

**Traffic Commission
REGULAR MEETING AGENDA
February 12, 2014 – 7:00 p.m.**

**City of Los Alamitos
3191 Katella Avenue
Los Alamitos, CA 90720**

NOTICE TO THE PUBLIC

This Agenda contains a brief general description of each item to be considered. Except as provided by law, action or discussion shall not be taken on any item not appearing on the agenda. Supporting documents, including staff reports, are available for review at City Hall in the Engineering office once the agenda has been publicly posted.

Any written materials relating to an item on this agenda submitted to the Traffic Commission after distribution of the agenda packet are available for public inspection in the Engineering Office, 3191 Katella Ave., Los Alamitos CA 90720, during normal business hours. In addition, such writings or documents will be made available for public review at the respective public meeting.

It is the intention of the City of Los Alamitos to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee, or a participant at this meeting, you will need special assistance beyond what is normally provided, please contact the Engineering Office at (562) 431-3538, extension 101, 48 hours prior to the meeting so that reasonable arrangements may be made. Assisted listening devices may be obtained from the Traffic Commission Secretary at the meeting for individuals with hearing impairments.

Persons wishing to address the Traffic Commission on any item on the Traffic Commission Agenda should complete a "Request to Speak" card and will be called upon at the time the agenda item is called or during the Traffic Commission's consideration of the item and may address the Traffic Commission for up to three minutes.

1. CALL TO ORDER

2. ROLL CALL

Commissioner Biri
Commissioner Mejia
Commissioner Schleuter
Commissioner Vardeman

Commissioner Wilhelm
Vice-Chair Patz
Chair Person Emerson

3. PLEDGE OF ALLEGIANCE

4. ORAL COMMUNICATION

At this time any individual in the audience may address the Traffic Commission and speak on any item within the subject matter jurisdiction of the Commission. Please state if you wish to speak on an item on the Agenda. Remarks are to be limited to not more than five minutes.

5. MINUTES

None

6. STAFF REPORTS

A. Review of Draft Scope of Work for School Traffic Study

The Engineering and Traffic Survey for Speed Limits was authorized by the City and was performed by the engineering consulting firm of Hartzog & Crabill, Inc. The goal of the review was to determine whether changes in pre-existing conditions have occurred where older speed limits should be modified.

Recommendation: It is recommended that the Traffic Commission approve the Engineering and Traffic Survey for Speed Limits as submitted in this report, and send to City Council for final approval.

B. Removal of Green 24-Minute Parking in Front of 4582 Katella Avenue

Request was made by property owner at 4582 Katella Avenue to remove the 24-minute parking restrictions in front of their property. The existing signage has been in place since 2009, and was a result of previous Traffic Commission and City Council staff action that dates back to 2006.

Recommendation: Review previous staff reports and deny this request.

C. Request for Loading/Unloading Parking on Lexington Drive from Katella Avenue to the First Southerly Alley

Staff received a request from the Traffic Commission to look into restricting parking, on the west side of Lexington Drive to a loading and unloading zone, from Katella Avenue to first southerly alley.

Recommendation: It is recommended that the Traffic Commission provide direction to staff.

7. ITEMS FROM THE PUBLIC WORKS DEPARTMENT

A. Traffic Commission Status Log

8. TRAFFIC COMMISSION INITIATED BUSINESS

At this time, Commissioners may report on items not included on the agenda, but no such matter may be discussed, nor may any action be taken in which there is interest to the community, except as to provide staff direction to report back or to place the item on a future agenda.

9. ADJOURNMENT

Adjourn to Wednesday, March 12, 2014.

I hereby certify, under penalty of perjury under the laws of the State of California that the foregoing Agenda was posted at the Community Center, Museum, and City Hall not less than 72 hours prior to the meeting. Dated this 6th day of February, 2014.

Sharon Nowell

Sharon Nowell, Department Secretary

City of Los Alamitos

TRAFFIC COMMISSION

Agenda Report
Discussion Item

February 12, 2014
Item No: 6A

To: Chairman and Members of the Traffic Commission
From: David L. Hunt, City Engineer
Subject: Review of Draft Engineering and Traffic Survey for Speed Limits

Summary: The Engineering and Traffic Survey for Speed Limits was authorized by the City and was performed by the engineering consulting firm of Hartzog & Crabill, Inc. The goal of the review was to determine whether changes in pre-existing conditions have occurred where older speed limits should be modified.

Recommendations: Approve Engineering and Traffic Survey for Speed Limits as submitted in this report, and send to City Council for final approval.

Background

In accordance with procedures established by the State of California, this Engineering and Traffic Survey has been developed for the City of Los Alamitos as the basis for the establishment and enforcement of speed limits for selected streets within the City.

All fifty states base their speed regulations on the Basic Speed Law. In California, CVC 22350 defines the basic speed law as:

"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 and, therefore, no set of fixed driving rules will adequately serve all conditions. The motorist will constantly adjust their driving behavior to fit the conditions encountered, and must learn to do this with a minimum of assistance from the police. The Basic Speed Law is founded on the belief that a majority of motorists are able to

modify their driving behavior properly, as long as they are aware of the conditions around them.

Discussion

The reason that speed limit areas and their required postings are done is to guard reasonable drivers from the unreasonable behavior of reckless, unreliable, or otherwise dangerous drivers. As with other similar laws, the limits identified are based on the consensus of the majority of those who drive the highway as to what speed is reasonable and safe. It is this type of information that is reflected in the analysis section of this report. Namely, posted speed limits are a reflection of that speed which most people deem to be safe as opposed to a minority of drivers who do not drive in a reasonable manner.

Speed zones are also established to advise drivers of road conditions or hazards that may not be readily apparent to a reasonable driver. For that reason, a field review of related road/traffic variables is conducted which considers the analytical data and accident history of a particular roadway segment to determine a safe and reasonable speed limit.

Speed evaluation data was collected at 17 different survey segments on 7 different roadways in the City of Los Alamitos. These areas and the number of segments on each are described as follows:

1. Ball Road (1)
2. Bloomfield Street (3)
3. Cerritos Avenue (3)
4. Farquhar Avenue (1)
5. Katella Avenue (5)
6. Lexington Drive (1)
7. Los Alamitos Boulevard (3)

Results and Recommendations

The Summary indicates that 16 of the 17 segments studied are recommended for no speed limit changes. The reason centers mostly on the fact that the newly measured values of the 85th percentile and the 10 MPH pace are still within the parameters of the existing speed limits. Additional factors such as the presence of horizontal or vertical curves reducing sight distance from the basis in some instances of our recommendations. Therefore, the current postings should remain as is.

Locations of "Speed Limit Increases":

With the combination of the speed data, field review and accident history, the following segment is recommended for a speed limit increase.

Bloomfield Street - Cerritos Ave, to Katella Ave.

- Increase speed from 35 mph to 40 mph

New signs to be posted:

Cerritos Avenue - Bloomfield Street to East City Limit

- The recommended 40 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards. Field notes state that only one speed sign is posted (eastbound) within the segment length. Although in the City of Cypress, there is a 40 mph speed sign posted for the westbound direction west of Denni Street. Therefore, it is recommended that a 40 mph speed sign be installed westbound west of Santa Clara Street (East City Limit).

Katella Avenue - Lexington Drive to Siboney Street

- This section of Katella Avenue is a six lane roadway. The adjacent land uses are residential non-fronting to the roadway, commercial, business, medical offices, and the Los Alamitos Race Track. Field observations include a 40 mph speed sign posted only eastbound east of Lexington Drive, no shoulders westbound, bus stops and heavy truck traffic. With the speed data results showing an 85th percentile speed of 43.8 mph, it is recommended that the existing 40 mph speed limit be maintained. For enforcement, it is recommended that a 40 mph speed sign be posted for the westbound direction as well.

Recommendation

Approve Engineering and Traffic Survey for Speed Limits as is, and send to City Council for final approval.

Submitted By:



David Hunt, PE

City Engineer

Attachments: 1) *Engineering and Traffic Survey for Speed Limits – January 2014*

**ENGINEERING AND TRAFFIC SURVEY
FOR SPEED LIMITS**

CITY OF LOS ALAMITOS

JANUARY 2014

PREPARED FOR:

**CITY OF LOS ALAMITOS
3191 KATELLA AVENUE
LOS ALAMITOS, CALIFORNIA 90720
(562) 431-3538**

PREPARED BY:

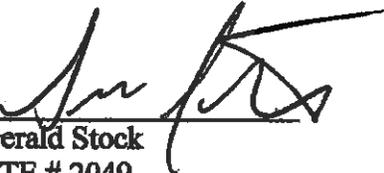
**HARTZOG & CRABILL, INC.
TRAFFIC ENGINEERS
17852 EAST 17TH STREET
TUSTIN, CA 92780
(714) 731-9455**

TABLE OF CONTENTS

	<u>PAGE</u>
Table of Contents.....	ii
Traffic Engineer's Certification	iii
Introduction.....	1
Basic Speed Law.....	2
Prima Facie Speed Limits	2
Residence District	2
Establishment of Speed Zones	3
Data Collection Procedures.....	3
Speed Zoning Methodology.....	3
Speed Zone Survey	4
Local Street Exemptions.....	5
Other Considerations	5
Radar Collection Time-Frames.....	5
Analysis Factors.....	5
Field Review	6
Accident History	7
Results and Recommendations	7
Locations of No Speed Limit Changes	7
Support Explanations for "No Speed Limit Changes"	8
Locations of "Speed Limit Increases".....	9
Support Explanations for "Speed Limit Increases".....	9
 Summary of Recommendations.....	 10
 Appendix A - For Each Street Segment in the Survey	
Data Summary Sheet.....	
Radar Speed Distribution Sheet.....	
Survey Field Sheet.....	
 Appendix B – Certification	
Radar Gun Certification.....	
Technician Certification.....	

CERTIFICATION

I, Gerald Stock, do hereby certify that this Engineering and Traffic Survey for the City of Los Alamitos was performed under my supervision and is accurate and complete. I certify that I am both experienced in performing surveys of this type and duly registered in the State of California as a professional Traffic Engineer.


Gerald Stock
RTE # 2049



**CITY OF LOS ALAMITOS
ENGINEERING AND TRAFFIC SURVEY FOR SPEED LIMITS**

In accordance with procedures established by the State of California, this Engineering and Traffic Survey has been developed for the City of Los Alamitos as the basis for the establishment and enforcement of speed limits for selected streets within the City. The work provided herein was authorized by the City and was performed by the engineering consulting firm of Hartzog & Crabill, Inc. The goal of the review was to determine whether changes in pre-existing conditions have occurred where older speed limits should be modified.

The requirement to perform Engineering and Traffic surveys for speed limits is based on the California Vehicle Code (CVC). CVC Section 40802 states that at least once every five (5), seven (7) or ten (10) years, States and local agencies should re-evaluate non-statutory speed limits on segments of their roadways. Recent changes to the CA. MUCTD changed the policy and procedure for setting speed limits in California. Engineering and Traffic Surveys must be performed with the use of radar or other approved electronic devices if the use of radar is to be employed to enforce speed limits. If such a survey is not performed within five years (or seven years, or ten years as stated previously) of the date of the preceding survey, then the new data and its use will constitute a speed trap. Hence, evidence using such would not be admissible in court. From the Vehicle Code, 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) A particular section of a highway with a prima facie speed limit provided by this code or by local ordinance under sub-paragraph (A) of paragraph (2) of subdivision (a) of Section 22352, or established pursuant to 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 where enforcement involves the use of radar or other electronic devices that measures the speed of moving objects. This paragraph does not apply to a local street, road, or school zone.

The definition of a Traffic and Engineering Survey is contained in Section 627 of the Vehicle Code and is as follows:

Engineering and Traffic survey, as used in this code, means a survey of highway and traffic conditions in accordance with methods determined by the California Department of Transportation (Caltrans) for use by State and local authorities. An engineering and traffic survey shall include, among other requirements deemed necessary by the department, consideration of the following:

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

The California Vehicle code has set certain regulations regarding the posting and enforcement of speed zones. These regulations generally reflect the viewpoint that speed zoning should be based on traffic conditions and natural driver behavior and not because of an arbitrary response to a traffic event or occurrence. Therefore, it is important to have a general understanding of the "Basic Speed Law", "Prima Facie Speed Limits" and "Intermediate Speed Zones".

Basic Speed Law (CVC 22350)

All fifty states base their speed regulations on the Basic Speed Law. In California, CVC 22350 defines the basic speed law as:

"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 and, therefore, no set of fixed driving rules will adequately serve all conditions. The motorist will constantly adjust their driving behavior to fit the conditions encountered, and must learn to do this with a minimum of assistance from the police. The Basic Speed Law is founded on the belief that a majority of motorists are able to modify their driving behavior properly, as long as they are aware of the conditions around them.

Prima Facie Speed Limits (CVC 22352)

All other speed limits are prima facie limits which, "on the face of it", are reasonable and prudent under normal 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 prima facie limits are automatically established by law (CVC 22352), including a 15 mph limit in alleys, blind intersections, blind railroad crossing, and the 25 mph limit in business and residence districts. There is also a part time 25 mph limit in school zones when children are present in 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. CVC Sections 235 and 515 define these regulations. 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 that are readily apparent.

Residence District (CVC 515)

A "residence district" is that portion of a highway and the property contiguous thereto, other than a business district, (a) upon one side of which highway, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures, or (b) upon both sides of which highway, collectively, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or

business structures. A residence district may be longer than one-quarter of a mile if the above ratio of separate dwelling houses or business structures to the length of the highway exists.

Establishment of Speed Zones

The reason that speed limit areas and their required postings are done is to guard reasonable drivers from the unreasonable behavior of reckless, unreliable, or otherwise dangerous drivers. As with other similar laws, the limits identified are based on the consensus of the majority of those who drive the highway as to what speed is reasonable and safe. It is this type of information that is reflected in the analysis section of this report. Namely, posted speed limits are a reflection of that speed which most people deem to be safe as opposed to a minority of drivers who do not drive in a reasonable manner.

Speed zones are also established to advise drivers of road conditions or hazards that may not be readily apparent to a reasonable driver. For that reason, a field review of related road/traffic variables is conducted which considers the analytical data and accident history of a particular roadway segment to determine a safe and reasonable speed limit.

Data Collection Procedures

Speed evaluation data was collected at 17 different survey segments on 7 different roadways in the City of Los Alamitos. These areas and the number of segments on each are described as follows:

1. Ball Road (1)
2. Bloomfield Street (3)
3. Cerritos Avenue (3)
4. Farquhar Avenue (1)
5. Katella Avenue (5)
6. Lexington Drive (1)
7. Los Alamitos Boulevard (3)

As described in various traffic engineering documents - including information provided by the State of California, the individual locations on which radar data collection procedures were used involved considerations for the following:

- a. Stop sign or traffic signal locations;
- b. Visibility issues;
- c. Traffic flow at intersections, cross-traffic, major driveways, crosswalks, railroad crossings and unusual turning movements;
- d. The influence of other traffic factors on the speed of cars: such as on street parking, roadway features, adjacent land uses, and lighting.

Speed Zoning Methodology

The California Manual on Uniform Traffic Control Devices (CA. MUTCD) specifies a "short method of determining speed limits on City and County through Highways, Arterial and Collector Roads Procedures.

Introduction - This short method of speed zoning is based on the premise that the reasonable speed limit is one that conforms to the actual behavior of the majority of motorists, and that by

measuring motorist's 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 three-year collision record, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile conditions, intersection spacing and offsets, commercial driveway characteristics, pedestrian traffic in the roadway without sidewalks.

Speed Zone Survey

- Only one person is required for the fieldwork. Speeds can be read directly from a radar speed meter.
- A section of road should be selected with representative operating speeds. If speeds vary on a given road, additional surveys should be conducted. In this case, it may be necessary to establish additional speed zones with different speed limits. The section selected should be straight and should have no traffic signal, stop sign or intersection with a major cross street.
- Speed measurements should be taken during off-peak hours on weekdays. The weather should be fair with no unusual conditions prevailing. It is important that the surveyor and his equipment be so inconspicuous as not to affect traffic speeds. For this reason, an unmarked car is recommended, with the radar speed meter located as inconspicuously as possible. It should be placed so as to be able to survey traffic in both directions, and should not make an angle greater than 15 degrees with the roadway centerline.
- It is desirable to have a minimum sample of 100 automobiles in each survey. This may result in excessive survey periods for low-volume roads. Under these conditions, the survey should be conducted for a minimum of two hours, but in no case should the sample for any survey contain less than 50 automobiles.
- The California MUTCD states that speed limits are established at or near the 85th percentile speed, which is defined as that speed at or below which 85 percent of the traffic is moving. This speed can be selected directly from the data sheet. However, roadway conditions not readily apparent to the motorist such as vertical or horizontal curves or other roadway conditions that may impact sight distance may result in a further reduction of 5 mph in the recommended speed limit.
- As a check on the validity of the proposed speed limit, an analysis should be made of the two-year accident record for the section of roadway under consideration. If this record shows an abnormally high percentage of accidents normally associated with excessive speeds, the proposed speed limit should be further reduced. This is a judgment situation, and will not usually be a factor,
- Short speed zones of less than half a mile should be avoided, except in transition areas.
- Speed zone changes should be coordinated with changes in roadway conditions or roadway development.
- Speed zoning in 5 mile per hour increments should be avoided if possible. A 10-mile per hour increment is preferable.
- Speed zoning should be coordinated between adjacent jurisdictions.

Local Street Exemptions (CVC 40802)

Many streets are designated as "Local" streets per CVC 40802. These streets are exempt from the radar study. Therefore, the speed limit for these streets does not require an Engineering and Traffic Survey. The code is as follows:

"For the purpose of this section, local streets and roads shall be defined by the latest functional usage and federal aid system maps as submitted to the Federal Highway Administration. When these maps have not been submitted, the following definition shall be used: A local street or road primarily provides access to abutting residential property and shall meet the following three conditions:

1. Roadway width of not more than 40 feet.
2. Not more than one half mile of uninterrupted length.
3. Not more than one traffic lane in each direction.

Other Considerations

Every street should be inspected for unusual traffic, roadway and roadside conditions not readily apparent to a motorist. A check should be made of the adequacy of traffic control devices, roadway alignment, width surface conditions, accident history and any unique traffic hazards that may exist. Any of these conditions may warrant the selection of a speed lower than the 85th percentile speed for speed zoning.

Radar Collection Time Frames

The hours of radar operation were restricted to off-peak periods for heavily traveled streets and to uncongested peak periods on lightly traveled streets. All surveys were conducted in fair weather.

The radar unit was mounted at the top of the front dash of an unmarked vehicle with the meter-reading unit sustained inside the vehicle. The radar unit's calibration was checked periodically using a tuning fork.

The radar operator and assistant recorded the speed meter readings for each location on Radar Speed Survey Field Sheets included in the appendix of this report. A representative sampling of at least 100 vehicles were surveyed in each direction or a cumulative sample of 200 vehicles for both directions where possible. On low volume roads, where a total sample of 200 vehicles would result in an excessive time period, sampling was continued until a representative bell-shaped frequency distribution was attained.

Analysis Factors

Several factors were used as input to our recommendations for speed limits. These include the 85th Percentile, the 10 MPH Pace and others. These are described in detail below.

1. The **CRITICAL SPEED**, or the 85th percentile is defined as that speed at or below which 85 percent of the traffic is moving. From experience, traffic engineers have found that this is one of the most reliable factors in determining appropriate speed limits.

Hence, the accepted practice, and one that has been used in this case is to set the speed limit at or near the critical speed. This recognizes that other factors could be present where the above may not be appropriate. When this procedure is used, it not only conforms to that required by the State but it also provides a strong base for law enforcement personnel to properly enforce speed limits.

2. The **10 MPH PACE** is that continuous 10 mph incremental range of speeds in which the largest number of recorded vehicles is contained. It is a measure of the dispersion of speeds within the sample surveyed. For this element, the accepted practice to the greatest extent possible is to try and keep the recommended speed limit within the 10 mph pace after considering the critical speed and any factors requiring a speed lower than the critical speed.
3. The **MEDIAN (MIDDLE) SPEED**, or 50th percentile speed, represents the mid-point value within the range of recorded speeds for a particular roadway location. In other words, 50% of the vehicles travel faster, and 50% travel slower than the median speeds. This value is another measure of the central tendency of the vehicle speed distribution.
4. The **15th PERCENTILE SPEED** is that speed at or below which 15% of the vehicles are traveling. This value is important in determining the minimum allowable speed limit, given that the vehicles traveling below this speed tend to obstruct the flow of traffic, thereby increasing the accident potential.
5. **MODAL SPEED:** The modal speed is the speed, which occurs most frequently in the distribution (the most). It serves as another useful measure in verifying the correct recommendation for speed limits.
6. **STANDARD DEVIATION:** This is a mathematical element, which relates to measures of dispersion of data. It is used to assist in describing the center of speed distribution information around the arithmetic mean or the time mean speed. It also is used in the overall review of recommended speed limits and serves to verify the level of confidence of data used in making recommendations.
7. The **MEAN (AVERAGE)** is the sum of the speeds of the samples divided by the number of samples.

The numerical values of the above factors are derived from the speed distribution curves calculated for each survey location. These distribution curves represent a method of graphic analysis that compares the cumulative percentage of vehicles to the speed at which the vehicles are traveling.

Field Review

In addition to the availability of the above statistical data, a significant aspect of speed limit recommendations is based on the field review. Its importance is that existing conditions may warrant a lower speed than is actually indicated by the application of survey data. Examples of the field data collected for the purposes of analyzing related roadway characteristics as they pertain to the determination of appropriate speed limits are listed below:

1. Segment length, width and alignment
2. Level of pedestrian activity
3. Traffic flow characteristics
4. Vertical and/or horizontal curves.
5. Driver sight distance constraints.
6. Adjacent residential/commercial/industrial etc. zoning.
7. Number of lanes and other channelization/striping factors
8. Frequency of intersections, driveways and on street parking;
9. Location of stop signs, traffic signals, and other regulatory traffic control devices;
10. Roadway conditions, bumps and dips;
11. Obstructions to pedestrian visibility;
12. Land use and proximity of schools;
13. Uniformity with existing speed zones to/with adjacent jurisdictions;
14. Any other unusual conditions not readily apparent to the driver.

The results of the field review of related road/traffic variables are summarized on the Engineering and Traffic Survey forms found in the Appendix of this report.

Accident History

The Engineering and Traffic Survey forms summarize the available two-year accident information for the subject streets. The accident information includes the total number of accidents within each street segment and of those accidents, the number that are speed-related. This information was obtained from the California Statewide Integrated Traffic Records System (SWITRS) for the City of Los Alamitos.

The annual accident rate figures represent the number of speed-related accidents divided by years of accident records. The evaluation of accidents is useful as a check on the accuracy of recommended or existing speed limits. Should this review show a high percentage of accidents associated with excessive speeds, consideration based on professional traffic engineering judgment should be directed toward reducing the posted or recommended speed limit.

Results and Recommendations

The following Summaries: No Speed Limit Changes, New Speed Limit Postings, Speed Limit Increases, Speed Limit Reductions and Summary of Recommendations presents the results of the radar survey for the selected 17 locations. As shown, the Summary of Recommendations chart presents the necessary analysis elements that in addition to the field review of a registered traffic engineer led to the recommendations indicated.

Locations of "No Speed Limit Changes"

The Summary indicates that 16 of the 17 segments studied are recommended for no speed limit changes. The reason centers mostly on the fact that the newly measured values of the 85th percentile and the 10 MPH pace are still within the parameters of the existing speed limits. Additional factors such as the presence of horizontal or vertical curves reducing sight distance form the basis in some instances of our recommendations. Therefore, the current postings should remain as is. One segment has a speed sign posted in one direction only and is listed for no change. Hence, the other direction should be posted. These segments noted as "install", as well as the segments recommended for "No Change" are listed below:

Ball Road

West City Limits to Bloomfield St

Remain posted at 40 mph

Bloomfield Street

North City Limits to Cerritos Ave
Katella Ave to Farquhar Ave

Remain posted at 40 mph
Remain posted at 25 mph

Cerritos Avenue

North City Limits to Los Alamitos Bl
Los Alamitos Bl to Bloomfield St
Bloomfield St to East City Limits

Remain posted at 40 mph
Remain posted at 35 mph
Install 40 mph, Westbound

Farquhar Avenue

Los Alamitos Bl to Lexington Dr

Remain posted at 25 mph

Katella Avenue

West City Limits to Los Alamitos Bl
Los Alamitos Bl to Bloomfield St
Bloomfield St to Lexington Dr
Lexington Dr to Siboney St
Siboney St to Walker St

Remain posted at 35 mph
Remain posted at 35 mph
Remain posted at 35 mph
Install 40 mph, Westbound
Remain posted at 40 mph

Lexington Drive

Katella Ave to Farquhar Ave

Remain posted at 30 mph

Los Alamitos Boulevard

North City Limits to Katella Ave
Katella Ave to Farquhar Ave
Farquhar Ave to Bradbury Rd

Remain posted at 35 mph
Remain posted at 35 mph
Remain posted at 40 mph

Support Explanations for “No Speed Limit Changes”

The following are support explanations for the roadway segments that the recommended speed limit is 5 mph lower or more than the newly measured 85th percentile speed or has a speed sign posted in one direction only. The various reasons for the recommendations are provided below.

Cerritos Avenue

Bloomfield Street to East City Limit

The recommended 40 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards. Field notes state that only one speed sign is posted (eastbound) within the segment length. Although in the City of Cypress, there is a 40 mph speed sign posted for the westbound direction west of Denni Street. Therefore, it is recommended that a 40 mph speed sign be installed westbound west of Santa Clara Street (East City Limit).

Katella Avenue

Lexington Drive to Siboney Street

This section of Katella Avenue is a six lane roadway. The adjacent land uses are residential non-fronting to the roadway, commercial, business, medical offices, and the Los Alamitos Race Track. Field observations include a 40 mph speed sign posted only eastbound east of Lexington Drive, no shoulders westbound, bus stops and heavy truck traffic. With the speed data results showing an 85th percentile speed of 43.8 mph, it is recommended that the existing 40 mph speed limit be maintained. For enforcement, it is recommended that a 40 mph speed sign be posted for the westbound direction as well.

Locations of "Speed Limit Increases"

With the combination of the speed data, field review and accident history, the following segment is recommended for a speed limit increase.

Bloomfield Street

Cerritos Ave to Katella Ave

Increase speed from 35 mph to 40 mph

Support Explanations of "Speed Limit Increases"

Bloomfield Street

Cerritos Avenue to Katella Avenue

This section of Bloomfield Street is a four lane roadway. Currently, a 35 mph speed limit is posted for this area. The adjacent land uses are business, industrial, elementary and middle schools, and a park. Field notes state that there are no shoulders throughout the majority of the segment except for approximately 1000' of cut out on-street parking south of Cerritos Avenue southbound, painted bikes lanes, and heavy pedestrian traffic at school arrive and release. The speed data resulted with an 85th percentile speed of 41.0 mph and a 10 mph pace range of 33 to 42 mph. Therefore, it is recommended that the existing 35 mph be increased to 40 mph.

**CITY OF LOS ALAMITOS
SUMMARY OF RECOMMENDATIONS**

STREET LOCATION	EXISTING SPEED LIMIT	RECOMMENDED SPEED LIMIT	85 TH PERCENTILE SPEED	AVERAGE SPEED	10 MPH PACE RANGE	PERCENT OF VEHICLES IN PACE	JUSTIFICATION / COMMENTS
<u>BALL ROAD</u>							
WEST CITY LIMITS TO BLOOMFIELD ST	40	40	44.9	41.2	37-46	83.3	NO CHANGE - 85 TH PERCENTILE
<u>BLOOMFIELD STREET</u>							
NORTH CITY LIMITS TO CERRITOS AVE	40 / 25*	40	44.8	41.3	38-47	83.9	NO CHANGE - 85 TH PERCENTILE
CERRITOS AVE TO KATELLA AVE	35 / 25*	40	41.0	36.2	33-42	79.5	INCREASE - 85 TH PERCENTILE
KATELLA AVE TO FARQUHAR AVE	25	25	25.2	22.5	19-28	96.9	NO CHANGE - 85 TH PERCENTILE
<u>CERRITOS AVENUE</u>							
WEST CITY LIMITS TO LOS ALAMITOS BL	40 / 25*	40	43.4	39.0	35-44	74.9	NO CHANGE - 85 TH PERCENTILE
LOS ALAMITOS BL TO BLOOMFIELD ST	35 / 25*	35	39.3	35.1	31-40	80.1	NO CHANGE - 85 TH PERCENTILE
BLOOMFIELD ST TO EAST CITY LIMITS	40 EB / 25*	40	44.9	41.1	37-46	85.2	NO CHANGE - 85 TH PERCENTILE / POST WB
<u>FARQUHAR AVENUE</u>							
LOS ALAMITOS BL TO LEXINGTON DR	25	25	29.9	25.9	22-31	87.2	NO CHANGE - 85 TH PERCENTILE
<u>KATELLA AVENUE</u>							
WEST CITY LIMITS TO LOS ALAMITOS BL	35	35	39.9	35.4	32-41	70.9	NO CHANGE - 85 TH PERCENTILE
LOS ALAMITOS BL TO BLOOMFIELD ST	35	35	35.7	32.0	27-36	76.0	NO CHANGE - 85 TH PERCENTILE
BLOOMFIELD ST TO LEXINGTON DR	35	35	39.9	34.7	30-39	67.3	NO CHANGE - 85 TH PERCENTILE

*25 mph When Children Present

EB = Eastbound

WB = Westbound

STREET LOCATION	EXISTING SPEED LIMIT	RECOMMENDED SPEED LIMIT	85 TH PERCENTILE SPEED	AVERAGE SPEED	10 MPH PACE RANGE	PERCENT OF VEHICLES IN PACE	JUSTIFICATION / COMMENTS
<u>KATELLA AVENUE (Continued)</u>							
LEXINGTON DR TO SIBONEY ST	40 EB	40	43.6	39.4	36-45	74.5	NO CHANGE - 85 TH PERCENTILE - POST WB
SIBONEY ST TO WALKER ST	40	40	44.1	38.2	34-43	73.5	NO CHANGE - 85 TH PERCENTILE
<u>LEXINGTON DRIVE</u>							
KATELLA AVE TO FARQUHAR AVE	30	30	33.4	29.6	26-35	86.1	NO CHANGE - 85 TH PERCENTILE
<u>LOS ALAMITOS BOULEVARD</u>							
NORTH CITY LIMITS TO KATELLA AVE	35	35	38.5	34.5	30-39	83.0	NO CHANGE - 85 TH PERCENTILE
KATELLA AVE TO FARQUHAR AVE	35	35	36.8	32.3	28-37	84.5	NO CHANGE - 85 TH PERCENTILE
FARQUHAR AVE TO BRADBURY RD	40 / 25*	40	42.2	38.4	34-43	84.4	NO CHANGE - 85 TH PERCENTILE

*25 mph When Children Present
 EB = Eastbound
 WB = Westbound

APPENDIX A

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS

HCI

BALL ROAD

WEST CITY LIMITS TO BLOOMFIELD ST

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 11:30 PM - 12:00 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	WEST OF KAYLOR
DATE OF SURVEY	11/14/2013
85th PERCENTILE	44.9 MPH
10 MPH PACE	37 - 46 MPH
PERCENT IN PACE	83.3 %
POSTED SPEED LIMIT	40 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	1
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	20,000
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - BLOOMFIELD / KAYLOR
CROSSWALKS	AT BLOOMFIELD (sch) / KAYLOR
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	NO PARKING ANYTIME
OTHER	BIKE ROUTE

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.25
VERTICAL CURVE	SLIGHT-GRADUAL UP/DOWNHILL GRADES (OVER CREEK)
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / NO
STREET LIGHTING	YES
OTHER	PAINTED ISLAND

ADJACENT LAND USE	RESIDENTIAL (NF) / COMMERCIAL / CREEK
--------------------------	---------------------------------------

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 40 mph speed limit is within 4.9 mph of the 85th percentile speed and meets CVC standards. Note, a 40 mph speed limit is posted in the adjacent City of Long Beach.

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



BALL ROAD

DATE: 11/14/2013

TIME: 11:30 PM - 12:00 PM

WEST CITY LIMITS TO BLOOMFIELD ST

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 99.3%
48						X 98.6%
47						X 95.1%
46					X	91.0% }PACE
45				X		85.4% }PACE
44				X		78.5% }PACE ---85PCT
43				X		70.1% }PACE
42			X			59.7% }PACE
41			X			47.9% }PACE ---MEAN
40		X				36.8% }PACE
39		X				26.4% }PACE
38		X				19.4% }PACE
37	X					12.5% }PACE ---15PCT
36	X					7.6%
35	X					4.2%
34	X					2.8%
33	X					1.4%
32	X					0.7%
31	X					0.0%
30	X					0.0%
29	X					0.0%
28	X					0.0%
27	X					0.0%
26	X					0.0%
25	X					0.0%
24	X					0.0%
23	X					0.0%
22	X					0.0%
21	X					0.0%
20	X					0.0%
19	X					0.0%
18	X					0.0%
17	X					0.0%
16	X					0.0%
15	X					0.0%

UPPER LIMIT 10 MPH PACE: 46 MPH
 LOWER LIMIT 10 MPH PACE: 37 MPH
 PERCENT OVER PACE: 9.0 %
 PERCENT IN PACE: 83.3 %
 PERCENT UNDER PACE: 7.6 %

85th PERCENTILE SPEED: 44.9 MPH
 MEDIAN SPEED: 41.2 MPH
 15th PERCENTILE SPEED: 37.4 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS

STREET: BALL ROAD

LOCATION: WEST CITY LIMITS TO BLOOMFIELD ST

WEATHER: SUNNY

ROAD CONDITION: DRY

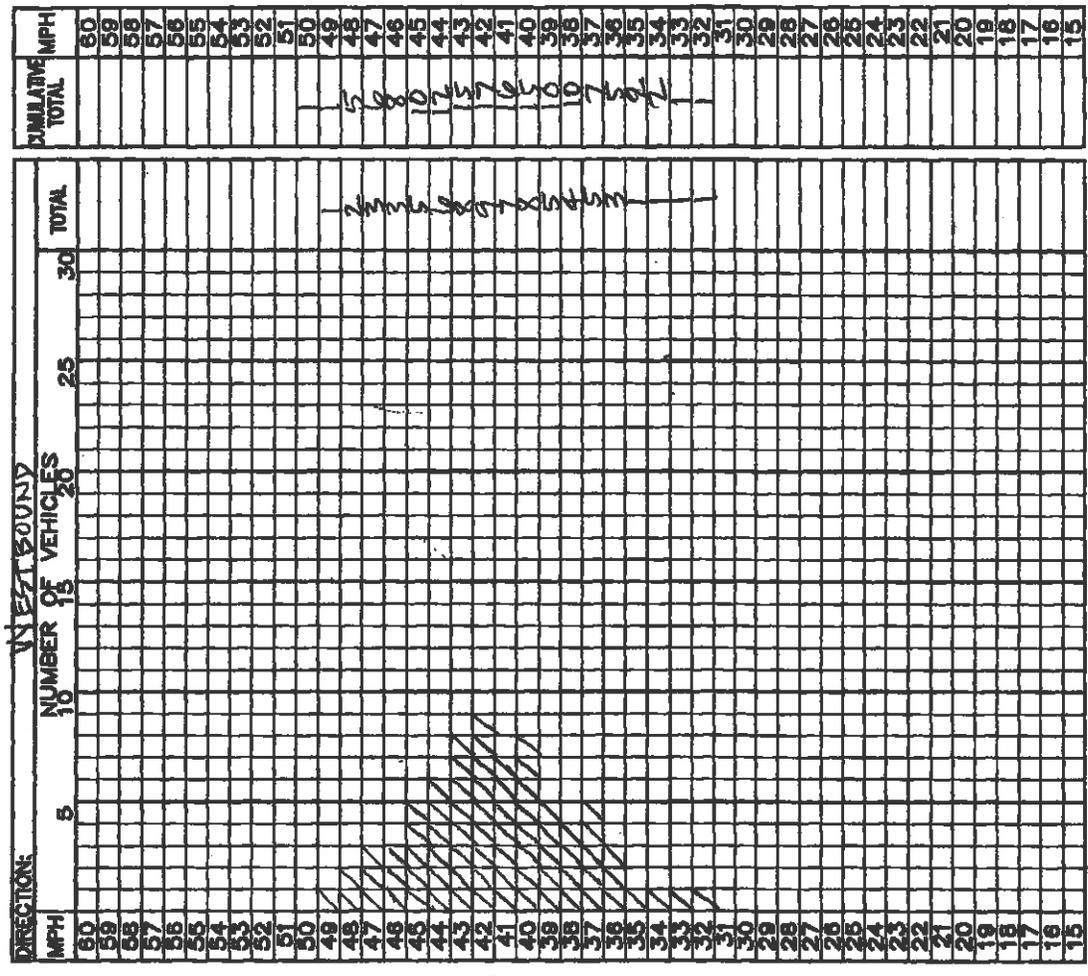
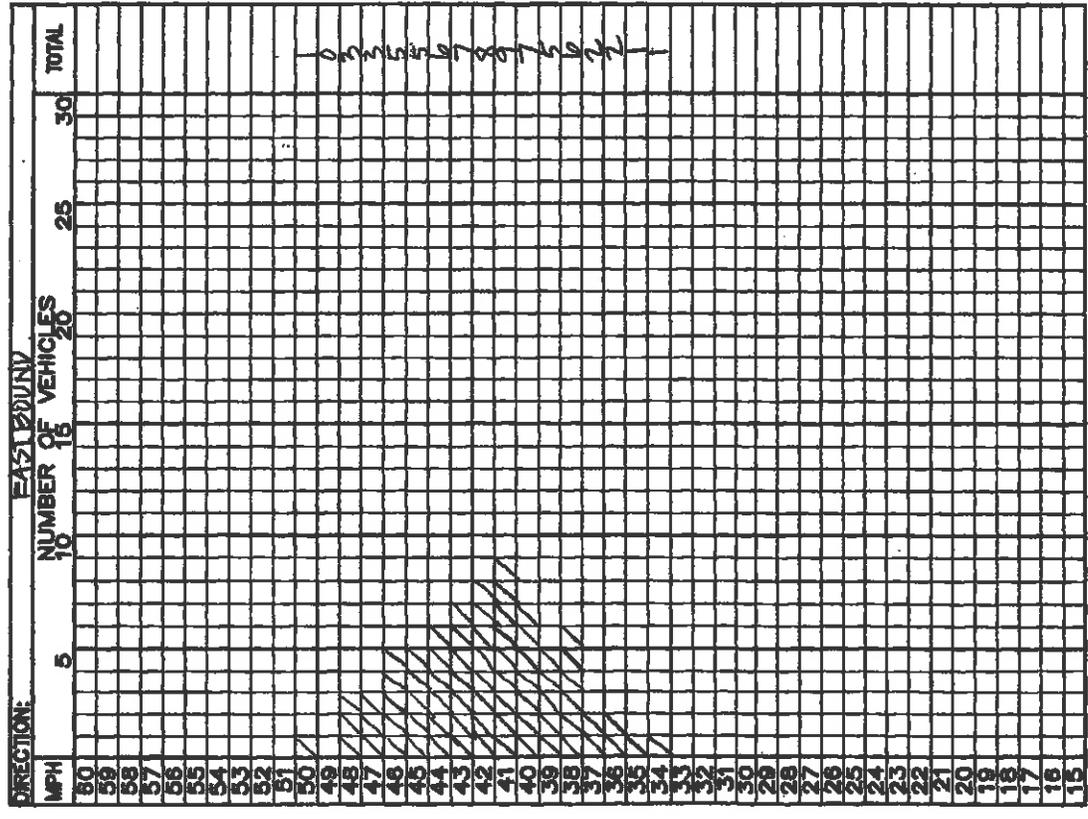
OBSERVER: Cathy Buendia

DATE: 11/14/13

START TIME: 11:30 AM

END TIME: 12:00 PM

V/L



AVERAGE SPEED: _____

CRITICAL SPEED: _____

PACE SPEED: _____

CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____

CRITICAL SPEED: _____

PACE SPEED: _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



BLOOMFIELD STREET

NORTH CITY LIMITS TO CERRITOS AVE

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 12:30 PM - 1:00 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	SOUTH OF BARCLAY
DATE OF SURVEY	11/14/2013
85th PERCENTILE	44.8 MPH
10 MPH PACE	38 - 47 MPH
PERCENT IN PACE	83.9 %
POSTED SPEED LIMIT	40 MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	1
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	13,700
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - CERRITOS / BALL
CROSSWALKS	AT CERRITOS (sch) / PED XING (at creek) / BALL
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	PARTIAL (NB) / NO STOPPING ANYTIME (SB)
OTHER	BIKE ROUTE MANY AREAS OF RED CURB

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.53
VERTICAL CURVE	SLIGHT-GRADUAL UP/DOWNHILL GRADES (OVER CREEK)
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / NO
STREET LIGHTING	YES
OTHER	PAINTED ISLAND

ADJACENT LAND USE RESIDENTIAL (NF) / LAUREL HIGH SCHOOL / SCHOOL DISTRICT

RECOMMENDED SPEED LIMIT 40 MPH

SPEED LIMIT CHANGE NO CHANGE

JUSTIFICATION:
The recommended 40 mph speed limit is within 4.8 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone
NF = Non-Fronting

RADAR SPEED DISTRIBUTION SHEET



CITY OF LOS ALAMITOS

BLOOMFIELD STREET

DATE: 11/14/2013

TIME: 12:30 PM - 1:00 PM

NORTH CITY LIMITS TO CERRITOS AVE

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 99.4%
49						X 99.4%
48						X 98.1%
47						X 96.9% } PACE
46					X	91.9% } PACE
45					X	86.3% } PACE
44				X		77.6% } PACE ---85PCT
43			X			68.3% } PACE
42			X			58.4% } PACE
41		X				46.0% } PACE ---MEAN
40		X				36.0% } PACE
39		X				25.5% } PACE
38		X				19.3% } PACE
37	X					13.0% ---15PCT
36	X					8.1%
35	X					3.7%
34	X					2.5%
33	X					0.6%
32	X					0.6%
31	X					0.0%
30	X					0.0%
29	X					0.0%
28	X					0.0%
27	X					0.0%
26	X					0.0%
25	X					0.0%
24	X					0.0%
23	X					0.0%
22	X					0.0%
21	X					0.0%
20	X					0.0%
19	X					0.0%
18	X					0.0%
17	X					0.0%
16	X					0.0%
15	X					0.0%

UPPER LIMIT 10 MPH PACE: 47 MPH
 LOWER LIMIT 10 MPH PACE: 38 MPH
 PERCENT OVER PACE: 8.1 %
 PERCENT IN PACE: 83.9 %
 PERCENT UNDER PACE: 13.0 %

85th PERCENTILE SPEED: 44.8 MPH
 MEDIAN SPEED: 41.3 MPH
 15th PERCENTILE SPEED: 37.3 MPH

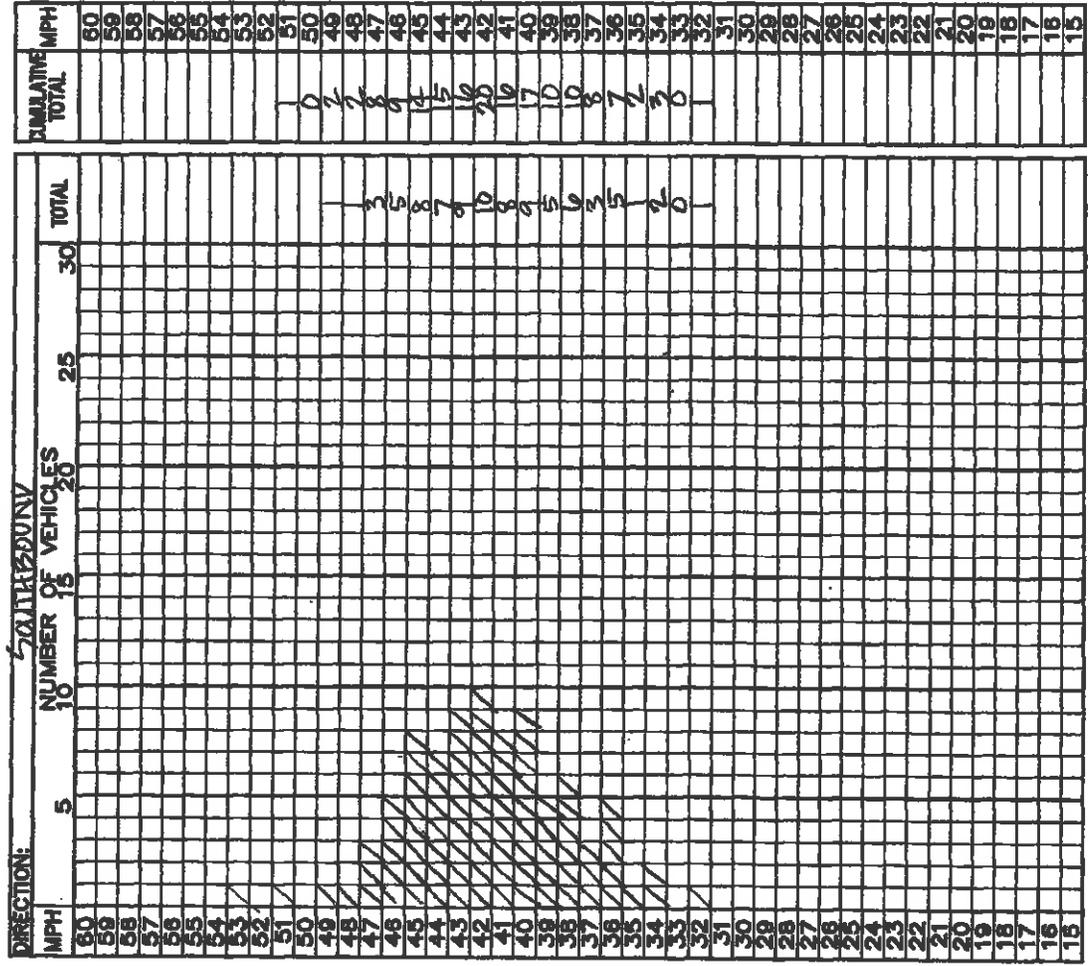
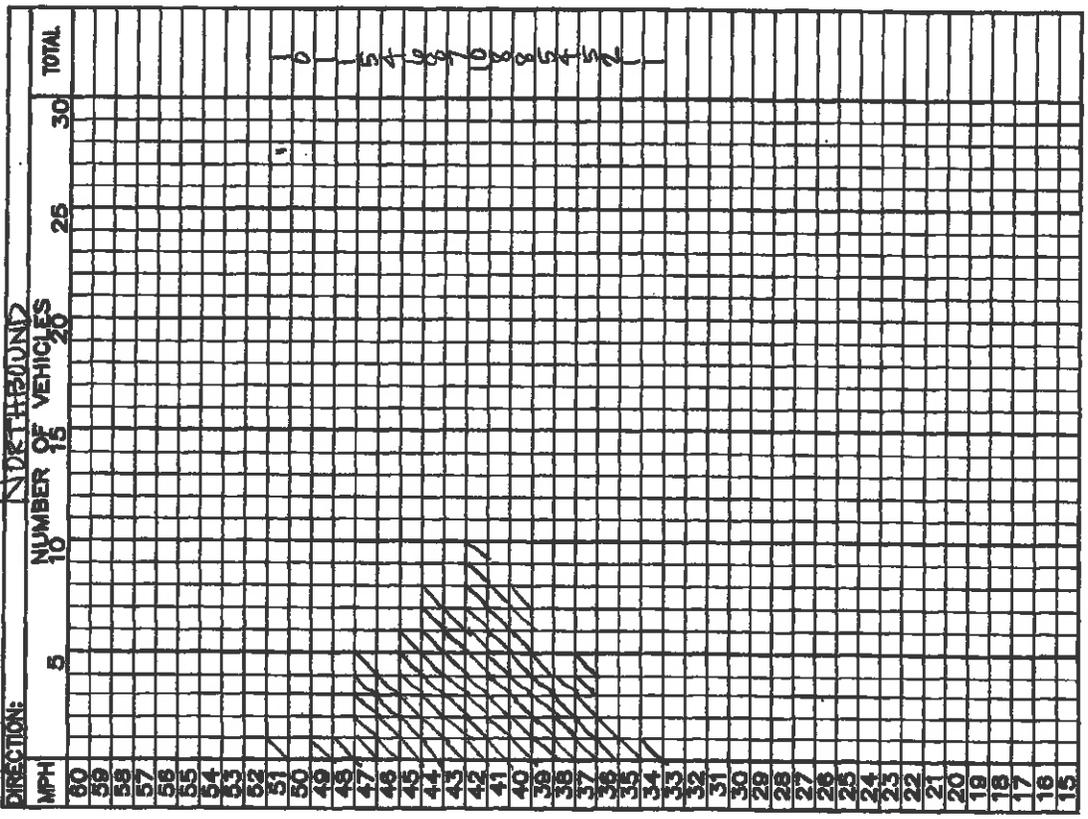
Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
 STREET: BLOOMFIELD STREET
 LOCATION: NORTH CITY LIMITS TO CERRITOS AVE

WEATHER: SUNNY
 ROAD CONDITION: DRY
 OBSERVER: Cathy Buendia

DATE: 11/14/13
 START TIME: 12:30 PM
 END TIME: 1:00 PM VAC



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



BLOOMFIELD STREET

CERRITOS AVE TO KATELLA AVE

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 1:00 PM - 1:30 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	SOUTH OF CERRITOS
DATE OF SURVEY	11/14/2013
85th PERCENTILE	41.0 MPH
10 MPH PACE	33 - 42 MPH
PERCENT IN PACE	79.5 %
POSTED SPEED LIMIT	35 MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	1
TOTAL ACCIDENTS	1
ANNUAL ACCIDENT RATE	0.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.16 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	16,900
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - CERRITOS / KATELLA
CROSSWALKS	AT CERRITOS (sch) / KATELLA (sch)
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	PARTIAL w/RESTRICTIONS (SB) / NO STOPPING ANYTIME (NB)
OTHER	BIKE ROUTE HEAVY PEDS AT SCHOOL ARRIVAL-DEPARTURE

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.50
VERTICAL CURVE	NONE (Except over former RxFR tracks)
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	2 WAY LEFT TURN CENTERLANE AREAS OF RED CURB

ADJACENT LAND USE	BUSINESS / INDUSTRIAL / SCHOOLS / PARK
--------------------------	--

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	INCREASE
---------------------------	----------

JUSTIFICATION:
 This section of Bloomfield Street is a four lane roadway. Currently, a 35 mph speed limit is posted for this area. The adjacent land uses are business, industrial, elementary and middle schools, and a park. Field notes state that there are no shoulders throughout the majority of the segment except for approximately 1000' of cut out on-street parking south of Cerritos Avenue southbound, painted bikes lanes, and heavy pedestrian traffic at school arrive and release. The speed data resulted with an 85th percentile speed of 41.0 mph and a 10 mph pace range of 33 to 42 mph. Therefore, it is recommended that the existing 35 mph be increased to 40 mph.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



BLOOMFIELD STREET

CERRITOS AVE TO KATELLA AVE

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 1:00 PM - 1:30 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 98.2%
44						X 96.4%
43						X 94.0%
42						X 90.4% }PACE
41						X 84.9% }PACE ---85PCT
40						X 81.3% }PACE
39						X 74.7% }PACE
38						X 67.5% }PACE
37						X 57.8% }PACE
36						X 48.2% }PACE ---MEAN
35						X 36.7% }PACE
34						X 28.3% }PACE
33						X 19.3% }PACE
32						X 10.8% ---15PCT
31						X 7.2%
30	X					X 3.6%
29	X					X 1.2%
28	X					X 0.0%
27	X					X 0.0%
26	X					X 0.0%
25	X					X 0.0%
24	X					X 0.0%
23	X					X 0.0%
22	X					X 0.0%
21	X					X 0.0%
20	X					X 0.0%
19	X					X 0.0%
18	X					X 0.0%
17	X					X 0.0%
16	X					X 0.0%
15	X					X 0.0%

UPPER LIMIT 10 MPH PACE: 42 MPH
 LOWER LIMIT 10 MPH PACE: 33 MPH
 PERCENT OVER PACE: 9.6 %
 PERCENT IN PACE: 79.5 %
 PERCENT UNDER PACE: 10.8 %

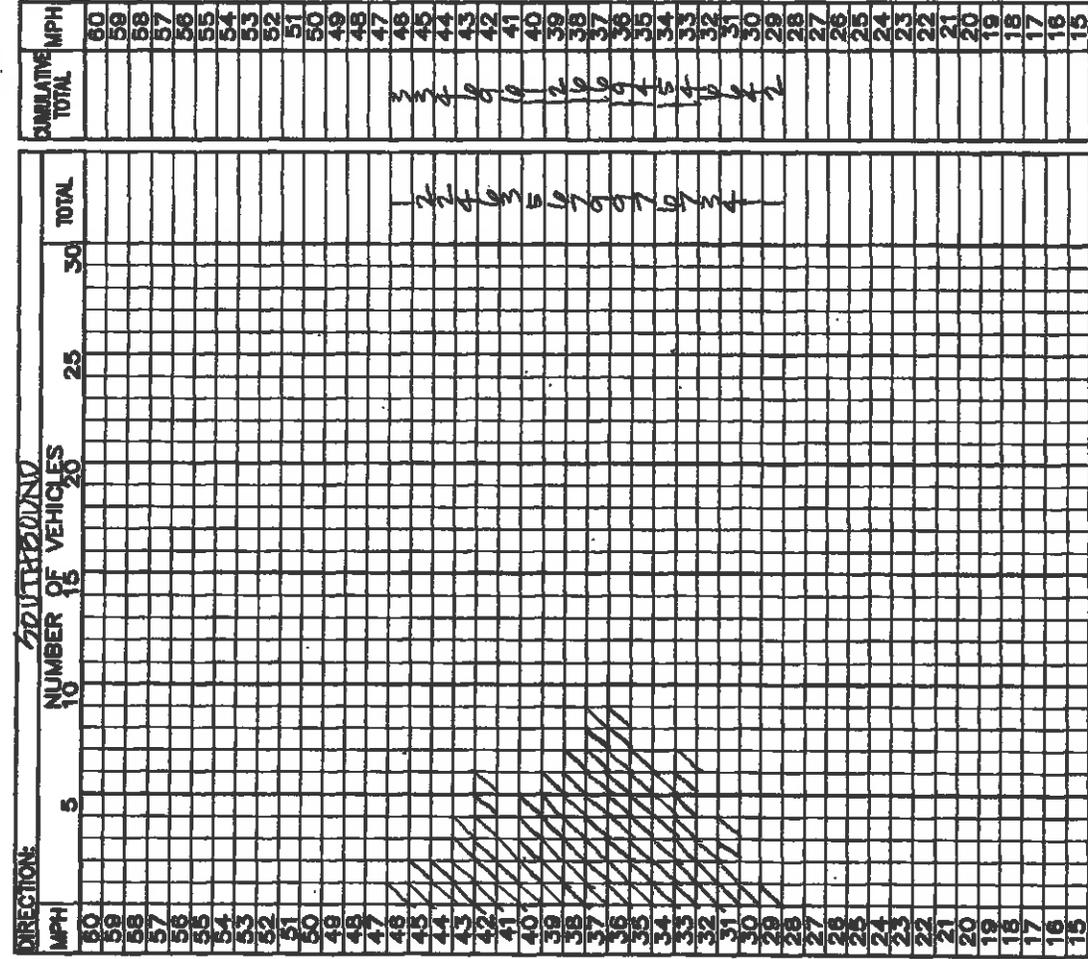
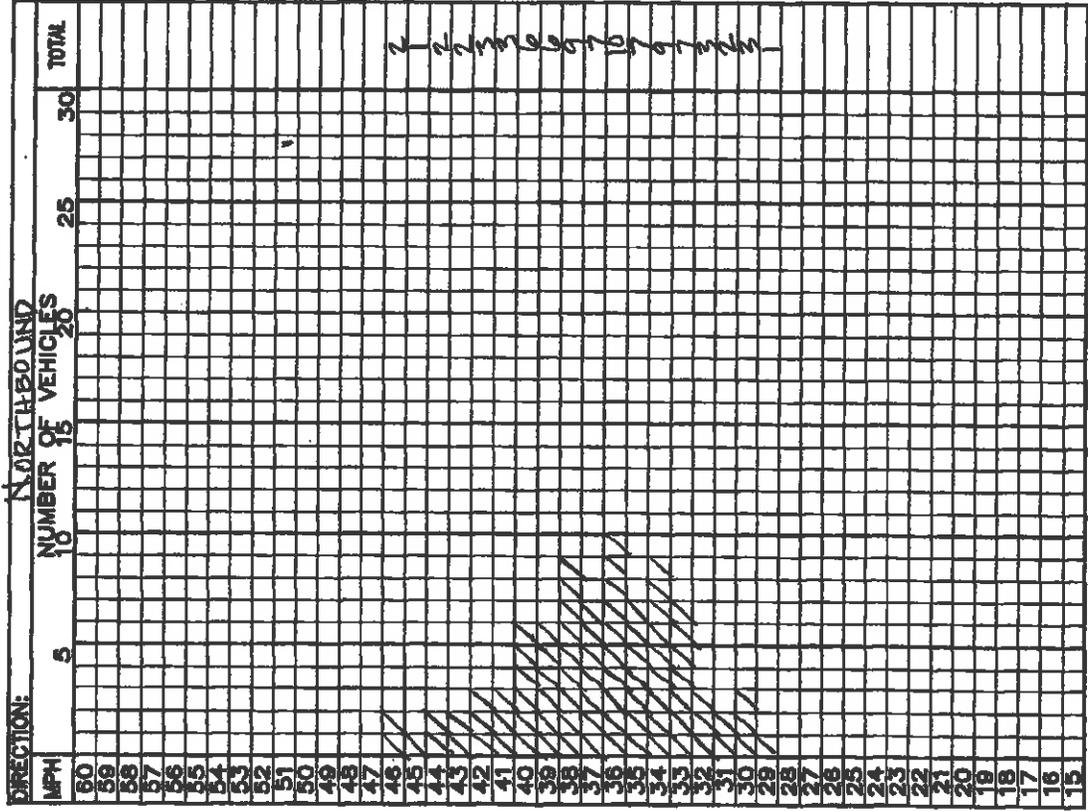
85th PERCENTILE SPEED: 41.0 MPH
 MEDIAN SPEED: 36.2 MPH
 15th PERCENTILE SPEED: 32.5 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
 STREET: BLOOMFIELD STREET
 LOCATION: CEKINDS AVE TO KATELLA AVE.

WEATHER: SUNNY DATE: 11/14/13
 ROAD CONDITION: DRY START TIME: 1:00 PM
 OBSERVER: Cathy Buendia END TIME: 1:30 PM 1/1A



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



BLOOMFIELD STREET

KATELLA AVE TO FARQUHAR AVE

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 1:30 PM - 2:15 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	SOUTH OF GREEN
DATE OF SURVEY	11/14/2013
85th PERCENTILE	25.2 MPH
10 MPH PACE	19 - 28 MPH
PERCENT IN PACE	96.9 %
POSTED SPEED LIMIT	25 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	0
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	4,200
LANE CONFIGURATION	1 LANE PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - KATELLA. STOP - FARQUHAR / GREEN / HOWARD
CROSSWALKS	AT KATELLA (sch)
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	NO (except delivery truck)
ON-STREET PARKING	YES
OTHER	NO PARKING 9am-12pm, 2nd-4th THURS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.25
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	

ADJACENT LAND USE	RESIDENTIAL (Multi-Family) / CHURCH / BUSINESS AND COMMERCIAL (at Katella)
--------------------------	--

RECOMMENDED SPEED LIMIT	25 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
 The recommended 25 mph is within 0.2 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET



CITY OF LOS ALAMITOS

BLOOMFIELD STREET

KATELLA AVE TO FARQUHAR AVE

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 1:30 PM - 2:15 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 100.0%
44						X 100.0%
43						X 100.0%
42						X 100.0%
41						X 100.0%
40						X 100.0%
39						X 100.0%
38						X 100.0%
37						X 100.0%
36						X 100.0%
35						X 100.0%
34						X 100.0%
33						X 100.0%
32						X 100.0%
31						X 100.0%
30						X 100.0%
29						X 99.4%
28						X 98.7% }PACE
27						X 96.2% }PACE
26					X	X 92.5% }PACE
25					X	X 83.6% }PACE ---85PCT
24				X		X 72.3% }PACE
23			X			X 58.5% }PACE
22		X				X 42.1% }PACE ---MEAN
21		X				X 29.6% }PACE
20	X	X				X 17.8% }PACE
19	X					X 8.2% }PACE ---15PCT
18	X					X 1.9%
17	X					X 0.6%
16	X					X 0.0%
15	X					X 0.0%

UPPER LIMIT 10 MPH PACE: 28 MPH
 LOWER LIMIT 10 MPH PACE: 19 MPH
 PERCENT OVER PACE: 1.3 %
 PERCENT IN PACE: 96.9 %
 PERCENT UNDER PACE: 1.9 %

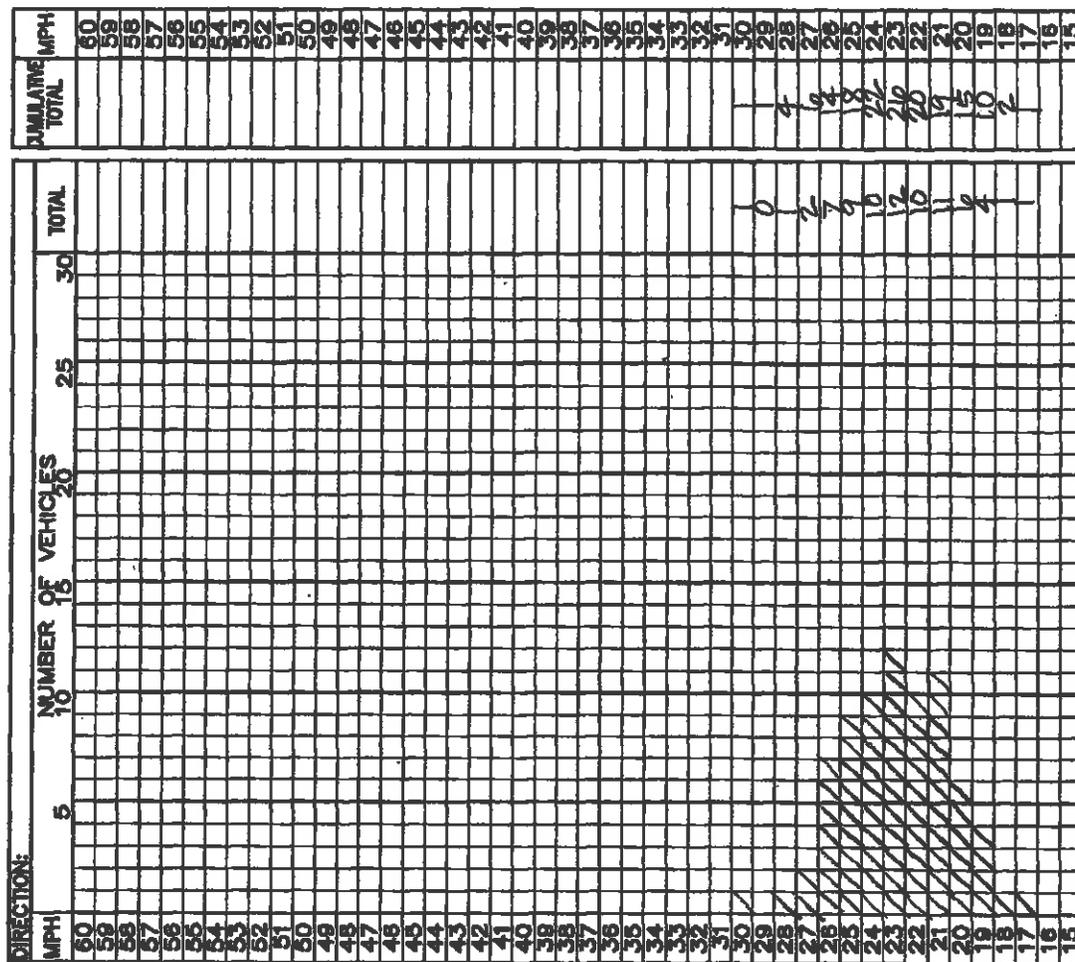
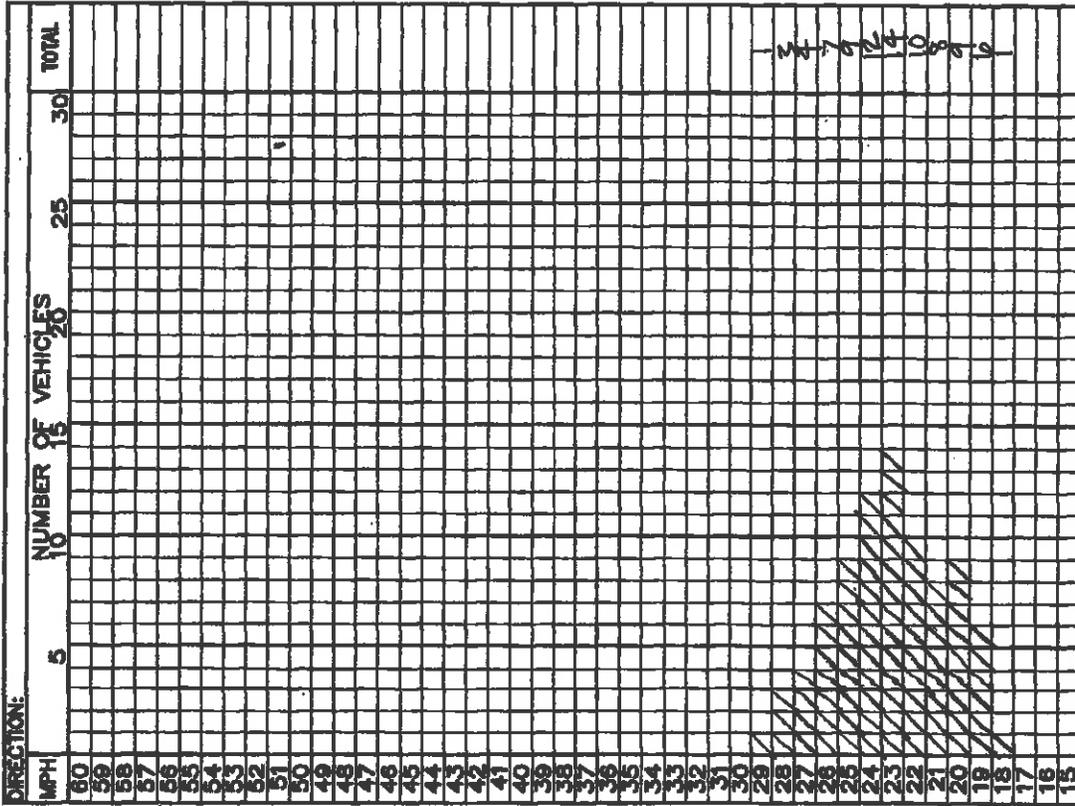
85th PERCENTILE SPEED: 25.2 MPH
 MEDIAN SPEED: 22.5 MPH
 15th PERCENTILE SPEED: 19.7 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
STREET: BLOOMFIELD STREET
LOCATION: KATELLA AVE TO FABOLAR AVE

WEATHER: SUNNY
ROAD CONDITION: DRY
OBSERVER: Cathy Buendia
DATE: 11/14/13
START TIME: 1:30 PM
END TIME: 2:15 PM UHL



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



CERRITOS AVENUE

WEST CITY LIMITS TO LOS ALAMITOS BL

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 10:45 AM - 11:15 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF RIVERBED
DATE OF SURVEY	11/14/2013
85th PERCENTILE	43.4 MPH
10 MPH PACE	35 - 44 MPH
PERCENT IN PACE	74.9 %
POSTED SPEED LIMIT	40 MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	1
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	28,500
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - LOS ALAMITOS
CROSSWALKS	AT LOS ALAMITOS (sch)
PEDESTRIAN/BICYCLES	FEW / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	NO PARKING ANYTIME (EB) / FEW AT LOS ALAMITOS BL (WB)
OTHER	NO SHOULDERS (EB) BIKE ROUTE

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.29
VERTICAL CURVE	SLIGHT UP-DOWNHILL GRADE (over creek/riverbed)
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	

ADJACENT LAND USE	BUSINESS / COMMERCIAL
--------------------------	-----------------------

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 40 mph is within 3.4 mph of the 85th percentile speed and meets CVC standards.

*25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS

HCI

CERRITOS AVENUE

WEST CITY LIMITS TO LOS ALAMITOS BL

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 10:45 AM - 11:15 AM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 98.4%
47						X 97.9%
46						X 95.2%
45						X 92.5%
44						X 88.8% }PACE
43						X 82.9% }PACE ---85PCT
42						X 75.4% }PACE
41						X 65.8% }PACE
40						X 58.3% }PACE
39						X 50.3% }PACE
38						X 41.2% }PACE ----MEAN
37						X 33.7% }PACE
36						X 26.7% }PACE
35						X 19.3% }PACE
34						X 13.9% ---15PCT
33						X 8.0%
32						X 5.3%
31						X 3.7%
30						X 3.2%
29						X 2.1%
28						X 1.1%
27						X 0.0%
26						X 0.0%
25						X 0.0%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 44 MPH
 LOWER LIMIT 10 MPH PACE: 35 MPH
 PERCENT OVER PACE: 17.1 %
 PERCENT IN PACE: 74.9 %
 PERCENT UNDER PACE: 13.9 %

85th PERCENTILE SPEED: 43.4 MPH
 MEDIAN SPEED: 39.0 MPH
 15th PERCENTILE SPEED: 34.2 MPH

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



CERRITOS AVENUE

LOS ALAMITOS BL TO BLOOMFIELD ST

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 10:15 AM - 10:45 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF HIGH SCH ENT
DATE OF SURVEY	11/14/2013
85th PERCENTILE	38.3 MPH
10 MPH PACE	31 - 40 MPH
PERCENT IN PACE	80.1 %
POSTED SPEED LIMIT	35MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	3
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	28,500
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - LOS ALAMITOS / H.S. ENTRANCE /HUMBOLT / BLOOMFIELD
CROSSWALKS	AT LOS ALAMITOS (sch) / H.S. ENTRANCE (sch) /HUMBOLT / BLOOMFIELD
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	YES
OTHER	SHORT DISTANCE BTWN SIGNALS BIKE ROUTE

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.47
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	BUS STOPS

ADJACENT LAND USE	BUSINESS / COMMERCIAL / RESIDENTIAL (NF) / HIGH SCH
--------------------------	---

RECOMMENDED SPEED LIMIT	35 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
 The recommended 35 mph is within 4.3 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



CERRITOS AVENUE

DATE: 11/14/2013

TIME: 10:15 AM - 10:45 AM

LOS ALAMITOS BL TO BLOOMFIELD ST

SURVEY BY: C. BUENDIA

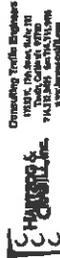
CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 99.3%
44						X 97.9%
43						X 96.6%
42						X 95.2%
41						X 91.8%
40						X 89.0% } PACE
39						X 83.6% } PACE ---85PCT
38						X 78.1% } PACE
37						X 69.2% } PACE
36						X 58.9% } PACE
35						X 48.6% } PACE ---MEAN
34						X 39.0% } PACE
33						X 28.1% } PACE
32						X 21.2% } PACE
31						X 13.7% } PACE ---15PCT
30						X 8.9%
29						X 3.4%
28						X 1.4%
27						X 0.7%
26						X 0.0%
25						X 0.0%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 40 MPH
 LOWER LIMIT 10 MPH PACE: 31 MPH
 PERCENT OVER PACE: 16.4 %
 PERCENT IN PACE: 80.1 %
 PERCENT UNDER PACE: 8.9 %

85th PERCENTILE SPEED: 39.3 MPH
 MEDIAN SPEED: 35.1 MPH
 15th PERCENTILE SPEED: 31.2 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
STREET: LEWIS AVENUE
LOCATION: LOS ALAMITOS BL TO BLOOMFIELD ST.

WEATHER: SUNNY
ROAD CONDITION: DRY
OBSERVER: Cathy Buendia
DATE: 11/14/13
START TIME: 10:15 AM
END TIME: 10:45 AM

MPH	EASTBOUND			TOTAL
	5	10	15	
60				
59				
58				
57				
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				
44				
43				
42				
41				
40				
39				
38				
37				
36				
35				
34				
33				
32				
31				
30				
29				
28				
27				
26				
25				
24				
23				
22				
21				
20				
19				
18				
17				
16				
15				

AVERAGE SPEED: _____ PACE SPEED: _____
CRITICAL SPEED: _____
CUMULATIVE (BOTH DIRECTIONS) _____

MPH	WESTBOUND			TOTAL
	5	10	15	
60				
59				
58				
57				
56				
55				
54				
53				
52				
51				
50				
49				
48				
47				
46				
45				
44				
43				
42				
41				
40				
39				
38				
37				
36				
35				
34				
33				
32				
31				
30				
29				
28				
27				
26				
25				
24				
23				
22				
21				
20				
19				
18				
17				
16				
15				

AVERAGE SPEED: _____ PACE SPEED: _____
CRITICAL SPEED: _____
CUMULATIVE _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



CERRITOS AVENUE

BLOOMFIELD ST TO EAST CITY LIMITS (Santa Clara St)

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 9:45 AM - 10:15 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF LOS VAQUEROS
DATE OF SURVEY	11/14/2013
85th PERCENTILE	44.9 MPH
10 MPH PACE	37 - 46 MPH
PERCENT IN PACE	85.2 %
POSTED SPEED LIMIT	40 MPH (EB) / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	2
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	25,500
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - BLOOMFIELD
CROSSWALKS	AT BLOOMFIELD
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	PARTIAL
OTHER	AREAS OF NO PARKING AND NO STOPPING BIKE ROUTE

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.50
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	BUS STOPS

ADJACENT LAND USE	RESIDENTIAL / BUSINESS / CHURCH / MIDDLE SCH
--------------------------	--

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE - POST WESTBOUND
---------------------------	----------------------------

JUSTIFICATION:
 The recommended 40 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards. Field notes state that only one speed sign is posted (eastbound) within the segment length. Although in the City of Cypress, there is a 40 mph speed sign posted for the westbound direction west of Denni Street. Therefore, it is recommended that a 40 mph speed sign be installed westbound west of Santa Clara Street (west of East City Limit).

* 25 MPH When Children Present, School Zone
 EB = Eastbound, WB = Westbound

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



CERRITOS AVENUE

BLOOMFIELD ST TO EAST CITY LIMITS

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 9:45 AM - 10:15 AM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 99.4%
50						X 99.4%
49						X 98.2%
48						X 97.8%
47						X 95.9%
46						X 91.7% } PACE
45						X 85.8% } PACE
44						X 78.7% } PACE --- 85PCT
43						X 70.4% } PACE
42						X 61.5% } PACE
41						X 48.5% } PACE --- MEAN
40						X 36.7% } PACE
39						X 28.8% } PACE
38						X 18.9% } PACE
37						X 11.2% } PACE --- 15PCT
36						X 6.5%
35						X 4.1%
34						X 2.4%
33						X 1.8%
32						X 0.6%
31						X 0.0%
30						X 0.0%
29						X 0.0%
28						X 0.0%
27						X 0.0%
26						X 0.0%
25						X 0.0%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 46 MPH
 LOWER LIMIT 10 MPH PACE: 37 MPH
 PERCENT OVER PACE: 8.3 %
 PERCENT IN PACE: 85.2 %
 PERCENT UNDER PACE: 6.5 %

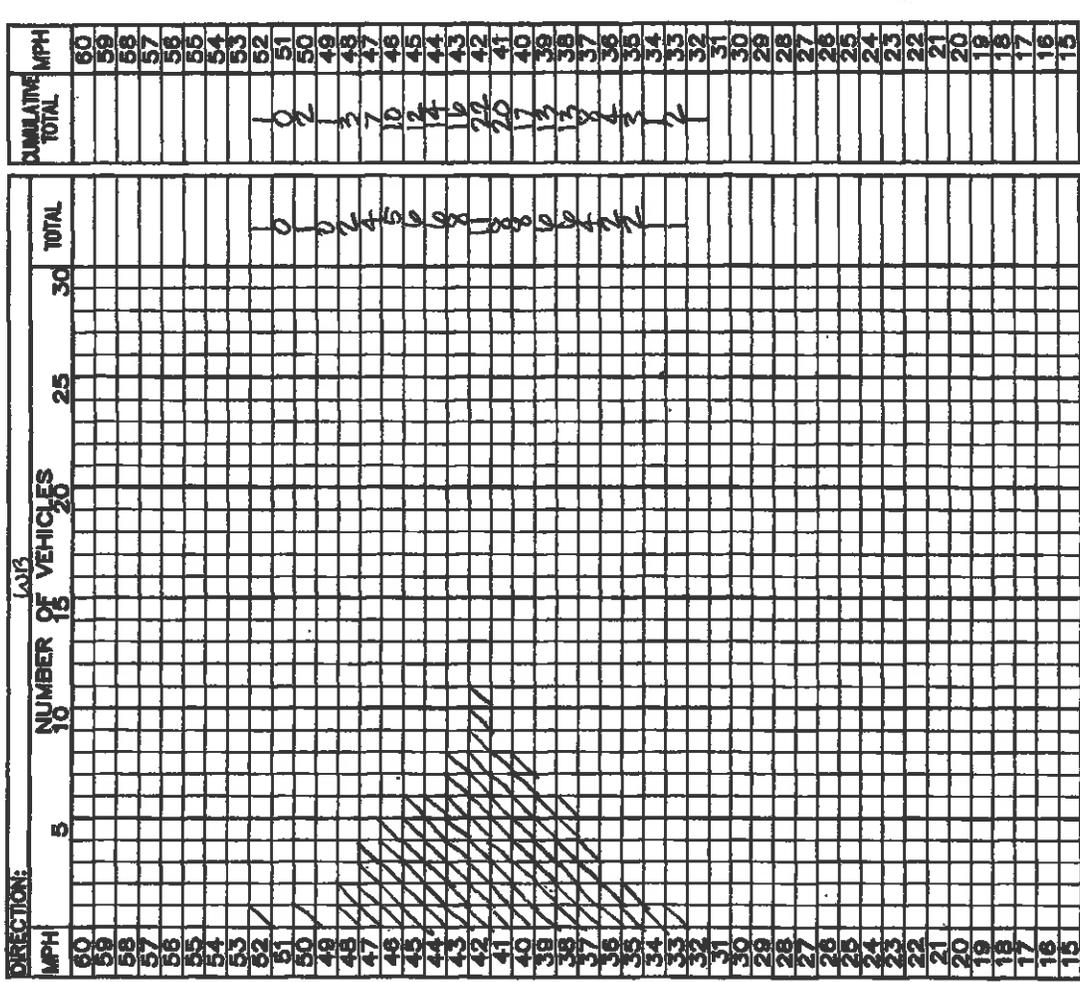
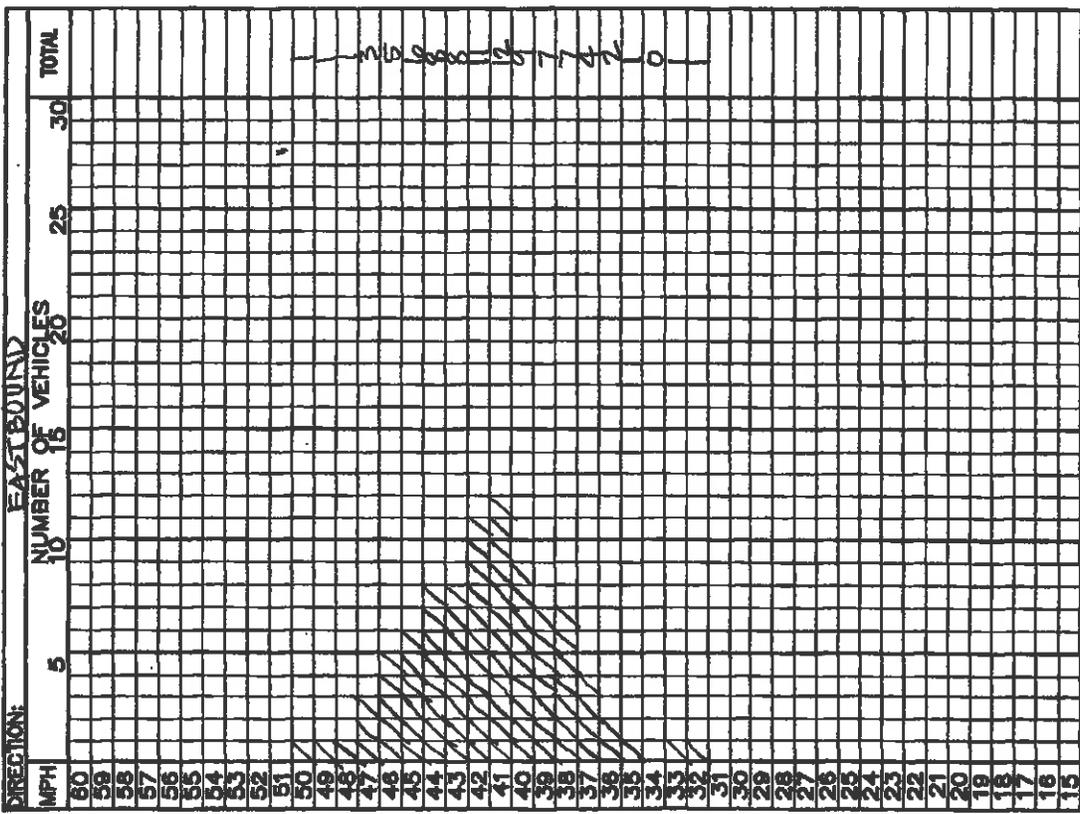
85th PERCENTILE SPEED: 44.9 MPH
 MEDIAN SPEED: 41.1 MPH
 15th PERCENTILE SPEED: 37.5 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS DATE: 11/14/13
 STREET: CERRITOS AVENUE ROAD CONDITION: DRY START TIME: 9:45 AM
 LOCATION: BLOOMFIELD ST TO EAST CITY LIMITS OBSERVER: Cathy Buendia END TIME: 10:15 AM VCA

WEATHER: SUNNY
 ROAD CONDITION: DRY
 OBSERVER: Cathy Buendia



AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



FARQUHAR AVENUE

LOS ALAMITOS BL TO LEXINGTON DR

DATE: 11/14/2013

SURVEY BY: C. BUENDIA

TIME: 3:15 PM - 3:45 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	WEST OF NOEL
DATE OF SURVEY	11/14/2013
85th PERCENTILE	29.9 MPH
10 MPH PACE	22 - 31 MPH
PERCENT IN PACE	87.2 %
POSTED SPEED LIMIT	25 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	3
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	18,900
LANE CONFIGURATION	1 LANE PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - LOS ALAMITOS, AND
" "	STOP- REAGAN / MAPLE / ROCHELLE / NOEL / BLOOMFIELD / LEXINGTON
CROSSWALKS	AT LOS ALAMITOS / REAGAN / MAPLE/ BLOOMFIELD / AMERICA / LEXINGTON
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	NO
ON-STREET PARKING	YES (WB) / NO PARKING ANYTIME (EB)
OTHER	NO SHOULDERS (EB)

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.97
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	FAIR
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	

ADJACENT LAND USE	RESIDENTIAL / COMMERCIAL (at Los Alamitos) / PARK / MILITARY BASE
--------------------------	---

RECOMMENDED SPEED LIMIT	25 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
 The recommended 25 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards.

RADAR SPEED DISTRIBUTION SHEET



CITY OF LOS ALAMITOS

FARQUHAR AVENUE

DATE: 11/14/2013

TIME: 3:15 PM - 3:45 PM

LOS ALAMITOS BL TO LEXINGTON DR

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 100.0%
44						X 100.0%
43						X 100.0%
42						X 100.0%
41						X 100.0%
40						X 100.0%
39						X 98.3%
38						X 98.3%
37						X 98.3%
36						X 98.0%
35						X 96.6%
34						X 96.0%
33						X 95.3%
32						X 94.6%
31					X	91.9% } PACE
30					X	85.9% } PACE
29				X		79.9% } PACE ---85PCT
28				X		71.1% } PACE
27			X			62.4% } PACE
26			X			51.0% } PACE
25			X			42.3% } PACE ---MEAN
24		X				31.5% } PACE
23		X				20.1% } PACE
22	X					12.1% } PACE ---15PCT
21	X					4.7%
20	X					1.3%
19	X					0.0%
18	X					0.0%
17	X					0.0%
16	X					0.0%
15	X					0.0%

UPPER LIMIT 10 MPH PACE: 31 MPH
 LOWER LIMIT 10 MPH PACE: 22 MPH
 PERCENT OVER PACE: 8.1 %
 PERCENT IN PACE: 87.2 %
 PERCENT UNDER PACE: 4.7 %

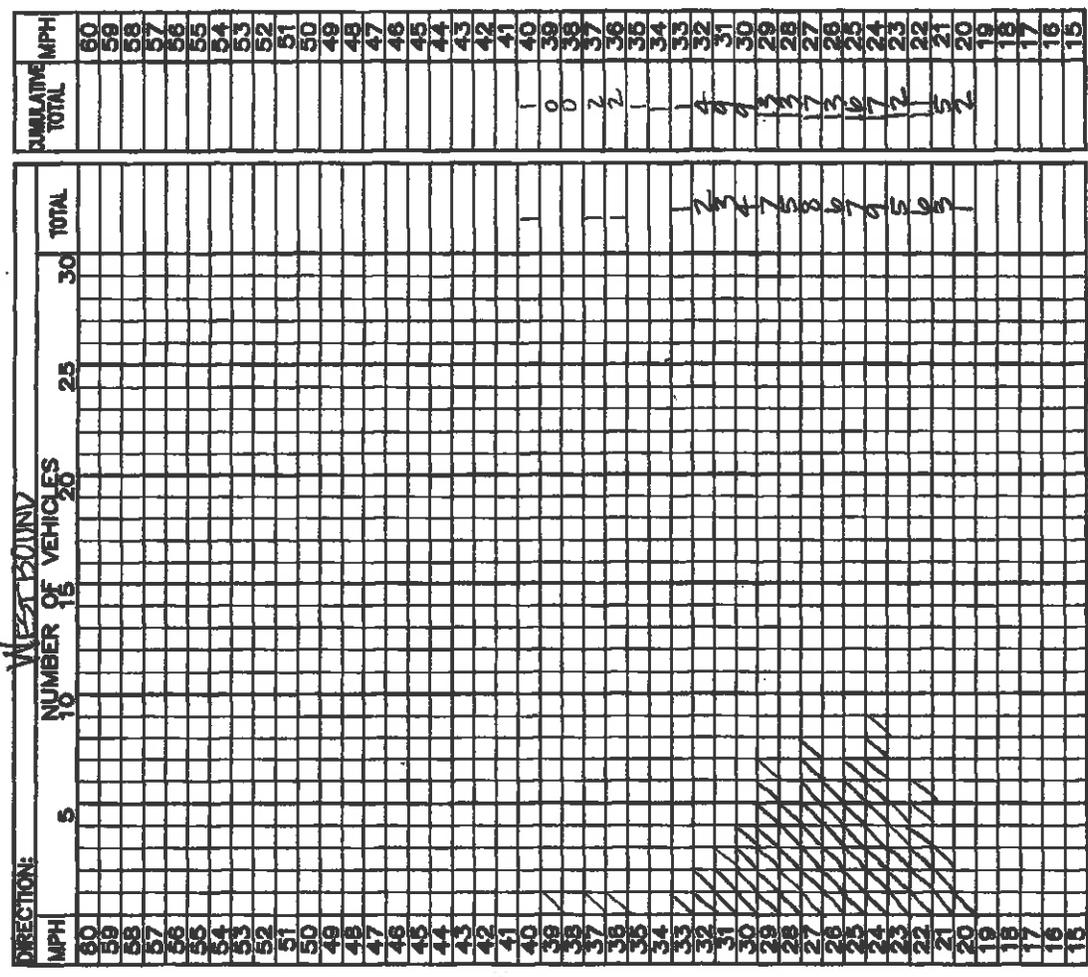
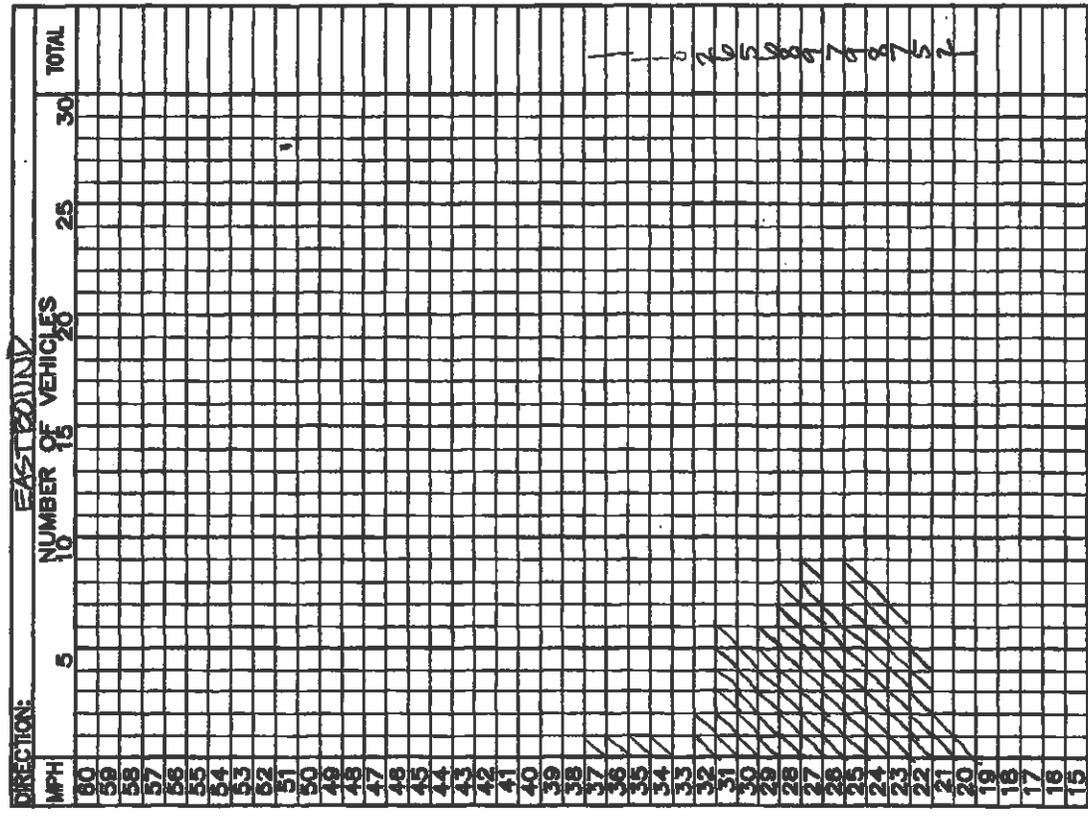
85th PERCENTILE SPEED: 29.9 MPH
 MEDIAN SPEED: 25.9 MPH
 15th PERCENTILE SPEED: 22.4 MPH



Radar Speed Survey Field Sheet

WEATHER: SUNNY DATE: 11/14/13
 ROAD CONDITION: DRY START TIME: 3:15 PM
 OBSERVER: Cathy Buendia END TIME: 3:45 PM VIA

AGENCY: CITY OF LOS ALAMITOS
 STREET: FARQUHAR AVENUE
 LOCATION: LOS ALAMITOS BL TO LEXINGTON DR



AVERAGE SPEED: _____ CRITICAL SPEED: _____ PAGE SPEED: _____
 AVERAGE SPEED: _____ CRITICAL SPEED: _____ PAGE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

ENGINEERING AND TRAFFIC SURVEY
CITY OF LOS ALAMITOS



KATELLA AVENUE

WEST CITY LIMITS TO LOS ALAMITOS BL

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 12:30 PM - 1:00 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	WEST OF OAK
DATE OF SURVEY	11/15/2013
85th PERCENTILE	39.9 MPH
10 MPH PACE	32 - 41 MPH
PERCENT IN PACE	70.9 %
POSTED SPEED LIMIT	35 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	3
TOTAL ACCIDENTS	8
ANNUAL ACCIDENT RATE	1.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.10 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	59,800
LANE CONFIGURATION	4 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - CIVIC CENTER / WELLINGSFORD-WALNUT / LOS ALAMITOS
CROSSWALKS	AT CIVIC CENTER / WELLINGSFORD-WALNUT / LOS ALAMITOS
PEDESTRIAN/BICYCLES	FEW / FEW
TRUCK TRAFFIC	YES (Heavy)
ON-STREET PARKING	NO PARKING ANYTIME
OTHER	NO SHOULDERS DENSE TRAFFIC

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.68
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / FEW
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND

ADJACENT LAND USE	RESIDENTIAL (NF) / BUSINESS / COMMERCIAL / CITY HALL
--------------------------	--

RECOMMENDED SPEED LIMIT	35 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
 The recommended 35 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS

HCI

KATELLA AVENUE

WEST CITY LIMITS TO LOS ALAMITOS BL

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 12:30 PM - 1:00 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 99.4%
44						X 99.4%
43						X 97.0%
42						X 94.5%
41						X 92.7% } PACE
40						X 85.5% } PACE
39						X 78.8% } PACE ---85PCT
38						X 73.3% } PACE
37						X 65.5% } PACE
36						X 54.5% } PACE
35						X 47.3% } PACE ---MEAN
34						X 38.2% } PACE
33						X 32.7% } PACE
32						X 27.3% } PACE
31						X 21.8%
30						X 18.2%
29						X 13.3% ---15PCT
28						X 10.9%
27						X 6.7%
26						X 2.4%
25						X 1.2%
24						X 0.8%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 41 MPH
 LOWER LIMIT 10 MPH PACE: 32 MPH
 PERCENT OVER PACE: 7.3 %
 PERCENT IN PACE: 70.9 %
 PERCENT UNDER PACE: 21.8 %

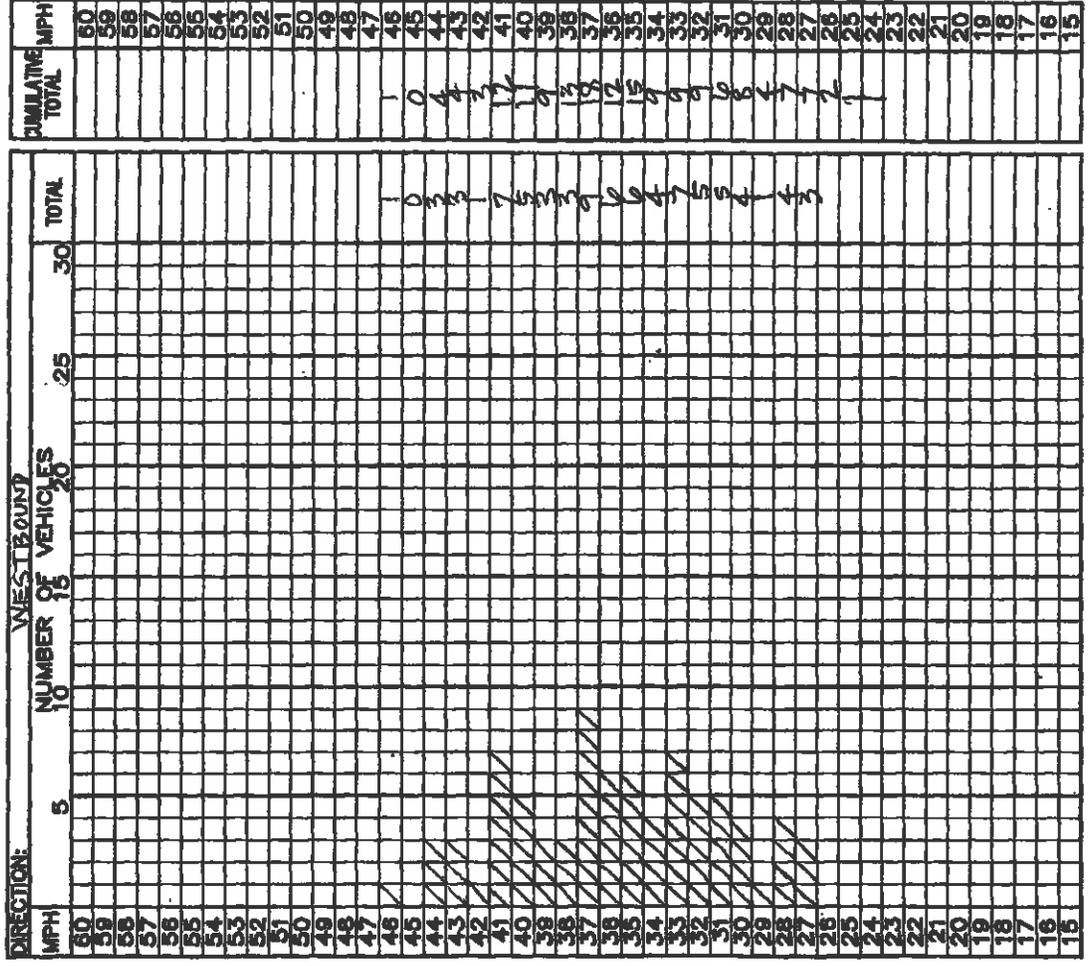
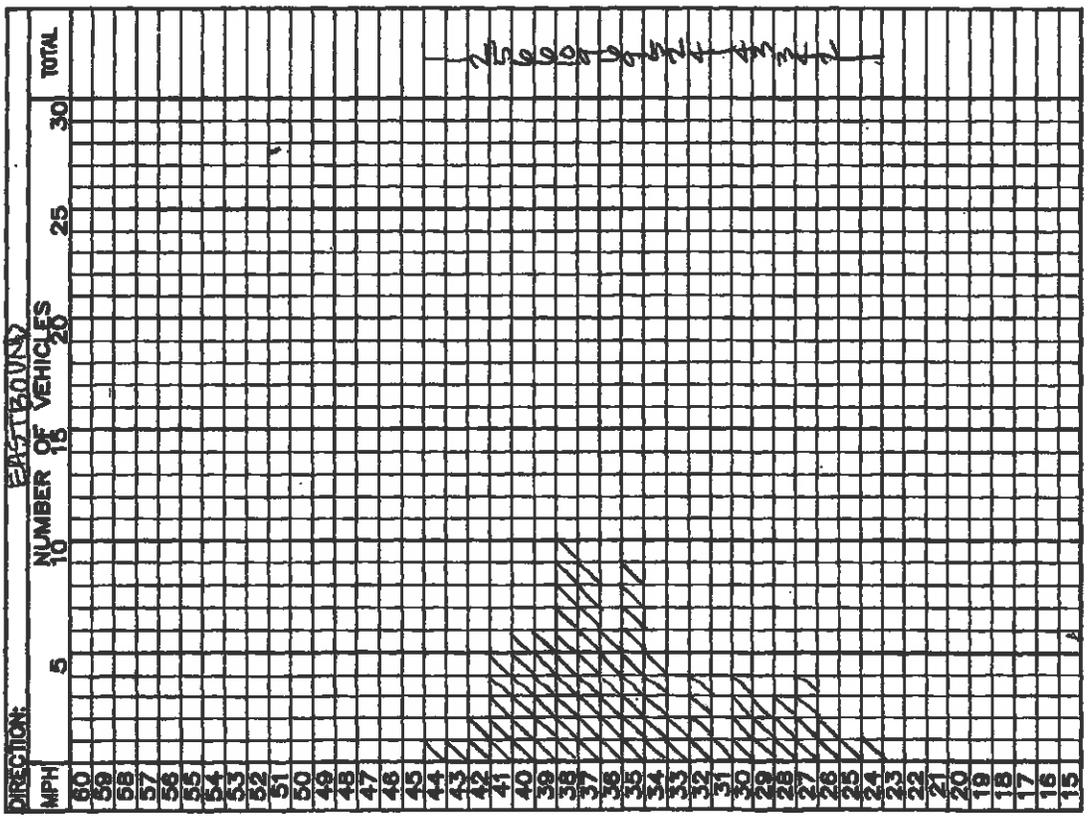
85th PERCENTILE SPEED: 39.9 MPH
 MEDIAN SPEED: 35.4 MPH
 15th PERCENTILE SPEED: 29.3 MPH

Radar Speed Survey Field Sheet



WEATHER: SUNNY DATE: 11/15/13
 ROAD CONDITION: DRY START TIME: 12:30 PM
 OBSERVER: Cathy Buendia END TIME: 1:00 PM V/MC

AGENCY: CITY OF LOS ALAMITOS
 STREET: KATELLA AVENUE
 LOCATION: WEST CITY LIMIT TO LOS ALAMITOS



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



KATELLA AVENUE

LOS ALAMITOS BL TO BLOOMFIELD ST

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 11:15 AM - 11:45 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF CHERRY
DATE OF SURVEY	11/15/2013
85th PERCENTILE	35.7 MPH
10 MPH PACE	27 - 36 MPH
PERCENT IN PACE	76.0 %
POSTED SPEED LIMIT	35 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	1
TOTAL ACCIDENTS	3
ANNUAL ACCIDENT RATE	0.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC. MILLION VEH. MILES	0.04 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	57,700
LANE CONFIGURATION	3 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - LOS ALAMITOS / CHERRY / BLOOMFIELD
CROSSWALKS	AT LOS ALAMITOS / CHERRY / BLOOMFIELD
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES (Heavy)
ON-STREET PARKING	YES (Heavy)
OTHER	MANY AREAS OF RED CURB / 2 HR PKNG (EB) 7am-6pm BUS STOPS / SOME AREAS OF NO PARKING ANYTIME

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.60
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND NO BLOCKING AT INTERSECTIONS OF KAYLOR AND REAGAN

ADJACENT LAND USE	DENSE BUSINESS / DENSE MEDICAL / COMMERCIAL / SMALL CHURCH
--------------------------	--

RECOMMENDED SPEED LIMIT	35 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 35 mph is within 0.7 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



KATELLA AVENUE

LOS ALAMITOS BL TO BLOOMFIELD ST

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 11:15 AM - 11:45 AM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 100.0%
44						X 100.0%
43						X 100.0%
42						X 100.0%
41						X 98.6%
40						X 97.3%
39						X 94.5%
38						X 91.8%
37						X 89.7%
36						X 87.0% } PACE
35						X 80.1% } PACE ---85PCT
34						X 69.2% } PACE
33						X 61.6% } PACE
32						X 50.0% } PACE ---MEAN
31						X 42.5% } PACE
30						X 37.7% } PACE
29						X 26.7% } PACE
28						X 19.2% } PACE
27						X 16.4% } PACE
26						X 11.0% } PACE ---15PCT
25						X 6.8%
24						X 4.1%
23						X 2.1%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

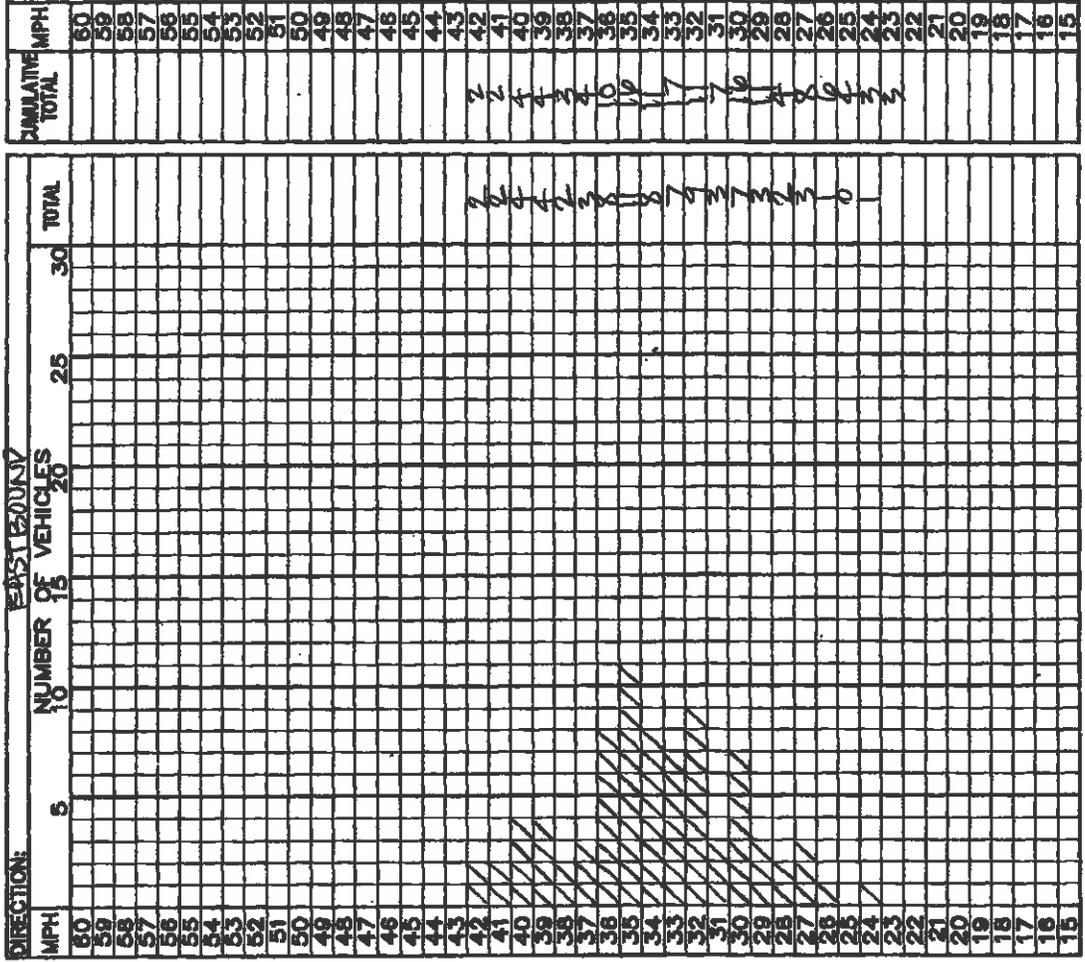
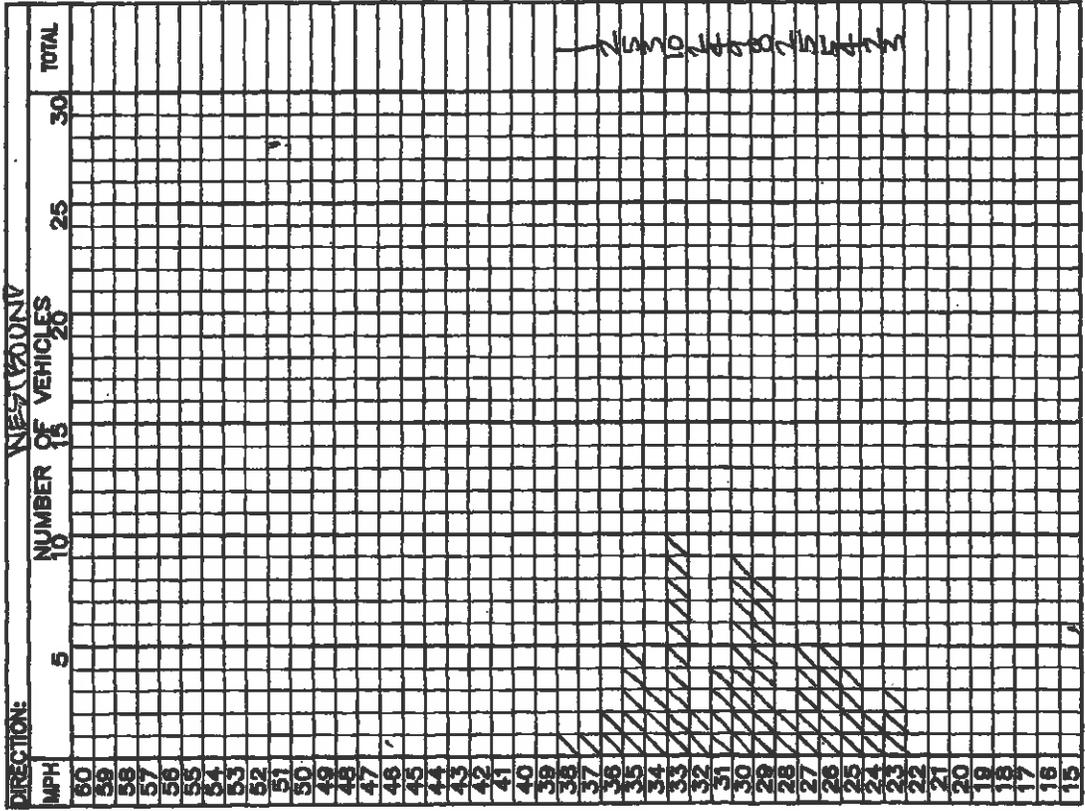
UPPER LIMIT 10 MPH PACE: 36 MPH
 LOWER LIMIT 10 MPH PACE: 27 MPH
 PERCENT OVER PACE: 13.0 %
 PERCENT IN PACE: 76.0 %
 PERCENT UNDER PACE: 11.0 %

85th PERCENTILE SPEED: 35.7 MPH
 MEDIAN SPEED: 32.0 MPH
 15th PERCENTILE SPEED: 26.7 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS DATE: 11/15/13
 STREET: KATELLA AVENUE ROAD CONDITION: DRY START TIME: 11:15 AM
 LOCATION: LOS ALAMITOS 81 TO BLOOMFIELD ST OBSERVER: Cathy Buendia END TIME: 11:46 AM 1/ML



AVERAGE SPEED: _____ PACE SPEED: _____
 CRITICAL SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____ PACE SPEED: _____
 CRITICAL SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

ENGINEERING AND TRAFFIC SURVEY
CITY OF LOS ALAMITOS



KATELLA AVENUE

BLOOMFIELD ST TO LEXINGTON DR

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 10:45 AM - 11:15 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	WEST OF NOEL
DATE OF SURVEY	11/15/2013
85th PERCENTILE	39.9 MPH
10 MPH PACE	30 - 39 MPH
PERCENT IN PACE	67.3 %
POSTED SPEED LIMIT	35 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	3
TOTAL ACCIDENTS	4
ANNUAL ACCIDENT RATE	1.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.15 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	53,200
LANE CONFIGURATION	3 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - BLOOMFIELD / NOEL / LEXINGTON
CROSSWALKS	AT BLOOMFIELD (sch) / NOEL / LEXINGTON
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES (Heavy)
ON-STREET PARKING	YES
OTHER	MANY AREAS OF RED CURB / 2 HR PKNG (EB) 7am-6pm NO BLOCKING INTERSECTION AT PORTAL

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.50
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND BUS STOPS

ADJACENT LAND USE	BUSINESS / MEDICAL / COMMERCIAL / PARK / CHURCH / INDUSTRIAL (at Lexington)
--------------------------	---

RECOMMENDED SPEED LIMIT	35 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
 The recommended 35 mph is within 4.9 mph of the 85th percentile speed and meets CVC standards.

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



KATELLA AVENUE

BLOOMFIELD ST TO LEXINGTON DR

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 10:45 AM - 11:15 AM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 99.3%
44						X 96.6%
43						X 93.2%
42						X 91.2%
41						X 89.8%
40						X 85.7%
39						X 81.0% }PACE -- -85PCT
38						X 72.8% }PACE
37						X 65.3% }PACE
36						X 59.9% }PACE
35						X 53.1% }PACE
34						X 44.2% }PACE ---MEAN
33						X 35.4% }PACE
32						X 29.3% }PACE
31						X 27.9% }PACE
30						X 22.4% }PACE
29						X 13.8% ---15PCT
28						X 9.5%
27						X 6.1%
26						X 4.1%
25						X 1.4%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 39 MPH
 LOWER LIMIT 10 MPH PACE: 30 MPH
 PERCENT OVER PACE: 19.0 %
 PERCENT IN PACE: 67.3 %
 PERCENT UNDER PACE: 13.6 %

85th PERCENTILE SPEED: 39.9 MPH
 MEDIAN SPEED: 34.7 MPH
 15th PERCENTILE SPEED: 29.2 MPH

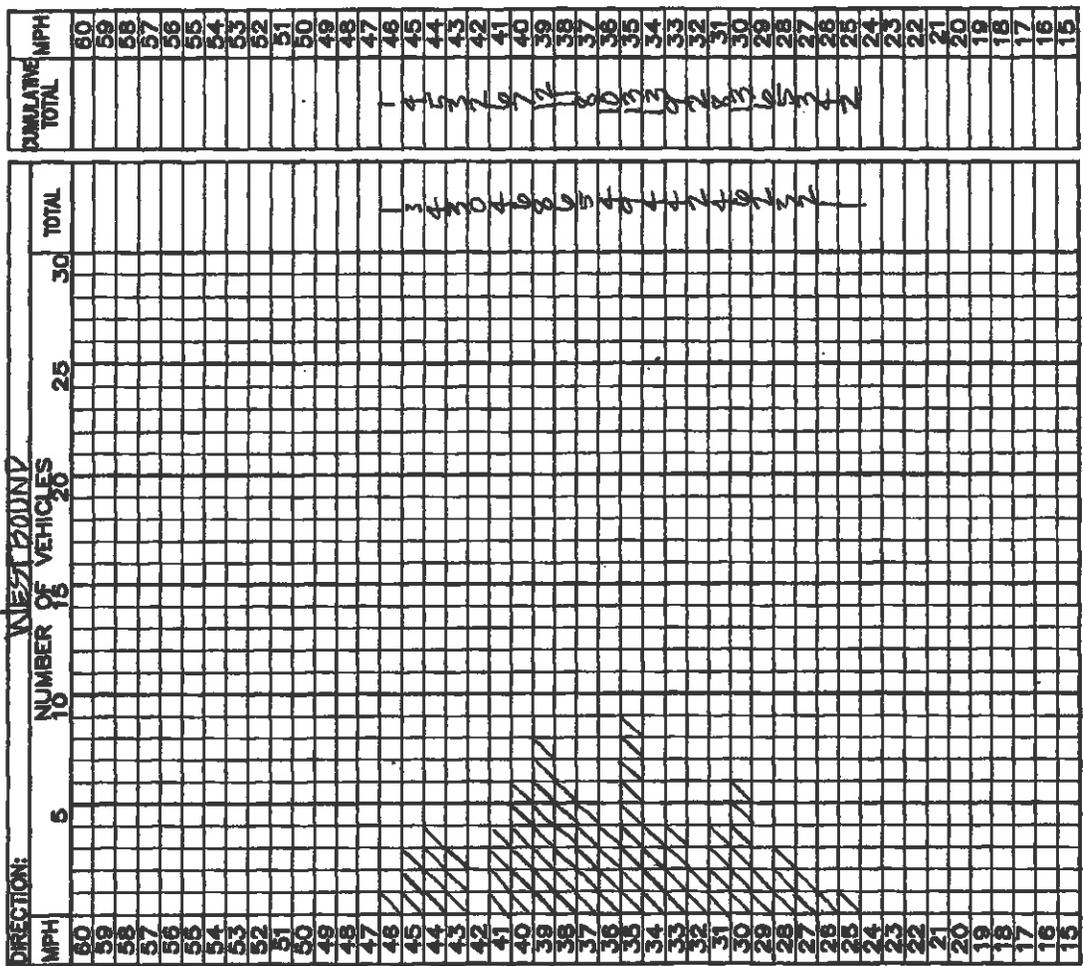
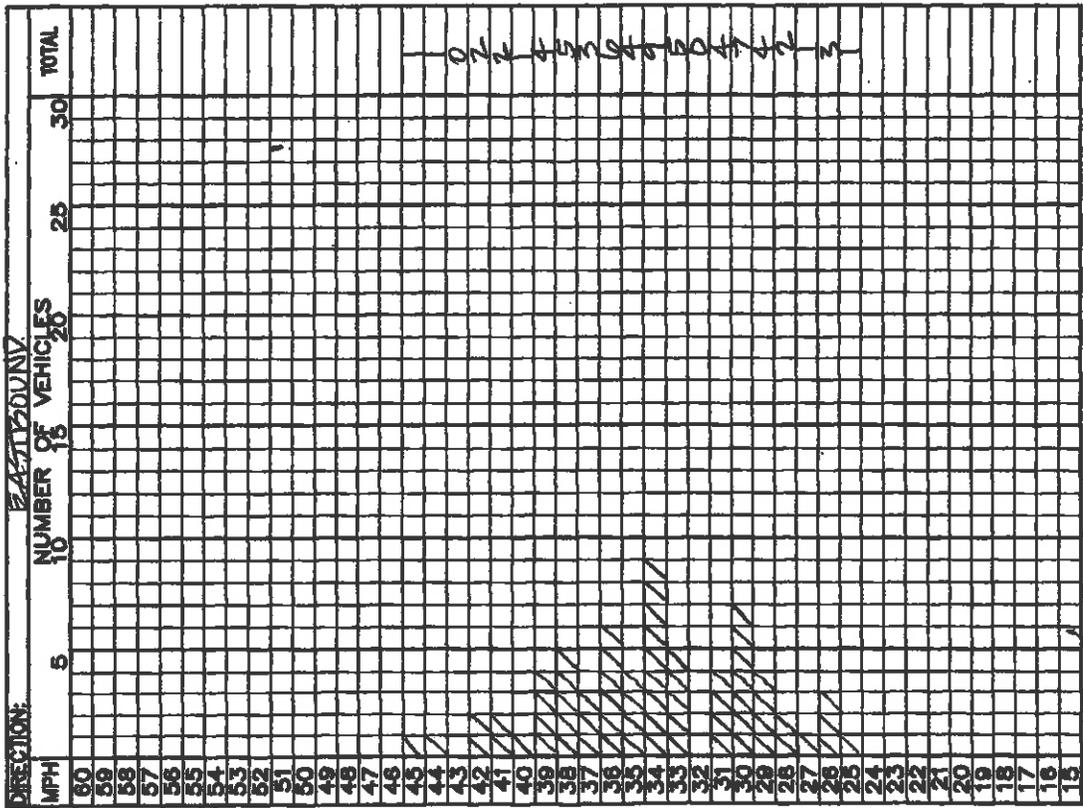
Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
 STREET: KATELLA AVENUE
 LOCATION: BLOOMFIELD ST. TO LEXINGTON DR

WEATHER: SMUNY
 ROAD CONDITION: DRY
 OBSERVER: Cathy Buendia

DATE: 11/15/13
 START TIME: 10:45 AM
 END TIME: 11:15 AM ✓



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



KATELLA AVENUE

LEXINGTON DR TO SIBONEY ST

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 10:15 AM - 10:45 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF LEXINGTON
DATE OF SURVEY	11/15/2013
85th PERCENTILE	43.8 MPH
10 MPH PACE	36 - 45 MPH
PERCENT IN PACE	74.5 %
POSTED SPEED LIMIT	40 MPH (EB)

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	1
TOTAL ACCIDENTS	3
ANNUAL ACCIDENT RATE	0.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC. MILLION VEH. MILES	0.05 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	47,000
LANE CONFIGURATION	3 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - LEXINGTON / SIBONEY / COTTONWOOD
CROSSWALKS	AT LEXINGTON / SIBONEY / COTTONWOOD
PEDESTRIAN/BICYCLES	YES / FEW
TRUCK TRAFFIC	YES (Heavy)
ON-STREET PARKING	PARTIAL (EB) / NO PARKING ANYTIME (WB)
OTHER	NO SHOULDERS (WB) BUS STOPS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.63
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND

ADJACENT LAND USE	COMMERCIAL / BUSINESS / RACE TRACK / MOTEL / CHURCH
--------------------------	---

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE - POST WESTBOUND
---------------------------	----------------------------

JUSTIFICATION:
 This section of Katella Avenue is a six lane roadway. The adjacent land uses are residential non-fronting to the roadway, commercial, business, medical offices, and the Los Alamitos Race Track. Field observations include a 40 mph speed sign posted only eastbound east of Lexington Drive, no shoulders westbound, bus stops and heavy truck traffic. With the speed data results showing an 85th percentile speed of 43.8 mph, it is recommended that the existing 40 mph speed limit be maintained. For enforcement, it is recommended that a 40 mph speed sign be posted for the westbound direction as well.

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



KATELLA AVENUE

DATE: 11/15/2013

TIME: 10:15 AM - 10:45 AM

LEXINGTON DR TO SIBONEY ST

SURVEY BY: C. BUENDIA

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 99.3%
46						X 96.6%
45					X	93.8% }PACE
44					X	87.6% }PACE
43				X	X	81.4% }PACE ---85PCT
42				X	X	75.2% }PACE
41			X	X	X	67.6% }PACE
40			X	X	X	56.6% }PACE
39			X	X	X	45.5% }PACE ---MEAN
38		X	X	X	X	36.6% }PACE
37		X	X	X	X	29.7% }PACE
36		X	X	X	X	24.1% }PACE
35		X	X	X	X	19.3%
34		X	X	X	X	14.5% ---15PCT
33	X	X	X	X	X	8.3%
32	X	X	X	X	X	4.8%
31	X	X	X	X	X	0.7%
30	X	X	X	X	X	0.0%
29	X	X	X	X	X	0.0%
28	X	X	X	X	X	0.0%
27	X	X	X	X	X	0.0%
26	X	X	X	X	X	0.0%
25	X	X	X	X	X	0.0%
24	X	X	X	X	X	0.0%
23	X	X	X	X	X	0.0%
22	X	X	X	X	X	0.0%
21	X	X	X	X	X	0.0%
20	X	X	X	X	X	0.0%
19	X	X	X	X	X	0.0%
18	X	X	X	X	X	0.0%
17	X	X	X	X	X	0.0%
16	X	X	X	X	X	0.0%
15	X	X	X	X	X	0.0%

UPPER LIMIT 10 MPH PACE: 45 MPH
 LOWER LIMIT 10 MPH PACE: 36 MPH
 PERCENT OVER PACE: 6.2 %
 PERCENT IN PACE: 74.5 %
 PERCENT UNDER PACE: 19.3 %

85th PERCENTILE SPEED: 43.6 MPH
 MEDIAN SPEED: 39.4 MPH
 15th PERCENTILE SPEED: 34.1 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS

STREET: KATELLA AVENUE

LOCATION: LEXINGTON & TO SIDNEY ST

WEATHER: SUNNY

ROAD CONDITION: DRY

OBSERVER: Cathy Buendia

DATE: 11/15/13

START TIME: 10:15 AM

END TIME: 10:45 AM

VIAL

DIRECTION: WESTBOUND

MPH	5	10	15	20	25	30	TOTAL
60							
59							
58							
57							
56							
55							
54							
53							
52							
51							
50							
49							
48							
47							
46							
45							
44							
43							
42							
41							
40							
39							
38							
37							
36							
35							
34							
33							
32							
31							
30							
29							
28							
27							
26							
25							
24							
23							
22							
21							
20							
19							
18							
17							
16							
15							

CUMULATIVE (BOTH DIRECTIONS)

DIRECTION: EASTBOUND

MPH	5	10	15	20	25	30	TOTAL
60							
59							
58							
57							
56							
55							
54							
53							
52							
51							
50							
49							
48							
47							
46							
45							
44							
43							
42							
41							
40							
39							
38							
37							
36							
35							
34							
33							
32							
31							
30							
29							
28							
27							
26							
25							
24							
23							
22							
21							
20							
19							
18							
17							
16							
15							

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS

HCI

KATELLA AVENUE

SIBONEY ST TO WALKER ST

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 9:45 AM - 10:15 AM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	EAST OF SIBONEY
DATE OF SURVEY	11/15/2013
85th PERCENTILE	44.1 MPH
10 MPH PACE	34 - 43 MPH
PERCENT IN PACE	73.5 %
POSTED SPEED LIMIT	40 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	3
TOTAL ACCIDENTS	6
ANNUAL ACCIDENT RATE	1.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.22 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	48,900
LANE CONFIGURATION	3 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - SIBONEY / WINNERS CIRCLE / WALKER
CROSSWALKS	AT SIBONEY / WINNERS CIRCLE / WALKER
PEDESTRIAN/BICYCLES	YES / FEW
TRUCK TRAFFIC	YES (Heavy)
ON-STREET PARKING	NO PARKING ANYTIME
OTHER	BUS STOPS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.38
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES (EB) / YES / NO (WB)
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND

ADJACENT LAND USE	BUSINESS / COMMERCIAL / RACE TRACK
-------------------	------------------------------------

RECOMMENDED SPEED LIMIT	40 MPH
-------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
--------------------	-----------

JUSTIFICATION:
The recommended 40 mph is within 4.1 mph of the 85th percentile speed and meets CVC standards.

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



KATELLA AVENUE

SIBONEY ST TO WALKER ST

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 9:45 AM - 10:15 AM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 99.4%
49						X 98.8%
48						X 97.5%
47						X 95.1%
46						X 93.2%
45						X 92.0%
44						X 84.6% ---85PCT
43						X 83.3% }PACE
42						X 79.6% }PACE
41						X 73.5% }PACE
40						X 68.5% }PACE
39						X 58.6% }PACE
38						X 48.1% }PACE ---MEAN
37						X 38.9% }PACE
36						X 28.4% }PACE
35						X 22.8% }PACE
34						X 13.6% }PACE ---15PCT
33						X 9.9%
32						X 7.4%
31						X 4.3%
30						X 4.3%
29						X 1.9%
28						X 0.6%
27						X 0.6%
26						X 0.0%
25						X 0.0%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

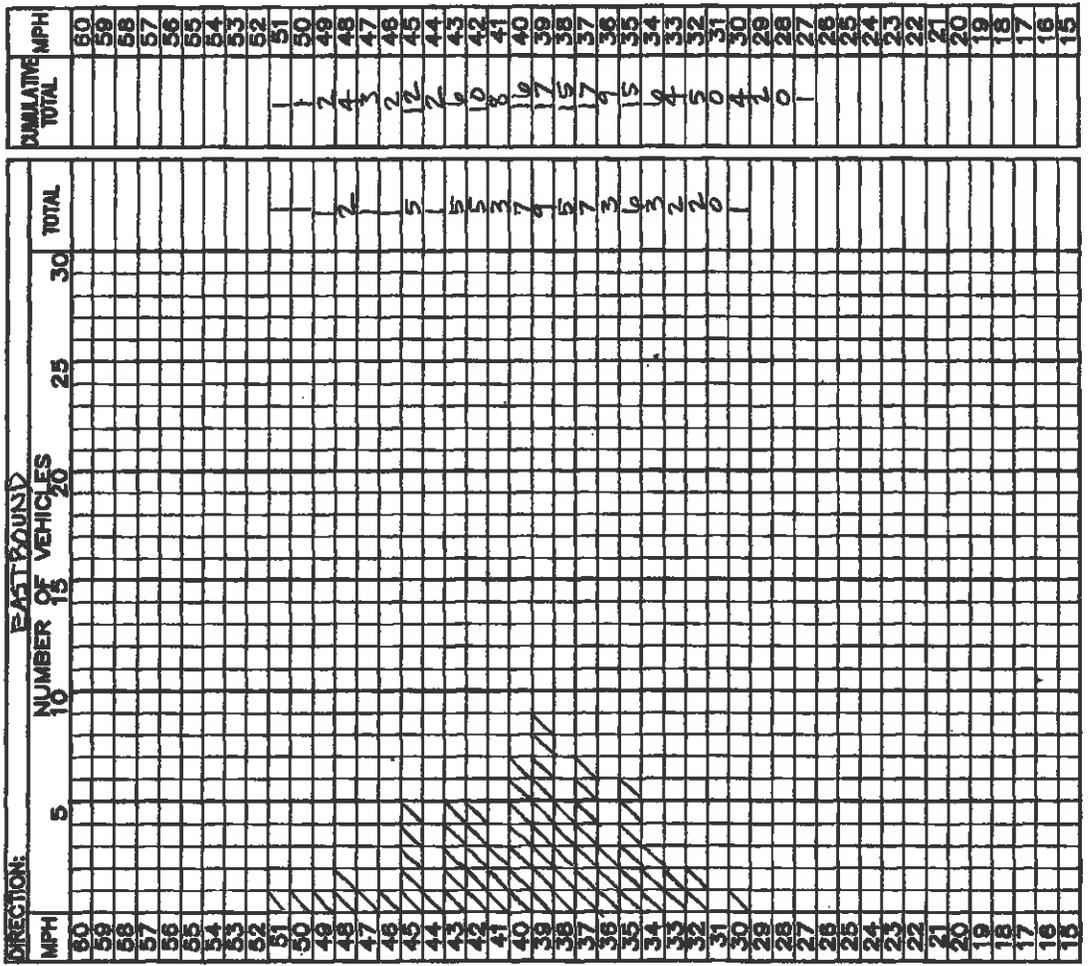
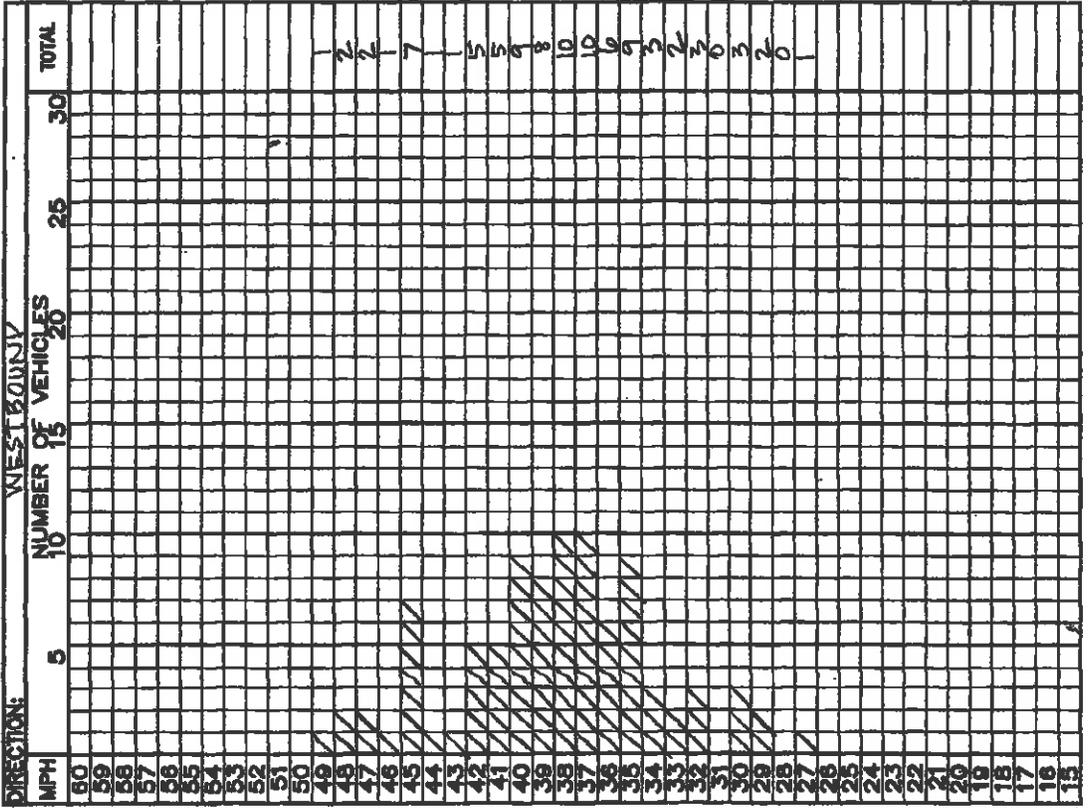
UPPER LIMIT 10 MPH PACE: 43 MPH
 LOWER LIMIT 10 MPH PACE: 34 MPH
 PERCENT OVER PACE: 16.7 %
 PERCENT IN PACE: 73.5 %
 PERCENT UNDER PACE: 9.9 %

85th PERCENTILE SPEED: 44.1 MPH
 MEDIAN SPEED: 38.2 MPH
 15th PERCENTILE SPEED: 34.2 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS
 STREET: KATELLA AVENUE
 LOCATION: DIPONEY ST. TO WALKER ST
 WEATHER: SUNNY
 ROAD CONDITION: DRY
 OBSERVER: Cathy Buendia
 DATE: 11/15/13
 START TIME: 9:45 AM
 END TIME: 10:15 AM \sqrt{ML}



AVERAGE SPEED: _____
 CRITICAL SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

AVERAGE SPEED: _____
 CRITICAL SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



LEXINGTON DRIVE

KATELLA AVE TO FARQUHAR AVE

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 1:15 PM - 1:45 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	SOUTH OF KATELLA
DATE OF SURVEY	11/15/2013
85th PERCENTILE	33.4 MPH
10 MPH PACE	26 - 35 MPH
PERCENT IN PACE	86.1 %
POSTED SPEED LIMIT	30 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	1
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	5,400
LANE CONFIGURATION	1 LANE PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - KATELLA, STOP - FARQUHAR
CROSSWALKS	AT KATELLA / FARQUHAR
PEDESTRIAN/BICYCLES	YES / NO
TRUCK TRAFFIC	YES
ON-STREET PARKING	YES
OTHER	NO PARKING 9am-NOON (2nd-4th TUES)

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.77
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	DBL YELLOW CENTERLINE WIDE ROADWAY

ADJACENT LAND USE	NATIONAL GUARD BASE / RESIDENTIAL / COMMERCIAL (at Katella)
--------------------------	---

RECOMMENDED SPEED LIMIT	30 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 30 mph is within 3.4 mph of the 85th percentile speed and meets CVC standards.

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS

HCI

LEXINGTON DRIVE

KATELLA AVE TO FARQUHAR AVE

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 1:15 PM - 1:45 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 100.0%
45						X 100.0%
44						X 100.0%
43						X 100.0%
42						X 100.0%
41						X 100.0%
40						X 100.0%
39						X 99.4%
38						X 98.7%
37						X 97.5%
36						X 96.2%
35						X 94.3% }PACE
34					X	X 88.0% }PACE
33					X	X 82.9% }PACE ---86PCT
32					X	X 74.1% }PACE
31				X		X 65.8% }PACE
30			X			X 55.1% }PACE
29			X			X 43.0% }PACE ---MEAN
28		X				X 34.2% }PACE
27		X				X 24.1% }PACE
26		X				X 14.6% }PACE ---15PCT
25	X					X 8.2%
24	X					X 2.5%
23	X					X 1.3%
22	X					X 0.0%
21	X					X 0.0%
20	X					X 0.0%
19	X					X 0.0%
18	X					X 0.0%
17	X					X 0.0%
16	X					X 0.0%
15	X					X 0.0%

UPPER LIMIT 10 MPH PACE: 35 MPH
 LOWER LIMIT 10 MPH PACE: 26 MPH
 PERCENT OVER PACE: 5.7 %
 PERCENT IN PACE: 86.1 %
 PERCENT UNDER PACE: 8.2 %

85th PERCENTILE SPEED: 33.4 MPH
 MEDIAN SPEED: 29.6 MPH
 15th PERCENTILE SPEED: 26.0 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS

STREET: LEXINGTON DRIVE

LOCATION: KATELLA AVE TO FARQUHAR AVE

WEATHER: SUNNY

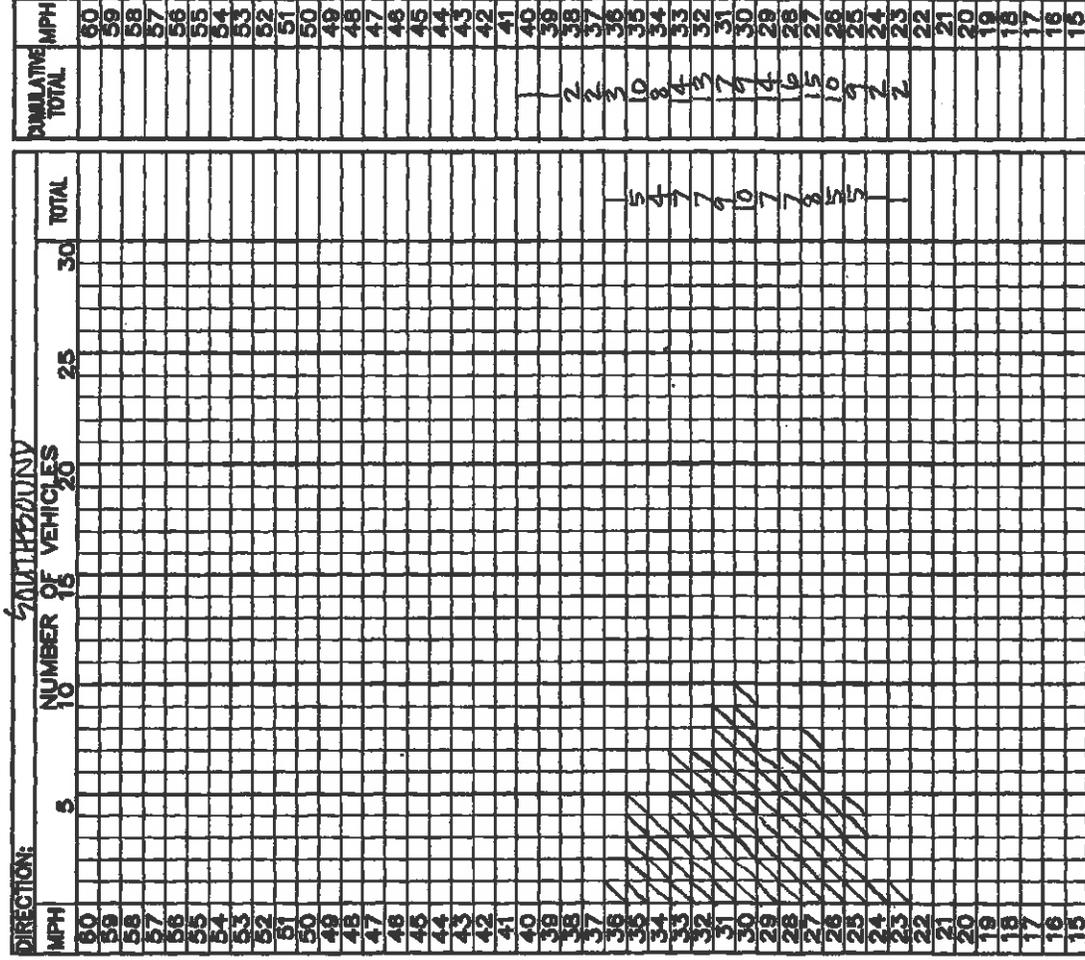
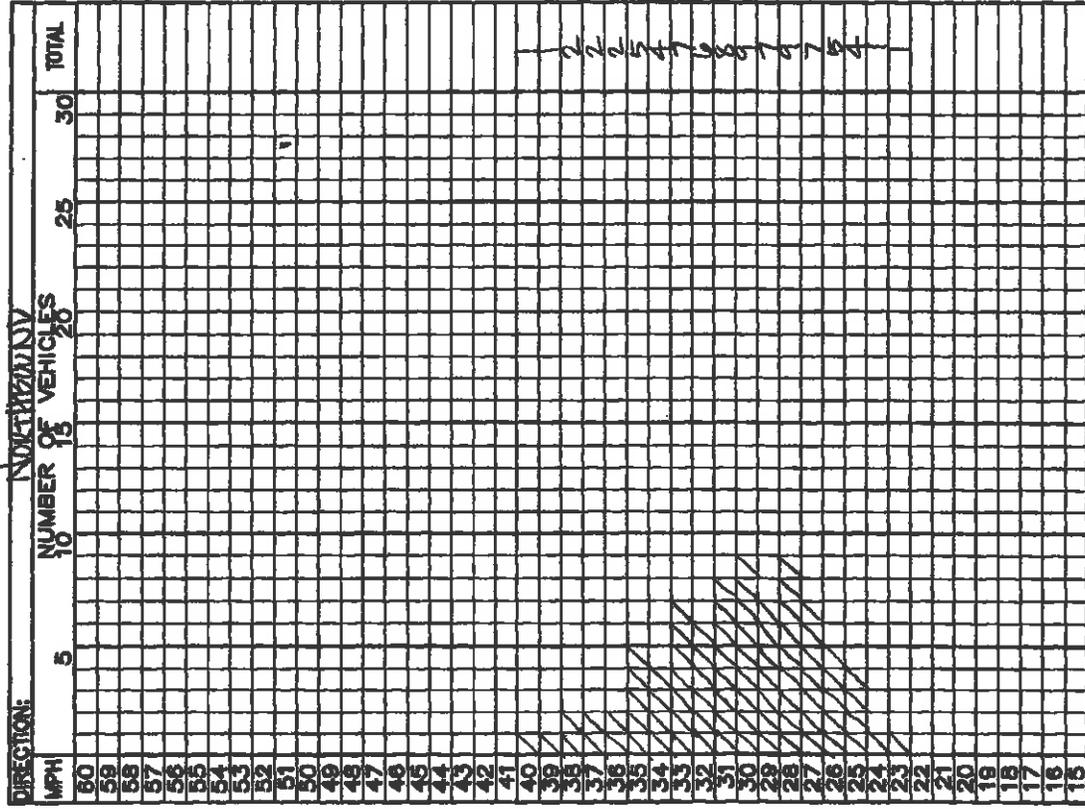
ROAD CONDITION: DRY

OBSERVER: Cathy Buendia

DATE: 11/16/13

START TIME: 1:15 PM

END TIME: 1:45 PM VIAL



ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS



LOS ALAMITOS BOULEVARD

NORTH CITY LIMITS TO KATELLA AVE

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 2:00 PM - 2:30 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	SOUTH OF SAUSALITO
DATE OF SURVEY	11/15/2013
85th PERCENTILE	38.5 MPH
10 MPH PACE	30 - 39 MPH
PERCENT IN PACE	83.0 %
POSTED SPEED LIMIT	35 MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	1
TOTAL ACCIDENTS	15
ANNUAL ACCIDENT RATE	0.50 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.07 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	23,400
LANE CONFIGURATION	2 LANES PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - KATELLA / CERRITOS / SAUSALITO / FLORISTA
CROSSWALKS	AT KATELLA / CERRITOS (sch) / SAUSALITO / FLORISTA
PEDESTRIAN/BICYCLES	YES / FEW
TRUCK TRAFFIC	YES
ON-STREET PARKING	YES
OTHER	AREAS OF RED CURB BUS STOPS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.84
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	2 WAY LEFT TURN CENTERLANE NO U-TURNS (NB) BY HIGH SCHOOL

ADJACENT LAND USE	DENSE COMMERCIAL / LOS ALAMITOS HIGH SCH
--------------------------	--

RECOMMENDED SPEED LIMIT	35 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 35 mph is within 3.5 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone

RADAR SPEED DISTRIBUTION SHEET



CITY OF LOS ALAMITOS

LOS ALAMITOS BOULEVARD

NORTH CITY LIMITS TO KATELLA AVE

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 2:00 PM - 2:30 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 100.0%
48						X 100.0%
47						X 100.0%
46						X 99.3%
45						X 99.3%
44						X 96.6%
43						X 97.3%
42						X 95.9%
41						X 95.2%
40						X 92.5%
39						X 89.8% }PACE
38						X 81.0% }PACE ---85PCT
37						X 77.6% }PACE
36						X 66.7% }PACE
35						X 56.5% }PACE
34						X 43.5% }PACE ---MEAN
33						X 36.1% }PACE
32						X 27.2% }PACE
31						X 15.6% }PACE
30						X 11.6% }PACE ---15PCT
29						X 6.8%
28						X 4.8%
27						X 2.0%
26						X 1.4%
25						X 0.7%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 39 MPH
 LOWER LIMIT 10 MPH PACE: 30 MPH
 PERCENT OVER PACE: 10.2 %
 PERCENT IN PACE: 83.0 %
 PERCENT UNDER PACE: 6.8 %

85th PERCENTILE SPEED: 38.5 MPH
 MEDIAN SPEED: 34.5 MPH
 15th PERCENTILE SPEED: 30.8 MPH

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS

HCI**LOS ALAMITOS BOULEVARD****KATELLA AVE TO FARQUHAR AVE**

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 2:30 PM - 3:00 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	NORTH OF HEDWIG
DATE OF SURVEY	11/15/2013
85th PERCENTILE	38.8 MPH
10 MPH PACE	28 - 37 MPH
PERCENT IN PACE	84.5 %
POSTED SPEED LIMIT	35 MPH

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	0
TOTAL ACCIDENTS	4
ANNUAL ACCIDENT RATE	0.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.00 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	80,000
LANE CONFIGURATION	3 LANE PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - KATELLA / FARQUHAR
CROSSWALKS	AT KATELLA / FARQUHAR
PEDESTRIAN/BICYCLES	YES / FEW
TRUCK TRAFFIC	YES
ON-STREET PARKING	YES (Heavy)
OTHER	AREAS OF RED CURB BUS STOPS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.84
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	PARTIAL 2 WAY LEFT TURN / PARTIAL RAISED MEDIAN ISLAND

ADJACENT LAND USE	DENSE BUSINESS / DENSE COMMERCIAL
-------------------	-----------------------------------

RECOMMENDED SPEED LIMIT	35 MPH
-------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
--------------------	-----------

JUSTIFICATION:
The recommended 35 mph is within 1.8 mph of the 85th percentile speed and meets CVG standards.

RADAR SPEED DISTRIBUTION SHEET



CITY OF LOS ALAMITOS

LOS ALAMITOS BOULEVARD

DATE: 11/15/2013

TIME: 2:30 PM - 3:00 PM

KATELLA AVE TO FARQUHAR AVE

SURVEY BY: C. BUENDIA

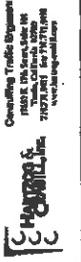
CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60					X	100.0%
59					X	100.0%
58					X	100.0%
57					X	100.0%
56					X	100.0%
55					X	100.0%
54					X	100.0%
53					X	100.0%
52					X	100.0%
51					X	100.0%
50					X	100.0%
49					X	100.0%
48					X	100.0%
47					X	100.0%
46					X	100.0%
45					X	100.0%
44					X	100.0%
43					X	98.6%
42					X	98.0%
41					X	95.3%
40					X	93.9%
39					X	91.9%
38					X	89.9%
37					X	85.8%
36					X	82.4%
35					X	75.7%
34					X	84.9%
33					X	57.4%
32					X	47.3%
31					X	37.8%
30					X	27.0%
29					X	15.5%
28	X				X	8.8%
27	X				X	1.4%
26	X				X	0.0%
25	X				X	0.0%
24	X				X	0.0%
23	X				X	0.0%
22	X				X	0.0%
21	X				X	0.0%
20	X				X	0.0%
19	X				X	0.0%
18	X				X	0.0%
17	X				X	0.0%
16	X				X	0.0%
15	X				X	0.0%

UPPER LIMIT 10 MPH PACE: 37 MPH
 LOWER LIMIT 10 MPH PACE: 28 MPH
 PERCENT OVER PACE: 14.2 %
 PERCENT IN PACE: 84.5 %
 PERCENT UNDER PACE: 1.4 %

85th PERCENTILE SPEED: 36.8 MPH
 MEDIAN SPEED: 32.3 MPH
 15th PERCENTILE SPEED: 28.9 MPH

Radar Speed Survey Field Sheet



WEATHER: SUNNY DATE: 11/15/13
 ROAD CONDITION: DRY START TIME: 2:30 PM
 OBSERVER: Cathy Buendia END TIME: 3:00 PM UAC

AGENCY: CITY OF LOS ALAMITOS
 STREET: LOS ALAMITOS BOULEVARD
 LOCATION: KATELLA AVE TO FARQUHAR AVE

DIRECTION: SOUTHERN

MPH	NUMBER OF VEHICLES				TOTAL
	5	10	15	20	
60					
59					
58					
57					
56					
55					
54					
53					
52					
51					
50					
49					
48					
47					
46					
45					
44					
43					
42					
41					
40					
39					
38					
37					
36					
35					
34					
33					
32					
31					
30					
29					
28					
27					
26					
25					
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION: NORTHERN

MPH	NUMBER OF VEHICLES				TOTAL
	5	10	15	20	
60					
59					
58					
57					
56					
55					
54					
53					
52					
51					
50					
49					
48					
47					
46					
45					
44					
43					
42					
41					
40					
39					
38					
37					
36					
35					
34					
33					
32					
31					
30					
29					
28					
27					
26					
25					
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

ENGINEERING AND TRAFFIC SURVEY

CITY OF LOS ALAMITOS

HCI

LOS ALAMITOS BOULEVARD

FARQUHAR AVE TO BRADBURY RD

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 3:00 PM - 3:30 PM

CHECKED BY: JERRY STOCK

PREVAILING SPEED DATA	
LOCATION OF SURVEY	NORTH OF BRADBURY
DATE OF SURVEY	11/15/2013
85th PERCENTILE	42.2 MPH
10 MPH PACE	34 - 43 MPH
PERCENT IN PACE	84.4 %
POSTED SPEED LIMIT	40 MPH / 25 MPH*

ACCIDENT HISTORY	
NO. OF MONTHS OBSERVED	24
SPEED-RELATED ACCIDENTS	2
TOTAL ACCIDENTS	8
ANNUAL ACCIDENT RATE	1.00 ACCIDENTS PER YEAR (SPEED RELATED ONLY)
ACC./MILLION VEH. MILES	0.07 ACCIDENTS PER MVM (SPEED RELATED ONLY)

TRAFFIC FACTORS	
AVERAGE DAILY TRAFFIC	47,200
LANE CONFIGURATION	3 LANE PER DIRECTION
TRAFFIC CONTROLS	SIGNAL - FARQUHAR / ORANGEWOOD ROSSMOOR / BRADBURY
CROSSWALKS	AT FARQUHAR / ORANGEWOOD (sch) / ROSSMOOR / BRADBURY
PEDESTRIAN/BICYCLES	YES / YES
TRUCK TRAFFIC	YES
ON-STREET PARKING	NO PARKING ANYTIME
OTHER	MANY AREAS OF RED CURB MANY AREAS OF NO SHOULDERS

ROADWAY FACTORS	
LENGTH OF SEGMENT (MILES)	0.81
VERTICAL CURVE	NONE
HORIZONTAL CURVE	NONE
LATERAL VISIBILITY	GOOD
ROAD CONDITIONS	GOOD
SIDEWALKS/DRIVEWAYS	YES / YES
STREET LIGHTING	YES
OTHER	RAISED MEDIAN ISLAND BUS STOPS

ADJACENT LAND USE	COMMERCIAL / BUSINESS / CHURCH / RESIDENTIAL (NF)
--------------------------	---

RECOMMENDED SPEED LIMIT	40 MPH
--------------------------------	--------

SPEED LIMIT CHANGE	NO CHANGE
---------------------------	-----------

JUSTIFICATION:
The recommended 40 mph is within 2.2 mph of the 85th percentile speed and meets CVC standards.

* 25 MPH When Children Present, School Zone
NF = Non-Fronting

RADAR SPEED DISTRIBUTION SHEET

CITY OF LOS ALAMITOS



LOS ALAMITOS BOULEVARD

FARQUHAR AVE TO BRADBURY RD

DATE: 11/15/2013

SURVEY BY: C. BUENDIA

TIME: 3:00 PM - 3:30 PM

CHECKED BY: JERRY STOCK

SPEED	CUMMULATIVE PERCENT					
	20	40	60	80	100	
60						X 100.0%
59						X 100.0%
58						X 100.0%
57						X 100.0%
56						X 100.0%
55						X 100.0%
54						X 100.0%
53						X 100.0%
52						X 100.0%
51						X 100.0%
50						X 100.0%
49						X 99.3%
48						X 99.3%
47						X 97.9%
46						X 97.9%
45						X 95.7%
44						X 92.9%
43						X 91.5% }PACE
42						X 83.0% }PACE ---85PCT
41						X 80.1% }PACE
40						X 69.5% }PACE
39						X 56.0% }PACE
38						X 45.4% }PACE ---MEAN
37						X 36.2% }PACE
36						X 24.1% }PACE
35						X 15.6% }PACE
34						X 10.6% }PACE ---15PCT
33						X 7.1%
32						X 2.1%
31						X 1.4%
30						X 0.0%
29						X 0.0%
28						X 0.0%
27						X 0.0%
26						X 0.0%
25						X 0.0%
24						X 0.0%
23						X 0.0%
22						X 0.0%
21						X 0.0%
20						X 0.0%
19						X 0.0%
18						X 0.0%
17						X 0.0%
16						X 0.0%
15						X 0.0%

UPPER LIMIT 10 MPH PACE: 43 MPH
 LOWER LIMIT 10 MPH PACE: 34 MPH
 PERCENT OVER PACE: 8.5 %
 PERCENT IN PACE: 84.4 %
 PERCENT UNDER PACE: 7.1 %

85th PERCENTILE SPEED: 42.2 MPH
 MEDIAN SPEED: 38.4 MPH
 15th PERCENTILE SPEED: 34.9 MPH

Radar Speed Survey Field Sheet



AGENCY: CITY OF LOS ALAMITOS DATE: 1/15/13
 STREET: LOS ALAMITOS BOULEVARD START TIME: 3:00 PM
 LOCATION: FAROUK AVE TO BRADBURY END TIME: 3:30 PM JOL
 WEATHER: SUNNY
 ROAD CONDITION: DRY
 OBSERVER: Cathy Buendia

DIRECTION: SOUTH

MPH	NUMBER OF VEHICLES				TOTAL
	5	10	15	20	
60					
59					
58					
57					
56					
55					
54					
53					
52					
51					
50					
49					
48					
47					
46					
45					
44					
43					
42					
41					
40					
39					
38					
37					
36					
35					
34					
33					
32					
31					
30					
29					
28					
27					
26					
25					
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE (BOTH DIRECTIONS) _____

DIRECTION: NORTH

MPH	NUMBER OF VEHICLES				TOTAL
	5	10	15	20	
60					
59					
58					
57					
56					
55					
54					
53					
52					
51					
50					
49					
48					
47					
46					
45					
44					
43					
42					
41					
40					
39					
38					
37					
36					
35					
34					
33					
32					
31					
30					
29					
28					
27					
26					
25					
24					
23					
22					
21					
20					
19					
18					
17					
16					
15					

AVERAGE SPEED: _____ CRITICAL SPEED: _____ PACE SPEED: _____
 CUMULATIVE TOTAL _____

APPENDIX B

Radars Certification

**Certificate of Completion and Competency
DOPPLER RADAR OPERATION**

Name & Title Cathy Buendia
Technician

Department Transportation

has successfully completed a course of instruction in the operation of Moving Car and Stationary Doppler Radar and is deemed competent to utilize the same Doppler Radar to determine the velocity of motor vehicles.

7/23/93 [Signature]
Date Instructor

EMI MPH 318 East Ninth Street
Owensboro, KY 42301
Subsidiaries of MPD, Inc. (502) 666-6200



TRAFFIC RADAR CERTIFICATION

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

16202 Keats Circle
 Westminster, Calif. 92683

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

1	TEST ID	Date Received 6-3-13	Certification Number 64903					
2	DEVICE ID	Manufacturer MPH	Model K-15	Type (I-IV) III	Directional radar <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Same direction <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Counting unit S/N 12145	Antenna-1 S/N N/A		Antenna-2 S/N N/A			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N 276979	Last date calib.	Freq. (Hz)	Speed (mph) 35	Measured (Hz) 2520	PASS	FAIL
		High speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)		
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS			Lo fork	High fork		PASS	FAIL
		Stationary mode	Fork speed (mph)	35	65			
			Disp. Speed (mph)	35	65			
		Moving mode Opposite Direction	TARGET SPEED (Hi fork - Lo fork)	Expected. (mph) N/A	Displayed. (mph) N/A			
Moving mode Same Direction	TARGET SPEED (Hi fork + Lo fork Ho fork - Lo fork)	Expected. (mph) N/A	Displayed. (mph) N/A					
5	§ 2.6.1 / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) 13.6 V	Antenna 1 Freq. GHz 24.155	Antenna 2 Freq. GHz N/A		PASS	FAIL	
		Standard supply Voltage - 20% (V) 10.8 V	Antenna 1 Freq. GHz 24.155	Antenna 2 Freq. GHz N/A				
		Standard supply voltage + 20% (V) 16.3 V	Antenna 1 Freq. GHz 24.155	Antenna 2 Freq. GHz N/A				
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) ≤ 5	Antenna 1 Power (mW/cm) .3	Antenna 2 Power (mW/cm) N/A		PASS	FAIL	
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) ≤ 10.8V	LVA activates (V) N/A	LVA deactivates (V) N/A		PASS	FAIL	
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		B. Functioning audio volume-adjustment control <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		PASS	FAIL	
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec.	32	Test results	32	PASS	FAIL	
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A.		B. Selects only targets moving away from radar <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A.		PASS	FAIL	
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. 20	Lo speed disp. 20		PASS	FAIL	
			Hi speed spec. 199	Hi speed disp. 199				
		Moving Mode target channel (mph)	Low speed spec. N/A	Lo speed disp. N/A				
			Hi speed spec. N/A	Hi speed disp. N/A				
Moving Mode: patrol channel (mph)	Low speed spec. N/A	Lo speed disp. N/A						
	Hi speed spec. N/A	Hi speed disp. N/A						
12	§ 2.13 / § 5.13 RFI TEST					PASS	FAIL	
13	LABORATORY COMMENTS							
14	NHTSA/IACP CERTIFICATION	This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802				<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL		
		Certified by: Ford Berman			Date: 6-3-13			
15	INVENTORY	<input type="checkbox"/> Fork Cert <input type="checkbox"/> Manual <input type="checkbox"/> 2 nd Ant. <input type="checkbox"/> Remote <input type="checkbox"/> Bat. <input type="checkbox"/> Carrying Case Other: (please list)						



TRAFFIC RADAR CERTIFICATION

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

16202 Keats Circle
Westminster, Calif. 92683

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

1	TEST ID	Date Received 6-3-13	Certification Number 64904					
2	DEVICE ID	Make: Kustom Electronics	Model: KR-10SP	Type (1-IV) IV	Directional radar <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
		Counting unit S/N EE 8364	Antenna-1 S/N CC 9108	Antenna-2 S/N	Same direction <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N 6359	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)	PASS	FAIL
		High speed fork S/N 75751	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)		
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS			Lo fork	High fork			
		Stationary mode	Fork speed (mph)	35	65			
			Disp. Speed (mph)	35	65			
		Moving mode Opposite Direction	TARGET SPEED (Hi fork - Lo fork)	Expected. (mph) 30	Displayed. (mph)	PASS		FAIL
	Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) N/A	Displayed. (mph) N/A				
5	§ 2.6.1. / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) 13.6 V	Antenna 1 Freq. GHz 24.162	Antenna 2 Freq. GHz			PASS	FAIL
		Standard supply Voltage - 20% (V) 10.8 V	Antenna 1 Freq. GHz 24.162	Antenna 2 Freq. GHz				
		Standard supply voltage + 20% (V) 16.3 V	Antenna 1 Freq. GHz 24.162	Antenna 2 Freq. GHz				
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) ≤ 5	Antenna 1 Power (mW/cm) .4	Antenna 2 Power (mW/cm)			PASS	FAIL
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) ≤ 10.8 V	LVA activates (V) 9.9	LVA deactivates (V) 10.4			PASS	FAIL
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				PASS		FAIL
		B. Functioning audio volume-adjustment control <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec. 32	Test results 32			PASS		FAIL
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A.				PASS		FAIL
		B. Selects only targets moving away from radar <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A.						
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. 15	Lo speed disp. 15			PASS	FAIL
			Hi speed spec. 175	Hi speed disp. 175				
		Moving Mode target channel (mph)	Low speed spec. 20	Lo speed disp. 20				
			Hi speed spec. 155	Hi speed disp. 155				
	Moving Mode: patrol channel (mph)	Low speed spec. 20	Lo speed disp. 20					
			Hi speed spec. 80	Hi speed disp. 80				
12	§ 2.13 / § 5.13 RFI TEST					PASS		FAIL
13	LABORATORY COMMENTS							
14	NHTSA/IACP CERTIFICATION	This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802 <input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL						
		Certified by: <i>Ford Berumen</i>				Date: 6-3-13		
15	INVENTORY	<input type="checkbox"/> Fork Cert <input type="checkbox"/> Manual <input type="checkbox"/> 2 nd Ant. <input type="checkbox"/> Remote <input type="checkbox"/> Bat. <input type="checkbox"/> Carrying Case Other: (please list)						

City of Los Alamitos

TRAFFIC COMMISSION

Agenda Report Consent Calendar

February 12, 2014
Item No: 6B

To: Chairman and Members of the Traffic Commission
From: David L. Hunt, City Engineer
Subject: Removal of Green 24-Minute Parking in Front of 4582 Katella Avenue

Summary: Request was made by property owner at 4582 Katella Avenue to remove the 24-minute parking restrictions in front of their property. The existing signage has been in place since 2009 and was a result of previous Traffic Commission and City Council staff action that dates back to 2006.

Recommendation: Review previous staff reports and deny this request.

Background

Staff received a request from the new owner of 4582 Katella Ave to remove the green parking restriction sign in front of their property. This sign limits the parking in front of the property to 24 minutes. The request is being made to provide more parking for their business.

History

The existing signage was brought to the Traffic Commission as a request of businesses in 2006, 2007, and 2009 regarding the subject of parking along the south side of Katella Avenue between Lexington Drive and Midway Drive, related to the narrow third lane adjacent to on-street parking; potential for conflicts with drivers exiting their parked vehicles; and adequate sight distance for motorists exiting driveways along the stretch of roadway. The request got delayed until the Cottonwood Church project was completed.

The concern over the narrow driving lane improved when Cottonwood Church completed its improvements and slurry sealed Katella Avenue eastbound. The pavement slurry seal allowed for a restriping to narrow the inside lanes; allowing for the third eastbound travel and parking lane to be widened from 16 feet to 18.5 feet, a more acceptable width to accommodate the travel lane and curb parking.



On October 14, 2008, a community meeting was held with the business owners to review and gather input on the remaining parking restriction issues. An announcement was delivered to property owners and businesses along Katella Avenue between Lexington Drive and Ticonderoga Drive regarding the meeting. About five property/business owners attended the meeting and gave input with no dissenting opinions.

Staff also met with one property owner separately as he had not received the notice. The owner did express concern for loss of some on-street parking associated with his business at 4522 Katella Avenue. The Traffic Commission heard the item at its December 10, 2008 meeting.

On April 20, 2009 the City Council approved the existing signage in this area. See attached staff report.

Recommendation

It is staff's recommendation to deny this request.

Submitted by:

Dave Hunt
City Engineer

*Attachments: 1) May 4, 2009 City Council Staff Report, Consideration of Establishing 'No Parking' – Katella Avenue
2) May 4, 2009 City Council Minutes*

City of Los Alamitos

Agenda Report Consent Calendar

May 4, 2009
Item No: 8D

To: Mayor Troy Edgar and Members of the City Council

Via: Nita McKay, Interim City Manager

From: Steven Mendoza, Community Development Director
William Huber, City Engineer

Subject: Consideration of Establishing 'No Parking' - Katella Avenue,
Lexington Drive to Midway Drive

Summary: This item was rescheduled from the April 20, 2009 City Council meeting to provide staff adequate time to sufficiently notice business and property owners impacted by the proposed parking restrictions. This is a request to consider various 'No Parking' areas on Katella Avenue, between Lexington Drive and Midway Drive by establishing red zones at various locations.

Recommendation: Approve Resolution No. 2009-04, A RESOLUTION OF CITY COUNCIL OF THE CITY OF LOS ALAMITOS ESTABLISHING 'NO PARKING' - KATELLA AVENUE, LEXINGTON DRIVE TO MIDWAY DRIVE.

Background

Municipal Code Requirements

This item has been reviewed and recommended for approval by the Traffic Commission. The Traffic Commission's powers and duties, however, are limited by City Municipal Code Section 2.48.070. With regard to on-street parking restrictions the Traffic Commission is solely a reviewing body. The City Engineer is authorized under Municipal Code Section 10.24.030 to issue Traffic Orders to regulate various traffic safety issues; however, the authority the Code provides pertaining to red curb parking restrictions cannot exceed 150 feet. The City Council pursuant to Municipal Code Section 10.24.040 must approve, by resolution, requests for 'No Parking'.

History

This item was brought to the Traffic Commission as a request of businesses, and as a result of the recent Katella Avenue improvements associated with the Cottonwood Church. Over the past few years there have been several meetings regarding the subject of parking along the south side of Katella Avenue between Lexington Drive and Midway Drive, related to the narrow third lane adjacent to on-street parking; potential

for conflicts with drivers exiting their parked vehicles; and adequate sight distance for motorists exiting driveways along the stretch of roadway.

The concern over the narrow driving lane improved when Cottonwood Church completed its improvements and slurry sealed Katella Avenue eastbound. The pavement slurry seal allowed for a restriping to narrow the inside lanes; allowing for the third eastbound travel and parking lane to be widened from 16 feet to 18.5 feet, a more acceptable width to accommodate the travel lane and curb parking.

Current Status

As a result of the restriping of the lanes, the only remaining concern was with respect to adequate sight distance at the exiting driveways. The City's traffic engineering consultant, Hartzog-Crabill and Associates, reviewed the existing parking restrictions and driveway exits and provided recommendations for changes.

Attachment 1 presents the current (post-Cottonwood Church improvements) conditions along the south side of Katella Avenue; that includes two 24-minute limited time parking areas painted green, red fire hydrant zones, and a 'No Parking' area east of Lexington Drive.

Attachment 2 presents the existing conditions along with Hartzog & Crabill's recommended changes. They recommend 'No Parking' areas to improve sight distance at driveways, the Cottonwood signalized access, and the Midway Drive intersection. The area immediately east of Lexington Drive and Saratoga Drive is recommended to be red zoned. The eastbound dual left turn lanes at Lexington Drive were widened; thus shifting the eastbound through lanes to the south, creating a narrow 14-foot lane width. This area was previously approved for 'No Parking' as part of the Cottonwood Church improvement plans. Just east of the narrow lane area, Katella Avenue widens to provide for a bus stop. The total curb line in this section is recommended for red curb, 'No Parking' area.

A red zone is recommended in front of 4612 Katella Avenue that would extend easterly from the existing fire hydrant area to the east property line fronting 4622 Katella Avenue. A portion of curb west of the fire hydrant was previously approved for 'No Parking' as part of the Church improvement plans. This area is opposite the Cottonwood Church access, an area that typically is 'No Parking' in an intersection. The property owner of 4622 Katella Avenue was contacted and is in agreement with the 'No Parking'.

The next 'No Parking' area is west of the driveway at 4662 Katella Avenue. The 30-foot red zone is adjacent to an existing 50-foot green, 24-minute parking area. The red zone is intended to provide a sight distance for the exiting vehicles at the adjacent driveway.

The last 30-foot red zone area is west of the most easterly motel driveway at Midway Drive, again to provide sight distance for exiting vehicles.

Property Owner Meetings

On October 14, 2008 a community meeting was held with the business owners to review and gather input on the remaining parking restriction issues. An announcement was delivered to property owners and businesses along Katella Avenue between Lexington Drive and Ticonderoga Drive regarding the meeting. About five property/business owners attended the meeting and gave input with no dissenting opinions.

Staff also met with one property owner separately as he had not received the notice. The owner did express concern for loss of some on-street parking associated with his business at 4522 Katella Avenue.

Traffic Commission Review

The Traffic Commission heard the item at its December 10, 2008 meeting. Property owners were again notified and attended the meeting. Again, the biggest concern was for loss of parking on Katella Avenue. The Traffic Commission reviewed the item in light of the safety issues and parking concerns of the businesses. After discussion on the item, the Commission voted to support staff's recommendation regarding 'No Parking', red curb zones. The minutes of the meeting are included in Attachment 3.

Notifications

All property/business owners were delivered notices of this meeting.

Fiscal Impact

The 'No Parking', red curbing is anticipated to cost around \$500 to install by City forces. Funding is available in the Public Works Street Maintenance budget.

Submitted By:

Approved By:

Steven Mendoza
Director of Community Development

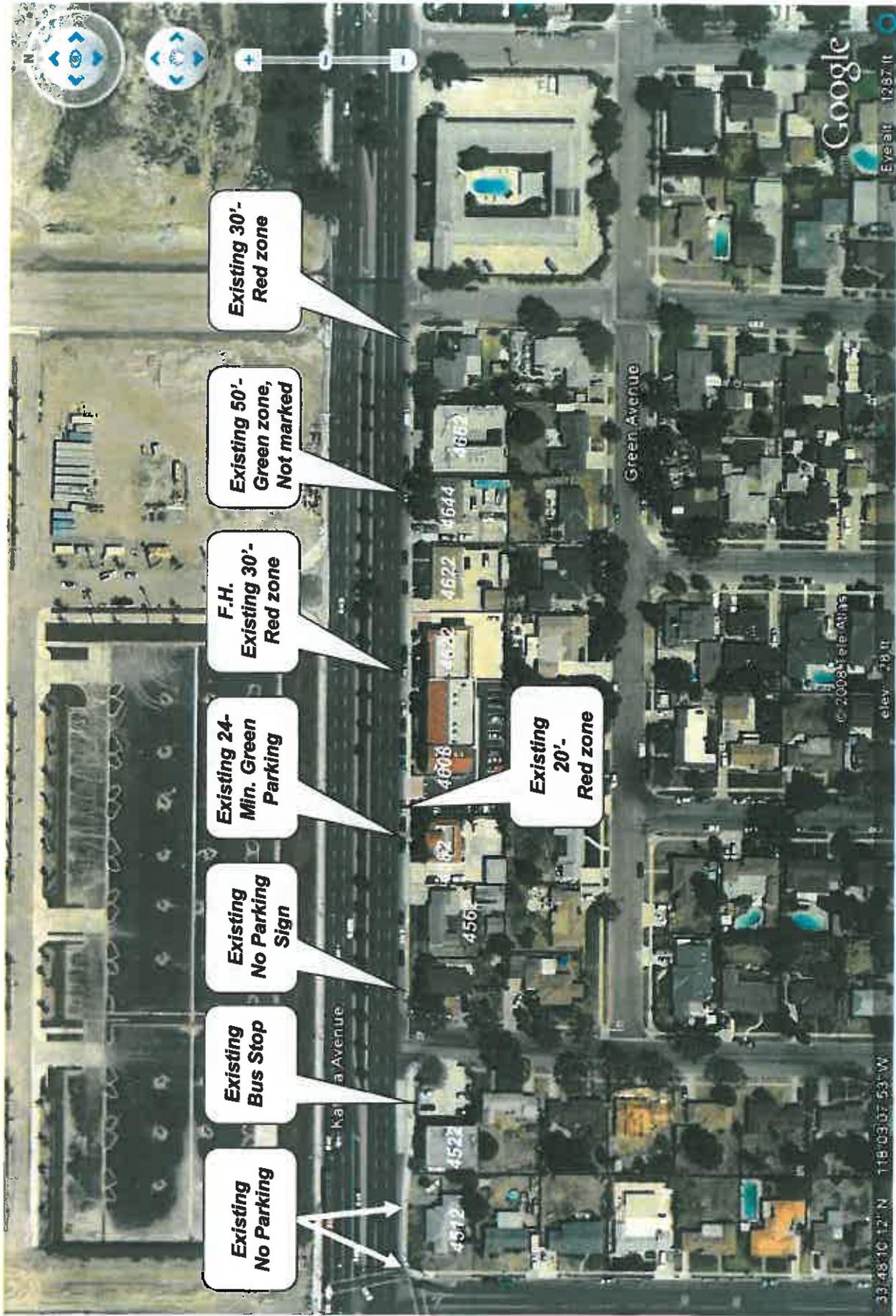
Nita McKay
Interim City Manager

Prepared By:

William Huber, P.E., City Engineer

Attachments:

- 1. Existing parking restrictions map*
- 2. Proposed parking restrictions map*
- 3. Traffic Commission minutes, December 10, 2008*
- 4. Resolution No. 2009-04*



Katella Av., Existing Conditions

8/13/08TC



Katella Av., Proposed Conditions

8/13/08TC

MINUTES OF TRAFFIC COMMISSION MEETING

CITY OF LOS ALAMITOS
3191 Katella Avenue
Los Alamitos, California

December 10, 2008

CALL TO ORDER

A regular meeting of the Traffic Commission was called to order at 7:00 p.m. on December 10, 2008, in the Council Chambers, 3191 Katella Avenue, Los Alamitos, Chair Brad Sheridan presiding.

ROLL CALL

<u>PRESENT:</u>	COMMISSIONERS	Clausen, Kusumoto, Wojak, Wray, Austin, Sheridan, Taylor
<u>ABSENT:</u>	COMMISSIONERS	None
<u>PRESENT:</u>	STAFF	Bill Huber, Interim Public Works Director/City Engineer Don Barker, Traffic Engineer Bruce McAlpine, Police Captain Sharon Nowell, Department Secretary

MINUTES

The minutes of the November 12, 2008 Traffic Commission meeting were approved with the following change: Commissioner Wojak's name was misspelled . . . remove 'c' from *Wojack* in two places.

Motion/Second/: Wojak/Austin: Motion was approved unanimously to approve the November 12, 2008 Traffic Commission meeting minutes with the changes noted.

ORAL COMMUNICATIONS

None

STAFF REPORTS

6A. KATELLA AVENUE PARKING, LEXINGTON DRIVE TO MIDWAY DRIVE, VARIOUS NO PARKING ZONES

Traffic Engineer, Don Barker, gave a summary of the staff report and recommendations. He stated that the parking in this area has been an issue for four years. With the completion of improvements made in conjunction with the Cottonwood Church construction, it was possible to narrow the eastbound travel

lanes and increase the curb lane from 16' to 18.5' to accommodate parking in most places.

Mr. Barker noted that the exhibits attached to the agenda report show the existing and proposed changes for red curbing on Katella Avenue. There are four areas of red zone that are being recommended since the curb lane has been widened to accommodate parking on the south side of the street.

Interim City Engineer, Bill Huber added that notices regarding this project were distributed to property owners in the area, staff met with a number of them a month and a half ago, and Mr. Necarsulmer was met with privately. He noted, for the record, that property owners and businesses were notified (via mail and handouts) that this meeting was being held. Thirty-five to forty notices were mailed out.

Chair Sheridan complimented staff on the agenda report, stating that this report is the most thorough and easy to follow that he has seen. He then opened discussion to questions from the Commission.

- o Commissioner Wojak requested clarification on the red curb proposed on Enterprise. Mr. Barker provided clarification.
- o Commissioner Kusumoto inquired as to how many parking spaces would be deleted with the proposed changes. Mr. Barker answered that approximately 8 parking spaces in the entire length between Lexington Drive and Enterprise Drive would be eliminated.
- o Commissioner Taylor questioned parking prohibition in the bus stop area. Mr. Barker stated that area should be signed or red curbed.
- o Commissioner Austin asked if there were any negative responses from the businesses along Katella Avenue. City Engineer, Bill Huber answered that the only negative response was the concern for the loss of parking and how that affects their businesses.

Chair Brad Sheridan opened up the floor to comments from the public.

- o John Necarsulmer spoke, represented Six Willow Partners, the owner of the building at 4522 Katella Avenue. He was here previously, and at that time pointed out that the building has remained empty, at this point for almost two years. This is due to the fact that potential tenants were concerned that there was not enough overflow parking. That issue has still not been resolved. He is speaking tonight because he is concerned that, not only are eight additional parking spaces being removed that are currently available to the businesses along Katella Avenue, but previously because of Resolution No. 1943 hundreds of spaces were removed that were available to his building. He would like to request that at least the eight spaces being removed today on Katella Avenue be replaced by putting them on Saratoga Drive.

Mr. Necarsulmer added that currently, he is allowing a number of the businesses to park in his lot since his building is empty. Those people will need to find parking on a daily basis in the event that a tenant is found.

- o Dr. Chang, of 4608 Katella Avenue spoke, stating that this has been an ongoing concern throughout the time he has been in this area. When the building was designed almost four years ago, it was designed two stories above parking. It was passed by the Planning Commission, and eventually changed by the City Council. Ten parking spots were lost by dropping the building down further than the original plans. Since then, part of the discussion he had with the City Council at that time was that he would be allowed to park on the street. However, in the last few years eliminating parking and allowing on-street parking have been ongoing issues. Fortunately, so far he has been able to, throughout this process, preserve parking on his side of his building. This is fine for his business, but for the other businesses it does make a difficult situation. Part of the reason he needed parking is because his patients are children, and parents drop their children off in the parking lot, not on the street. His staff therefore does not park in the lot and he has fought very diligently to keep parking in front of his building.

Dr. Chang further stated that a lot has changed and there are more buildings and businesses on Katella Avenue. Eight spaces are significant. Since parking has been taken away in the residential areas, it has been difficult for businesses to utilize parking on the side streets. He understands the effect that this parking has on the residents, but feels that a happy compromise must be found for business owners and residents.

He is pleased that parking has been preserved in front of his area, but at the same time he realizes that other businesses are affected.

Chair Sheridan brought discussion back to the Commission asking if there were any questions of staff. Commissioner Wojak asked if the red curbs were put in for safety for site distance for ingress and egress from driveways, and for the signal that was installed. Mr. Barker answered in the affirmative.

Commissioner Austin asked staff if any of the red zones proposed could be eliminated. Mr. Barker stated that the recommended red zones are the minimum, based on input from the previous public meetings, as well as an inventory of actual conditions on Katella Avenue.

Commissioner Wojak commented that moving the lanes to the north has made a big difference in relation to the safety of the area. He feels that based on the concerns of the property owners, the red curbs are minimal and a good recommendation.

Chair Brad Sheridan concurs that the least amount of infringement balances safety with efficiency in an effort to show businesses that we care. Businesses on Katella Avenue thrive on the traffic that we need to keep moving and keep conditions safe. Motorists need the lane width and ability to pull out safely from the businesses.

MOTION/SECOND: Wojak/Clausen: Motion to approve recommendation to approve No Parking zones at various locations generally located on driveway and intersection approaches as follows:

- No Parking between Lexington Drive and Saratoga Drive;
- Red zone in the signalized Cottonwood Church access intersection;
- 30-foot 'red zone' west of the driveway for the office at 4662 Katella Avenue and the most easterly driveway of the motel west of Midway Drive.

Motion passed unanimously.

7. ITEMS FROM THE PUBLIC WORKS DEPARTMENT

A. Traffic Commission Status Log

Don Barker reported on the status of the striping on Katella Avenue under the 605 freeway. Caltrans has denied the City's request for an encroachment permit. Subsequently, videotaping was done of the location and is available for viewing. A meeting for further discussion on the matter will be set up with Caltrans. The tape did not show insurmountable problems.

City Engineer, Bill Huber took this opportunity to mention to the Commission the challenges being presented by the present tough economic times. The City is facing serious budget issues, and in the next couple of months staff will be addressing ways to cut costs and increase revenues. He stated that, therefore, for the foreseeable future we will have to be careful about what we want to tackle. The highest priorities will be imminent health/safety issues; there will be a limit on how much we can do. Budget constraints will have an effect on the way we will be able to do business.

Commissioner Austin requested that Item B-2 on the list be expedited. Mr. Huber assured her that he would address it tomorrow.

8. TRAFFIC COMMISSION INITIATED BUSINESS

Dean Hill requested status on a request for Measure M funds for bike lanes. Mr. Huber is waiting for OCTA to get back to him, and will call Mr. Hill tomorrow.

9. ADJOURNMENT – Austin/Wojak

There being no further business, at 8:48 p.m., the meeting was adjourned to the next regularly scheduled meeting of January 14, 2009, at 7:00 p.m.


Bill Huber, Interim City Engineer

RESOLUTION NO. 2009-04**A RESOLUTION OF CITY COUNCIL OF THE CITY OF
LOS ALAMITOS ESTABLISHING 'NO PARKING' -
KATELLA AVENUE, LEXINGTON DRIVE TO MIDWAY
DRIVE**

WHEREAS, the City Engineer has recommended that certain areas on the south curb of Katella Avenue, between Lexington Drive to Midway Drive be established as 'No Parking - Red Curb' as herein described; and,

WHEREAS, on October 14, 2008 a community meeting was held to discuss the proposed parking restrictions. Notices of said meeting were delivered to affected property and business owners; and,

WHEREAS, on December 10, 2008 the Traffic Commission of the City of Los Alamitos did hear the item; took public testimony into consideration and recommended to the City Council to establish said 'No Parking - Red Curb' on Katella Avenue between Lexington Drive to Midway Drive; and,

WHEREAS, the City Council of the City of Los Alamitos has established by Ordinance, City Council will, by resolution designate certain streets or portions of streets as 'No Parking - Red Curb'; and,

WHEREAS, the City Council of the City of Los Alamitos has determined that the public health, safety and welfare will be promoted by designating the hereinafter described areas as 'No Parking - Red Curb'.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS DOES RESOLVE AS FOLLOWS:

SECTION 1. The City Council of the City of Los Alamitos, California, finds that the above recitals are true and correct.

SECTION 2. 'No Parking - Red Curb' zones are established on the south side of Katella Avenue between Lexington Drive and Midway Drive as follows:

- Install red curb on Katella Avenue between the end of the curb return at Lexington Drive and the beginning of the curb return at Saratoga Drive.
- Install red curb from west side of driveway at 4644 Katella Avenue westerly to existing red curb.
- Install 30-feet of red curb on west side of driveway at 4662 Katella Avenue.
- Install 30-feet of red curb on west side of driveway on Katella Avenue immediately west of Midway Drive.

SECTION 3. The City Clerk shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 4th day of May 2009.

Troy Edgar, Mayor

ATTEST:

Susan C. Vanderpool, City Clerk

APPROVED AS TO FORM:

Dean Derleth, City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF LOS ALAMITOS)

I, Susan C. Vanderpool, City Clerk of the City of Los Alamitos, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council held on the 4th day of May 2009, by the following vote, to wit:

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

ABSTAIN: COUNCILMEMBERS:

Susan C. Vanderpool, City Clerk

Motion/Second: Poe/Mejia

Unanimously carried: The City Council approved the Warrant Register of May 4, 2009, in the amount of \$76,320.78.

C. Southern California Association of Governments (SCAG) Compass Blueprint Demonstration Project

Staff was seeking support from City Council to develop and submit an application to the Southern California Association of Governments (SCAG) for Compass Blueprint Demonstration Project studying the Los Alamitos Boulevard and Katella Avenue Corridors.

Council Member Mejia thanked staff for proactive involvement, adding the program could potentially provide development funding. Mayor Pro Tem Poe agreed.

Motion/Second: Mejia/Poe

Unanimously carried: The City Council adopted Resolution No. 2009-05, entitled, "A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LOS ALAMITOS, CALIFORNIA, PLEDGING COOPERATION AND SUPPORT FOR A SCAG COMPASS BLUEPRINT DEMONSTRATION PROJECT PROPOSAL."

D. Consideration of Establishing 'No Parking' - Katella Avenue, Lexington Drive to Midway Drive (Continued from April 20, 2009, City Council Meeting)

This item was rescheduled from the April 20, 2009 City Council meeting to provide staff adequate time to sufficiently notice business and property owners impacted by the proposed parking restrictions. This was a request to consider various 'No Parking' areas on Katella Avenue, between Lexington Drive and Midway Drive by establishing red zones at various locations.

Council Member Zarkos stated several business owners had raised concerns regarding this issue, and asked staff for further information.

City Engineer Huber summarized the staff report, referring to the information contained therein, and answered questions from the City Council.

Council Member Zarkos asked if decreasing the parking spaces would adversely impact the surrounding neighborhoods. City Engineer Huber responded in the negative, adding there was already permit parking in adjacent neighborhoods.

Council Member Mejia stated she had walked the proposed site with City Engineer Huber. She made a motion to adopt Resolution 2009-04, with the revision of "15" feet of red curb instead of "30" feet, on the west side of the proposed driveways only. She added there were no safety issues with the revisions.

Mayor Pro Tem Poe expressed support for the motion, as did Mayor Edgar.

Mayor Edgar opened the meeting to public comment.

John Necarsulmer, business owner, opposed additional red curbing. He stated there was already a lack of parking spaces that precluded him from finding tenants for his building. He requested Council consider replacing the Saratoga parking spaces previously removed due to red curbing.

Council Member Mejia asked if Mr. Necarsulmer was aware of the parking situation when he purchased the property, adding Cottonwood Church had offered the use of its parking lot. Mr. Necarsulmer responded in the affirmative, adding Cottonwood would not provide guaranteed use of their parking.

Mayor Pro Tem Poe indicated she had been involved in the residential parking permits for the surrounding neighborhood, which had been instituted for the safety of the residents.

Council Member Mejia pointed out the revised Resolution could potentially save three to four parking spaces.

Mayor Edgar closed the meeting to public comment.

Motion/Second: Mejia/Poe

Carried 4-5 (Council Member Zarkos cast the dissenting vote): The City Council approved Resolution No. 2009-04, "A RESOLUTION OF CITY COUNCIL OF THE CITY OF LOS ALAMITOS ESTABLISHING 'NO PARKING' - KATELLA AVENUE, LEXINGTON DRIVE TO MIDWAY DRIVE," with the stated revisions.

Mayor Edgar and Council introduced newly appointed City Manager, Jeffery L. Stewart, who was in the audience.

9. PUBLIC HEARING/ORDINANCES

A. Ordinance No. 09-02 - Modifying Chapter 17.16.100, Permitting Residential Air-Conditioning Unit Placement in the Required Side Yard Setback in the Single-family (R-1) Zoning District

At its special meeting on February 9, 2009, the Planning Commission recommended City Council approval of Zoning Ordinance Amendment Z09-02, modifying Chapter 17.16.100, permitting residential air-conditioning unit placement in the required side yard setback in the Single-family (R-1) Zoning District (City initiated).

City of Los Alamitos

TRAFFIC COMMISSION

**Agenda Report
Discussion**

**February 12, 2014
Item No: 6C**

To: Chairman and Members of the Traffic Commission

From: Dave Hunt, City Engineer

Subject: Request for Loading/Unloading Parking on Lexington Drive from Katella Avenue to the First Southerly Alley

Summary: Staff received a request from the Traffic Commission to look into restricting parking, on the west side of Lexington Drive to a loading and unloading zone, from Katella Avenue to first southerly alley.

Recommendation: It is recommended that the Traffic Commission provide direction to staff.

Background

Staff received a request from the Traffic Commission to look into restricting parking, on the west side of Lexington Drive to loading and unloading, from Katella Avenue to first southerly alley. There is approximately 125 feet of parking available in the section of Lexington Drive as seen in the aerial photo below.





Westside of Lexington at Katella Ave



Delivery trucks parking in middle of street



Double deep in alley and on-site delivery area

Discussion

Trucks parking in the alley make it difficult and sometimes impossible for cars to drive down the alley. This is one of the business alleys in the City with about 400 cars per day driving in the alley at this location. The Traffic Code allows parking in the alley for deliveries in Section 10.24.060, Parking prohibited in alleys, which states:

No person shall park any vehicle in any alley for any purpose other than the loading or unloading of passengers or materials. (Ord. 409 § 2, 1981)

By providing a loading/unloading zone on Lexington Drive next to the Katella Deli it will allow more free flowing traffic in the alley. Staff met with the owner of Katella Deli and discussed this proposed change and he stated that he is fine with the restricted parking and that it would help his large delivery trucks to have that space to park.

Recommendation

Provide direction to staff.

Submitted By:

A handwritten signature in blue ink, appearing to read "David Hunt", written over a horizontal line.

David Hunt
City Engineer

TRAFFIC COMMISSION UPDATED STATUS LIST - 2011 to 2013

ITEM	DESCRIPTION	DATE INITIATED	REQUESTED BY	TAKEN TO		REMARKS
				T.C.	C.C.	
RECOMMENDATION APPROVED/COMPLETED						
A-1	Review of Draft I-605 Freeway @ Spring St./Cerritos Ave. Interchange		City Engineer	May-11		Received and filed
A-2	General Plan Review		Steven Mendoza	Aug. 2011		Received and filed
A-3	Katella Ave. Removal of U-turn restrictions		Marilynn Poe	Aug. 2011		Approved remove Midw., Ticon., Ent.
A-4	Laurel H.S. xwalk on Bloomfield - consideration of limit line		Kusumoto			Done - 9/13/11
A-5	Alley Safety - Phase 1 Speed Survey Results		City Engineer	Oct-11		Receive and File
A-6	General Plan-Overview of Circulation Element & Strategic Plan		Steven Mendoza	Nov-11		Receive and File
A-7	Consideration of right-turn only lane on sbound Los Al @ Florista	Nov-11	Resident	Jan-12		TC Approved - implemented
A-8	Alley Safety - Katella Ave. - from Noel to Lexington		City Engineer	Dec-11		Signage, move humps
A-9	General Plan Overview - Part III	Feb-12	S. Mendoza			Review and discuss
A-10	Traffic Calming-Neighborhood Traffic Management	Mar-12	City Engineer	Mar & Apr	Jun-12	Traffic Calming Budgeted
A-11	Traffic Circulation Issues at Los Alamitos High School	Jun-12	City Engineer	12-Jun		Input from Commission
A-12	Katella Ave. (TLSP) Project		City Engineer	Aug-12		Receive and file
A-13	High Traffic Volume Hour Data-Rossmoor Way/Bradbury Rd.	Dec-12		Jan-13		Receive and file
A-14	Medical Center traffic control during Phase 1 construction	Dec-12		Jan-13		Receive and file
A-15	7-Year Capital Improvement Program (CIP)	Mar-13	Dave Hunt	Mar-13		Receive and file
A-16	Additional measures - right-turn only Los Al Bl. & Florista St.		T.C.	Mar-13		Approved triangular striping
A-17	Proposed Cypress Developments - Katella Avenue	Apr-13				Receive and file
A-18	Left-turn signal modifications Los Al & Rossmoor Way/Bradbury			Dec-12		H&C modified timing
A-19	Change Drop Off to Unloading Zone - 10904 Reagan St.	Mar-13	Reagan Surgery Center	Mar-13		Installed
A-20	Add 20' white curbing and install passenger loading/unloading sign	Jun-13	4152 Katella Ave.	Jun-13		Installed
A-21	4 - Way Stops Apartment Row	Dec-12	Traffic Commission	Dec-12	Aug-13	CC approved
A-22	Laurel Park Parking Lot Improvements			Sep-13		TC approved Option 4 - temporary
A-23	Traffic Calming - Farquhar Ave. traffic	Feb-13		May-13		Install 2nd left-turn lane
A-24	Lexington Dr./Howard Ave. red curb	Jun-13	Comm. Schleuter	June-13		Approved
A-24	KEEP CLEAR-Los Al.HS driveway & Los Al. Bus. Park driveway	Nov-13		Dec-13		Approved

RECOMMENDATION APPROVED & PENDING IMPLEMENTATION						

RECOMMENDATION DENIED						
C-1	Permit parking restriction Lexington Dr.-from Katella to Howard	Mar-11	Petition	Mar-11		Permit Parking request denied
C-2	Two-hour parking restriction - east side of Humbolt	Jan-11		Jan-11		Denied
C-3	Keep Clear @ Los Al High School driveway, Farg. & Rochelle	Nov-12		Dec-12		Denied
C-4	No Parking' SB Los Al. Blvd., south of Katella Ave.	Jan-13	Kyle Poff, OCTA	Feb-13		Motion failed
C-5	Remove parking restriction in front of 3691 Katella Ave.	Mar-13	Dean Grose	Mar-13		Denied

ITEMS PENDING CONSIDERATION - TRAFFIC COMMISSION						
D-1	Diagonal parking Cherry Street @ Catalina Street	Jan-13	Wilhelm	Feb-13		Re-visit after hospital construction
D-2	Review Draft Engrg. & Traffic Survey for Speed Limits	Feb-14	D. Hunt	Feb-14		
D-3	Remove 24-minute parking in front of 4582 Katella Ave.	Feb-14	Owner/4582 Katella	Feb-14		
D-4	Loading/Unloading Lexington Dr.-Katella Ave. to first alley	Feb-14	Traffic Commission	Feb-14		

TRAFFIC COMMISSION UPDATED STATUS LIST - 2011 to 2013

ITEM	DESCRIPTION	DATE INITIATED	REQUESTED BY	TAKEN TO		REMARKS
				T.C.	C.C.	
ITEMS PENDING CONSIDERATION - CITY COUNCIL						
F						
F-1	20' curb radius - no parking	Mar-13	J. Mejia			Done
F-2	Barricade on Bloomfield in front of elementary school	Mar-13	J. Mejia			Gone
F-3	NB Los Al. @ Katella Ave./left-turn extend pocket	Apr-13	Emerson			Part of school traffic study
F-4	Katella Deli loading dock - used as break area	Mar-13	J. Mejia			Done
F-5	NB one-way alley for three month trial period east of Los Al/no. of Farquhar	May-13	N. Wray			
F-6	SB Bloomfield - street markings unclear	May-13	J. Mejia			Done
F-7	Speed limit sign on Katella Ave. near Bloomfield St. is bent	May-13	J. Mejia			Done
F-8	Crosswalk across Los Alamitos Blvd. @ Ganahl Lumber	Aug-13				Dave to obtain more information
F-9	Get crossing guard uniforms	Jun-13	J. Mejia			No
F-10	Laurel Park Manor - needs left turn restriction sign on east side	Oct-13	J. Wilhelm			Dave to look into
F-11	Street name signs in Carrier Row are crooked	Oct-13	J. Schleuter			
F-12	Wbound Katella Ave approaching Walnut - striping needs to be repainted	Oct-13	J. Schleuter			P.W. to replace soon
F-13	Additional enforcement Cerritos & Humbolt - bet. 7:30 & 8:00 am	Oct-13	D. Patz			Sent to P.D.
F-14	Right-turn only striping on Los Al./include northbound Sausalito	Nov-13	J. Mejia			Done
F-15	Los Vaqueros/Industrial Park - sidewalk raised	Nov-13	J. Mejia			Done
F-16	Delivery trucks @ Katella Deli still blocking alley	Dec-13	J. Mejia			Done
F-17	Alley speed bumps need reflective paint	Dec-13	J. Mejia			Dave to request P.W. do
F-18	Commissioner name tags	Dec-13	J. Mejia			Done
F-19	SB Los Al. @ Florista St. - needs dashed line @ right-turn only	Dec-13	Vardeman/Patz			Done