 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 797 |
| 17:00 | 44 | 51 | 88 | 189 | 187 | 97 | 32 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 698 |
| 18:00 | 29 | 31 | 72 | 161 | 185 | 90 | 26 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 600 |
| 19:00 | 23 | 9 | 32 | 113 | 148 | 99 | 32 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 466 |
| 20:00 | 8 | 5 | 19 | 59 | 99 | 95 | 29 | 12 | 2 | 3 | 0 | 1 | 0 | 0 | 332 |
| 21:00 | 4 | 1 | 12 | 41 | 82 | 72 | 36 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 254 |
| 22:00 | 2 | 0 | 4 | 17 | 39 | 47 | 39 | 20 | 5 | 2 | 0 | 0 | 0 | 0 | 175 |
| 23:00 | 1 | 1 | 2 | 8 | 27 | 38 | 22 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 117 |
| Total | 267 | 184 | 515 | 1631 | 2553 | 1878 | 791 | 189 | 56 | 18 | 1 | 1 | 1 | 0 | 8085 |

Daily
15th Percentile : 25 MPH
50th Percentile : 32 MPH
85th Percentile : 39 MPH
95th Percentile : 44 MPH

Statistics
Mean Speed(Average) : 33 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 4431
Percent in Pace : 54.8%
Number of Vehicles > 55 MPH : 21
Percent of Vehicles > 55 MPH : 0.3%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD012
Site Code: 999-21500

City of San Fernando
Glenoaks Boulevard
E/ Newton Street

24 Hour Directional Speed Survey
Eastbound, Westbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|-----|-----|-----|-----|------|------|------|------|------|-----|-----|-----|----|----|----|----|-------|
| 09/22/21 | 3 | 0 | 1 | 0 | 0 | 11 | 23 | 34 | 48 | 23 | 10 | 4 | 1 | 1 | 1 | 0 | 0 | 159 |
| 01:00 | 0 | 0 | 0 | 2 | 2 | 4 | 11 | 23 | 22 | 15 | 8 | 2 | 2 | 0 | 3 | 0 | 0 | 90 |
| 02:00 | 0 | 0 | 4 | 2 | 2 | 6 | 11 | 18 | 28 | 10 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 85 |
| 03:00 | 10 | 0 | 0 | 0 | 0 | 3 | 17 | 23 | 39 | 27 | 7 | 4 | 4 | 2 | 0 | 0 | 0 | 132 |
| 04:00 | 8 | 4 | 4 | 2 | 2 | 8 | 34 | 86 | 91 | 49 | 24 | 17 | 17 | 5 | 0 | 1 | 0 | 329 |
| 05:00 | 29 | 8 | 8 | 10 | 10 | 39 | 87 | 167 | 155 | 84 | 33 | 13 | 13 | 3 | 1 | 0 | 0 | 629 |
| 06:00 | 31 | 8 | 8 | 34 | 34 | 71 | 203 | 257 | 198 | 83 | 26 | 5 | 5 | 4 | 0 | 0 | 0 | 920 |
| 07:00 | 102 | 63 | 63 | 115 | 115 | 209 | 369 | 301 | 125 | 34 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1326 |
| 08:00 | 34 | 19 | 19 | 44 | 44 | 186 | 330 | 351 | 203 | 86 | 15 | 4 | 4 | 2 | 0 | 0 | 0 | 1274 |
| 09:00 | 17 | 9 | 9 | 37 | 37 | 95 | 216 | 221 | 205 | 100 | 18 | 7 | 7 | 0 | 1 | 0 | 0 | 926 |
| 10:00 | 13 | 4 | 4 | 17 | 17 | 85 | 234 | 278 | 182 | 88 | 18 | 5 | 5 | 3 | 0 | 0 | 0 | 927 |
| 11:00 | 18 | 8 | 8 | 32 | 32 | 103 | 180 | 268 | 197 | 76 | 20 | 9 | 9 | 1 | 0 | 0 | 0 | 912 |
| 12 PM | 21 | 5 | 5 | 18 | 18 | 120 | 259 | 298 | 185 | 60 | 15 | 8 | 8 | 3 | 1 | 0 | 0 | 993 |
| 13:00 | 22 | 12 | 12 | 40 | 40 | 106 | 208 | 313 | 199 | 79 | 15 | 6 | 6 | 0 | 0 | 0 | 0 | 1000 |
| 14:00 | 27 | 22 | 22 | 39 | 39 | 120 | 254 | 357 | 219 | 68 | 20 | 6 | 6 | 1 | 1 | 0 | 0 | 1134 |
| 15:00 | 54 | 26 | 26 | 95 | 95 | 278 | 426 | 293 | 128 | 26 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 1340 |
| 16:00 | 62 | 37 | 37 | 68 | 68 | 264 | 406 | 372 | 174 | 45 | 19 | 1 | 1 | 0 | 0 | 0 | 0 | 1448 |
| 17:00 | 69 | 77 | 77 | 132 | 132 | 260 | 330 | 282 | 138 | 43 | 11 | 6 | 6 | 2 | 0 | 0 | 0 | 1350 |
| 18:00 | 53 | 53 | 53 | 102 | 102 | 229 | 336 | 267 | 105 | 40 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1191 |
| 19:00 | 29 | 15 | 15 | 51 | 51 | 169 | 278 | 252 | 102 | 39 | 15 | 5 | 5 | 1 | 0 | 0 | 0 | 956 |
| 20:00 | 12 | 5 | 5 | 36 | 36 | 89 | 211 | 216 | 125 | 52 | 13 | 6 | 6 | 3 | 1 | 0 | 0 | 769 |
| 21:00 | 6 | 3 | 3 | 13 | 13 | 54 | 123 | 177 | 110 | 46 | 15 | 3 | 3 | 0 | 0 | 0 | 0 | 550 |
| 22:00 | 3 | 0 | 0 | 8 | 8 | 27 | 75 | 98 | 97 | 43 | 27 | 8 | 8 | 4 | 0 | 0 | 1 | 391 |
| 23:00 | 3 | 2 | 2 | 5 | 5 | 11 | 48 | 73 | 65 | 44 | 19 | 8 | 8 | 3 | 2 | 0 | 0 | 283 |
| Total | 626 | 385 | 385 | 902 | 902 | 2547 | 4669 | 5025 | 3140 | 1260 | 378 | 131 | 131 | 38 | 11 | 1 | 1 | 19114 |

Daily
15th Percentile : 26 MPH
50th Percentile : 35 MPH
85th Percentile : 43 MPH
95th Percentile : 48 MPH

Statistics
Mean Speed(Average) : 35 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 9694
Percent in Pace : 50.7%
Number of Vehicles > 55 MPH : 182
Percent of Vehicles > 55 MPH : 1.0%

Counts Unlimited, Inc.

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Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD003
Site Code: 999-21500

County of El Dorado
Harding Avenue
S/ Eighth Street / Glenoaks Boulevard
24 Hour Directional Speed Survey

Northbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 2 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 05:00 | 2 | 1 | 1 | 5 | 3 | 3 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 06:00 | 3 | 2 | 14 | 6 | 19 | 12 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 07:00 | 3 | 12 | 12 | 19 | 21 | 21 | 21 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 08:00 | 7 | 9 | 12 | 13 | 19 | 21 | 21 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 09:00 | 2 | 11 | 11 | 13 | 13 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 10:00 | 4 | 11 | 11 | 15 | 13 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 11:00 | 3 | 7 | 7 | 13 | 13 | 13 | 13 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 12 PM | 6 | 10 | 10 | 11 | 11 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 13:00 | 1 | 3 | 3 | 13 | 13 | 17 | 17 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 14:00 | 6 | 9 | 9 | 15 | 15 | 24 | 24 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 15:00 | 9 | 15 | 15 | 24 | 24 | 23 | 23 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 |
| 16:00 | 11 | 14 | 14 | 23 | 23 | 14 | 14 | 7 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 |
| 17:00 | 7 | 25 | 25 | 33 | 33 | 30 | 30 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99 |
| 18:00 | 26 | 29 | 29 | 20 | 20 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 87 |
| 19:00 | 7 | 14 | 14 | 26 | 26 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 20:00 | 2 | 10 | 10 | 12 | 12 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 21:00 | 1 | 6 | 6 | 8 | 8 | 7 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 22:00 | 0 | 1 | 1 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 23:00 | 1 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| Total | 103 | 200 | 285 | 285 | 216 | 52 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 860 |

Daily
15th Percentile : 15 MPH
50th Percentile : 22 MPH
85th Percentile : 28 MPH
95th Percentile : 31 MPH

Statistics
Mean Speed(Average) : 22 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 501
Percent in Pace : 58.3%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

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Corona, CA 92878

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email: counts@countsunlimited.com

SFD003
Site Code: 999-21500

County of El Dorado
Harding Avenue
S/ Eighth Street / Glenoaks Boulevard
24 Hour Directional Speed Survey
Southbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 05:00 | 2 | 0 | 0 | 3 | 3 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 06:00 | 3 | 4 | 4 | 11 | 11 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 07:00 | 5 | 8 | 12 | 28 | 23 | 34 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |
| 08:00 | 8 | 12 | 19 | 3 | 0 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 09:00 | 8 | 5 | 8 | 8 | 8 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 10:00 | 3 | 4 | 4 | 12 | 12 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 11:00 | 8 | 6 | 6 | 20 | 20 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 12 PM | 2 | 5 | 5 | 15 | 15 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 13:00 | 3 | 9 | 9 | 10 | 10 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 14:00 | 8 | 9 | 16 | 16 | 16 | 16 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54 |
| 15:00 | 10 | 18 | 18 | 18 | 18 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| 16:00 | 12 | 13 | 13 | 28 | 28 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| 17:00 | 4 | 12 | 12 | 29 | 29 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 18:00 | 15 | 18 | 18 | 25 | 25 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 19:00 | 13 | 23 | 23 | 25 | 25 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 20:00 | 5 | 5 | 5 | 18 | 18 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 21:00 | 2 | 2 | 2 | 13 | 13 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 22:00 | 1 | 2 | 2 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 23:00 | 0 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 115 | 159 | 159 | 312 | 312 | 203 | 52 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 843 |

Daily
15th Percentile : 15 MPH
50th Percentile : 22 MPH
85th Percentile : 28 MPH
95th Percentile : 31 MPH

Statistics
Mean Speed(Average) : 22 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 515
Percent in Pace : 61.1%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

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SFD003
Site Code: 999-21500

County of El Dorado
Harding Avenue
S/ Eighth Street / Glenoaks Boulevard
24 Hour Directional Speed Survey
Northbound, Southbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 3 | 15 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 1 | 0 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 05:00 | 4 | 1 | 1 | 8 | 7 | 4 | 7 | 7 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 06:00 | 6 | 6 | 6 | 17 | 14 | 2 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 07:00 | 8 | 22 | 24 | 47 | 46 | 16 | 46 | 46 | 16 | 16 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 140 |
| 08:00 | 15 | 24 | 24 | 42 | 40 | 9 | 40 | 40 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 |
| 09:00 | 10 | 14 | 14 | 21 | 14 | 3 | 14 | 14 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 10:00 | 7 | 15 | 15 | 27 | 19 | 3 | 19 | 19 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 11:00 | 11 | 13 | 13 | 33 | 23 | 9 | 23 | 23 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 12 PM | 8 | 15 | 15 | 26 | 23 | 7 | 23 | 23 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 13:00 | 4 | 12 | 12 | 23 | 30 | 7 | 30 | 30 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 |
| 14:00 | 14 | 18 | 18 | 31 | 40 | 11 | 40 | 40 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 |
| 15:00 | 19 | 33 | 33 | 42 | 31 | 2 | 31 | 31 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 128 |
| 16:00 | 23 | 27 | 27 | 51 | 25 | 9 | 25 | 25 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 136 |
| 17:00 | 11 | 37 | 37 | 62 | 37 | 4 | 37 | 37 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 151 |
| 18:00 | 41 | 47 | 47 | 45 | 20 | 5 | 20 | 20 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| 19:00 | 20 | 37 | 37 | 51 | 20 | 5 | 20 | 20 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 133 |
| 20:00 | 7 | 15 | 15 | 30 | 11 | 2 | 11 | 11 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| 21:00 | 3 | 8 | 8 | 21 | 12 | 3 | 12 | 12 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 |
| 22:00 | 1 | 3 | 3 | 11 | 2 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 23:00 | 1 | 5 | 5 | 4 | 3 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Total | 218 | 359 | 359 | 597 | 419 | 104 | 419 | 419 | 104 | 104 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1703 |

Daily
15th Percentile : 15 MPH
50th Percentile : 22 MPH
85th Percentile : 28 MPH
95th Percentile : 31 MPH

Statistics
Mean Speed(Average) : 22 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 1016
Percent in Pace : 59.7%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD004RD
Site Code: 999-21500

City of San Fernando
Harding Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey

Northbound

| Start Time | 1 15 | 16 20 | 21 25 | 26 30 | 31 35 | 36 40 | 41 45 | 46 50 | 51 55 | 56 60 | 61 65 | 66 70 | 71 75 | 76 999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 09/22/21 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:00 | 2 | 0 | 2 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 05:00 | 1 | 1 | 1 | 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 06:00 | 1 | 2 | 7 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 07:00 | 3 | 4 | 11 | 33 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 08:00 | 1 | 2 | 11 | 23 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| 09:00 | 4 | 3 | 8 | 8 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 10:00 | 5 | 2 | 7 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 11:00 | 0 | 5 | 8 | 10 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 12 PM | 5 | 2 | 9 | 6 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 13:00 | 2 | 4 | 8 | 10 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 14:00 | 3 | 2 | 7 | 24 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 15:00 | 0 | 5 | 5 | 25 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 16:00 | 1 | 2 | 19 | 30 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 |
| 17:00 | 6 | 5 | 16 | 22 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 18:00 | 11 | 5 | 11 | 22 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 56 |
| 19:00 | 1 | 3 | 13 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 20:00 | 1 | 7 | 10 | 4 | 3 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 27 |
| 21:00 | 1 | 3 | 9 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 22:00 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 23:00 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 48 | 60 | 166 | 267 | 126 | 29 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 700 |

Daily
15th Percentile : 19 MPH
50th Percentile : 26 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Statistics
Mean Speed(Average) : 26 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 433
Percent in Pace : 61.9%
Number of Vehicles > 55 MPH : 1
Percent of Vehicles > 55 MPH : 0.1%

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

SFD004RD
Site Code: 999-21500

City of San Fernando
Harding Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey
Southbound

| Start Time | 1 15 | 16 20 | 21 25 | 26 30 | 31 35 | 36 40 | 41 45 | 46 50 | 51 55 | 56 60 | 61 65 | 66 70 | 71 75 | 76 999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 09/22/21 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 01:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 05:00 | 1 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 06:00 | 3 | 1 | 3 | 9 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 07:00 | 0 | 5 | 15 | 28 | 33 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 |
| 08:00 | 0 | 3 | 12 | 15 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 09:00 | 3 | 4 | 10 | 10 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 10:00 | 0 | 2 | 4 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 11:00 | 0 | 1 | 7 | 12 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 12 PM | 2 | 2 | 6 | 12 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 13:00 | 5 | 2 | 5 | 14 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 14:00 | 1 | 2 | 8 | 23 | 13 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| 15:00 | 1 | 1 | 9 | 16 | 14 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 16:00 | 2 | 2 | 17 | 26 | 12 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 17:00 | 3 | 2 | 17 | 33 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 18:00 | 5 | 0 | 8 | 17 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 19:00 | 0 | 3 | 12 | 11 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 20:00 | 1 | 3 | 12 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 21:00 | 0 | 0 | 4 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 22:00 | 0 | 1 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 23:00 | 0 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 28 | 40 | 155 | 265 | 157 | 34 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 687 |

Daily
15th Percentile : 21 MPH
50th Percentile : 27 MPH
85th Percentile : 33 MPH
95th Percentile : 36 MPH

Statistics
Mean Speed(Average) : 27 MPH
10 MPH Pace Speed : 25-34 MPH
Number in Pace : 422
Percent in Pace : 61.4%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

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SFD004RD
Site Code: 999-21500

City of San Fernando
Harding Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey
Northbound, Southbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|----|-----|-----|-----|----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 3 | 1 | 1 | 0 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 01:00 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 2 | 0 | 0 | 2 | 0 | 4 | 4 | 4 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 05:00 | 2 | 1 | 1 | 3 | 0 | 8 | 8 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 06:00 | 4 | 3 | 3 | 10 | 0 | 18 | 18 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| 07:00 | 3 | 9 | 9 | 26 | 0 | 61 | 61 | 40 | 40 | 13 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 153 |
| 08:00 | 1 | 5 | 5 | 23 | 0 | 38 | 38 | 30 | 30 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| 09:00 | 7 | 7 | 7 | 18 | 0 | 18 | 18 | 7 | 7 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 10:00 | 5 | 4 | 4 | 11 | 0 | 16 | 16 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| 11:00 | 0 | 6 | 6 | 15 | 0 | 22 | 22 | 17 | 17 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| 12 PM | 7 | 4 | 4 | 15 | 0 | 18 | 18 | 10 | 10 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 13:00 | 7 | 6 | 6 | 13 | 0 | 24 | 24 | 20 | 20 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
| 14:00 | 4 | 4 | 4 | 15 | 0 | 47 | 47 | 23 | 23 | 8 | 8 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 |
| 15:00 | 1 | 6 | 6 | 14 | 0 | 41 | 41 | 27 | 27 | 6 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 |
| 16:00 | 3 | 4 | 4 | 36 | 0 | 56 | 56 | 23 | 23 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| 17:00 | 9 | 7 | 7 | 33 | 0 | 55 | 55 | 23 | 23 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| 18:00 | 16 | 5 | 5 | 19 | 0 | 39 | 39 | 16 | 16 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 |
| 19:00 | 1 | 6 | 6 | 25 | 0 | 26 | 26 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| 20:00 | 2 | 10 | 10 | 22 | 0 | 18 | 18 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 21:00 | 1 | 3 | 3 | 13 | 0 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 22:00 | 0 | 1 | 1 | 5 | 0 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 23:00 | 0 | 4 | 4 | 2 | 0 | 2 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Total | 76 | 100 | 100 | 321 | 2 | 532 | 532 | 283 | 283 | 63 | 63 | 9 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1387 |

Daily
15th Percentile : 20 MPH
50th Percentile : 26 MPH
85th Percentile : 32 MPH
95th Percentile : 35 MPH

Statistics
Mean Speed(Average) : 27 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 853
Percent in Pace : 61.5%
Number of Vehicles > 55 MPH : 1
Percent of Vehicles > 55 MPH : 0.1%

Counts Unlimited, Inc.

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email: counts@countsunlimited.com

SFD005
Site Code: 999-21500

City of San Fernando

Harding Avenue

B/ Fourth Street - First Street

24 Hour Directional Speed Survey

Northbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 01:00 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 2 | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 05:00 | 4 | 2 | 2 | 6 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 06:00 | 2 | 4 | 4 | 6 | 6 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 07:00 | 11 | 21 | 21 | 16 | 10 | 9 | 9 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
| 08:00 | 2 | 5 | 5 | 10 | 8 | 12 | 12 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 09:00 | 5 | 3 | 3 | 8 | 8 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 10:00 | 0 | 4 | 4 | 5 | 5 | 7 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 11:00 | 0 | 5 | 5 | 7 | 7 | 11 | 11 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 12 PM | 1 | 1 | 1 | 11 | 11 | 6 | 6 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13:00 | 2 | 6 | 6 | 14 | 14 | 15 | 15 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 14:00 | 7 | 3 | 3 | 15 | 15 | 12 | 12 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| 15:00 | 3 | 12 | 12 | 16 | 16 | 13 | 13 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| 16:00 | 3 | 9 | 9 | 19 | 19 | 16 | 16 | 10 | 10 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 |
| 17:00 | 2 | 8 | 8 | 24 | 24 | 22 | 22 | 7 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 18:00 | 4 | 11 | 11 | 12 | 12 | 15 | 15 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 |
| 19:00 | 13 | 8 | 8 | 11 | 11 | 10 | 10 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 20:00 | 3 | 14 | 14 | 12 | 12 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 21:00 | 0 | 5 | 5 | 6 | 6 | 4 | 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 22:00 | 1 | 3 | 3 | 4 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 23:00 | 2 | 3 | 3 | 1 | 1 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| Total | 65 | 130 | 130 | 205 | 205 | 173 | 173 | 65 | 65 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 648 |

Daily
15th Percentile : 16 MPH
50th Percentile : 23 MPH
85th Percentile : 29 MPH
95th Percentile : 33 MPH

Statistics
Mean Speed(Average) : 23 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 378
Percent in Pace : 58.3%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

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SFD005
Site Code: 999-21500

City of San Fernando

Harding Avenue

B/ Fourth Street - First Street

24 Hour Directional Speed Survey

Southbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 1 | 1 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:00 | 3 | 1 | 1 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 06:00 | 5 | 4 | 4 | 12 | 12 | 5 | 5 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 07:00 | 5 | 14 | 14 | 26 | 26 | 34 | 21 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 |
| 08:00 | 6 | 10 | 7 | 8 | 8 | 22 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 09:00 | 0 | 1 | 1 | 11 | 11 | 9 | 6 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 10:00 | 4 | 4 | 4 | 11 | 11 | 6 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 11:00 | 0 | 3 | 3 | 6 | 6 | 10 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 12 PM | 2 | 3 | 3 | 6 | 6 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 13:00 | 3 | 6 | 6 | 10 | 10 | 10 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 14:00 | 6 | 12 | 12 | 13 | 13 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| 15:00 | 5 | 10 | 10 | 22 | 22 | 15 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 16:00 | 5 | 13 | 13 | 13 | 13 | 17 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| 17:00 | 5 | 8 | 8 | 13 | 13 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 18:00 | 3 | 12 | 12 | 7 | 7 | 8 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 19:00 | 4 | 7 | 7 | 13 | 13 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
| 20:00 | 5 | 12 | 12 | 15 | 15 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 21:00 | 2 | 2 | 2 | 9 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 22:00 | 1 | 7 | 7 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 23:00 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total | 64 | 131 | 131 | 202 | 202 | 199 | 84 | 11 | 11 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 692 |

Daily
15th Percentile : 16 MPH
50th Percentile : 23 MPH
85th Percentile : 29 MPH
95th Percentile : 33 MPH

Statistics
Mean Speed(Average) : 24 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 401
Percent in Pace : 57.9%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

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email: counts@countsunlimited.com

SFD005
Site Code: 999-21500

City of San Fernando

Harding Avenue

B/ Fourth Street - First Street

24 Hour Directional Speed Survey

Northbound, Southbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 01:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 0 | 3 | 3 | 2 | 2 | 2 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 05:00 | 7 | 7 | 3 | 3 | 12 | 7 | 2 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 06:00 | 7 | 7 | 8 | 8 | 18 | 18 | 8 | 7 | 7 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| 07:00 | 16 | 16 | 35 | 35 | 42 | 42 | 43 | 25 | 25 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 165 |
| 08:00 | 8 | 8 | 15 | 15 | 17 | 17 | 34 | 6 | 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| 09:00 | 5 | 5 | 4 | 4 | 16 | 16 | 13 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 10:00 | 4 | 4 | 8 | 8 | 16 | 16 | 13 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 11:00 | 0 | 0 | 8 | 8 | 13 | 13 | 21 | 8 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 12 PM | 3 | 3 | 4 | 4 | 17 | 17 | 17 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| 13:00 | 5 | 5 | 12 | 12 | 24 | 24 | 25 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 74 |
| 14:00 | 13 | 13 | 15 | 15 | 28 | 28 | 22 | 12 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 91 |
| 15:00 | 8 | 8 | 22 | 22 | 38 | 38 | 28 | 15 | 15 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 |
| 16:00 | 8 | 8 | 22 | 22 | 32 | 32 | 33 | 15 | 15 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 |
| 17:00 | 7 | 7 | 16 | 16 | 37 | 37 | 32 | 8 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| 18:00 | 7 | 7 | 23 | 23 | 19 | 19 | 23 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 19:00 | 17 | 17 | 15 | 15 | 24 | 24 | 25 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 |
| 20:00 | 8 | 8 | 26 | 26 | 27 | 27 | 11 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
| 21:00 | 2 | 2 | 7 | 7 | 15 | 15 | 6 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| 22:00 | 2 | 2 | 10 | 10 | 5 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 23:00 | 2 | 2 | 4 | 4 | 3 | 3 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Total | 129 | 129 | 261 | 261 | 407 | 407 | 372 | 149 | 149 | 20 | 20 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1340 |

| | | |
|-------|-------------------|--------|
| Daily | 15th Percentile : | 16 MPH |
| | 50th Percentile : | 23 MPH |
| | 85th Percentile : | 29 MPH |
| | 95th Percentile : | 33 MPH |

| | | |
|------------|--------------------------------|-----------|
| Statistics | Mean Speed(Average) : | 23 MPH |
| | 10 MPH Pace Speed : | 21-30 MPH |
| | Number in Pace : | 779 |
| | Percent in Pace : | 58.1% |
| | Number of Vehicles > 55 MPH : | 0 |
| | Percent of Vehicles > 55 MPH : | 0.0% |

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD006
Site Code: 999-21500

City of San Fernando
Maclay Avenue
B/S/Eighth Street - Glenoaks Boulevard
24 Hour Directional Speed Survey
Northbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 99 | 76 | Total |
|------------|-----|-----|-----|-----|-----|------|------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 3 | 7 | 14 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 45 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 02:00 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 |
| 03:00 | 1 | 0 | 0 | 0 | 0 | 2 | 4 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 04:00 | 0 | 0 | 2 | 2 | 1 | 3 | 15 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 44 |
| 05:00 | 1 | 1 | 1 | 1 | 3 | 14 | 45 | 16 | 9 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 127 |
| 06:00 | 0 | 0 | 2 | 2 | 7 | 29 | 52 | 29 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 202 |
| 07:00 | 4 | 4 | 8 | 1 | 27 | 71 | 103 | 39 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 403 |
| 08:00 | 5 | 1 | 1 | 1 | 19 | 69 | 109 | 42 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 |
| 09:00 | 8 | 8 | 6 | 6 | 11 | 59 | 61 | 26 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 269 |
| 10:00 | 7 | 7 | 7 | 7 | 24 | 57 | 61 | 36 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 279 |
| 11:00 | 10 | 10 | 9 | 9 | 30 | 68 | 85 | 26 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 367 |
| 12 PM | 5 | 5 | 6 | 6 | 22 | 50 | 116 | 37 | 8 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 355 |
| 13:00 | 18 | 18 | 12 | 12 | 34 | 59 | 79 | 31 | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 337 |
| 14:00 | 14 | 14 | 15 | 15 | 24 | 65 | 102 | 59 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 423 |
| 15:00 | 5 | 5 | 8 | 8 | 51 | 134 | 97 | 42 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 524 |
| 16:00 | 9 | 9 | 23 | 23 | 59 | 122 | 126 | 35 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 628 |
| 17:00 | 18 | 18 | 17 | 17 | 55 | 159 | 112 | 40 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 642 |
| 18:00 | 14 | 14 | 19 | 19 | 44 | 114 | 114 | 18 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 527 |
| 19:00 | 6 | 6 | 13 | 13 | 40 | 97 | 81 | 23 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 411 |
| 20:00 | 5 | 5 | 6 | 6 | 21 | 43 | 63 | 13 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 268 |
| 21:00 | 0 | 0 | 1 | 1 | 7 | 30 | 63 | 23 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 195 |
| 22:00 | 0 | 0 | 2 | 2 | 5 | 8 | 25 | 15 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 97 |
| 23:00 | 1 | 1 | 2 | 2 | 0 | 5 | 16 | 10 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 |
| Total | 131 | 131 | 160 | 160 | 489 | 1271 | 1553 | 584 | 163 | 43 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6659 |

Daily
15th Percentile : 25 MPH
50th Percentile : 32 MPH
85th Percentile : 39 MPH
95th Percentile : 44 MPH

Statistics
Mean Speed(Average) : 33 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 3806
Percent in Pace : 57.2%
Number of Vehicles > 55 MPH : 12
Percent of Vehicles > 55 MPH : 0.2%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD006
Site Code: 999-21500

City of San Fernando
Maday Avenue
B/ S/Eighth Street - Glencaks Boulevard
24 Hour Directional Speed Survey

Southbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|-----|-----|-----|-----|----|------|------|------|-----|-----|----|----|----|----|----|----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 14 | 24 | 10 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 59 |
| 01:00 | 1 | 1 | 0 | 1 | 1 | 0 | 4 | 3 | 12 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 35 |
| 02:00 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 6 | 6 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 27 |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 5 | 15 | 8 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 38 |
| 04:00 | 1 | 1 | 3 | 0 | 2 | 0 | 6 | 13 | 25 | 21 | 7 | 5 | 1 | 0 | 0 | 0 | 0 | 84 |
| 05:00 | 2 | 2 | 4 | 4 | 4 | 0 | 9 | 44 | 60 | 37 | 11 | 7 | 0 | 1 | 0 | 0 | 0 | 179 |
| 06:00 | 4 | 4 | 9 | 9 | 20 | 0 | 42 | 111 | 112 | 65 | 14 | 4 | 2 | 1 | 0 | 0 | 0 | 384 |
| 07:00 | 37 | 37 | 52 | 52 | 89 | 0 | 139 | 159 | 155 | 60 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 704 |
| 08:00 | 21 | 21 | 33 | 33 | 83 | 0 | 102 | 160 | 127 | 29 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 561 |
| 09:00 | 9 | 9 | 8 | 8 | 38 | 0 | 66 | 113 | 116 | 45 | 21 | 0 | 1 | 0 | 0 | 1 | 0 | 418 |
| 10:00 | 10 | 10 | 14 | 14 | 36 | 0 | 83 | 110 | 131 | 41 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 439 |
| 11:00 | 2 | 2 | 11 | 11 | 45 | 0 | 86 | 123 | 96 | 45 | 12 | 5 | 0 | 0 | 0 | 0 | 0 | 425 |
| 12 PM | 9 | 9 | 21 | 21 | 23 | 0 | 77 | 149 | 128 | 40 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 465 |
| 13:00 | 7 | 7 | 17 | 17 | 45 | 0 | 75 | 110 | 90 | 38 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 388 |
| 14:00 | 10 | 10 | 25 | 25 | 56 | 0 | 92 | 168 | 119 | 44 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 522 |
| 15:00 | 15 | 15 | 34 | 34 | 90 | 0 | 146 | 165 | 70 | 21 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 546 |
| 16:00 | 16 | 16 | 26 | 26 | 86 | 0 | 130 | 182 | 106 | 31 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 585 |
| 17:00 | 23 | 23 | 47 | 47 | 71 | 0 | 126 | 173 | 112 | 22 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 581 |
| 18:00 | 26 | 26 | 27 | 27 | 52 | 0 | 137 | 156 | 108 | 17 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 528 |
| 19:00 | 14 | 14 | 11 | 11 | 51 | 0 | 106 | 159 | 81 | 28 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 455 |
| 20:00 | 3 | 3 | 9 | 9 | 19 | 0 | 63 | 108 | 67 | 32 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 305 |
| 21:00 | 1 | 1 | 2 | 2 | 6 | 0 | 28 | 76 | 60 | 21 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 198 |
| 22:00 | 2 | 2 | 0 | 0 | 2 | 0 | 17 | 41 | 47 | 17 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 133 |
| 23:00 | 1 | 1 | 0 | 0 | 2 | 0 | 10 | 19 | 32 | 16 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 98 |
| Total | 214 | 214 | 354 | 354 | 822 | 0 | 1553 | 2367 | 1899 | 701 | 181 | 54 | 9 | 2 | 0 | 1 | 0 | 8157 |

Daily
15th Percentile : 23 MPH
50th Percentile : 32 MPH
85th Percentile : 39 MPH
95th Percentile : 43 MPH

Statistics
Mean Speed(Average) : 32 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 4266
Percent in Pace : 52.3%
Number of Vehicles > 55 MPH : 12
Percent of Vehicles > 55 MPH : 0.1%

Counts Unlimited, Inc.

City of San Fernando
Maday Avenue
B/ S/Eighth Street - Glenoaks Boulevard
24 Hour Directional Speed Survey
Northbound, Southbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

SFD006
Site Code: 999-21500

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
|------------|-----|-----|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-------|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 3 | 12 | 12 | 7 | 25 | 35 | 38 | 18 | 14 | 9 | 8 | 6 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| 01:00 | 1 | 2 | 0 | 0 | 2 | 7 | 7 | 10 | 7 | 10 | 10 | 10 | 11 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 02:00 | 0 | 1 | 0 | 0 | 1 | 4 | 5 | 12 | 10 | 12 | 19 | 14 | 14 | 7 | 7 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 03:00 | 1 | 0 | 0 | 0 | 1 | 4 | 9 | 27 | 27 | 27 | 40 | 28 | 28 | 8 | 8 | 6 | 6 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| 04:00 | 1 | 5 | 5 | 5 | 3 | 23 | 76 | 105 | 76 | 183 | 164 | 258 | 94 | 99 | 21 | 21 | 12 | 12 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 128 |
| 05:00 | 3 | 7 | 11 | 11 | 27 | 71 | 210 | 236 | 236 | 296 | 258 | 236 | 99 | 71 | 14 | 14 | 2 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 306 |
| 06:00 | 4 | 11 | 60 | 60 | 116 | 210 | 210 | 236 | 236 | 296 | 258 | 236 | 99 | 71 | 14 | 14 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 586 |
| 07:00 | 41 | 102 | 34 | 34 | 102 | 171 | 171 | 207 | 207 | 305 | 236 | 236 | 99 | 71 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1107 |
| 08:00 | 26 | 17 | 14 | 14 | 49 | 125 | 125 | 194 | 194 | 305 | 236 | 236 | 99 | 71 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 961 |
| 09:00 | 17 | 21 | 21 | 21 | 60 | 140 | 140 | 194 | 194 | 305 | 236 | 236 | 99 | 71 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 687 |
| 10:00 | 17 | 21 | 21 | 21 | 60 | 140 | 140 | 194 | 194 | 305 | 236 | 236 | 99 | 71 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 718 |
| 11:00 | 12 | 20 | 20 | 20 | 75 | 154 | 154 | 252 | 252 | 341 | 244 | 244 | 77 | 77 | 20 | 20 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 792 |
| 12 PM | 14 | 27 | 27 | 27 | 45 | 127 | 127 | 254 | 254 | 341 | 244 | 244 | 77 | 77 | 26 | 26 | 4 | 4 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 820 |
| 13:00 | 25 | 29 | 29 | 29 | 79 | 134 | 134 | 200 | 200 | 294 | 221 | 221 | 69 | 69 | 15 | 15 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 725 |
| 14:00 | 24 | 40 | 40 | 40 | 80 | 157 | 157 | 294 | 294 | 341 | 221 | 221 | 103 | 103 | 20 | 20 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 945 |
| 15:00 | 20 | 42 | 42 | 42 | 141 | 280 | 280 | 341 | 341 | 425 | 232 | 232 | 66 | 66 | 11 | 11 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1070 |
| 16:00 | 25 | 49 | 49 | 49 | 145 | 252 | 252 | 397 | 397 | 425 | 232 | 232 | 66 | 66 | 15 | 15 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1213 |
| 17:00 | 41 | 64 | 64 | 64 | 126 | 285 | 285 | 397 | 397 | 425 | 232 | 232 | 66 | 66 | 20 | 20 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1223 |
| 18:00 | 40 | 46 | 46 | 46 | 96 | 251 | 251 | 347 | 347 | 425 | 232 | 232 | 66 | 66 | 15 | 15 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1055 |
| 19:00 | 20 | 24 | 24 | 24 | 91 | 203 | 203 | 299 | 299 | 347 | 222 | 222 | 51 | 51 | 9 | 9 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 866 |
| 20:00 | 8 | 15 | 15 | 15 | 40 | 106 | 106 | 214 | 214 | 299 | 162 | 162 | 45 | 45 | 13 | 13 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 573 |
| 21:00 | 1 | 3 | 3 | 3 | 13 | 58 | 58 | 142 | 142 | 214 | 130 | 130 | 44 | 44 | 8 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 393 |
| 22:00 | 2 | 2 | 2 | 2 | 7 | 25 | 25 | 78 | 78 | 142 | 123 | 123 | 32 | 32 | 7 | 7 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 |
| 23:00 | 2 | 2 | 2 | 2 | 2 | 15 | 15 | 35 | 35 | 78 | 48 | 48 | 26 | 26 | 15 | 15 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 157 |
| Total | 345 | 514 | 1311 | 2824 | 4620 | 3452 | 1285 | 344 | 97 | 20 | 3 | 0 | 1 | 0 | 14816 | | | | | | | | | | | | | |

Daily
15th Percentile : 25 MPH
50th Percentile : 32 MPH
85th Percentile : 39 MPH
95th Percentile : 43 MPH

Statistics
Mean Speed(Average) : 33 MPH
10 MPH Pace Speed : 31-40 MPH
Number in Pace : 8072
Percent in Pace : 54.5%
Number of Vehicles > 55 MPH : 24
Percent of Vehicles > 55 MPH : 0.2%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD007
Site Code: 999-21500

City of San Fernando
Maday Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey

| Northbound | | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
|------------|--|-----|-----|-----|-----|------|------|------|------|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| Start Time | | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | Total |
| 09/22/21 | | 1 | 1 | 1 | 1 | 7 | 4 | 11 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 01:00 | | 1 | 1 | 1 | 1 | 4 | 1 | 10 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 02:00 | | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 03:00 | | 0 | 0 | 0 | 0 | 4 | 4 | 4 | 11 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 04:00 | | 0 | 0 | 0 | 0 | 7 | 7 | 13 | 11 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 05:00 | | 2 | 2 | 1 | 1 | 9 | 9 | 32 | 23 | 11 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| 06:00 | | 15 | 15 | 7 | 7 | 27 | 27 | 54 | 41 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 157 |
| 07:00 | | 93 | 93 | 43 | 43 | 62 | 62 | 69 | 34 | 8 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 311 |
| 08:00 | | 54 | 54 | 37 | 37 | 87 | 87 | 127 | 54 | 12 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 373 |
| 09:00 | | 11 | 11 | 8 | 8 | 55 | 55 | 133 | 62 | 14 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 284 |
| 10:00 | | 13 | 13 | 15 | 15 | 87 | 87 | 130 | 64 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 319 |
| 11:00 | | 20 | 20 | 24 | 24 | 100 | 100 | 170 | 70 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 397 |
| 12 PM | | 16 | 16 | 11 | 11 | 66 | 66 | 168 | 123 | 11 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 398 |
| 13:00 | | 18 | 18 | 18 | 18 | 91 | 91 | 152 | 77 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 372 |
| 14:00 | | 77 | 77 | 55 | 55 | 111 | 111 | 109 | 62 | 14 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 430 |
| 15:00 | | 18 | 18 | 35 | 35 | 145 | 145 | 215 | 98 | 14 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 529 |
| 16:00 | | 52 | 52 | 69 | 69 | 193 | 193 | 215 | 81 | 17 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 630 |
| 17:00 | | 26 | 26 | 53 | 53 | 175 | 175 | 232 | 91 | 21 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 601 |
| 18:00 | | 7 | 7 | 25 | 25 | 163 | 163 | 195 | 85 | 21 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 499 |
| 19:00 | | 9 | 9 | 13 | 13 | 90 | 90 | 158 | 67 | 18 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 359 |
| 20:00 | | 3 | 3 | 4 | 4 | 70 | 70 | 129 | 60 | 15 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 285 |
| 21:00 | | 4 | 4 | 1 | 1 | 35 | 35 | 74 | 47 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 |
| 22:00 | | 0 | 0 | 1 | 1 | 14 | 14 | 42 | 25 | 17 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| 23:00 | | 1 | 1 | 1 | 1 | 10 | 10 | 28 | 19 | 5 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| Total | | 441 | 441 | 424 | 424 | 1613 | 1613 | 2475 | 1220 | 263 | 42 | 42 | 7 | 7 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6488 |

Daily
15th Percentile : 20 MPH
50th Percentile : 26 MPH
85th Percentile : 32 MPH
95th Percentile : 34 MPH

Statistics
Mean Speed(Average) : 26 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 4088
Percent in Pace : 63.0%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

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Phone: (951) 268-6268

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SFD007
Site Code: 999-21500

City of San Fernando
MacLay Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey

Southbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
|------------|-----|-----|-----|-----|------|------|------|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 1 | 0 | 5 | 7 | 15 | 31 | 36 | 40 | 45 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 01:00 | 1 | 1 | 0 | 0 | 0 | 7 | 5 | 7 | 35 | 40 | 45 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 02:00 | 0 | 0 | 0 | 2 | 0 | 4 | 2 | 6 | 35 | 40 | 45 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 03:00 | 0 | 0 | 0 | 1 | 0 | 5 | 4 | 7 | 35 | 40 | 45 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 04:00 | 2 | 0 | 0 | 2 | 0 | 14 | 9 | 19 | 31 | 36 | 40 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| 05:00 | 1 | 1 | 1 | 5 | 0 | 20 | 18 | 42 | 31 | 36 | 40 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| 06:00 | 3 | 4 | 4 | 10 | 0 | 68 | 58 | 87 | 31 | 36 | 40 | 17 | 17 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 253 |
| 07:00 | 18 | 20 | 20 | 72 | 0 | 205 | 64 | 185 | 31 | 36 | 40 | 12 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 577 |
| 08:00 | 10 | 10 | 10 | 54 | 0 | 144 | 69 | 177 | 31 | 36 | 40 | 14 | 14 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 482 |
| 09:00 | 16 | 7 | 7 | 27 | 0 | 107 | 54 | 133 | 31 | 36 | 40 | 26 | 26 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 371 |
| 10:00 | 16 | 11 | 11 | 25 | 0 | 105 | 72 | 130 | 31 | 36 | 40 | 15 | 15 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 378 |
| 11:00 | 15 | 15 | 15 | 36 | 0 | 134 | 65 | 162 | 31 | 36 | 40 | 12 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 441 |
| 12 PM | 13 | 4 | 4 | 26 | 0 | 130 | 72 | 150 | 31 | 36 | 40 | 24 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 419 |
| 13:00 | 10 | 13 | 13 | 27 | 0 | 105 | 65 | 113 | 31 | 36 | 40 | 11 | 11 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 348 |
| 14:00 | 29 | 18 | 18 | 57 | 0 | 170 | 38 | 143 | 31 | 36 | 40 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 468 |
| 15:00 | 24 | 9 | 9 | 43 | 0 | 155 | 55 | 192 | 31 | 36 | 40 | 11 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 490 |
| 16:00 | 25 | 27 | 27 | 47 | 0 | 151 | 82 | 177 | 31 | 36 | 40 | 13 | 13 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 524 |
| 17:00 | 13 | 6 | 6 | 32 | 0 | 141 | 95 | 148 | 31 | 36 | 40 | 18 | 18 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 455 |
| 18:00 | 6 | 5 | 5 | 27 | 0 | 141 | 46 | 146 | 31 | 36 | 40 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 387 |
| 19:00 | 4 | 4 | 4 | 27 | 0 | 118 | 54 | 126 | 31 | 36 | 40 | 14 | 14 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 353 |
| 20:00 | 1 | 1 | 1 | 21 | 0 | 58 | 34 | 109 | 31 | 36 | 40 | 8 | 8 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 234 |
| 21:00 | 1 | 1 | 1 | 12 | 0 | 40 | 25 | 62 | 31 | 36 | 40 | 6 | 6 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 148 |
| 22:00 | 0 | 0 | 0 | 3 | 0 | 26 | 18 | 46 | 31 | 36 | 40 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| 23:00 | 0 | 2 | 2 | 1 | 0 | 6 | 11 | 22 | 31 | 36 | 40 | 5 | 5 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| Total | 208 | 160 | 160 | 558 | 2059 | 2404 | 1022 | 254 | 39 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 6716 |

Daily
15th Percentile : 25 MPH
50th Percentile : 30 MPH
85th Percentile : 36 MPH
95th Percentile : 39 MPH

Statistics
Mean Speed(Average) : 31 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 4463
Percent in Pace : 66.5%
Number of Vehicles > 55 MPH : 2
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

City of San Fernando
 Madlay Avenue
 B/ Glenoaks Boulevard - Fourth Street
 24 Hour Directional Speed Survey
 Northbound, Southbound

PO Box 1178
 Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD007
 Site Code: 999-21500

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | 76 | Total |
|------------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|-------|
| 09/22/21 | 1 | 1 | 1 | 1 | 8 | 16 | 16 | 17 | 21 | 21 | 12 | 8 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 01:00 | 2 | 2 | 2 | 2 | 4 | 17 | 17 | 17 | 12 | 12 | 8 | 4 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 |
| 02:00 | 0 | 0 | 1 | 1 | 3 | 9 | 9 | 9 | 10 | 10 | 4 | 1 | 1 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 03:00 | 0 | 0 | 0 | 0 | 5 | 9 | 9 | 9 | 18 | 18 | 5 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |
| 04:00 | 2 | 2 | 0 | 0 | 9 | 27 | 27 | 27 | 30 | 30 | 9 | 9 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 05:00 | 3 | 3 | 2 | 2 | 14 | 52 | 52 | 52 | 65 | 65 | 29 | 29 | 12 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 179 |
| 06:00 | 18 | 11 | 11 | 11 | 37 | 122 | 122 | 122 | 128 | 128 | 69 | 69 | 19 | 19 | 6 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 410 |
| 07:00 | 111 | 63 | 63 | 63 | 134 | 274 | 274 | 274 | 219 | 219 | 72 | 72 | 14 | 14 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 888 |
| 08:00 | 64 | 47 | 47 | 47 | 141 | 271 | 271 | 271 | 231 | 231 | 81 | 81 | 15 | 15 | 4 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 855 |
| 09:00 | 27 | 15 | 15 | 15 | 82 | 240 | 240 | 240 | 195 | 195 | 68 | 68 | 26 | 26 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 655 |
| 10:00 | 29 | 26 | 26 | 26 | 112 | 235 | 235 | 235 | 194 | 194 | 82 | 82 | 15 | 15 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 697 |
| 11:00 | 35 | 39 | 39 | 39 | 136 | 304 | 304 | 304 | 232 | 232 | 76 | 76 | 14 | 14 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 838 |
| 12 PM | 29 | 15 | 15 | 15 | 92 | 298 | 298 | 298 | 273 | 273 | 83 | 83 | 27 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 817 |
| 13:00 | 28 | 31 | 31 | 31 | 118 | 257 | 257 | 257 | 190 | 190 | 80 | 80 | 11 | 11 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 720 |
| 14:00 | 106 | 73 | 73 | 73 | 168 | 279 | 279 | 279 | 205 | 205 | 52 | 52 | 13 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 898 |
| 15:00 | 42 | 44 | 44 | 44 | 188 | 370 | 370 | 370 | 290 | 290 | 69 | 69 | 14 | 14 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1019 |
| 16:00 | 77 | 96 | 96 | 96 | 240 | 366 | 366 | 366 | 258 | 258 | 99 | 99 | 16 | 16 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1154 |
| 17:00 | 39 | 59 | 59 | 59 | 207 | 373 | 373 | 373 | 239 | 239 | 116 | 116 | 20 | 20 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1056 |
| 18:00 | 13 | 30 | 30 | 30 | 190 | 336 | 336 | 336 | 231 | 231 | 67 | 67 | 15 | 15 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 886 |
| 19:00 | 13 | 17 | 17 | 17 | 117 | 276 | 276 | 276 | 193 | 193 | 72 | 72 | 17 | 17 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 712 |
| 20:00 | 4 | 5 | 5 | 5 | 91 | 187 | 187 | 187 | 169 | 169 | 49 | 49 | 12 | 12 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 519 |
| 21:00 | 5 | 2 | 2 | 2 | 47 | 114 | 114 | 114 | 109 | 109 | 32 | 32 | 8 | 8 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 318 |
| 22:00 | 0 | 0 | 2 | 2 | 17 | 68 | 68 | 68 | 71 | 71 | 35 | 35 | 7 | 7 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 202 |
| 23:00 | 1 | 3 | 3 | 3 | 11 | 34 | 34 | 34 | 41 | 41 | 16 | 16 | 8 | 8 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 |
| Total | 649 | 584 | 584 | 584 | 2171 | 4534 | 4534 | 4534 | 3624 | 3624 | 1285 | 1285 | 296 | 296 | 46 | 46 | 13 | 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13204 |

| | | |
|------------|--------------------------------|-----------|
| Daily | 15th Percentile : | 21 MPH |
| | 50th Percentile : | 28 MPH |
| | 85th Percentile : | 34 MPH |
| | 95th Percentile : | 38 MPH |
| Statistics | Mean Speed(Average) : | 29 MPH |
| | 10 MPH Pace Speed : | 26-35 MPH |
| | Number in Pace : | 8158 |
| | Percent in Pace : | 61.8% |
| | Number of Vehicles > 55 MPH : | 2 |
| | Percent of Vehicles > 55 MPH : | 0.0% |

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD008
Site Code: 999-21500

City of San Fernando

Maday Avenue

B/ Fourth Street - Truman Street

24 Hour Directional Speed Survey

Northbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|------|------|------|------|------|------|------|-----|----|----|----|----|----|----|----|----|----|-------|
| 09/22/21 | 1 | 1 | 1 | 1 | 8 | 13 | 13 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 01:00 | 0 | 0 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 |
| 02:00 | 1 | 1 | 0 | 1 | 1 | 4 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| 03:00 | 1 | 1 | 1 | 1 | 5 | 4 | 4 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 04:00 | 0 | 0 | 5 | 4 | 4 | 21 | 21 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 05:00 | 3 | 3 | 0 | 8 | 8 | 24 | 24 | 16 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 06:00 | 12 | 12 | 14 | 33 | 33 | 42 | 42 | 25 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| 07:00 | 58 | 58 | 46 | 85 | 85 | 64 | 64 | 14 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 272 |
| 08:00 | 59 | 59 | 57 | 130 | 130 | 83 | 83 | 21 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 352 |
| 09:00 | 45 | 45 | 68 | 132 | 132 | 42 | 42 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 296 |
| 10:00 | 52 | 52 | 85 | 123 | 123 | 48 | 48 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 317 |
| 11:00 | 103 | 103 | 113 | 76 | 76 | 59 | 59 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 357 |
| 12 PM | 84 | 84 | 83 | 114 | 114 | 69 | 69 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 363 |
| 13:00 | 72 | 72 | 85 | 139 | 139 | 49 | 49 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 349 |
| 14:00 | 60 | 60 | 98 | 155 | 155 | 88 | 88 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 414 |
| 15:00 | 88 | 88 | 127 | 178 | 178 | 52 | 52 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 456 |
| 16:00 | 99 | 99 | 117 | 158 | 158 | 68 | 68 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 447 |
| 17:00 | 86 | 86 | 155 | 181 | 181 | 58 | 58 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 487 |
| 18:00 | 98 | 98 | 159 | 157 | 157 | 37 | 37 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 457 |
| 19:00 | 57 | 57 | 119 | 133 | 133 | 35 | 35 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 349 |
| 20:00 | 30 | 30 | 70 | 127 | 127 | 45 | 45 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 283 |
| 21:00 | 19 | 19 | 25 | 75 | 75 | 37 | 37 | 12 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 |
| 22:00 | 6 | 6 | 8 | 35 | 35 | 39 | 39 | 11 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 105 |
| 23:00 | 2 | 2 | 2 | 19 | 19 | 32 | 32 | 15 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 |
| Total | 1036 | 1036 | 1440 | 2079 | 2079 | 1016 | 1016 | 232 | 52 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 5868 |

Daily
15th Percentile : 12 MPH
50th Percentile : 21 MPH
85th Percentile : 27 MPH
95th Percentile : 30 MPH

Statistics
Mean Speed(Average) : 21 MPH
10 MPH Pace Speed : 16-25 MPH
Number in Pace : 3519
Percent in Pace : 60.0%
Number of Vehicles > 55 MPH : 1
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD008
Site Code: 999-21500

City of San Fernando

MacLay Avenue

B/ Fourth Street - Truman Street

24 Hour Directional Speed Survey

Northbound, Southbound

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
|------------|------|------|------|------|------|------|------|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
| 01:00 | 1 | 1 | 5 | 4 | 17 | 4 | 7 | 24 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 02:00 | 2 | 2 | 0 | 0 | 4 | 4 | 11 | 16 | 9 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |
| 03:00 | 1 | 1 | 1 | 1 | 8 | 8 | 8 | 12 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 04:00 | 2 | 2 | 8 | 8 | 17 | 8 | 43 | 20 | 8 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 05:00 | 7 | 7 | 4 | 4 | 33 | 33 | 68 | 54 | 16 | 3 | 3 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 102 |
| 06:00 | 25 | 25 | 39 | 39 | 104 | 104 | 147 | 69 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 189 |
| 07:00 | 355 | 355 | 119 | 119 | 149 | 149 | 132 | 35 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 |
| 08:00 | 257 | 257 | 105 | 105 | 249 | 249 | 150 | 33 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 796 |
| 09:00 | 113 | 113 | 139 | 139 | 246 | 246 | 127 | 30 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 797 |
| 10:00 | 163 | 163 | 183 | 183 | 246 | 246 | 114 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 660 |
| 11:00 | 266 | 266 | 218 | 218 | 194 | 194 | 100 | 13 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 728 |
| 12 PM | 220 | 220 | 202 | 202 | 214 | 214 | 118 | 17 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 775 |
| 13:00 | 183 | 183 | 147 | 147 | 254 | 254 | 91 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 690 |
| 14:00 | 204 | 204 | 221 | 221 | 286 | 286 | 147 | 19 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 878 |
| 15:00 | 256 | 256 | 222 | 222 | 269 | 269 | 85 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 848 |
| 16:00 | 398 | 398 | 173 | 173 | 199 | 199 | 99 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 879 |
| 17:00 | 269 | 269 | 243 | 243 | 281 | 281 | 84 | 9 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 889 |
| 18:00 | 287 | 287 | 255 | 255 | 241 | 241 | 67 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 857 |
| 19:00 | 185 | 185 | 201 | 201 | 242 | 242 | 80 | 6 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 717 |
| 20:00 | 58 | 58 | 131 | 131 | 230 | 230 | 105 | 17 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 547 |
| 21:00 | 37 | 37 | 54 | 54 | 156 | 156 | 102 | 33 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 389 |
| 22:00 | 11 | 11 | 19 | 19 | 61 | 61 | 81 | 37 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 217 |
| 23:00 | 3 | 3 | 4 | 4 | 23 | 23 | 50 | 33 | 9 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 |
| Total | 3304 | 3304 | 2697 | 2697 | 3727 | 3727 | 2039 | 549 | 114 | 27 | 27 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 12464 |

Daily

15th Percentile : 8 MPH

50th Percentile : 20 MPH

85th Percentile : 27 MPH

95th Percentile : 30 MPH

Statistics

Mean Speed(Average) : 19 MPH

10 MPH Pace Speed : 16-25 MPH

Number in Pace : 6424

Percent in Pace : 51.5%

Number of Vehicles > 55 MPH : 1

Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

City of San Fernando
Orange Grove Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey
Northbound

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

SFD009
Site Code: 999-21500

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 31 | 36 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 76 | 999 | Total |
|------------|----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 02:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 05:00 | 1 | 4 | 4 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 06:00 | 3 | 4 | 4 | 9 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 07:00 | 7 | 8 | 8 | 22 | 22 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| 08:00 | 4 | 7 | 7 | 10 | 10 | 6 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 09:00 | 6 | 6 | 6 | 11 | 11 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 10:00 | 4 | 7 | 7 | 3 | 3 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 11:00 | 6 | 6 | 6 | 15 | 15 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 |
| 12 PM | 1 | 2 | 2 | 13 | 13 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 13:00 | 3 | 8 | 8 | 10 | 10 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 14:00 | 0 | 3 | 3 | 20 | 20 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 15:00 | 3 | 10 | 10 | 32 | 32 | 18 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 |
| 16:00 | 3 | 10 | 10 | 25 | 25 | 19 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 17:00 | 2 | 3 | 3 | 28 | 28 | 25 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| 18:00 | 2 | 13 | 13 | 17 | 17 | 16 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 19:00 | 2 | 8 | 8 | 14 | 14 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 20:00 | 1 | 7 | 7 | 9 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 21:00 | 0 | 2 | 2 | 4 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 22:00 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 23:00 | 0 | 0 | 0 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| Total | 50 | 111 | 111 | 250 | 250 | 180 | 50 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 650 |

Daily
15th Percentile : 17 MPH
50th Percentile : 23 MPH
85th Percentile : 28 MPH
95th Percentile : 32 MPH

Statistics
Mean Speed(Average) : 23 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 430
Percent in Pace : 66.2%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

SFD009
 Site Code: 999-21500

City of San Fernando
 Orange Grove Avenue
 B/ Glenoaks Boulevard - Fourth Street
 24 Hour Directional Speed Survey
 Southbound

| Start Time | 1 15 | 16 20 | 21 25 | 26 30 | 31 35 | 36 40 | 41 45 | 46 50 | 51 55 | 56 60 | 61 65 | 66 70 | 71 75 | 76 999 | Total |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------|
| 09/22/21 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 01:00 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 03:00 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:00 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 05:00 | 0 | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 06:00 | 2 | 4 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 07:00 | 8 | 12 | 31 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 |
| 08:00 | 1 | 7 | 18 | 17 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 09:00 | 5 | 3 | 7 | 8 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 10:00 | 3 | 5 | 8 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 11:00 | 7 | 7 | 11 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 12 PM | 2 | 4 | 7 | 14 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 13:00 | 5 | 4 | 8 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 14:00 | 1 | 9 | 23 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| 15:00 | 8 | 14 | 19 | 10 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 |
| 16:00 | 1 | 5 | 10 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 17:00 | 4 | 6 | 22 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| 18:00 | 7 | 8 | 14 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 19:00 | 6 | 9 | 13 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 20:00 | 1 | 7 | 8 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 21:00 | 2 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 22:00 | 0 | 0 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 23:00 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 64 | 113 | 225 | 166 | 28 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 599 |

Daily
 15th Percentile : 16 MPH
 50th Percentile : 22 MPH
 85th Percentile : 28 MPH
 95th Percentile : 30 MPH

Statistics
 Mean Speed(Average) : 22 MPH
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 391
 Percent in Pace : 65.3%
 Number of Vehicles > 55 MPH : 0
 Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD009
Site Code: 999-21500

City of San Fernando
Orange Grove Avenue
B/ Glenoaks Boulevard - Fourth Street
24 Hour Directional Speed Survey
Northbound, Southbound

| Start Time | 1 | 16 | 21 | 26 | 31 | 36 | 41 | 46 | 51 | 56 | 61 | 66 | 71 | 76 | Total |
|------------|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|-----|-------|
| | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 999 | |
| 09/22/21 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 3 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 02:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 03:00 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 1 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 05:00 | 1 | 6 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 06:00 | 5 | 8 | 15 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 07:00 | 15 | 20 | 53 | 26 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| 08:00 | 5 | 14 | 28 | 23 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 09:00 | 11 | 9 | 18 | 12 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 |
| 10:00 | 7 | 12 | 11 | 24 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| 11:00 | 13 | 13 | 26 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
| 12 PM | 3 | 6 | 20 | 23 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 13:00 | 8 | 12 | 18 | 22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 63 |
| 14:00 | 1 | 12 | 43 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 |
| 15:00 | 11 | 24 | 51 | 28 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 |
| 16:00 | 4 | 15 | 35 | 34 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 |
| 17:00 | 6 | 9 | 50 | 36 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 109 |
| 18:00 | 9 | 21 | 31 | 21 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 19:00 | 8 | 17 | 27 | 15 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 |
| 20:00 | 2 | 14 | 17 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 |
| 21:00 | 2 | 7 | 9 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 22:00 | 0 | 1 | 5 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 23:00 | 0 | 0 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| Total | 114 | 224 | 475 | 346 | 78 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1249 |

Daily
15th Percentile : 16 MPH
50th Percentile : 23 MPH
85th Percentile : 28 MPH
95th Percentile : 31 MPH

Statistics
Mean Speed(Average) : 23 MPH
10 MPH Pace Speed : 21-30 MPH
Number in Pace : 821
Percent in Pace : 65.7%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

City of San Fernando
 Park Avenue
 B/ Fourth Street - First Street
 24 Hour Directional Speed Survey
 Northbound

PO Box 1178
 Corona, CA 92878
 Phone: (951) 268-6268
 email: counts@countsunlimited.com

SFD010
 Site Code: 999-21500

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 02:00 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 03:00 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:00 | 2 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 06:00 | 5 | 5 | 5 | 14 | 14 | 9 | 9 | 6 | 6 | 4 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 |
| 07:00 | 9 | 20 | 20 | 52 | 52 | 44 | 44 | 33 | 33 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 170 |
| 08:00 | 21 | 36 | 36 | 32 | 32 | 27 | 27 | 12 | 12 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| 09:00 | 11 | 20 | 20 | 15 | 15 | 12 | 12 | 11 | 11 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| 10:00 | 7 | 12 | 12 | 18 | 18 | 15 | 15 | 9 | 9 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 11:00 | 17 | 16 | 16 | 21 | 21 | 13 | 13 | 6 | 6 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 77 |
| 12 PM | 15 | 13 | 13 | 29 | 29 | 25 | 25 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 |
| 13:00 | 10 | 17 | 17 | 27 | 27 | 22 | 22 | 12 | 12 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 14:00 | 18 | 13 | 13 | 23 | 23 | 26 | 26 | 17 | 17 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 |
| 15:00 | 14 | 17 | 17 | 36 | 36 | 32 | 32 | 14 | 14 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 |
| 16:00 | 9 | 14 | 14 | 23 | 23 | 27 | 27 | 24 | 24 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| 17:00 | 28 | 26 | 26 | 26 | 26 | 22 | 22 | 16 | 16 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 |
| 18:00 | 27 | 21 | 21 | 31 | 31 | 21 | 21 | 4 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 |
| 19:00 | 24 | 33 | 33 | 34 | 34 | 11 | 11 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 106 |
| 20:00 | 7 | 21 | 21 | 21 | 21 | 11 | 11 | 5 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 |
| 21:00 | 1 | 6 | 6 | 9 | 9 | 10 | 10 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 33 |
| 22:00 | 2 | 5 | 5 | 4 | 4 | 2 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 23:00 | 0 | 2 | 2 | 6 | 6 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| Total | 228 | 301 | 301 | 424 | 424 | 337 | 337 | 203 | 203 | 45 | 45 | 11 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1552 |

Daily
 15th Percentile : 15 MPH
 50th Percentile : 22 MPH
 85th Percentile : 30 MPH
 95th Percentile : 34 MPH

Statistics
 Mean Speed(Average) : 23 MPH
 10 MPH Pace Speed : 21-30 MPH
 Number in Pace : 761
 Percent in Pace : 49.0%
 Number of Vehicles > 55 MPH : 1
 Percent of Vehicles > 55 MPH : 0.1%

Counts Unlimited, Inc.

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD010
Site Code: 999-21500

City of San Fernando
Park Avenue
B/ Fourth Street - First Street
24 Hour Directional Speed Survey
Southbound

| Start Time | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | 76 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|-------|
| 09/22/21 | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| 01:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 02:00 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 03:00 | 1 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 04:00 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 05:00 | 3 | 1 | 6 | 6 | 6 | 7 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 06:00 | 3 | 10 | 11 | 11 | 11 | 6 | 6 | 1 | 1 | 2 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| 07:00 | 14 | 18 | 16 | 16 | 16 | 25 | 25 | 9 | 9 | 6 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 08:00 | 21 | 21 | 40 | 40 | 40 | 11 | 11 | 4 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 |
| 09:00 | 16 | 17 | 22 | 22 | 22 | 8 | 8 | 4 | 4 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| 10:00 | 8 | 13 | 14 | 14 | 14 | 11 | 11 | 3 | 3 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
| 11:00 | 18 | 18 | 26 | 26 | 26 | 14 | 14 | 1 | 1 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 12 PM | 13 | 30 | 20 | 20 | 20 | 16 | 16 | 7 | 7 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 |
| 13:00 | 16 | 22 | 17 | 17 | 17 | 13 | 13 | 3 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| 14:00 | 14 | 18 | 14 | 14 | 14 | 11 | 11 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| 15:00 | 16 | 17 | 26 | 26 | 26 | 18 | 18 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
| 16:00 | 10 | 14 | 26 | 26 | 26 | 24 | 24 | 8 | 8 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 |
| 17:00 | 21 | 23 | 17 | 17 | 17 | 18 | 18 | 8 | 8 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 |
| 18:00 | 30 | 30 | 27 | 27 | 27 | 10 | 10 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 101 |
| 19:00 | 21 | 23 | 31 | 31 | 31 | 14 | 14 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 |
| 20:00 | 12 | 11 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 21:00 | 1 | 8 | 4 | 4 | 4 | 6 | 6 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 22:00 | 4 | 4 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 23:00 | 2 | 5 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Total | 245 | 307 | 334 | 334 | 334 | 228 | 228 | 85 | 85 | 31 | 31 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1236 |

Daily
15th Percentile : 11 MPH
50th Percentile : 20 MPH
85th Percentile : 28 MPH
95th Percentile : 33 MPH

Statistics
Mean Speed(Average) : 21 MPH
10 MPH Pace Speed : 16-25 MPH
Number in Pace : 641
Percent in Pace : 51.9%
Number of Vehicles > 55 MPH : 0
Percent of Vehicles > 55 MPH : 0.0%

Counts Unlimited, Inc.

City of San Fernando
 Park Avenue
 B/ Fourth Street - First Street
 24 Hour Directional Speed Survey
 Northbound, Southbound

PO Box 1178

Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

SFD010
 Site Code: 999-21500

| Start Time | 1 | 15 | 16 | 20 | 21 | 25 | 26 | 30 | 31 | 35 | 36 | 40 | 41 | 45 | 46 | 50 | 51 | 55 | 56 | 60 | 61 | 65 | 66 | 70 | 71 | 75 | 999 | Total |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 09/22/21 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 01:00 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 02:00 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 03:00 | 1 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 04:00 | 0 | 0 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 05:00 | 5 | 5 | 2 | 2 | 7 | 7 | 12 | 12 | 7 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 06:00 | 8 | 8 | 15 | 15 | 25 | 25 | 15 | 15 | 7 | 7 | 6 | 6 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 07:00 | 23 | 23 | 38 | 38 | 68 | 68 | 69 | 69 | 42 | 42 | 15 | 15 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 259 |
| 08:00 | 42 | 42 | 57 | 57 | 72 | 72 | 38 | 38 | 16 | 16 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 232 |
| 09:00 | 27 | 27 | 37 | 37 | 37 | 37 | 20 | 20 | 15 | 15 | 3 | 3 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 141 |
| 10:00 | 15 | 15 | 25 | 25 | 32 | 32 | 26 | 26 | 12 | 12 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 |
| 11:00 | 35 | 35 | 34 | 34 | 47 | 47 | 27 | 27 | 7 | 7 | 5 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 |
| 12 PM | 28 | 28 | 43 | 43 | 49 | 49 | 41 | 41 | 19 | 19 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 183 |
| 13:00 | 26 | 26 | 39 | 39 | 44 | 44 | 35 | 35 | 15 | 15 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 161 |
| 14:00 | 32 | 32 | 31 | 31 | 37 | 37 | 37 | 37 | 28 | 28 | 7 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173 |
| 15:00 | 30 | 30 | 34 | 34 | 62 | 62 | 50 | 50 | 21 | 21 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 |
| 16:00 | 19 | 19 | 28 | 28 | 49 | 49 | 51 | 51 | 32 | 32 | 5 | 5 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 185 |
| 17:00 | 49 | 49 | 49 | 49 | 43 | 43 | 40 | 40 | 24 | 24 | 4 | 4 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 210 |
| 18:00 | 57 | 57 | 51 | 51 | 58 | 58 | 31 | 31 | 8 | 8 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 208 |
| 19:00 | 45 | 45 | 56 | 56 | 65 | 65 | 25 | 25 | 9 | 9 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 201 |
| 20:00 | 19 | 19 | 32 | 32 | 27 | 27 | 17 | 17 | 7 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 103 |
| 21:00 | 2 | 2 | 14 | 14 | 13 | 13 | 16 | 16 | 7 | 7 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 56 |
| 22:00 | 6 | 6 | 9 | 9 | 5 | 5 | 4 | 4 | 3 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| 23:00 | 2 | 2 | 7 | 7 | 9 | 9 | 5 | 5 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 |
| Total | 473 | 473 | 608 | 608 | 758 | 758 | 565 | 565 | 288 | 288 | 76 | 76 | 14 | 14 | 5 | 5 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2788 |

| | | |
|------------|--------------------------------|-----------|
| Daily | 15th Percentile : | 13 MPH |
| | 50th Percentile : | 22 MPH |
| | 85th Percentile : | 29 MPH |
| | 95th Percentile : | 34 MPH |
| Statistics | Mean Speed(Average) : | 22 MPH |
| | 10 MPH Pace Speed : | 16-25 MPH |
| | Number in Pace : | 1366 |
| | Percent in Pace : | 49.0% |
| | Number of Vehicles > 55 MPH : | 1 |
| | Percent of Vehicles > 55 MPH : | 0.0% |

04 If used, the Overhead Pedestrian Crossing sign shall be placed over the roadway at the crosswalk location.

05 An In-Street or Overhead Pedestrian Crossing sign shall not be placed in advance of the crosswalk to educate road users about the State law prior to reaching the crosswalk, nor shall it be installed as an educational display that is not near any crosswalk.

Guidance:

06 If an island (see Chapter 3I) is available, the In-Street Pedestrian Crossing sign, if used, should be placed on the island.

Option:

07 If a Pedestrian Crossing (W11-2) warning sign is used in combination with an In-Street or an Overhead Pedestrian Crossing sign, the W11-2 sign with a diagonal downward pointing arrow (W16-7P) plaque may be post-mounted on the right-hand side of the roadway at the crosswalk location.

Standard:

08 The In-Street Pedestrian Crossing sign and the Overhead Pedestrian Crossing sign shall not be used at signalized locations controlled approaches.

09 The STOP FOR legend shall only be used in States where the State law specifically requires that a driver must stop for a pedestrian in a crosswalk.

10 The In-Street Pedestrian Crossing sign shall have a black legend (except for the red-STOP or YIELD sign symbols) and border on a white background, surrounded by an outer yellow or fluorescent yellow-green background area (see Figure 2B-2). The Overhead Pedestrian Crossing sign shall have a black legend and border on a yellow or fluorescent yellow-green background at the top of the sign and a black legend and border on a white background at the bottom of the sign (see Figure 2B-2).

11 Unless the In-Street Pedestrian Crossing sign is placed on a physical island, the sign support shall be designed to bend over and then bounce back to its normal vertical position when struck by a vehicle.

Support:

12 The Provisions of Section 2A.18 concerning mounting height are not applicable for the In-Street Pedestrian Crossing sign.

Standard:

13 The top of an In-Street Pedestrian Crossing sign shall be a maximum of 4 feet above the pavement surface. The top of an In-Street Pedestrian Crossing sign placed in an island shall be a maximum of 4 feet above the island surface.

Option:

14 The In-Street Pedestrian Crossing sign may be used seasonably seasonally to prevent damage in winter because of plowing operations, and may be removed at night if the pedestrian activity at night is minimal.

15 In-Street Pedestrian Crossing signs, Overhead Pedestrian Crossing signs, and Yield Here To (Stop Here For) Pedestrians signs may be used together at the same crosswalk.

Section 2B.13 Speed Limit Sign (R2-1)

Support:

00 The setting of speed limits can be controversial and requires a rational and defensible determination to maintain public confidence. Speed limits are normally set near the 85th-percentile speed that statistically represents one standard deviation above the average speed and establishes the upper limit of what is considered reasonable and prudent. As with most laws, speed limits need to depend on the voluntary compliance of the greater majority of motorists. Speed limits cannot be set arbitrarily low, as this would create violators of the majority of drivers and would not command the respect of the public.

Standard:

01 Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering and traffic survey (E&TS) study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles.

02 The Speed Limit (R2-1) sign (see Figure 2B-3) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph.

03 Speed Limit (R2-1) signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another.

04 At the downstream end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be installed. Additional Speed Limit signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.

05 Speed Limit signs indicating the statutory speed limits shall be installed at entrances to the State and, where appropriate, at jurisdictional boundaries in urban areas.

Support:

06 In general, the maximum speed limits applicable to rural and urban roads are established:

A. Statutorily – a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or

B. As altered speed zones – based on engineering studies.

07 State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

Option:

~~08 If a jurisdiction has a policy of installing Speed Limit signs in accordance with statutory requirements only on the streets that enter a city, neighborhood, or residential area to indicate the speed limit that is applicable to the entire city, neighborhood, or residential area unless otherwise posted, a CITYWIDE (R2 5aP), NEIGHBORHOOD (R2 5bP), or RESIDENTIAL (R2 5cP) plaque may be mounted above the Speed Limit sign and an UNLESS OTHERWISE POSTED (R2 5P) plaque may be mounted below the Speed Limit sign (see Figure 2B-3).~~

Guidance:

09 A Reduced Speed Limit Ahead (W3-5 or W3-5a) sign (see Section 2C.38) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.

10 States and local agencies should conduct engineering studies at least once every 5, 7 or 10 years, in compliance with CVC Section 40802 to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.

11 No more than three speed limits should be displayed on any one Speed Limit sign or assembly.

~~12 When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th percentile speed of free-flowing traffic.~~

Standard:

12a When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th-percentile speed of free-flowing traffic, except as shown in the two Options below.

Option:

1. The posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5. See Standard below for documentation requirements.
2. For cases in which the nearest 5 mph increment of the 85th-percentile speed would require a rounding up, then the speed limit may be rounded down to the nearest 5 mph increment below the 85th percentile speed, if no further reduction is used. Refer to CVC Section 21400(b).

Standard:

12b If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

Support:

12c The following examples are provided to explain the application of these speed limit criteria:

Example 1. Using Option 1 above and first step is to round down: If the 85th percentile speed in a speed survey for a location was 37 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 37 mph speed. As indicated by the option, this 35 mph established speed limit could be reduced by 5 mph to 30 mph if

the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.

Example 2. Using Option 1 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 33 mph speed. As indicated by the option, this 35 mph speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.

Example 3. Using Option 2 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, instead of rounding up to 35 mph, the speed limit can be established at 30 mph, but no further reductions can be applied (which is allowed in the two examples above).

Standard:

^{12d} Examples 1 and 2 for establishing posted speed limits shall apply to engineering and traffic surveys (E&TS) performed on or after July 1, 2009 in accordance with Caltrans' Traffic Operations Policy Directive Number 09-04 dated June 29, 2009.

Option:

^{12e} After January 1, 2012, Example 3 may be used to establish speed limits. Refer to CVC 21400(b).

Support:

^{12f} Any existing E&TS that was performed before July 1, 2009 in accordance with previous traffic control device standards is not required to comply with the new criteria until it is due for reevaluation per the 5, 7 or 10 year criteria.

¹³ *Speed studies for signalized intersection approaches should be taken outside the influence area of the traffic control signal, which is generally considered to be approximately 1/2 mile, to avoid obtaining skewed results for the 85th-percentile speed.*

Support:

¹⁴ Advance warning signs and other traffic control devices to attract the motorist's attention to a signalized intersection are usually more effective than a reduced speed limit zone.

Guidance:

¹⁵ *An advisory speed plaque (see Section 2C.08) mounted below a warning sign should be used to warn road users of an advisory speed for a roadway condition. A Speed Limit sign should not be used for this situation.*

Option:

¹⁶ Other factors that may be considered when establishing or reevaluating speed limits are the following:

- A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- B. The pace;
- C. Roadside development and environment;
- D. Parking practices and pedestrian activity; and
- E. Reported crash experience for at least a 12-month period.

¹⁷ Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles.

¹⁸ A changeable message sign that changes the speed limit for traffic and ambient conditions may be installed provided that the appropriate speed limit is displayed at the proper times.

¹⁹ A changeable message sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit sign.

Guidance:

²⁰ *If a changeable message sign displaying approach speeds is installed, the legend YOUR SPEED XX MPH or such similar legend should be displayed. The color of the changeable message legend should be a yellow legend on a black background or the reverse of these colors.*

Support:

²¹ Advisory Speed signs and plaques are discussed in Sections 2C.08 and 2C.14. Temporary Traffic Control Zone Speed signs are discussed in Part 6. The WORK ZONE (G20-5aP) plaque intended for installation above a Speed Limit sign is discussed in Section 6F.12. School Speed Limit signs are discussed in Section 7B.15.

22 Speed limits in California are governed by the California Vehicle Code (CVC), Sections 22348 through 22413; also, pertinent sections are found in Sections 627 and 40802 and others referenced in this section. See Section 1A.11 for information regarding this publication.

23 Refer to Part 6, Section 6C.01 for speed limit signs in temporary traffic control zones. Refer to Part 7 for speed limit signs in school areas.

Engineering and Traffic Survey (E&TS)

Support:

24 CVC Section 627 defines the term "Engineering and traffic survey" and lists its requirements.

Standard:

25 **An engineering and traffic survey (E&TS) shall include, among other requirements deemed necessary by Caltrans, consideration of all of the following:**

- A. Prevailing speeds as determined by traffic engineering measurements.**
- B. Collision records.**
- C. Highway, traffic, and roadside conditions not readily apparent to the driver.**

Guidance:

26 *The E&TS should contain sufficient information to document that the required three items of CVC Section 627 are provided and that other conditions not readily apparent to a driver are properly identified.*

27 *Prevailing speeds are determined by a speed zone survey. A speed zone survey should include:*

- A. The intent of the speed measurements is to determine the actual speed of unimpeded traffic. The speed of traffic should not be altered by concentrated law enforcement, or other means, just prior to, or while taking the speed measurements.*
- B. Only one person is required for the field work. Speeds should be read directly from a radar or other electronic speed measuring devices; or,*
- C. Devices, other than radar, capable of accurately distinguishing and measuring the unimpeded speed of free flowing vehicles may be used.*
- D. A location should be selected where prevailing speeds are representative of the entire speed zone section. If speeds vary on a given route, more than one speed zone section may be required, with separate measurements for each section. Locations for measurements should be chosen so as to minimize the effects of traffic signals or stop signs.*
- E. Speed measurements should be taken during off-peak hours between peak traffic periods on weekdays. If there is difficulty in obtaining the desired quantity, speed measurements may be taken during any period with free flowing traffic.*
- F. The weather should be fair (dry pavement) with no unusual conditions prevailing.*
- G. The surveyor and equipment should not affect the traffic speeds. For this reason, an unmarked car is recommended, and the radar speed meter located as inconspicuously as possible.*
- H. In order for the sample to be representative of the actual traffic flow, the minimum sample should be 100 vehicles in each survey. In no case should the sample contain less than 50 vehicles.*
- I. Short speed zones of less than 0.5 miles should be avoided, except in transition areas.*
- J. Speed zone changes should be coordinated with changes in roadway conditions or roadside development.*
- K. Speed zoning should be in 10 mph increments except in urban areas where 5 mph increments are preferable.*
- L. Speed zoning should be coordinated with adjacent jurisdictions.*

Support:

28 Physical conditions such as width, curvature, grade and surface conditions, or any other condition readily apparent to the driver, in the absence of other factors, would not require special downward speed zoning. Refer to CVC 22358.5.

Option:

29 When qualifying an appropriate speed limit, local authorities may also consider all of the following findings:

- A. Residential density, if any of the following conditions exist on the particular portion of highway and the property contiguous thereto, other than a business district:
 - 1. Upon one side of the highway, within 0.25 miles, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures.
 - 2. Upon both sides of the highway, collectively, within a distance of 0.25 miles the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures.

3. The portion of highway is larger than 0.25 miles but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph 1 or 2 above.
- B. Pedestrian and bicyclist safety.
- ³⁰ The following two methods of conducting E&TS may be used to establish speed limits:
 1. State Highways - The E&TS for State highways is made under the direction of the Caltrans District Traffic Engineer. The data includes:
 - a. One copy of the Example of Speed Zone Survey Sheet (See Figure 2B-101(CA)) showing:
 - A north arrow
 - Engineer's station or post mileage
 - Limits of the proposed zones
 - Appropriate notations showing type of roadside development, such as "scattered business," "solid residential," etc. Schools adjacent to the highway are shown, but other buildings need not be plotted unless they are a factor in the speed recommendation or the point of termination of a speed zone.
 - Collision rates for the zones involved
 - Average daily traffic volume
 - Location of traffic signals, signs and markings
 - If the highway is divided, the limits of zones for each direction of travel
 - Plotted 85th percentile and pace speeds at location taken showing speed profile
 - b. A report to the District Director that includes:
 - The reason for the initiation of speed zone survey.
 - Recommendations and supporting reasons.
 - The enforcement jurisdictions involved and the recommendations and opinions of those officials.
 - The stationing or reference post in mileage at the beginning and ending of each proposed zone and any intermediate equations. Location ties must be given to readily identifiable physical features.
 2. City and County Through Highways, Arterials, Collector Roads and Local Streets.
 - a. The short method of speed zoning is based on the premise that a reasonable speed limit is one that conforms to the actual behavior of the majority of motorists, and that by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Other factors that need to be considered include but are not limited to: the most recent two-year collision record, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile conditions, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.
 - b. Determination of Existing Speed Limits - Figures 2B-103(CA) & 2B-104(CA) show examples of data sheets which may be used to record speed observations. Specific types of vehicles may be tallied by use of letter symbols in appropriate squares.

³¹ In most situations, the short form for local streets and roads will be adequate; however, the procedure used on State highways may be used at the option of the local agency.

Guidance:

³² *The factors justifying a reduction below the 85th percentile speed for the posted speed limit are the same factors mentioned above. Whenever such factors are considered to establish the speed limit, they should be documented on the speed zone survey or the accompanying engineering report.*

³³ *The establishment of a speed limit of more than 5 mph below the 85th percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates; in addition, this may make violators of a disproportionate number of the reasonable majority of drivers.*

Support:

³⁴ Generally, the most decisive evidence of conditions not readily apparent to the driver surfaces in collision histories.

³⁵ Speed limits are established at or near the 85th percentile speed, which is defined as that speed at or below which 85th percent of the traffic is moving. The 85th percentile speed is often referred to as the critical speed. Pace speed is defined as the 10 mph increment of speed containing the largest number of vehicles (See Figure 2B-102(CA)). The lower limit of the pace is plotted on the Speed Zone Survey Sheets as an aid in determining the proper zone limits. Speed limits higher than the 85th

percentile are not generally considered reasonable and prudent. Speed limits below the 85th percentile do not ordinarily facilitate the orderly movement of traffic and require constant enforcement to maintain compliance. Speed limits established on the basis of the 85th percentile conform to the consensus of those who drive highways as to what speed is reasonable and prudent, and are not dependent on the judgment of one or a few individuals.

³⁶ The majority of drivers comply with the basic speed law. Speed limits set at or near the 85th percentile speed provide law enforcement officers with a limit to cite drivers who will not conform to what the majority considers reasonable and prudent. Further studies show that establishing a speed limit at less than the 85th percentile (Critical Speed) generally results in an increase in collision rates.

Option:

³⁷ When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, as indicated in collision records, speed limits somewhat below the 85th percentile may be justified. Concurrence and support of enforcement officials are necessary for the successful operation of a restricted speed zone.

Guidance:

³⁸ *Speed zones of less than 0.5 miles and short transition zones should be avoided.*

Signs

Standard:

³⁹ **The Speed Limit (R2-1) sign shall be used to give notice of a prima facie or maximum speed limit except as provided under Prima Facie Speed Limits in CVC 22352.**

⁴⁰ **When used, the TRUCKS, 3 AXLES OR MORE 55 MAXIMUM (R6-3(CA)) sign shall be installed approximately 750 feet following each R2-1 sign.**

⁴¹ **The ALL VEHICLES WHEN TOWING 55 MAXIMUM (R6-4(CA)) sign shall be installed approximately 750 feet following the R6-3(CA) sign.**

Guidance:

⁴² *The R6-3(CA) and R6-4(CA) signs should be placed on highway segments where speeds in excess of 55 mph are permitted.*

Option:

⁴³ The existing AUTOS WITH TRAILERS, TRUCKS 55 MAXIMUM (R6-1(CA)) sign may remain in place until it is knocked down, damaged, stolen, vandalized, or otherwise reaches the end of its useful life.

⁴⁴ The local California Highway Patrol office may be consulted to identify highway segments where enforcement is an issue. On these segments early replacement of existing R6-1(CA) signs may be necessary.

Support:

⁴⁵ Refer to CVC Section 22406 for types of vehicles subject to the 55 mph maximum speed limit.

Option:

⁴⁶ The Speed Zone Ahead (R2-4(CA)) sign (see Figure 2B-3(CA)) may be used to inform the motorist of a reduced speed zone.

Standard:

⁴⁷ **The R2-4(CA) sign shall always be followed by a Speed Limit (R2-1) sign installed at the beginning of the zone where the reduced speed limit applies.**

⁴⁸ **The End Speed Limit (R3(CA)) sign shall only be used to mark the end of a speed zone.**

⁴⁹ **The R3(CA) sign shall not be used at a transition into a change in speed limits within a reduced zone.**

Option:

⁵⁰ The R3(CA) sign (see Figure 2B-3(CA)) may be used with the TRUCK (M4-4) plaque to mark the end of truck speed zones on descending grades.

Standard:

⁵¹ **Speed limit signs shall be placed at the beginning of all restricted speed zones.**

Option:

⁵² Where speed zones are longer than 1 mile, intermediate signs may be placed at approximate 1 mile intervals. For three or more lanes in each direction, dual installation may be used.



Bill Text: CA AB43 | 2021-2022 | Regular Session | Chaptered California Assembly Bill 43 (*In Recess*)

Bill Title: Traffic safety.

Spectrum: Partisan Bill (Democrat 13-0)

Status: (*Passed*) 2021-10-08 - Chaptered by Secretary of State - Chapter 690, Statutes of 2021. [AB43 Detail]

Download: California-2021-AB43-Chaptered.html

Assembly Bill No. 43

CHAPTER 690

An act to amend Sections 627, 21400, 22352, 22354, 22358, and 40802 of, and to add Sections 22358.6, 22358.7, 22358.8, and 22358.9 to, the Vehicle Code, relating to traffic safety.

[Approved by Governor October 08, 2021. Filed with Secretary of State October 08, 2021.]

LEGISLATIVE COUNSEL'S DIGEST

AB 43, Friedman. Traffic safety.

(1) Existing law establishes various default speed limits for vehicles upon highways, as specified. Existing law authorizes state and local authorities to adjust these default speed limits, as specified, based upon certain findings determined by an engineering and traffic survey. Existing law defines an engineering and traffic survey and prescribes specified factors that must be included in the survey, including prevailing speeds and road conditions. Existing law authorizes local authorities to consider additional factors, including pedestrian and bicyclist safety.

This bill would authorize local authorities to consider the safety of vulnerable pedestrian groups, as specified.

(2) Existing law establishes a prima facie speed limit of 25 miles per hour on any highway, other than a state highway, located in any business or residence district, as defined. Existing law authorizes a local authority to change the speed limit on any such highway, as prescribed, including erecting signs to give notice thereof.

This bill would establish a prima facie speed limit of 25 miles per hour on state highways located in any business or residence district and would authorize the Department of Transportation (Caltrans) to change the speed limit on any such highway, as prescribed, including erecting signs to give notice thereof.

(3) Existing law establishes a speed limit of 65 miles per hour on state highways, as specified. Existing law authorizes Caltrans to declare a speed limit on any such highway, as prescribed, of 60, 55, 50, 45, 40, 35, 30, or 25 miles per hour, including erecting signs to give notice thereof. Existing law also authorizes a local authority, on a section of highway, other than a state highway, where the speed limit is 65 miles per hour to declare a lower speed limit, as specified.

This bill would additionally authorize Caltrans and a local authority to declare a speed limit of 20 or 15 miles per hour, as specified, on these highways.

(4) Existing law authorizes a local authority, without an engineering and traffic survey, to declare a lowered speed limit on portions of highway, as specified, approaching a school building or school grounds. Existing law limits this authority to sections of highway meeting specified requirements relating to the number of lanes and the speed limit of the highway before the school zone.

This bill would similarly authorize a lowered speed limit on a section of highway contiguous to a business activity district, as defined, and would require that certain violations be subject to a warning citation, for the first 30 days of implementation.

(5) Existing law requires Caltrans, by regulation, to provide for the rounding up or down to the nearest 5 miles per hour increment of the 85th percentile speed of free-flowing traffic on a portion of highway as determined by a traffic and engineering survey. Existing law requires the Judicial Council to create and implement an online tool by June 30, 2024, for the adjudication of traffic infractions, among other things.

This bill would authorize a local authority to further reduce the speed limit, as specified, and require that certain violations be subject to a warning citation, for the first 30 days of implementation. The bill would, in some circumstances, authorize the reduction of a speed limit beginning June 30, 2024, or when the Judicial Council has developed an online tool for adjudicating traffic infraction violations, whichever is sooner. The bill would require Caltrans to accordingly revise the California Manual on Uniform Traffic Control Devices, as specified.

(6) Existing law defines a speed trap and prohibits evidence of a driver's speed obtained through a speed trap from being admissible in court in any prosecution against a driver for a speed-related offense. Existing law deems a road where the speed limit is not justified by a traffic and engineering survey conducted within the previous 7 years to be a speed trap, unless the roadway has been evaluated by a registered engineer, as specified, in which case the speed limit remains enforceable for a period of 10 years. Existing law exempts a school zone, as defined, from certain provisions relating to defining a speed trap.

This bill would extend the period that a speed limit justified by a traffic and engineering survey conducted more the 7 years ago remains valid, for purposes of speed enforcement, if evaluated by a registered engineer, as specified, to 14 years.

This bill would also exempt a senior zone and business activity district, as defined, from those provisions.

Digest Key

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

Bill Text

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 627 of the Vehicle Code is amended to read:

627. (a) "Engineering and traffic survey," as used in this code, means a survey of highway and traffic conditions in accordance with methods determined by the Department of Transportation for use by state and local authorities.

(b) An engineering and traffic survey shall include, among other requirements deemed necessary by the department, consideration of all of the following:

- (1) Prevailing speeds as determined by traffic engineering measurements.
- (2) Accident records.
- (3) Highway, traffic, and roadside conditions not readily apparent to the driver.

(c) When conducting an engineering and traffic survey, local authorities, in addition to the factors set forth in paragraphs (1) to (3), inclusive, of subdivision (b) may consider all of the following:

(1) Residential density, if any of the following conditions exist on the particular portion of highway and the property contiguous thereto, other than a business district:

(A) Upon one side of the 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.

(B) Upon both sides of the 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.

(C) The portion of highway is longer than one-quarter of a mile but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph (A) or (B).

(2) Safety of bicyclists and pedestrians, with increased consideration for vulnerable pedestrian groups including children, seniors, persons with disabilities, users of personal assistive mobility devices, and the unhoused.

SEC. 2. Section 21400 of the Vehicle Code is amended to read:

21400. (a) The Department of Transportation shall, after consultation with local agencies and public hearings, adopt rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to this code, including, but not limited to, stop signs, yield right-of-way signs, speed restriction signs, railroad warning approach signs, street name signs, lines and markings on the roadway, and stock crossing signs placed pursuant to Section 21364.

(b) The Department of Transportation shall, after notice and public hearing, determine and publicize the specifications for uniform types of warning signs, lights, and devices to be placed upon a highway by a person engaged in performing work that interferes with or endangers the safe movement of traffic upon that highway.

(c) Only those signs, lights, and devices as are provided for in this section shall be placed upon a highway to warn traffic of work that is being performed on the highway.

(d) Control devices or markings installed upon traffic barriers on or after January 1, 1984, shall conform to the uniform standards and specifications required by this section.

SEC. 3. Section 22352 of the Vehicle Code is amended to read:

22352. The prima facie limits are as follows and shall be applicable unless changed as authorized in this code and, if so changed, only when signs have been erected giving notice thereof:

(a) Fifteen miles per hour:

(1) When traversing a railway grade crossing, if during the last 100 feet of the approach to the crossing the driver does not have a clear and unobstructed view of the crossing and of any traffic on the railway for a distance of 400 feet in both directions along the railway. This subdivision does not apply in the case of any railway grade crossing where a human flagperson is on duty or a clearly visible electrical or mechanical railway crossing signal device is installed but does not then indicate the immediate approach of a railway train or car.

(2) When traversing any intersection of highways if during the last 100 feet of the driver's approach to the intersection the driver does not have a clear and unobstructed view of the intersection and of any traffic upon all of the highways entering the intersection for a distance of 100 feet along all those highways, except at an intersection protected by stop signs or yield right-of-way signs or controlled by official traffic control signals.

(3) On any alley.

(b) Twenty-five miles per hour:

(1) On any highway, in any business or residence district unless a different speed is determined by local authority or the Department of Transportation under procedures set forth in this code.

(2) When approaching or passing a school building or the grounds thereof, contiguous to a highway and posted with a standard "SCHOOL" warning sign, while children are going to or leaving the school either during school hours or during the noon recess period. The prima facie limit shall also apply when approaching or passing any school grounds which are not separated from the highway by a fence, gate, or other physical barrier while the grounds are in use by children and the highway is posted with a standard "SCHOOL" warning sign. For purposes of this subparagraph, standard "SCHOOL" warning signs may be placed at any distance up to 500 feet away from school grounds.

(3) When passing a senior center or other facility primarily used by senior citizens, contiguous to a street other than a state highway and posted with a standard "SENIOR" warning sign. A local authority may erect a sign pursuant to this paragraph when the local agency makes a determination that the proposed signing should be implemented. A local authority may request grant funding from the Active Transportation Program pursuant to Chapter 8 (commencing with Section 2380) of Division 3 of the Streets and Highways Code, or any other grant funding available to it, and use that grant funding to pay for the erection of those signs, or may utilize any other funds available to it to pay for the erection of those signs, including, but not limited to, donations from private sources.

SEC. 4. Section 22354 of the Vehicle Code is amended to read:

22354. (a) Whenever the Department of Transportation determines upon the basis of an engineering and traffic survey that the limit of 65 miles per hour is more than is reasonable or safe upon any portion of a state highway where the limit of 65 miles is applicable, the department may determine and declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, 25, 20, or 15 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie speed limit shall be effective when appropriate signs giving notice thereof are erected upon the highway.

(b) This section shall become operative on the date specified in subdivision (c) of Section 22366.

SEC. 5. Section 22358 of the Vehicle Code is amended to read:

22358. (a) Whenever a local authority determines upon the basis of an engineering and traffic survey that the limit of 65 miles per hour is more than is reasonable or safe upon any portion of any street other than a state highway where the limit of 65 miles per hour is applicable, the local authority may by ordinance determine and declare a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, 25, 20, or 15 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie limit shall be effective when appropriate signs giving notice thereof are erected upon the street.

(b) This section shall become operative on the date specified in subdivision (c) of Section 22366.

SEC. 6. Section 22358.6 is added to the Vehicle Code, to read:

22358.6. The Department of Transportation shall, in the next scheduled revision, revise and thereafter maintain the California Manual on Uniform Traffic Control Devices to require the Department of Transportation or a local authority to round speed limits to the nearest five miles per hour of the 85th percentile of the free-flowing traffic. However, in cases in which the speed limit needs to be rounded up to the nearest five miles per hour increment of the 85th-percentile speed, the Department of Transportation or a local authority may decide to instead round down the speed limit to the lower five miles per hour increment. A local authority may additionally lower the speed limit as provided in Sections 22358.7 and 22358.8.

SEC. 7. Section 22358.7 is added to the Vehicle Code, to read:

22358.7. (a) 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, determine and declare a prima facie speed limit that has been reduced an additional five miles per hour 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.

(b) (1) As used in this section, "safety corridor" shall be defined by the Department of Transportation in the next revision of the California Manual on Uniform Traffic Control Devices. In making this determination, the department shall consider highways that have the highest number of serious injuries and fatalities based on collision data that may be derived from, but not limited to, the Statewide Integrated Traffic Records System.

(2) The Department of Transportation shall, in the next revision of the California Manual on Uniform Traffic Control Devices, determine what constitutes land or facilities that generate high concentrations of bicyclists and pedestrians, as used in paragraph (2) of subdivision (a). In making this determination, the department shall consider density, road use type, and bicycle and pedestrian infrastructure present on a section of highway.

(c) 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.

(d) A local authority shall issue only warning citations for violations of exceeding the speed limit by 10 miles per hour or less for the first 30 days that a lower speed limit is in effect as authorized by this section.

SEC. 8. Section 22358.8 is added to the Vehicle Code, to read:

22358.8. (a) 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.

(c) A local authority shall issue only warning citations for violations of exceeding the speed limit by 10 miles per hour or less for the first 30 days that a lower speed limit is in effect as authorized by this section.

SEC. 9. Section 22358.9 is added to the Vehicle Code, to read:

22358.9. (a) (1) Notwithstanding any other law, a local authority may, by ordinance, determine and declare a 25 or 20 miles per hour prima facie speed limit on a highway contiguous to a business activity district when posted with a sign that indicates a speed limit of 25 or 20 miles per hour.

(2) The prima facie limits established under paragraph (1) apply only to highways that meet all of the following conditions:

(A) A maximum of four traffic lanes.

(B) A maximum posted 30 miles per hour prima facie speed limit immediately prior to and after the business activity district, if establishing a 25 miles per hour speed limit.

(C) A maximum posted 25 miles per hour prima facie speed limit immediately prior to and after the business activity district, if establishing a 20 miles per hour speed limit.

(b) As used in this section, a "business activity district" is that portion of a highway and the property contiguous thereto that includes central or neighborhood downtowns, urban villages, or zoning designations that prioritize commercial land uses at the downtown or neighborhood scale and meets at least three of the following requirements in paragraphs (1) to (4), inclusive:

(1) No less than 50 percent of the contiguous property fronting the highway consists of retail or dining commercial uses, including outdoor dining, that open directly onto sidewalks adjacent to the highway.

(2) Parking, including parallel, diagonal, or perpendicular spaces located alongside the highway.

(3) Traffic control signals or stop signs regulating traffic flow on the highway, located at intervals of no more than 600 feet.

(4) Marked crosswalks not controlled by a traffic control device.

(c) A local authority shall not declare a prima facie speed limit under this section on a portion of a highway where the local authority has already lowered the speed limit as permitted under Sections 22358.7 and 22358.8.

(d) A local authority shall issue only warning citations for violations of exceeding the speed limit by 10 miles per hour or less for the first 30 days that a lower speed limit is in effect as authorized by this section.

SEC. 10. Section 40802 of the Vehicle Code is amended to read:

40802. (a) A "speed trap" is either of the following:

(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.

(3) For purposes of this section, "senior zone" means that area approaching or passing a senior center building or other facility primarily used by senior citizens, or the grounds thereof that is contiguous to a highway and on which is posted a standard "SENIOR" warning sign, pursuant to Section 22352.

(4) For purposes of this section, "business activity district" means a section of highway described in subdivision (b) of Section 22358.9 in which a standard 25 miles per hour or 20 miles per hour speed limit sign has been posted pursuant to paragraph (1) of subdivision (a) of that section.

(c) (1) When all of the following criteria are met, paragraph (2) of this subdivision shall be applicable and subdivision (a) shall not be applicable:

(A) When radar is used, the arresting officer has successfully completed a radar operator course of not less than 24 hours on the use of police traffic radar, and the course was approved and certified by the Commission on Peace Officer Standards and Training.

(B) When laser or any other electronic device is used to measure the speed of moving objects, the arresting officer has successfully completed the training required in subparagraph (A) and an additional training course of not less than two hours approved and certified by the Commission on Peace Officer Standards and Training.

(C) (i) The prosecution proved that the arresting officer complied with subparagraphs (A) and (B) and that an engineering and traffic survey has been conducted in accordance with subparagraph (B) of paragraph (2). The prosecution proved that, prior to the officer issuing the notice to appear, the arresting officer established that the radar, laser, or other electronic device conformed to the requirements of subparagraph (D).

(ii) The prosecution proved the speed of the accused was unsafe for the conditions present at the time of alleged violation unless the citation was for a violation of Section 22349, 22356, or 22406.

(D) The radar, laser, or other electronic device used to measure the speed of the accused meets or exceeds the minimal operational standards of the National Highway Traffic Safety Administration, and has been calibrated within the three years prior to the date of the alleged violation by an independent certified laser or radar repair and testing or calibration facility.

(2) A "speed trap" is either of the following:

(A) 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.

(B) (i) A particular section of a highway or state 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 one of the following time periods, 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:

(I) Except as specified in subclause (II), seven years.

(II) If an engineering and traffic survey was conducted more than seven years prior to the date of the alleged violation, and a registered 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, 14 years.

(ii) This subparagraph does not apply to a local street, road, or school zone, senior zone, or business activity district.

To: Chair Carlos Hernandez and Commissioners

From: Matt Baumgardner, Director of Public Works
Patsy Orozco, Civil Engineering Assistant II

Date: November 3, 2021

Subject: Update on Safe Routes to School Projects – Cycles 1 and 2

RECOMMENDATION:

It is recommended that the Transportation and Safety Commission receive and file this informational update on the Safe Routes to School Projects (Cycles 1 and 2) and provide direction to Staff, as necessary.

BACKGROUND:

1. The Safe Routes to School Projects (Cycles 1 and 2) consists of safety improvements around the vicinities of eight elementary schools (three for Cycle 1 and five for Cycle 2), one day care (Cycle 2), and one middle school (Cycle 1). The proposed improvements include traffic calming devices such as perpendicular curb ramps, raised crosswalks, chicanes, chokers, pedestrian refuge islands, medians, bulb outs, lane reductions for drop-off/pick-up loading zones, high visibility crosswalks, bicycle lanes, advanced stop bars and legends, solar flashers, countdown signals and signage (see Exhibit "A" for improvement locations).
2. In November 2007, the City was awarded a grant for the Federal Cycle 1 Safe Routes to School (SRTS) Program, based on its grant application. The City was awarded \$994,124 in Federal funds.
3. In February 2009, the City was awarded a grant for the Federal Cycle 2 SRTS Program. The City was awarded \$999,850 in federal funds for the project.
4. In June 2017, the City advertised a Request for Proposals (RFP) for design services for both Cycle 1 and Cycle 2 projects.
5. On September 18, 2017, two separate contracts for design services were awarded to David Evans and Associates, Inc. after review of submitted proposals and interviews with City staff.

ANALYSIS:

The Safe Routes to School (SRTS) projects (Cycles 1 and 2) have been funded for several years now through federal grants administered by Caltrans. David Evans and Associates worked with staff to develop design plans that are based on a list of traffic calming measures that are promoted as part of the SRTS program. These measures are intended to reduce driving speeds and increase visibility of pedestrians and cyclists that are traveling along defined routes to schools. The overall goal is to create safe active transportation options for our children and families on their way to school each morning.

The project has been on delay due to COVID-19, but Public Works engineering staff are aiming to get this project back on track, as funding could expire in the next few years if no progress is being made. Plans for the project are not currently complete and new staff in the Public Works department are involved. During review of the plans, it was determined that it would be important to seek community input on these traffic measures.

It was critical to start with one particular traffic measure proposed in residential areas – the use of chicanes to narrow road width. Chicanes are semi-circular obstacles that are constructed on the street and jut outward to reduce the width of the vehicular travel lanes. They are often used as areas to plant trees. A good example of the use of chicanes in the City are those that you find on North Maclay Avenue between First and Eighth Streets. Chicanes have the ability to alter driving behavior due to reducing the width of travel lanes, especially when planted with trees. They are known to be effective at reducing travel speeds as a result of this width reduction. However, they result in the loss of on-street parking and tend to need more maintenance as litter and leaves can plug up the space between them and the sidewalk curb. If not maintained properly, drainage issues during storms may occur.

Staff was mindful of these potential issues in residential areas when initially reviewing the plans. Outreach was conducted with residents living near these proposed chicane locations (sections of Orange Grove Avenue, Fifth Street, and Brand Avenue) to seek their input. As expected, staff received a significant number of comments in opposition to the use of chicanes due to loss of on-street parking, as well as concern regarding the exacerbation of existing drainage issues. Overall, staff had over eighty percent of the residents in these areas oppose the use of chicanes. It was clear to staff that these were not an ideal traffic calming measure to use in residential areas and they will be removed from the project.

Next Steps on the SRTS project.

Staff is reviewing the project elements and seeking to find the best measures that achieve the overall goal of creating safe options for children and families to travel to school each morning. The next steps for the project include:

- 1) Identifying options that achieve SRTS safety goals, while also creating minimal impact to parking and drainage along these routes.
- 2) Discussing the proposed project design changes with Caltrans so they can understand the need to modify what had been presented to them in the past due to concerns from the community.
- 3) Conducting additional community engagement in the future to explain the redesigned project and making adjustments, as necessary, from this input.
- 4) Returning to Transportation and Safety Commission and City Council in the future with a final design that focuses on all of these points.

It is important to note that step 3 on additional community engagement has been and will continue to be a vital part of this process going forward.

BUDGET IMPACT:

There is no fiscal impact related to the update on this project.

CONCLUSION:

It is recommended that the Transportation and Safety Commission receive and file this update report, discuss any project concerns, and provide direction to Staff, as necessary.

ATTACHMENT:

- A. Safe Routes to School – Cycle 1 and Cycle 2 – Proposed Improvements and Locations from 2017

San Fernando SRTS – Cycle 1

Project Understanding (CYCLE 1 Safe Route to School)

David Evans and Associates (DEA) has reviewed the City of San Fernando (City) scope of work for the Safe Routes to School Cycle 1 Projects (SRTS), and is prepared to provide the required engineering design, reports and field investigations to complete the improvement plan and specification documents. The services provided to the City will include completion and processing the certifications and checklists for the E-76 Construction Authorization and Construction Support in accordance with the Caltrans Local Assistance Procedures Manual.

The City's SRTS Cycle 1 project encompasses 26 specific locations throughout the City in and adjacent to local school properties. The improvements at each location differ but in general will include: construction of raised curb bulb-outs, curb ramps, crosswalk enhancements, signage, traffic signal modifications, culvert drainage, and narrowing of the street sections at the intersection.

Cycle 1 projects include street work around and within the Metrolink right-of-way and track property located southerly of the Mission City Trail at the Brand Blvd and Jesse St crossings. The services provided to the City for completion of the street design at the Metrolink crossings includes the coordination and permit reviews with the Metrolink RR Agency and UPRR property owners.

The Cycle 1 project Locations include:

1. Maclay Ave and Fifth Street
 - a. Add bulb out to 2 corners to cross Fifth St. on east side
 - b. Add 2 Double bulb outs to cross Maclay Avenue on west side (east side already has them)
 - c. Install perpendicular curb ramps in the bulb outs
 - d. Install 4 perpendicular curb ramps to new double bulb outs to cross Maclay Avenue
 - e. Paint crosswalk legs in all 4 directions
 - f. Add countdown signals to cross Maclay Ave
 - g. Add advanced stop bars to both approaches of Maclay Ave and to southeast bound side of Fifth St.
2. Brand Blvd and Library St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
3. Brand Blvd and Fifth St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
4. Fifth St and Hagar St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
5. Fifth St between Hagar St and Alexander St
 - a. Add chicanes to slow traffic
6. Fifth St and Alexander St
 - a. Paint zebra stripe crosswalks in all 4 directions

San Fernando SRTS – Cycle 1

- b. Add advanced stop bars to all 4 approaches
- 7. Chatsworth Dr and Mott St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
- 8. Chatsworth Dr and Woodworth St
 - a. Add raised crosswalk to northeast crossing
 - b. Add bulb outs to both sides of raised crosswalk and to crossing of Woodworth St
 - c. Paint zebra stripe crosswalk across Woodworth St
- 9. Chatsworth Dr and O'Melveny St
 - a. Add bulb outs to crossings Chatsworth Dr and O'Melveny St
 - b. Paint zebra stripe crosswalks in both crossings
- 10. Woodworth St and Wolfskill St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
- 11. Mott St and Wolfskill St
 - a. Paint zebra stripe crosswalks in all 4 directions
- 12. O'Melveny St and Wolfskill St
 - a. Add bulb outs to both corners and both ends of crosswalks on northwest side
 - b. Paint zebra stripe crosswalks in 3 directions
- 13. Maclay Ave and Griffith St
 - a. Add bulb outs to all 4 corners crossing Griffith St
 - b. Paint zebra stripe crosswalk to cross Griffith St on both sides of Maclay
 - c. Add chockers to both sides of Maclay on the southwest side of Griffith St to slow cars entering school zone
- 14. Maclay Ave and Mott St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
- 15. Maclay Ave and Woodworth St
 - a. Add raised crosswalk to existing crosswalk
 - b. Paint zebra stripe crosswalk across Woodworth St
- 16. San Fernando Mission And Mott St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
 - e. Add countdown signals to cross San Fernando Mission Blvd
- 17. Woodworth St at San Fernando Mission Blvd
 - a. Add 2 bulb outs to cross Woodworth St
 - b. Paint zebra stripe crosswalk to cross Woodworth St
- 18. San Fernando Mission Blvd and O'Melveny St
 - a. Add bulb outs to all 4 corners in all directions
 - b. Install perpendicular curb ramps in the bulb outs
 - c. Paint zebra stripe crosswalks in all 4 directions
 - d. Add advanced stop bars to all 4 approaches
 - e. Add countdown signals to cross San Fernando Mission Blvd
- 19. Mott St between San Fernando Mission Blvd and Maclay Ave.
 - a. Add center median to narrow street to slow cars, prevent U-turns and double parking, and to add pedestrian refuge

San Fernando SRTS – Cycle 1

- b. Create midblock crossing to the front of the school with bulb outs and pedestrian refuge in the median
 - c. Add signs notifying the motorists of the crossing
 - d. Add pedestrian activated Flashers to cross Mott Street at Median Crosswalk (Qty. 3 – two at each return and one at median island)
20. On Brand Blvd from Mission City Trail to Fourth St
- a. Reduce from 4 lanes to 2 lanes to slow traffic, to add bike lane, to narrow crossing, and to eliminate U-turns, double parking and other dangerous maneuvers at pick up/drop off
 - b. Add bicycle lanes on both sides
 - c. Move curb to widen sidewalk on southeast side from Mission City Trail to First St
 - d. Move curb to widen sidewalk on northwest side from First St to Third St
 - e. Move curb to widen sidewalk on southeast side from Third St to Fourth St
 - f. Add bulb out to school side of Brand Blvd north of First St (not on south side)
 - g. Create bus loading zone northeast of First St on school side of Brand Blvd
 - h. Create car loading zone southwest of Third St on school side of Brand Blvd.
 - i. Add raised lane divider between drop off zone and travel lane with access gaps at southwest end for buses, halfway for cars and the northeast for cars
 - j. Add bulb outs on north and south corners of Brand Blvd and Third St
 - k. Paint zebra stripe crosswalks in all 2 directions at First St and Brand Blvd (not on south side)
 - l. Paint zebra stripe crosswalks in all 4 directions at Brand Blvd and Third St
 - m. Add advanced stop bars in all 4 directions at Brand Blvd and Third St
 - n. Add bulb outs to north, east and south corners of Brand Blvd and Fourth St
 - o. Add advanced stop bars in all 4 directions at Brand Blvd and Fourth St.
 - p. Remove perpendicular curb ramp to school side of Brand Blvd in cross walk at Brand Blvd
21. Fourth St and Griswold Ave
- a. Paint zebra stripe crosswalks in all 4 directions
 - b. Add Advanced stop bars to all 4 approaches
22. Third St and Griswold Ave
- a. Add Bulb outs to both sides of crosswalk
23. Third St and Newton St
- a. Move crosswalk to other side
 - b. Add bulb outs to both sides of crosswalk
24. Third St and Jesse St
- a. Paint zebra stripe crosswalks in all 3 directions
 - b. Add advanced stop bars to all 3 approaches
25. Mission City Trail crossing of Jessie St
- a. Add refuge islands in the center of Jessie St
 - b. Add bulb outs to both sides
 - c. Paint crosswalk legs
 - d. Add advanced stop bar
 - e. Connect city of Los Angeles bike path on the southwest side of the Metrolink tracks to the Mission City Trail on the northeast side with a new curbed path
 - f. Delete Rumble bars on SB Jessie St.
 - g. Add paint zebra stripe crosswalk on Jessie north of First St
 - h. Add Pedestrian Activated flashers to cross Jessie north of First St.
26. Mission City Trail crossing of Brand Blvd
- a. Add refuge islands in the center of Brand Blvd, with activated flashers
 - b. Add user activated flashers on existing poles, change existing overhead flashers to user activated
 - c. Add bulb outs to both sides
 - d. Add raised crosswalk

The project design services will include a comprehensive field survey drawing to establish a comprehensive digital base map for use in completing the intersection design for streets with intersection curb bulb outs or street width reduction. Intersection improvements requiring striping modifications will utilize aerial imaging for plan design. The project design will include a coordinated field review by the design team to verify and evaluate the site conditions, drainage patterns, curb ramps and walks within the project limits.

The final design will include civil engineering plans, signing and striping plans, construction specifications, bid documents, engineers cost and quantity estimates, and traffic signal plan modifications where required.

DEA will follow the Caltrans Local Assistance Procedures Manual to prepare the required engineering forms and supporting documents including the Finance Letter, Field Review form, PS&E Certificate and Checklist, Right of Way Certification, and Environmental compliance forms. (CEQA and NEPA) for submittal of the request for construction authorization from Caltrans.

After receipt of construction bids, DEA will prepare the City's Bid Award Package for submittal to Caltrans. DEA will also prepare the monthly project reimbursement invoices to Caltrans during the construction phase, and upon final acceptance of the work by the City, DEA will prepare the Caltrans Project Completion package for submittal and project close out to the Caltrans Local Agency Representative.

Project Approach

DEA will engage and work seamlessly with the City Project Management Team to deliver the Projects in a timely and cost effective manner. We begin this relationship at the start with our first kick-off meeting with your staff. The key objectives of DEA's technical approach are to develop PS&E documents in a manner that achieves value, provides detailed information to the contractor, facilitates the construction schedule, and is in strict accordance with City Standards. Our specific approach to delivering the scope of services is described in the following paragraphs.

Scope of Services

Phase 1 Project Administration

Task 1. Project Management

The Project Manager will be the main point of contact for the duration of the contract providing project controls, coordination and scheduling of the team. This will include tracking of the project progress, permitting requirements, advising the City of the schedule status and coordination with outside Agencies. This work will include technical and cursory reviews of deliverable documents prepared by DEA's Team.

The Project Manager will provide periodic project updates through phone calls, e-mails and project transmittals to the City for general coordination, project updates, response to design inquiries and requests for clarification on City Standards and procedures.

Deliverables: Monthly Progress Reports/Project Schedule Updates

Task 2. Project Meetings

During the course of the field review and project design, monthly meetings will be established to provide time for DEA's Team and the City to meet and review the roadway investigation process, specific project designs and presentation of critical information. Meetings will be held at the City Offices or in the field as necessary to discuss and resolve the project designs and issues. DEA engineers and staff will attend a kick-off meeting with the City and four (4) design meetings to review progress of the work, and obtain additional input from City staff.

Deliverables: Meeting Minutes

Task 3. Quality Control

The project design segments will be reviewed by a DEA construction engineer with relevant project experience in street rehabilitation and construction operations. The DEA construction engineer will meet with the project team on a monthly basis to review plan design, and discuss quality reviews on plan preparation, utility information, details, and accuracy of the design. Comments received from the Quality Control process will be reviewed with the City, and included in the final PS&E preparation

Deliverables: QA/QC Memorandums

Phase 2 Preliminary Field Investigations

Task 1. Topographic Survey

DEA's Team will utilize the City's most recent bench mark elevations as shown in the NAVD 88 for vertical design control. Horizontal control for the survey will be tied into found survey monuments and centerline control within the project limits.

Perform research at the City of San Fernando and County of Los Angeles for the latest available Vertical and Horizontal Bench mark control (NAVD 88). Provide GPS field topographic services for bench mark and ground control for the topographic ground survey for the project. Survey control includes establishing benchmark control, and coordinate control based on the County of Los Angeles State Plane Geodetic Control Database.

The field topographic survey at the project intersections will be completed for each intersection and street segment. Survey of the intersection will be extended on each intersecting side street to 50 ft beyond the BCR/ECR. This topo will be obtained through a Laser 3D scanning process and conventional Total Station survey equipment to obtain the elevation controls and street features along the sidewalk areas for use in curb ramp design and curb profile design. Elevations will be obtained for top of curb, flow line, crown line, back of walk, lip of gutter, grade breaks in the sidewalk areas. A survey of the pavement intersection will be included to locate all at grade utility structures for inclusion on the base maps. All topographic data will be obtained digitally and converted for use in AutoCad design software.

Deliverables: Digital Topographic Survey/Horizontal and Vertical Survey Control

Task 2. Field Investigation

DEA's Team will perform site investigations to conduct a thorough site inspection of the project area to verify the completeness of the topographic survey and to investigate and appraise the condition of all existing street facilities including utilities, traffic, drainage, pavement, and accessibility. The investigation will include a site evaluation and verifications of street widths, project length, and the visible condition of the intersection improvements and drainage patterns.

Deliverables: Field Investigation Report

Task 3. Data Collection Review and Utility Research

DEA's Team will compile a comprehensive project data base, starting with the documents referenced in the RFP. These will be reviewed and catalogued, and then supplemented with record drawings for streets, drains, sewer, and water, traffic signal plans and record right-of-way maps and tract maps for the project areas. DEA will submit a notification request to Electric, Telephone, CATV, and Gas facilities and coordinate utility research with the Utility Company records to notify the agencies of proposed street rehabilitation work.

San Fernando SRTS – Cycle 1

Utility information obtained from the research activities will be documented and provided to the City for their project records. The utility contact information will be included on the plans for reference. At grade utility structures including manholes, vaults, valve covers, and other utility structures located within the street pavement rehabilitation areas and sidewalk improvement areas will be shown on the plans. Plotting of the utility underground conduits and pipelines located during the research phase of the project will not be shown on the final plan sheets.

Deliverables: Record Plans, Utility Correspondence Log

Phase 3 Preliminary Design

Task 1. Prepare Project Base Plans

DEA's Team will utilize existing City maps, GIS files and the DEA topographic survey to prepare street improvement base plans for proposed street improvements. The plans will be prepared at a plan scale (1" = 20') to show proposed street improvements. Composite project title sheet will be developed for project listing, project locations, Capital Project Information and General Construction Notes. Special construction details sheets will be prepared to show street sections, construction details, accessibility ramps, and other project related construction notes and general contractor information.

Project improvement areas where civil design grade control and layout is not required, will utilize City base maps and Google imagery for layout of plan base sheets. Google image will be field verified in field for dimension control and include supplemental field improvements as located during field investigation.

Deliverables: Project Base Plans

Task 2. Preliminary Design Layout

DEA's Team will prepare preliminary street improvement plans and 70% design level plan and profile plans for each project location based on the City's conceptual plan exhibits. The plans will show curb alignments, curb ramps, striping improvements, and drainage construction for the specified intersections. Plans will be developed to a conceptual level to allow the street improvements to show limits of work, and impacts to existing street facilities. DEA will provide preliminary cost estimates for each project location.

Deliverables: Preliminary Designs

Task 3 Environmental Assessment

DEA will prepare a Preliminary Environmental Study (PES) form for the projects in accordance with Caltrans Local Assistance Procedures Manual, Chapter 6 and City Requirements. Caltrans PES Forms will be reviewed and completed for the project. DEA will prepare and submit to the City for approval. DEA Engineers will prepare a Categorical Exemption for the street projects in accordance with CEQA Section 15301, Class 1 for installation of traffic control devices, and placement of concrete curbs and gutters.

The tasks included in this service will include the Field Review Forms, Preliminary Environmental Study (PES) form, and reviews with the City Environmental Manager.

Technical reports supporting the environmental findings are not included in the DEA scope of work. If the PES report requires preparation of supporting technical reports, this work will be provided by the Client or as additional services by DEA.

Deliverables: Caltrans PES Form/CEQA Cat Ex Documents and NEPA Environmental Documents

Phase 4 Final Design PS&E

Task 1. Final Street Rehabilitation Plans

The DEA Team will complete the construction plans to 90%, 100% and final construction level documents based on all previous correspondence and plan check comments received from the City, permitting agencies, and public utility companies. Improvement plans will be prepared at 1" = 20' scale in plan and profile format for intersections where curbs are being replaced. Plan layout will reflect proposed street improvements, including removals, new construction and modification of existing site facilities, pavement rehabilitation methods, construction details, notes and typical sections showing the proposed work required for the projects.

Final design will include locations of concrete construction, limits of existing pavement replacement areas, pavement grinding, overlays, and new pavement structural replacement areas. Drainage improvements will include installation of pipe culverts to allow intersection drainage to continue along existing drainage flow paths. Pavement replacement section will be provided by the City or based on record plans for the representative project location.

Deliverables: *Street Rehabilitation Plans and Construction Details*

Task 2. Curb Ramp Layout

Curb Ramp design will be completed for the ramps found non-compliant with the CBC Title 24 Requirements during the field investigation phase. The ramp design shall include layout controls including dimensional limits, elevations and slope gradients to depict the limits of work and type of ramp to be constructed. Ramp designs will include the use of directional and perpendicular ramps for access from the pedestrian sidewalk and landing areas to the street crosswalk locations.

Deliverables: *Curb Ramp Details*

Task 3. Pavement Signing and Striping Plans

DEA will prepare and process the signing and striping plans for the projects. The plans will include necessary details for the replacement of the roadway striping, and new signage installation. The plans will be prepared in accordance with City of San Fernando requirements, California Manual of Uniform Traffic Control Devices (CAMUCTD) and Caltrans striping standards. The plans will be prepared for the SRTS projects, and will be processed for approval with the submittal of 70%, 90%, and 100% City reviews. This will allow for City input in the design and review of the plans. Striping and signing plans will be prepared at a plan scale of 1" = 40'.

Deliverables: *Pavement Signing and Striping Plans*

Task 4. Traffic Signal Modifications

DEA will prepare traffic signal modification exhibits for the existing traffic signal intersections located at:

Cycle 1 Project Locations:

- Maclay Ave and Fifth St (Countdown Signal, Ped Button Relocation)
- San Fernando Mission Blvd and Mott St (Countdown Signal, Ped Button Relocation)
- San Fernando Mission Blvd and O'Melveny St (Countdown Signal, Ped Button Relocation)
- Brand Blvd and Third St (Ped Button Relocation)
- Brand Blvd and Fourth St (Ped Button Relocation)
- Mission City Trail crossing at Brand Blvd (Pedestrian Activated Flashers)

The work for these intersections will include the relocation of the existing pedestrian push buttons from the existing traffic signal poles to a location near the new Curb Ramps, and the addition of countdown signals to cross the intersection. Work at some intersections will include the addition Solar Powered Pedestrian activated flashers.

This work does not include preparation of a complete traffic signal plan for the work. Plan exhibits will be prepared for use by the Contractor to replace and modify existing signal equipment and cabling to conform with the SRTS proposed improvements.

Deliverables: Traffic Signal Modification Exhibits

Task 5. Encroachment Permits

Cycle 1 Project

DEA shall prepare an Encroachment Permit Application for submittal to Metro Link/UPRR for work within and adjacent to the Mission City Trail crossing at Jesse St and Brand Blvd. Upon completion of the permit application, DEA shall process the Encroachment Permit. Included in this task will be the response to comments during the permit review/processing, and any necessary meetings with the Railroad Agencies for the processing and approval of the plans and permit. Based on our experience, the project will require at least two reviews and resubmittals of the plans for approval of the permit.

Deliverables: Encroachment Permit

Task 6 – Construction Cost and Quantity Estimates

During the course of the project, the DEA Team will prepare three (3) construction cost estimates (70%, 90%, and 100%) for the project. Construction items and quantities will match those items from the Bid Schedule and final contract documents.

Deliverables: Construction Cost and Quantity Estimates

Task 7. Construction Specifications

The DEA Team will prepare the technical specifications and bid schedules required for inclusion in the City's standard contract documents. Technical specifications will encompass the work and material required for construction of all proposed project segments. Bid schedules will be developed and reviewed with the City's Project Manager to obtain a consensus on the type, detail, and listing of the work to be completed. Submitted documents will be based on the City's standard documents, edited for application to this project utilizing the latest edition Caltrans Special Provisions boiler plate and the most current Standard Specifications for Public Works Construction (2015) and all amendments.

Deliverables: Project Special Provisions and Bid Schedules

Task 8. Construction Authorization (E-76 Forms)

DEA Engineers will prepare and process the Request for Construction Authorization forms for the SRTS program in accordance with the Caltrans Local Assistance Procedures Manual. The forms to be completed by DEA will include the following Caltrans Exhibits and forms:

- 3D - Request for Authorization to Proceed with Construction
- 3O – Finance Letter
- 3E – Request to Proceed Data Sheets
- 3R – PS&E Package
- 7B – Field Review Form
- 12C – PS&E Certificate
- 12D – PS&E Checklist
- 13A – Right-of-Way Certification
- 15A – Local Agency Construction Check List
- DBE Annual Goal Certifications (Caltrans Chapter 9, LAPM)

San Fernando SRTS – Cycle 1

The completion of these forms will be reviewed with the City and will be combined with all City completed forms for submittal to the City Local Agency Representative for processing the funding authorization.

Deliverables: Construction Authorization Exhibits and Forms

Phase 5 Construction Services

Task 1. Construction Support Services

The DEA Team will provide the following services in support of the project construction plans during the Construction phase:

- Attend Pre-construction conference
- Review Contractor Issued RFI's
- Review and respond to construction issues
- Revise Plans at no cost to City for plan discrepancies, missing information, oversights, and errors
- Prepare as-built drawings

Deliverables: Technical Bulletins/Addendums/Bid Support Services

Task 2. Bid Award Package

Upon the bid award of the project by the City, DEA will prepare and process the Bid Award Package with Caltrans Local Assistance.

The Bid Award Package to Caltrans includes but not limited to:

- 15A Cover Page/Construction Contract Administration Checklist
- Local Agency Bid Opening Checklist
- 30 Updated Finance Letter
- 15M Detailed Estimate and Detail Estimate Summary
- 15G DBE Certifications (from Contractors)
- 15L Contract Award Check List
- RE's Checklist

Task 3. Caltrans Invoicing

DEA will prepare and process the Caltrans Invoices with Caltrans Local Assistance. The Caltrans invoicing will be prepared as needed and will be based on the City provided paid contractor invoicing. This task estimates invoicing to Caltrans will occur on a monthly basis.

Task 4. Project Completion Package

After the construction of the project is complete and accepted by the City, DEA will prepare and process the Project Completion Forms with Caltrans Local Assistance

The Final Completion Package to Caltrans includes but is not limited to:

San Fernando SRTS – Cycle 1

- 17A Cover Page/Expenditure Checklist
- 17B Final Inspection of Federal Aid Project
- Final Detailed Estimate
- 17D Final Invoice
- 17E Change Order Summary
- 17F Final DBE Certifications (from Contractors)
- 17G Material Certifications
- 17C Final Inspection Form

CITY OF SAN FERNANDO
CONSULTING ENGINEERING SERVICES
Safe Routes to School, Cycle 1

| Task Description | July 30, 2017 Fee Amount | 5 % Discount | August 22, 2017 Revised Fee Amount | Comments |
|--|-----------------------------|--------------|---------------------------------------|-------------------------------|
| Phase 1 -Project Administration | | | | |
| 1. Project Management | \$ 4,180 | \$ 190 | \$ 3,990 | |
| 2. Project Meetings | \$ 3,880 | \$ 190 | \$ 3,690 | |
| 3. Quality Control | \$ 1,140 | \$ - | \$ 1,140 | |
| Phase 1 Subtotal | \$ 9,200 | \$ 380 | \$ 8,820 | |
| Phase 2 - Preliminary Field Investigation | | | | |
| 1. Topographic Field Survey and Ground Control | \$ 38,960 | \$ 2,120 | \$ 36,840 | |
| 2. Field Investigation | \$ 3,100 | \$ 160 | \$ 2,940 | |
| 3. As-Built Data Collection & Utility Research | \$ 6,600 | \$ 285 | \$ 6,315 | |
| Phase 2 Subtotal | \$ 48,660 | \$ 2,565 | \$ 46,095 | |
| Phase 3 - Preliminary Design | | | | |
| 1. Base Construction Drawings | \$ 5,500 | \$ 235 | \$ 5,265 | |
| 2. Preliminary Design | \$ 9,270 | \$ 380 | \$ 8,890 | |
| 3. Environmental Assessment | \$ 6,140 | \$ 320 | \$ 5,820 | |
| Phase 3 Subtotal | \$ 20,910 | \$ 935 | \$ 19,975 | |
| Phase 4 - Final Design | | | | |
| 1. Final Street Rehabilitation Plans | \$ 24,900 | \$ 720 | \$ 24,180 | |
| 2. Curb Ramp Layout Plans & Details | \$ 7,780 | \$ 375 | \$ 7,405 | |
| 3. Pavement Striping & Signing | \$ 7,980 | \$ 500 | \$ 7,480 | |
| 4. Traffic Signal Modifications | \$ 12,060 | \$ 640 | \$ 11,420 | |
| 5. Encroachment Permits | \$ 5,120 | \$ 500 | \$ 4,620 | |
| 6. Cost and Quantity Estimates | \$ 7,880 | \$ 410 | \$ 7,470 | |
| 7. Specifications | \$ 5,260 | \$ 160 | \$ 5,100 | |
| 8. Construction Authorization Forms & Processing | \$ 4,140 | \$ 190 | \$ 3,950 | |
| Phase 4 Subtotal | \$ 75,120 | \$ 3,495 | \$ 71,625 | |
| Phase 5 - Construction Support | | | | |
| 1. Bidding Assistance | \$ 3,300 | \$ 160 | \$ 3,140 | |
| 2. Construction Support | \$ 4,940 | \$ 250 | \$ 4,690 | |
| 3. Caltrans Project Administration | N/A | | \$ 7,110 | New task as requested by City |
| Phase 5 Subtotal | \$ 8,240 | \$ 410 | \$ 14,940 | |
| Deliverables/Reimbursable Expense | \$ 2,500 | \$ 500 | \$ 2,000 | |
| Project Total | \$ 164,630 | \$ 8,285 | \$ 163,455 | |

Summary

| | |
|---------------------|------------|
| Original Fee Amount | \$ 164,630 |
| 5% Discount | \$ 8,285 |
| | \$ 156,345 |

Multiple Project Award

| | |
|--------------------|------------|
| New Task Request | \$ 7,110 |
| Revised Fee Amount | \$ 163,455 |

Phase 5 - Construction Support,
Caltrans Project Administration

San Fernando SRTS – Cycle 2

Project Understanding (CYCLE 2)

David Evans and Associates (DEA) has reviewed the City of San Fernando (City) scope of work for the Safe Routes to School Cycle 2 Projects (SRTS), and is prepared to provide the required engineering design, reports and field investigations to complete the improvement plan and specification documents. The services provided to the City will include completion and processing the certifications and checklists for the E-76 Construction Authorization and Construction Support in accordance with the Caltrans Local Assistance Procedures Manual.

The City's SRTS Cycle 2 project encompasses 18 specific locations throughout the City in and adjacent to local school properties. The improvements at each location differ but in general will include construction of raised curb bulb-outs, curb ramps, crosswalk enhancements, signage, traffic signal modifications, culvert drainage, and narrowing of the street sections at the intersection.

The Cycle 1 project Locations include:

1. Orange Grove Ave from 8th St to Glenoaks Blvd
 - a. Add chicanes to slow traffic
2. 8th St from Orange Grove Ave to Fremont St
 - a. Move curb and gutter over to add parkway buffer for students to slow cars, add safety and make driveway crossings flat
3. Orange Grove Ave at 7th St
 - a. Add bulb outs to 6 crossings, all except NE and SE corners on 7th St where bus stops exist
 - b. Add double perpendicular curb ramps to bulb outs
4. Glenoaks Blvd at Orange Grove Ave – **No Work This Intersection (Removed by City)**
5. Glenoaks Blvd at Huntington St
 - a. Add bulb outs to cross Huntington St on both sides
 - b. Add double perpendicular ramps to all bulb outs
6. Glenoaks at Fermoore St
 - a. Add high visibility crosswalks to cross Fermoore St on north side
 - b. Add bulb outs to cross Fermoore St on north side
 - c. Add double perpendicular curb ramps to all north side
7. Glenoaks Blvd at Workman St
 - a. Add high visibility crosswalks to cross Workman St on both sides
 - b. Add bulb out to cross Workman St on both sides
 - c. Add double perpendicular curb ramps to all bulb outs
8. Glenoaks Blvd at Harps St
 - a. Add high visibility crosswalks to cross Harps St on both sides
 - b. Add bulb outs to cross Harps St on both sides
 - c. Add double perpendicular curb ramps to all bulb outs
9. Glenoaks Blvd at Alexander St
 - a. Add high visibility crosswalks to cross Alexander St on both sides
 - b. Add advanced yield bars to cross Glenoaks Blvd
 - c. Add overhead task lighting to illuminate crosswalk of Glenoaks Blvd
 - d. Add double perpendicular curb ramps to Alexander St bulb outs.
10. Glenoaks Blvd at Hagar St
 - a. Add high visibility crosswalks to cross Hagar St on both sides
 - b. Add double perpendicular curb ramps to all bulb outs
 - c. Add Single perpendicular curb ramps to bulb outs to cross Fermoore (both sides)
11. Brand Blvd from Glenoaks Blvd to 4th St

San Fernando SRTS – Cycle 2

- a. Add chicanes to slow traffic
12. Maclay Ave at Hewett St
 - a. Add high visibility crosswalks on all 4 crossings
 - b. Add bulb outs on all 8 corners
 - c. Add double perpendicular curb ramps to all bulb outs
13. Maclay Ave at Hollister St
 - a. Add high visibility crosswalks on all 4 crossings
 - b. Add bulb outs on all 8 corners
 - c. Add double perpendicular curb ramps to all bulb outs
14. Workman St at O'Melveny St
 - a. Add high visibility crosswalks on all 2 crossings
 - b. Add bulb out to cross O'Melveny St from South side
 - c. Add double perpendicular curb ramps to north side bulb outs (East side)
 - d. Add bulb out to cross Workman from West side
15. Workman St at Woodworth St
 - a. Add high visibility crosswalks to cross Woodworth St
 - b. Add bulb outs to cross Woodworth St
 - c. Add double perpendicular curb ramps to all bulb outs
16. Workman St at Mott St
 - a. Add high visibility crosswalks on all 4 crossings
 - b. Add raised crosswalk to cross Mott St on north side
 - c. Add center pedestrian sign on raised crosswalk
 - d. Add bulb outs on all 8 corners
 - e. Add double perpendicular curb ramps to all bulb outs
17. Workman St at Griffith St
 - a. Add high visibility crosswalks on all 4 crossings
 - b. Add raised crosswalk to cross Workman St on south side
 - c. Add raised crosswalk to cross Griffith St on east side
 - d. Add center pedestrian sign on all 4 crossings
 - e. Add bulb outs on 4 corners without raised crosswalks
 - f. Add double perpendicular curb ramps to all bulb outs
18. 5th St from Alexander to Orange Grove Ave
 - a. Add chicanes to slow traffic.

All Pedestrian Activated Flashers shall be solar powered. City will provide preferred manufacturer.

Minimum 25 feet of red curb shall be placed at all legs on intersection where center pedestrian signs (R1-6) are placed.

The project design services will include a comprehensive field survey drawing to establish a comprehensive digital base map for use in completing the intersection design for streets with intersection curb bulb outs or street width reduction. Intersection improvements requiring striping modifications will utilize aerial imaging for plan design. The project design will include a coordinated field review by the design team to verify and evaluate the site conditions, drainage patterns, curb ramps and walks within the project limits.

The final design will include civil engineering plans, signing and striping plans, construction specifications, bid documents, engineers cost and quantity estimates, and traffic signal plan modifications where required.

DEA will follow the Caltrans Local Assistance Procedures Manual to prepare the required engineering forms and supporting documents including the Finance Letter, Field Review form, PS&E Certificate and Checklist, Right of Way Certification, and Environmental compliance forms. (CEQA and NEPA).

After receipt of construction bids, DEA will prepare the City's Bid Award Package for submittal to Caltrans. DEA will also prepare the monthly project reimbursement invoices to Caltrans during the construction phase, and upon final acceptance of the work by the City, DEA will prepare the Caltrans Project Completion package for submittal and project close out to the Caltrans Local Agency Representative.

Project Approach

DEA will engage and work seamlessly with the City Project Management Team to deliver the Projects in a timely and cost effective manner. We begin this relationship at the start with our first kick-off meeting with your staff. The key objectives of DEA's technical approach are to develop PS&E documents in a manner that achieves value, provides detailed information to the contractor, facilitates the construction schedule, and is in strict accordance with City Standards. Our specific approach to delivering the scope of services is described in the following paragraphs.

Scope of Services

Phase 1 Project Administration

Task 1. Project Management

The Project Manager will be the main point of contact for the duration of the contract providing project controls, coordination and scheduling of the team. This will include tracking of the project progress, permitting requirements, advising the City of the schedule status and coordination with outside Agencies. This work will include technical and cursory reviews of deliverable documents prepared by DEA's Team.

The Project Manager will provide periodic project updates through phone calls, e-mails and project transmittals to the City for general coordination, project updates, response to design inquiries and requests for clarification on City Standards and procedures.

Deliverables: *Monthly Progress Reports/Project Schedule Updates*

Task 2. Project Meetings

During the course of the field review and project design, monthly meetings will be established to provide time for DEA's Team and the City to meet and review the roadway investigation process, specific project designs and presentation of critical information. Meetings will be held at the City Offices or in the field as necessary to discuss and resolve the project designs and issues. DEA engineers and staff will attend a kick-off meeting with the City and four (4) design meetings to review progress of the work, and obtain additional input from City staff.

Deliverables: *Meeting Minutes*

Task 3. Quality Control

The project design segments will be reviewed by a DEA construction engineer with relevant project experience in street rehabilitation and construction operations. The DEA construction engineer will meet with the project team on a monthly basis to review plan design, and discuss quality reviews on plan preparation, utility information, details, and accuracy of the design. Comments received from the Quality Control process will be reviewed with the City, and included in the final PS&E preparation

Deliverables: *QA/QC Memorandums*

Phase 2 Preliminary Field Investigations

Task 1. Topographic Survey

DEA's Team will utilize the City's most recent bench mark elevations as shown in the NAVD 88 for vertical design control. Horizontal control for the survey will be tied into found survey monuments and centerline control within the project limits.

Perform research at the City of San Fernando and County of Los Angeles for the latest available Vertical and Horizontal Bench mark control (NAVD 88). Provide GPS field topographic services for bench mark and ground control for the topographic ground survey for the project. Survey control includes establishing benchmark control, and coordinate control based on the County of Los Angeles State Plane Geodetic Control Database.

The field topographic survey at the project intersections will be completed for each intersection and street segment. Survey of the intersection will be extended on each intersecting side street to 50 ft beyond the BCR/ECR. This topo will be obtained through a Laser 3D scanning process and conventional Total Station survey equipment to obtain the elevation controls and street features along the sidewalk areas for use in curb ramp design and curb profile design. Elevations will be obtained for top of curb, flow line, crown line, back of walk, lip of gutter, grade breaks in the sidewalk areas. A survey of the pavement intersection will be included to locate all at grade utility structures for inclusion on the base maps. All topographic data will be obtained digitally and converted for use in AutoCad design software.

Deliverables: Digital Topographic Survey/Horizontal and Vertical Survey Control

Task 2. Field Investigation

DEA's Team will perform site investigations to conduct a thorough site inspection of the project area to verify the completeness of the topographic survey and to investigate and appraise the condition of all existing street facilities including utilities, traffic, drainage, pavement, and accessibility. The investigation will include a site evaluation and verifications of street widths, project length, and the visible condition of the intersection improvements and drainage patterns.

Deliverables: Field Investigation Report

Task 3. Data Collection Review and Utility Research

DEA's Team will compile a comprehensive project data base, starting with the documents referenced in the RFP. These will be reviewed and catalogued, and then supplemented with record drawings for streets, drains, sewer, and water, traffic signal plans and record right-of-way maps and tract maps for the project areas. DEA will submit a notification request to Electric, Telephone, CATV, and Gas facilities and coordinate utility research with the Utility Company records to notify the agencies of proposed street rehabilitation work.

Utility information obtained from the research activities will be documented and provided to the City for their project records. The utility contact information will be included on the plans for reference. At grade utility structures including manholes, vaults, valve covers, and other utility structures located within the street pavement rehabilitation areas and sidewalk improvement areas will be shown on the plans.

Plotting of the utility underground conduits and pipelines located during the research phase of the project will not be shown on the final plan sheets.

Deliverables: Record Plans, Utility Correspondence Log

Phase 3 Preliminary Design

Task 1. Prepare Project Base Plans

DEA's Team will utilize existing City maps, GIS files and the DEA topographic survey to prepare street improvement base plans for proposed street improvements. The plans will be prepared at a plan scale (1" =20') to show proposed street improvements. Composite project title sheet will be developed for project listing, project locations, Capital Project Information and General Construction Notes. Special construction details sheets will be prepared to show street sections, construction details, accessibility ramps, and other project related construction notes and general contractor information.

Project improvement areas where civil design grade control and layout is not required, will utilize City base maps and Google imagery for layout of plan base sheets. Google image will be field verified in field for dimension control and include supplemental field improvements as located during field investigation.

Deliverables: Project Base Plans

Task 2. Preliminary Design Layout

DEA's Team will prepare preliminary street improvement plans and 70% design level plan and profile plans for each project location based on the City's conceptual plan exhibits. The plans will show curb alignments, curb ramps, striping improvements, and drainage construction for the specified intersections. Plans will be developed to a conceptual level to allow the street improvements to show limits of work, and impacts to existing street facilities. DEA will provide preliminary cost estimates for each project location.

Deliverables: Preliminary Designs

Task 3 Environmental Assessment

DEA will prepare a Preliminary Environmental Study (PES) form for the projects in accordance with Caltrans Local Assistance Procedures Manual, Chapter 6 and City Requirements. Caltrans PES Forms will be reviewed and completed for the project. DEA will prepare and submit to the City for approval. DEA Engineers will prepare a Categorical Exemption for the street projects in accordance with CEQA Section 15301, Class 1 for installation of traffic control devices, and placement of concrete curbs and gutters.

The tasks included in this service will include the Field Review Forms, Preliminary Environmental Study (PES) form, and reviews with the City Environmental Manager.

Technical reports supporting the environmental findings are not included in the DEA scope of work. If the PES report requires preparation of supporting technical reports, this work will be provided by the Client or as additional services by DEA.

Deliverables: Caltrans PES Form/CEQA Cat Ex Documents and NEPA Environmental Documents

Phase 4 Final Design PS&E

Task 1. Final Street Rehabilitation Plans

The DEA Team will complete the construction plans to 90%, 100% and final construction level documents based on all previous correspondence and plan check comments received from the City, permitting agencies, and public utility companies. Improvement plans will be prepared at 1" =20' scale in plan and profile format for intersections where curbs are being replaced. Plan layout will reflect proposed street improvements, including removals, new construction and modification of existing site facilities, pavement rehabilitation methods, construction details, notes and typical sections showing the proposed work required for the projects.

Final design will include locations of concrete construction, limits of existing pavement replacement areas, pavement grinding, overlays, and new pavement structural replacement areas. Drainage improvements will include installation of pipe culverts to allow intersection drainage to continue along existing drainage flow paths. Pavement replacement section will be provided by the City or based on record plans for the representative project location.

Deliverables: *Street Rehabilitation Plans and Construction Details*

Task 2. Curb Ramp Layout

Curb Ramp design will be completed for the ramps found non-compliant with the CBC Title 24 Requirements during the field investigation phase. The ramp design shall include layout controls including dimensional limits, elevations and slope gradients to depict the limits of work and type of ramp to be constructed. Ramp designs will include the use of directional and perpendicular ramps for access from the pedestrian sidewalk and landing areas to the street crosswalk locations.

Deliverables: Curb Ramp Details

Task 3. Pavement Signing and Striping Plans

DEA will prepare and process the signing and striping plans for the projects. The plans will include necessary details for the replacement of the roadway striping, and new signage installation. The plans will be prepared in accordance with City of San Fernando requirements, California Manual of Uniform Traffic Control Devices (CAMUCTD) and Caltrans striping standards. The plans will be prepared for the SRTS projects, and will be processed for approval with the submittal of 70%, 90%, and 100% City reviews. This will allow for City input in the design and review of the plans. Striping and signing plans will be prepared at a plan scale of 1" = 40'.

Deliverables: Pavement Signing and Striping Plans

Task 4. Traffic Signal Modifications

DEA will prepare traffic signal modification exhibits for the existing traffic signal intersections located at:

Cycle 2 Project Locations:

- Glenoaks Blvd and Orange Grove Ave (Countdown Signal, Audible Ped Signals, Ped Button Relocation)
- Glenoaks Blvd and Fermoore St (Pedestrian Activated Flashers)
- Glenoaks Blvd and Alexander St (Pedestrian Activated Flashers)
- Maclay Ave and Hewett St (Ped Button Relocation)

The work for these intersections will include the relocation of the existing pedestrian push buttons from the existing traffic signal poles to a location near the new Curb Ramps, and the addition of countdown signals to cross the intersection. Work at some intersections will include the addition Solar Powered Pedestrian activated flashers.

This work does not include preparation of a complete traffic signal plan for the work. Plan exhibits will be prepared for use by the Contractor to replace and modify existing signal equipment and cabling to conform with the SRTS proposed improvements.

Deliverables: Traffic Signal Modification Exhibits

Task 5. Encroachment Permits

Cycle 2 Project

The Cycle 2 project improvements are located within existing City owned right of way, and the project will not require construction permits from Caltrans, Metrolink, or other regulatory agency. The encroachment permit task will not be completed for the Cycle 2 project design.

Deliverables: Encroachment Permit

Task 6 – Construction Cost and Quantity Estimates

During the course of the project, the DEA Team will prepare three (3) construction cost estimates (70%, 90%, and 100%) for the project. Construction items and quantities will match those items from the Bid Schedule and final contract documents.

Deliverables: Construction Cost and Quantity Estimates

Task 7. Construction Specifications

The DEA Team will prepare the technical specifications and bid schedules required for inclusion in the City's standard contract documents. Technical specifications will encompass the work and material required for construction of all proposed project segments. Bid schedules will be developed and reviewed with the City's Project Manager to obtain a consensus on the type, detail, and listing of the work to be completed. Submitted documents will be based on the City's standard documents, edited for application to this project utilizing the latest edition Caltrans Special Provisions boiler plate and the most current Standard Specifications for Public Works Construction (2015) and all amendments.

Deliverables: Project Special Provisions and Bid Schedules

Task 8. Construction Authorization (E-76 Forms)

DEA Engineers will prepare and process the Request for Construction Authorization forms for the SRTS program in accordance with the Caltrans Local Assistance Procedures Manual. The forms completed by DEA will include the following Caltrans Exhibits and forms:

- 3D - Request for Authorization to Proceed with Construction
- 3O – Finance Letter
- 3E – Request to Proceed Data Sheets
- 3R – PS&E Package
- 7B – Field Review Form
- 12C – PS&E Certificate
- 12D – PS&E Checklist
- 13A – Right-of-Way Certification
- 15A – Local Agency Construction Check List
- DBE Annual Goal Certifications (Caltrans Chapter 9, LAPM)

The completion of these forms will be reviewed with the City and will be combined with all City completed forms for submittal to the City Local Agency Representative for processing the funding authorization.

Deliverables: Construction Authorization Exhibits and Forms

Phase 5 Construction Services

Task 1. Construction Support Services

The DEA Team will provide the following services in support of the project construction plans during the Construction phase:

- Attend Pre-construction conference

- Review Contractor Issued RFI's
- Review and respond to construction issues
- Revise Plans at no cost to City for plan discrepancies, missing information, oversights, and errors
- Prepare as-built drawings

Deliverables: Technical Bulletins/Addendums/Bid Support Services

Task 2. Bid Award Package

Upon the bid award of the project by the City, DEA will prepare and process the Bid Award Package with Caltrans Local Assistance.

The Bid Award Package to Caltrans includes but not limited to:

- 15A Cover Page/Construction Contract Administration Checklist
- Local Agency Bid Opening Checklist
- 3O Updated Finance Letter
- 15M Detailed Estimate and Detail Estimate Summary
- 15G DBE Certifications (from Contractors)
- 15L Contract Award Check List
- RE's Checklist

Task 3. Caltrans Invoicing

DEA will prepare and process the Caltrans Invoices with Caltrans Local Assistance. The Caltrans invoicing will be prepared as needed and will be based on the City provided paid contractor invoicing. This task estimates invoicing to Caltrans will occur on a monthly basis.

Task 4. Project Completion Package

After the construction of the project is complete and accepted by the City, DEA will prepare and process the Project Completion Forms with Caltrans Local Assistance

The Final Completion Package to Caltrans includes but is not limited to:

- 17A Cover Page/Expenditure Checklist
- 17B Final Inspection of Federal Aid Project
- 17D Final Invoice
- 17E Change Order Summary
- 17F Final DBE Certifications (from Contractors)
- 17G Material Certifications
- 17C Final Inspection Form
- Final Detailed Estimate

CITY OF SAN FERNANDO
CONSULTING ENGINEERING SERVICES
Safe Routes to School, Cycle 2

| Task Description | July 30, 2017 Fee Amount | 5 % Discount | August 22, 2017 Revised Fee Amount | Comments |
|--|-----------------------------|--------------|---------------------------------------|-------------------------------|
| Phase 1 -Project Administration | | | | |
| 1. Project Management | \$ 4,180 | \$ 190 | \$ 3,990 | |
| 2. Project Meetings | \$ 3,880 | \$ 190 | \$ 3,690 | |
| 3. Quality Control | \$ 1,140 | \$ - | \$ 1,140 | |
| Phase 1 Subtotal | \$ 9,200 | \$ 380 | \$ 8,820 | |
| Phase 2 - Preliminary Field Investigation | | | | |
| 1. Topographic Field Survey and Ground Control | \$ 27,400 | \$ 1,060 | \$ 26,340 | |
| 2. Field Investigation | \$ 3,100 | \$ 125 | \$ 2,975 | |
| 3. As-Built Data Collection & Utility Research | \$ 6,600 | \$ 250 | \$ 6,350 | |
| Phase 2 Subtotal | \$ 37,100 | \$ 1,435 | \$ 35,665 | |
| Phase 3 - Preliminary Design | | | | |
| 1. Base Construction Drawings | \$ 4,920 | \$ 250 | \$ 4,670 | |
| 2. Preliminary Design | \$ 8,550 | \$ 500 | \$ 8,050 | |
| 3. Environmental Assessment | \$ 7,220 | \$ 380 | \$ 6,840 | |
| Phase 3 Subtotal | \$ 20,690 | \$ 1,130 | \$ 19,560 | |
| Phase 4 - Final Design | | | | |
| 1. Final Street Rehabilitation Plans | \$ 22,380 | \$ 1,100 | \$ 21,280 | |
| 2. Curb Ramp Layout Plans & Details | \$ 7,250 | \$ 345 | \$ 6,905 | |
| 3. Pavement Striping & Signing | \$ 9,150 | \$ 440 | \$ 8,710 | |
| 4. Traffic Signal Modifications | \$ 9,880 | \$ 500 | \$ 9,380 | |
| 5. Encroachment Permits | \$ - | \$ - | \$ - | |
| 6. Cost and Quantity Estimates | \$ 7,060 | \$ 500 | \$ 6,560 | |
| 7. Specifications | \$ 5,960 | \$ 320 | \$ 5,640 | |
| 8. Construction Authorization Forms & Processing | \$ 4,200 | \$ 190 | \$ 4,010 | |
| Phase 4 Subtotal | \$ 65,880 | \$ 3,395 | \$ 62,485 | |
| Phase 5 - Construction Support | | | | |
| 1. Bidding Assistance | \$ 3,680 | \$ 160 | \$ 3,520 | |
| 2. Construction Support | \$ 5,320 | \$ 250 | \$ 5,070 | |
| 3. Caltrans Project Administration | N/A | | \$ 7,110 | New task as requested by City |
| Phase 5 Subtotal | \$ 9,000 | \$ 410 | \$ 15,700 | |
| Deliverables/Reimbursable Expense | \$ 2,000 | \$ 500 | \$ 1,500 | 500 |
| Project Total | \$ 143,870 | \$ 7,250 | \$ 143,730 | |

Summary

| | |
|---------------------|------------|
| Original Fee Amount | \$ 143,870 |
| 5% Discount | \$ 7,250 |
| | \$ 136,620 |

Multiple Project Award

| | |
|--------------------|------------|
| New Task Request | \$ 7,110 |
| Revised Fee Amount | \$ 143,730 |

Phase 5 - Construction Support,
Caltrans Project Administration