SAND CITY PUBLIC SAFETY COMMITTEE AGENDA



TUESDAY, NOVEMBER 10, 2015
10:30 A.M.
SAND CITY
COUNCIL CHAMBERS

AGENDA PUBLIC SAFETY COMMITTEE

Tuesday, November 10, 2015 10:30 A.M. Sand City Council Chambers #1 Sylvan Park, Sand City, CA 93955

1. CALL TO ORDER

2. ROLL CALL

3. COMMUNICATIONS

Members of the Public may address the Public Safety Committee on matters not appearing on the Public Safety Committee Agenda at this time for up to three minutes. In order that the Public Safety Committee Secretary may later identify the speaker in the minutes of the meeting, it is helpful if the speakers state their names. Public comments regarding items on the scheduled agenda will be heard at the time the item is being considered by the Public Safety Committee.

4. OLD BUSINESS

- A. Capital Projects on Hickory/Diaz
- B. Verbal Update and Discussion of On-going projects
 - 1. Dog Waste Ordinance
 - 2. Camping on Land East of Hwy 1
 - 3. Speed Survey
 - 4. Traffic Cameras
 - 5. Citywide Emergency Plan
 - 6. California Avenue Sidewalk

5. NEW BUSINESS

- A. Approval of October 16, 2015 Public Safety Committee Meeting Minutes
- B. Reserve Officer Program
- C. Police Firearms Update
- D. Hire Temp Employee Discussion
- E. Infrastructure and Economic Development Funding Discussion

6. ADJOURNMENT

Agenda Item 4A

This agenda item to be distributed at the meeting

Agenda Item 4B (3)





October 22, 2015

Brian Ferrante City of Sand City Police Department 1 Sylvan Way Sand City, CA 93955

Re:

Sand City Speed Survey Update,

Sand City, California

Dear Brian:

Hatch Mott MacDonald (HMM) has prepared a vehicle speed survey update for the City of Sand City. This survey was conducted along 10 roadways within the City, as required by the California Vehicle Code (CVC) and California Manual on Uniform Traffic Control Devices (CA MUTCD) to allow radar speed enforcement by the Sand City Police Department.

A. Project Approach

Speed surveys were conducted at the following 10 locations:

- 1) Contra Costa Street, between Del Monte Boulevard and end of road;
- 2) Redwood Avenue, between end of road (east) and end of road (west)
- 3) California Avenue, between Contra Costa Street and Sylvan Avenue;
- 4) California Avenue, between Sylvan Avenue and East Avenue;
- 5) California Avenue, between East Avenue and Tioga Avenue;
- 6) Dunes Drive, between City Limits and Tioga Avenue;
- 7) Tioga Avenue, between Dunes Drive and Del Monte Boulevard;
- 8) Playa Avenue, between Metz Road and Del Monte Boulevard;
- 9) California Avenue, between Playa Avenue and Southbound State Route 1 On-Ramp; and
- 10) Catalina Street, between Ortiz Avenue and Olympia Avenue.

Exhibit 1 graphically depicts the locations of the surveyed roadways.

This speed survey was conducted in accordance with the requirements of the latest California Vehicle Code (CVC) and the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD). A minimum of 100 radar gun speed-readings were obtained on each surveyed roadway (i.e. a minimum of 50 readings in each travel direction). The speed surveys were conducted in good weather conditions and under normal vehicle operating conditions, and in off-peak travel periods where possible.

B. Speed Survey Frequency

CVC Section 40802 contains rules regarding the frequency of updating speed surveys. Under normal circumstances, speed surveys of a jurisdiction's roadways must be updated every <u>five</u> years for a speed limit to remain valid. (The sole exceptions to this rule are local streets, streets in business districts, and school zones, which by law are to be signed at 25 miles per hour (MPH). The CVC specifically defines each of the street types.) However, there are two exceptions that allow for a longer frequency between survey updates:



Exception #1: If speed enforcement officers have at least 24 hours of radar training and their radar equipment has been calibrated within the past 3 years, speed surveys only need to be updated every seven years. (If an agency uses lidar, then an additional 2 hours of training is also required to meet this rule.)

Exception #2: If Exception #1 is met and there have been no significant changes to a roadway, then speed surveys only need to be repeated every ten years. ("Significant changes" are defined in the CVC as changes to adjoining properties, land use, roadway width, or traffic volume. The 2014 CA MUTCD further clarifies that "significant changes" can also include addition or removal of driveways, addition or removal of on-street parking restrictions, changes in roadway lane configurations, additions or removal of bicycle lanes, changes in traffic control, or addition or removal of signal coordination.) Note that the CVC requires that the determination of "no significant changes" must be made by a Registered Engineer.

Note that these rules apply on a street-by-street basis. Thus, if a particular roadway that has been previously surveyed has significant changes, it may need to be re-surveyed in seven years, but an adjacent roadway with no changes may only need to be re-surveyed every ten years.

Finally, note that these rules apply to updates to a speed survey. If a roadway is not a local street, business district or school zone, a speed survey must be performed and adopted by a local agency prior to enforcement of its speed limit.

C. Speed Limits by Statute

The CVC identifies three specific instances where a specific speed limit may be established without a speed survey if certain conditions are met. They are business districts, local streets, and narrow streets. Each of these instances is described below.

- Business Districts CVC Section 235 defines a business district as an area in which at least 50 percent of the fronting properties are used for business for a minimum distance of 600 feet on one side or 300 feet on both sides of a roadway. As previously noted in Section 2.1 of this document, speed limits within business districts are defined in the CVC as 25 MPH.
- Local Streets CVC Section 40802(a) defines local streets and roads as ones that are functionally classified as "local" on the California Road System Maps approved by the Federal Highway Administration and maintained by the California Department of Transportation (Caltrans). Exhibit 2 depicts the current California Road System Maps covering the City of Sand City.

If a local street or roadway is not indicated on the California Road System Maps, CVC Section 40802(b) also allows local streets and roads to be defined as those roadways that meet the following four conditions:

- Primarily provides access to abutting residential property;
- Roadway width of not more than 40 feet;
- Not more than one-half mile of uninterrupted length. Interruptions shall include official traffic control devices; and
- Not more than one traffic lane in each direction.



As noted in CVC Section 40802(a), roadways meeting either of the above CVC definitions for local streets and roadways are categorically exempt from any of the speed trap provisions within Section 40802. This means that the City of Sand City may enforce speed limits on local streets and roads meeting either definition without first performing an engineering and traffic survey (i.e. speed survey). However, enforcement on local streets would still be based upon the Basic Speed Law (i.e. 85th percentile).

Note: A jurisdiction's functional classification of a local street or roadway has no bearing on whether the roadway actually meets either of the CVC definitions. For example, if there is a discrepancy in function classification between the city's General Plan and the California Road System Maps, the California Road System Maps is the controlling definition. It is therefore important that cities submit their roadway classifications to Caltrans after adoption of city General Plan revisions.

3. <u>Narrow Streets</u> – CVC Section 22358.3 states that roadways not exceeding 25 feet in width that are also located in business districts, residential districts, or in public parks can be signed at either 20 or 15 MPH if a speed survey identifies that such speed limits are reasonable and safe.

D. Procedures to Establish Speed Limits

The CA MUTCD summarizes the CVC procedures to select an appropriate speed limit for a roadway. Normally, the speed limit is established at the nearest 5 mile-per-hour (MPH) increment of the 85th-percentile speed, a.k.a. critical speed. (The 85th-percentile speed, also known as the critical speed, is defined as the speed at which 85% of all surveyed drivers are traveling at or below.) Note that this procedure could result in a speed limit either below or above the critical speed. Two examples follow:

<u>Example 1:</u> For a critical speed of 27 MPH, the nearest 5 MPH increment is 25 MPH, and thus the speed limit would be established at 25 MPH.

Example 2: For a critical speed of 28 MPH, the nearest 5 MPH increment is 30 MPH, and thus the speed limit would be established at 30 MPH.

The CA MUTCD and CVC provide for three speed reductions that can supplement these procedures. Each reduction method is summarized below.

Reduction #1 - Residential Density:

CVC Section 627 allows for the consideration of residential and commercial building densities when determining speed limits, as long as said densities meet or exceed specific thresholds. The CA MUTCD provides further guidance, allowing for a specific speed reduction of 5 MPH to be applied to the nearest 5 MPH increment of the critical speed if either of the following building densities currently exists along a roadway:

- 1. The density of separate dwelling houses or business structures contiguous along one side of a roadway is at least 13 houses or structures per 0.25 miles; or
- 2. The density of separate dwelling houses or business structures contiguous along both sides of a roadway is at least 16 houses or structures per 0.25 miles.



Note that the previously described speed reduction can only be applied after the critical speed has been initially adjusted. For example, for a critical speed of 28 MPH, the critical speed would normally be adjusted to 30 MPH. If the densities within Reduction #1 are applicable, then the initial 30 MPH speed recommendation could be reduced by 5 MPH to a final recommendation of 25 MPH.

Reduction #2 - Pedestrian and Bicycle Safety

The CA MUTCD and CVC Section 627 state that pedestrian and bicyclist safety can also be used as justification for keeping a speed limit low. No specific criteria is provided in either document for use in this justification; however, in the spirit of the other guidance and statutes in the CA MUTCD and CVC, it is recommended that reductions be limited to no more than 5 MPH and that they be limited to roadways with moderate to heavy pedestrian and bicycle activity, such as near schools, parks, and other public gathering areas, as well as along obvious and established routes to schools. The factors which can enter into this decision process can include roadway geometry (including changes in horizontal and vertical profile); collision histories; lack of sidewalks or bicycle lanes, and any highway, traffic, or roadway conditions not readily apparent to the driver.

Similar to Reduction #1, Reduction #2 can only be applied after the critical speed has been initially adjusted.

Reduction #3 - Exception for Adjustment of Critical Speed

The CVC contains an exception to the CA MUTCD procedure to establish a speed limit from the critical speed (i.e. 85th percentile speed). Section 21400(b) of the CVC allows for the speed limit of a roadway to be rounded down to the nearest 5 MPH increment below the critical speed, as long as the speed limit would have otherwise been rounded up to the 5 MPH increment above the critical speed. If this reduction is applied to the critical speed, no additional reductions can be made. This means that if Reduction #3 is applied, neither Reductions #1 or #2 could be applied afterwards, regardless of whether or not the criteria for those other reductions are met. Two examples of this reduction follow:

Example 1: For a critical speed of 28 MPH, instead of rounding up to 30 MPH (the nearest 5 MPH increment), the speed limit could be rounded down to 25 MPH using Reduction #3, but no further reductions could be taken.

Example 2: For a critical speed of 27 MPH, the nearest 5 MPH increment would be 25 MPH – a speed lower than the critical speed – and thus Reduction #3 would not apply. However, Reductions #1 or #2 could still be applied if their criteria are met.

Finally, the CA MUTCD also states that other factors can be used in establishing speed limits on city and county roadways, including the most recent 2-year collision record, roadway design speed, sight distance, intersection spacing and offsets, and commercial driveway characteristics.



E. Recommended Speed Limits

Exhibit 3 summarizes the recommended speed limits along the 11 study locations. Conditions and recommended speed limits are discussed below, including factors that explain the reasoning behind any speed reductions taken. The existing speed limits are indicated in parentheses next to each segment. (See **Appendix A** for individual field survey sheets.)

1. Contra Costa Street - Del Monte to End of Road (25 MPH)

The critical speed is 25 MPH, which would require a speed limit of 25 MPH – this matches the existing signed speed limit. Therefore, it is recommended that the existing 25 MPH speed limit be retained.

2. Redwood Avenue – End of Road (east) to End of Road (west) (25 MPH by statute)

(Note: This roadway does not have any speed limit signs. However, as it is a local street, the speed limit is 25 MPH, per the CVC.)

The critical speed is 24 MPH, which would require a speed limit of 25 MPH – this matches the existing signed speed limit. Therefore, it is recommended that the existing 25 MPH speed limit be retained.

3. California Avenue – Contra Costa Street to Sylvan Avenue (25 MPH)

The critical speed is 25 MPH, which would require a speed limit of 25 MPH – this matches the existing signed speed limit. Therefore, it is recommended that the existing 25 MPH speed limit be retained.

4. California Avenue - Sylvan Avenue to East Avenue (25 MPH)

The critical speed is between 28 and 29 MPH, 3 to 4 MPH above the current speed limit; this would normally require a speed limit of 30 MPH. However, the rounding exception in Section 21400(b) of the CVC is being applied to this segment. For this reason, it is recommended that the existing speed limit of 25 MPH be retained.

5. California Avenue – East Avenue to Tioga Avenue (25 MPH)

The critical speed is between 30 and 31 MPH, 5 to 6 MPH above the current speed limit; this would normally require a speed limit of 30 MPH. However, this roadway does not have any sidewalks, requiring pedestrian traffic to travel in the roadway. For this reason, it is recommended that the existing speed limit be retained at 25 MPH.

6. Sand Dunes Drive - City Limits to Tioga Avenue (35 MPH)

The critical speed is between 44 and 47 MPH, 9 to 12 MPH above the current speed limit; this would normally require a speed limit of 45 MPH. However, the rounding exception in Section 21400(b) of the CVC is being applied to this segment. For this reason, it is recommended that the existing speed limit be raised to 40 MPH.



7. Tioga Avenue – Sand Dunes Drive to Del Monte Boulevard (25 MPH)

The critical speed is between 33 and 35 MPH, 8 to 10 MPH above the current speed limit; this would normally require a speed limit of 35 MPH. However, this roadway is an important connection between existing regional bicycle paths within Sand City, a connection lacking in dedicated bicycle lanes. For this reason, it is recommended that the existing speed limit be retained at 25 MPH.

8. Playa Avenue – Metz Road to Del Monte Boulevard (25 MPH)

The critical speed is between 25 and 26 MPH, which would require a speed limit of 25 MPH – this matches the existing signed speed limit. Therefore, it is recommended that the existing 25 MPH speed limit be retained.

9. California Avenue – Playa Avenue to Southbound State Route 1 On-Ramp (35 MPH)

The critical speed is between 40 and 41 MPH, 5 to 6 MPH above the current speed limit; therefore, it is recommended that the existing speed limit be raised to 40 MPH.

10. Catalina Street - Ortiz Avenue to Olympia Avenue (25 MPH)

The critical speed is between 25 and 26 MPH, which would require a speed limit of 25 MPH - this matches the existing signed speed limit. Therefore, it is recommended that the existing 25 MPH speed limit be retained.

F. **Speed Reduction Techniques**

The most extreme levels of violation of the current speed limits (i.e. largest difference between the measures 85th percentile speed and the current speed limit) were found on the following two roadways:

- 6. Sand Dunes Drive City Limits to Tioga Avenue (9 to 12 MPH above speed limit); and
- 7. Tioga Avenue Sand Dunes Drive to Del Monte Boulevard (8 to 10 MPH above speed limit).

Two additional roadways had 85% percentile speeds that were 5 or 6 MPH above the current speed limit:

- 5. California Avenue East Avenue to Tioga Avenue;
- 9. California Avenue Playa Avenue to Southbound State Route 1 On-Ramp.

While continued speed enforcement is an important method to reduce travel speeds on these roadways, it cannot be implemented on all roadways at all times and is labor intensive. Other physical improvements to the se roadways could be considered to reduce travel speeds, such as:

- Additional (and more frequent) speed limit signs;
- Speed feedback signs (i.e. "Your Speed XX");
- Roadway narrowings;
- Speed humps and lumps; and
- Roundabouts.



While signs can be implemented relatively simply and inexpensively, a more comprehensive traffic calming study is recommended prior to implementation of other, more extensive physical improvements, like speed humps/lumps and roundabouts. Such a study will help to identify the most appropriate types of traffic calming for a corridor and the most effective placement of these traffic calming improvements to reduce vehicle speeds, as well as implement traffic calming improvements that minimize effects on emergency response times. It is also recommended that the City of Sand City continue to implement simpler traffic calming improvements that, as shown by the results of this speed survey, have been effective at reducing travel speeds on other city roadways, such as the roadway narrowings on Contra Costa Street and California Avenue.

G. Conclusion

In summary, it is recommended that the speed limits on two of the ten surveyed segments be modified, while the speed limits on the other eight segments would remain at their current levels.

If you have any questions regarding the contents of this letter or need additional information, please do not hesitate to contact Jeff Waller. Thank you for the opportunity to assist you with this project.

Very truly yours,

Hatch MounMacDonald

Keith B. Higgins, PE, TE

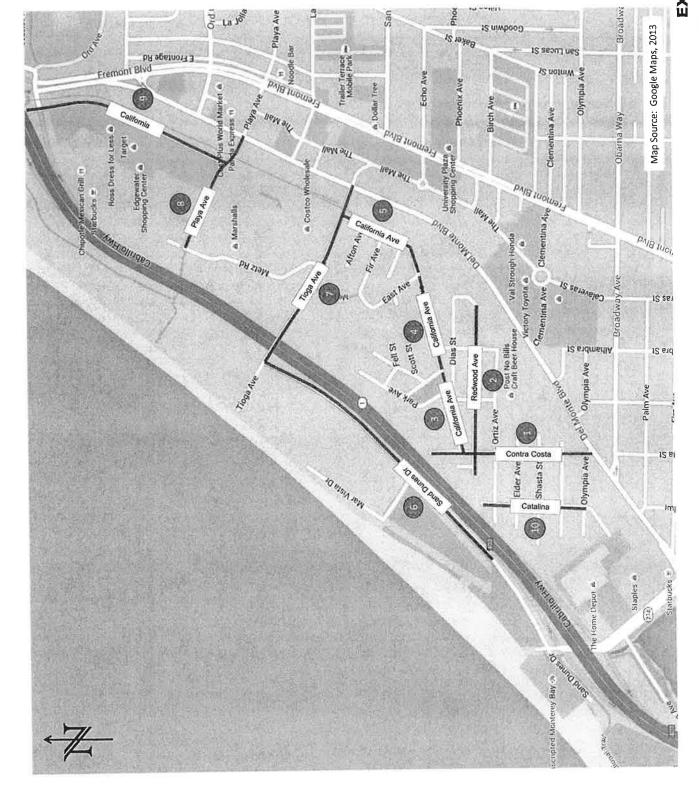
Vice President

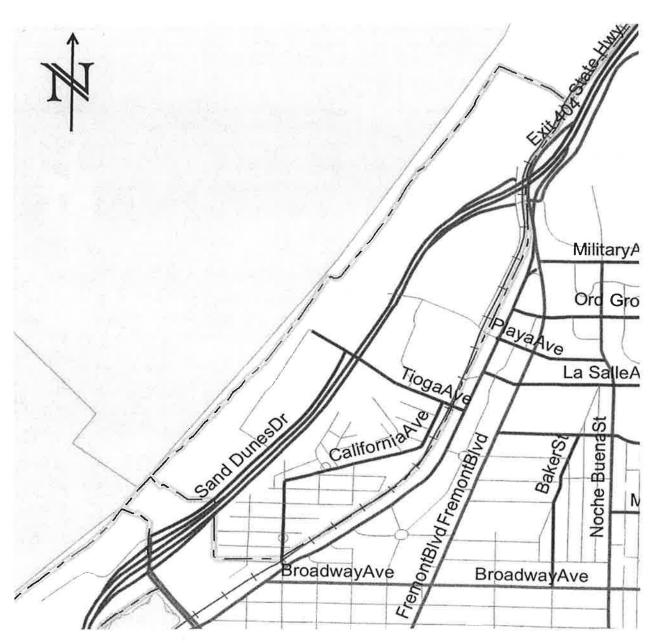
T 408.848.3122 F 408.848.2202 keith.higgins@hatchmott.com

kbh: jmw

Enclosed

EXHIBIT 1





Source: California Department of Transportation, 201 http://www.dot.ca.gov/hq/tsip/hseb/crs_maps/

INTERSTATE 1 OTHER FWY OR EXPWY 2 OTHER PRINCIPAL ARTERIAL 3 MINOR ARTERIAL 4 MAJOR COLLECTOR 5 MINOR COLLECTOR 6 LOCAL 7



EXHIBIT 2
California Road System Map
for Sand City

| 25 22 25* 19 25* 19 25* 19 25 23 25 23 25 25 25 25 26 25 27 25 28 39 28 39 29 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 25 27 26 27 27 27 28 39 28 39 29 27 27 27 28 39 29 27 29 20 27 29 20 27 29 27 29 27 29 27 29 27 29 27 29 27 29 27 29 27 29 27 20 2 | NO O | Street | Segment | Direction | Existing Speed Limit (mph) | Median Speed (mph) | Critical Speed (mph) | 10 mph Pace Speed | % within Pace | Recommended Speed (mph) |
|--|---------|---------------------|---|-----------|-------------------------------------|--------------------------|----------------------------|-------------------------|------------------|-------------------------------|
| Redwood Avenue End of Road (east) - End of Road (west) SB 25 22 California Avenue End of Road (east) - End of Road (west) WB 25* 19 California Avenue Contra Costa Street - Sylvan Avenue WB 25 23 California Avenue Sylvan Avenue - East Avenue East Avenue - Tioga Avenue NB 25 25 Sand Dunes Drive City Limits - Tioga Avenue SB 35 39 Tioga Avenue Sand Dunes Drive - Del Monte Boulevard WB 25 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | Contra Costa Street | Del Monte - End of Road | NB NB | 25 | 22 | 25 | 19-28 | 87% | 25 |
| Redwood Avenue End of Road (east) - End of Road (west) EB 25* 19 Callifornia Avenue Contra Costa Street - Sylvan Avenue EB 25* 19 Callifornia Avenue Sylvan Avenue - East Avenue - East Avenue EB 25 25 Callifornia Avenue East Avenue - Tioga Avenue NB 25 25 Sand Dunes Drive City Limits - Tioga Avenue SB 35 31 Tioga Avenue Sand Dunes Drive - Del Monte Boulevard NB 25 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 29 Playa Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 California Avenue Playa Avenue - Ontiz Avenue - Oympia Avenue NB 35 36 | | | | SB | 25 | 22 | 25 | 17-26 | %08 | 25 |
| California Avenue Contra Costa Street - Sylvan Avenue WB 25* 19 California Avenue Sylvan Avenue - East Avenue - East Avenue WB 25 23 California Avenue East Avenue - Tioga Avenue - Tioga Avenue NB 25 25 Sand Dunes Drive City Limits - Tioga Avenue - Sand Dunes Drive - Del Monte Boulevard NB 35 41 Tioga Avenue - Sand Dunes Drive - Del Monte Boulevard - WB MB 25 27 Playa Avenue - Playa Avenue - SB State Route 1 On-Ramp - SB NB 25 22 California Avenue - Playa Avenue - SB State Route 1 On-Ramp - SB NB 25 22 Catalina Street - Suma - Oympia Avenue | | Redwood Avenue | End of Road (east) - End of Road (west) | EB | 25* | 19 | 24 | 15-24 | 73% | 25 |
| California Avenue Contra Costa Street - Sylvan Avenue EB 25 23 California Avenue Sylvan Avenue - East Avenue EB 25 25 California Avenue East Avenue - Tioga Avenue NB 25 25 Sand Dunes Drive City Limits - Tioga Avenue SB 35 41 Sand Dunes Drive Sand Dunes Drive - Del Monte Boulevard EB 25 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 29 Playa Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | WB | 25* | 19 | 24 | 13-22 | 71% | 25 |
| California Avenue Sylvan Avenue - East Avenue WB 25 23 California Avenue East Avenue - Tioga Avenue NB 25 25 Sand Dunes Drive City Limits - Tioga Avenue NB 35 41 Sand Dunes Drive - Del Monte Boulevard SB 35 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 29 Playa Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | 310 | California Avenue | Contra Costa Street - Sylvan Avenue | EB | 25 | 23 | 25 | 18-27 | 87% | 25 |
| California Avenue Sylvan Avenue - East Avenue East Avenue - Tioga Avenue East Avenue - Tioga Avenue East Avenue - Tioga Avenue SB 25 25 Sand Dunes Drive City Limits - Tioga Avenue SB 35 41 Tioga Avenue Sand Dunes Drive - Del Monte Boulevard KB 25 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 22 Playa Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | WB | 25 | 23 | 25 | 17-26 | %88 | 25 |
| California Avenue East Avenue - Tioga Avenue WB 25 25 Sand Dunes Drive City Limits - Tioga Avenue NB 35 41 Sand Dunes Drive - Del Monte Boulevard SB 35 39 Tioga Avenue Metz Road - Del Monte Boulevard WB 25 27 Playa Avenue Playa Avenue - SB State Route 1 On-Ramp NB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | California Avenue | Sylvan Avenue - East Avenue | EB | 25 | 25 | 28 | 19-28 | %29 | 25 |
| California Avenue East Avenue - Tioga Avenue NB 25 26 Sand Dunes Drive City Limits - Tioga Avenue NB 35 41 Sand Dunes Drive - Del Monte Boulevard SB 35 39 Tioga Avenue Metz Road - Del Monte Boulevard EB 25 27 Playa Avenue Metz Road - Del Monte Boulevard WB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | WB | 25 | 25 | 59 | 18-27 | 79% | 25 |
| Sand Dunes Drive City Limits - Tioga Avenue SB 25 27 Tioga Avenue City Limits - Tioga Avenue SB 35 41 Tioga Avenue Sand Dunes Drive - Del Monte Boulevard EB 25 29 Playa Avenue Metz Road - Del Monte Boulevard WB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | 2 | California Avenue | East Avenue - Tioga Avenue | NB | 25 | 26 | 31 | 22-31 | %69 | 25 |
| Sand Dunes Drive City Limits - Tioga Avenue NB 35 41 Tioga Avenue Sand Dunes Drive - Del Monte Boulevard EB 25 29 Playa Avenue Metz Road - Del Monte Boulevard WB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | SB | 25 | 27 | 30 | 21-30 | 424 | 25 |
| Tioga Avenue Sand Dunes Drive - Del Monte Boulevard EB 25 27 Playa Avenue Metz Road - Del Monte Boulevard EB 25 29 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | Sand Dunes Drive | City Limits - Tioga Avenue | NB | 35 | 41 | 47 | 35-44 | 71% | 40 |
| Tioga Avenue Sand Dunes Drive - Del Monte Boulevard EB 25 27 Playa Avenue Metz Road - Del Monte Boulevard EB 25 22 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | SB | 35 | 39 | 44 | 35-44 | 73% | 40 |
| Playa Avenue Metz Road - Del Monte Boulevard WB 25 29 California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | 7 | Tioga Avenue | | EB | 25 | 27 | 33 | 25-34 | %69 | 25 |
| Playa AvenueMetz Road - Del Monte BoulevardEB2522California AvenuePlaya Avenue - SB State Route 1 On-RampNB3536Catalina StreetOrtiz Avenue - Oympia AvenueNB2522 | 教を見る | | | WB | 25 | 29 | 35 | 24-33 | %69 | 25 |
| Catalina Street Ortiz Avenue - Oympia Avenue | | Playa Avenue | Metz Road - Del Monte Boulevard | EB | 25 | 22 | 25 | 16-25 | 88% | 25 |
| California Avenue Playa Avenue - SB State Route 1 On-Ramp NB 35 36 36 Catalina Street Ortiz Avenue - Oympia Avenue | | | | WB | 25 | 22 | 56 | 17-26 | 83% | 25 |
| Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | California Avenue | | NB | 35 | 36 | 40 | 31-40 | 81% | 40 |
| Catalina Street Ortiz Avenue - Oympia Avenue NB 25 22 | | | | SB | 35 | 36 | 41 | 32-41 | 75% | 40 |
| - | | Catalina Street | Ortiz Avenue - Oympia Avenue | NB | 25 | 22 | 56 | 17-26 | 79% | 25 |
| 25 19 | | | | SB | 25 | 19 | 25 | 15-24 | 75% | 25 |

Notes:
1. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
2. * = No signed speed limit. Listed speed limit is by statute (i.e. "local" streets are 25 mph per California Vehicle Code).

Appendix A

Speed Survey Data

Location: #1 Contra Costa Street, Del Monte Blvd - end of road

Direction: Day of the Week: NB

50th percentile speed (median):

85th percentile speed (critical):

22 mph 25 mph Average Speed: Standard Deviation: 21 mph 4 mph

Date: Time of Day: Thursday September 3, 2015

10 mph pace speed2:

19 to 28

Mode¹: % Exceeding Speed Limit: 22 mph 12 %

Posted Speed Limit3:

10:30 AM - 11:55 AM 25 mph

52

Percent in pace speed:

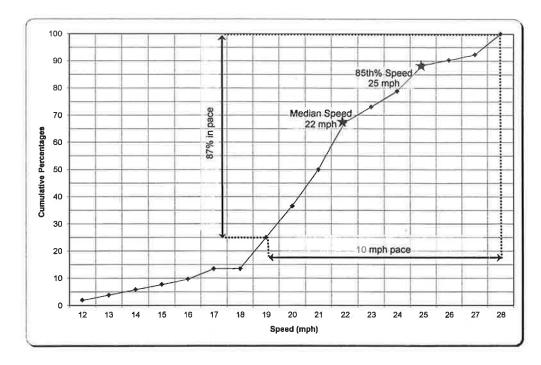
87 %

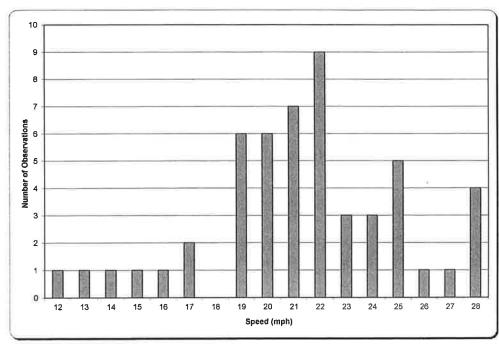
Vehicles Observed:

Range of speeds:

12 to 28

| | | | 900 |
|----------------|----------------|----------------------|--------------------|
| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent. |
| 12 | 1 | 2 | 2 |
| 13 | 1 | 2 | 4 |
| | | 2 | |
| 14 | 1 | | 6 |
| 15 | 1 | 2 | 8 |
| 16 | 1 | 2 | 10 |
| 17 | 2 | 4 | 13 |
| 18 | 0 | 0 | 13 |
| 19 | 6 | 12 | 25 |
| 20 | 6 | 12 | 37 |
| 21 | 7 | 13 | 50 |
| 22 | 9 | 17 | 67 |
| 23 | 3 | 6 | 73 |
| 24 | 3 | 6 | 79 |
| 25 | 5 | 10 | 88 |
| 26 | 1 | 2 | 90 |
| 27 | 1 | 2 | 92 |
| 28 | 4 | 8 | 100 |
| | | | |





#1 Contra Costa Street, Del Monte Blvd - end of road Location: Average Speed: 22 mph 22 mph 50th percentile speed (median): Direction: SB Standard Deviation: 4 mph 85th percentile speed (critical): 25 mph Day of the Week: Thursday 10 mph pace speed2: 17 to 26 Mode¹: 25 mph September 3, 2015 Date:

80 % 10:30 AM - 11:55 AM Percent in pace speed: Time of Day: 14 to 29

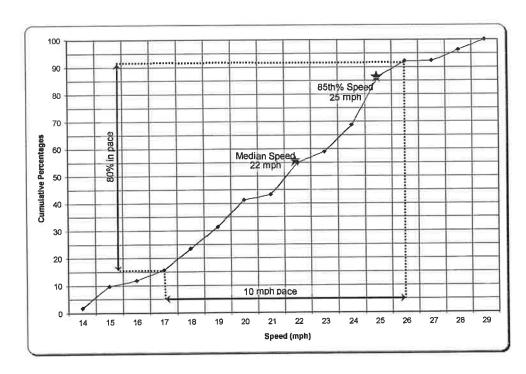
Posted Speed Limit³: 25 mph Range of speeds:

Survey Data

51

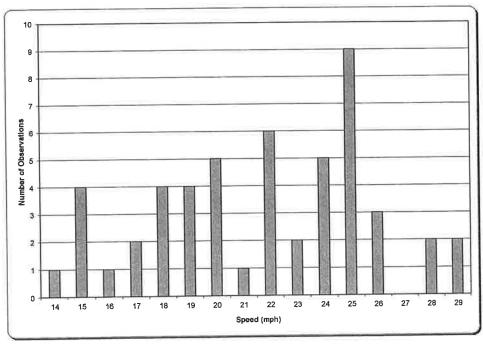
Vehicles Observed:

| Speed | Number | Percent. | Cumul. |
|-------|---------|----------|----------|
| (mph) | of Obs. | of Total | Percent. |
| | 1 | 2 | 2 |
| 14 | | | |
| 15 | 4 | 8 | 10 |
| 16 | 1 | 2 | 12 |
| 17 | 2 | 4 | 16 |
| 18 | 4 | 8 | 24 |
| 19 | 4 | 8 | 31 |
| 20 | 5 | 10 | 41 |
| 21 | 1 | 2 | 43 |
| 22 | 6 | 12 | 55 |
| 23 | 2 | 4 | 59 |
| 24 | 5 | 10 | 69 |
| 25 | 9 | 18 | 86 |
| 26 | 3 | 6 | 92 |
| 27 | 0 | 0 | 92 |
| 28 | 2 | 4 | 96 |
| 29 | 2 | 4 | 100 |



% Exceeding Speed Limit:

14 %



#2 Redwood Avenue, end of road (east) - end of road (west) Location:

Direction:

EB

50th percentile speed (median):

19 mph

Average Speed: 19 mph

Day of the Week:

Wednesday

85th percentile speed (critical):

24 mph

Standard Deviation: 4 mph

Date: Time of Day: September 9, 2015

9:15 AM - 11:00 AM

10 mph pace speed²:

15 to 24

Mode¹: 17 mph

Posted Speed Limit³:

Percent in pace speed:

73 %

% Exceeding Speed Limit:

6 %

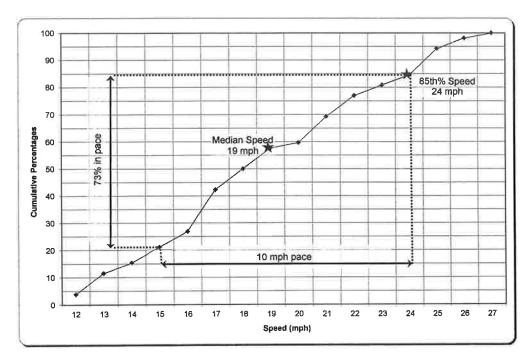
Vehicles Observed:

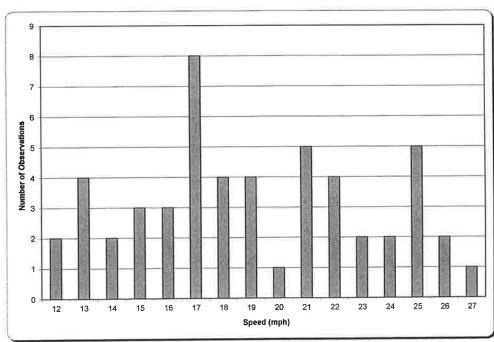
25 mph Range of speeds:

12 to 27

52

| | peed | | Percent. of Total | Cumul. Percent. |
|----|------|---|----------------------|--------------------|
| 12 | 2 | 2 | 4 | 4 |
| 13 | 3 | 4 | 8 | 12 |
| 14 | ļ. | 2 | 4 | 15 |
| 15 | 5 | 3 | 6 | 21 |
| 16 | 3 | 3 | 6 | 27 |
| 17 | 7 | 8 | 15 | 42 |
| 18 | 3 | 4 | 8 | 50 |
| 19 | 9 | 4 | 8 | 58 |
| 20 |) | 1 | 2 | 60 |
| 2 | 1 | 5 | 10 | 69 |
| 22 | 2 | 4 | 8 | 77 |
| 23 | 3 | 2 | 4 | 81 |
| 24 | 4 | 2 | 4 | 85 |
| 25 | 5 | 5 | 10 | 94 |
| 26 | 3 | 2 | 4 | 98 |
| 27 | 7 | 1 | 2 | 100 |
| | | | | |





#2 Redwood Avenue, end of road (east) - end of road (west) Location:

Direction:

50th percentile speed (median):

19 mph

Average Speed:

19 mph

Day of the Week:

Wednesday

85th percentile speed (critical): 10 mph pace speed²:

24 mph 13 to 22 Standard Deviation: Mode1:

5 mph

Time of Day:

Date:

September 9, 2015

9:15 AM - 11:00 AM Percent in pace speed:

71 %

% Exceeding Speed Limit:

18 mph 8 %

Posted Speed Limit³: Vehicles Observed:

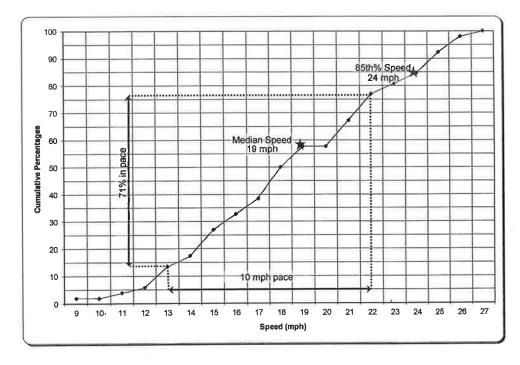
25 mph

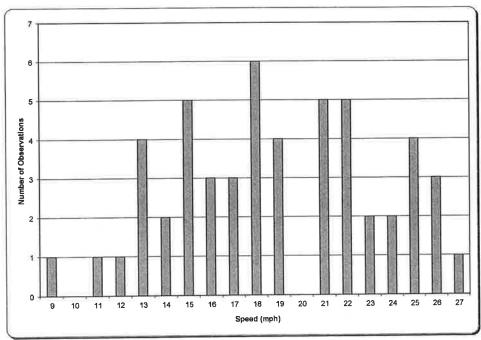
52

Range of speeds:

9 to 27

| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent. |
|----------------|----------------|----------------------|--------------------|
| 9 | 1 | 2 | 2 |
| 10 | 0 | 0 | 2 |
| 11 | 1 | 2 | 4 |
| 12 | 1 | 2 | 6 |
| 13 | 4 | 8 | 13 |
| 14 | 2 | 4 | 17 |
| 15 | 5 | 10 | 27 |
| 16 | 3 | 6 | 33 |
| 17 | 3 | 6 | 38 |
| 18 | 6 | 12 | 50 |
| 19 | 4 | 8 . | 58 |
| 20 | 0 | 0 | 58 |
| 21 | 5 | 10 | 67 |
| 22 | 5 | 10 | 77 |
| 23 | 2 | 4 | 81 |
| 24 | 2 | 4 | 85 |
| 25 | 4 | 8 | 92 |
| 26 | 3 | 6 | 98 |
| 27 | 1 | 2 | 100 |





Location: #3 California Avenue, Contra Costa Street - Sylvan Avenue

Direction:

50th percentile speed (median):

23 mph Average Speed: Standard Deviation: 22 mph 4 mph

Day of the Week:

Wednesday

85th percentile speed (critical): 10 mph pace speed²:

25 mph 18 to 27

Mode¹:

Date: Time of Day: September 9, 2015

87 %

% Exceeding Speed Limit:

25 mph

Posted Speed Limit³:

11:05 AM - 12:50 PM mph

Percent in pace speed: Range of speeds:

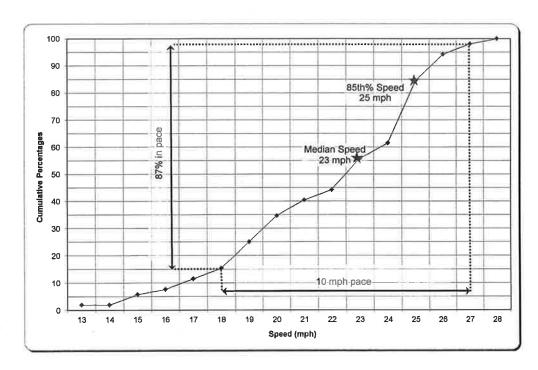
15 %

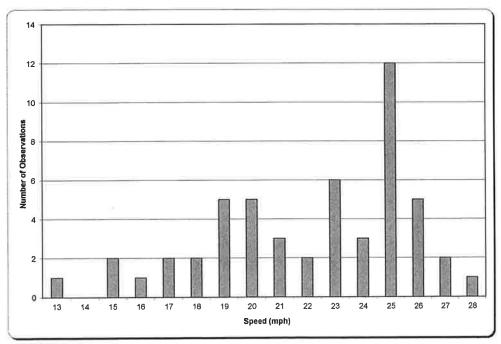
Vehicles Observed:

52

13 to 28

| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent |
|----------------|----------------|----------------------|-------------------|
| | | | |
| 13 | 1 | 2 | 2 |
| 14 | 0 | 0 | 2 |
| 15 | 2 | 4 | 6 |
| 16 | 1 | 2 | 8 |
| 17 | 2 | 4 | 12 |
| 18 | 2 | 4 | 15 |
| 19 | 5 | 10 | 25 |
| 20 | 5 | 10 | 35 |
| 21 | 3 | 6 | 40 |
| 22 | 2 | 4 | 44 |
| 23 | 6 | 12 | 56 |
| 24 | 3 | 6 | 62 |
| 25 | 12 | 23 | 85 |
| 26 | 5 | 10 | 94 |
| 27 | 2 | 4 | 98 |
| 28 | 1 | 2 | 100 |
| | | | |





Location: #3 California Avenue, Contra Costa Street - Sylvan Avenue

Direction:

50th percentile speed (median):

25 mph

23 mph Average Speed: 22 mph

Time of Day:

Date:

Day of the Week: Wednesday

September 9, 2015

85th percentile speed (critical): 10 mph pace speed2:

17 to 26

Mode1:

Standard Deviation:

3 mph 22 mph

Posted Speed Limit³:

25 mph

11:05 AM - 12:50 PM Percent in pace speed:

88 %

% Exceeding Speed Limit:

15 %

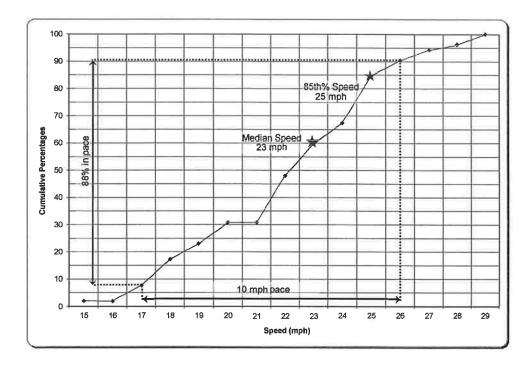
Vehicles Observed:

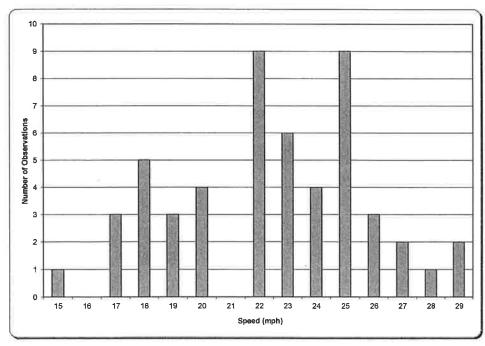
52

Range of speeds:

15 to 29

| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent. |
|-------------|----------------|----------------------|--------------------|
| 15 | 1 | 2 | 2 |
| 16 | 0 | 0 | 2 |
| 17 | 3 | 6 | 8 |
| 18 | 5 | 10 | 17 |
| 19 | 3 | 6 | 23 |
| 20 | 4 | 8 | 31 |
| 21 | 0 | 0 | 31 |
| 22 | 9 | 17 | 48 |
| 23 | 6 | 12 | 60 |
| 24 | 4 | 8 | 67 |
| 25 | 9 | 17 | 85 |
| 26 | 3 | 6 | 90 |
| 27 | 2 | 4 | 94 |
| 28 | 1 | 2 | 96 |
| 29 | 2 | 4 | 100 |





Location: #4 California Avenue, Sylvan Avenue - East Avenue

Direction:

EB

50th percentile speed (median):

25 mph 28 mph

Average Speed: 24 mph Standard Deviation:

Date:

Day of the Week: Wednesday 85th percentile speed (critical): 10 mph pace speed²:

19 to 28 Mode¹: 5 mph

Time of Day:

September 9, 2015 12:55 PM - 1:59 PM

Percent in pace speed:

25 mph

Posted Speed Limit³:

25 mph

67 %

% Exceeding Speed Limit:

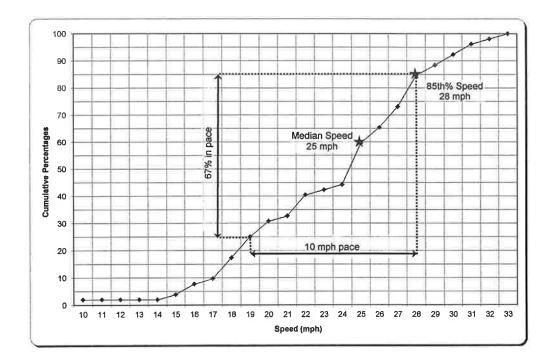
40 %

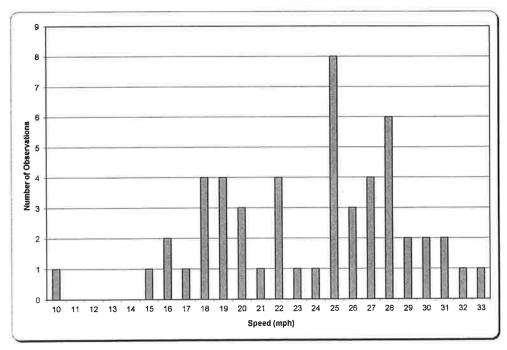
Vehicles Observed:

52

Range of speeds: 10 to 33

| | Surv | ey Data | |
|----------------|----------------|----------------------|--------------------|
| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent. |
| 10 11 | 1 0 | 2 | 2 |
| 12 | 0 | Ō | 2 |
| 13 | 0 | Ō | 2 |
| 14 | 0 | 0 | 2 |
| 15 | 1 | 2 | 4 |
| 16 | 2 | 4 | 8 |
| 17 | 1 | 2 | 10 |
| 18 | 4 | 8 | 17 |
| 19 | 4 | 8 | 25 |
| 20 | 3 | 6 | 31 |
| 21 | 1 | 2 | 33 |
| 22 | 4 | 8 | 40 |
| 23 | 1 | 2 | 42 |
| 24 | 1 | 2 | 44 |
| 25 | 8 | 15 | 60 |
| 26 | 3 | 6 | 65 |
| 27 | 4 | 8 | 73 |
| 28 | 6 | 12 | 85 |
| 29 | 2 | 4 | 88 |
| 30 | 2 | 4 | 92 |
| 31 | 2 | 4 | 96 |
| 32 | 1 | 2 | 98 |
| 33 | 1 | 2 | 100 |





#4 California Avenue, Sylvan Avenue - East Avenue Location:

Direction:

WB

50th percentile speed (median):

25 mph

Average Speed: 25 mph

Date:

Day of the Week:

Wednesday

85th percentile speed (critical):

29 mph

Standard Deviation:

4 mph

Time of Day:

September 9, 2015

12:55 PM - 1:59 PM

10 mph pace speed2: Percent in pace speed: 18 to 27 79 %

Mode¹: 25 mph

Posted Speed Limit3:

25 mph

Vehicles Observed:

Range of speeds:

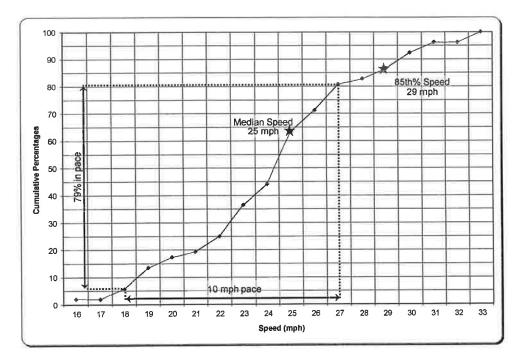
% Exceeding Speed Limit:

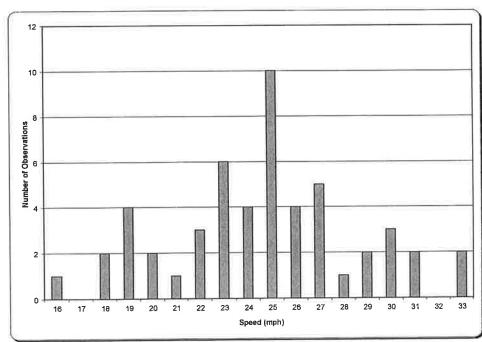
37 %

52

16 to 33

| Speed | Number | Percent. | Cumul. |
|-------|---------|----------|----------|
| (mph) | of Obs. | of Total | Percent. |
| 16 | 1 | 2 | 2 |
| 17 | 0 | 0 | 2 |
| 18 | 2 | 4 | 6 |
| 19 | 4 | 8 | 13 |
| 20 | 2 | 4 | 17 |
| 21 | 1 | 2 | 19 |
| 22 | 3 | 6 | 25 |
| 23 | 6 | 12 | 37 |
| 24 | 4 | 8 | 44 |
| 25 | 10 | 19 | 63 |
| 26 | 4 | 8 | 71 |
| 27 | 5 | 10 | 81 |
| 28 | 1 | 2 | 83 |
| 29 | 2 | ! 4 | 87 |
| 30 | 3 | 6 | 92 |
| 31 | 2 | 4 | 96 |
| 32 | C | 0 | 96 |
| 33 | 2 | 2.4 | 100 |





85th percentile speed (critical):

Location: #5 California Avenue, East Avenue - Tioga Avenue

Direction: 50th percentile speed (median):

Day of the Week: Wednesday

Date:

Time of Day:

September 9, 2015

2:05 PM - 3:15 PM

25 mph

Percent in pace speed:

Range of speeds:

10 mph pace speed2:

26 mph

31 mph

22 to 31

Average Speed: Standard Deviation: 26 mph 5 mph

Mode¹:

31 mph

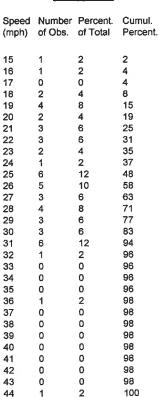
69 % % Exceeding Speed Limit: 15 to 44

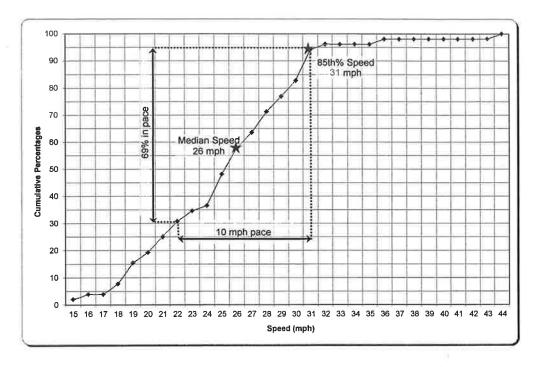
52 %

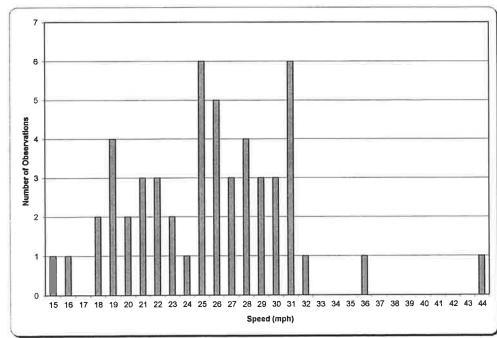
Posted Speed Limit3:

Vehicles Observed:

52







City of Morgan Hill Speed Study Analysis

Location: #5 California Avenue, East Avenue - Tioga Avenue

Direction:

SB

50th percentile speed (median):

27 mph

Average Speed:

Day of the Week:

Wednesday

85th percentile speed (critical):

30 mph

Standard Deviation:

26 mph 5 mph

Date: Time of Day: September 9, 2015

10 mph pace speed2:

21 to 30 77 %

Mode1: % Exceeding Speed Limit: 23 mph

Posted Speed Limit³:

2:05 PM - 3:15 PM 25 mph

Percent in pace speed: Range of speeds:

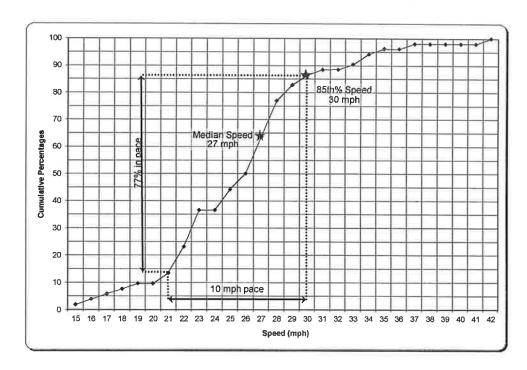
15 to 42

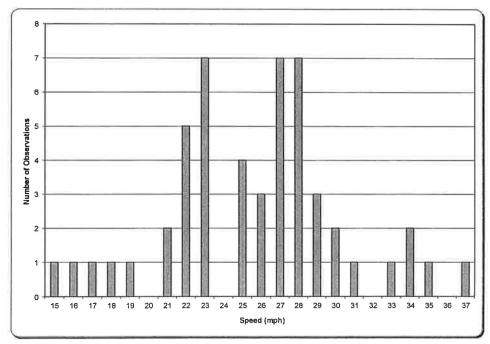
56 %

Vehicles Observed:

52

| Speed | Number | Percent. | Cumul. |
|-------|---------|----------|---------|
| (mph) | of Obs. | of Total | Percent |
| 15 | 1 | 2 | 2 |
| 16 | 1 | 2 | 4 |
| 17 | 1 | 2 | 6 |
| 18 | 1 | 2 | 8 |
| 19 | 1 | 2 | 10 |
| 20 | 0 | 0 | 10 |
| 21 | 2 | 4 | 13 |
| 22 | 5 | 10 | 23 |
| 23 | 7 | 13 | 37 |
| 24 | 0 | 0 | 37 |
| 25 | 4 | 8 | 44 |
| 26 | 3 | 6 | 50 |
| 27 | 7 | 13 | 63 |
| 28 | 7 | 13 | 77 |
| 29 | 3 | 6 | 83 |
| 30 | 2 | 4 | 87 |
| 31 | 1 | 2 | 88 |
| 32 | 0 | 0 | 88 |
| 33 | 1 | 2 | 90 |
| 34 | 2 | 4 | 94 |
| 35 | 1 | 2 | 96 |
| 36 | 0 | 0 | 96 |
| 37 | 1 | 2 | 98 |
| 38 | 0 | 0 | 98 |
| 39 | 0 | 0 | 98 |
| 40 | 0 | 0 | 98 |
| 41 | 0 | 0 | 98 |
| 42 | 1 | 2 | 100 |





Location: #6 Sand Dunes Drive, City Limits - Tioga Avenue

Direction:

NB

50th percentile speed (median):

41 mph

Average Speed:

42 mph

Day of the Week: Date: Thursday

85th percentile speed (critical): 10 mph pace speed²:

47 mph 35 to 44 Standard Deviation: Mode¹:

5 mph

Time of Day:

September 3, 2015 9:30 AM - 10:20 AM

Percent in pace speed:

71 %

% Exceeding Speed Limit:

35 mph 88 %

Posted Speed Limit³:

35 mph

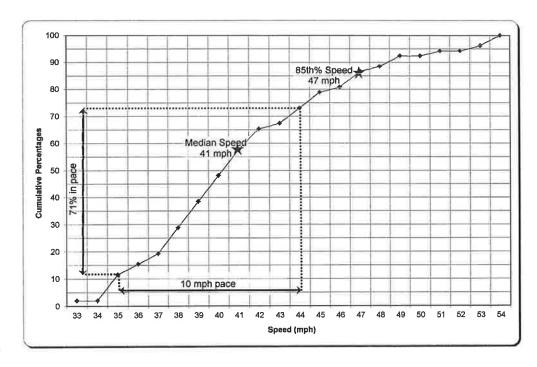
Range of speeds:

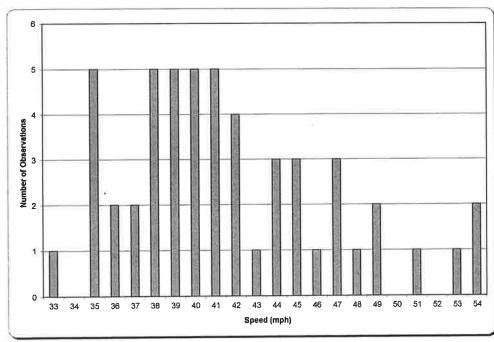
33 to 54

Vehicles Observed:

52

| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent |
|----------------|----------------|----------------------|-------------------|
| 33 | 1 | 2 | 2 |
| 34 | 0 | 0 | 2 |
| 35 | 5 | 10 | 12 |
| 36 | 2 | 4 | 15 |
| 37 | 2 | 4 | 19 |
| 38 | 5 | 10 | 29 |
| 39 | 5 | 10 | 38 |
| 40 | 5 | 10 | 48 |
| 41 | 5 | 10 | 58 |
| 42 | 4 | 8 | 65 |
| 43 | 1 | 2 | 67 |
| 44 | 3 | 6 | 73 |
| 45 | 3 | 6 | 79 |
| 46 | 1 | 2 | 81 |
| 47 | 3 | 6 | 87 |
| 48 | 1 | 2 | 88 |
| 49 | 2 | 4 | 92 |
| 50 | 0 | 0 | 92 |
| 51 | 1 | 2 | 94 |
| 52 | 0 | 0 | 94 |
| 53 | 1 | 2 | 96 |
| 54 | 2 | 4 | 100 |





Location: #6 Sand Dunes Drive, City Limits - Tioga Avenue

Direction:

SB

50th percentile speed (median):

39 mph

Average Speed:

39 mph

Day of the Week: Date: Thursday

85th percentile speed (critical): 10 mph pace speed²:

44 mph 35 to 44 Standard Deviation: Mode¹:

5 mph 35 mph

Time of Day:

September 3, 2015 9:30 AM - 10:20

9:30 AM - 10:20 AM Percent in pace speed:

Range of speeds:

73 %

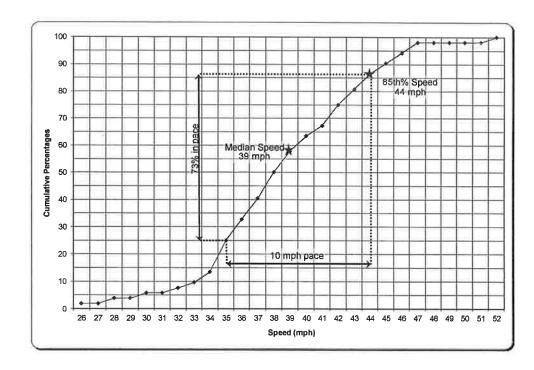
% Exceeding Speed Limit:

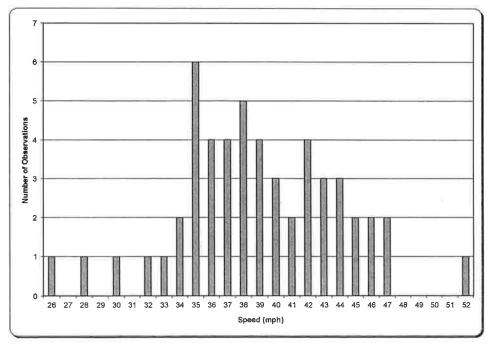
75 %

Posted Speed Limit³: Vehicles Observed:

eed Limit³: 35 mph bserved: 52 26 to 52

| | Our | oy Data | |
|----------------|----------------|----------------------|-------------------|
| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent |
| 26 | 1 | 2 | 2 |
| 27 | 0 | 0 | 2 |
| 28 | 1 | 2 | 4 |
| 29 | 0 | 0 | 4 |
| 30 | 1 | 2 | 6 |
| 31 | 0 | 0 | 6 |
| 32 | 1 | 2 | 8 |
| 33 | 1 | 2 | 10 |
| 34 | 2 | 4 | 13 |
| 35 | 6 | 12 | 25 |
| 36 | 4 | 8 | 33 |
| 37 | 4 | 8 | 40 |
| 38 | 5 | 10 | 50 |
| 39 | 4 | 8 | 58 |
| 40 | 3 | 6 | 63 |
| 41 | 2 | 4 | 67 |
| 42 | 4 | 8 | 75 |
| 43 | 3 | 6 | 81 |
| 44 | 3 | 6 | 87 |
| 45 | 2 | 4 | 90 |
| 46 | 2 | 4 | 94 |
| 47 | 2 | 4 | 98 |
| 48 | 0 | 0 | 98 |
| 49 | 0 | 0 | 98 |
| 50 | 0 | 0 | 98 |
| 51 | 0 | 0 | 98 |
| 52 | 1 | 2 | 100 |
| 52 | 1 | 2 | 100 |





#7 Tioga Avenue, Dunes Drive - Del Monte Boulevard Location:

Direction:

EB

50th percentile speed (median): 85th percentile speed (critical):

27 mph 33 mph Average Speed: Standard Deviation: 28 mph 5 mph

Day of the Week: Date:

Wednesday September 2, 2015

10 mph pace speed2:

25 to 34

Mode¹:

25 mph

Time of Day: Posted Speed Limit³: 12:35 PM - 1:15 PM 25 mph

Percent in pace speed:

69 %

% Exceeding Speed Limit:

67 %

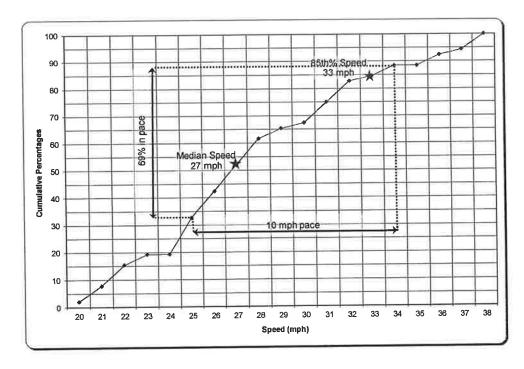
Vehicles Observed:

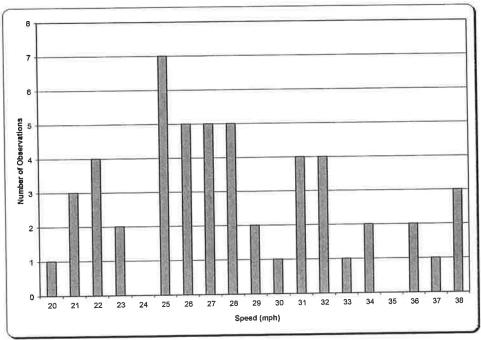
52

Range of speeds:

20 to 38

| | | - | |
|-------|---------|----------|--------|
| Speed | Number | | Cumul. |
| (mph) | of Obs. | of Total | Percen |
| | | | |
| 20 | 1 | 2 | 2 |
| 21 | 3 | 6 | 8 |
| 22 | 4 | 8 | 15 |
| 23 | 2 | 4 | 19 |
| 24 | 0 | 0 | 19 |
| 25 | 7 | 13 | 33 |
| 26 | 5 | 10 | 42 |
| 27 | 5 | 10 | 52 |
| 28 | 5 | 10 | 62 |
| 29 | 2 | 4 | 65 |
| 30 | 1 | 2 | 67 |
| 31 | 4 | 8 | 75 |
| 32 | 4 | 8 | 83 |
| 33 | 1 | 2 | 85 |
| 34 | 2 | 4 | 88 |
| 35 | 0 | 0 | 88 |
| 36 | 2 | 4 | 92 |
| 37 | 1 | 2 | 94 |
| 38 | 3 | 6 | 100 |
| | | | |





#7 Tioga Avenue, Dunes Drive - Del Monte Boulevard Location:

Direction:

WB

50th percentile speed (median):

29 mph

Average Speed:

29 mph

Date:

Day of the Week: Wednesday 85th percentile speed (critical):

35 mph 24 to 33 Standard Deviation: Mode¹:

% Exceeding Speed Limit:

5 mph 25 mph

71 %

Time of Day:

September 2, 2015

12:35 PM - 1:15 PM

10 mph pace speed2: Percent in pace speed:

69 %

Posted Speed Limit3: Vehicles Observed:

25 mph

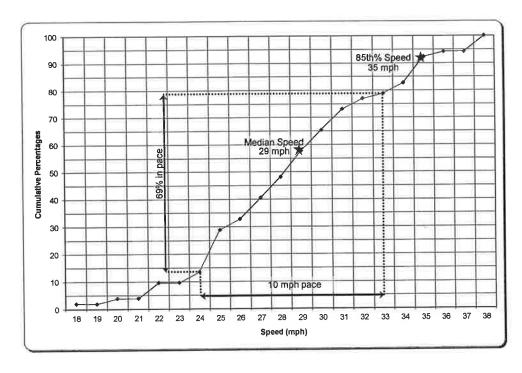
52

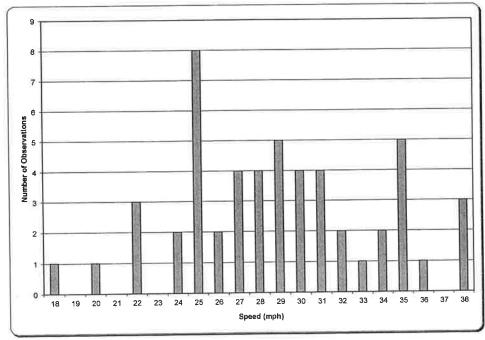
Range of speeds:

18 to 38

| SII | rve | , D | oto |
|-----|------|-----|------|
| OII | I VI | VЫ | cile |

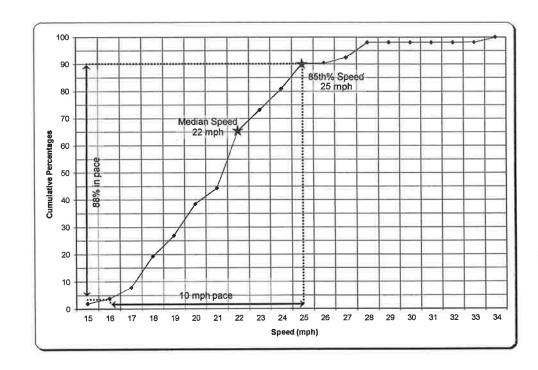
| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent | |
|----------------|----------------|----------------------|-------------------|--|
| 18 | 1 | 2 | 2 | |
| 19 | 0 | 0 | 2 | |
| 20 | 1 | 2 | 4 | |
| 21 | 0 | 0 | 4 | |
| 22 | 3 | 6 | 10 | |
| 23 | 0 | 0 | 10 | |
| 24 | 2 | 4 | 13 | |
| 25 | 8 | 15 | 29 | |
| 26 | 2 | 4 | 33 | |
| 27 | 4 | 8 | 40 | |
| 28 | 4 | 8 | 48 | |
| 29 | 5 | 10 | 58 | |
| 30 | 4 | 8 | 65 | |
| 31 | 4 | 8 | 73 | |
| 32 | 2 | 4 | 77 | |
| 33 | 1 | 2 | 79 | |
| 34 | 2 | 4 | 83 | |
| 35 | 5 | 10 | 92 | |
| 36 | 1 | 2 | 94 | |
| 37 | 0 | 0 | 94 | |
| 38 | 3 | 6 | 100 | |

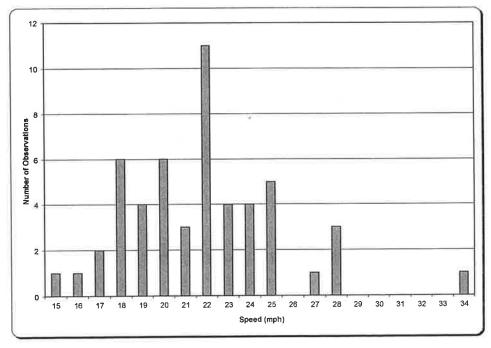




#8 Playa Avenue, Metz Road - Del Monte Boulevard Location: Average Speed: Direction: 50th percentile speed (median): 22 mph 22 mph 85th percentile speed (critical): Standard Deviation: Day of the Week: Wednesday 25 mph 4 mph Date: September 2, 2015 10 mph pace speed2: 16 to 25 Mode1: 22 mph 88 % % Exceeding Speed Limit: Percent in pace speed: 10 % Time of Day: 10:10 AM - 11:15 AM Posted Speed Limit³: 25 Range of speeds: 15 to 34 mph Vehicles Observed: 52

| Speed (mph) | | Percent. of Total | Cumul. Percent. |
|----------------|----|----------------------|--------------------|
| | | | |
| 15 | 1 | 2 | 2 |
| 16 | 1 | 2 | 4 |
| 17 | 2 | 4 | 8 |
| 18 | 6 | 12 | 19 |
| 19 | 4 | 8 | 27 |
| 20 | 6 | 12 | 38 |
| 21 | 3 | 6 | 44 |
| 22 | 11 | 21 | 65 |
| 23 | 4 | 8 | 73 |
| 24 | 4 | 8 | 81 |
| 25 | 5 | 10 | 90 |
| 26 | 0 | 0 | 90 |
| 27 | 1 | 2 | 92 |
| 28 | 3 | 6 | 98 |
| 29 | 0 | 0 | 98 |
| 30 | 0 | 0 | 98 |
| 31 | 0 | 0 | 98 |
| 32 | 0 | 0 | 98 |
| 33 | 0 | 0 | 98 |
| 34 | 1 | 2 | 100 |





Location: #8 Playa Avenue, Metz Road - Del Monte Boulevard

Direction:

Date:

50th percentile speed (median):

22 mph

22 mph Average Speed:

Day of the Week:

Wednesday

85th percentile speed (critical):

26 mph 17 to 26 Standard Deviation:

4 mph

Time of Day:

September 2, 2015 10:10 AM - 11:15 AM Percent in pace speed:

10 mph pace speed2:

83 %

Mode1: % Exceeding Speed Limit: 22 mph 17 %

Posted Speed Limit3:

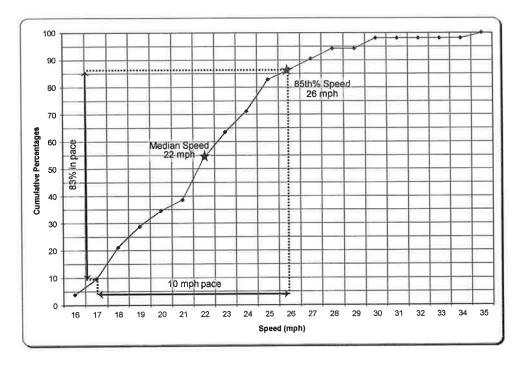
25 mph Range of speeds:

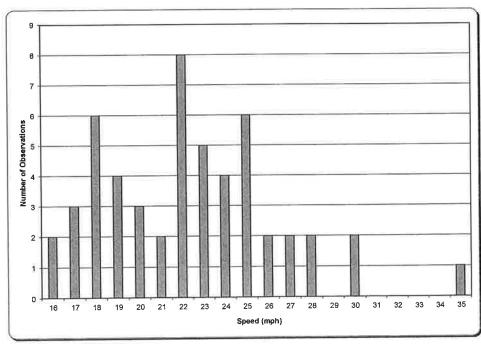
16 to 35

Vehicles Observed:

52

| Speed | Number | Percent. | Cumul. |
|-------|---------|----------|---------|
| (mph) | of Obs. | of Total | Percent |
| 16 | 2 | 4 | 4 |
| 17 | 3 | 6 | 10 |
| 18 | 6 | 12 | 21 |
| 19 | 4 | 8 | 29 |
| 20 | 3 | 6 | 35 |
| 21 | 2 | 4 | 38 |
| 22 | 8 | 15 | 54 |
| 23 | 5 | 10 | 63 |
| 24 | 4 | 8 | 71 |
| 25 | 6 | 12 | 83 |
| 26 | 2 | 4 | 87 |
| 27 | 2 | 4 | 90 |
| 28 | 2 | 4 | 94 |
| 29 | 0 | 0 | 94 |
| 30 | 2 | 4 | 98 |
| 31 | 0 | 0 | 98 |
| 32 | 0 | 0 | 98 |
| 33 | 0 | 0 | 98 |
| 34 | 0 | 0 | 98 |
| 35 | 1 | 2 | 100 |





Location: #9 California Avenue, Playa Avenue - Southbound State Route 1 On-Ramp

Direction:

NB

50th percentile speed (median):

36 mph 40 mph Average Speed: Standard Deviation: 36 mph 4 mph

Day of the Week:

Wednesday

85th percentile speed (critical): 10 mph pace speed2:

31 to 40

Mode1:

Time of Day:

Date:

September 2, 2015 8:30 AM - 10:05 AM

Percent in pace speed:

81 %

35 mph

Posted Speed Limit3:

35 mph Range of speeds:

% Exceeding Speed Limit:

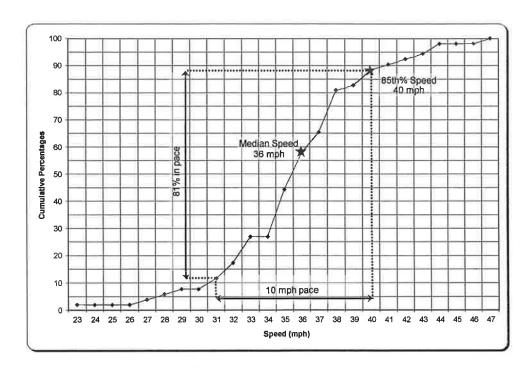
56 %

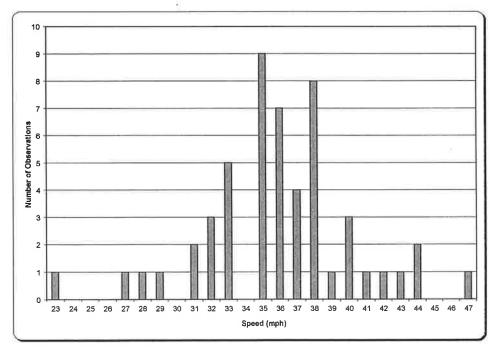
Vehicles Observed:

52

23 to 47

| | | _ | |
|----------------|----------------|----------------------|------------------|
| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percen |
| 23 | 1 | 2 | 2 |
| 24 | 0 | 0 | 2 |
| 25 | 0 | 0 | 2 |
| 26 | 0 | 0 | 2 |
| 27 | 1 | 2 | 4 |
| 28 | 1 | 2 | 6 |
| 29 | 1 | 2 | 8 |
| 30 | 0 | 0 | 8 |
| 31 | 2 | 4 | 12 |
| 32 | 3 | 6 | 17 |
| 33 | 5 | 10 | 27 |
| 34 | 0 | 0 | 27 |
| 35 | 9 | 17 | 44 |
| 36 | 7 | 13 | 58 |
| 37 | 4 | 8 | 65 |
| 38 | 8 | 15 | 81 |
| 39 | 1 | 2 | 83 |
| 40 | 3 | 6 | 88 |
| 41 | 1 | 2 | 90 |
| 42 | 1 | 2 | 92 |
| 43 | 1 | 2 | 94 |
| 44 | 2 | 4 | 98 |
| 45 | 0 | 0 | 98 |
| 46 | 0 | 0 | 98 |
| 47 | 1 | 2 | 100 |

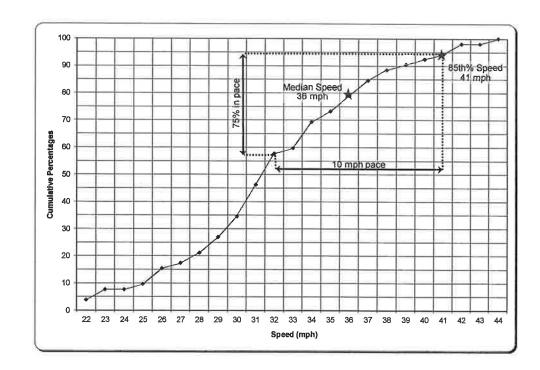


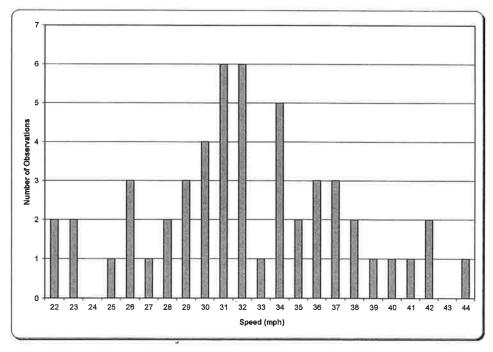


Location: #9 California Avenue, Playa Avenue - Southbound State Route 1 On-Ramp Direction: 50th percentile speed (median): 36 mph Average Speed: 36 mph Day of the Week: Wednesday 85th percentile speed (critical): 41 mph Standard Deviation: 5 mph Date: September 2, 2015 10 mph pace speed2: 32 to 41 Mode¹: 35 mph 8:30 AM - 10:05 AM Percent in pace speed: Time of Day: 75 % % Exceeding Speed Limit: 52 % Posted Speed Limit3: mph Range of speeds: 22 to 44

Vehicles Observed: 52

| Spe | eed | Number | Percent. | Cumul. |
|-----|-----|---------|----------|---------|
| (mp | oh) | of Obs. | of Total | Percent |
| 22 | | 2 | 4 | 4 |
| 23 | | 2 | 4 | 8 |
| 24 | | 0 | 0 | 8 |
| 25 | | 1 | 2 | 10 |
| 26 | | 3 | 6 | 15 |
| 27 | | 1 | 2 | 17 |
| 28 | | 2 | 4 | 21 |
| 29 | | 3 | 6 | 27 |
| 30 | | 4 | 8 | 35 |
| 31 | | 6 | 12 | 46 |
| 32 | | 6 | 12 | 58 |
| 33 | | 1 | 2 | 60 |
| 34 | | 5 | 10 | 69 |
| 35 | | 2 | 4 | 73 |
| 36 | | 3 | 6 | 79 |
| 37 | | 3 | 6 | 85 |
| 38 | | 2 | 4 | 88 |
| 39 | | 1 | 2 | 90 |
| 40 | | 1 | 2 | 92 |
| 41 | | 1 | 2 | 94 |
| 42 | | 2 | 4 | 98 |
| 43 | | 0 | 0 | 98 |
| 44 | | 1 | 2 | 100 |





Location: #10 Catalina Street, Ortiz Avenue - Olympia Avenue

Direction:

NB

50th percentile speed (median):

22 mph

Average Speed:

22 mph

Date:

Day of the Week: Thursday 85th percentile speed (critical): 10 mph pace speed2:

26 mph 17 to 26 Standard Deviation: Mode1:

4 mph

Time of Day:

September 3, 2015 12:10 PM - 3:30 PM

Percent in pace speed:

79 %

19 mph % Exceeding Speed Limit:

Posted Speed Limit³: Vehicles Observed:

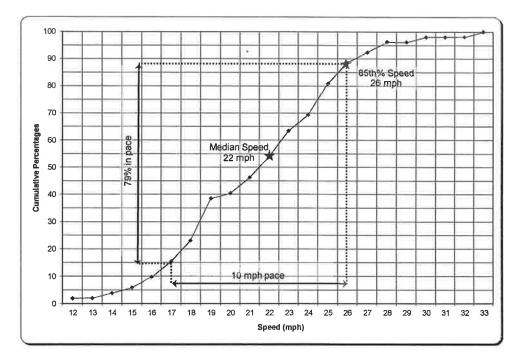
25 mph Range of speeds:

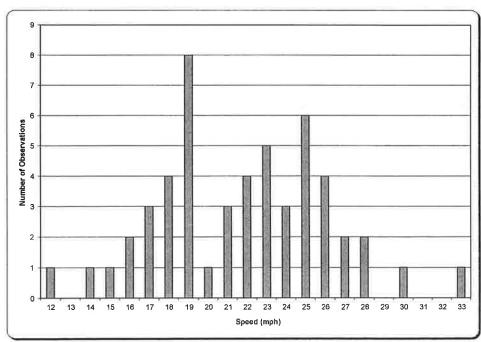
19 %

52

12 to 33

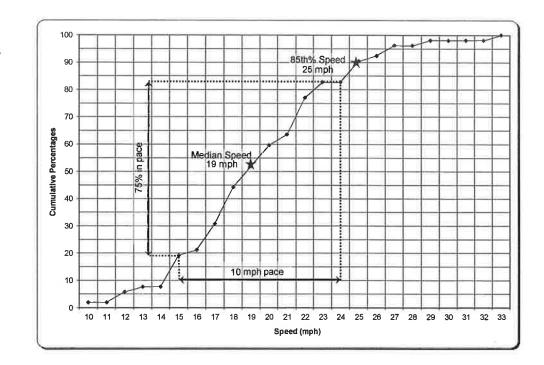
| Spe (mp | Number of Obs. | Percent. of Total | Cumul. Percent. |
|------------|----------------|----------------------|--------------------|
| 12 | 1 | 2 | 2 |
| 13 | 0 | 0 | 2 |
| 14 | 1 | 2 | 4 |
| 15 | 1 | 2 | 6 |
| 16 | 2 | 4 | 10 |
| 17 | 3 | 6 | 15 |
| 18 | 4 | 8 | 23 |
| 19 | 8 | 15 | 38 |
| 20 | 1 | 2 | 40 |
| 21 | 3 | 6 | 46 |
| 22 | 4 | 8 | 54 |
| 23 | 5 | 10 | 63 |
| 24 | 3 | 6 | 69 |
| 25 | 6 | 12 | 81 |
| 26 | 4 | 8 | 88 |
| 27 | 2 | 4 | 92 |
| 28 | 2 | 4 | 96 |
| 29 | 0 | 0 | 96 |
| 30 | 1 | 2 | 98 |
| 31 | 0 | 0 | 98 |
| 32 | 0 | 0 | 98 |
| 33 | 1 | 2 | 100 |

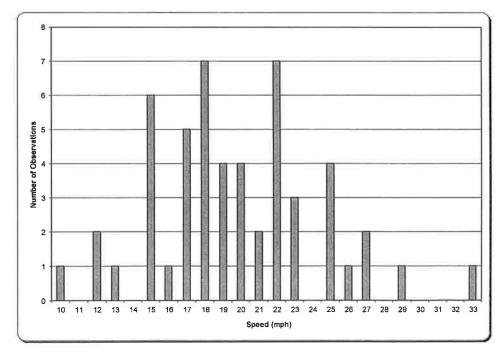




#10 Catalina Street, Ortiz Avenue - Olympia Avenue Location: Direction: SB 50th percentile speed (median): 19 mph Average Speed: 20 mph Day of the Week: Thursday 85th percentile speed (critical): 25 mph Standard Deviation: 5 mph Date: September 3, 2015 10 mph pace speed2: 15 to 24 Mode1: 22 mph 12:10 PM - 3:30 PM Percent in pace speed: Time of Day: 75 % % Exceeding Speed Limit: 10 % Posted Speed Limit3: 25 mph Range of speeds: 10 to 33 Vehicles Observed; 52

| Speed (mph) | Number of Obs. | Percent. of Total | Cumul. Percent. |
|----------------|----------------|----------------------|--------------------|
| | | | • |
| 10 | 1 | 2 | 2 |
| 11 | 0 | 0 | 2 |
| 12 | 2 | 4 | 6 |
| 13 | 1 | 2 | 8 |
| 14 | 0 | 0 | 8 |
| 15 | 6 | 12 | 19 |
| 16 | 1 | 2 | 21 |
| 17 | 5 | 10 | 31 |
| 18 | 7 | 13 | 44 |
| 19 | 4 | 8 | 52 |
| 20 | 4 | 8 | 60 |
| 21 | 2 | 4 | 63 |
| 22 | 7 | 13 | 77 |
| 23 | 3 | 6 | 83 |
| 24 | 0 | 0 | 83 |
| 25 | 4 | 8 | 90 |
| 26 | 1 | 2 | 92 |
| 27 | 2 | 4 | 96 |
| 28 | 0 | 0 | 96 |
| 29 | 1 | 2 | 98 |
| 30 | 0 | 0 | 98 |
| 31 | 0 | 0 | 98 |
| 32 | 0 | 0 | 98 |
| 33 | 1 | 2 | 100 |





Agenda Item 4B (6)

MEMORANDUM

TO:

PUBLIC SAFETY COMMITTEE

FROM:

CHIEF BRIAN FERRANTE

SUBJECT:

CALIFORNIA AVENUE PATHWAY

DATE:

NOVEMBER 5, 2015

Background

Recently there has been discussion regarding the lack of a continuous sidewalk/pathway on California Avenue leading to the Sand Dollar Shopping Center. Specifically, there is no dedicated sidewalk between Orland St. and Afton Ave. This creates a hazard as pedestrians are forced to walk into the street as they approach Tioga Ave. on California Ave. This is an area used heavily by cement trucks, tractor trailers, and vehicles entering and leaving the commercial/light industrial area of the City. A sidewalk/pathway could create a safer environment for pedestrians and vehicles in the area.

There is currently a dirt pathway between Orland St and Fir Ave. It was recently weeded and is usable as a pedestrian walkway. There is also a sidewalk that runs approximately halfway between Fir Ave and Afton Ave. However, the sidewalk ends as it reaches the residential property approaching Afton Ave. This property is elevated and has a driveway that has a relatively steep angle of approach leading from the California Ave. If the City were to create a sidewalk/pathway at this location, there are several potential obstacles that would have to be taken into consideration.

- Due to the elevation of the lot, a small retaining wall would likely need to be erected to accommodate a level pathway cut 4-5 feet into the property
- As the pathway met the existing driveway it would need to integrate with the existing angle or otherwise modify the driveway while still allowing for vehicles to enter the property
- The City would have to explore the lot line of the property to determine ownership and right of way for the sidewalk area

Another area of consideration is whether this area of the City will be developed in the near future. The property and roadways adjacent to California Ave would likely change significantly during development of the area. The costs of installing sidewalks with necessary ADA ramps and access should be weighed against the level of use the area will experience prior to development. One alternative might be to finish the pathways in decomposed granite, asphalt, or another surface that would allow for convenient transit without the need for the expense of engineered concrete sidewalks.

Recommendation

Staff seeks direction from the Public Safety Committee on what type of pathway should be pursued for this project, how much funding should be explored for the project, and a level of priority for completion of the project.

Agenda Item 5A

MEETING OF THE SAND CITY PUBLIC SAFETY COMMITTEE

Friday October 16, 2015 MINUTES

LOCATION:

Sand City City Hall

1 Sylvan Park Sand City, CA

COMMENCEMENT:

2:00 P. M.

MEMBERS PRESENT:

Todd Bodem
Todd Kruper
Jerry Blackwelder
Chief Ferrante
Linda Scholink

MEMBERS ABSENT:

None

ALSO PRESENT:

Leon Gomez, and Charles Pooler

AGENDA ITEM 1, CALL TO ORDER

The meeting was called to order by Chair Todd K. at 10:30 AM.

AGENDA ITEM 2, ROLL CALL

All members present.

AGENDA ITEM 3, COMMUNICATIONS

Todd K. opened the floor to public comments. None were taken.

AGENDA ITEM 4, OLD BUSINESS

A. Capital Projects on Hickory / Diaz

Leon Gomez gave a presentation on the different possible designs for the curb/gutter and repair of Hickory and Diaz. By consensus the Committee agreed to merge two of the designs and have the city engineer create a cost proposal and working drawings to be presented to Council for review at the Nov 17th City Council meeting.

B. Camping on land East of Highway 1

Following discussion by the committee and a review of information provided by the Chief, the Committee by consensus, agreed to table this item and refer it back to the City Attorney.

C. Verbal Updates and Discussion of Previous tasks/priorities

1) Speed Survey

Chief Ferrante gave a presentation on the report by Hatch Mott MacDonald, the Consultants who created the survey. Brian agreed to the conclusions and

suggested the PSC advise the City Council to accept this survey and implement the changes. By consensus the Committee agreed and will forward to the City Council.

2) Traffic Cameras

No update.

3) City-wide emergency plan

No update.

4) Winter water flood plan

Chief stated that the PW Department has created 50 sand bags and will be creating a bagging station on Shasta for the public to fill their own sand bags as needed.

5) Municipal Lighting –LED's

Chief Ferrante explained that there are some electrical problems on the bike path and that it would be looked into next week; then the LED's would be put in place and the cost savings from the installation of the LED's would pay for the lights. The Committee requested that the PW crew research programs to replace all city lights in this manner. The PW crew was also directed to replace the light poles that are in bad shape and in need of repair.

6) Bulb outs planters and tree removal

The tree removal and the replanting are to be completed soon.

AGENDA ITEM 5, NEW BUSINESS

A. Approval of September 3, 2015 Public Safety Committee Minutes.

Motion made by Jerry, seconded by Linda. Motion passed on a unanimous vote 5-0, with one spelling correction.

B. Dog waste ordinance

Information was presented to the Committee for review. By request, the Chief will condense the information and pass it on to the City Attorney for the final creation.

C. Parking issues with storage pods

Chief Ferrante feels that there are ordinances currently in place to handle this problem. He reminded the Committee that most businesses do not use this type of storage on a long-term basis. This is something the city can work towards with the community.

D. City Banners

The Committee was satisfied with the condition of the current city banners and was not inclined to advise the purchase of new banners.

E. Committee Agenda Process

City Administrator Bodem handed out new guidelines for the policy and procedure related to the agenda process for the committee's use. Following this policy all administrative duties will be handled by city staff, and all agenda items will be funneled through the City Administrator. By consensus the committee agreed.

AGENDA ITEM 6, ADJOURNMENT

Meeting adjourned at 12:20 P.M. Motion made by Linda, seconded by Chief Ferrante. Motion passed unanimously by a 5-0 vote. The next scheduled meeting will be TBA.

Chairs Notes:

Due to the nature that the Public Safety Committee is a Standing Committee and is guided by "Roberts Rules of Order", any item to be discussed must be agendized and posted by city staff.

Respectfully submitted,

Councilmember Todd Kruper Chair

Agenda Item 5C

MEMORANDUM

TO:

PUBLIC SAFETY COMMITTEE

FROM:

CHIEF BRIAN FERRANTE

SUBJECT: FIREARM REPLACEMENT

DATE:

NOVEMBER 2, 2015

Background

During the recent officer involved shooting, Officer Bushnell had a malfunction with his department issued H&K pistol causing him to switch magazines while still engaging the suspect. The Officers were fortunate enough to survive the incident; however anytime a weapon malfunctions it puts the officer's life at greater risk.

The police department purchased H&K USP .45 caliber pistols in 2002, 13-years ago. The pistols were purchased with accessories which included tactical weapon lights, night sights and holsters. All of the officers were assigned new pistols at that time. The officers have conducted quarterly qualifications and training putting excessive wear on the pistols. The estimated number of rounds fired through each pistol is approximately 13000-15000, which is nearing the recommended time where they will need to be fully refurbished. The night sights have an effective life expectancy of approximately 10years. All of the sights on the current duty pistols have lost their illumination capabilities rendering them ineffective at night. The lights and holsters have shown extensive wear requiring replacement.

Hunter Supply provided a quote to refurbish 12 H&K USP pistols and replacement of the night sights: $$238.00 \times 12 = $3,216.00$ Replacement Safariland holsters: \$165 X 12 = \$1,980.00 Tactical weapon lights: Insight M2 weapon lights \$189.00 X 12 = \$2,268.00

Total costs without tax is approximately \$7,464.00.

I have researched replacement pistols and requested input from Range Masters at various agencies. The Glock 21 Gen4 .45 caliber was determined to be the best pistol for the environment we are working

in. The pistol is extremely reliable and comes with 3 high capacity magazines holding 13-rounds each. TruGlo night sights and Blackhawk Weapon lights can be mounted and attached. Blackhawk offers the Serpa triple threat holster designed to be used with the weapon light. I have contacted Hunter Supply located in Monterey for quotes on purchasing our current duty weapons and the cost of the Glock 21 Gen4.

They will purchase our H&K's for \$316.00 per pistol applying it towards the purchase of the Glock 21 Gen4. Purchase price of the Glock is \$516.00 per pistol leaving a difference of \$200.00, for a total purchase price for 12 pistols; \$2,607.00 (Tax included)
Hunter Supply provided a quote for Night sights, 36-extra magazines, 13-Blackhawk Serpa holsters, 13-Blackhawk weapon lights \$4,050.00

Total purchase price \$6,657.00

(Tax included)

We are currently in need of 2 additional patrol rifles. LC Action has provided a quote of \$785.00 for the Colt LE6920 .223 Patrol Rifle. Total purchase price for 2 rifles; \$1,732.00 (tax included)

Due to the Law Enforcement configuration of the patrol rifle, Hunter Supply was unable to quote a price.

Funding for this purchase is currently available from several PD budget sources including Equipment Police 5745, Police Supplies 5785, and Miscellaneous 5930. There are currently approximately \$23,000 total funds available from these three areas.

Recommendation

The Department would like to move forward with the purchase of the new weapons systems as described. The current systems would need to be refurbished at a cost greater than their replacement.

Agenda Item 5E

MEMO

To:

Public Safety Committee

From:

Todd Bodem, City Administrator

Date:

November 5, 2015

Subject:

Infrastructure and Economic Development Funding.

At the recent League and CALED Conferences I attended, I learned about California's Infrastructure and Economic Development Bank (IBank) program that provides financing to public agencies for a wide variety of infrastructure, public facilities, and economic development projects. This Program funding is available in amounts ranging from \$50,000 to \$25,000,000, with loan terms of up to 30 years.

I contacted IBank staff and sent them 5 years of financial statements to see if Sand City qualifies, and for how much. Sand City qualifies for a \$3 million loan for 30 years at an indicative interest rate of 3.44% with annual debt service payments of approximately \$173,000. Their staff believes the City may even qualify for a \$5 to \$6 Million loan, but this analysis was not completed.

This provides another financing option for Sand City to complete small and large projects swiftly. IBank has 97 loans in their portfolio; the application process is simple and very straightforward.

