

TO: James L. App, City Manager
FROM: Robert Burton, Chief of Police
SUBJECT: Speed Zone Survey
DATE: March 18, 2014

NEEDS: For the City Council to consider adopting the 2014 Speed Zone Survey.

- FACTS:**
1. The City is required to complete a speed zone survey every five years in order to comply with the State Vehicle Code for enforcement by radar.
 2. Specific criteria must be met in establishing speed limits. Without conformance to the criteria, radar cannot be used enforce speed limits.
 3. Generally, speed limit postings are set at the nearest 5 MPH increment of the 85th percentile speed of free flowing traffic (as measured in the field).
 4. The posted speed may be reduced by 5 MPH from the nearest 5 MPH increment of the 85th percentile speed where an engineering study indicates the need for a speed reduction due to existing conditions affecting the safety of the community. The conditions may include existing land use along the street segment, road curvature, number of driveways accessing the road, availability of sidewalks, sight distance, vertical curves, accident history, etc.
 5. In October 2013, the City retained C2 Consult Corp, a traffic engineering firm, to update the City's radar speed survey and analyze posted speed zones.

**ANALYSIS &
CONCLUSION:**

The attached Exhibit A is the complete "2014 Speed Zone Survey Update." A summary on pages 21 & 22 show street segments measured and the recommended speed limits. Street segments where a new speed limit is recommended have been highlighted.

POLICY

REFERENCE: Title 12, Chapter 12.54, Section 12.54.010 of the Municipal Code; Section 22354 of the California Vehicle Code; Caltrans Traffic Manual.

FISCAL IMPACT: None

- OPTIONS:**
- a. Adopt Resolution No. 14-xx approving speed limits recommended in the "2014 Speed Zone Survey Update" prepared by C2 Consult Corp (attached Exhibit A).
 - b. Amend, modify, or reject the above option.

Attachments: Resolution
Exhibit A

RESOLUTION NO. 14-xxx

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES
ACCEPTING THE COMPLETED SPEED ZONE SURVEY AND AUTHORIZING THE UPDATE
AND ENFORCEMENT OF POSTED SPEEDS ACCORDINGLY

WHEREAS, the City is required to update its speed zone studies every five years; and

WHEREAS, the City retained C2 Consult Corp to complete an update of the City's radar speed surveys and an analysis of all posted speed zones within the City limits; and

WHEREAS, the Police Department and Public Works Department have reviewed the speed studies and concur with the recommendations in the report prepared by C2 Consult Corp, "2014 Speed Zone Survey Update" dated January 2014 and attached here as Exhibit A; and

WHEREAS, Municipal Code Section 12.54.010 and 12.54.020 allow for speed limits to be set by resolution of the City Council.

NOW, THEREFORE, BE IT RESOLVED that the City Council does hereby adopt this resolution amending speed limits within the City limits of Paso Robles as listed on the attached Exhibit A, and superseding the limits as set forth in Chapter 12.54 of the Municipal Code and all previous resolutions adopting speed limits.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 18th day of March 2014 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Duane Picanco, Mayor

ATTEST:

Caryn Jackson, Deputy City Clerk

2014 Speed Zone Survey Update

For The City of El Paso De Robles

January 2014

Prepared For:



City of El Paso De Robles
(805) 237-3861

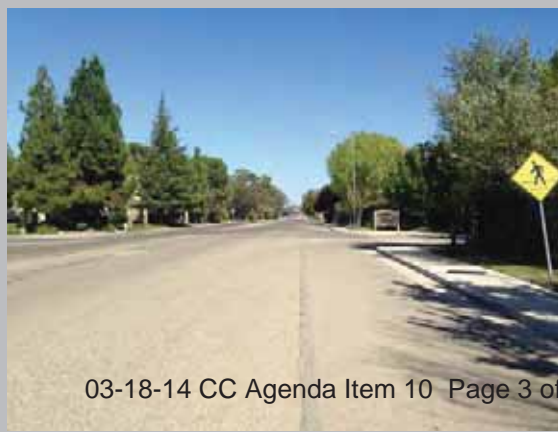
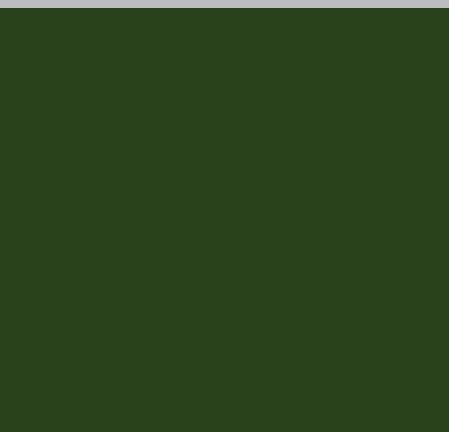
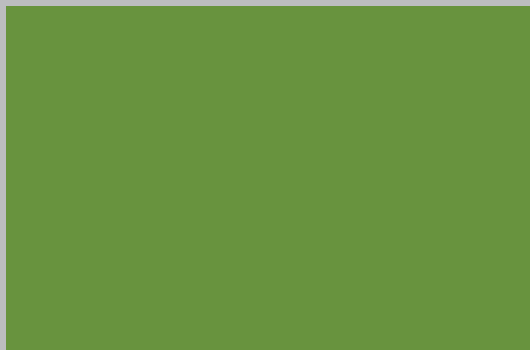
1000 Spring Street
Paso Robles, CA 93446

Prepared By:



C2 Consult Corp
(720) 502-7236

7451 N. Remington Ave, Ste 100
Fresno, CA 93711



2013 SPEED ZONE SURVEY UPDATE

FOR THE

CITY OF EL PASO DE ROBLES

January 2014



Prepared for the
City of El Paso de Robles
1000 Spring Street
Paso Robles, CA 93446
(805) 237-3861



Prepared by
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2013 SPEED ZONE SURVEY UPDATE

FOR THE

CITY OF EL PASO DE ROBLES

1. INTRODUCTION

Chapter 7 of Division 11 of the State of California Vehicle Code deals with speed laws. Basically, this chapter indicates that prima facie speed limits on local streets are 25 mph in residential and business districts and are 65 mph at all other locations. However, a maximum speed limit of 55 mph is imposed on two-lane, undivided highways unless posted for a higher speed limit. The code also provides for intermediate speed limits. In Section 22357, it indicates that whenever a city/county determines "... upon the basis of an engineering and traffic survey, that a speed greater than 25 mph would facilitate the orderly movement of vehicular traffic and would be reasonable and safe... (it) ... may by ordinance determine and declare a prima facie speed limit of 30, 35, 40, 45, 50, 55, 60 mph, or a maximum speed limit of 65 mph, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe."

Similarly, Sections 22358, 22358.3, and 22358.4 allow public agencies to reduce, by ordinance or resolution, those sections that are automatically 65 (or 55) mph to limits as low as 25 mph (20 or 15 mph if certain special conditions are present) on the basis of an engineering and traffic survey and the determination that the resulting speeds will be reasonable and safe.

In addition to the above requirements, Section 40802, "Speed Traps" of the Vehicle Code, was amended by the 1999 Legislature to indicate that radar cannot be used to enforce speed limits unless justified by an engineering and traffic survey conducted within various specified time periods.

Based on requirements shown above, the City of El Paso de Robles, in an effort to examine its existing speed zoning program, retained TPG Consulting to perform a radar speed survey and an engineering analysis of all posted speed zones within the city limits.

This report and the procedures used to formulate its recommendations fully meet the requirement of the California Vehicle Code and the California Department of Transportation and will allow the City of El Paso de Robles to enforce speed limits by the use of radar following adoption of the recommendations made in this report (or modified as deemed necessary by the City of El Paso de Robles) and the installation of appropriate speed limit signs.

2. DEFINITIONS, GUIDELINES & REGULATIONS

The following section contains excerpts from the California Vehicle Code and the California Manual on Uniform Traffic Control Devices, which provides guidance for the establishment of speed limits.

A. Engineering and Traffic Survey

Section 627, California Vehicle Code:

- (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 the 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) *Collision Records.*
 - (3) *Highway, traffic, and roadside conditions not readily apparent to the driver.*
- (c) *When conducting an engineering and traffic survey, local authorities 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) *Pedestrian and bicyclist safety.*

In September, 2006 the State of California published two methods of conducting an engineering and traffic survey, which are appropriate for California streets of differing functions:

1. State Highways

The E&TS for State highways is made under the direction of the Department of Transportation’s District Traffic Engineer.

The data includes:



- (a) *One copy of the Example of Speed Zone Survey Sheet 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, super elevation, 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- Specific types of vehicles may be tallied by use of letter symbols in appropriate squares. 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: 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. 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 mile 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.*

B. Uniform Standards

Section 21400, California Vehicle Code:

(a)

- (1) 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.*

- (2) *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 highway by a person engaged in performing work that interferes with or endangers the safe movement of traffic upon that highway.*
- (3) *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.*

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.

- (b) *Devices, as it read on January 1, 2012, 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, but then the Department of Transportation or a local authority shall not reduce the speed limit any further for any reason.*

C. Maximum Speed Limit

Section 22349, California Vehicle Code:

- (a) *Except as provided in Section 22356, no person may drive a vehicle upon a highway at a speed greater than 65 miles per hour.*
- (b) *Notwithstanding any other provision of law, no person may drive a vehicle upon a two-lane, undivided highway at a speed greater than 55 miles per hour unless that highway, or portion thereof, has been posted for a higher speed by the Department of Transportation or appropriate local agency upon the basis of an engineering and traffic survey. For purposes of this subdivision, the following apply:*
 - (1) *A two-lane, undivided highway is a highway with not more than one through lane of travel in each direction.*
 - (2) *Passing lanes may not be considered when determining the number of through lanes.*
- (c) *It is the intent of the Legislature that there be reasonable signing on affected two-lane, undivided highways described in subdivision (b) in continuing the 55 miles-per-hour speed limit, including placing signs at county boundaries to the extent possible, and at other appropriate locations.*

Support: 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.*

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

D. Basic Speed Law

Section 22350, California Vehicle Code:

No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.

E. Increase of Local Speed Limits

Section 22357, California Vehicle Code- Increase of Local Speed Limits to 65 Miles/Hour:

(a) Whenever a local authority determines upon the basis of an engineering and traffic survey that a speed greater than 25 miles per hour would facilitate the orderly movement of vehicular traffic and would be reasonable and safe upon any street other than a state highway otherwise subject to a prima facie limit of 25 miles per hour, the local authority may by ordinance determine and declare prima facie speed limit of 30, 35, 40, 45, 50, 55, or 60 miles per hour or a maximum speed limit of 65 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe. The declared prima facie or maximum speed limit shall be effective when appropriate signs giving notice thereof are erected upon the street and shall not thereafter be revised except upon the basis of an engineering and traffic survey. This section does not apply to any 25-mile-per-hour prima facie limit which is applicable when passing a school building or the grounds thereof or when passing a senior center or other facility primarily used by senior citizens.

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

F. Decrease of Local Speed Limits

Section 22358, California Vehicle Code:

(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 and 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 prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 miles per hour, whichever is found most appropriate to facilitate the orderly movement of traffic and is reasonable and safe, which declared prima facie 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.

G. Downward Speed Zoning

Section 22358.5, California Vehicle Code:

It is the intent of the Legislature that physical conditions such as width, curvature, grade and surface conditions, or any other conditions readily apparent to a driver, in the absence of other factors, would not require special downward speed zoning, as the basic rule of Section 22350 is sufficient regulation as to such conditions.

Support: 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.

H. Boundary Line Streets

Section 22359, California Vehicle Code:

With respect to boundary line streets and highways where portions thereof are within different jurisdictions, no ordinance adopted under Sections 22357 and 22358 shall be effective as to any such portion until all authorities having jurisdiction of the portions of the street concerned have approved the same. This section shall not apply in the case of boundary line streets consisting of separate roadways within different jurisdictions.

I. Linking Districts on Local Highways

Section 22360, California Vehicle Code:

(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 a highway other than a state highway for a distance of not exceeding 2,000 feet in length between districts, either business or residence, the local authority may determine and declare a reasonable and safe prima facie limit thereon lower than 65 miles per hour, but not less than 25 miles per hour, which declared prima facie speed limit shall be effective when appropriate signs giving notice thereof are erected upon the street or highway.

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

J. Multiple-Lane Highways

Section 22361, California Vehicle Code:

On multiple-lane highways with two or more separate roadways different prima facie speed limits may be established for different roadways under any of the procedures specified in Sections 22354 to 22359, inclusive.

K. Notice of Authorization to Increase Maximum Speed Limit

Section 22366, California Vehicle Code:

(a) Whenever the Director of Transportation determines the date upon which the state may establish a maximum speed limit of 65 miles per hour on highways without subjecting the state to a reduction in the amount of federal aid for highways, the director shall notify the Secretary of State of that determination.

- (b) *The notice required under subdivision (a) shall state that it is being made pursuant to this section.*
- (c) *The notice shall specify a date which is either the date determined pursuant to subdivision (a), or a later date designated by the director.*

L. Use of Speed Trap

Section 40801, California Vehicle Code- Speed Trap Prohibition:

No peace officer or other person shall use a speed trap in arresting, or participating or assisting in the arrest of, any person for any alleged violation of this code nor shall any speed trap be used in securing evidence as to the speed of any vehicle for the purpose of an arrest or prosecution under this code.

M. Speed Traps

Section 40802, California Vehicle Code:

(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 subparagraph (A) of paragraph (2) of subdivision (a) 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, or school zone.*
- (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. When a street or road does not appear on the “California Road System Maps,” it may 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.

(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 Traffic Highway 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 subparagraph (A) of paragraph (2) of subdivision (a) 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 sub clause (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, 10 years.

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

N. Speed Limit Sign

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

In 2011, the legislature amended the wording of the California MUTCD 2012 Edition affecting the ability of municipalities to change the posted speed limit within their jurisdiction. The primary change is that the need of speed limits to conform broadly to the 85th percentile speed has been changes from a recommendation to a standard. In addition, in cases where the 85th percentile speed is to be rounded up to the nearest 5 mph increment, the ruling jurisdiction is permitted to round down to the appropriate 5 mph increment without justifying this need with an engineering study. Section 2B.13(12) of the California MUTCD 2012 Edition reads as follows:

Section 2B.13(12)

Standard: (12a) When a speed limit is to be posted, it shall be established at the nearest 10 km/h (5 mph) increment of the 85th-percentile speed of free-flowing traffic, except as shown in the option below.

Option: The posted speed may be reduced by 10 km/h (5 mph) from the nearest 10 km/h 5 mph increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5.

Standard: (12b) If the speed limit to be posted has had the 10km/h (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:

a. 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 can be further 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.*
- b. 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 established speed limit can be further 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.*
- c. If the 85th percentile speed in a speed survey for a location was 38 mph, then the speed limit would be established at 40 mph since it is the closest 5 mph increment to the 38 mph speed. As indicated by the option, this 40 mph established speed limit can be further reduced by 5 mph to 35 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.*

Support: 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: Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering and traffic survey (E&TS) 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.

The Speed Limit (R2-1) sign 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. 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.

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. 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.

Guidance: 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.

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.

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

Standard:

- a. *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.*
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(f).*

Standard: 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: 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. 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: 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: 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:

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.*

Two types of Speed Limit signs may be used:

- 1. To designate passenger car speeds, including any nighttime information or minimum speed limit that might apply*
- 2. The other to show any special speed limits for trucks and other vehicles.*

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. 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.

3. OBJECTIVES & SCOPE

A. Fundamentals of Realistic Speed Zoning

Most citizens can be relied upon to behave in a reasonable manner as they go about their daily activities. Many of our laws reflect observations of the way reasonable people behave under most circumstances. Traffic regulations are also based upon observations of the behavior of groups of motorists under various conditions. Generally speaking, traffic laws that reflect the behavior of the majority of motorists are found to be successful. Laws that arbitrarily restrict the majority of drivers encourage wholesale violations, lack public support, and usually fail to bring about desirable changes in driving behavior. This is especially true of speed zoning.

Speed zoning is based upon several fundamental concepts deeply rooted in our American system of government and law:

- Driving behavior is an extension of social attitude, and the majority of drivers respond in a safe and reasonable manner as demonstrated by their consistently favorable driving records.
- The normally careful and competent actions of a reasonable person should be considered legal.
- Laws are established for the protection of the public and the regulation of unreasonable behavior of the individual.
- Laws cannot be effectively enforced without the consent and voluntary compliance of the public majority.

Public acceptance of these precepts is normally instinctive. However, the same public, when emotionally aroused in a specific instance, will invariably reject these fundamentals and rely instead on more comfortable and widely held misconceptions, such as:

- Speed limit signs will slow the speed of traffic.
- Speed limit signs will decrease the accident rate and increase safety.
- Raising a posted speed limit will cause an increase in the speed of traffic.
- Any posted speed limit must be safer than an unposted speed limit, regardless of traffic and roadway conditions prevailing.

Before-and-after studies consistently demonstrate that there are no significant changes in traffic speeds following the posting of new or revised speed limits. Furthermore, no published research findings have established any direct relationship between posted speed limits and accident frequency, although short-term reductions have resulted from saturation enforcement efforts directed at speed and other traffic law violations.

Police agencies necessarily rely on reasonable and well recognized speed laws to control the unreasonable violator whose behavior is clearly out of line with the normal flow of traffic.

B. Why are realistic speed zones desirable?

Realistic speed zones are of public importance for a variety of reasons:

- They satisfy the requirements of the state law for establishing prima facie speed limits on public streets and highways.
- They invite public compliance by conforming to the behavior of the majority and by giving a clear reminder to nonconforming violators.
- They offer an effective enforcement tool to the police by clearly separating the occasional violator from the reasonable majority.

- They tend to minimize current public antagonism toward police enforcement of obviously unreasonable regulations.
- They inject an element of logic and reason into an otherwise arbitrary and often emotional issue.
- They correctly serve to place responsibility for justifying so-called "tolerances" upon those administrative agencies that grant them.
- They lend credence and acceptability to the widely posted admonition, "Speed Laws Strictly Enforced", at many city boundaries.

C. Where are realistic speed zones applicable?

Speed zoning should be reserved for thoroughfares with appreciable volumes of traffic where such zoning can be shown to facilitate the orderly movement of traffic by increasing driver awareness of a reasonable speed.

Transition sections between rural and suburban conditions usually require "reminder" zoning: business or residence districts that barely satisfy the legal definition for automatic 25 mph limits can also be zoned to advise the driver of a safe speed and to avoid confusion in determining if Vehicle Code prima facie limits apply.

Through streets that are not wide thoroughfares frequently require zoning to aid the police in determining what is a reasonable limit. On the other hand, it is seldom necessary to post limits relating to business or residence districts in obviously well established urban areas, where such districts are clearly apparent to drivers.

The basic intent of speed zoning is to influence as many drivers as possible to operate at or near the same speed - thus reducing conflicts created by wide differentials in operating speeds. Low-volume streets, therefore, offer little opportunity for encouraging closely grouped speeds due to the absence of traffic platoons under normal conditions.

4. REQUIREMENTS

The California Vehicle Code reflects the sensible viewpoint that speed zoning, as other types of traffic control, should be based on traffic conditions and natural driver behavior - and not simply upon a hasty or arbitrary response to a traffic event.

A. Basic Speed Law

All fifty states base their speed regulations on the Basic Speed Law:

"No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of the highway, and in no event at a speed which endangers the safety of persons or property."

This law recognizes that driving conditions vary widely from time-to-time and place-to-place. No set of fixed driving rules will adequately serve all conditions. The motorist must constantly adjust his driving behavior to fit the conditions he meets. He must learn to do this with a minimum of assistance from the police. The basic speed law is founded on the belief that most motorists are able to modify their driving behavior properly, as long as they are aware of the conditions around them.

B. Maximum Speed Limits

In California, the maximum speed for any passenger vehicle on a two-lane, undivided highway is 55 miles per hour (unless posted with a higher speed limit). The maximum speed for most trucks and for vehicles towing any trailer is also 55 miles per hour. These are absolute limits, which may not be legally exceeded under any circumstances.

C. Prima Facie Speed Limits

All other speed limits are prima facie limits which, "on the face of it", are reasonable and prudent under normal conditions. A driver may exceed any prima facie limit if it is safe to do so under prevailing conditions. However, when a police officer cites a driver for exceeding a prima facie speed limit, it is up to the driver to prove, if he can, that he was driving in a reasonable and prudent manner under the existing conditions. The opportunity given to the driver to exceed a prima facie speed limit when it is safe to do so recognizes the fact that any posted speed limit cannot adequately reflect the many different conditions of traffic, weather, visibility, etc., that may be found on the same highway at different times.

Certain blanket (or automatic) prima facie limits are established by law including the 15 mph limit in alleys, at blind intersections and railroad crossings, and the 25 mph limit in business districts, residence districts and at sign posted senior citizen facilities. There is also a part-time 25 mph limit in sign posted school zones when children are present en route to or from school.

Business and residence districts are defined in the Vehicle Code as specific areas meeting a specified minimum density of roadside development. A count of houses or active businesses facing on a highway must be made to determine whether or not a valid business or residence district exists. The law does not require posting these prima facie limits, which are readily apparent.

D. Intermediate Speed Zones

State law permits local authorities to lower the maximum speed limit (55 mph) or to raise business and residence district speed limits (25 mph) on the basis of a traffic and engineering survey. These "intermediate limits" between 25 and 55 mph (or as low as 15 mph under certain special conditions) must be posted to define clearly the limits of the zone and the prima facie speed established.

5. STUDY PROCEDURES

A. Location Selection

The requirement of this study was to analyze 59 roadway segments in the City of El Paso de Robles and to recommend an appropriate speed limit for these roadway segments consistent with the laws and practices of the State of California. The principal feature of the survey was manual radar speed checks, the process of which will be described in the following section.

B. Data Collection

Speed checks were made on all street sections in which the traffic speeds, traffic volumes, street width, or other significant factors were different from an adjacent section. Thus, an important arterial may require speed surveys at several locations to account for changes in these factors whereas a less important street with consistency in these areas may be sufficiently surveyed with just one check point.

The prevailing vehicle speeds were determined through use of a radar traffic speed meter. Each of the radar speed checks was made from an inconspicuously parked, unmarked vehicle utilizing consultant personnel. An effort was made to insure that the presence of the vehicle in no way affected the speed of the traffic being surveyed.

Field information was recorded on forms (Appendix A) and later coded for computer analysis. In order to obtain a significant sample at the study location, either one or the other of the following two survey techniques was employed:

- Along sections of highway where traffic flows freely, only the lead vehicles of groups or vehicles traveling alone were recorded.
- In highly concentrated areas, the speeds of lead vehicles were recorded as well as vehicles from varying positions within each group.

The calculations derived from both techniques accurately demonstrate a balance among the speed, capacity and general use of the street segment under observation.

An absolute minimum of 50 vehicles was surveyed at each study location, per the recommendations in the *California MUTCD*. For this study, C2 attempted to collect for in excess of 100 vehicles for each study segment. Where traffic volumes were low or 100 vehicles per could not be obtained within a reasonable amount of time, a minimum of 50 total vehicles were surveyed. As such, certain study segments may contain more sample points than others.

C. Data Analysis

The data sheets contained in the Appendix B consist of a computer analysis of the radar speed survey information gathered in the field. The data on the sheet begins with the actual location of the data collection consisting of the name of the particular roadway segment of study, followed by the longitudinal location of the checkpoint in relation to an

easily identifiable intersection or landmark. This heading is followed by two columns listing other pertinent observed conditions including:

- direction of traffic observed
- roadway cross section
- paved roadway width
- any special conditions noted (See Section E, Inventory of Street Conditions, which follows)
- the date
- the day of the week
- the beginning and ending time of the check.

The middle body of the form consists of a summary table of various calculated parameters. An explanation of the data and terms follows:

- The 10 MPH pace speed is the 10 miles per hour increment of observed speeds which contains the greatest number of vehicles. In nearly all cases, the 85th percentile speed and the recommended speed limit lie somewhere within the pace, frequently in the middle to upper ranges. This is an important indicator used to determine appropriate speed limits.

Also provided is the percentage of vehicles traveling at or below the lower limit of the pace, the percentage of vehicles traveling within the pace and the percentage of vehicles traveling above the upper limit of the pace.

The number of vehicles within the pace is an indication of the bunching of vehicular speeds. Ideally, if all vehicles were traveling at or about the same speed, there would be a reduced likelihood of traffic collisions. Within speed limit analysis, the higher the percentage of vehicles within the pace, the better the speed distribution.

- The average speed is the mean speed of the sample, or the total of all the vehicle speeds divided by the number of vehicles in the sample.
- The critical speed (or 85th percentile speed) is that speed at or below which 85 percent of the observed vehicles are traveling. It is a well recognized fact among traffic engineers that most drivers are able to drive at reasonable speeds without the benefit of any speed limits, speed signs, or enforcement. The behavior of traffic is a good indication of the appropriate speed zone that should apply on a particular street section. It is generally felt that at least 85 percent of the drivers operate at speeds that are reasonable and prudent for the conditions pertaining in each situation. Therefore, the 85th percentile speed of a spot speed survey is the primary indicator of a speed limit that might be imposed subject to the secondary factors of accident experience, traffic volumes, road features, or other special situations.

Several lines are provided to list *comments/unusual condition*. These special conditions, and their influence on the appropriate speed zone limit are described in Section E, Inventory of Street Conditions, which follows.

The bottom portion of the form includes a graphic display of the vehicles observed by speed and percent of total observations, and a table listing vehicle speed in one mile per hour increments, the frequency (number) of observations at each particular speed, the percentage of the total number of observations that number represents, and the cumulative number and percentage of all vehicles checked.

D. Accident Review

Accidents are a factor of some importance in speed limit establishment. The location and severity of reported traffic accidents are reviewed to determine locations of higher accident incidence. When the review indicates a concentration of reported accidents or an accident rate significantly higher than normal for the type of roadway under study, careful consideration of the accident history should be included in the development of the speed limit. Adequate consideration may then be given to other corrective measures, the degree of enforcement emphasis needed, and the general applicability of any posted speed limit at all.

E. Inventory of Street Conditions

The Speed Survey Form (Appendix A) provides space for recording various roadway and survey conditions in addition to the observed speeds of vehicles. These conditions included such general information as the date, location, recorder (observer), and beginning and ending time of the study, as well as the direction of traffic flow surveyed (B = band or both directions), road width, general road surface condition, existing speed limit and the posting thereof, and the type of vehicle checked.

The data obtained for each street section from the above review process is printed on each sheet by location, and included in Appendix B. Additionally, certain street sections exhibited unique characteristics, such as roadway design speed, stopping sight distance, superelevation, shoulder conditions, profile conditions, intersection spacing and offsets, commercial driveway characteristics, pedestrian traffic in the roadway without sidewalks, etc. which justified special consideration. Comments regarding any special factors or conditions considered in establishing the appropriate speed limit, if any, have been documented in street segment's engineering report.

F. Data Evaluation

The data evaluated for each roadway segment includes the existing posted speed limit, the observed and measured prevailing vehicle speeds, a review of the most recent three-year traffic collision history and an inventory of any special physical characteristics of the roadway and adjacent development. This information is listed in Table 1 on the following page as follows:

1. The roadway name.
2. The limits of the speed zone study.
3. The latest three-year traffic collision history, obtained from the City of El Paso de Robles Police Department. It should be noted that recently the City began limiting the collection of traffic accident data to only those involving injuries. This change in data collection procedures was in response to reduction in Police resources. Therefore, the accident data shown in this report is substantially lower in numbers than previous reports.
4. The existing posted speed limit.
5. The average speed, critical (85th percentile) speed and pace speed as determined by computer analysis of the observed and measured vehicle speeds.
6. The recommended speed limit determined from the above information in accordance with the stated sections of the State of California Vehicle Code and the California MUTCD.

TABLE 1: SUMMARY OF THE STUDY SEGMENTS

#	Study Segment	Boundaries	Posted Speed Limit	Accidents (past 3 years)	ADT	Average Speed	Critical Speed (85 th Percentile)	Pace Speed (10 mph)	Recommended Speed Limit
1	Airport Road	Meadowlark to Linne	35	1	N/A	33	39	30-39	35
2	Airport Road	SR 46 to Buena Vista	NPS	4	2,192	51	56	46-55	NPS
3	Appaloosa Drive	Niblick to Red Cloud	25	2	N/A	24	28	19-28	25
4	Buena Vista Drive	SR 46 to City Limit	40	1	2,788	37	41	33-42	40
5	Charolais Road	River Rd to Creston	40	11	5,910	43	48	39-48	45
6	Commerce Street	Sherwood to Scott	40	3	N/A	34	40	31-40	40
7	Creston Road	River Rd to Rolling Hills	35	26	15,765	34	40	30-39	35
8	Creston Road	Rolling Hills to Niblick	35	28	17,689	35	40	32-41	35
9	Creston Road	Niblick to Meadowlark	35	13	5,721	33	39	26-35	35
10	Creston Road	Meadowlark to City Limit	45	0	4,027	44	47	39-48	45
11	Dallons Drive	Buena Vista to Golden Hill	35	0	1,330	36	40	31-40	35
12	Dry Creek Road	Airport Rd to Aerotech Way	NPS	2	1,260	43	50	40-49	50
13	Experimental Station Road	River Oaks to Buena Vista	25	1	N/A	33	39	30-39	25
14	Golden Hill Road	Creston to Rolling Hills Rd	45	12	8,360	46	49	42-51	45
15	Golden Hill Road	Rolling Hills Rd to Union	45	3	11,159	45	48	40-49	45
16	Golden Hill Road	Union to SR 46	40	8	7,328	37	40	31-40	40
17	Linne Road	Fontana to City Limit	NPS	4	4,145	52	61	45-54	55
18	Meadowlark Road	Beechwood to Airport	35	1	N/A	41	46	37-46	40
19	Montebello Oaks	Skyview to Union	25	0	N/A	29	34	26-35	25
20	Navajo Avenue	River Rd to Crazy Horse	30	1	N/A	30	34	26-35	25
21	Niblick Road	Spring to River Rd	40	59	28,835	40	45	36-45	40
22	Niblick Road	River Rd to Creston	40	40	18,508	39	43	34-43	40
23	North River Road	Creston to City Limit	40	17	2,893	44	50	38-48	45
24	Paso Robles Street	13th to US 101	35	5,506	5,506	35	40	30-39	35
25	Pine Street	10th to 4th	30	7	3,492	27	32	19-28	30
26	Ramada Drive	SR 46 to VindeJ Circle	35	2	1,734	33	37	28-37	35
27	Rambouillet Road	Niblick to Nicklaus	25	5	1,582	27	33	23-32	25
28	Rambouillet Road	Nicklaus to Charolais	25	4	1,582	25	31	19-28	25
29	Riverglen Drive	Union to Via Camelia	35	1	1,199	32	39	30-39	35
30	Riverside Avenue	Black Oak to 13th	35	36	6,680	33	37	27-36	35
31	Riverside Avenue	US 101 to 13th	35	17	7,057	37	42	34-43	35
32	Rolling Hills Road	Creston to Golden Hill	40	0	2,797	41	46	35-44	40

N/A = Not Available

NPS = No Posted Speed

ADT = Average Daily Traffic



Table 1: Summary of the Study Segments

#	Study Segment	Boundaries	Posted Speed Limit	Accidents (past 3 years)	ADT	Average Speed	Critical Speed (85 th Percentile)	Pace Speed (10 mph)	Recommended Speed Limit
33	Scott Street	Creston to Commerce	35	3	N/A	31	36	26-35	35
34	Scott Street	Commerce to Airport	25	3	N/A	25	28	20-29	25
35	Sherwood Road	Creston to Fontana	40	3	10,249	38	42	35-44	40
36	South River Road	Creston to Navajo	40	11	11,226	40	45	36-45	40
37	South River Road	Navajo to Niblick	40	21	10,331	36	40	32-41	40
38	South River Road	Niblick to Charolais	40	33	2,086	40	45	37-46	40
39	South Vine Street	1st to SR 46 West	45	11	4,842	47	52	43-52	50
40	Spring Street	1st to 10th	30	30	25,804	29	33	23-32	30
41	Spring Street	10th to 28th	30	54	13,980	27	31	22-31	30
42	Spring Street	28th to 36th	35	13	4,391	32	36	27-36	35
43	Stoney Creek	Creston to Rambouillet	30	5	N/A	30	35	24-33	30
44	Theatre Drive	SR 46 West to South City Limit	40	9	9,606	36	41	32-41	40
45	Union Road	North River Rd to Kleck	40	3	7,151	43	47	39-48	45
46	Union Road	Kleck to Golden Hill	40	4	5,836	38	42	33-42	40
47	Union Road	Golden Hill Rd to SR 46	45	16	7,847	40	45	36-45	45
48	Union Road	Along Barney Schwartz Park	50	0	3,256	46	51	43-52	50
49	Vine Street	1st to 12th	30	12	5,207	30	34	26-35	30
50	Vine Street	12th to 17th	30	7	4,037	25	28	21-30	30
51	Vine Street	17th to 24 th	35	6	4,037	26	31	21-30	30
52	Vine Street	24th to 32nd	35	5	945	29	33	25-34	35
53	10th Street	Riverside to Spring	25	7	N/A	23	25	17-26	25
54	12th Street	Vine to Merryhill	30	2	599	29	34	24-33	25
55	13th Street	Spring to Riverside	25	28	10,816	23	26	18-27	25
56	16th Street	Spring to Riverside	30	10	3,438	25	30	21-30	30
57	21st Street	Spring to Riverside	25	7	2,532	21	24	16-25	25
58	24th Street	West City Limit to Spring	35	20	7,480	33	39	29-38	35
59	24th Street	Spring to US 101	25	35	14,076	32	37	27-36	25

ADT = Average Daily Traffic NPS = No Posted Speed N/A = Not Available

New posted speed limit	Speed limit reduced	Speed limit increased
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6. RECOMMENDATIONS

A. Modification of Ordinance

Based on the findings of this study, it is recommended that the City of El Paso de Robles adopt the recommended speed limits shown in Table 1. All speed limit signs should be posted according to the guidelines in the California MUTCD.

B. Prima Facie Posting

Pursuant to the provisions of the said various section of the California Vehicle Code, any speed zone ordinance adopted by the City of El Paso de Robles will not become effective until, “*appropriate signs giving notice therefore are erected upon the street.*” Therefore, it is recommended that special attention be given to any and all such signing to insure that both the signs themselves and the installation procedures used during their erection in the field conform to the standards, policies and guidelines found in Part 2, *Signs*, in the California MUTCD.

C. After Study

An after-study of operating speeds in a newly established speed zone should be made to verify appropriateness, relative effectiveness, and general acceptance by the motoring public. After studies are recommended for the study segments for which a revised speed limit is recommended.

D. Recommended Speed Zones

Based on the data presented above and shown in Table 1, the following summarizes the recommended speed zones for each study segments. For those segments that remain unchanged, that will be so noted. For those segments that are receiving a recommended change in the speed limits, that will be supported by data and information. Have a recommended speed limit different than the current speed limit. Each of these segments is discussed in detail here:

(#1) *Airport Road from Meadowlark to Linne*– This segment is currently posted at 35 miles per hour. This divided two-lane roadway segment traverses a number of residential subdivisions. The measured critical speed is 39 mph, while the pace is 30-39 mph. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 35 mph.

(#2) *Airport Road from SR 46 to Buena Vista*– This study segment currently has an unposted speed limit. The measured critical speed is 56 mph, suggesting that 55 mph is an appropriate limit. Since the segment is in a generally rural area, it is recommended that it remain unposted and subject to the “Maximum Speed Limit” per California Vehicle Code 22349(b).

(#3) *Appaloosa Drive from Niblick Road to Red Cloud Drive*– This study segment is currently posted at 25 mph. The measured critical speed is 28 mph. This segment meets the residential

density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment remain posted at 25 mph.

(#4) *Buena Vista Drive from SR 46 to the City Limits*– This study segment is currently posted at 40 mph. The measured critical speed is 41 mph. Therefore, it is recommended that the segment remain posted at 40 mph.

(#5) *Charolais Road from South River Road to Creston Road*– This study segment is currently posted at 40 mph, while the measured critical speed is 48 mph. In addition, the segment is experiencing high accident numbers over the past three years. Per the California MUTCD, the posted speed limit should be 50 mph. However, CVC 21400 and CA MUTCD Section 2B.13(12c) allow for a reduction of this limit to 45 mph without further justification. Therefore it is recommended that the posted limit be raised to 45 mph.

(#6) *Commerce Street from Sherwood to Scott*– This study segment is currently posted at 40 mph. The measured critical speed is 40 mph. Therefore, it is recommended that the segment remain posted at 40 mph.

(#7) *Creston Road from South River Road to Rolling Hills Road*– This study segment is currently posted at 35 mph. The measured critical speed is 40 mph. There are bike lanes in both directions of traffic and four separate student crossing locations along the segment. In addition, the segment is experiencing high accident numbers over the past three years. The high accident total coupled with the potential for pedestrian/bike/vehicle interaction throughout this segment leads to the recommendation that this segment remain posted at 35 mph.

(#8) *Creston from Rolling Hills Road to Niblick Road*- This study segment is currently posted at 35 mph. The measured critical speed is 40 mph. There is an existing elementary school with associated student crossings in the section and there are bike lanes within the segment. In addition, the segment is experiencing high accident numbers over the past three years. The high accident total coupled with the potential for pedestrian/bike/vehicle interaction throughout this segment leads to the recommendation that this segment remain unchanged. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 35 mph.

(#9) *Creston Road from Niblick Road to Meadowlark Road*– This study segment is currently posted at 35 mph. The measured critical speed is 39 mph, while the pace is between 26 and 35. In addition, the segment is experiencing some accident history over the past three years. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 35 mph.

(#10) *Creston Road from Meadowlark Road to City Limit*– This study segment is currently posted at 45 mph. The measured critical speed is 47 mph. Therefore, it is recommended that the segment remain posted at 45 mph.

(#11) *Dallons Drive from Buena Vista Drive to Golden Hill Road*– This study segment is currently posted at 35 mph. The measured critical speed is 40 mph, while the pace is between 31 and 40. Bike lanes are found on the segment and there are a series of curves which limit speeds and sight distance. In addition, the segment is scheduled for a reconfiguration with the addition of a continuous two-way left turn lane. Therefore it is recommended that the segment remain unchanged. Pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 35 mph.

(#12) *Dry Creek Road from Airport Road to Aerotech Way*– This study segment is currently unposted, with the exception of an advisory 35 mph curve speed near the east end of the segment. The roadway does not have a striped centerline and is in generally bad pavement condition. Traffic volumes on the segment are low and vehicle speeds varied greatly. The measured critical speed is 50 mph. Given the narrowness and condition of the roadway, it is recommended that the segment be posted as a 50 mph zone.

(#13) *Experimental Station Road from River Oaks Drive to Buena Vista Drive*– This study segment is currently posted at 25 mph. The measured critical speed is 39 mph. This segment meets the residential density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment remain posted at 25 mph.

(#14) *Golden Hill Road from Creston Road to Rolling Hills Road*– This study segment is currently posted at 45 mph. The measured critical speed is 49 mph, while the pace is between 42 and 51. The segment has experienced some accident history over the past 3 years. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 45 mph.

(#15) *Golden Hill Road from Rolling Hills Road to Union Road*– This study segment is currently posted at 45 mph. The measured critical speed is 48 mph, while the pace is between 40 and 49. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 45 mph.

(#16) *Golden Hill Road from Union Road to SR 46* – This study segment is currently posted at 40 mph. The measured critical speed is 40 mph. Therefore, it is recommended that the segment remain posted at 40 mph.

(#17) *Linne Road from Fontana Road to City Limit*– This study segment is currently unposted. This narrow two-lane road has non-fronting residential to the south for the first thousand feet east of Fontana Road, but is otherwise rural in nature. Recorded speeds vary greatly with a critical speed of 61 mph and is higher than the prima facie speed limit for the facility. It is recommended that the segment be posted at 55mph.

(#18) *Meadowlark Road from Beechwood Drive to Airport Road*– This study segment is currently posted at 35 mph. The measured critical speed is 46 mph. this suggests a posted speed limit of 45 mph. However, the west end of this segment abuts an elementary school, and the sidewalk to the north of this road is a student pedestrian route to this facility. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5 mph reduction from the critical speed, it is recommended that the segment be raised to 40 mph.

(#19) *Montebello Oaks Drive from Skyview Drive to Union Road*– This study segment is currently posted at 25 mph. The measured critical speed is 34 mph. This segment meets the residential density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment remain posted at 25 mph.

(#20) *Navajo Avenue from South River Road to Crazy Horse Drive*– This study segment is currently posted at 30 mph. The measured critical speed is 34 mph, which would suggest a posted speed limit of 35mph. However, this segment now meets the residential density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment’s posted speed limit be reduced to 25 mph.

(#21) *Niblick Road from Spring Street to South River Road*– This study segment is currently posted at 40 mph. The measured critical speed is 45 mph. This study segment is one of the primary river crossing locations from east to west in Paso Robles. This segment experiences high traffic volume and a high number of traffic accidents. It also includes an intensely developed commercial zone on the east end of the segment. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5 mph reduction from the critical speed, it is recommended that the segment remain posted at 40 mph.

(#22) *Niblick Road from South River Road to Creston Road*– This study segment is currently posted at 40 mph. The measured critical speed is 43 mph. This segment experiences high traffic volume and a high number of traffic accidents. It also includes Paso Robles and Independence High Schools. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5 mph reduction from the critical speed, it is recommended that the segment remain posted at 40 mph.

(#23) *North River Road from Creston to City Limit*– This study segment is currently posted at 40 mph. The measured critical speed is 50 mph, while the pace is between 38 and 48. This segment experiences a high number of traffic accidents and has a narrow road cross section. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5

mph reduction from the critical speed, it is recommended that the segment be raised to 45 mph.

(#24) *Paso Robles Street from 13th Street to US 101* – This study segment is currently posted at 35 mph. The measured critical speed is 40 mph, while the pace is between 30 and 39. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5 mph reduction from the critical speed, it is recommended that the segment remain at 35 mph.

(#25) *Pine Street from 10th Street to 4th Street* – This study segment is currently posted at 30 mph. The measured critical speed is 32 mph. Therefore, it is recommended that the segment remain posted at 30 mph.

(#26) *Ramada Drive from SR 46 to Vindel Circle* – This study segment is currently posted at 35 mph. The measured critical speed is 37 mph. Therefore, it is recommended that the segment remain posted at 35 mph.

(#27 & #28) *Rambouillet Road from Niblick Road to Charolais Road* – These study segments are currently posted at 25 mph. The measured critical speed is 33 mph for Nicklaus to Niblick and 31 mph from Charolais to Nicklaus. Both of these segments meets the residential density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that they remain posted at 25 mph.

(#29) *Riverglen Drive from Union Road to Via Camelia* – This study segment is currently posted at 35 mph. The measured critical speed is 39 mph, while the pace is between 30 and 39. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5 mph reduction from the critical speed, it is recommended that the segment remain at 35 mph.

(#30) *Riverside Avenue from Black Oak to 13th Street* – This study segment is currently posted at 35 mph. The measured critical speed is 37 mph. The segment is also experiencing a high number of accidents. Therefore, it is recommended that the segment remain posted at 35 mph.

(#31) *Riverside Avenue from US 101 to 13th Street*– This study segment is currently posted at 35 mph. The measured critical speed is 42 mph. while the pace is between 34 to 43. The segment is experiencing a high number of accidents. The critical speed would suggest a speed limit of 40 mph, however, given the pace and the accident history and pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allows for a 5 mph reduction from the critical speed, it is recommended that the segment remain at 35 mph.

(#32) *Rolling Hills Road from Creston Road to Golden Hill Road*– This study segment is currently posted at 40 mph. The measured critical speed is 46 mph, while the pace is between 35 and 44. The critical speed would suggest a speed limit of 45 mph, however, given the pace and pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allows for a 5 mph reduction from the critical speed, it is recommended that the segment remain at 40 mph.

(#33) *Scott Street from Creston Road to Commerce Way* – This study segment is currently posted at 35 mph. The measured critical speed is 36 mph. Therefore, it is recommended that the segment remain posted at 35 mph.

(#34) *Scott Street from Commerce Way to Airport Road* – This study segment is currently posted at 25 mph. The measured critical speed is 28 mph, while the pace is between 20 and 29. Therefore, it is recommended that the segment remain posted at 25 mph.

(#35) *Sherwood Road from Creston Road to Fontana* - This study segment is currently posted at 40 mph. The measured critical speed is 42 mph. Therefore, it is recommended that the segment remain posted at 40 mph.

(#36) *South River Road from Creston Road to Navajo Avenue*- This study segment is currently posted at 40 mph. The measured critical speed is 45 mph, while the pace is between 36 and 29. The segment is experiencing some accidents. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 40 mph.

(#37) *South River Road from Navajo Avenue to Niblick Road* - This study segment is currently posted at 40 mph. The measured critical speed is 40 mph. The segment is experiencing a high accident history. Therefore, it is recommended that the segment remain posted at 40 mph.

(#38) *South River Road from Niblick Road to Charolais Road* – This study segment is currently posted at 40 mph. The measured critical speed is 45 mph. The segment is experiencing a high accident history. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 40 mph.

(#39) *South Vine Street from 1st Street to SR 46 West*- This study segment is currently posted at 45 mph. The measured critical speed is 52 mph, while the pace is between 43 and 52. Therefore, it is recommended that the segment be raised to 50 mph.

(#40) *Spring Street from 1st Street to 10th Street* - This study segment is currently posted at 30 mph. The measured critical speed is 33 mph, while the pace is between 23 and 32. The segment is experiencing high traffic volumes and a high accident history. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 30 mph.

(#41) *Spring Street from 10th Street to 28th Street* – This study segment is currently posted at 30 mph. The measured critical speed is 31 mph. The segment is experiencing a high accident history. Therefore, it is recommended that the segment remain posted at 30 mph.

(#42) *Spring Street from 28th Street to 36th Street* – This study segment is currently posted at 35 mph. The measured critical speed is 36 mph. The segment is experiencing an accident history. Therefore, it is recommended that the segment remain posted at 35 mph.

(#43) *Stoney Creek Road from Creston Road to Rambouillet Road* - This study segment is currently posted at 30 mph. The measured critical speed is 35 mph, while the pace is between 24 and 33. The segment is experiencing an accident history. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 30 mph.

(#44) *Theatre Drive from SR 46 West to South City Limit* - This study segment is currently posted at 40 mph. The measured critical speed is 41 mph. The segment is experiencing an accident history. Therefore, it is recommended that the segment remain posted at 40 mph.

(#45) *Union Road from North River Road to Kleck Road* – This study segment is currently posted at 40 mph. The measured critical speed is 47 mph. Therefore, it is recommended that the segment's speed limit be raised to 45 mph.

(#46) *Union Road from Kleck Road to Golden Hill Road* – This study segment is currently posted at 40 mph. The measured critical speed is 42 mph. Therefore, it is recommended that the segment remain posted at 40 mph.

(#47) *Union Road from Golden Hill Road to SR 46* – This study segment is currently posted at 45 mph. The measured critical speed is 45 mph. Therefore, it is recommended that the segment remain posted at 45 mph.

(#48) *Union Road from Along Barney Schwartz Park* – This study segment is currently posted at 50 mph. The measured critical speed is 51 mph. Therefore, it is recommended that the segment remain posted at 50 mph.

(#49) *Vine Street from 1st Street to 12th Street* - This study segment is currently posted at 30 mph. The measured critical speed is 34 mph, while the pace is between 26 and 35. The segment is experiencing an accident history. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 30 mph.

(#50) *Vine Street from 12th Street to 17th Street* – This study segment is currently posted at 30 mph. The measured critical speed is 28 mph. Therefore, it is recommended that the segment remain posted at 30 mph.

(#51) *Vine Street from 17th Street to 24th Street*– This study segment is currently posted at 35 mph. The measured critical speed is 31 mph. This study segment is a 2-lane roadway with bike lanes in both directions. The lower speeds may be due to schools at either end of the segment. Therefore, it is recommended that the segment's speed limit be reduced to 30 mph.

(#52) *Vine Street from 24th Street to 32nd Street* – This study segment is currently posted at 35 mph. The measured critical speed is 33 mph. Therefore, it is recommended that the segment remain posted at 35 mph.

(#53) *10th Street from Riverside to Spring Street* – This study segment is currently posted at 25 mph. The measured critical speed is 25 mph. Therefore, it is recommended that the segment remain posted at 25 mph.

(#54) *12th Street from Vine Street to Merryhill Road* – This study segment is currently posted at 30 mph. The measured critical speed is 34 mph. However, this segment now meets the density requirements for a residential district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment's posted speed limit be reduced to 25 mph.

(#55) *13th Street from Spring Street to Riverside* – This study segment is currently posted at 25 mph. The measured critical speed is 26 mph. Therefore, it is recommended that the segment remain posted at 25 mph.

(#56) *16th Street from Spring Street to Riverside* – This study segment is currently posted at 30 mph. The measured critical speed is 30 mph. Therefore, it is recommended that the segment remain posted at 30 mph.

(#57) *21st Street from Spring Street to Riverside* – This study segment is currently posted at 25 mph. The measured critical speed is 24 mph. Therefore, it is recommended that the segment remain posted at 25 mph.

(#58) *24th Street from West City Limit to Spring Street* – This study segment is currently posted at 35 mph. The measured critical speed is 39 mph, while the pace is between 29 and 38. The segment is experiencing a high accident history. Therefore, pursuant to CVC 21400 and CA MUTCD Section 2B.13(12c), which allow for a 5mph reduction from the critical speed, it is recommended that the segment remain posted at 35 mph.

(#59) *24th Street from Spring Street to US 101*– This study segment is currently posted at 25 mph. The measured critical speed is 37 mph (measured approximately 300 feet west of the railroad overpass). This two-lane roadway is metered by traffic signals at both ends. This roadway is narrow in places and has substantial vertical curvature at the existing railroad overpass. The eastern portion of the segment has many uncontrolled business access points with poor sight-distance due to the horizontal curvature of the street. And at times, the fairgrounds can generate significant pedestrian traffic in the area. The segment has experienced a high number of accidents over the past 3 years. This segment now meets the commercial density requirements for a commercial district as defined in the California Vehicle Code 627(c)(1). Therefore, it is recommended that the segment remain posted at 25 mph.

APPENDIX A:
SAMPLE DATA COLLECTION FORM



RADAR SPOT SPEED SURVEY

Job #: _____

Location: _____

Observer: _____ Date: _____

Type of Check: Both Directions- Yes No Directional: N/B S/B E/B W/B

Roadway Type: A/C Dirt Lanes _____ Left Turn Lane- Yes No Median- Yes No

Road Surface: Good Fair Poor Existing Speed Limit: _____ Paved Width: _____

Time of Day: Start _____ End _____ School Zone: Yes No 55mph Posted: Yes No

Weather: _____

Comments: _____

	1	5	10	15	20	25	30	35	
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APPENDIX B:
SPEED SURVEY CALCULATIONS

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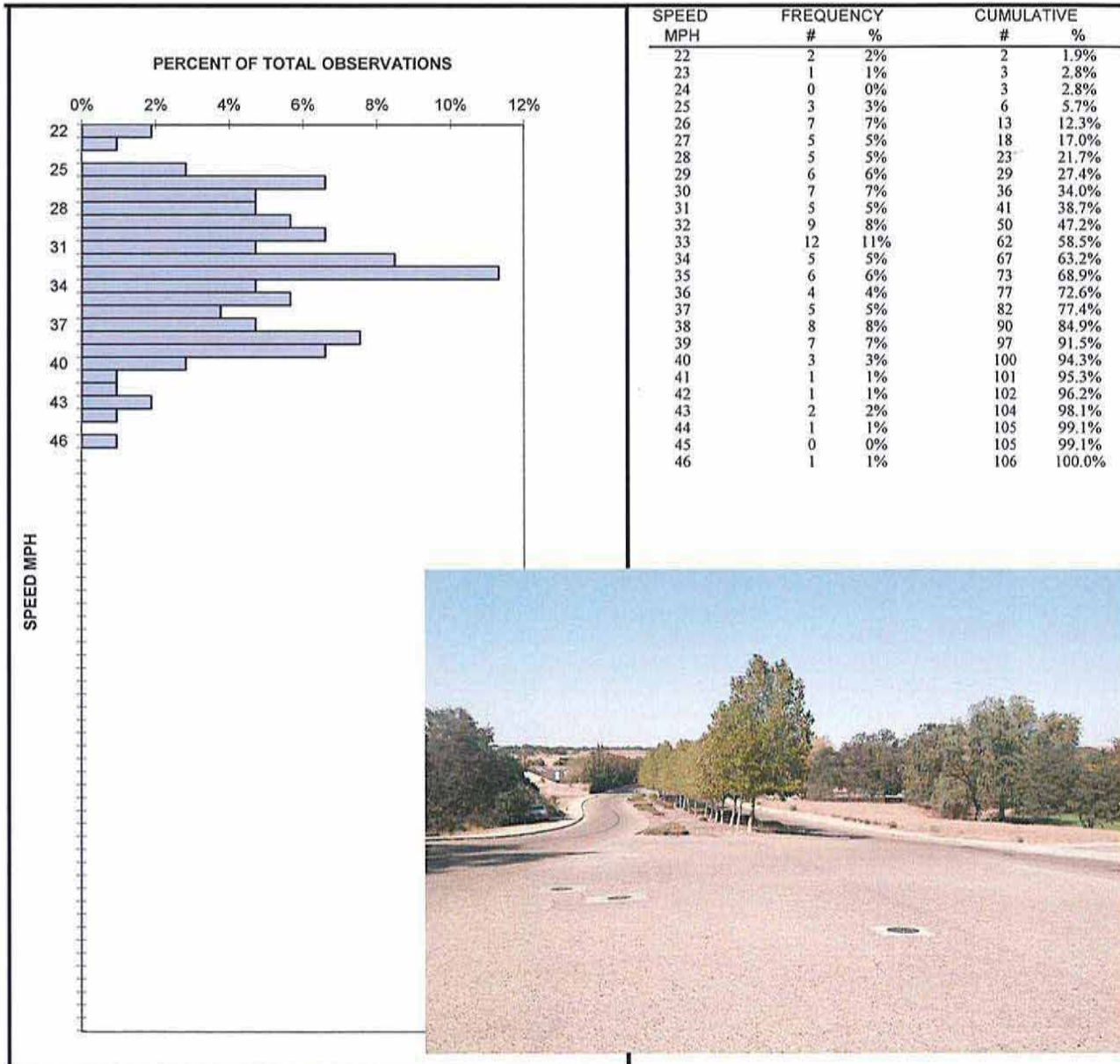
LOCATION: #1 AIRPORT ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH RAISED MEDIAN
PAVED WIDTH: 80 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

MEADOWLARK TO LINNE

DATE: 10/16/2013
DAY: WEDNESDAY
TIME: 10:45 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		30 - 39	33	39
	<= 69% > 31%		< 27% IN 64% > 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL ARTERIAL WITH NO HOMES FRONTING ROADWAY.
TWO LANES NORTH OF RIATA CT, FOUR LANES SOUTH. VEGITATION IN MEDIAN LIMITS SIGHT DISTANCE IN SOME LOCATIONS. SIDEWALKS BUT NO BIKE FACILITIES.



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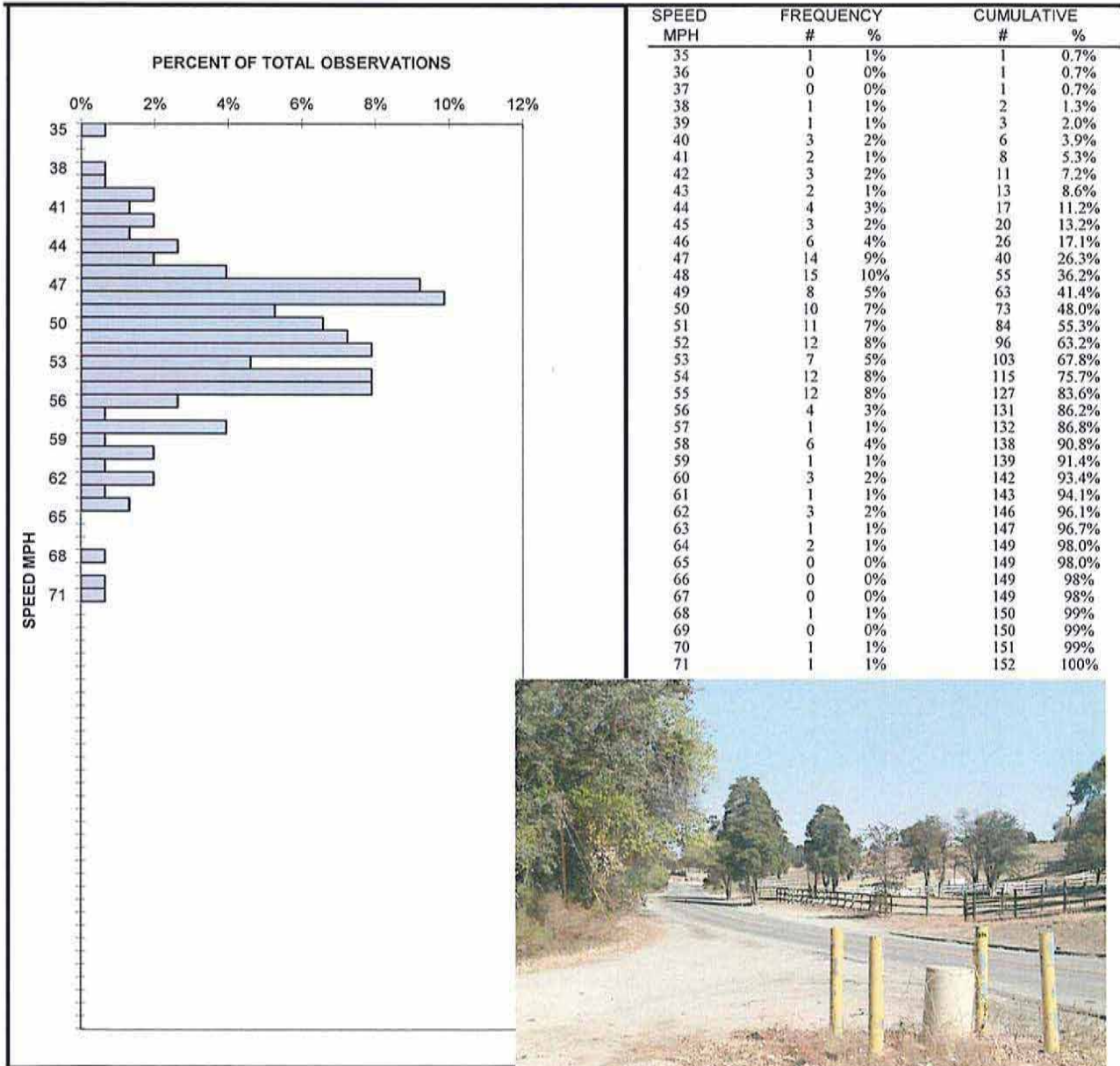
LOCATION: #2 AIRPORT ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANE
PAVED WIDTH: 20-26 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SR 46 TO BUENA VISTA DRIVE

DATE: 10/8/2013
DAY: TUESDAY
TIME: 9:00 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
55	None	46 - 55	51	56
	<= > N/A N/A	< IN > 13% 70% 16%		<= > 85% 15%

COMMENTS/UNUSUAL CONDITIONS RURAL AREA, NO BIKE OR PEDESTRIAN FACILITIES
AUXILIARY LANES AT SR 46, WATER PARK, RV PARK AND DRY CREEK ROAD



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LOCATION: #3 APPALOOSA DR

NIBLICK TO RED CLOUD

DIRECTION: NORTH-SOUTH

DATE: 10/15/2013

ROAD X-SECTION: 2 LANES WITH INTERMITTANT PAINTED MEDIAN

DAY: TUESDAY

PAVED WIDTH: 40 Feet

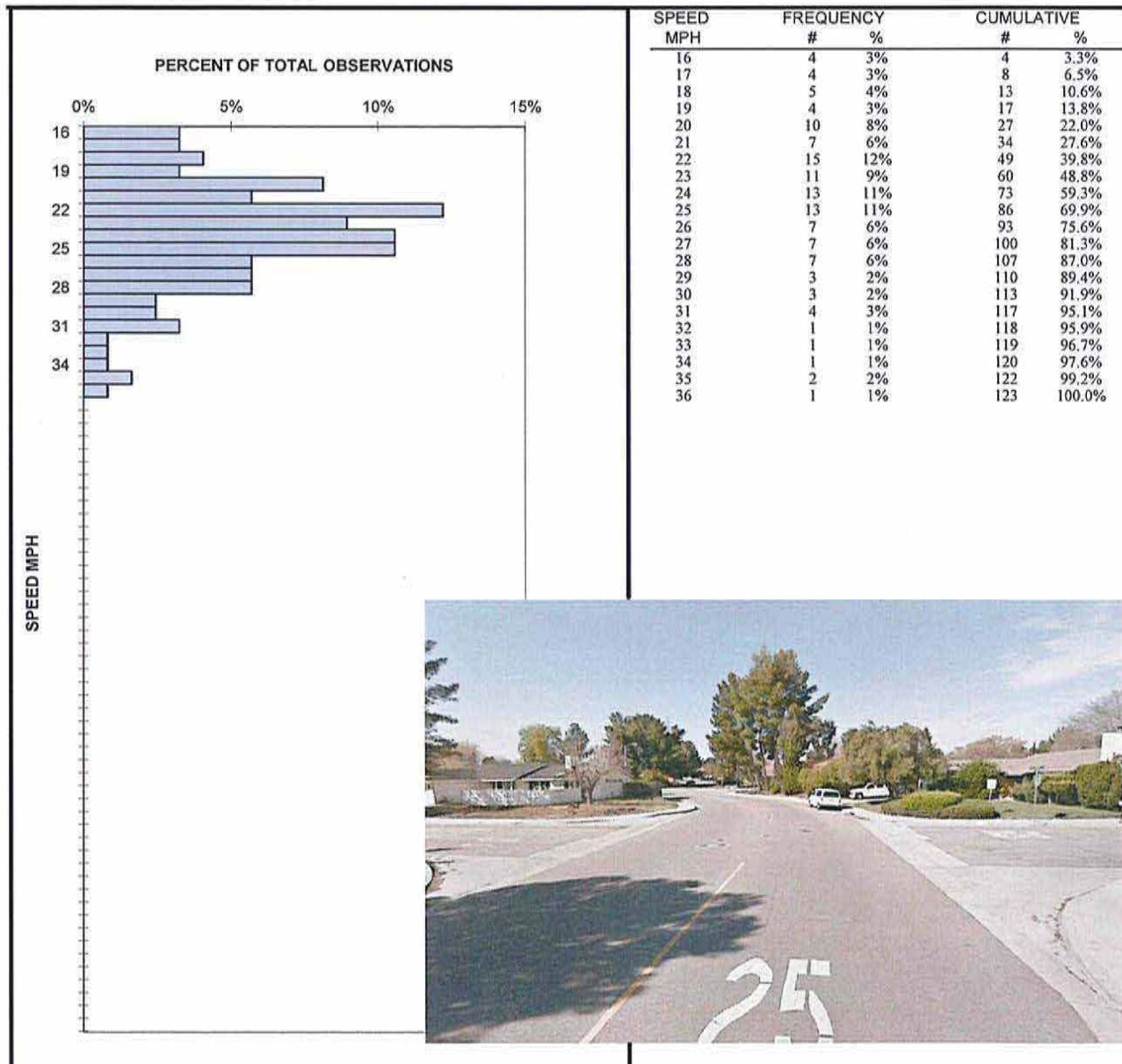
TIME: 3:15 PM

BUSINESS OR RESIDENCE DISTRICT: YES

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		19 - 28	24	28
	<= 70% > 30%		< IN >		<= 85% > 15%
			11% 76% 13%		

COMMENTS/UNUSUAL CONDITIONS HOUSING DENSITY MEETS REQUIREMENTS FOR RESIDENTIAL DISTRICT. SEVERAL SPEED BUMPS, PARKS AT EITHER END OF SEGMENT. SCHOOL AT NORTH END OF SEGMENT. TWO RIGHT ANGLE TURNS SIGNED WITH W1-3 REVERSE TURN SIGN (15 MPH ADVISED)



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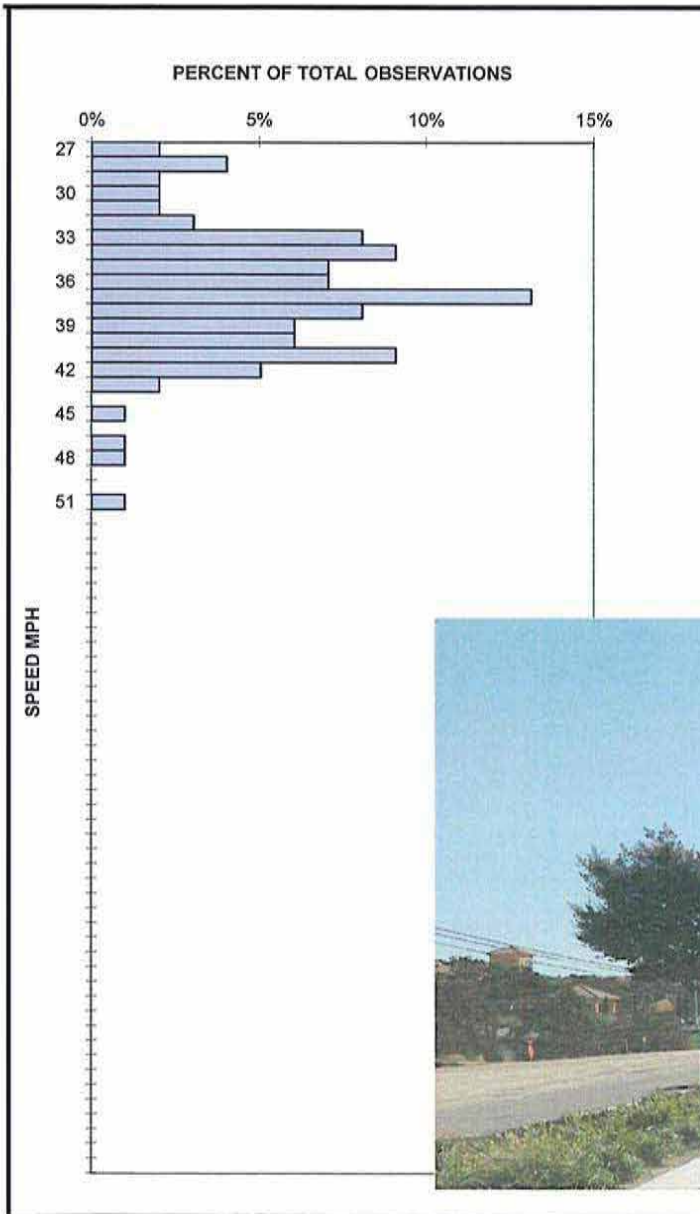
LOCATION: #4 BUENA VISTA DRIVE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANE
PAVED WIDTH: 47-80 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SR 46 TO CITY LIMIT

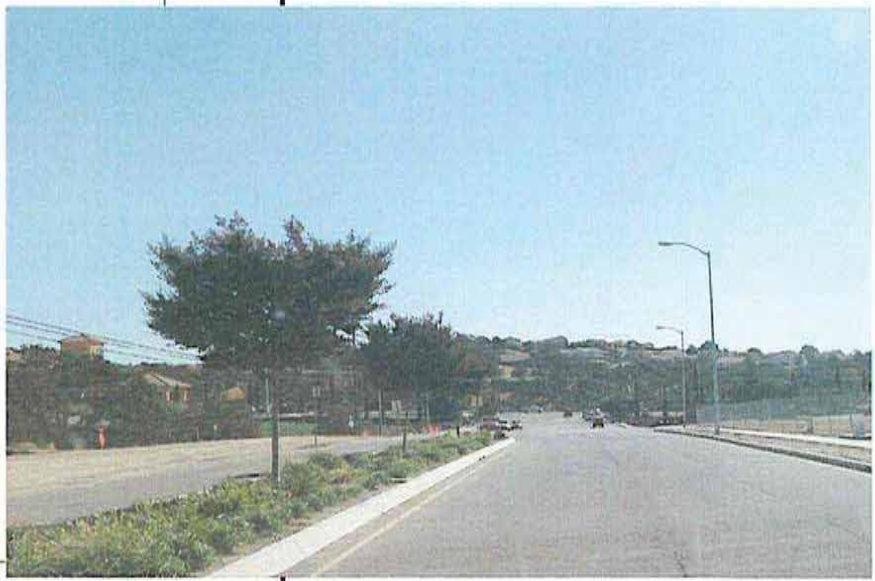
DATE: 10/8/2013
DAY: TUESDAY
TIME: 12:15 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		33 - 42	37	41
	<= 80% >	> 20%	< IN >		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS PARTIAL PLANTED MEDIAN. LIMITED ACCESS POINTS.
UNFINISHED NORTHBOUND SECTION BETWEEN EXPERIMENTAL STATION ROAD AND DALLONS DRIVE.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
27	2	2%	2	2.0%
28	4	4%	6	6.1%
29	2	2%	8	8.1%
30	2	2%	10	10.1%
31	2	2%	12	12.1%
32	3	3%	15	15.2%
33	8	8%	23	23.2%
34	9	9%	32	32.3%
35	7	7%	39	39.4%
36	7	7%	46	46.5%
37	13	13%	59	59.6%
38	8	8%	67	67.7%
39	6	6%	73	73.7%
40	6	6%	79	79.8%
41	9	9%	88	88.9%
42	5	5%	93	93.9%
43	2	2%	95	96.0%
44	0	0%	95	96.0%
45	1	1%	96	97.0%
46	0	0%	96	97.0%
47	1	1%	97	98.0%
48	1	1%	98	99.0%
49	0	0%	98	99.0%
50	0	0%	98	99.0%
51	1	1%	99	100.0%



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LOCATION: #5 CHAROLAIS ROAD

S RIVER RD TO CRESTON

DIRECTION: EAST-WEST

DATE: 10/14/2013

ROAD X-SECTION: 2 LANES WITH PAINTED MEDIAN

DAY: MONDAY

PAVED WIDTH: 40 Feet

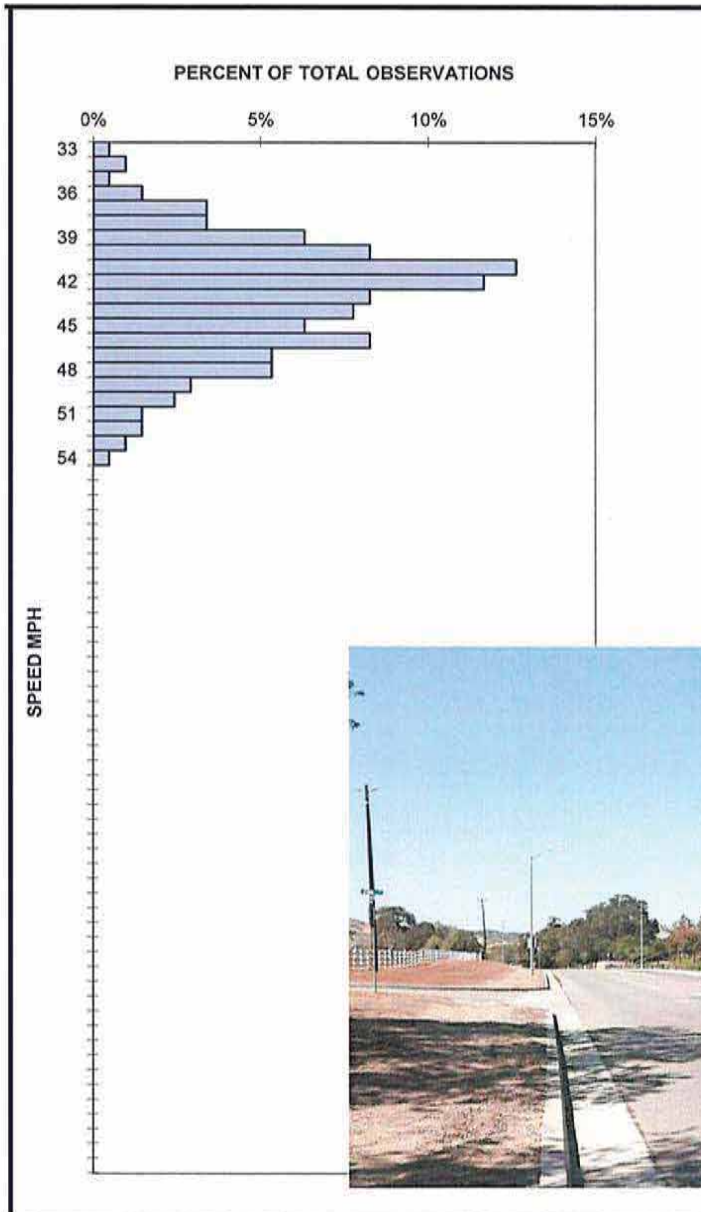
TIME: 12:45 PM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	40		39 - 48	43	48
	<= 25% > 75%		< IN > 10% 80% 10%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA, TRANSITION FROM SUBURBAN (NORTH OF ROAD) TO RURAL (SOUTH OF ROAD). FEW BUILDINGS FRONTING ROADWAY. SPEEDS HIGHER THAN POSTED LIMIT SIGNED BIKE ROUTE. CONTINUOUS SIDEWALK ON NORTH SIDE OF ROADWAY.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
33	1	0%	1	0.5%
34	2	1%	3	1.5%
35	1	0%	4	1.9%
36	3	1%	7	3.4%
37	7	3%	14	6.8%
38	7	3%	21	10.2%
39	13	6%	34	16.5%
40	17	8%	51	24.8%
41	26	13%	77	37.4%
42	24	12%	101	49.0%
43	17	8%	118	57.3%
44	16	8%	134	65.0%
45	13	6%	147	71.4%
46	17	8%	164	79.6%
47	11	5%	175	85.0%
48	11	5%	186	90.3%
49	6	3%	192	93.2%
50	5	2%	197	95.6%
51	3	1%	200	97.1%
52	3	1%	203	98.5%
53	2	1%	205	99.5%
54	1	0%	206	100.0%



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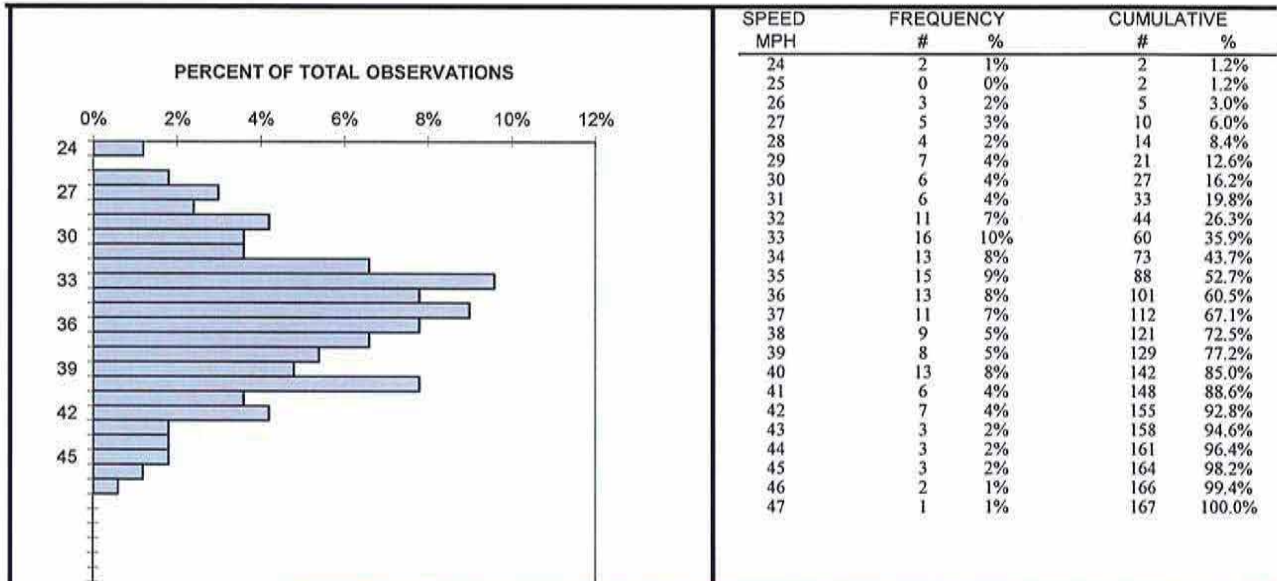
LOCATION: #6 COMMERCE WAY
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 60-80 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SHERWOOD TO SCOTT

DATE: 10/15/2013
DAY: TUESDAY
TIME: 12:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		31 - 40	35	40
	<= 85% >	> 15%	< IN >		<= 85% > 15%
			16% 69% 15%		

COMMENTS/UNUSUAL CONDITIONS WIDE TWO LANE FACILITY WITH PARKING IN AN INDUSTRIAL AREA. 60 FEET WIDE ALONG NORTH END OF SEGMENT, 80 FEET ALONG REMAINDER. LARGELY COMPLETE SIDEWALK SYSTEM, NO BIKE FACILITIES.



SPEED MPH



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LOCATION: #7 CRESTON ROAD

SOUTH RIVER ROAD TO ROLLING HILLS ROAD

DIRECTION: EAST-WEST

DATE: 10/9/2013

ROAD X-SECTION: 2-4 LANES

DAY: THURSDAY

PAVED WIDTH: VARIES

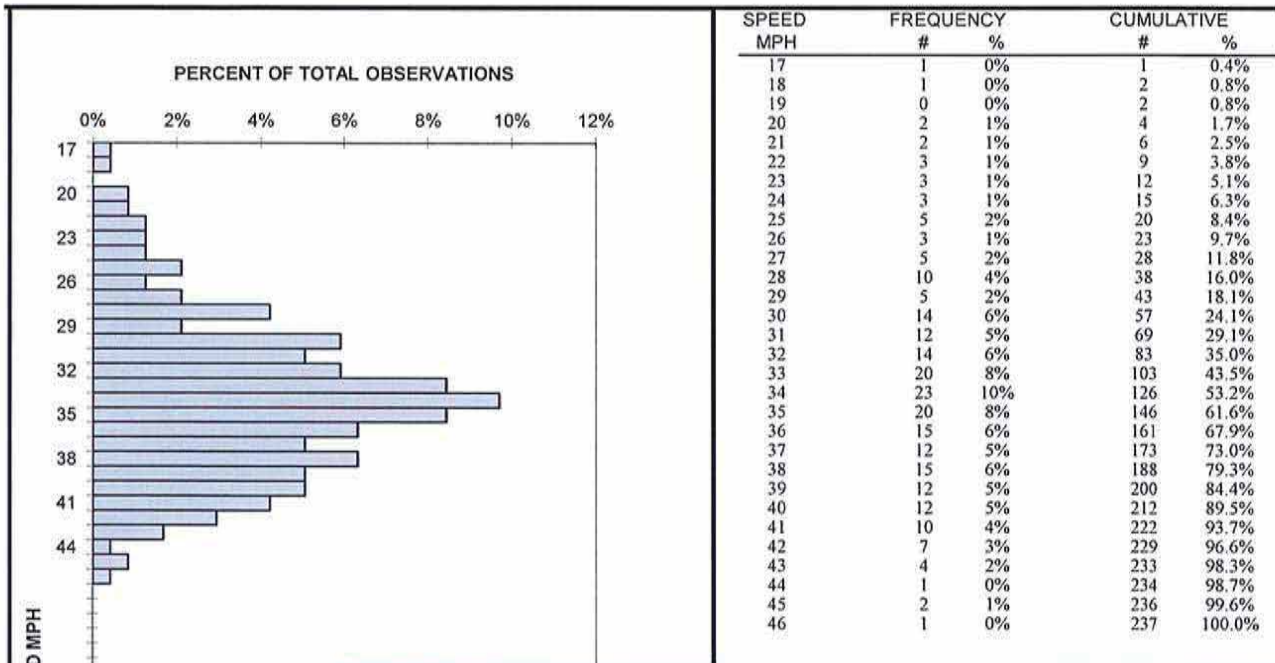
TIME: 9:30 PM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		30 - 39	34	40
	<= 62% > 38%		< IN > 18% 66% 16%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS MIXED RESIDENTIAL AND COMMERCIAL DISTRICT. FIVE LANES AT RIVER RD, THREE EAST OF WALNUT DR TWO LANES BETWEEN THESE AREAS. SCHOOL ZONES IN SECTION WITH 4 PED CROSSING BEACONS. BIKE LANES BOTH DIRECTIONS. SIDEWALKS MOSTLY COMPLETE SOUTH OF ROAD.



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LOCATION: # 8 CRESTON ROAD

ROLLING HILLS TO NIBLICK

DIRECTION: NORTH-SOUTH

DATE: 10/10/2013

ROAD X-SECTION: 4 LANES WITH INTERMITTANT PAINTED MEDIAN

DAY: THURSDAY

PAVED WIDTH: 62 Feet

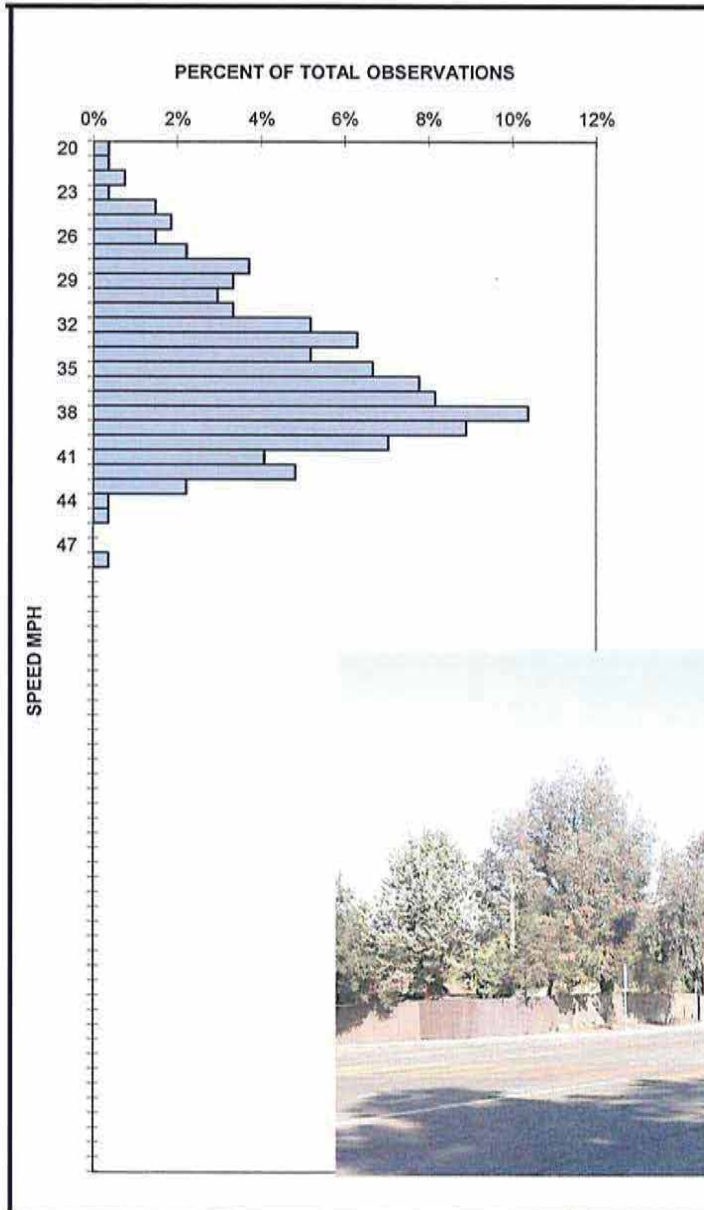
TIME: 11:00 AM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		32 - 41	35	40
	<= 46% > 54%		< IN > 22% 70% 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS FOUR LANE WITH MEDIAN, WITH SWEEPING CURVE FROM WEST TO SOUTH. MIX OF RESIDENTIAL, COMMERCIAL AND SCHOOL USES ALONG ROADWAY. ONE SCHOOL PED CROSSING NB #2 LANE UNCONSTRUCTED ACROSS FROM SCHOOL. WIDE SHOULDERS PROVIDE SOME MARKED BIKE LANES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
20	1	0%	1	0.4%
21	1	0%	2	0.7%
22	2	1%	4	1.5%
23	1	0%	5	1.9%
24	4	1%	9	3.3%
25	5	2%	14	5.2%
26	4	1%	18	6.7%
27	6	2%	24	8.9%
28	10	4%	34	12.6%
29	9	3%	43	15.9%
30	8	3%	51	18.9%
31	9	3%	60	22.2%
32	14	5%	74	27.4%
33	17	6%	91	33.7%
34	14	5%	105	38.9%
35	18	7%	123	45.6%
36	21	8%	144	53.3%
37	22	8%	166	61.5%
38	28	10%	194	71.9%
39	24	9%	218	80.7%
40	19	7%	237	87.8%
41	11	4%	248	91.9%
42	13	5%	261	96.7%
43	6	2%	267	98.9%
44	1	0%	268	99.3%
45	1	0%	269	99.6%
46	0	0%	269	99.6%
47	0	0%	269	99.6%
48	1	0%	270	100.0%



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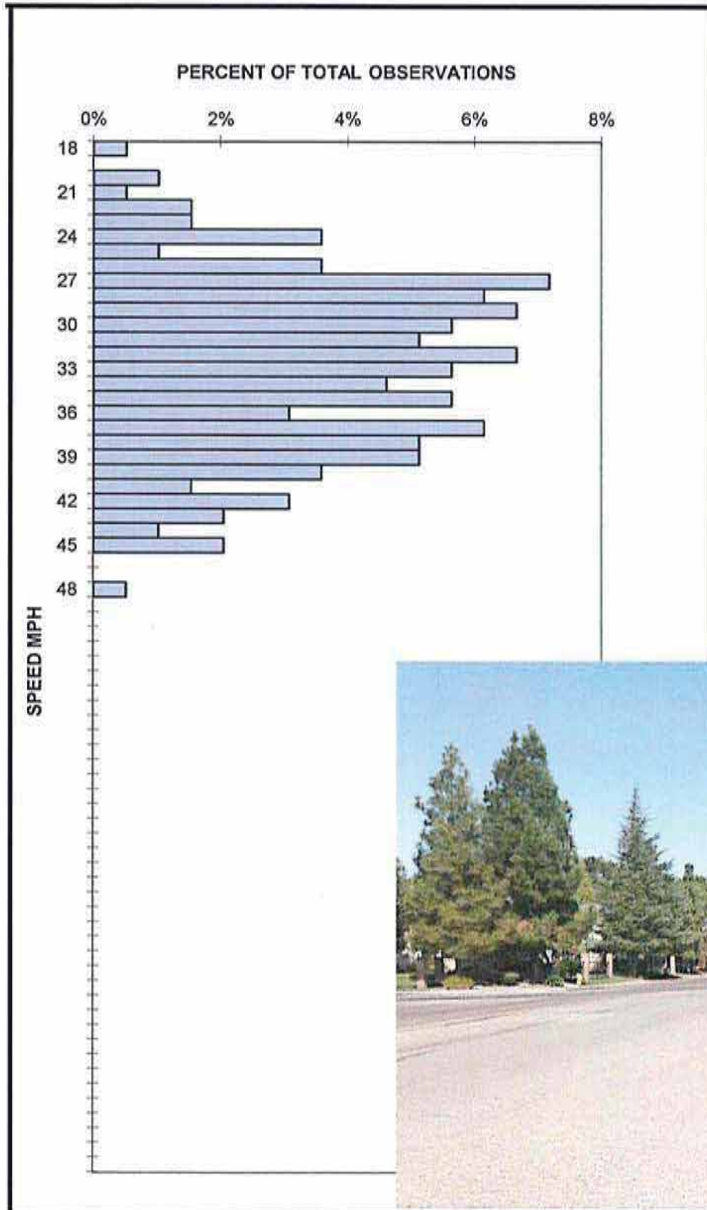
LOCATION: #9 CRESTON ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 -4 LANES
PAVED WIDTH: VARIES
BUSINESS OR RESIDENCE DISTRICT:

NIBLICK TO MEADOWLARK

DATE: 10/10/2013
DAY: THURSDAY
TIME: 1:30 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		26 - 35	33	39
	<= >		< IN >		<= >
	67% 33%		10% 57% 33%		85% 15%

COMMENTS/UNUSUAL CONDITIONS **LARGELY RESIDENTIAL ARTERIAL. SOME PARK FRONTAGE. PIECE-MEAL DEVELOPMENT CREATES A CROSSECTION VARYING FROM 2-4 LANES. NO MARKED BIKE LANES IN SEGMENT SOME DISCONTINUITY, BUT SIDEWALK SYSTEM LARGELY DEVELOPED.**



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	1	1%	1	0.5%
19	0	0%	1	0.5%
20	2	1%	3	1.5%
21	1	1%	4	2.1%
22	3	2%	7	3.6%
23	3	2%	10	5.1%
24	7	4%	17	8.7%
25	2	1%	19	9.7%
26	7	4%	26	13.3%
27	14	7%	40	20.5%
28	12	6%	52	26.7%
29	13	7%	65	33.3%
30	11	6%	76	39.0%
31	10	5%	86	44.1%
32	13	7%	99	50.8%
33	11	6%	110	56.4%
34	9	5%	119	61.0%
35	11	6%	130	66.7%
36	6	3%	136	69.7%
37	12	6%	148	75.9%
38	10	5%	158	81.0%
39	10	5%	168	86.2%
40	7	4%	175	89.7%
41	3	2%	178	91.3%
42	6	3%	184	94.4%
43	4	2%	188	96.4%
44	2	1%	190	97.4%
45	4	2%	194	99.5%
46	0	0%	194	99.5%
47	0	0%	194	99.5%
48	1	1%	195	100.0%



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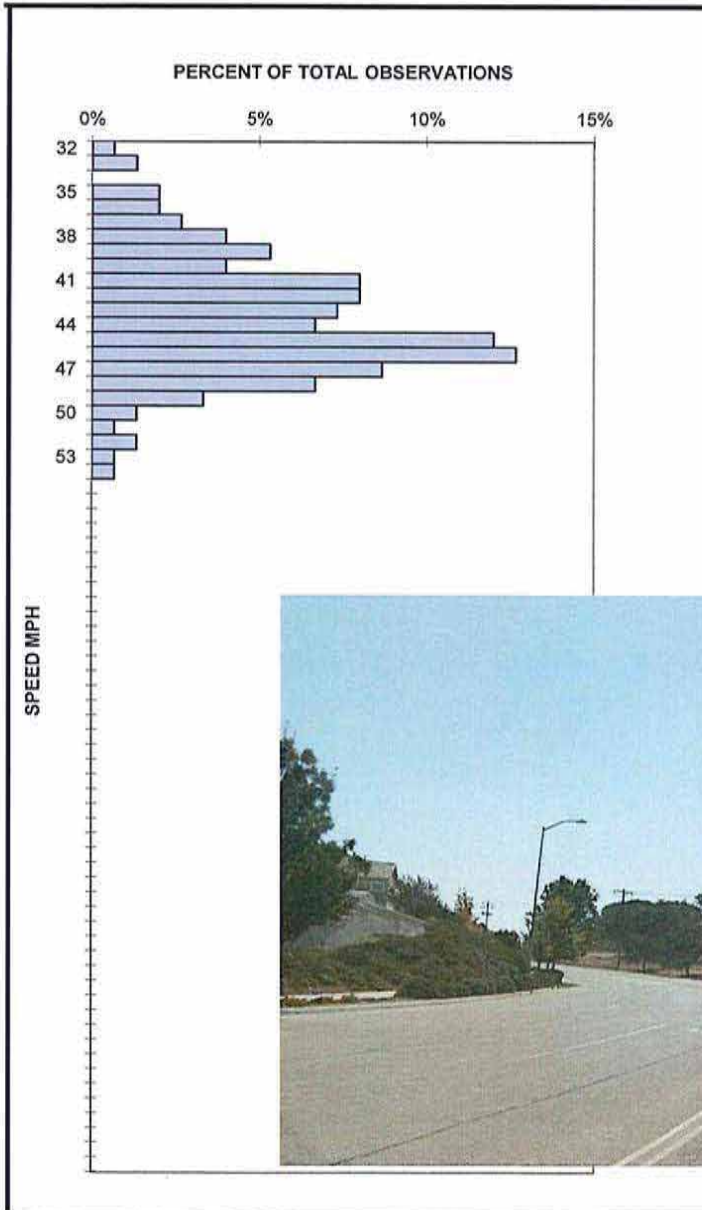
LOCATION: # 10 CRESTON ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 3-4 LANES
PAVED WIDTH: 50-72 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

MEADOWLARK TO CITY LIMIT

DATE: 10/10/2013
DAY: THURSDAY
TIME: 2:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	45		39 - 48	44	47
	<= >		< IN >		<= >
	64% 36%		13% 79% 8%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL SUBURBAN TO RURAL TRANSITION AREA.
NORTHBOUND TWO LANES SOUTH OF CHAROLAIS, ONE LANE NORTH. SOUTHBOUND ONE LANE SOUTH OF CHAROLAIS, TWO LANES NORTH. EAST SIDE SIDEWALK AND BIKE LANE, LIMITED WEST SIDE FACILITIES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
32	1	1%	1	0.7%
33	2	1%	3	2.0%
34	0	0%	3	2.0%
35	3	2%	6	4.0%
36	3	2%	9	6.0%
37	4	3%	13	8.7%
38	6	4%	19	12.7%
39	8	5%	27	18.0%
40	6	4%	33	22.0%
41	12	8%	45	30.0%
42	12	8%	57	38.0%
43	11	7%	68	45.3%
44	10	7%	78	52.0%
45	18	12%	96	64.0%
46	19	13%	115	76.7%
47	13	9%	128	85.3%
48	10	7%	138	92.0%
49	5	3%	143	95.3%
50	2	1%	145	96.7%
51	1	1%	146	97.3%
52	2	1%	148	98.7%
53	1	1%	149	99.3%
54	1	1%	150	100.0%



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LOCATION: #11 DALLONS DRIVE

BUENA VISTA TO GOLDEN HILL

DIRECTION: EAST-WEST

DATE: 10/8/2013

ROAD X-SECTION: 2 LANE

DAY: TUESDAY

PAVED WIDTH: 44-47 Feet

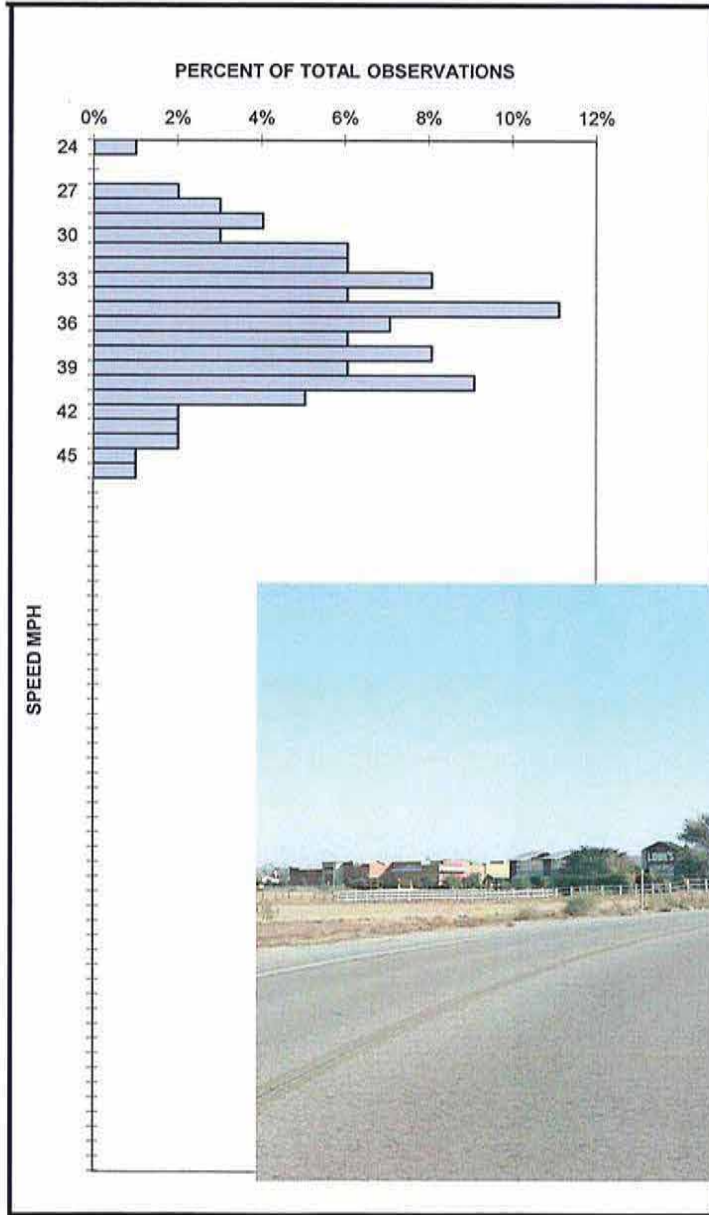
TIME: 1:00 PM

BUSINESS OR RESIDENCE DISTRICT: NO

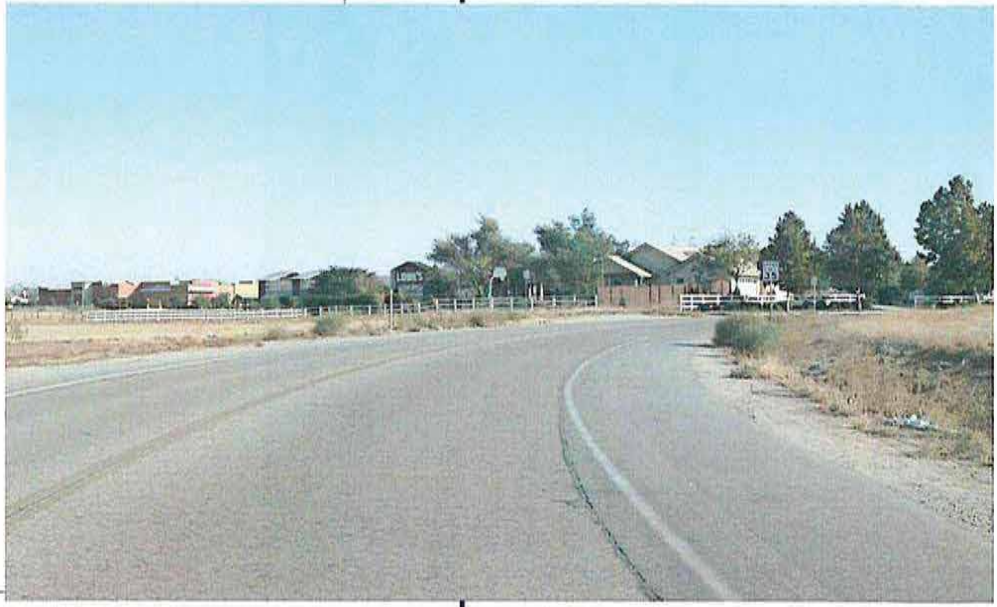
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		31 - 40	36	40
	<= >		< IN >		<= >
	51% 49%		13% 74% 13%		85% 15%

COMMENTS/UNUSUAL CONDITIONS CONTINUOUS HORIZONTAL CURVES THROUGHOUT WEST 2/3 OF THE SEGMENT. CONTINUOUS BIKE LANES. INCOMPLETE SIDEWALK NETWORK ON BOTH SIDES OF STREET. COMMERCIAL DEVELOPMENT ON EAST END, LOW DENSITY RES CENTRAL, COLLEGE ON WEST END.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
24	1	1%	1	1.0%
25	0	0%	1	1.0%
26	0	0%	1	1.0%
27	2	2%	3	3.0%
28	3	3%	6	6.1%
29	4	4%	10	10.1%
30	3	3%	13	13.1%
31	6	6%	19	19.2%
32	6	6%	25	25.3%
33	8	8%	33	33.3%
34	6	6%	39	39.4%
35	11	11%	50	50.5%
36	7	7%	57	57.6%
37	6	6%	63	63.6%
38	8	8%	71	71.7%
39	6	6%	77	77.8%
40	9	9%	86	86.9%
41	5	5%	91	91.9%
42	2	2%	93	93.9%
43	2	2%	95	96.0%
44	2	2%	97	98.0%
45	1	1%	98	99.0%
46	1	1%	99	100.0%



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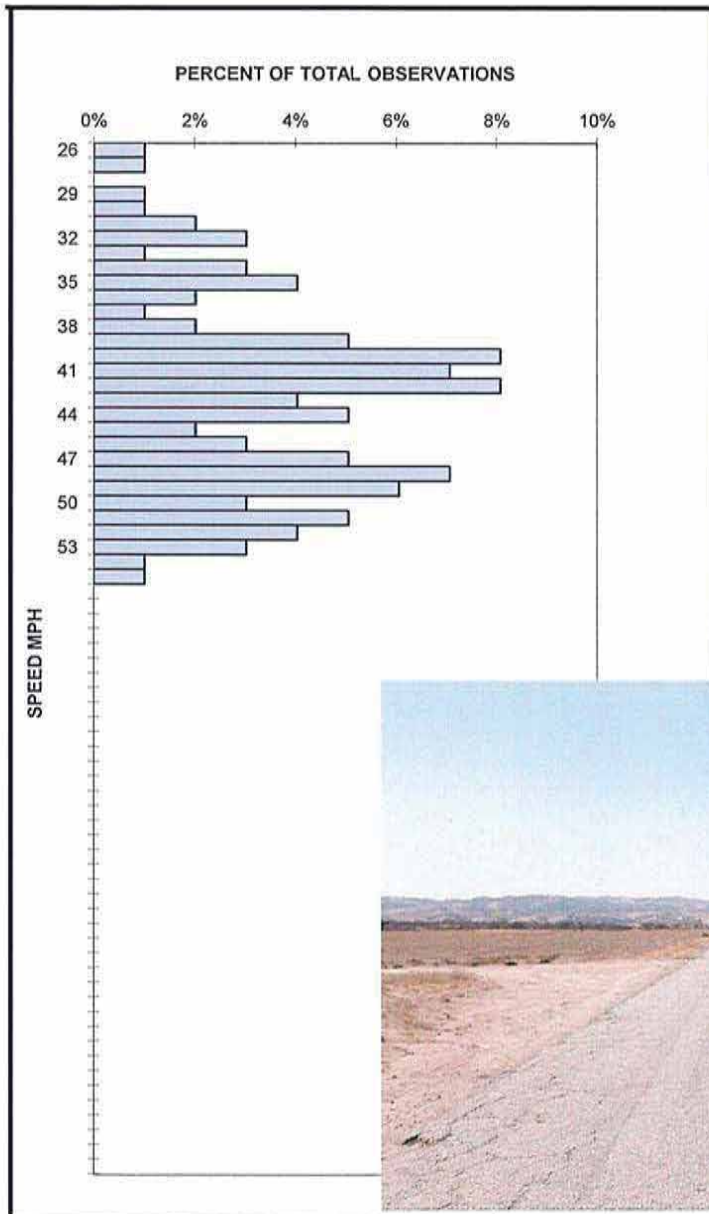
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LOCATION: #12 DRY CREEK ROAD
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANE
PAVED WIDTH: 20 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

AIRPORT ROAD TO AEROTECH CENTER WAY
DATE: 10/8/2013
DAY: TUESDAY
TIME: 10:15 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
50	None		40 - 49	43	50
	<= N/A > N/A		< IN >		<= >
			27% 56% 17%		85% 15%

COMMENTS/UNUSUAL CONDITIONS LOW VOLUME RURAL ROAD WITH NO CENTERLINE. PAVEMENT IN POOR CONDITION. LIGHT INDUSTRY AND RURAL RESIDENTIAL ALONG ROADWAY. W1-5 (NO ADVISORY SPEED) EASTBOUND WEST OF AEROTECH. 35 MPH ADVISORY (WARNING SIGN MISSING?) WESTBOUND WEST OF SEGMENT



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
26	1	1%	1	1.0%
27	1	1%	2	2.0%
28	0	0%	2	2.0%
29	1	1%	3	3.0%
30	1	1%	4	4.0%
31	2	2%	6	6.1%
32	3	3%	9	9.1%
33	1	1%	10	10.1%
34	3	3%	13	13.1%
35	4	4%	17	17.2%
36	2	2%	19	19.2%
37	1	1%	20	20.2%
38	2	2%	22	22.2%
39	5	5%	27	27.3%
40	8	8%	35	35.4%
41	7	7%	42	42.4%
42	8	8%	50	50.5%
43	4	4%	54	54.5%
44	5	5%	59	59.6%
45	2	2%	61	61.6%
46	3	3%	64	64.6%
47	5	5%	69	69.7%
48	7	7%	76	76.8%
49	6	6%	82	82.8%
50	3	3%	85	85.9%
51	5	5%	90	90.9%
52	4	4%	94	94.9%
53	3	3%	97	98.0%
54	1	1%	98	99.0%
55	1	1%	99	100.0%



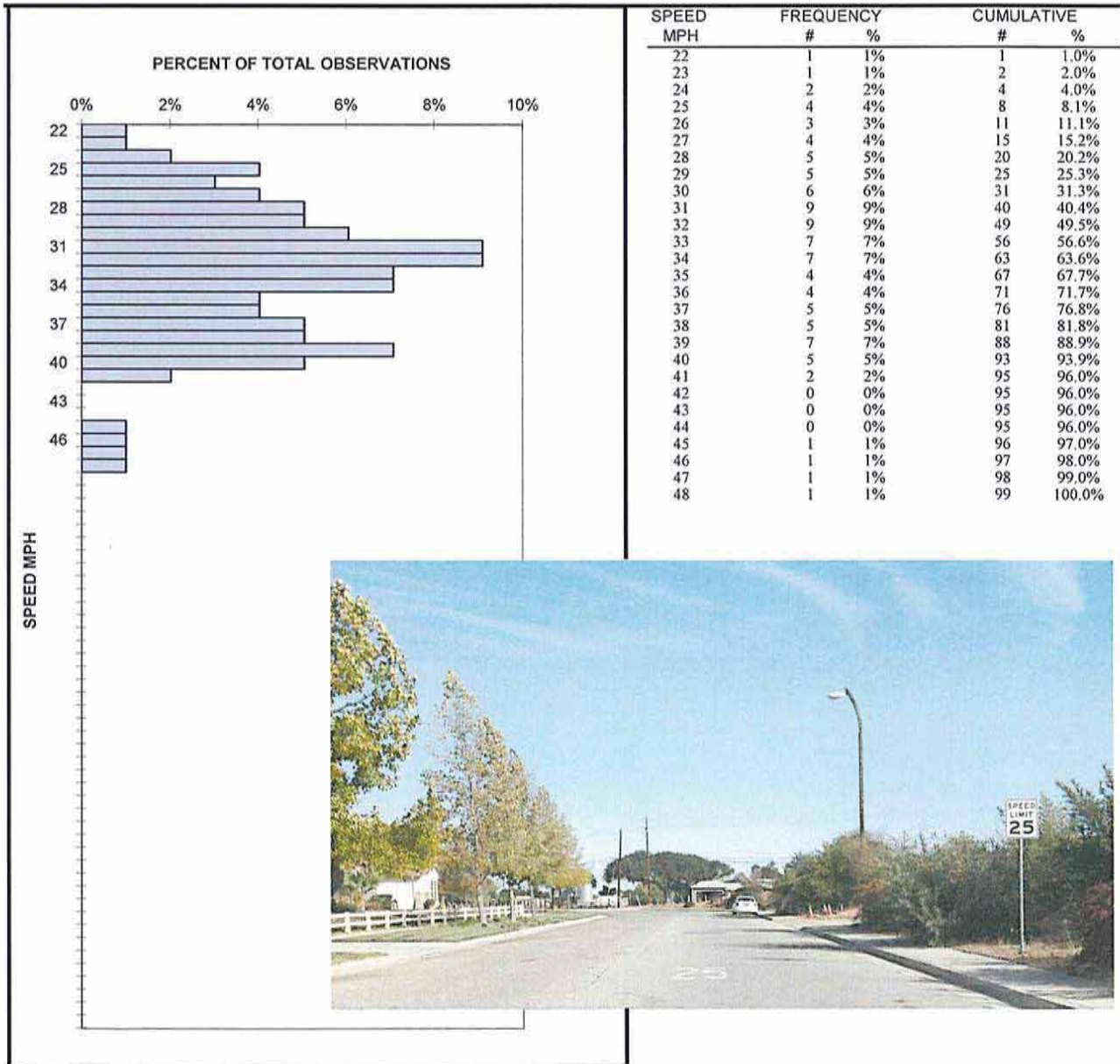
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LOCATION: #13 EXPERIMENTAL STATION ROAD	RIVER OAKS DR TO BUENA VISTA DR
DIRECTION: EAST-WEST	DATE: 10/8/2013
ROAD X-SECTION: 2 LANE	DAY: TUESDAY
PAVED WIDTH: 35 Feet	TIME: 2:00 PM
BUSINESS OR RESIDENCE DISTRICT: YES	OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		30 - 39	33	39
	<= 8% > 92%		< IN > 25% 64% 11%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS
BUT 25? RESIDENTIAL DENSITY IS ONLY MET FOR THE FIRST 1/4 MILE. TREES ARE AN ISSUE, BUT THE LIMIT SHOULD BE IN THE PACE SPEED AT LEAST...



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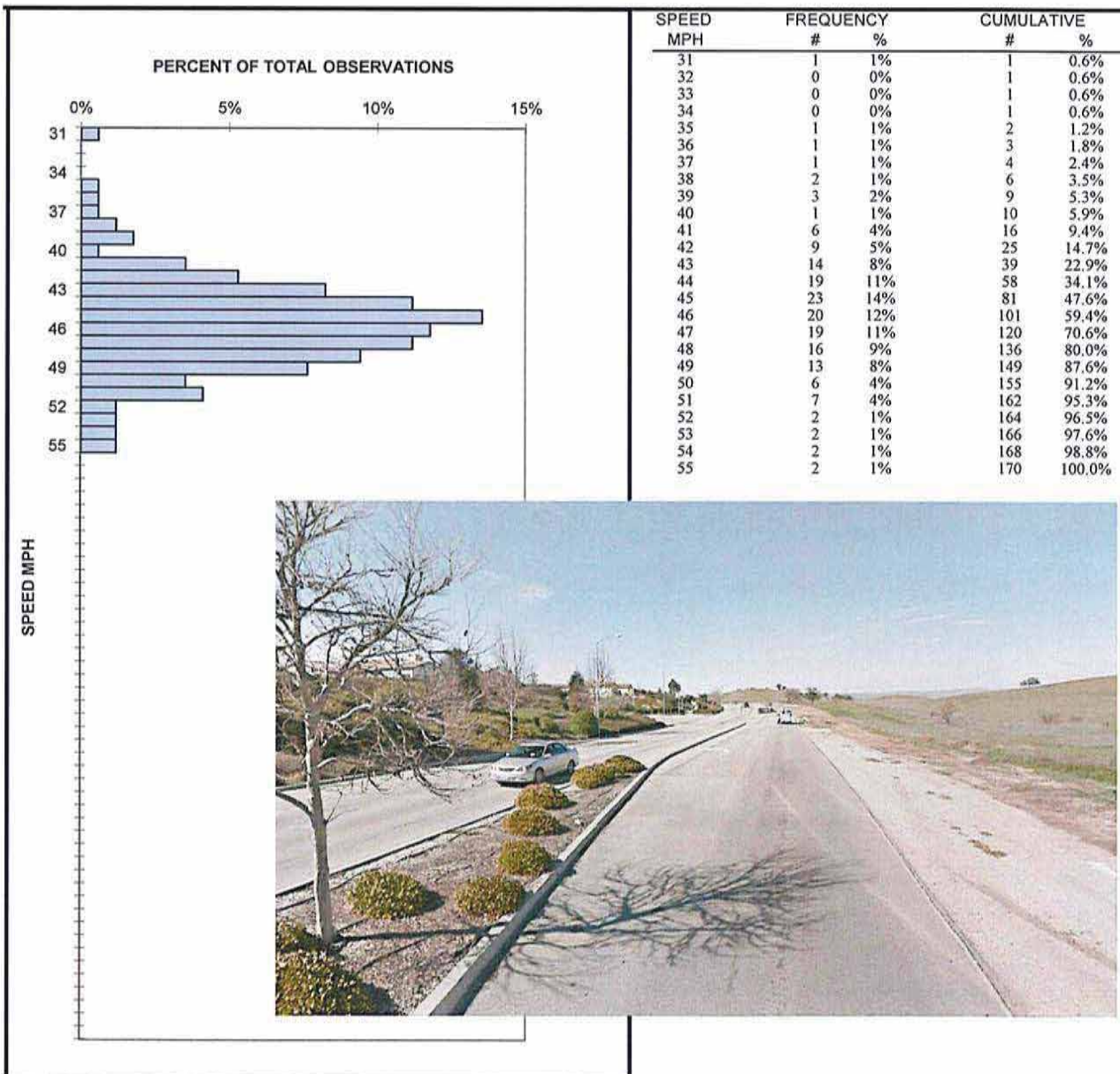
LOCATION: #14 GOLDEN HILL ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANE
PAVED WIDTH: 50-78 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO ROLLING HILLS

DATE: 10/7/2013
DAY: MONDAY
TIME: 3:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	45		42 - 51	46	49
	<= 48% >		< IN >		<= 85% >
			9% 86% 5%		15%

COMMENTS/UNUSUAL CONDITIONS 2 LANES SOUTHBOUND, 1 LANE NORTHBOUND. RAISED OR STRIPED MEDIAN THROUGHOUT SEGMENT. SEPARATED SIDEWALK AND BIKE LANE ON WEST SIDE. SOFT SHOULDER . FIVE ACCESS POINTS ON ~1 MILE SECTION.



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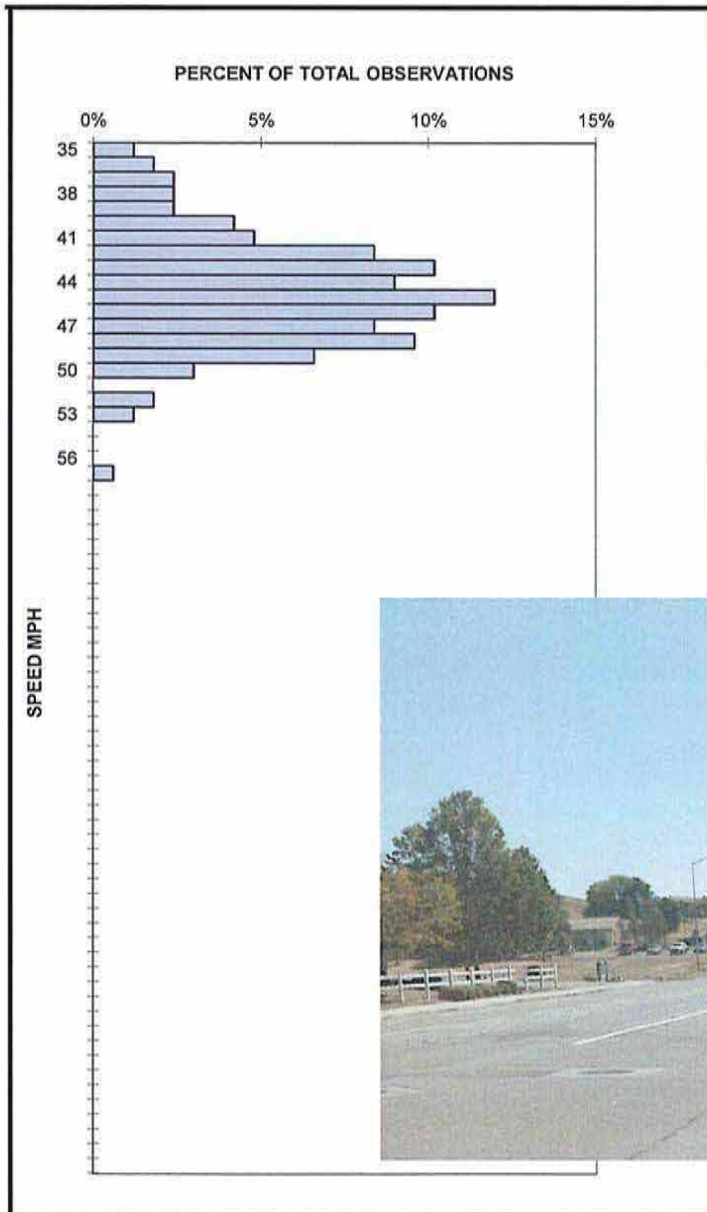
LOCATION: #15 GOLDEN HILL ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 3-5 LANES
PAVED WIDTH: 50-78 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

ROLLING HILLS RD TO UNION RD

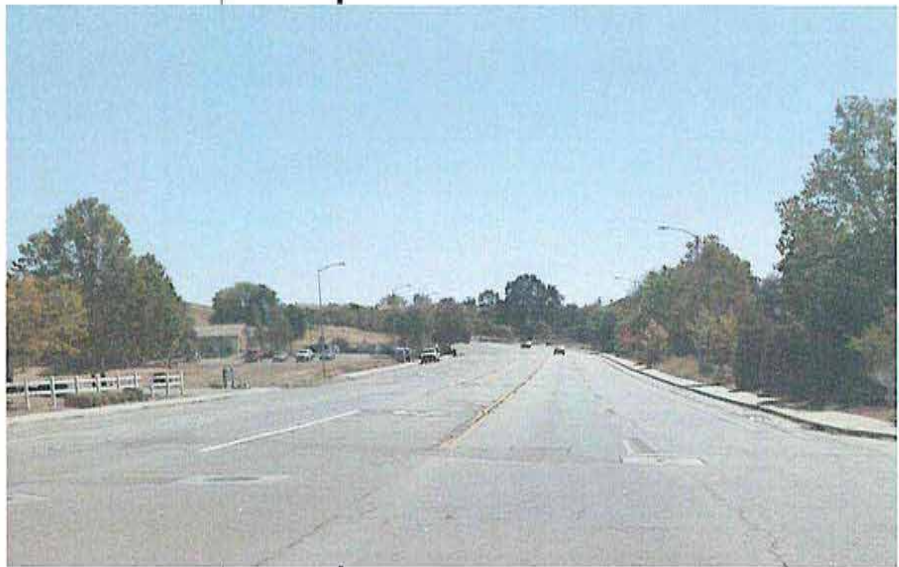
DATE: 10/7/2013
DAY: MONDAY
TIME: 1:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	45		40 - 49 < IN > 10% 83% 7%	45	48 <= > 85% 15%
	<= > 59% 41%				

COMMENTS/UNUSUAL CONDITIONS 2 LANES SOUTHBOUND, 1 LANE NORTHBOUND, TWO-WAY LEFT-TURN LANE THROUGHOUT. INTERMITTANT BUILOUT OF EAST SIDE WITH



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
35	2	1%	2	1.2%
36	3	2%	5	3.0%
37	4	2%	9	5.4%
38	4	2%	13	7.8%
39	4	2%	17	10.2%
40	7	4%	24	14.4%
41	8	5%	32	19.2%
42	14	8%	46	27.5%
43	17	10%	63	37.7%
44	15	9%	78	46.7%
45	20	12%	98	58.7%
46	17	10%	115	68.9%
47	14	8%	129	77.2%
48	16	10%	145	86.8%
49	11	7%	156	93.4%
50	5	3%	161	96.4%
51	0	0%	161	96.4%
52	3	2%	164	98.2%
53	2	1%	166	99.4%
54	0	0%	166	99.4%
55	0	0%	166	99.4%
56	0	0%	166	99.4%
57	1	1%	167	100.0%



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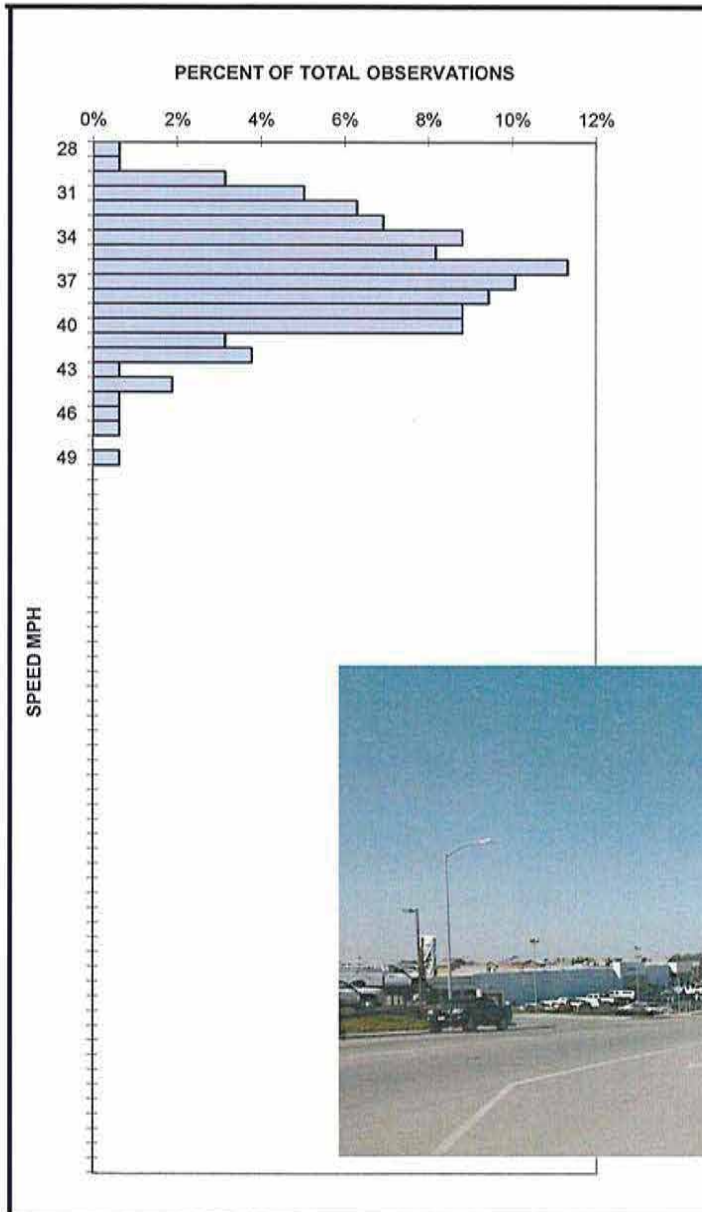
LOCATION: #16 GOLDEN HILLS ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2-4 LANES
PAVED WIDTH: 36 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

UNION ROAD TO SR 46

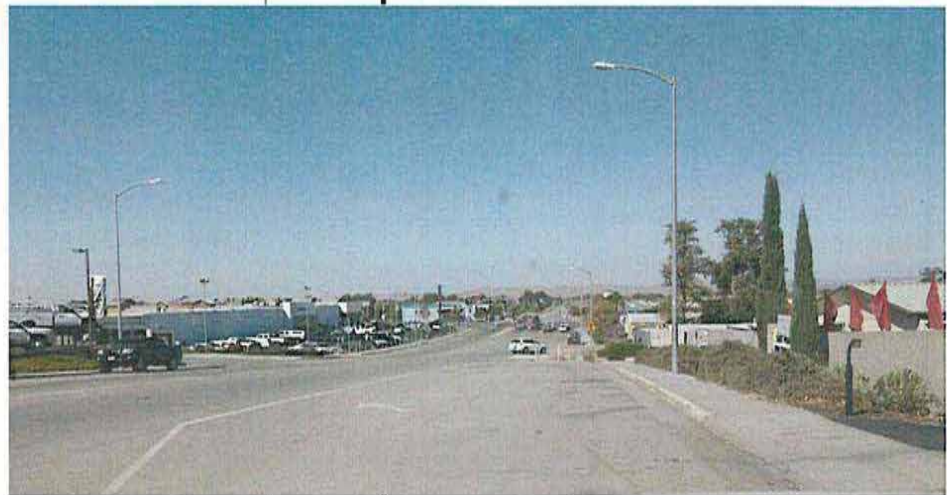
DATE: 10/7/2013
DAY: MONDAY
TIME: 2:15 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		31 - 40	37	40
	<= 88% >		< IN >		<= 85% >
			4% 84% 12%		

COMMENTS/UNUSUAL CONDITIONS INTERMITTENT BUILDOUT TO FULL FOUR LANE WITH CURB/
GUTTER AND SIDEWALK. SHORT SEGMENT, SIGNALIZED AT NORTH END, STOP-CONTROL AT SOUTH END.
SIDEWALK SYSTEM INCOMPLETE.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
28	1	1%	1	0.6%
29	1	1%	2	1.3%
30	5	3%	7	4.4%
31	8	5%	15	9.4%
32	10	6%	25	15.7%
33	11	7%	36	22.6%
34	14	9%	50	31.4%
35	13	8%	63	39.6%
36	18	11%	81	50.9%
37	16	10%	97	61.0%
38	15	9%	112	70.4%
39	14	9%	126	79.2%
40	14	9%	140	88.1%
41	5	3%	145	91.2%
42	6	4%	151	95.0%
43	1	1%	152	95.6%
44	3	2%	155	97.5%
45	1	1%	156	98.1%
46	1	1%	157	98.7%
47	1	1%	158	99.4%
48	0	0%	158	99.4%
49	1	1%	159	100.0%



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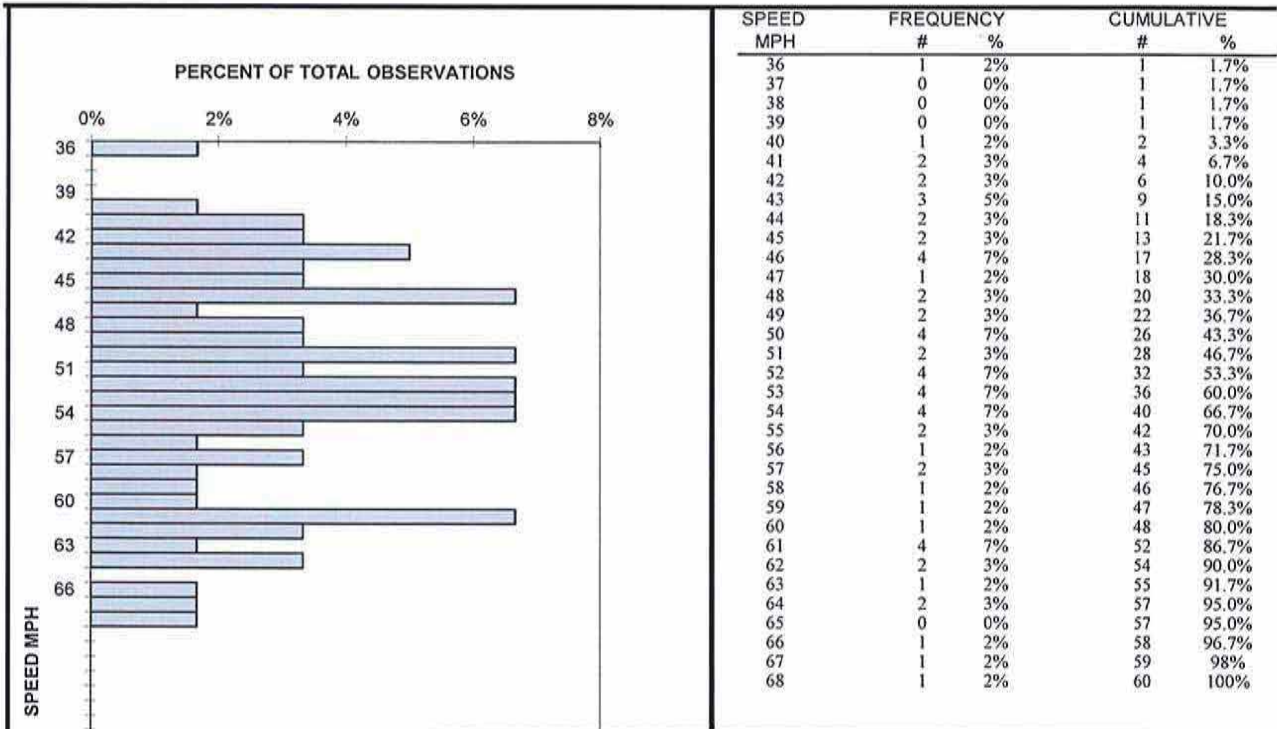
LOCATION: #17 LINNE ROAD
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 22-24 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

FONTANA TO CITY LIMIT

DATE: 10/16/2013
DAY: WEDNESDAY
TIME: 12:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
55	NONE		45 - 54	52	61
	<= >		< IN >		<= >
	N/A N/A		18% 48% 33%		85% 15%

COMMENTS/UNUSUAL CONDITIONS NARROW URBAN/RURAL TRANSITION ROAD. WIDE VARIATION IN SPEEDS. LITTLE HORIZONTAL OR VERTICAL CHANGES.



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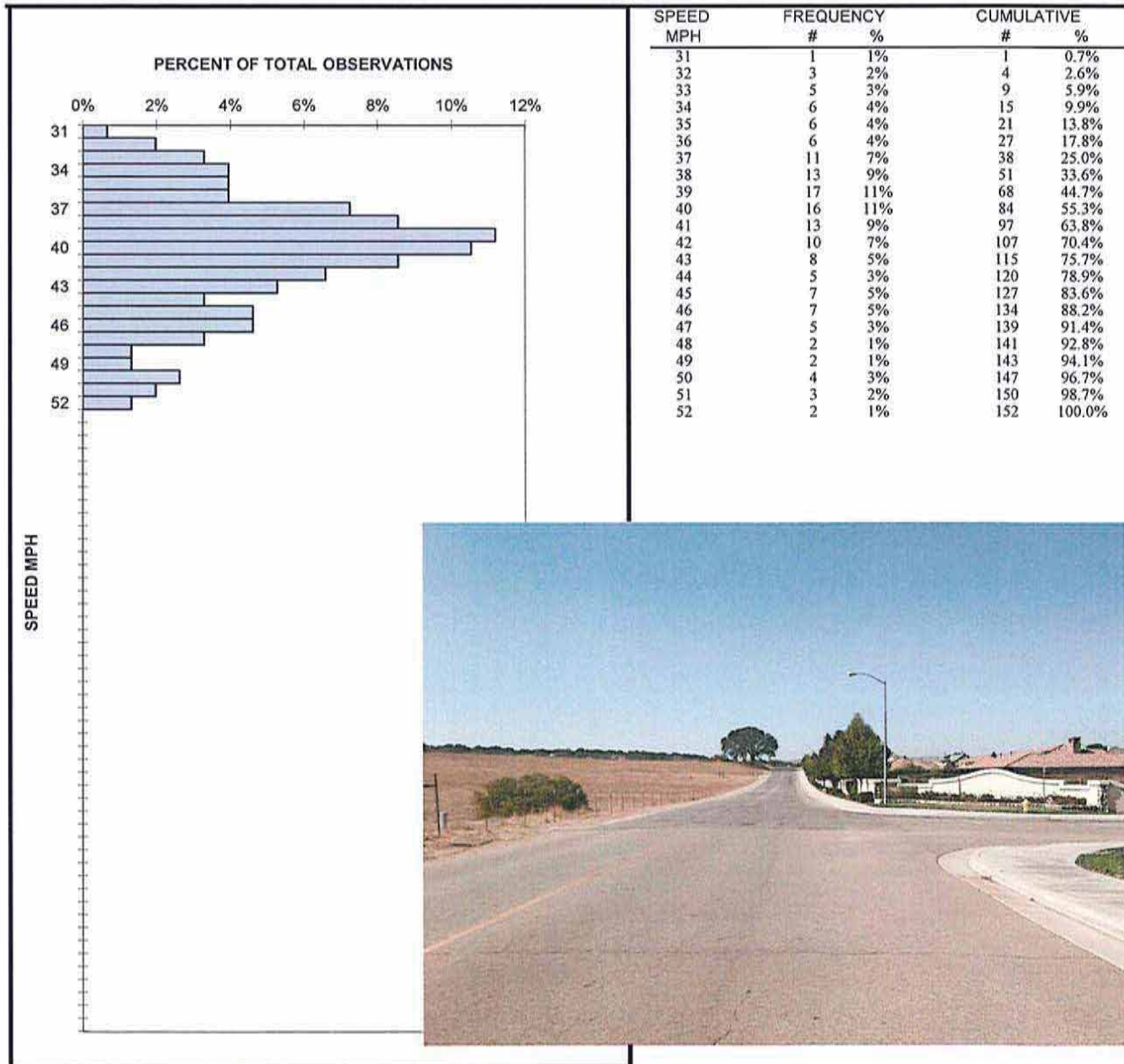
LOCATION: #18 MEADOWLARK ROAD
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 34 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

BEECHWOOD TO AIRPORT

DATE: 10/16/2013
DAY: WEDNESDAY
TIME: 9:30 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	35		37 - 46	41	46
	<= >		< IN >		<= >
	14% 86%		18% 70% 12%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RURAL/URBAN TRANSITION AREA, SUBURBAN RESIDENTIAL WITH CURB/GUTTER/SIDEWALK NORTH OF ROADWAY, UNDEVELOPED WITH NO SHOULDER TO SOUTH.



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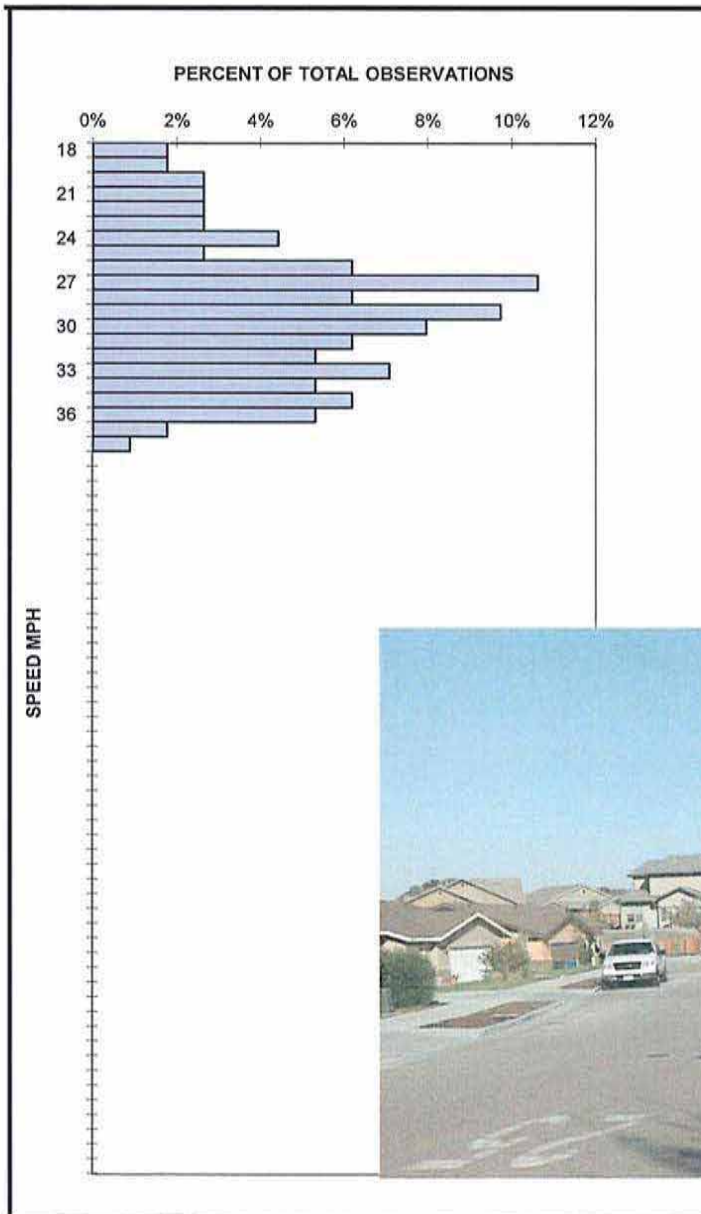
LOCATION: #19 MONTEBELLO OAKS DRIVE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 40 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

SKYVIEW TO UNION

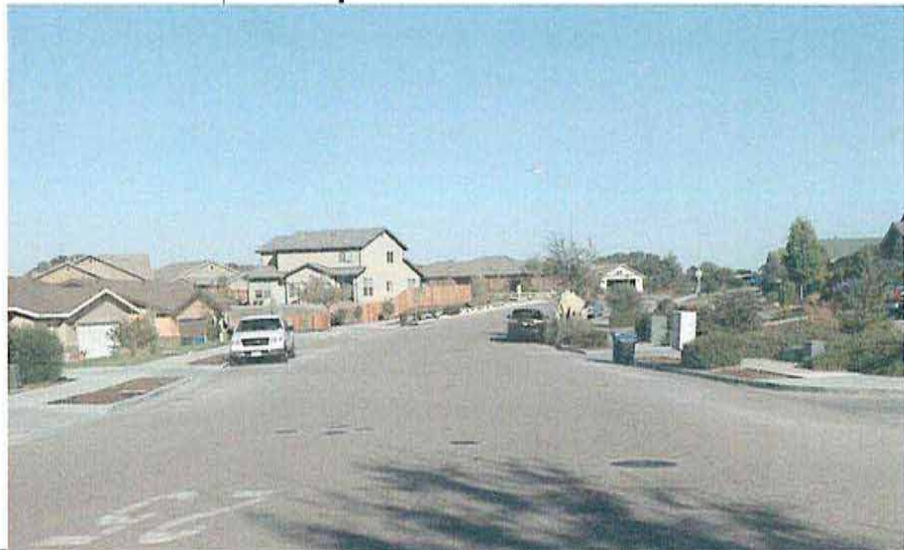
DATE: 10/7/2013
DAY: MONDAY
TIME: 3:40 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		26 - 35	29	34
	<= 21%	> 79%	< 21% IN 71% > 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL FRONTING ROADWAY WITH SEVERAL LOCAL INTERSECTIONS IN SEGMENT. CURRENTLY MEETS DENSITY REQUIREMENTS FOR 25 MPH RESIDENTIAL DISTRICT WITH FURTHER DEVELOPMENT EXPECTED.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	2	2%	2	1.8%
19	2	2%	4	3.5%
20	3	3%	7	6.2%
21	3	3%	10	8.8%
22	3	3%	13	11.5%
23	3	3%	16	14.2%
24	5	4%	21	18.6%
25	3	3%	24	21.2%
26	7	6%	31	27.4%
27	12	11%	43	38.1%
28	7	6%	50	44.2%
29	11	10%	61	54.0%
30	9	8%	70	61.9%
31	7	6%	77	68.1%
32	6	5%	83	73.5%
33	8	7%	91	80.5%
34	6	5%	97	85.8%
35	7	6%	104	92.0%
36	6	5%	110	97.3%
37	2	2%	112	99.1%
38	1	1%	113	100.0%



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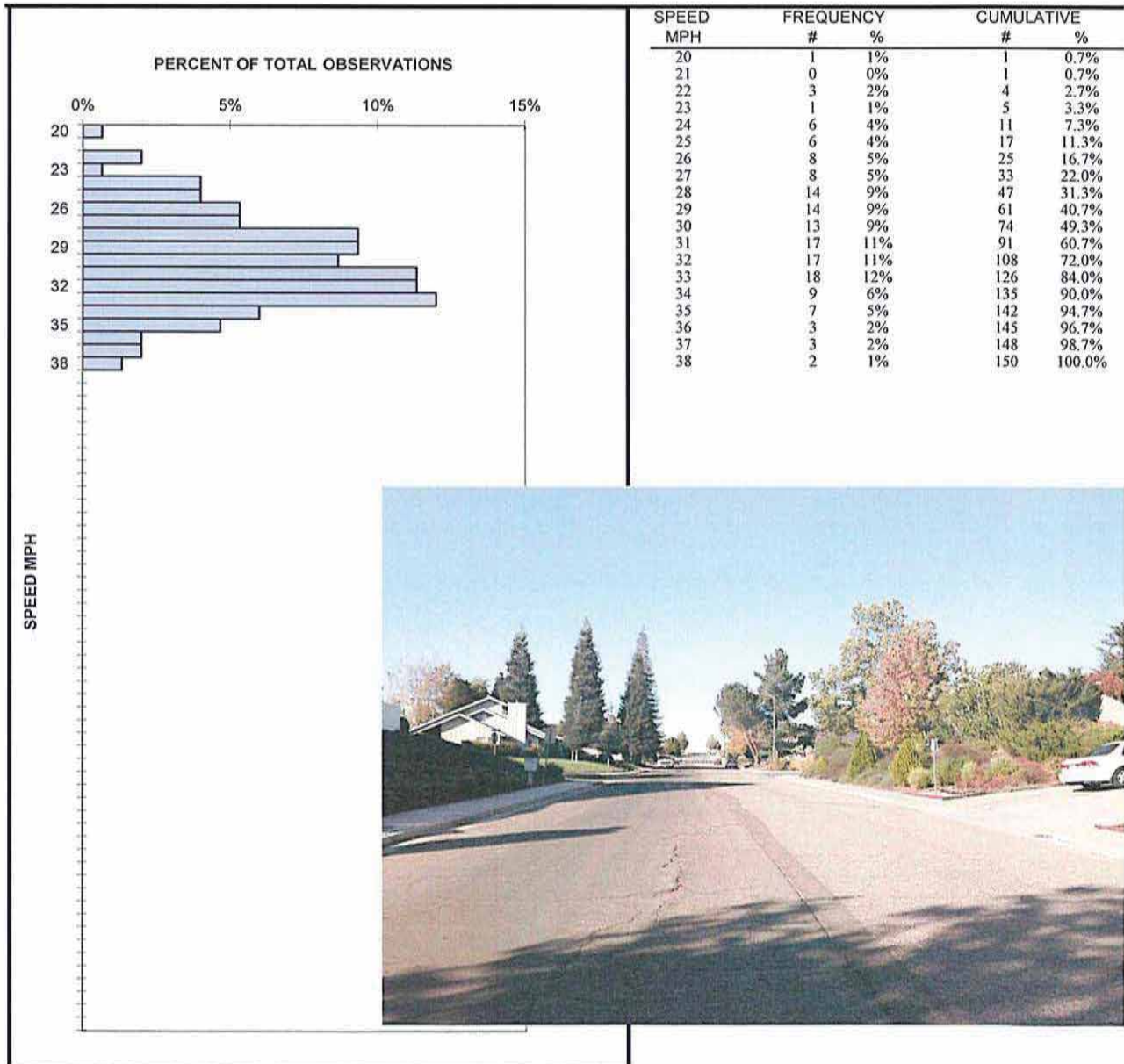
LOCATION: #20 NAVAJO AVENUE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 39 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

RIVER RD TO CRAZY HORSE

DATE: 10/16/2013
DAY: WEDNESDAY
TIME: 2:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	30		26 - 35	30	34
	<= 49% > 51%		< IN >		<= 85% > 15%
			11% 83% 5%		

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA WITH SOME HOMES FRONTING STREET. STEEP GRADES AND HORIZONTAL CURVE NEAR INTERSECTION WITH RIVER ROAD



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LOCATION: #21 NIBLICK ROAD

SPRING TO RIVER RD

DIRECTION: EAST-WEST

DATE: 10/16/2013

ROAD X-SECTION: 4 LANES WITH INTERMITTANT MEDIAN

DAY: WEDNESDAY

PAVED WIDTH: 65-80 Feet

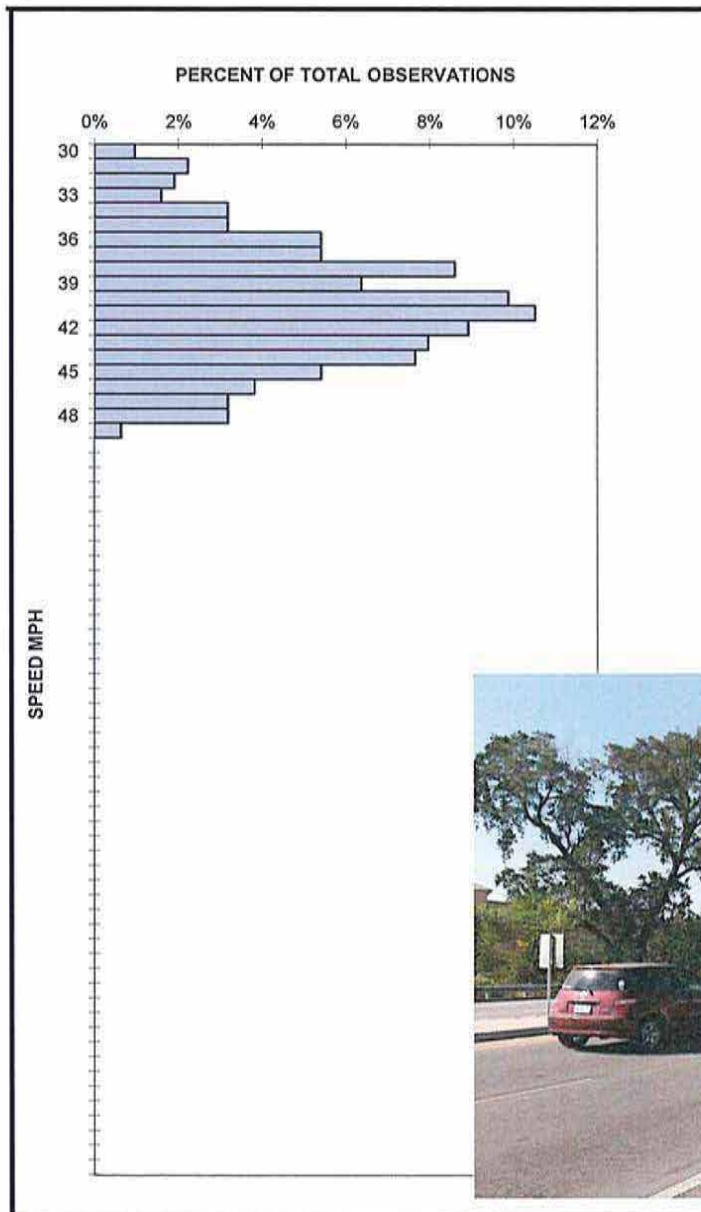
TIME: 3:15 PM

BUSINESS OR RESIDENCE DISTRICT: NO

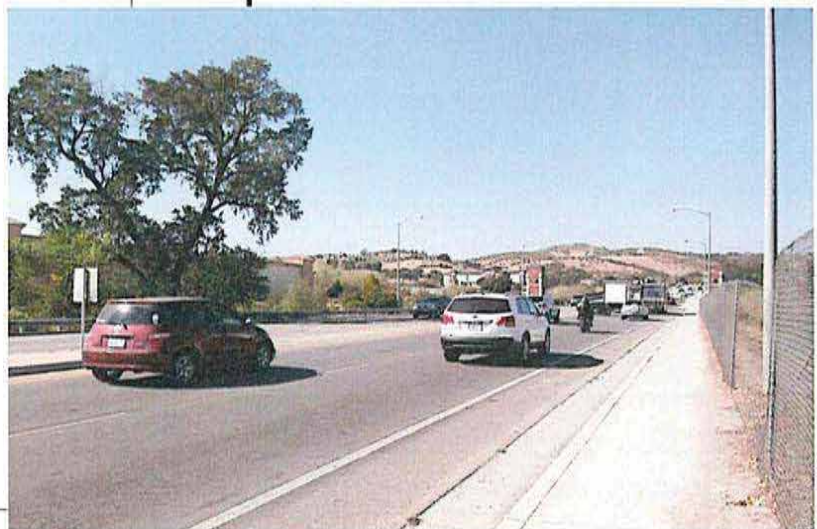
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		36 - 45	40	45
	<= 49% > 51%		< IN > 13% 76% 11%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS PRIMARY ROUTE CROSSING US 101 AND RIVER, SIGNIFICANT RETAIL AT EAST END OF SEGMENT. SIDEWALK NORTH SIDE, BIKE LANES BOTH SIDES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
30	3	1%	3	1.0%
31	7	2%	10	3.2%
32	6	2%	16	5.1%
33	5	2%	21	6.7%
34	10	3%	31	9.9%
35	10	3%	41	13.1%
36	17	5%	58	18.5%
37	17	5%	75	23.9%
38	27	9%	102	32.5%
39	20	6%	122	38.9%
40	31	10%	153	48.7%
41	33	11%	186	59.2%
42	28	9%	214	68.2%
43	25	8%	239	76.1%
44	24	8%	263	83.8%
45	17	5%	280	89.2%
46	12	4%	292	93.0%
47	10	3%	302	96.2%
48	10	3%	312	99.4%
49	2	1%	314	100.0%



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LOCATION: #22 NIBLICK ROAD

RIVER RD TO CRESTON

DIRECTION: EAST-WEST

DATE: 10/16/2013

ROAD X-SECTION: 4 LANES

DAY: WEDNESDAY

PAVED WIDTH: 60-78 Feet

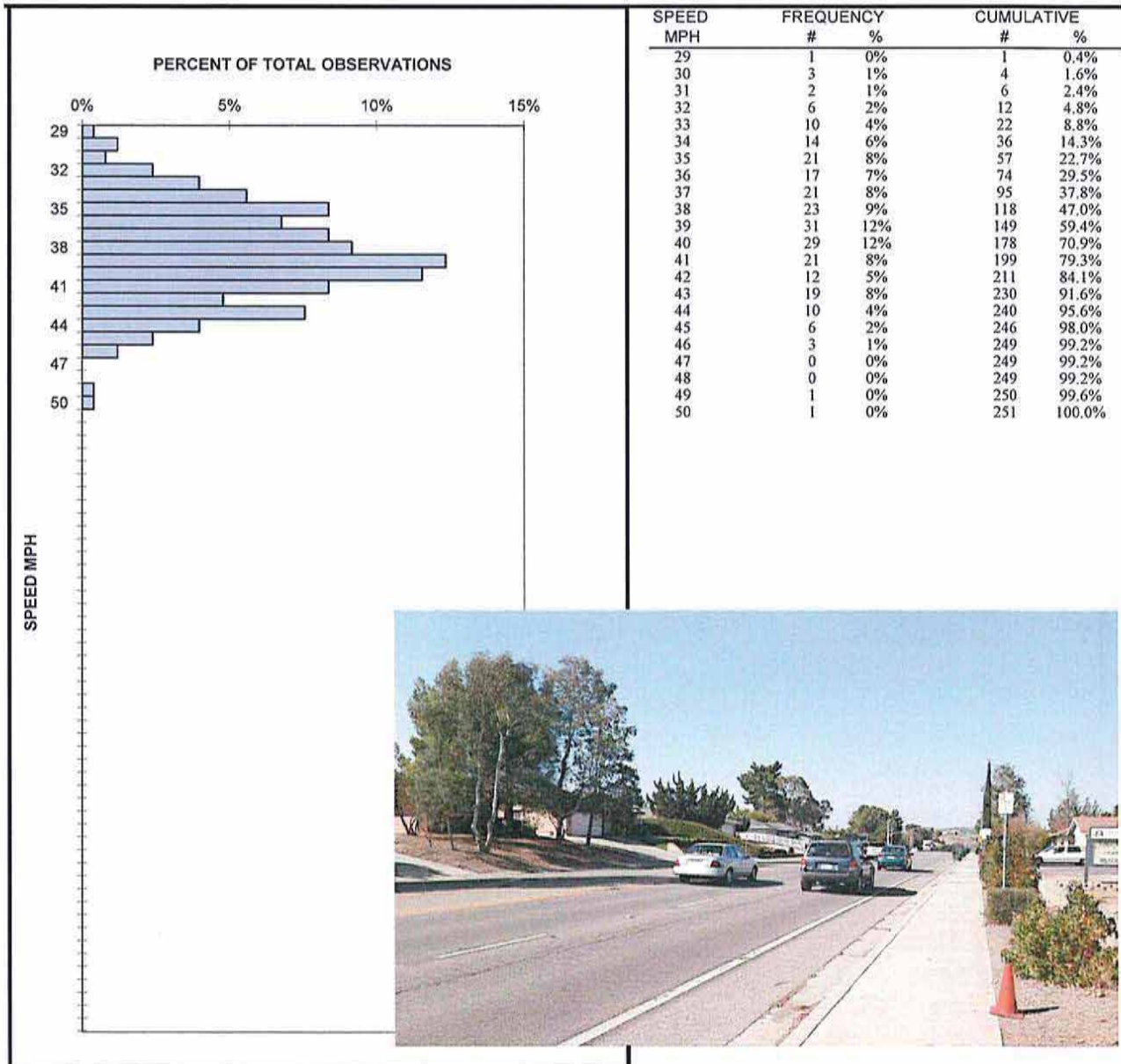
TIME: 8:30 AM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		34 - 43	39	43
	<= 71% >	> 29%	< 9% IN 83% > 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS MIXED USE ARTERIAL CONTAINING SCHOOLS, RESIDENTIAL (BOTH FRONTING AND INDIRECT ACCESS TO ROADWAY) AS WELL AS LIMITED COOMMERCIAL. SCHOOL ZONE WITH PEDESTRIAN CROSSINGS. BIKE LANES BOTH DIRECTIONS.



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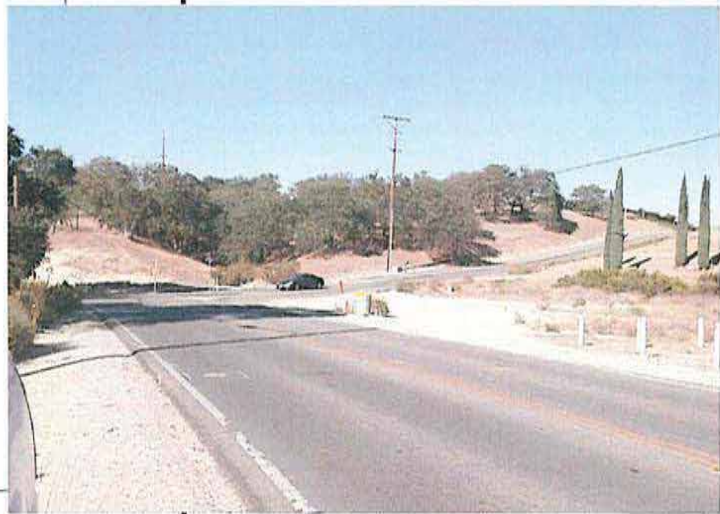
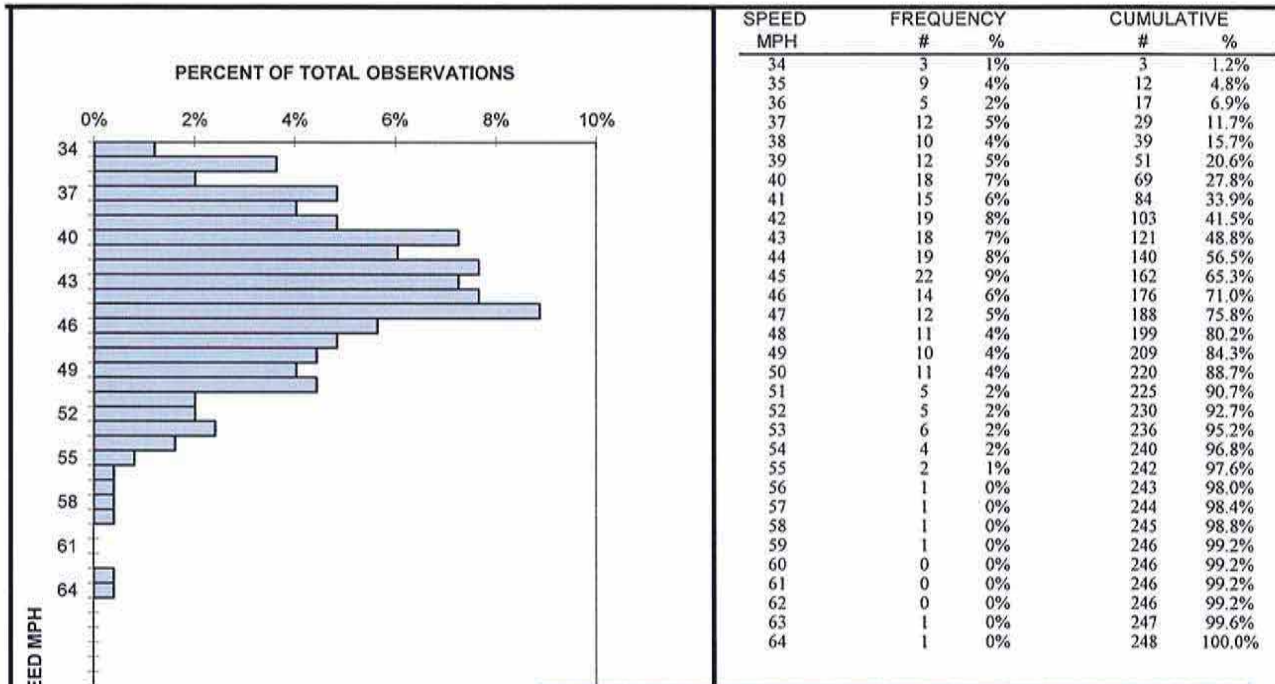
LOCATION: #23 NORTH RIVER ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 23 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO CITY LIMIT

DATE: 10/17/2013
DAY: THURSDAY
TIME: 2:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	40		39 - 48	44	50
	<= >		< IN >		<= >
	28% 72%		16% 65% 20%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RURAL/URBAN TRANSITION AREA. NARROW TWO LANE ROAD
WITH SEVERAL HORIZONTAL CURVES AND SOME LIMITATION OF SIGHT DISTANCE. CRITICAL SPEED
SIGNIFICANTLY HIGHER THAN POSTED LIMIT.



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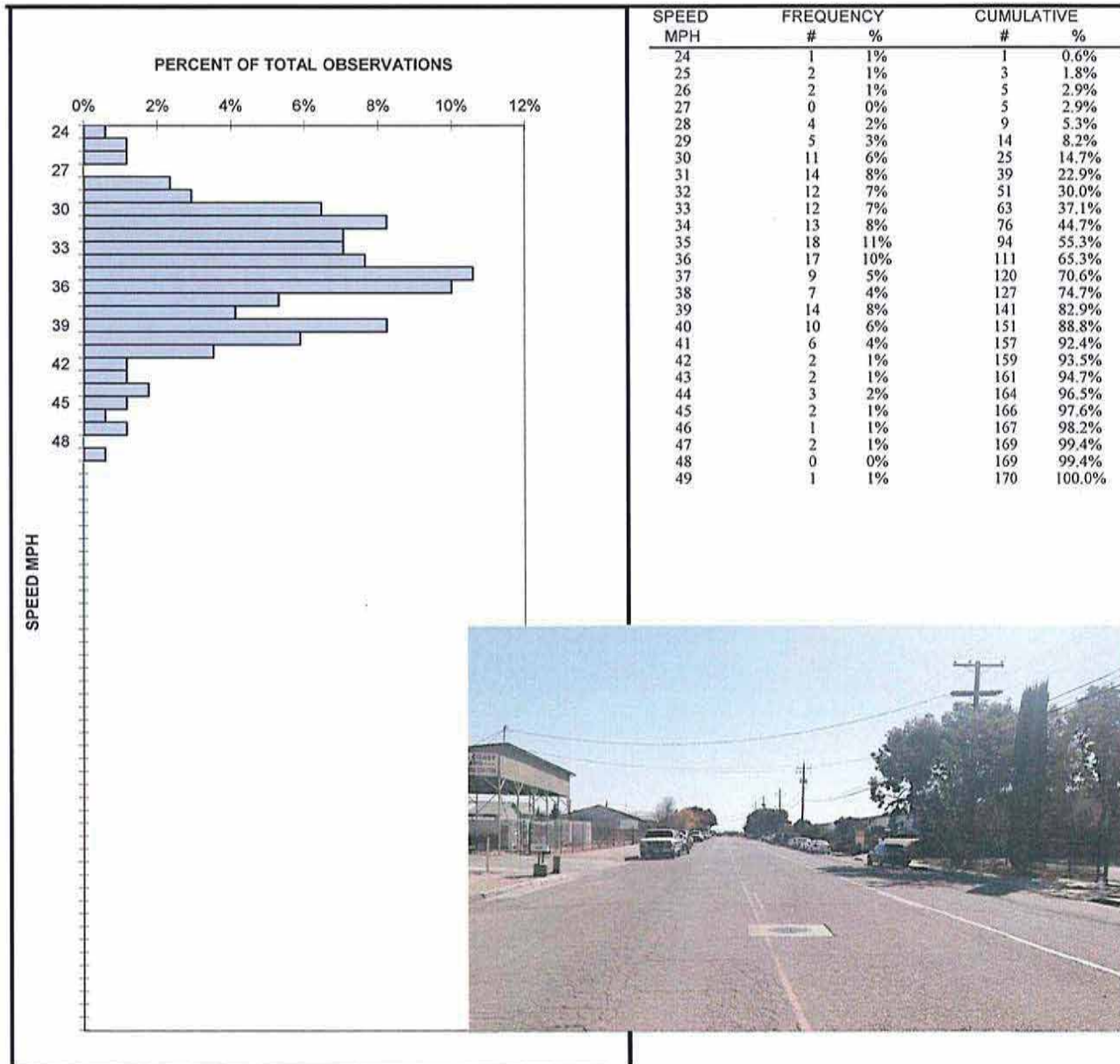
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LOCATION: #24 PASO ROBLES STREET 13TH TO US 101
 DIRECTION: NORTH-SOUTH
 ROAD X-SECTION: 2 LANES WITH INTERMITTANT PAINTED MEDIAN
 PAVED WIDTH: 50 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

DATE: 10/17/2013
 DAY: THURSDAY
 TIME: 12:45 AM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35	30 - 39	35	40
	<= 55% > 45%	< 8% IN 75% > 17%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS BUSINESS ACCESS ROAD THAT ALSO FUNCTIONS AN OFF-RAMP FOR US 101. BUSINESSES FRONTING ROADWAY APPROACHING "BUSINESS DISTRICT" DENSITY. SIGNIFICANT ON-STREET PARKING. CRITICAL SPEED NOT IN PACE SPEED.



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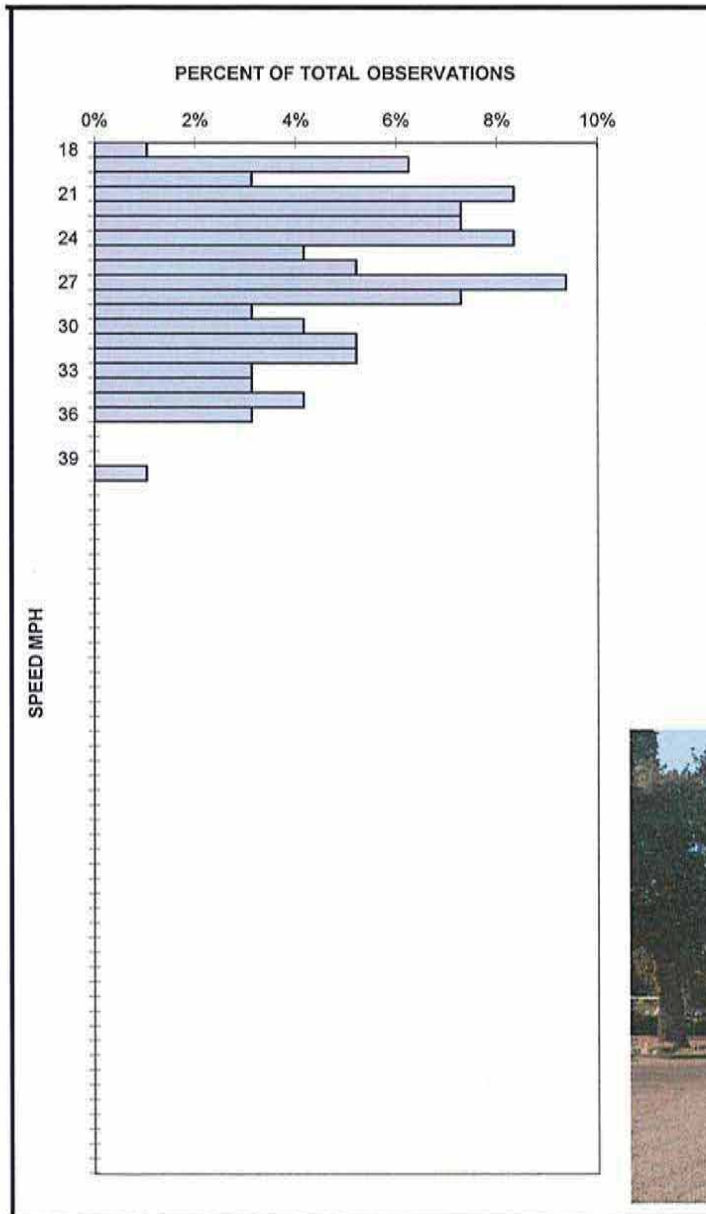
LOCATION: #25 PINE STREET
 DIRECTION: NORTH-SOUTH
 ROAD X-SECTION: 2 LANES
 PAVED WIDTH: 30-50 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

10TH TO 4TH

DATE: 10/23/2013
 DAY: WEDNESDAY
 TIME: 2:00 PM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30	19 - 28	27	32
	<= 75% > 25%	< IN > 1% 67% 32%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS MIX OF MANY DEVELOPMENT TYPES, INCLUDING PARKS, RESIDENTIAL AND COMMERCIAL. SIGNED BIKE ROUTE. ROADWAY NARROWS AND BECOMES LESS IMPROVED NE 4TH.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	1	1%	1	1.0%
19	6	6%	7	7.3%
20	3	3%	10	10.4%
21	8	8%	18	18.8%
22	7	7%	25	26.0%
23	7	7%	32	33.3%
24	8	8%	40	41.7%
25	4	4%	44	45.8%
26	5	5%	49	51.0%
27	9	9%	58	60.4%
28	7	7%	65	67.7%
29	3	3%	68	70.8%
30	4	4%	72	75.0%
31	5	5%	77	80.2%
32	5	5%	82	85.4%
33	3	3%	85	88.5%
34	3	3%	88	91.7%
35	4	4%	92	95.8%
36	3	3%	95	99.0%
37	0	0%	95	99.0%
38	0	0%	95	99.0%
39	0	0%	95	99.0%
40	1	1%	96	100.0%



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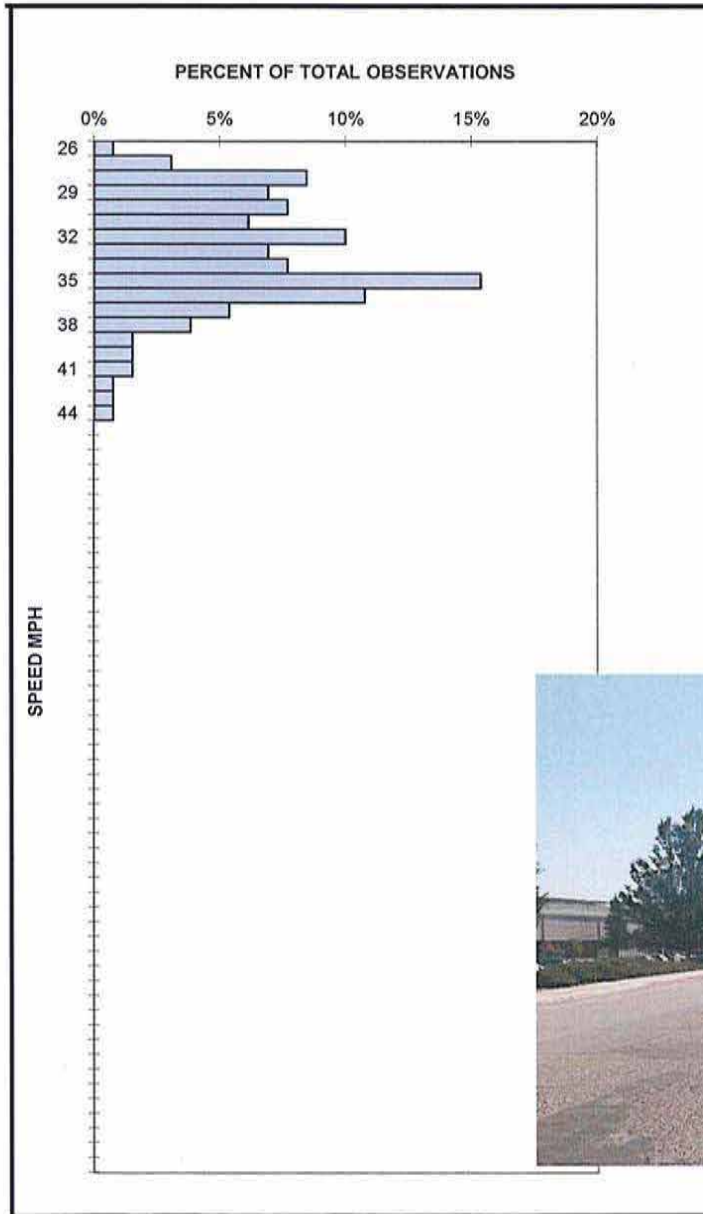
LOCATION: #26 RAMADA DRIVE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 40-62 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SR 46 TO VINDEL CIR

DATE: 10/18/2013
DAY: FRIDAY
TIME: 3:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		28 - 37	33	37
	<= >		< IN >		<= >
	73% 27%		4% 85% 11%		85% 15%

COMMENTS/UNUSUAL CONDITIONS LIGHT INDUSTRIAL AND FREEWAY SERVICE COMMERCIAL AREA.
WIDE TWO LANE INDUSTRIAL CROSS SECTION WITH ON-STREET PARKING. SIDEWALK ON EAST SIDE, NO BIKE FACILITIES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
26	1	1%	1	0.8%
27	4	3%	5	3.8%
28	11	8%	16	12.3%
29	9	7%	25	19.2%
30	10	8%	35	26.9%
31	8	6%	43	33.1%
32	13	10%	56	43.1%
33	9	7%	65	50.0%
34	10	8%	75	57.7%
35	20	15%	95	73.1%
36	14	11%	109	83.8%
37	7	5%	116	89.2%
38	5	4%	121	93.1%
39	2	2%	123	94.6%
40	2	2%	125	96.2%
41	2	2%	127	97.7%
42	1	1%	128	98.5%
43	1	1%	129	99.2%
44	1	1%	130	100.0%



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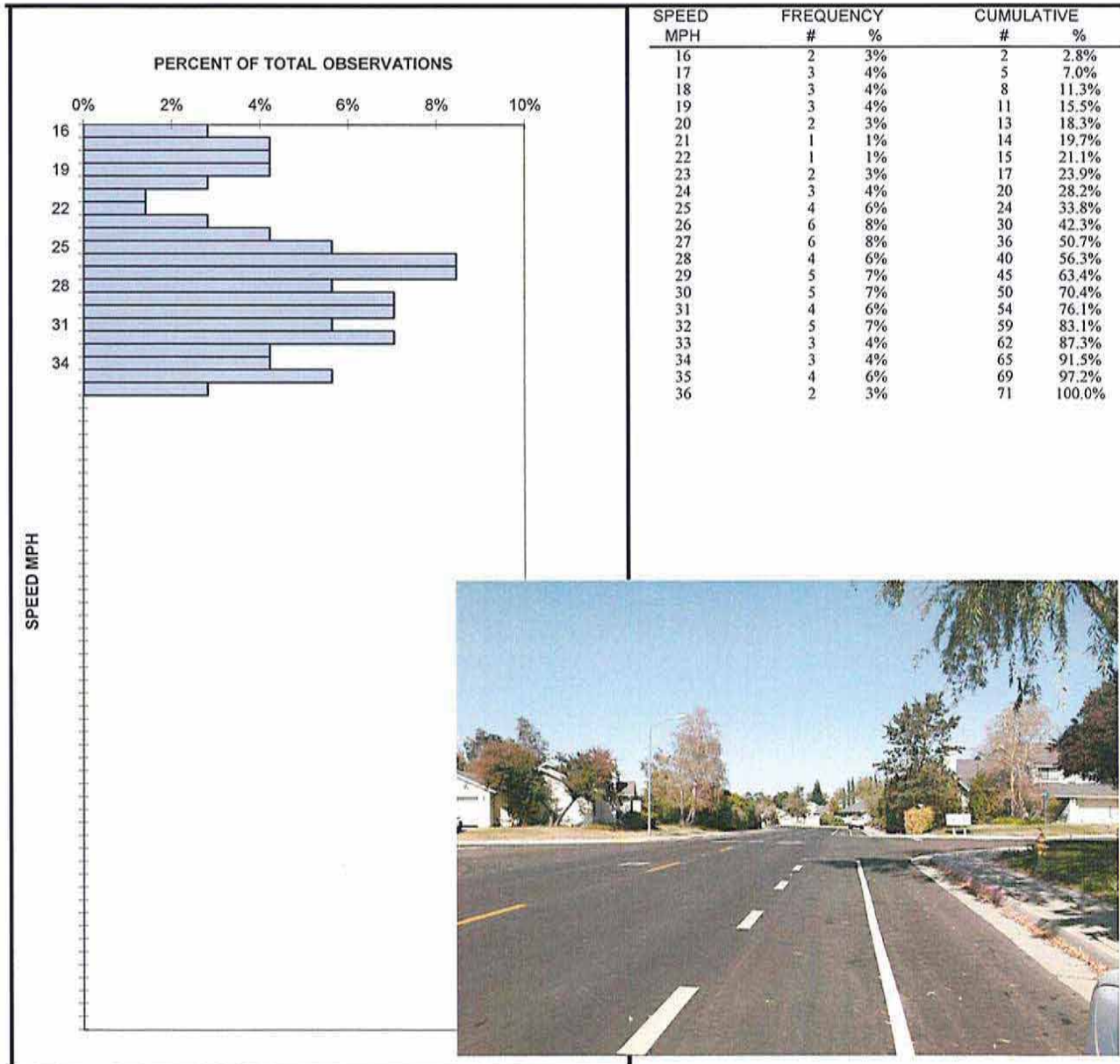
LOCATION: # 27 RAMBOUILLET ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 42 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

NIBLICK TO NICKAUS

DATE: 10/14/2013
DAY: MONDAY
TIME: 2:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		23 - 32	27	33
	<= 34% >	> 66%	< IN >		<= 85% >
			24% 63% 13%		15%

COMMENTS/UNUSUAL CONDITIONS ACCESS DENSITY QUALIFIES ROADWAY AS RESIDENTIAL DISTRICT
HIGH SCHOOL AT NORTH END OF ROADWAY. SPEED HUMPS LIMIT SPEEDS ALONG CORRIDOR. SIDEWALKS ON BOTH SIDES OF ROADWAY. BUS STOPS ALONG SEGMENT. CRITICAL SPEED ABOVE PACE SPEED.



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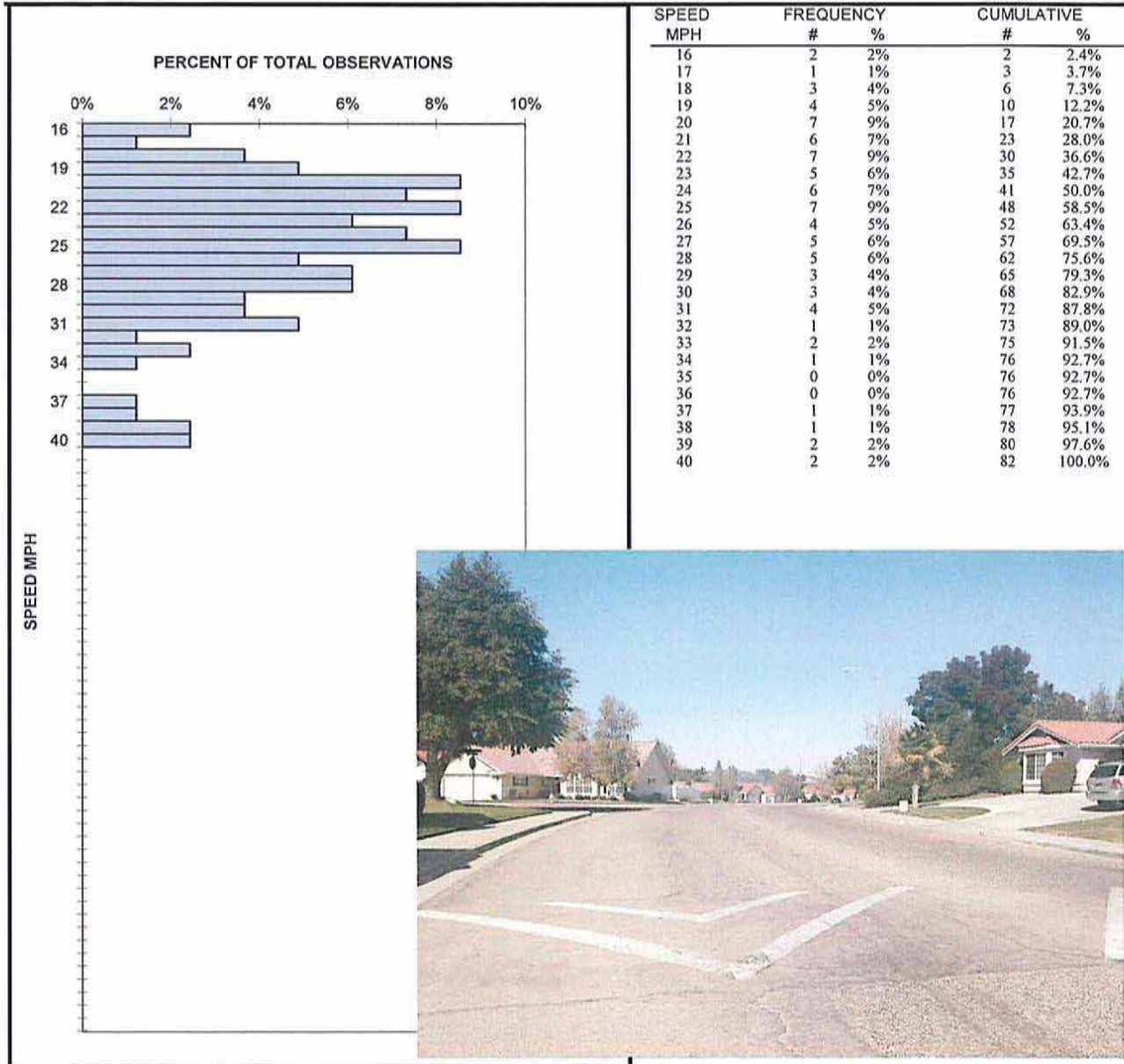
LOCATION: #28 RAMBOUILLET ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 42 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

NICKLAUS TO CHAROLAIS

DATE: 10/14/2013
DAY: MONDAY
TIME: 3:15 PM
OBSERVER: MB

EXISTING CONDITIONS			CALCULATED		
RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		19 - 28	25	31
	<= >		< IN >		<= >
	59% 41%		7% 68% 24%		85% 15%

COMMENTS/UNUSUAL CONDITIONS APPEARS TO MEET DENSITY REQUIREMENTS FOR RESIDENTIAL DISTRICT. SPEED HUMPS INSTALLED TO CONTROL SPEED. SIDEWALKS ON BOTH SIDES OF ROADWAY. BUS ROUTE AND STOPS IN SEGMENT.



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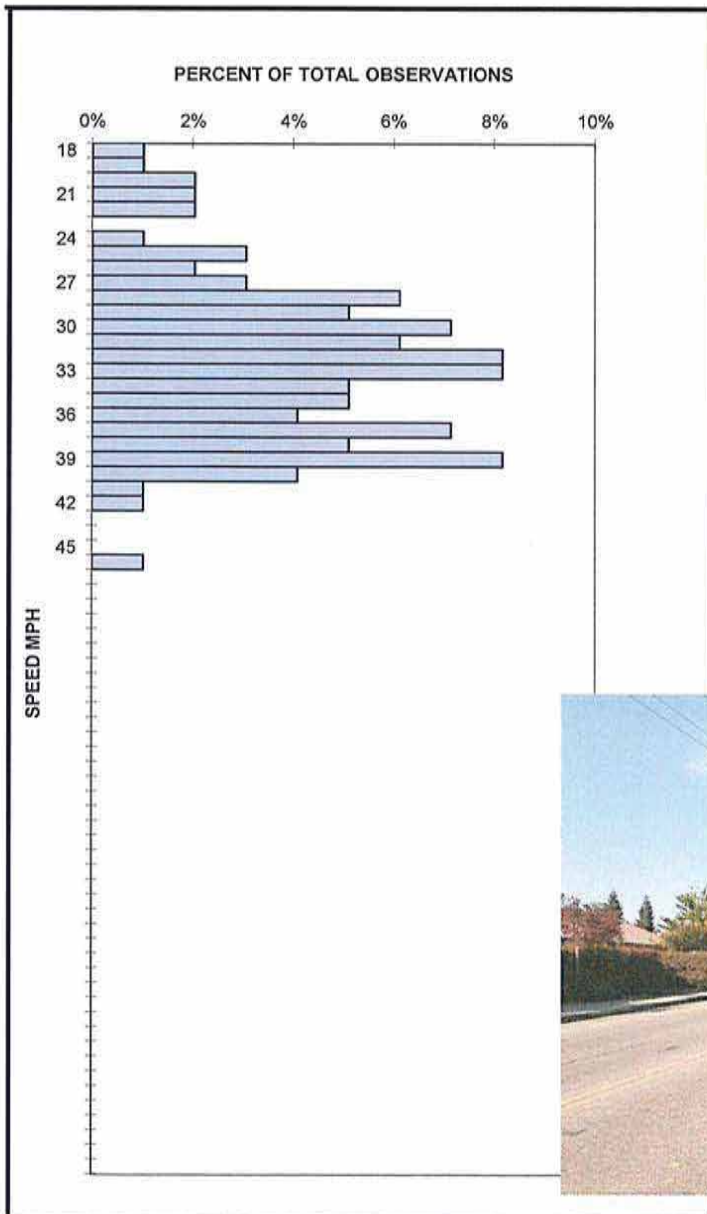
LOCATION: #29 RIVERGLEN DRIVE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 36 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

UNION TO VIA CAMELIA

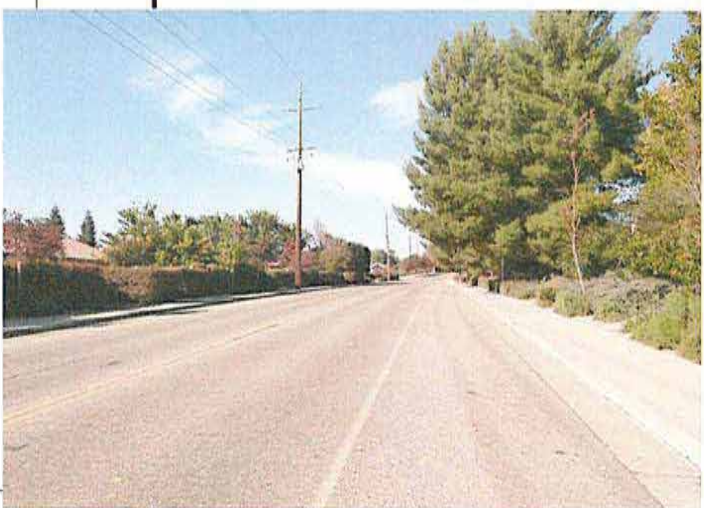
DATE: 10/23/2013
DAY: WEDNESDAY
TIME: 4:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		30 - 39 < IN >	32	39
	<= 68% > 32%		29% 64% 7%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA, HOWEVER, NO HOMES FRONTING STREET.
PARKING LANE ON EITHER SIDE OF STREET SERVES BIKES. SIDEWALKS BOTH SIDE OF STREET.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	1	1%	1	1.0%
19	1	1%	2	2.0%
20	2	2%	4	4.1%
21	2	2%	6	6.1%
22	2	2%	8	8.2%
23	0	0%	8	8.2%
24	1	1%	9	9.2%
25	3	3%	12	12.2%
26	2	2%	14	14.3%
27	3	3%	17	17.3%
28	6	6%	23	23.5%
29	5	5%	28	28.6%
30	7	7%	35	35.7%
31	6	6%	41	41.8%
32	8	8%	49	50.0%
33	8	8%	57	58.2%
34	5	5%	62	63.3%
35	5	5%	67	68.4%
36	4	4%	71	72.4%
37	7	7%	78	79.6%
38	5	5%	83	84.7%
39	8	8%	91	92.9%
40	4	4%	95	96.9%
41	1	1%	96	98.0%
42	1	1%	97	99.0%
43	0	0%	97	99.0%
44	0	0%	97	99.0%
45	0	0%	97	99.0%
46	1	1%	98	100.0%



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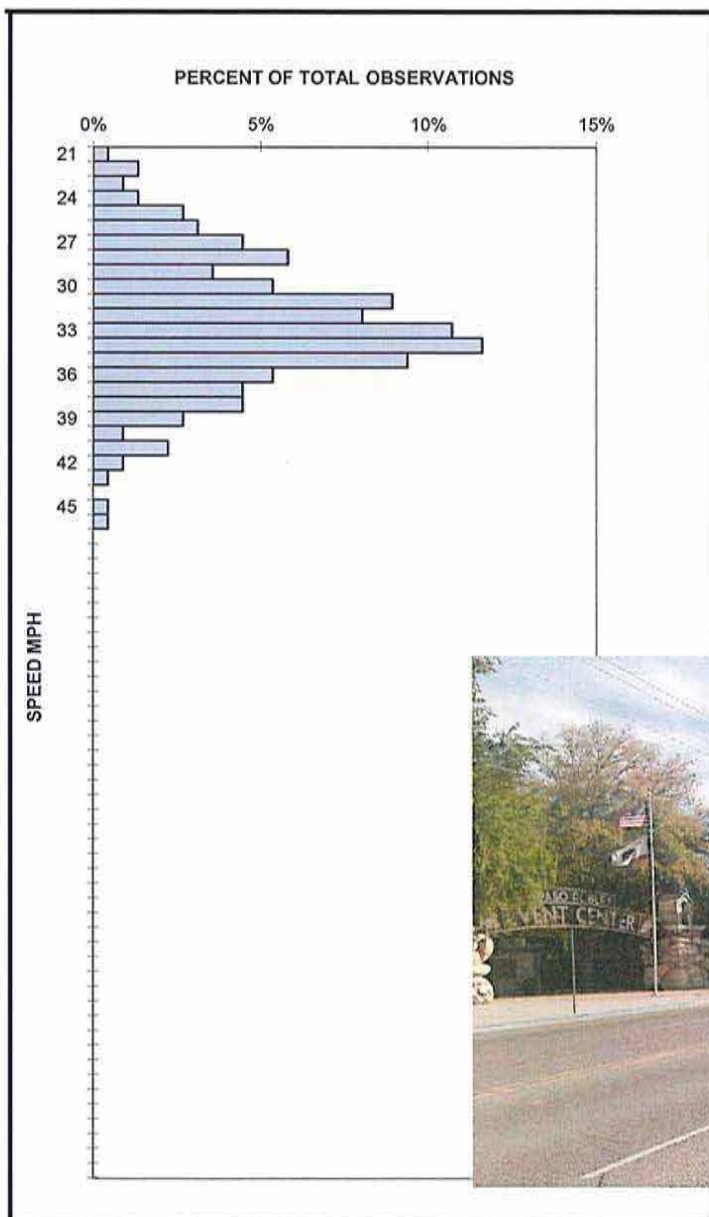
LOCATION: #30 RIVERSIDE AVENUE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2-4 LANES
PAVED WIDTH: 36-64 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

BLACK OAK TO 13TH

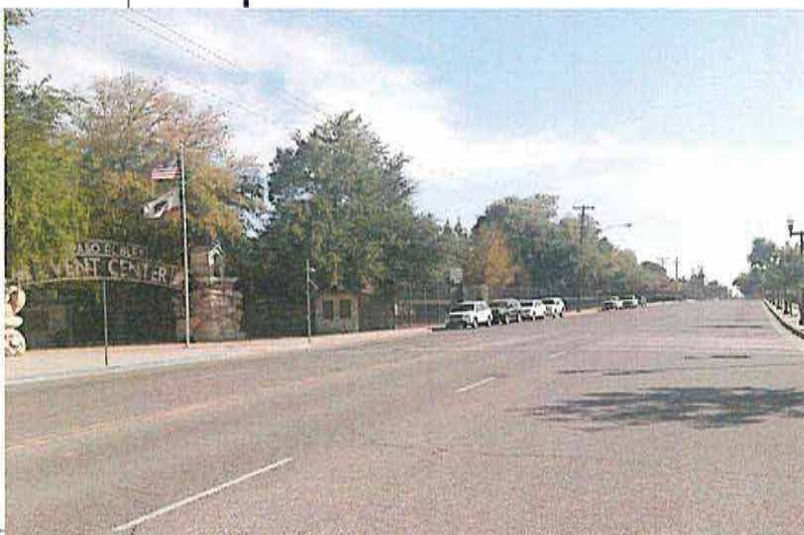
DATE: 10/23/2013
DAY: WEDNESDAY
TIME: 2:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		27 - 36	33	37
	<= 78% > 22%		< IN > 10% 73% 17%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS MIX OF COMMERCIAL, INDUSTRIAL AND RESIDENTIAL USES.
 PRIMARILY TWO LANES, ADDITIONAL LANES NEAR FAIRGROUNDS. PED CROSSING AT FAIRGROUND. BIKE ROUTE



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
21	1	0%	1	0.4%
22	3	1%	4	1.8%
23	2	1%	6	2.7%
24	3	1%	9	4.0%
25	6	3%	15	6.7%
26	7	3%	22	9.8%
27	10	4%	32	14.3%
28	13	6%	45	20.1%
29	8	4%	53	23.7%
30	12	5%	65	29.0%
31	20	9%	85	37.9%
32	18	8%	103	46.0%
33	24	11%	127	56.7%
34	26	12%	153	68.3%
35	21	9%	174	77.7%
36	12	5%	186	83.0%
37	10	4%	196	87.5%
38	10	4%	206	92.0%
39	6	3%	212	94.6%
40	2	1%	214	95.5%
41	5	2%	219	97.8%
42	2	1%	221	98.7%
43	1	0%	222	99.1%
44	0	0%	222	99.1%
45	1	0%	223	99.6%
46	1	0%	224	100.0%



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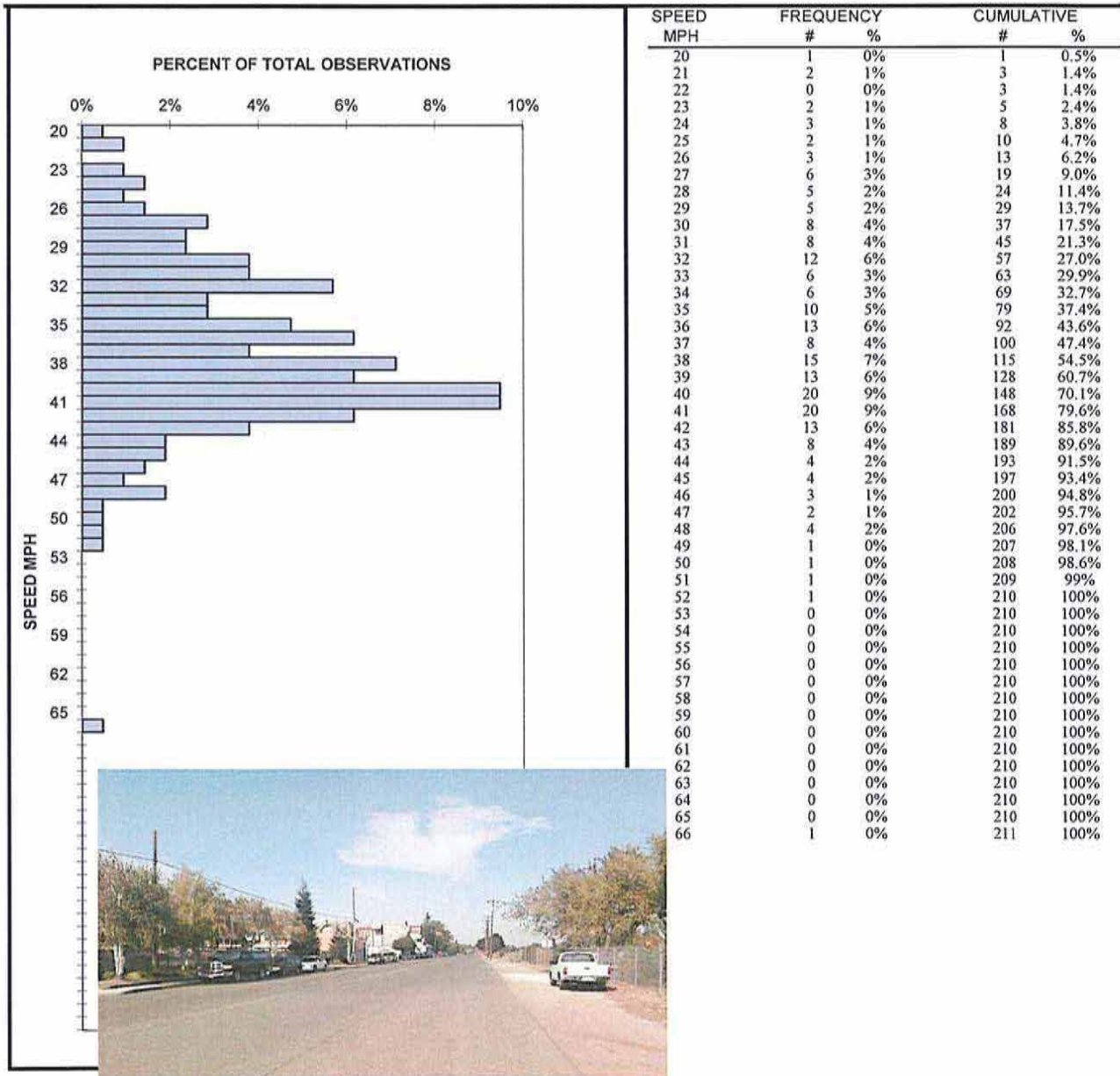
LOCATION: #31 RIVERSIDE AVENUE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 30-55 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

US 101 TO 13TH STREET

DATE: 10/23/2013
DAY: WEDNESDAY
TIME: 12:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		34 - 43	37	42
	<= 37% > 63%		< 30% IN 60% > 10%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS COMMERCIAL AND INDUSTRIAL DEVELOPMENT WEST OF ROAD,
US 101 EAST. ROAD NARROWS AT SOUTH END, LARGE TREES IN CLEAR ZONE. WEST SIDE SIDEWALK COMPLETE
NORTH OF 700 BLOCK. BIKE ROUTE.



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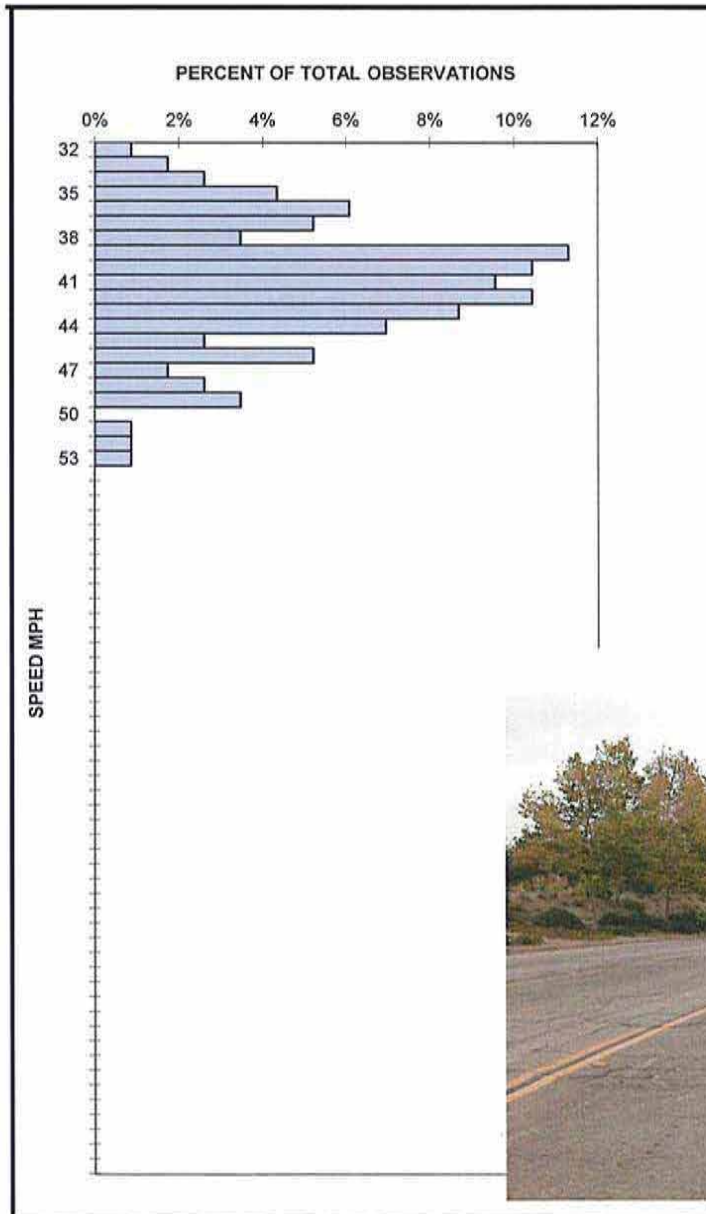
LOCATION: #32 ROLLING HILLS ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH TWLTL
PAVED WIDTH: 36 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO GOLDEN HILL

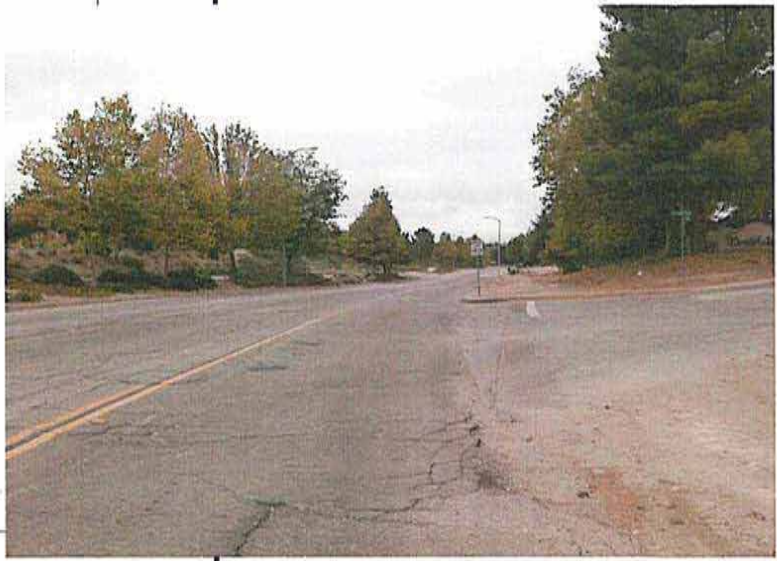
DATE: 10/9/2013
DAY: WEDNESDAY
TIME: 10:00 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		35 - 44	41	46
	<= 46% > 54%		< 5% IN 77% > 18%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS LOW DENSITY RESIDENTIAL WITH LARGE SETBACKS ON WEST SIDE OF ROADWAY. MODERATE DENSITY RESIDENTIAL WITH CONGREGATED ACCESSES ON EAST. CONTINUOUS SIDEWALK ON EAST SIDE. NO BIKE FACILITIES. CRITICAL SPEED OUT OF PACE SPEED.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
32	1	1%	1	0.9%
33	2	2%	3	2.6%
34	3	3%	6	5.2%
35	5	4%	11	9.6%
36	7	6%	18	15.7%
37	6	5%	24	20.9%
38	4	3%	28	24.3%
39	13	11%	41	35.7%
40	12	10%	53	46.1%
41	11	10%	64	55.7%
42	12	10%	76	66.1%
43	10	9%	86	74.8%
44	8	7%	94	81.7%
45	3	3%	97	84.3%
46	6	5%	103	89.6%
47	2	2%	105	91.3%
48	3	3%	108	93.9%
49	4	3%	112	97.4%
50	0	0%	112	97.4%
51	1	1%	113	98.3%
52	1	1%	114	99.1%
53	1	1%	115	100.0%



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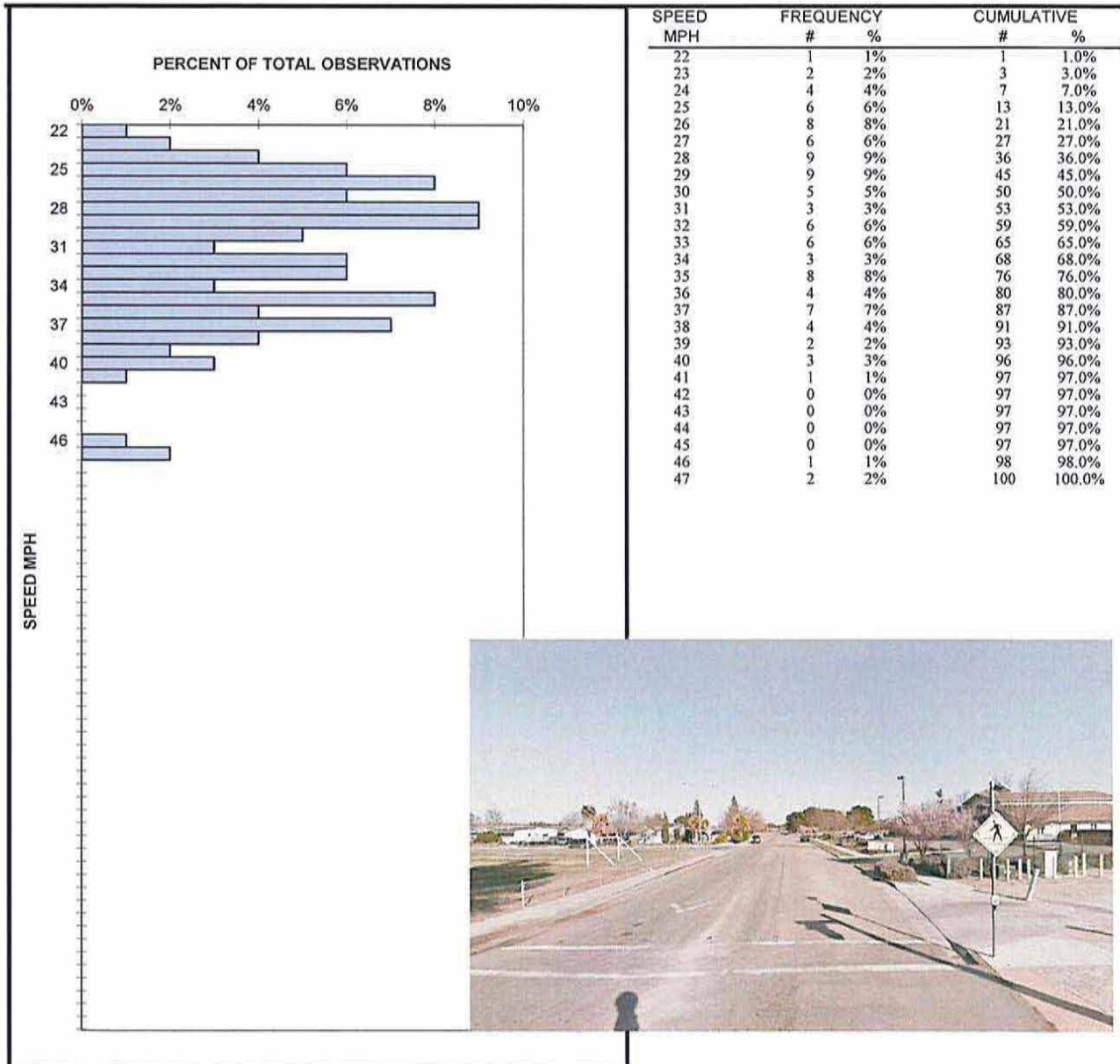
LOCATION: #33 SCOTT STREET
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 30-40 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO COMMERCE

DATE: 10/15/2013
DAY: TUESDAY
TIME: 10:15 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		26 - 35	31	36
	<= >		< IN >		<= >
	76% 24%		13% 63% 24%		85% 15%

COMMENTS/UNUSUAL CONDITIONS PARKS ON EITHER SIDE OF ROADWAY, SENIOR CENTER ALONG SOUTH SIDE OF ROAD. TWO RAISED PEDESTRIAN X-WALKS WITH BEACONS IN SEGMENT. LIMITED SIDEWALKS ALONG SEGMENT. NO DEDICATED BIKE FACILITIES.



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LOCATION: #34 SCOTT STREET

COMMERCE TO AIRPORT

DIRECTION: EAST-WEST

DATE: 10/15/2013

ROAD X-SECTION: 2 LANES WITH INTERMITTANT RAISED MEDIAN

DAY: TUESDAY

PAVED WIDTH: 40-50 Feet

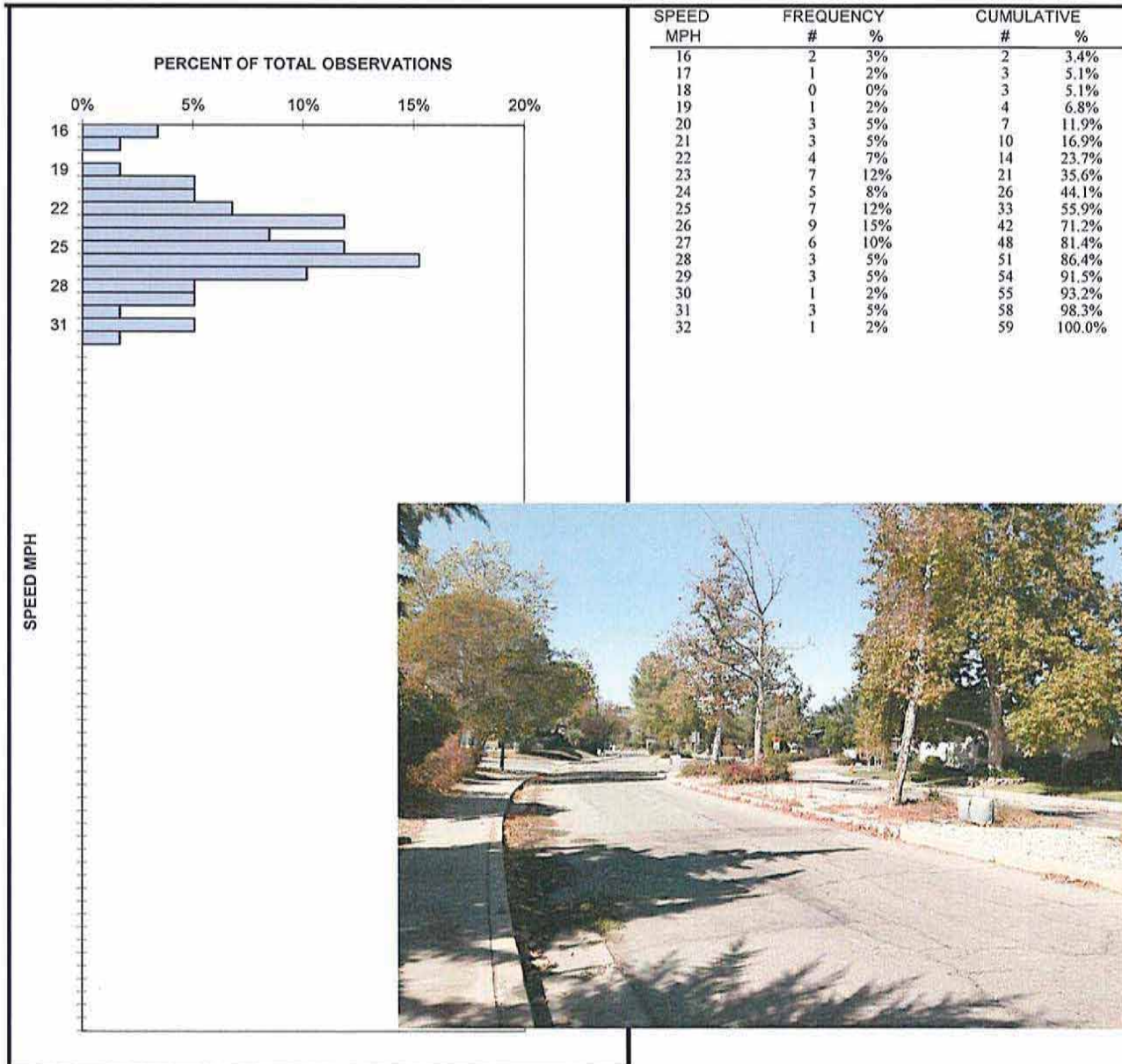
TIME: 11:30 AM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		20 - 29	25	28
	<= 56% > 44%		< IN > 7% 85% 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA, BUT FEW HOMES FRONTING ROADWAY.
 TWO LANE ROADWAY, RAISED MEDIAN ALONG EASTERN 3/4 OF SEGMENT. VEGETATION IN MEDIAN LIMITS SIGHT DISTANCE. SIDEWALK SYSTEM COMPLETE. NO DEDICATED BIKE FACILITIES.



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LOCATION: #35 SHERWOOD ROAD

CRESTON TO FONTANA

DIRECTION: EAST-WEST

DATE: 10/15/2013

ROAD X-SECTION: 2 LANES WITH INTERMITTANT PAINTED MEDIAN

DAY: TUESDAY

PAVED WIDTH: 44-62 Feet

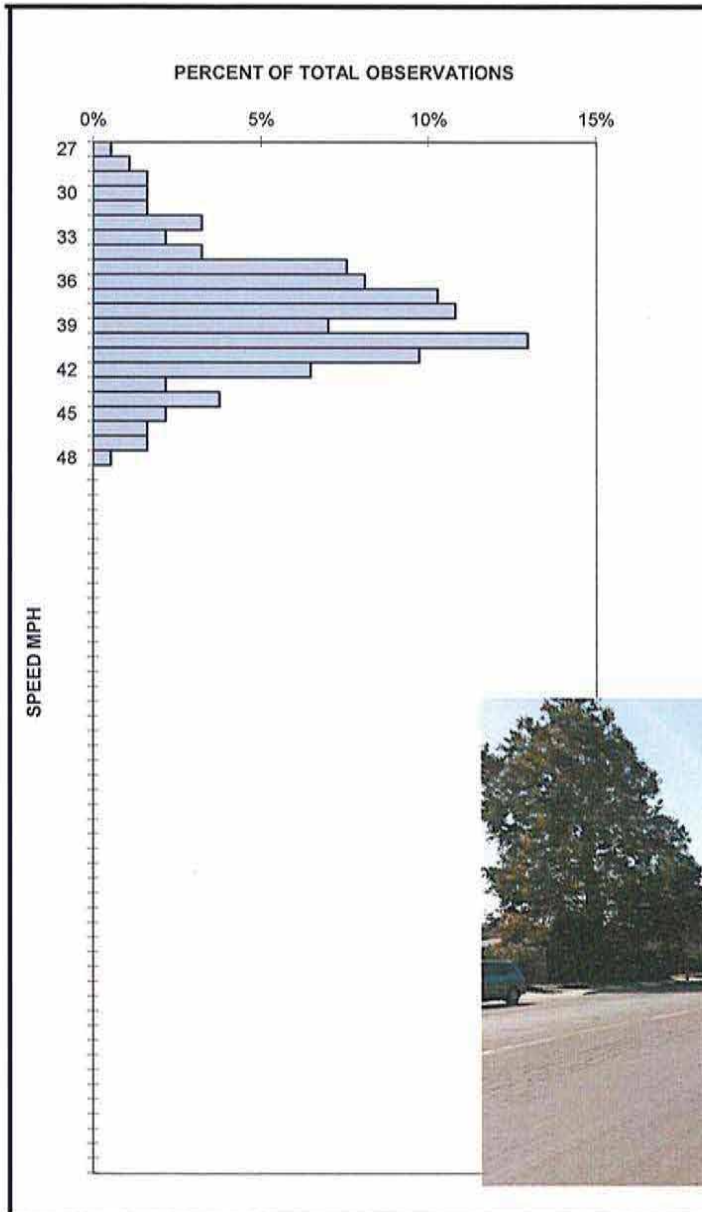
TIME: 2:00 PM

BUSINESS OR RESIDENCE DISTRICT: NO

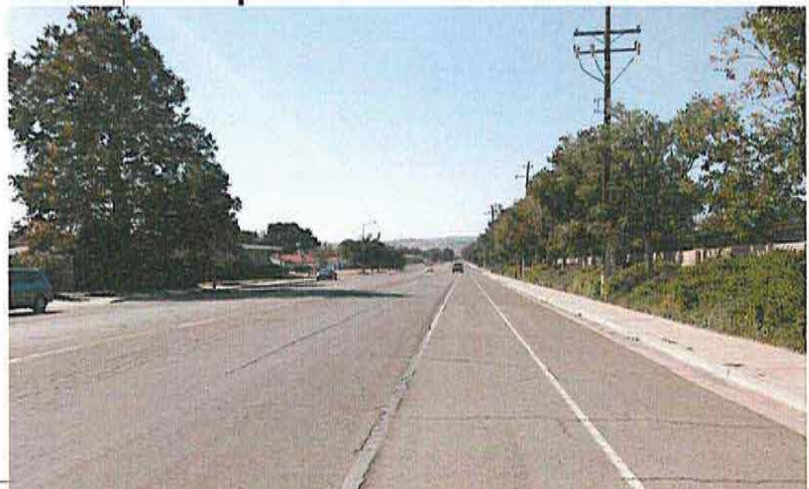
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		35 - 44	38	42
	<= 72% >		< IN >		<= 85% >
			15% 79% 6%		15%

COMMENTS/UNUSUAL CONDITIONS COMMERCIAL AND NON-FRONTING RESIDENTIAL TO THE NORTH OF ROADWAY, INDUSTRIAL AND UNDEVELOPED LAND SOUTH. WIDE TWO LANE FACILITY WITH OCCASIONAL PAINTED MEDIANS. SIDEWALK COMPLETE TO NORTH, PARTIAL TO SOUTH. PAINTED BIKE LANES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
27	1	1%	1	0.5%
28	2	1%	3	1.6%
29	3	2%	6	3.2%
30	3	2%	9	4.9%
31	3	2%	12	6.5%
32	6	3%	18	9.7%
33	4	2%	22	11.9%
34	6	3%	28	15.1%
35	14	8%	42	22.7%
36	15	8%	57	30.8%
37	19	10%	76	41.1%
38	20	11%	96	51.9%
39	13	7%	109	58.9%
40	24	13%	133	71.9%
41	18	10%	151	81.6%
42	12	6%	163	88.1%
43	4	2%	167	90.3%
44	7	4%	174	94.1%
45	4	2%	178	96.2%
46	3	2%	181	97.8%
47	3	2%	184	99.5%
48	1	1%	185	100.0%



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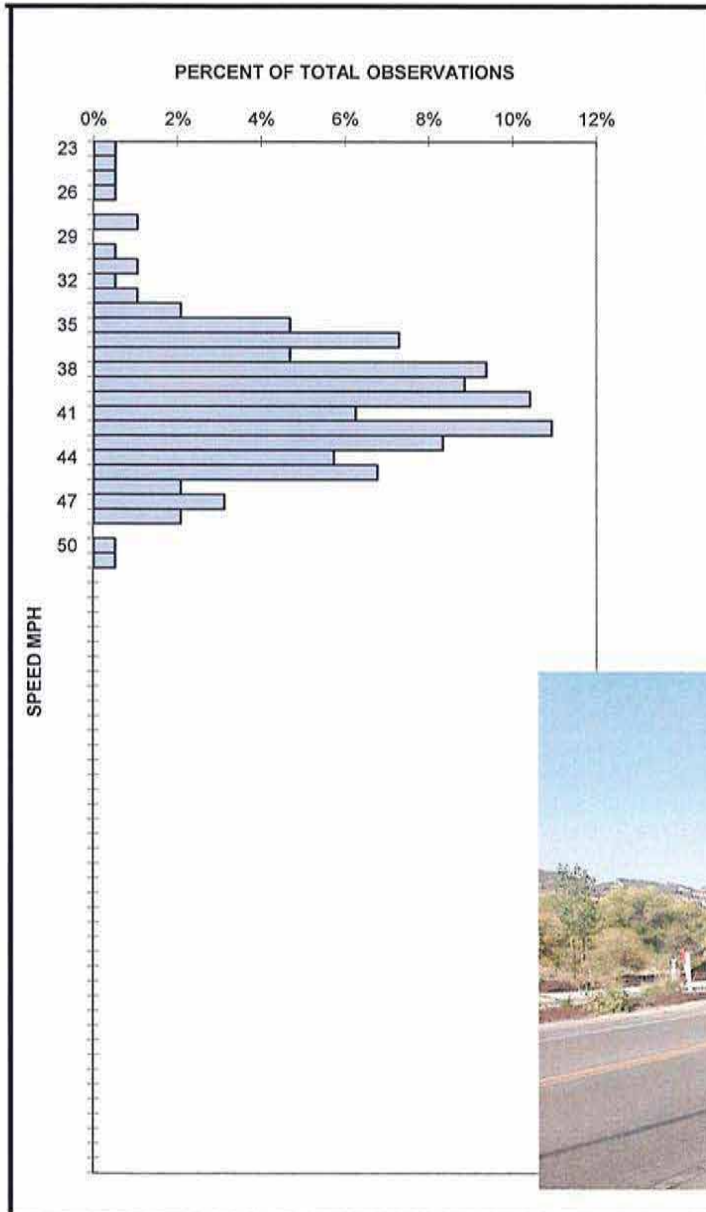
LOCATION: #36 SOUTH RIVER ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 30 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO NAVAJO

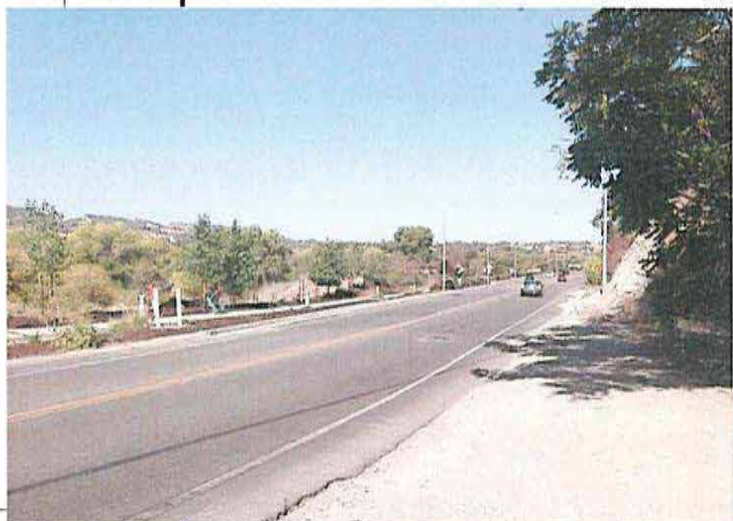
DATE: 10/14/2013
DAY: MONDAY
TIME: 9:00 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		36 - 45	40	45
	<= >		< IN >		<= >
	54% 46%		13% 79% 8%		85% 15%

COMMENTS/UNUSUAL CONDITIONS TRAVELS ALONG LIGHTLY DEVELOPED LAND ADJACENT TO RIVER
FEW ACCESS POINTS. ROADWAY NARROWS TO SUBSTANDARD LANE WIDTH NEAR ROADSIDE CUTS. W1-5 WINDIN
ROAD SIGN (NO ADVISORY SPEED) IN BOTH DIRECTIONS. MULTI-USE PATH NEAR NORTH END OF SEGMENT ONLY



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
23	1	1%	1	0.5%
24	1	1%	2	1.0%
25	1	1%	3	1.6%
26	1	1%	4	2.1%
27	0	0%	4	2.1%
28	2	1%	6	3.1%
29	0	0%	6	3.1%
30	1	1%	7	3.6%
31	2	1%	9	4.7%
32	1	1%	10	5.2%
33	2	1%	12	6.3%
34	4	2%	16	8.3%
35	9	5%	25	13.0%
36	14	7%	39	20.3%
37	9	5%	48	25.0%
38	18	9%	66	34.4%
39	17	9%	83	43.2%
40	20	10%	103	53.6%
41	12	6%	115	59.9%
42	21	11%	136	70.8%
43	16	8%	152	79.2%
44	11	6%	163	84.9%
45	13	7%	176	91.7%
46	4	2%	180	93.8%
47	6	3%	186	96.9%
48	4	2%	190	99.0%
49	0	0%	190	99.0%
50	1	1%	191	99.5%
51	1	1%	192	100.0%



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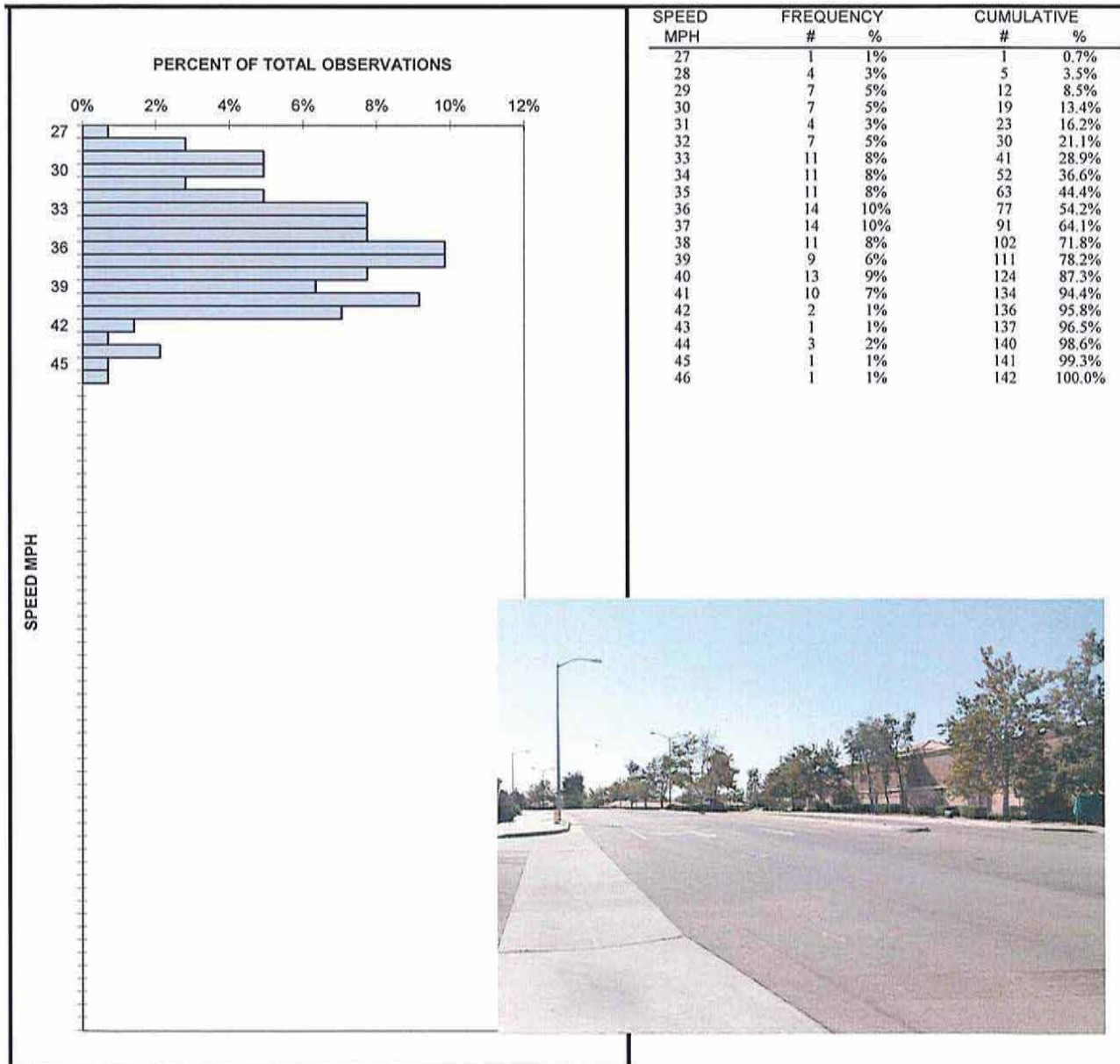
LOCATION: #37 SOUTH RIVER ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 4 LANES WITH MEDIAN
PAVED WIDTH: 78 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

NAVAJO TO NIBLICK

DATE: 10/14/2013
DAY: MONDAY
TIME: 10:15 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		32 - 41	36	40
	<= 87% > 13%		< IN > 16% 78% 6%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS MULTI-FAMILY HOUSING ALONG NORTH HALF OF SEGMENT.
COMMERCIAL ALONG SOUTH HALF. TRAFFIC INFLUENCED BY SIGNAL AT NIBLICK ROAD. SIDEWALKS ON BOTH SIDES OF ROADWAY.



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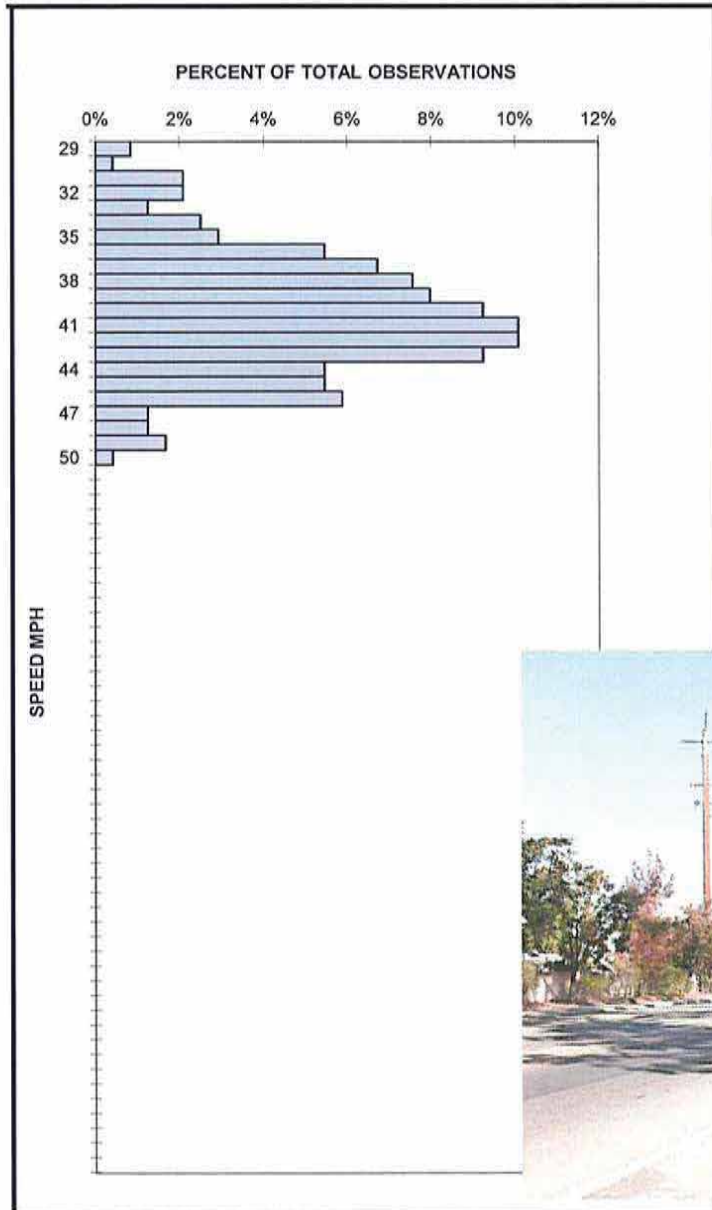
LOCATION: #38 SOUTH RIVER ROAD
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2-4 LANES WITH MEDIAN
PAVED WIDTH: 57 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

NIBLICK TO CHAROLAIS

DATE: 10/14/2013
DAY: MONDAY
TIME: 11:30 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		37 - 46	40	45
	<= >		< IN >		<= >
	49% 51%		18% 78% 5%		85% 15%

COMMENTS/UNUSUAL CONDITIONS COMMERCIAL ALONG NORTHERN PART OF SEGMENT, RESIDENTIAL ALONG SOUTHERN HALF. FOUR LANES WITH RAISED MEDIAN IN COMMERCIAL AREA, TWO LANES WITH RAISED MEDIAN NEAR RESIDENTIAL. ROAD NARROWS AT RIVERBEND DUE TO TREES. BIKE LANES AND WESTERN SIDEWALK



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
29	2	1%	2	0.8%
30	1	0%	3	1.3%
31	5	2%	8	3.4%
32	5	2%	13	5.5%
33	3	1%	16	6.7%
34	6	3%	22	9.2%
35	7	3%	29	12.2%
36	13	5%	42	17.6%
37	16	7%	58	24.4%
38	18	8%	76	31.9%
39	19	8%	95	39.9%
40	22	9%	117	49.2%
41	24	10%	141	59.2%
42	24	10%	165	69.3%
43	22	9%	187	78.6%
44	13	5%	200	84.0%
45	13	5%	213	89.5%
46	14	6%	227	95.4%
47	3	1%	230	96.6%
48	3	1%	233	97.9%
49	4	2%	237	99.6%
50	1	0%	238	100.0%



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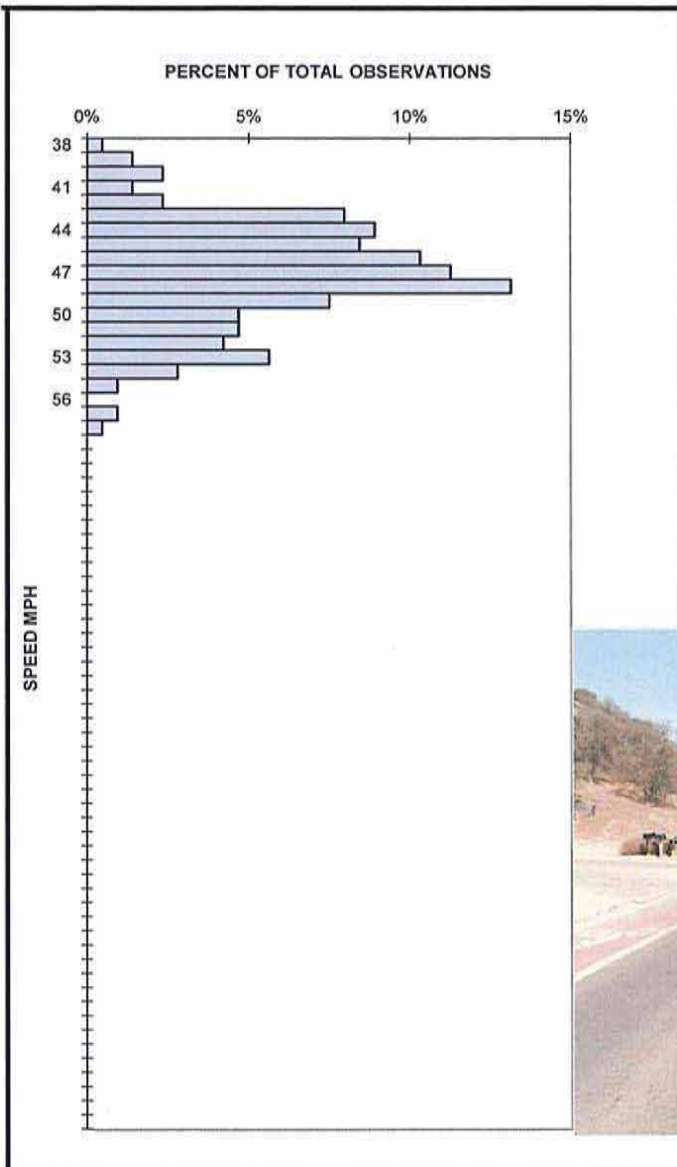
LOCATION: #39 SOUTH VINE STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 32 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

IST TO SR 46 WEST

DATE: 10/18/2013
DAY: FRIDAY
TIME: 12:30 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
50	45		43 - 52	47	52
	<= 33% > 67%		< 8% IN 81% > 11%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS PRIMARY NON-FREEWAY CONNECTION BETWEEN PASO ROBLES AND TEMPLETON. SOME ADJACENT OFFICE SPACE, BUT MOSTLY RURAL ACCESS AND FRONTAGE ROAD. W1-5 WINDING ROAD (40 MPH ADVISED). BIKE LANES BUT NO CONTINUOUS SIDEWALK.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
38	1	0%	1	0.5%
39	3	1%	4	1.9%
40	5	2%	9	4.2%
41	3	1%	12	5.6%
42	5	2%	17	8.0%
43	17	8%	34	16.0%
44	19	9%	53	24.9%
45	18	8%	71	33.3%
46	22	10%	93	43.7%
47	24	11%	117	54.9%
48	28	13%	145	68.1%
49	16	8%	161	75.6%
50	10	5%	171	80.3%
51	10	5%	181	85.0%
52	9	4%	190	89.2%
53	12	6%	202	94.8%
54	6	3%	208	97.7%
55	2	1%	210	98.6%
56	0	0%	210	98.6%
57	2	1%	212	99.5%
58	1	0%	213	100.0%



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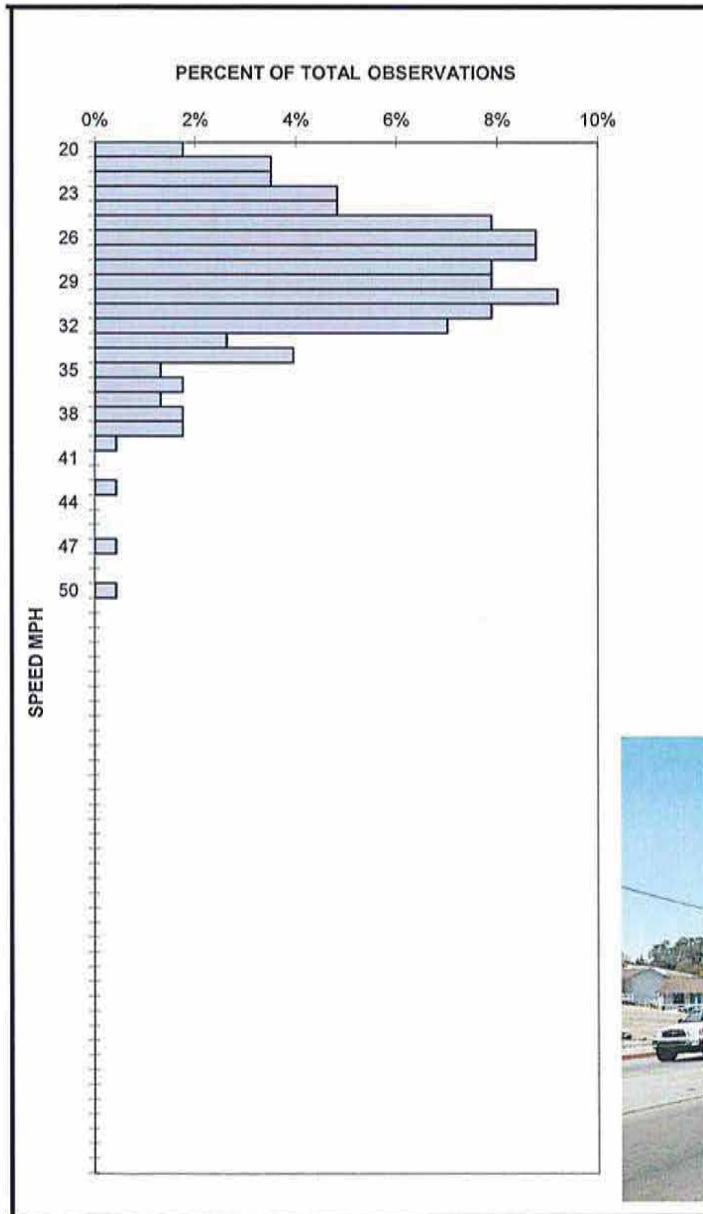
LOCATION: #40 SPRING STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH TWLTL
PAVED WIDTH: 60 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

1ST TO 10TH

DATE: 10/17/2013
DAY: THURSDAY
TIME: 9:30 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30	23 - 32	29	33
	<= 69% > 31%	< 9% IN 75% > 16%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS **COMMERCIAL AND RESIDENTIAL CORRIDOR. APPROACHING DENSITY REQUIRED FOR "BUSINESS DISTRICT". SIDEWALKS BUT NO BIKE FACILITIES. SPEEDS APPEAR TO BE METERED BY TRAFFIC SIGNALS AT 1ST, 4TH, 6TH AND 10TH STREETS.**



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
20	4	2%	4	1.8%
21	8	4%	12	5.3%
22	8	4%	20	8.8%
23	11	5%	31	13.6%
24	11	5%	42	18.4%
25	18	8%	60	26.3%
26	20	9%	80	35.1%
27	20	9%	100	43.9%
28	18	8%	118	51.8%
29	18	8%	136	59.6%
30	21	9%	157	68.9%
31	18	8%	175	76.8%
32	16	7%	191	83.8%
33	6	3%	197	86.4%
34	9	4%	206	90.4%
35	3	1%	209	91.7%
36	4	2%	213	93.4%
37	3	1%	216	94.7%
38	4	2%	220	96.5%
39	4	2%	224	98.2%
40	1	0%	225	98.7%
41	0	0%	225	98.7%
42	0	0%	225	98.7%
43	1	0%	226	99.1%
44	0	0%	226	99.1%
45	0	0%	226	99.1%
46	0	0%	226	99.1%
47	1	0%	227	99.6%
48	0	0%	227	99.6%
49	0	0%	227	99.6%
50	1	0%	228	100.0%



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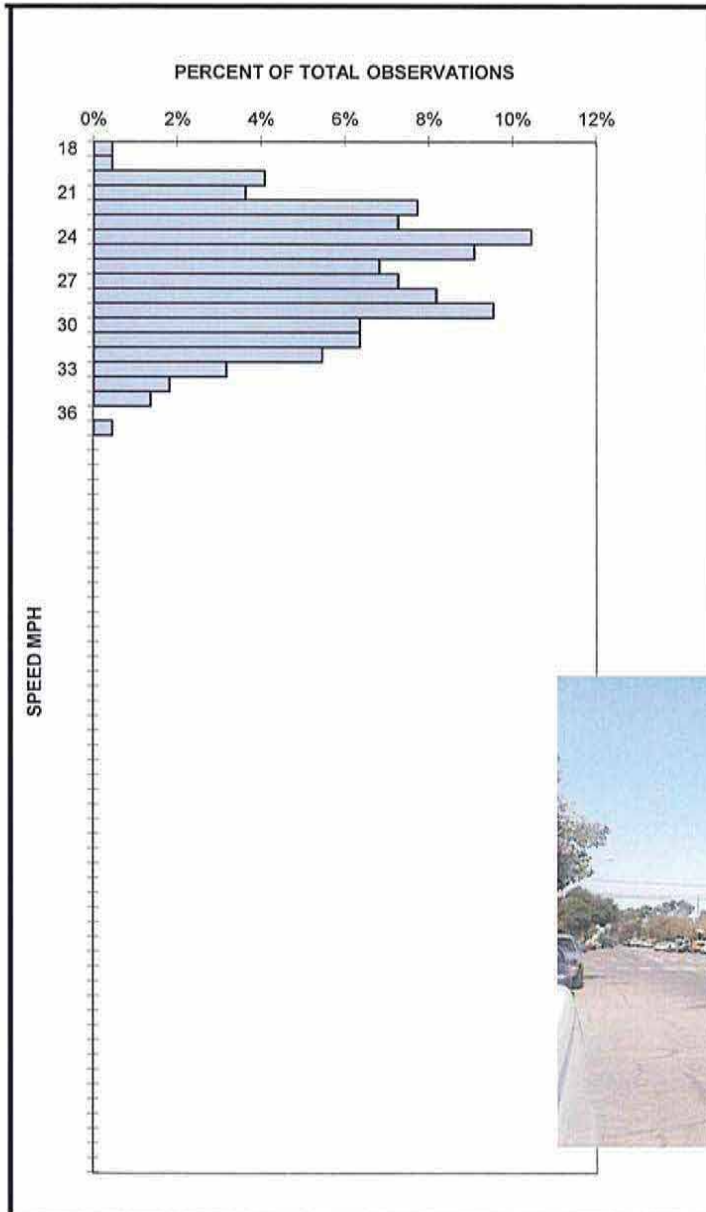
LOCATION: #41 SPRING STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH TWLTL
PAVED WIDTH: 60 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

10TH TO 28TH

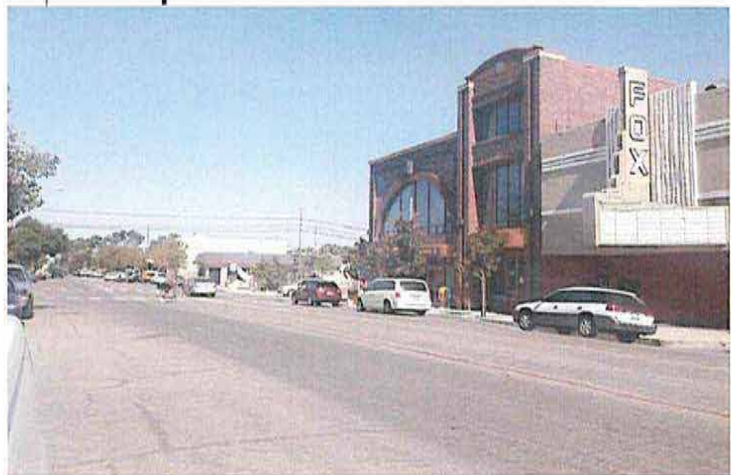
DATE: 10/17/2013
DAY: THURSDAY
TIME: 10:45 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30		22 - 31	27	31
	<= >		< IN >		<= >
	81% 19%		9% 79% 12%		85% 15%

COMMENTS/UNUSUAL CONDITIONS MAJOR COMMERCIAL CORRIDOR WITH SOME RESIDENTIAL.
TWO LANES WITH TWLTL. SIGNIFICANT PEDESTRIAN AND PARKING ACTIVITY THROUGHOUT CORRIDOR
SIGNALS AT 10TH, 12TH, 13TH AND 24TH METER TRAFFIC ALONG CORRIDOR.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	1	0%	1	0.5%
19	1	0%	2	0.9%
20	9	4%	11	5.0%
21	8	4%	19	8.6%
22	17	8%	36	16.4%
23	16	7%	52	23.6%
24	23	10%	75	34.1%
25	20	9%	95	43.2%
26	15	7%	110	50.0%
27	16	7%	126	57.3%
28	18	8%	144	65.5%
29	21	10%	165	75.0%
30	14	6%	179	81.4%
31	14	6%	193	87.7%
32	12	5%	205	93.2%
33	7	3%	212	96.4%
34	4	2%	216	98.2%
35	3	1%	219	99.5%
36	0	0%	219	99.5%
37	1	0%	220	100.0%



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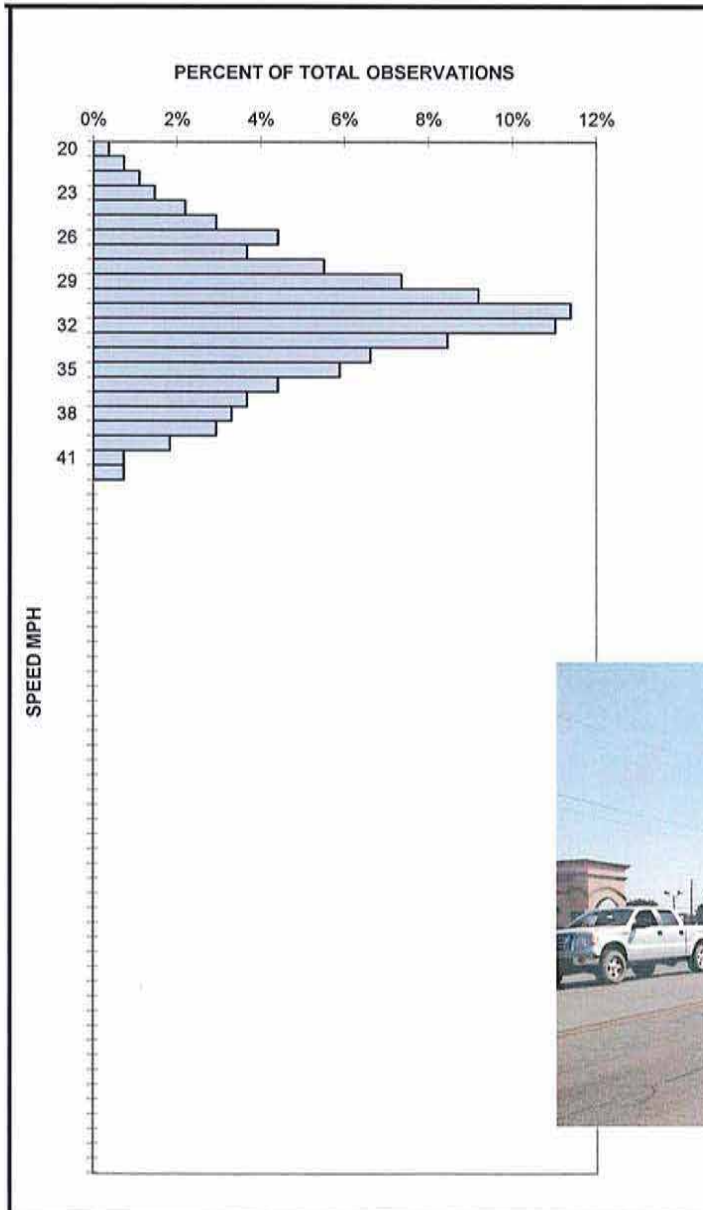
LOCATION: #42 SPRING STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH TWLTL
PAVED WIDTH: 50-60 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

28TH TO 36TH

DATE: 10/17/2013
DAY: THURSDAY
TIME: 11:45 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35		27 - 36	32	36
	<= 82% > 18%		< IN > 13% 74% 13%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS SECTION IS A MIX OF COMMERCIAL AND SINGLE/MULTI-FAMILY RERSIDENTIAL. BECOMES FREEWAY RAMP NORTH OF 36TH. MOSTLY TWO LANE WITH TWLTL, SOME RAISED MEDIAN, SIDEWALKS BOTH SIDES, NO BIKE FACILITIES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
20	1	0%	1	0.4%
21	2	1%	3	1.1%
22	3	1%	6	2.2%
23	4	1%	10	3.7%
24	6	2%	16	5.9%
25	8	3%	24	8.8%
26	12	4%	36	13.2%
27	10	4%	46	16.9%
28	15	6%	61	22.4%
29	20	7%	81	29.8%
30	25	9%	106	39.0%
31	31	11%	137	50.4%
32	30	11%	167	61.4%
33	23	8%	190	69.9%
34	18	7%	208	76.5%
35	16	6%	224	82.4%
36	12	4%	236	86.8%
37	10	4%	246	90.4%
38	9	3%	255	93.8%
39	8	3%	263	96.7%
40	5	2%	268	98.5%
41	2	1%	270	99.3%
42	2	1%	272	100.0%



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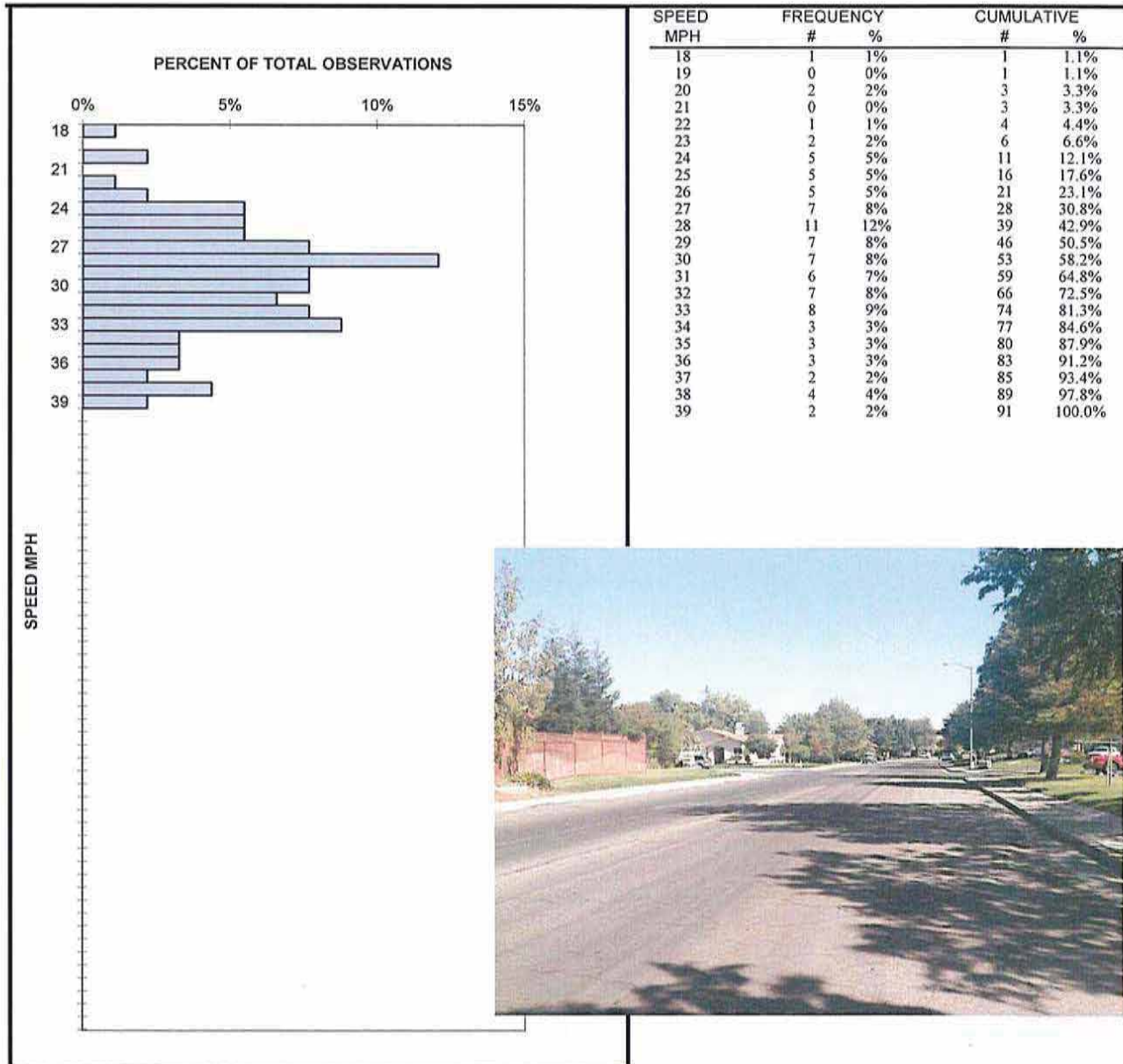
LOCATION: #43 STONEY CREEK ROAD
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 47 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CRESTON TO RAMBOUILLET

DATE: 10/15/2013
DAY: TUESDAY
TIME: 9:00 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30		24 - 33	30	35
	<= >		< IN >		<= >
	58% 42%		7% 75% 19%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA WITH BOTH LOW AND HIGH DENSITY DEVELOPMENT. MID-BLOCK BUS STOP. CRITICAL SPEED NOT IN PACE SPEED. SIDEWALK NETWORK COMPLETE ON-STREET PARKING BOTH SIDES. NO DEDICATED BIKE FACILITIES.



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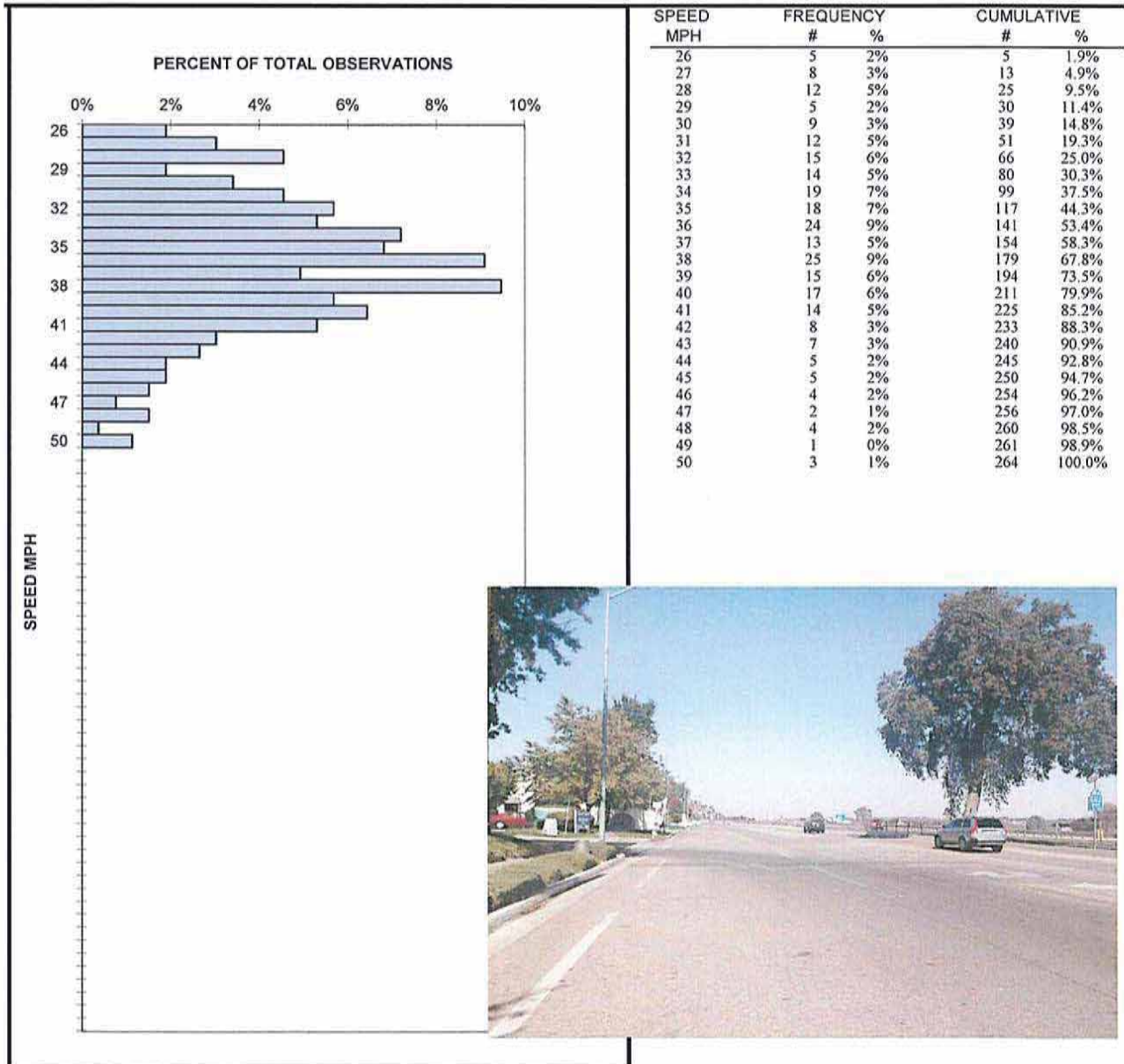
LOCATION: #44 THEATRE DRIVE
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES WITH MEDIAN
PAVED WIDTH: 30-62 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SR 46 WEST TO CITY LIMIT

DATE: 10/18/2013
DAY: FRIDAY
TIME: 3:00 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		32 - 41	36	41
	<= 80% > 20%		< IN > 19% 66% 15%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS LARGE FORMAT RETAIL ACCESS TO WEST. US 101 (NO DIRECT ACCESS) TO EAST. AREA NEAR SR 46 HAS RAISED MEDIAN, PAINTED MEDIAN WITH TURN LANES ELSEWHERE. FACILITIES. SIDEWALK ON WEST SIDE, NO BIKE FACILITIES.



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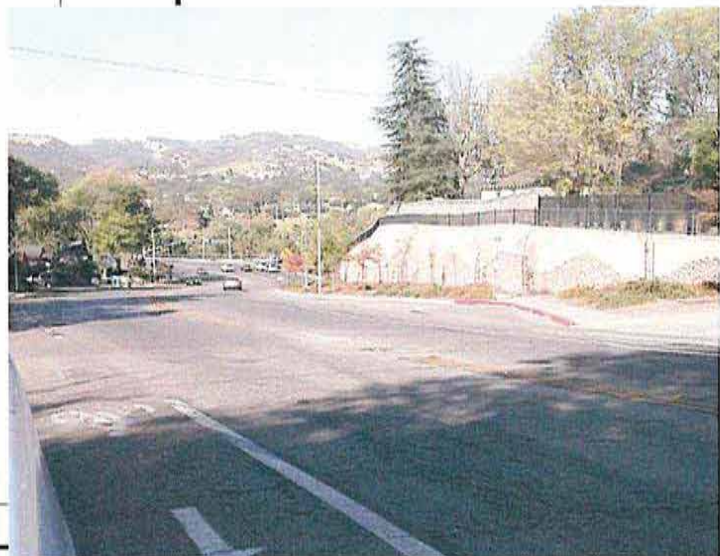
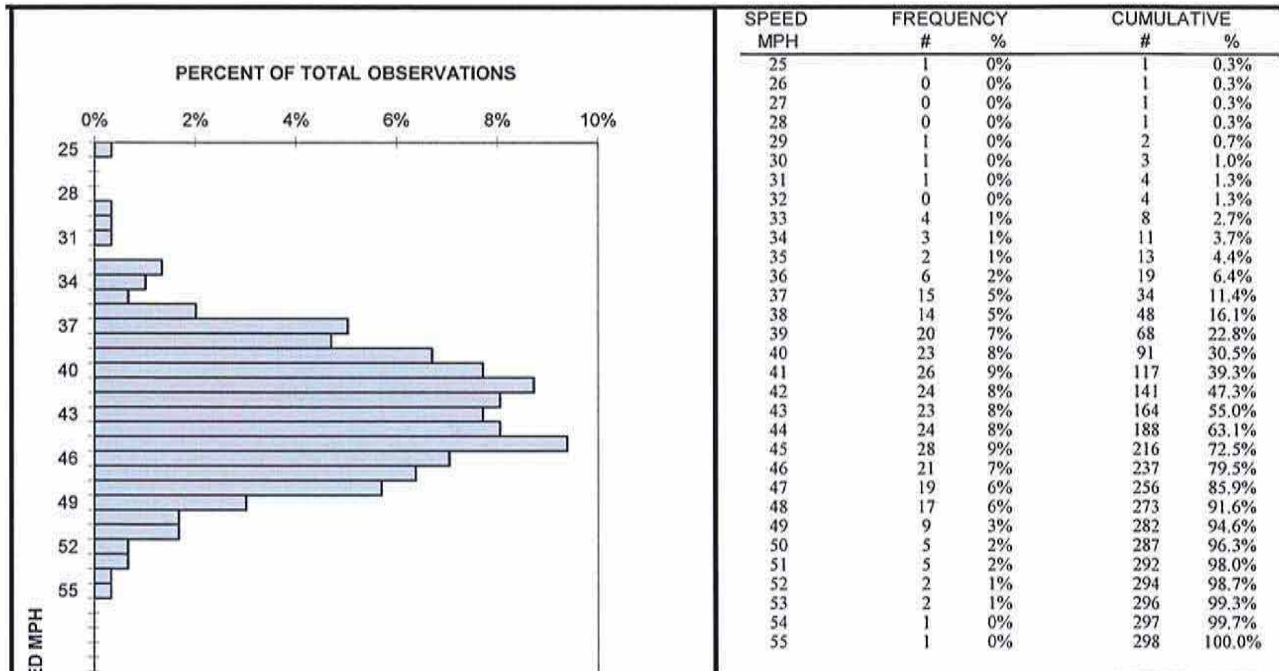
LOCATION: #45 UNION ROAD
 DIRECTION: EAST-WEST
 ROAD X-SECTION: 2 LANES WITH MEDIAN
 PAVED WIDTH: 44 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

NORTH RIVER RD TO KLECK

DATE: 10/9/2013
 DAY: WEDNESDAY
 TIME: 3:00 PM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	40		39 - 48	43	47
	<= 31% > 69%		< IN > 16% 76% 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS WEST SIDE OF ROAD FULLY DEVELOPED WITH FOUR ACCESS POINT
 SIGNIFICANT GRADES LIMIT ACCESS TO EAST (ONLY JACKSON DR). CONTINUOUS SIDEWALK ON WEST SIDE ONLY
 BIKE LANES BOTH WAYS.



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LOCATION: #46 UNION ROAD

KLECK TO GOLDEN HILL

DIRECTION: EAST-WEST

DATE: 10/9/2013

ROAD X-SECTION: 2 LANES WITH INTERMITTANT PAINTED MEDIAN

DAY: WEDNESDAY

PAVED WIDTH: 36 Feet

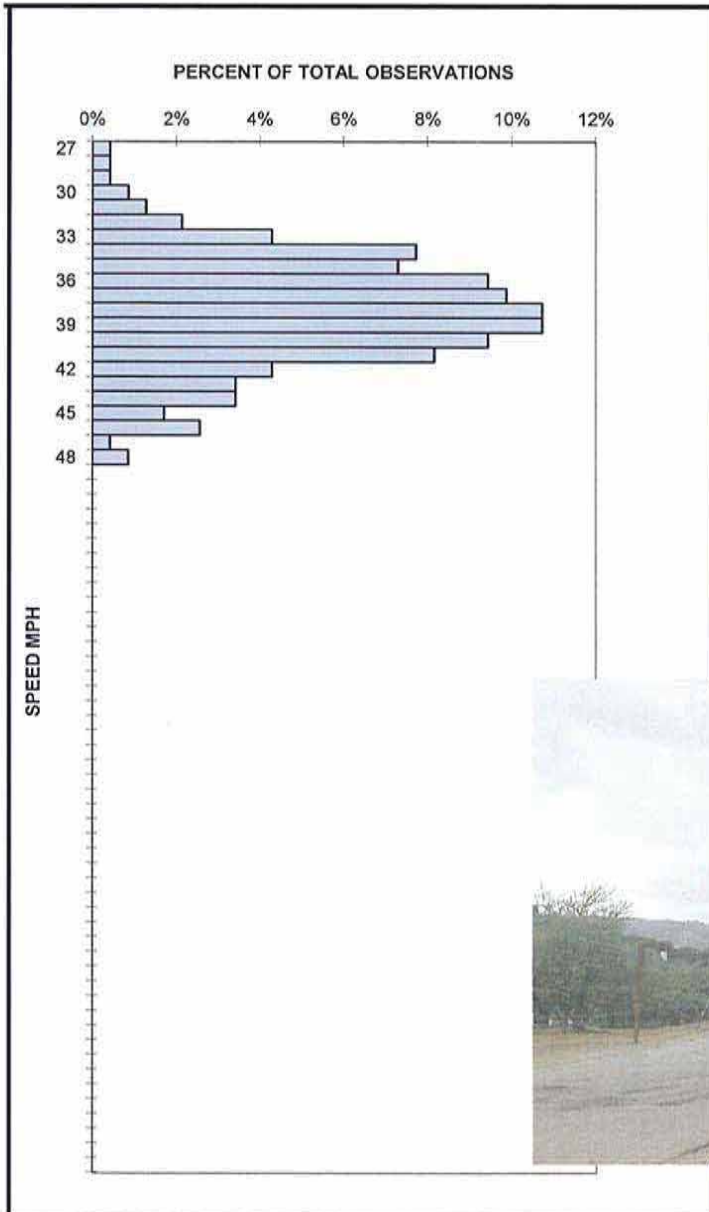
TIME: 2:00 PM

BUSINESS OR RESIDENCE DISTRICT: NO

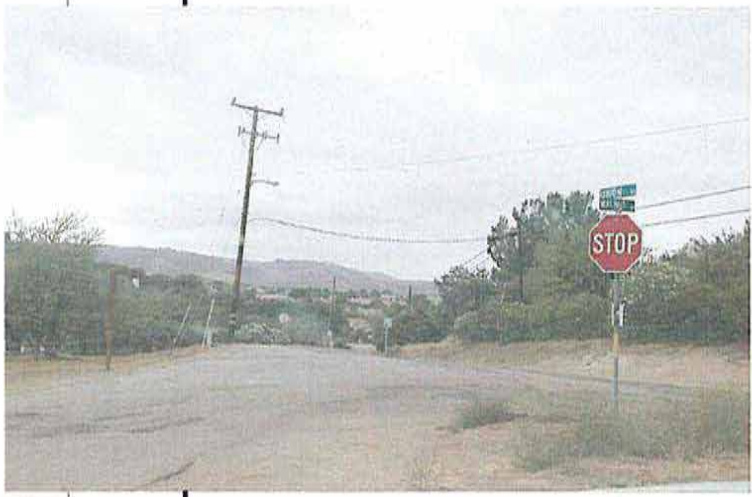
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
40	40		33 - 42	38	42
	<= 75% > 25%		< IN > 6% 82% 12%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS LOW DENSITY RESIDENTIAL IN WESTERN HALF WITH SEVERAL DRIVEWAYS AND TWO LANE ROAD. W1-5 WINDING ROAD SIGN. CENTER MEDIAN IN EASTERN HALF WITH MORE TYPICAL SUBURBAN ACCESS SPACING. SIDEWALK ON SOUTH SIDE BETWEEN MONTIBELLO OAKS AND GOLDEN HILL



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
27	1	0%	1	0.4%
28	1	0%	2	0.9%
29	1	0%	3	1.3%
30	2	1%	5	2.1%
31	3	1%	8	3.4%
32	5	2%	13	5.6%
33	10	4%	23	9.9%
34	18	8%	41	17.6%
35	17	7%	58	24.9%
36	22	9%	80	34.3%
37	23	10%	103	44.2%
38	25	11%	128	54.9%
39	25	11%	153	65.7%
40	22	9%	175	75.1%
41	19	8%	194	83.3%
42	10	4%	204	87.6%
43	8	3%	212	91.0%
44	8	3%	220	94.4%
45	4	2%	224	96.1%
46	6	3%	230	98.7%
47	1	0%	231	99.1%
48	2	1%	233	100.0%



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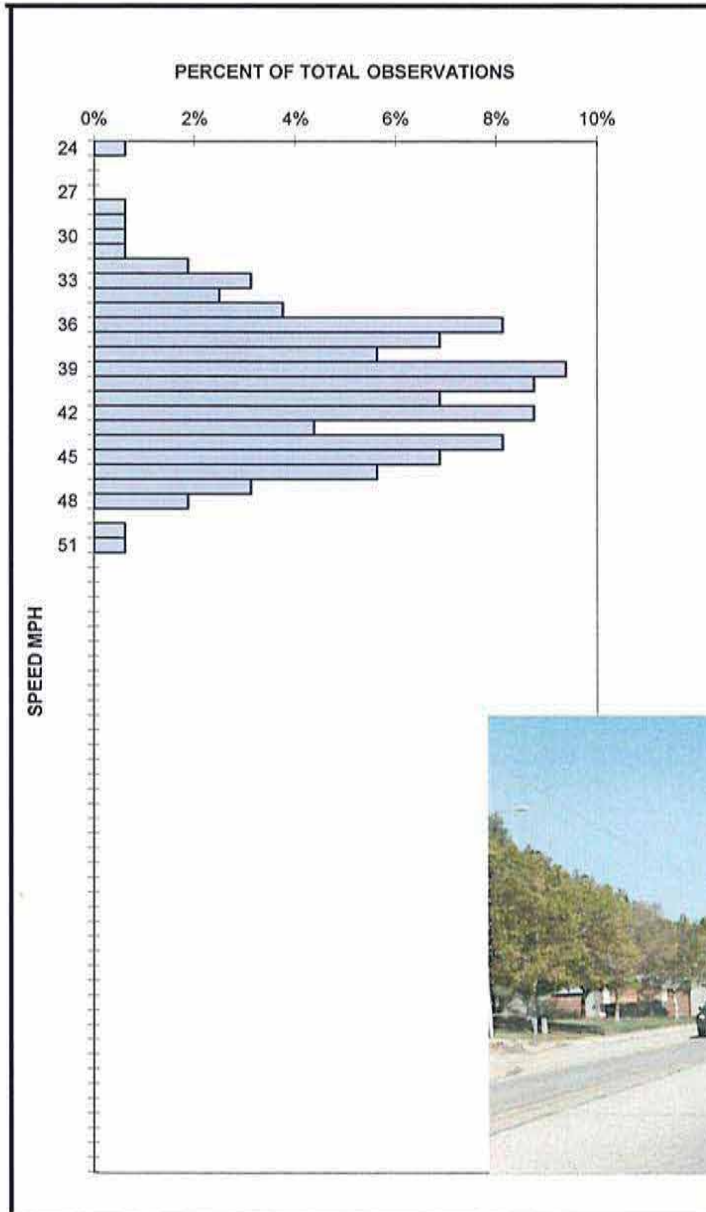
LOCATION: #47 UNION ROAD
 DIRECTION: EAST-WEST
 ROAD X-SECTION: 2 LANES
 PAVED WIDTH: 26 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

GOLDEN HILL TO SR 46

DATE: 10/7/2013
 DAY: MONDAY
 TIME: 11:45 PM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
45	45	36 - 45	40	45
	<= 88% > 12%	< 14% IN 74% > 12%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS LIGHT INDUSTRIAL AND RURAL TRANSITION AREA. VARIABLE PAVED WIDTH WITH TWO THROUGH LANES AND POOR PAVEMENT CONDITIONS. DISCONTINUOUS PEDESTRIAN FACILITIES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
24	1	1%	1	0.6%
25	0	0%	1	0.6%
26	0	0%	1	0.6%
27	0	0%	1	0.6%
28	1	1%	2	1.3%
29	1	1%	3	1.9%
30	1	1%	4	2.5%
31	1	1%	5	3.1%
32	3	2%	8	5.0%
33	5	3%	13	8.1%
34	4	3%	17	10.6%
35	6	4%	23	14.4%
36	13	8%	36	22.5%
37	11	7%	47	29.4%
38	9	6%	56	35.0%
39	15	9%	71	44.4%
40	14	9%	85	53.1%
41	11	7%	96	60.0%
42	14	9%	110	68.8%
43	7	4%	117	73.1%
44	13	8%	130	81.3%
45	11	7%	141	88.1%
46	9	6%	150	93.8%
47	5	3%	155	96.9%
48	3	2%	158	98.8%
49	0	0%	158	98.8%
50	1	1%	159	99.4%
51	1	1%	160	100.0%



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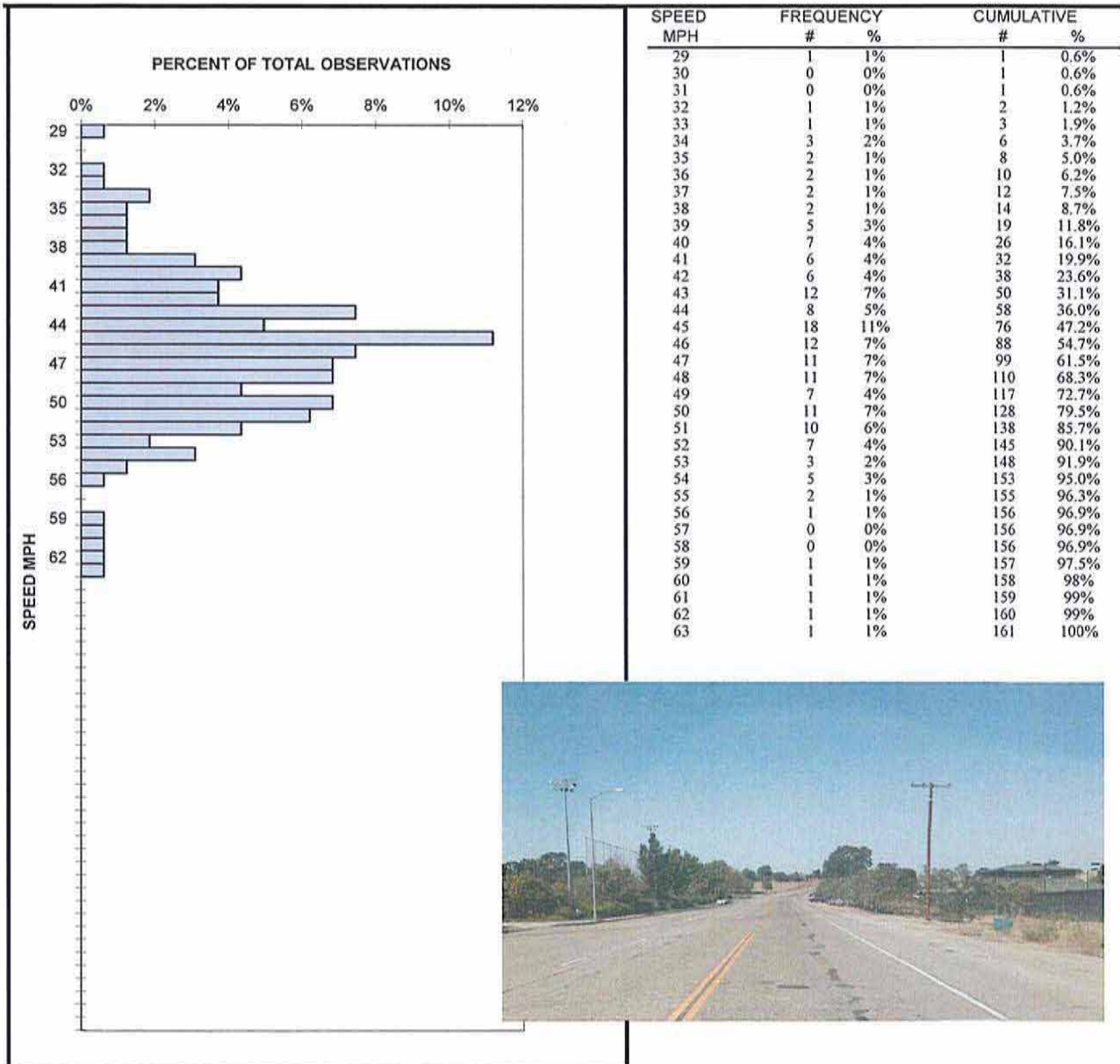
LOCATION: #48 UNION ROAD
DIRECTION: EAST-WEST
ROAD X-SECTION: 2-3 LANES
PAVED WIDTH: 58 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

ALONG BARNEY SCHWARTZ PARK

DATE: 10/7/2013
DAY: MONDAY
TIME: 9:30 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
50	50		43 - 52	46	51
	<= >		< IN >		<= >
	80% 20%		24% 66% 10%		85% 15%

COMMENTS/UNUSUAL CONDITIONS 50 NEAR SR 46 EASTNBUND, EAST OF PARK SOUTHBOUND. PARK OF ROAD, REC CENTER NORTH. BIKE LANE/PARKING/SIDEWALK ALONG PARK SIDE. DETACHED PATH ALONG REC CENTER. PARK SIGNIFICANT TRAFFIC GENERATOR DURING OFF PEAK TIMES



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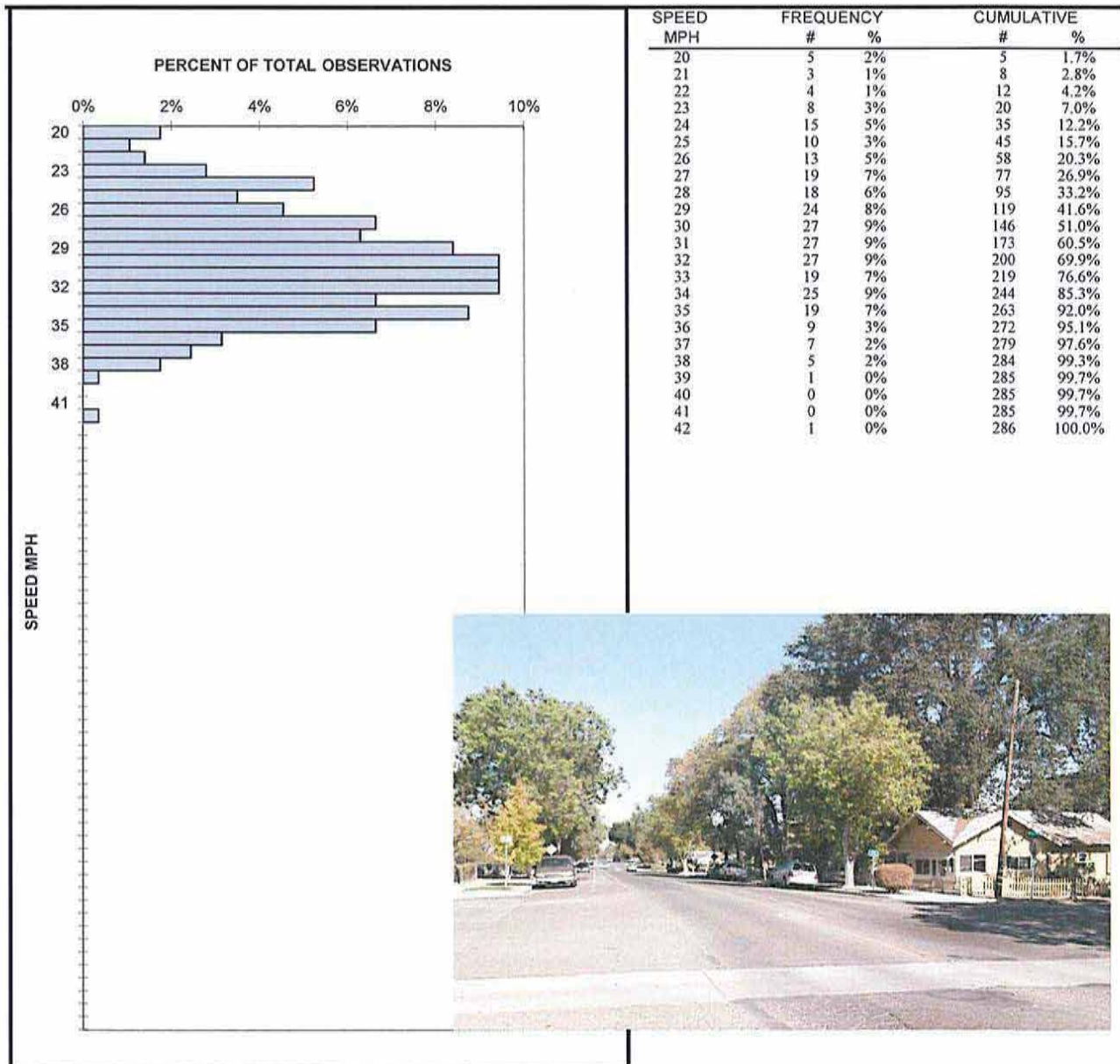
LOCATION: #49 VINE STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 48 Feet
BUSINESS OR RESIDENCE DISTRICT: YES

1ST TO 12TH

DATE: 10/18/2013
DAY: FRIDAY
TIME: 11:15 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30		26 - 35	30	34
	<= 51% > 49%		< IN > 16% 76% 8%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS BUSINESS AND RESIDENTIAL AREA WITH ON-STREET PARKING.
BIKE LANES NORTH OF 4TH STREET. SEVERAL; MARKED "DIPS" AT INTERSECTIONS. BOTH BUSINESSES AND RESIDENTIAL FRONTING ROADWAY.



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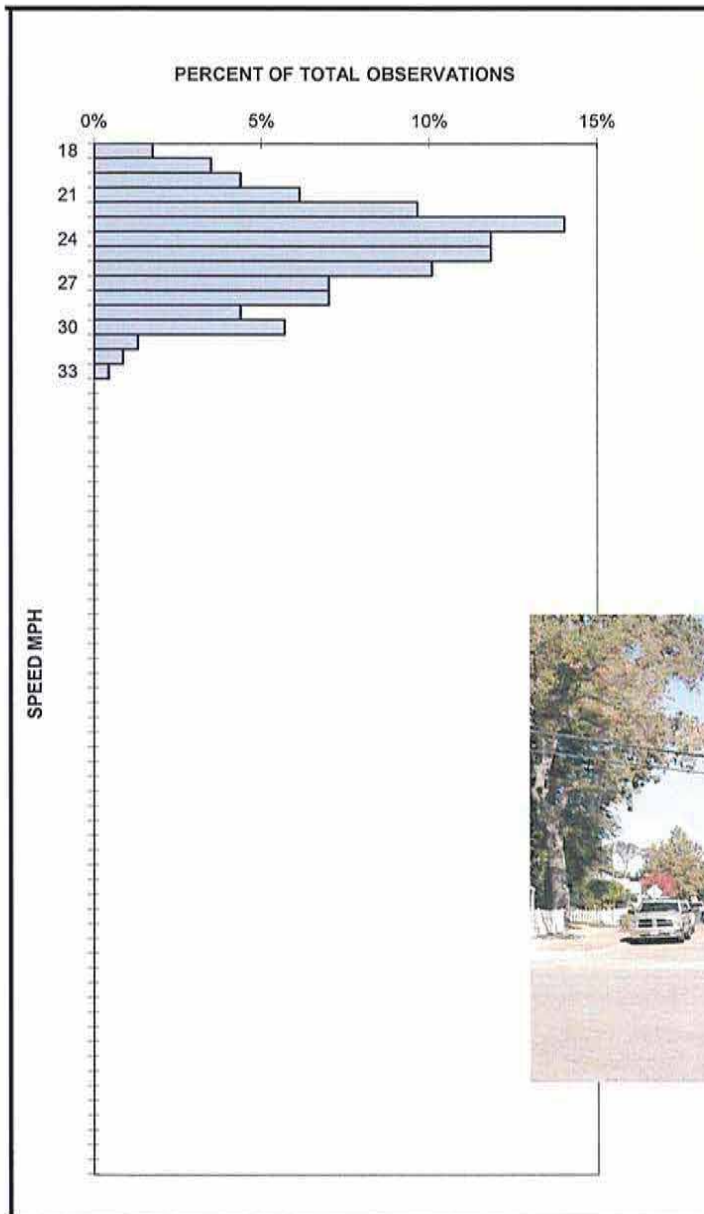
LOCATION: #50 VINE STREET
 DIRECTION: NORTH-SOUTH
 ROAD X-SECTION: 2 LANES
 PAVED WIDTH: 51 Feet
 BUSINESS OR RESIDENCE DISTRICT: YES

12TH TO 17TH

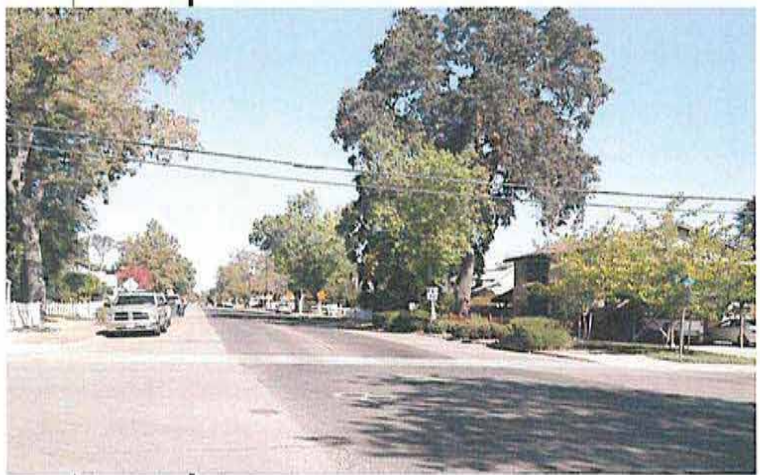
DATE: 10/18/2013
 DAY: FRIDAY
 TIME: 10:00 AM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30	21 - 30	25	28
	<= 97% > 3%	< 10% IN 88% > 3%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AND BUSINESS DISTRICT WITH SCHOOL AT NORTH END OF SEGMENT. TWO LANE FACILITY WITH BIKE LANES AND ON-STREET PARKING. SCHOOL PED CROSSINGS AT 16TH AND 17TH. MARKED AND SIGNED DIPS AT INTERSECTIONS.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	4	2%	4	1.8%
19	8	4%	12	5.3%
20	10	4%	22	9.6%
21	14	6%	36	15.8%
22	22	10%	58	25.4%
23	32	14%	90	39.5%
24	27	12%	117	51.3%
25	27	12%	144	63.2%
26	23	10%	167	73.2%
27	16	7%	183	80.3%
28	16	7%	199	87.3%
29	10	4%	209	91.7%
30	13	6%	222	97.4%
31	3	1%	225	98.7%
32	2	1%	227	99.6%
33	1	0%	228	100.0%



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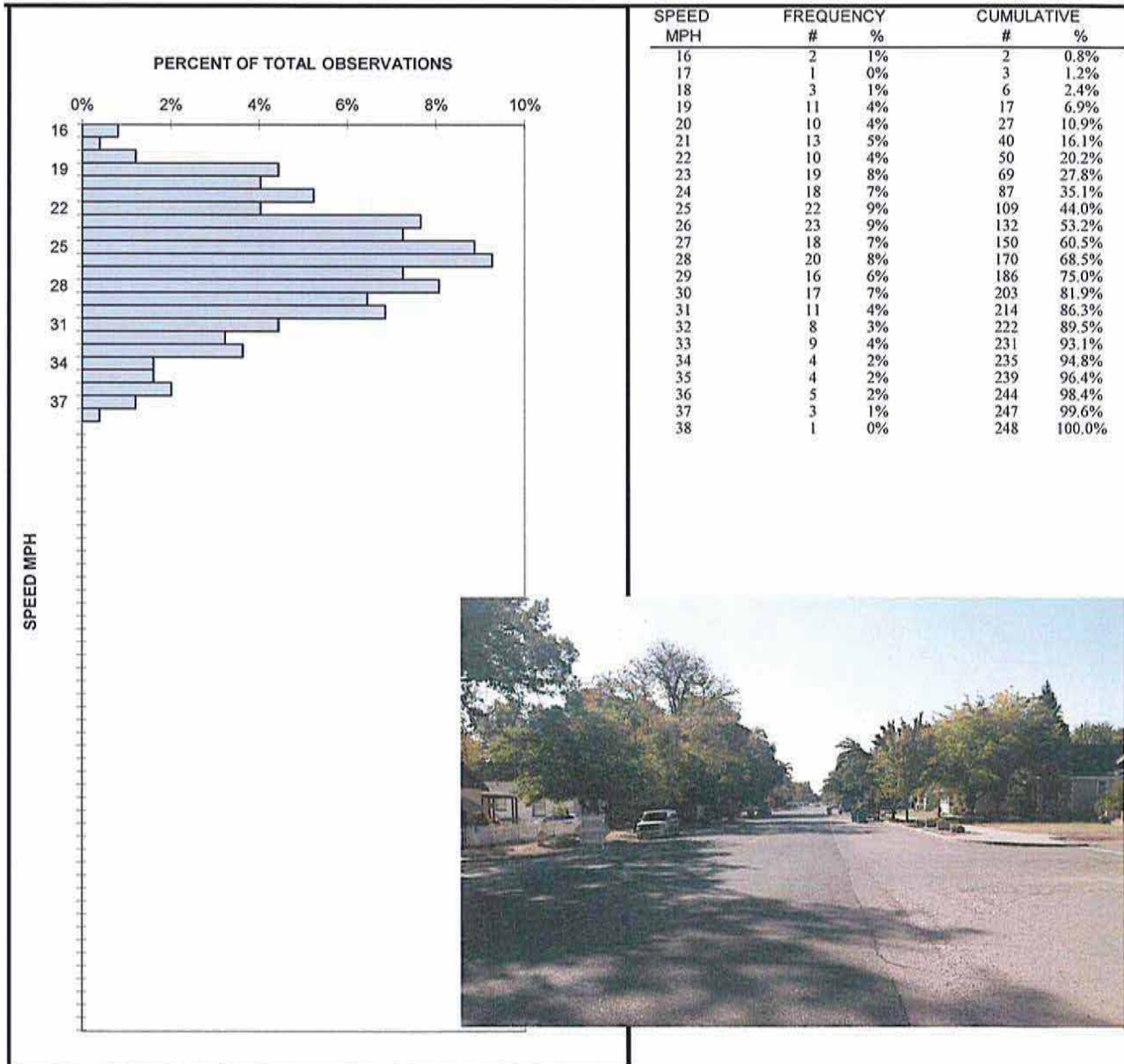
LOCATION: #51 VINE STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 50 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

17TH TO 24TH

DATE: 10/18/2013
DAY: FRIDAY
TIME: 8:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	35		21 - 30	26	31
	<= >		< IN >		<= >
	96% 4%		11% 71% 18%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA WITH SCHOOL ZONE AT SOUTH END OF ON STREET PARKING WITH CURB/GUTTER/INTERMITTANT SIDEWALK. DIPS AT SOME INTERSECTIONS. BIKE LANE BOTH DIRECTIONS.



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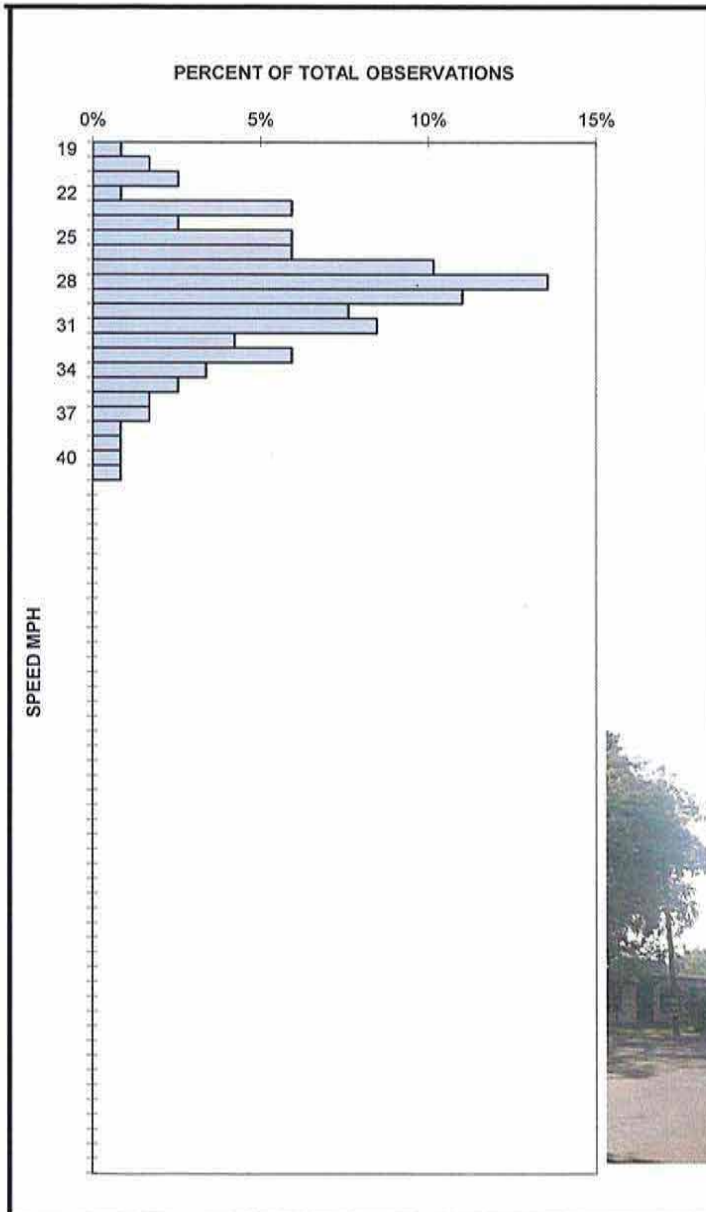
LOCATION: #52 VINE STREET
 DIRECTION: NORTH-SOUTH
 ROAD X-SECTION: 2 LANES
 PAVED WIDTH: 32-38 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

24TH TO 32ND

DATE: 10/22/2013
 DAY: TUESDAY
 TIME: 9:00 AM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35	25 - 34	29	33
	<= 93% > 7%	< IN > 14% 76% 9%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL AREA, THOUGH NOT DENSE ENOUGH TO QUALIFY AS A RES. DISTRICT. SCHOOL/STUDENT CROSSING AT SOUTH END OF SEGMENT. BIKE ROUTE.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
19	1	1%	1	0.8%
20	2	2%	3	2.5%
21	3	3%	6	5.1%
22	1	1%	7	5.9%
23	7	6%	14	11.9%
24	3	3%	17	14.4%
25	7	6%	24	20.3%
26	7	6%	31	26.3%
27	12	10%	43	36.4%
28	16	14%	59	50.0%
29	13	11%	72	61.0%
30	9	8%	81	68.6%
31	10	8%	91	77.1%
32	5	4%	96	81.4%
33	7	6%	103	87.3%
34	4	3%	107	90.7%
35	3	3%	110	93.2%
36	2	2%	112	94.9%
37	2	2%	114	96.6%
38	1	1%	115	97.5%
39	1	1%	116	98.3%
40	1	1%	117	99.2%
41	1	1%	118	100.0%



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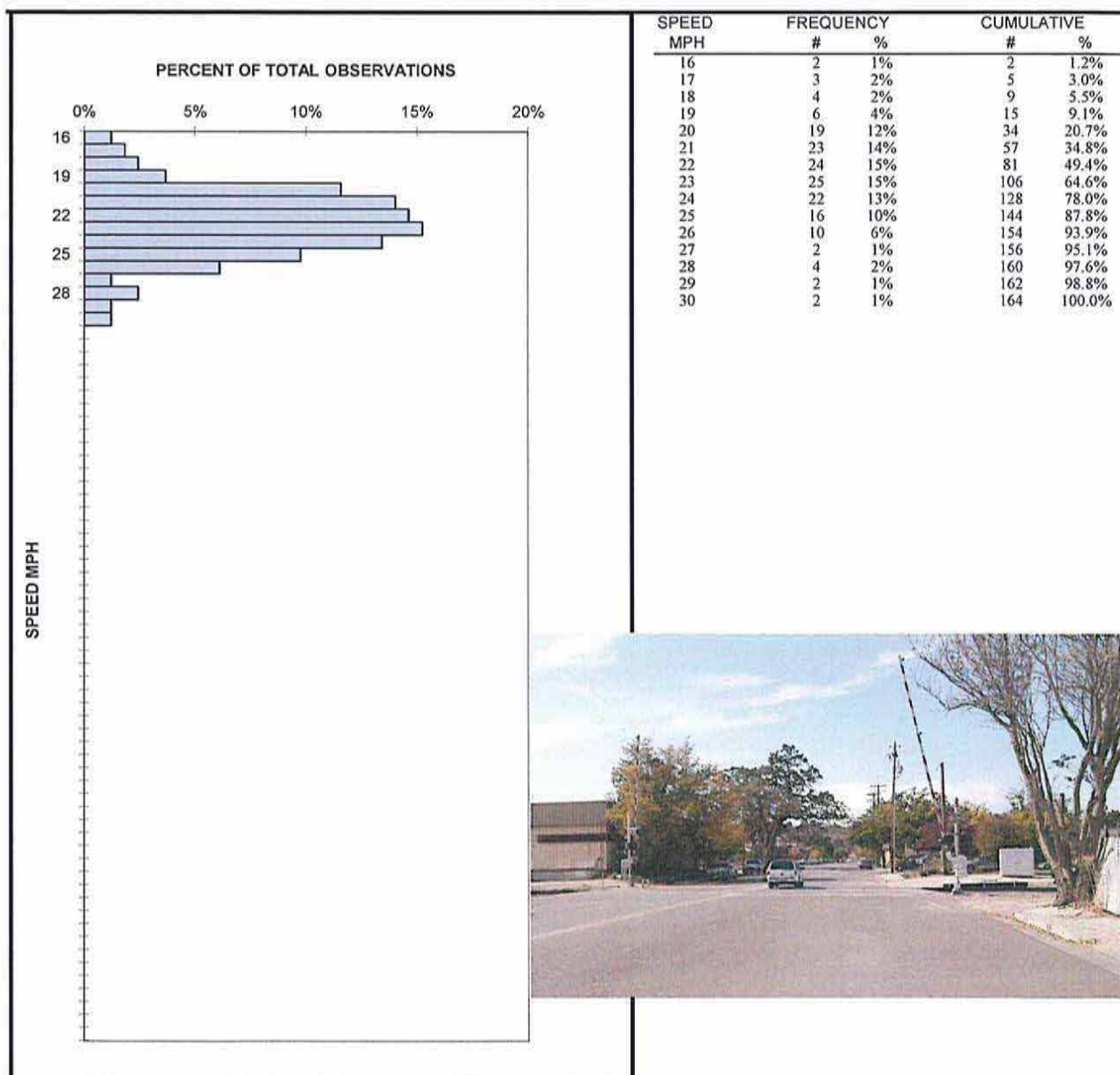
LOCATION: #53 10TH STREET
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 34-60 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SPRING TO RIVERSIDE

DATE: 10/23/2013
DAY: WEDNESDAY
TIME: 10:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		17 - 26	23	25
	<= 88% >	> 12%	< IN >		<= 85% >
			1% 93% 6%		15%

COMMENTS/UNUSUAL CONDITIONS DOWNTOWN AREA WITH SEVERAL ADJACENT PUBLIC BUILDINGS.
TRAFFIC SIGNAL AT SPRING, STOP SIGNS AT PINE AND RIVERSIDE. ON-STREET PARKING. SIDEWALK ON BOTH SID
EXCEPT FOR AT RAILROAD CROSSING.



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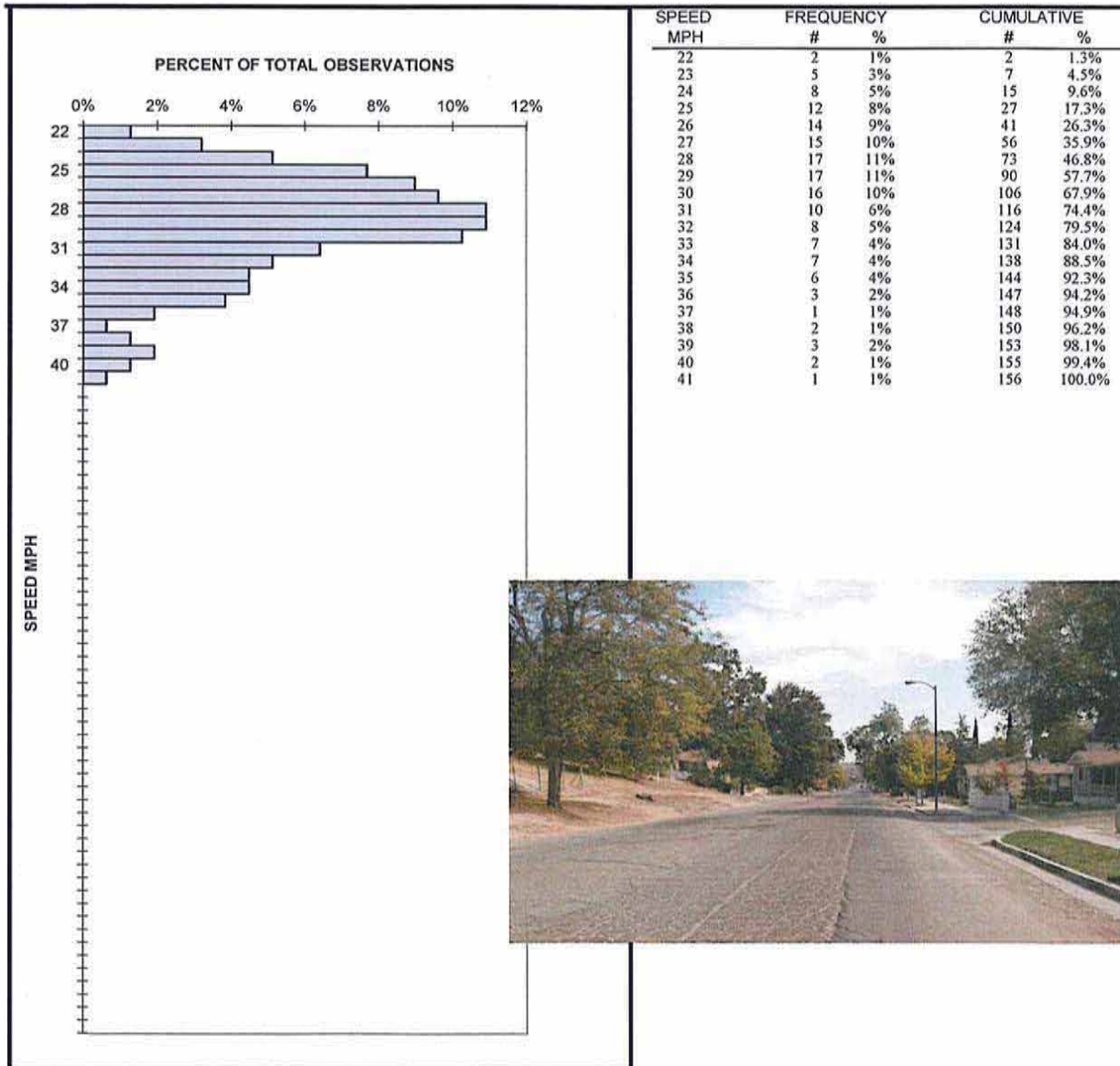
LOCATION: #54 12TH STREET
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 43-50 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

VINE TO MERRYHILL

DATE: 10/23/2013
DAY: WEDNESDAY
TIME: 9:30 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	30	24 - 33	29	34
	<= >	< IN >		<= >
	68% 32%	4% 79% 16%		85% 15%

COMMENTS/UNUSUAL CONDITIONS RESIDENTIAL DISTRICT WITH POOR ROADWAY CONDITION.
WIDE LANES WITH MANY HOMES FRONTING STREET. INCOMPLETE SIDEWALK NETWORK. NO BIKE FACILITIES.



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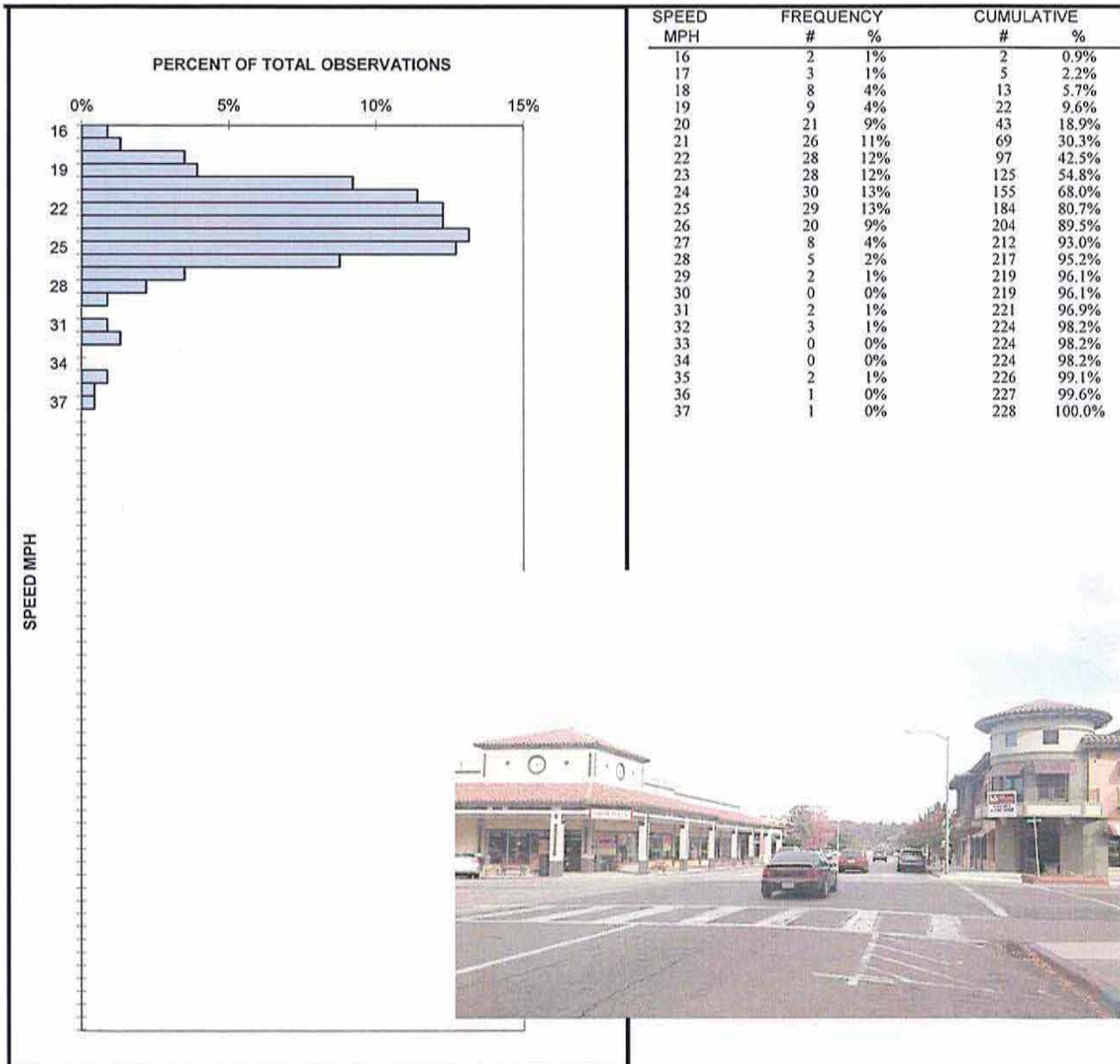
LOCATION: #55 13TH STREET
 DIRECTION: EAST-WEST
 ROAD X-SECTION: 2 LANES WITH PAINTED MEDIAN
 PAVED WIDTH: 55-60 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

SPRING TO RIVERSIDE

DATE: 10/18/2013
 DAY: TUESDAY
 TIME: 3:15 PM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		18 - 27	23	26
	<= >		< IN >		<= >
	81% 19%		2% 91% 7%		85% 15%

COMMENTS/UNUSUAL CONDITIONS **SHORT SEGMENT PROVIDING BUSINESS ACCESS. TRAFFIC SIGNALS AT EITHER END OF SEGMENT METER TRAFFIC SPEEDS. MEDIAN PROVIDES LEFT TURN LANES AT EACH INTERSECTION. SIDEWALK ALONG BOTH SIDES OF MAJORITY OF SEGMENT.**



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LOCATION: #56 16TH STREET

SPRING TO RIVERSIDE

DIRECTION: NORTH-SOUTH

DATE: 10/22/2013

ROAD X-SECTION: 2 LANES

DAY: TUESDAY

PAVED WIDTH: 50 Feet

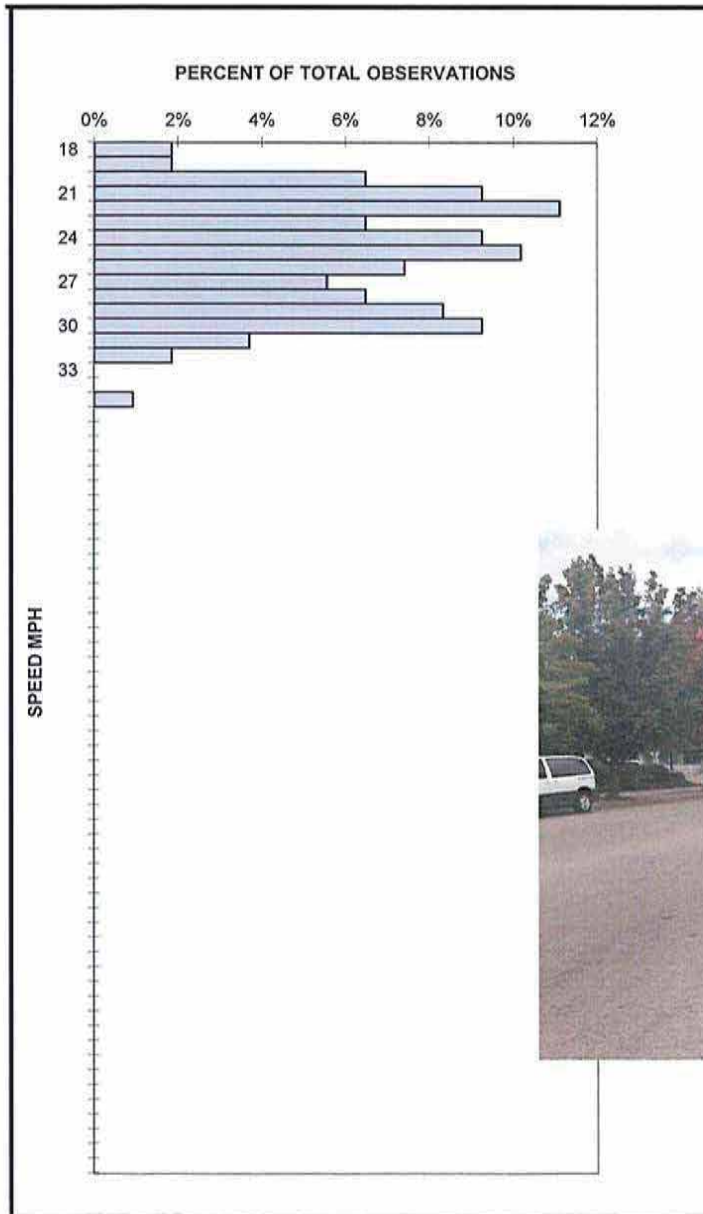
TIME: 2:00 PM

BUSINESS OR RESIDENCE DISTRICT: NO

OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
30	30		21 - 30	25	30
	<= 94%	> 6%	< 10% IN 83% > 6%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS SHORT SEGMENT. VARIETY OF RESIDENTIAL AND COMMERCIAL USES IN THE AREA. WIDE TWO LANE FACILITY WITH RAILROAD CROSSING NEAR EAST END. INTERMITTANT SIDEWALKS ON BOTH SIDES, NO BIKE FACILITIES.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
18	2	2%	2	1.9%
19	2	2%	4	3.7%
20	7	6%	11	10.2%
21	10	9%	21	19.4%
22	12	11%	33	30.6%
23	7	6%	40	37.0%
24	10	9%	50	46.3%
25	11	10%	61	56.5%
26	8	7%	69	63.9%
27	6	6%	75	69.4%
28	7	6%	82	75.9%
29	9	8%	91	84.3%
30	10	9%	101	93.5%
31	4	4%	105	97.2%
32	2	2%	107	99.1%
33	0	0%	107	99.1%
34	0	0%	107	99.1%
35	1	1%	108	100.0%



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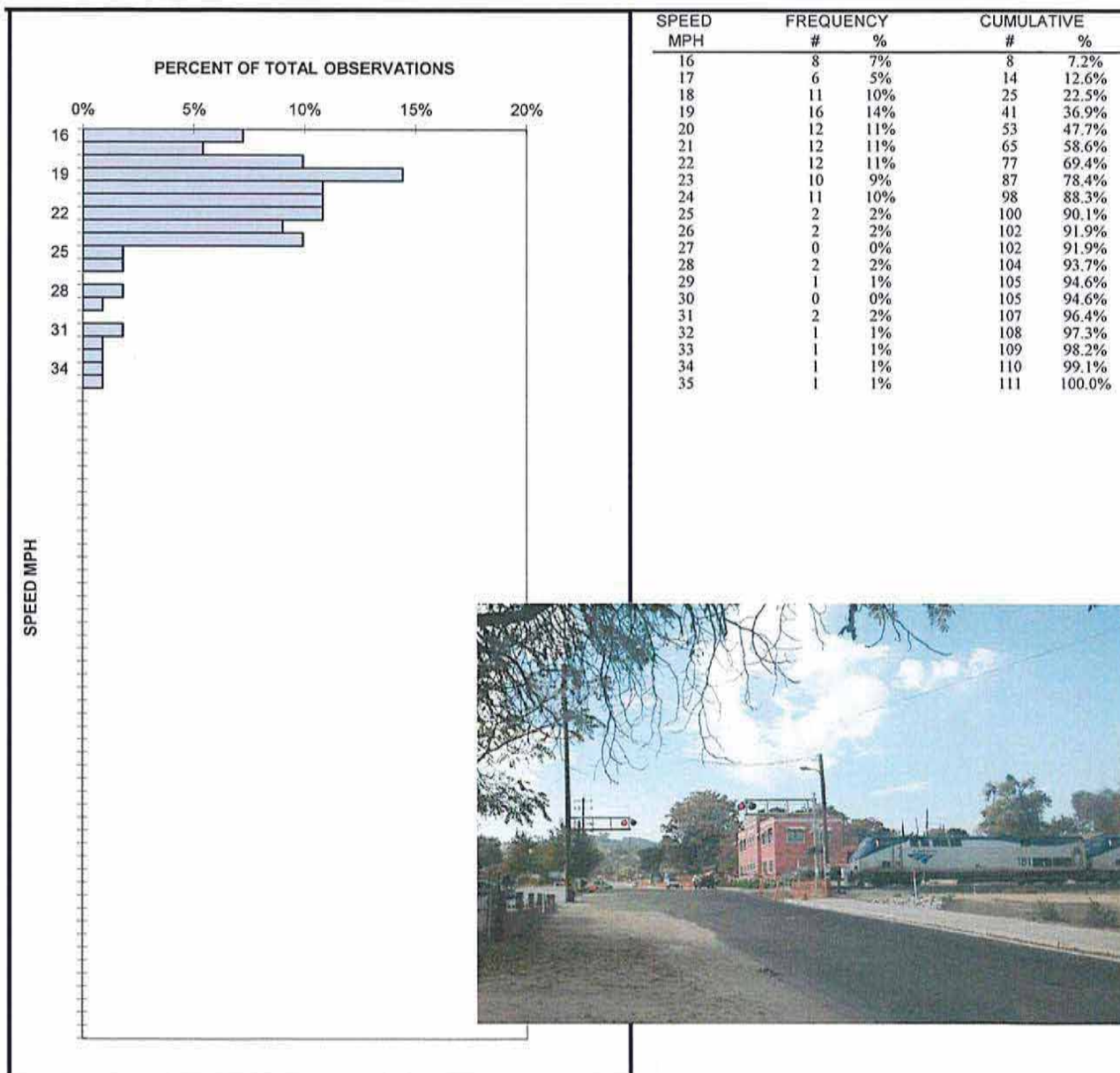
LOCATION: #57 21ST STREET
DIRECTION: NORTH-SOUTH
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 34-46 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

SPRING TO RIVERSIDE

DATE: 10/22/2013
DAY: TUESDAY
TIME: 12:45 PM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT		10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25		16 - 25	21	24
	<= >		< IN >		<= >
	90% 10%		0% 90% 10%		85% 15%

COMMENTS/UNUSUAL CONDITIONS SIGNIFICANT ACTIVE CONSTRUCTION IN AREA DURING COUNT.
MIX OF RESIDENTIAL AND COMMERCIAL LAND USES. VERY POOR PAVEMENT CONDITIONS.
HORIZONTAL CURVE. SPEEDS INFLUENCED BY TRAFFIC SIGNALS.



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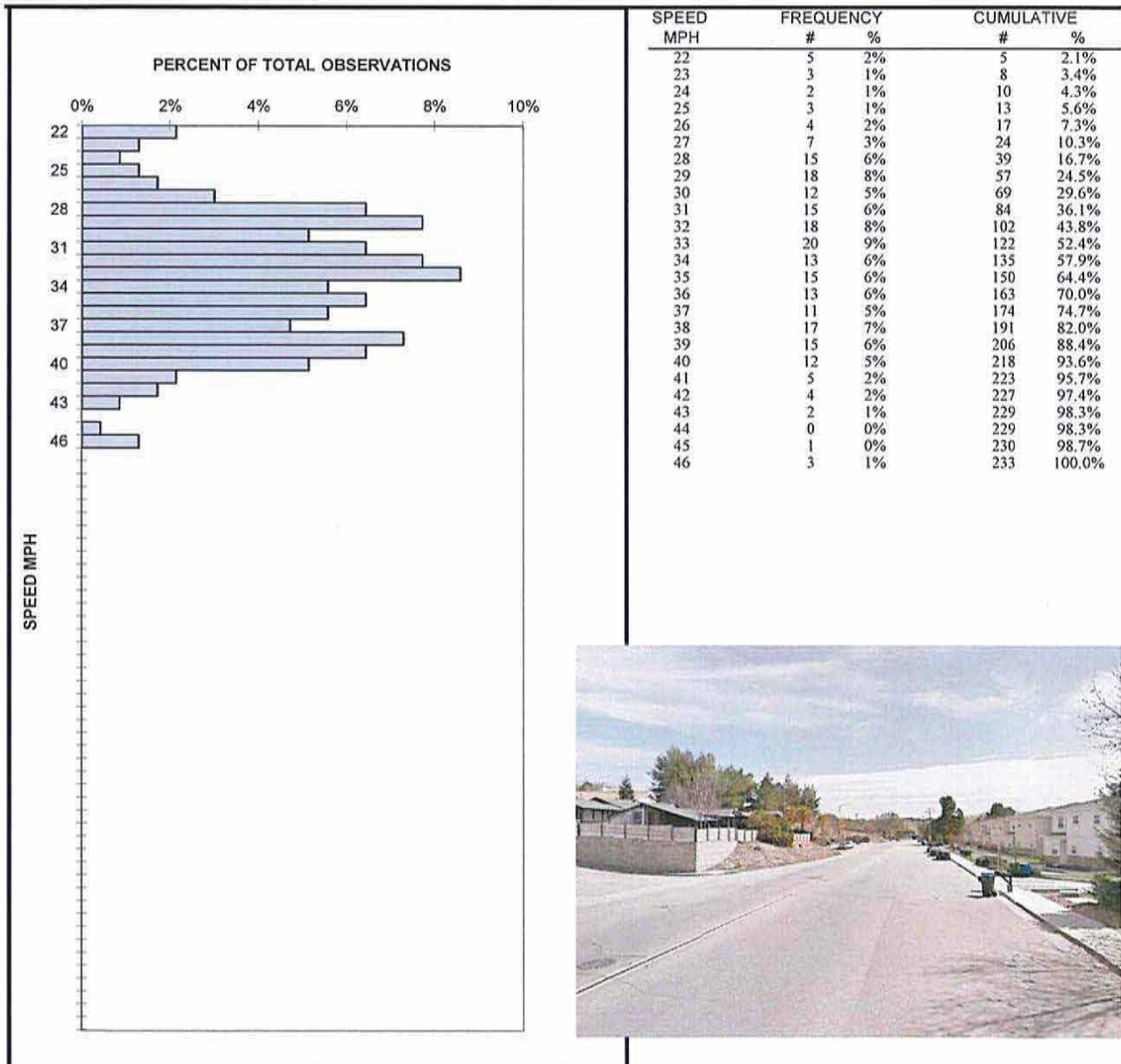
LOCATION: #58 24TH STREET
DIRECTION: EAST-WEST
ROAD X-SECTION: 2 LANES
PAVED WIDTH: 50-64 Feet
BUSINESS OR RESIDENCE DISTRICT: NO

CITY LIMIT TO SPRING ST

DATE: 10/22/2013
DAY: TUESDAY
TIME: 10:15 AM
OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
35	35	29 - 38	33	39
	<= 64% > 36%	< IN > 17% 65% 18%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS TRANSITION AREA FROM RURAL RESIDENTIAL TO CITY STREET GRID. SECOND THROUGH LANE BETWEEN EASTBOUND VINE AND SPRING. SCHOOL ZONE IN SAME AREA. COMPLETE SIDEWALK ON SOUTH SIDE, INTERMITTANT ON NORTH. NO BIKE FACILITIES.



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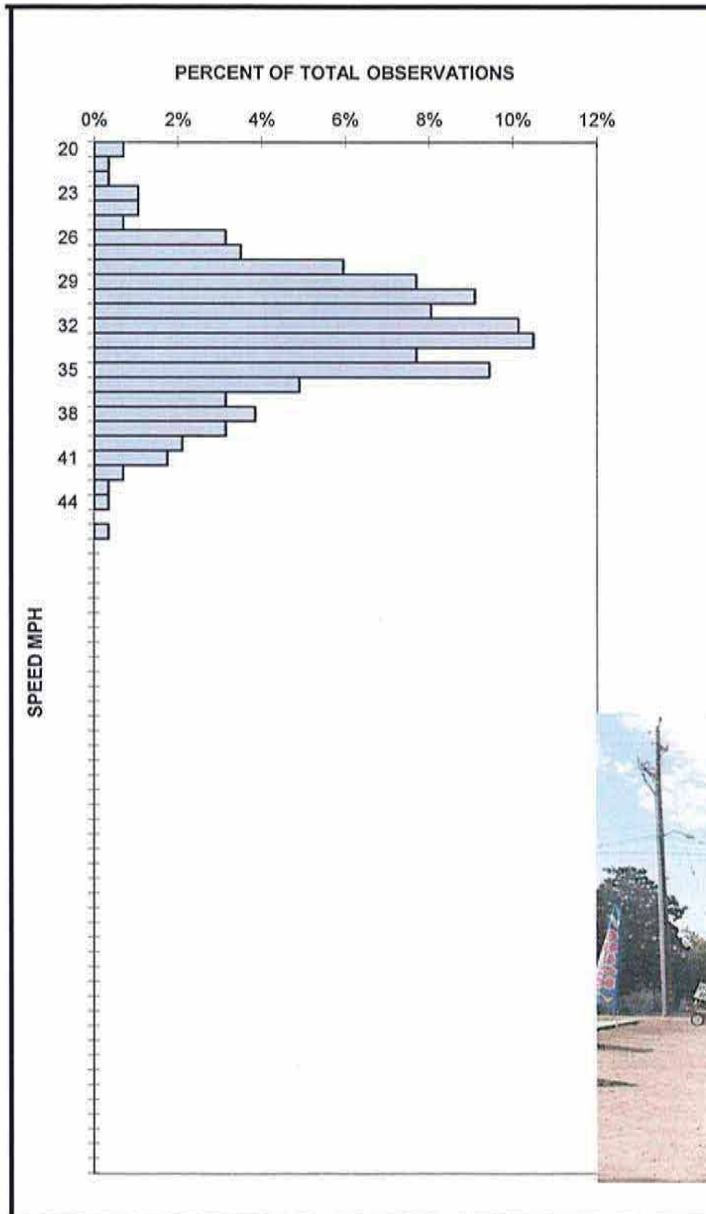
LOCATION: #59 24TH STREET
 DIRECTION: EAST-WEST
 ROAD X-SECTION: 2 LANES
 PAVED WIDTH: 30-60 Feet
 BUSINESS OR RESIDENCE DISTRICT: NO

SPRING TO US 101

DATE: 10/22/2013
 DAY: TUESDAY
 TIME: 11:30 AM
 OBSERVER: MB

RECOMMENDED SPEED LIMIT	POSTED SPEED LIMIT	10 MPH PACE SPEED	AVERAGE SPEED	CRITICAL SPEED
25	25	27 - 36	32	37
	<= 4% > 96%	< 7% IN 77% > 16%		<= 85% > 15%

COMMENTS/UNUSUAL CONDITIONS BUSINESS AREA WITH MANY DRIVEWAY ACCESSES, SOME NOT READILY VISABLE. NARROW BRIDGE OVER RAILROAD TRACKS. SIGNIFICANT PEDESTRIAN ACTIVITY DURING EVENTS AT FAIRGROUNDS. POSTED LIMIT OUTSIDE OF PACE SPEED.



SPEED MPH	FREQUENCY		CUMULATIVE	
	#	%	#	%
20	2	1%	2	0.7%
21	1	0%	3	1.0%
22	1	0%	4	1.4%
23	3	1%	7	2.4%
24	3	1%	10	3.5%
25	2	1%	12	4.2%
26	9	3%	21	7.3%
27	10	3%	31	10.8%
28	17	6%	48	16.8%
29	22	8%	70	24.5%
30	26	9%	96	33.6%
31	23	8%	119	41.6%
32	29	10%	148	51.7%
33	30	10%	178	62.2%
34	22	8%	200	69.9%
35	27	9%	227	79.4%
36	14	5%	241	84.3%
37	9	3%	250	87.4%
38	11	4%	261	91.3%
39	9	3%	270	94.4%
40	6	2%	276	96.5%
41	5	2%	281	98.3%
42	2	1%	283	99.0%
43	1	0%	284	99.3%
44	1	0%	285	99.7%
45	0	0%	285	99.7%
46	1	0%	286	100.0%

