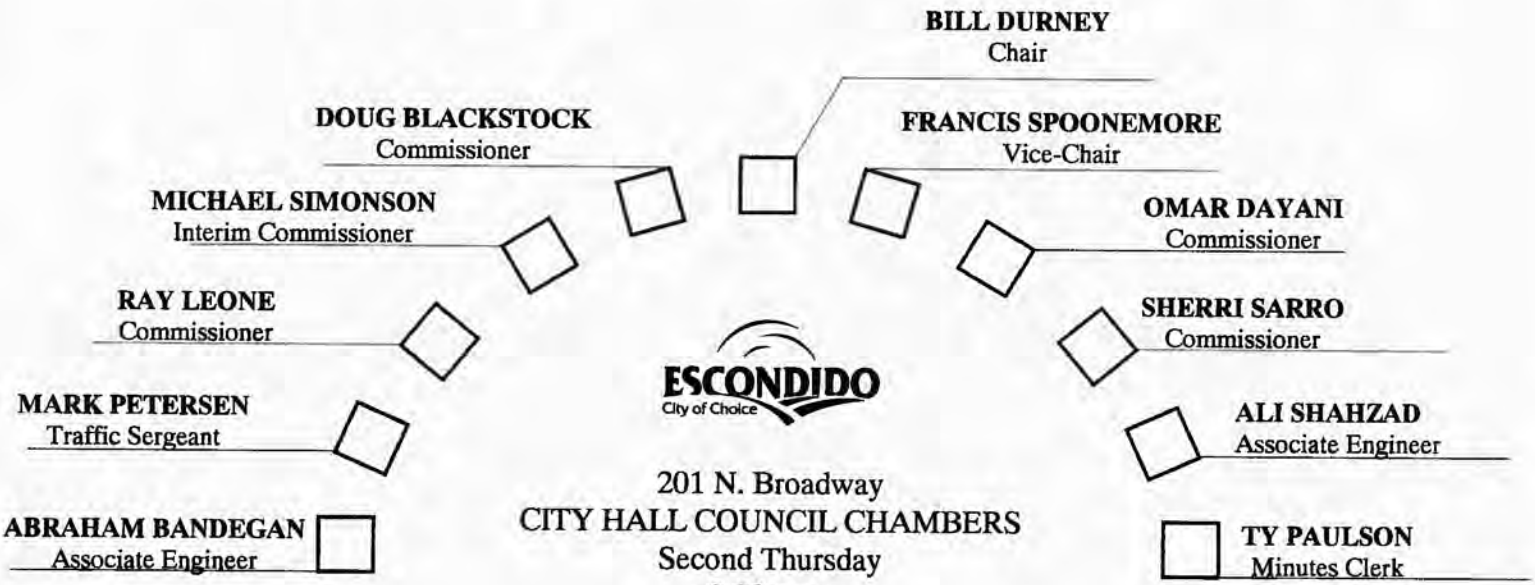
CITY OF ESCONDIDO

Transportation & Community Safety Commission



201 N. Broadway
CITY HALL COUNCIL CHAMBERS
Second Thursday
3:00 p.m.

AGENDA
January 14th, 2016

A. FLAG SALUTE

B. ROLL CALL AND DETERMINATION OF QUORUM

C. ORAL COMMUNICATIONS* (At this time, members of the public are encouraged to speak to the Commission concerning items not already on this agenda. A time limit of three [3] minutes per speaker and a total time allotment of fifteen [15] minutes will be observed.)

The Brown Act provides an opportunity for the members of the public to directly address the Commission on any item of interest to the public, before or during the Commission's consideration of the item. If you wish to speak regarding an agenda item, please fill out a speaker's slip and give it to the minute's clerk who will forward it to the Chairman.

If you wish to speak concerning an item not on the agenda, you may do so under "Oral Communications" which is listed on the agenda.

The City of Escondido recognizes its obligation to provide equal access to public meetings to those qualified individuals with disabilities. Please contact the Human Resources Department (839-4643) with any requests for reasonable accommodation, to include sign language interpreter, at least twenty-four (24) hours prior to the meeting.

D. APPROVAL OF MINUTES OF OCTOBER 08, 2015 MEETING

E. CONSENT ITEMS – Staff will provide Overview for single vote – NO ITEMS

F. NEW BUSINESS

1. FY 15/16 Traffic Management Project List – Gamble St. Traffic Calming

Source: Staff

Recommendation: Approval.

Previous action: Traffic Management Projects Initiation and Approval Process.

2. New City of Escondido Crosswalk Policy

Source: Staff

Recommendation: Discussion & Comments

Previous action: None

3. Traffic Management Project List 2014 – Effectiveness

Source: Staff

Recommendation: Approval.

Previous action: Traffic Management Projects Initiation and Approval Process.

4. Speed Surveys – Various Locations

Source: Staff

Recommendation: Approval

Previous action: On-going new surveys of expired segments.

G. OLD BUSINESS

1. An overview of various projects involving the City.

Source: Staff

Written or verbal reports may be presented on the following topics:

a. North Bear Valley from Glenridge Rd. to East Valley Pkwy – Traffic signal timing synchronization near schools – Will present Before & After Travel Time report in April.
b. Traffic Signal in Design: El Norte/Fig & East Valley Pkwy/Date – Work in Progress
c. Traffic Signals – Private Development in Plancheck: North Ash/ Vista Ave., North Ash/Sheridan Avenue, El Norte/Vista Verde Way. And Hotel Traffic Signal on La Terraza Blvd. Under Construction: Harmony Grove/Citracado Pkwy., County/City Signal on Boyle/Bear Valley Pkwy. Work in Progress
d. FY 15/16 TMPL Project Progress

Recommendation: Receive and file reports.

H. SCHOOL AREA SAFETY

a. School Safety Evaluation with EPD and Escondido Union School District (EUSD)
b. High visibility crosswalks at 5 intersections

I. COUNCIL ACTION* (A briefing on recent Council actions on Commission related items.)

a. Truck Route Modification

J. ORAL COMMUNICATIONS* (At this time, members of the public are encouraged to speak to the Commission.)

K. TRANSPORTATION COMMISSIONERS* (Commissioners may bring up questions or items for future discussion.)

L. ADJOURNMENT

*In order for the Transportation Commission to take action or conclude discussion, an item must appear on the agenda which is posted 72 hours in advance of the meeting. Therefore, all items brought up under the categories marked with an asterisk (*) can have no action. Such items can be referred to staff or scheduled for a future agenda.

AVAILABILITY OF SUPPLEMENTAL MATERIALS AFTER AGENDA POSTING: Any supplemental writings or documents provided to the Commission regarding any item on this agenda will be made available for public inspection in the Engineering Office located at 201 N. Broadway during normal business hours, or in the Council Chambers while the meeting is in session.

CITY OF ESCONDIDO

MINUTES OF THE REGULAR MEETING OF THE TRANSPORTATION AND COMMUNITY SAFETY COMMISSION

October 8, 2015

The regular meeting of the Escondido Transportation and Community Safety Commission was called to order at 3:06 p.m., Thursday, by Chair Durney, in the City Council Chambers, 201 North Broadway, Escondido, California.

Commissioners present: Chair Durney, Vice-chair Spoonemore, Commissioner Simonson, and Commissioner Sarro.

Commissioners absent: Commissioner Dayani, Commissioner Leone, and Commissioner Blackstock.

Staff present: Julie Procopio, Assistant Director of Public Works; Ali Shahzad, Associate Engineer/Traffic Division; Abraham Bandegan, Associate Engineer/Traffic Division; Mark Peterson, Escondido Police Department; and Ty Paulson, Minutes Clerk.

ORAL COMMUNICATIONS: None.

MINUTES:

Moved by Commissioner Sarro, seconded by Commissioner Simonson, to approve the minutes of the July 9, 2015, meeting. Motion carried unanimously.

CONSENT ITEMS: None.

NEW BUSINESS:

1. **FY 15/16 Traffic Management Project List - Gamble Street Traffic Calming**

Abraham Bandegan, Associate Engineer, referenced the staff report and noted staff recommended approving the Traffic Calming Plan for Gamble Street and authorize the use of the TCSC budget to fund the work.

Commissioner Sarro and Mr. Bandegan discussed mitigation measures for limiting cut-through movements and the striping costs.

Commissioner Sarro felt further review was needed with regarding to reducing cut-through traffic. She was opposed to spending $20,000 on narrowing the street without reducing traffic.

Chairman Durney asked how effective lane chokers were and whether staff had any studies showing their effectiveness. Mr. Bandegan noted that chokers were selected, noting that many other jurisdictions used them in their toolbox for traffic calming.

Brian Eveland, Escondido, expressed his concern with the excessive speeds occurring on Gamble Street by cut-through traffic. He did not feel the lane chokers or striping would be effective. He felt that having an officer present would alleviate the speeding issues on Gamble Street. He also suggested utilizing radar signage with the ability to capture license plates for enforcement purposes.

Gregory Blomberg, Escondido, concurred with Mr. Eveland's comments. He felt narrowing the road would not reduce speeds. He felt widening the road along with adding lighting and sidewalks would help make the street safer.

Jason Koch, Escondido, expressed his concern for the safety of his children due to the excessive speeds on Gamble Street. He felt speed tables would help reduce speeds. He felt adding lane chokers and striping would be a waste of City funds.

Alex Shepherd, Escondido, expressed his concern with the excessive speeds occurring on Gamble Street. He was opposed to narrowing Gamble Street, noting his concern for the loss of parking. He felt speed tables would help reduce speeds.

Mark Loven, Escondido, expressed his concern with the proposed plan eliminating parking. He then questioned why the subject street could not be completed. He also felt the street needed curbs and radar signage.

Commissioner Sarro felt further study was needed with regard to limiting the cut-through activity and reducing speeds. She suggested receiving public input with regard to prohibiting left turn movements from El Norte Parkway and Lincoln. She also stated that she was in favor of using speed tables.

Chairman Durney was in favor of using speed tables. He noted there were many places where striping worked. He also expressed his concern with eliminating parking.

Discussion ensued regarding the effectiveness of speed bumps.

Commissioner Simonson expressed his concern with the excessive speeds on Gamble Street and waiting to do something. Mr. Bandegan suggested installing

the chokers and re-evaluating the situation in six months. He also noted that before prohibiting any movements staff would work with the residents.

Commissioner Francis felt speed signs and radar would help reduce speeds.

ACTION:

Moved by Commissioner Sarro, seconded by Commissioner Spoonemore, to approve the speed limit signage and pavement legends. The motion also included studying left turn movements on Lincoln and El Norte Parkway with residential input. Motion carried unanimously.

2. City of San Diego Crosswalk Policy Review. Suggestions to incorporate in COE Crossing warrants

Abraham Bandegan, Associate Engineer, referenced the staff report and noted staff recommended the Commission review and provide recommendations on the proposed changed to the current City of Escondido Crosswalk Policy.

Yazmin Lopez, Escondido, Member of CX3, stated that she attended Escondido High School. She indicated that she was advocating the use of high visibility continental crosswalks in Escondido around schools and the entrances for Escondido Creek for the safety of parents, students, and pedestrians. She stated that the City of San Diego had approved continental crosswalks in May of 2015.

Munon Perrin, Escondido, Member of CX3, stated that she attended Escondido High School. She stated that the City of San Diego had approved using continental crosswalks in May of 2015. She indicated that Escondido had not upgraded its crosswalk policies since the 1970s. She asked that the City update its crosswalk policies to use high visibility continental crosswalks in Escondido. She expressed her view that this would create a sense of safety for individuals crossing the streets, especially in the area of schools. She noted that the Mission Park area had three schools that were in need of the subject crosswalks.

ACTION:

Moved by Chairman Durney seconded by Commissioner Spoonemore, to approve staff's recommendation. Motion carried unanimously.

3. Speed Surveys –Various Locations

Ali Shahzad, Associate Engineer/Traffic Division, referenced the staff report and noted that staff recommended that the Commission approve the Speed Surveys.

ACTION:

Moved by Commissioner Simonson, seconded by Chairman Durney, to approve staff's recommendation. Motion carried unanimously.

OLD BUSINESS:

1. An overview of various projects involving the City

    a. North Bear Valley from Glenridge Road to East Valley Parkway – Traffic signal timing synchronization near schools - Complete
    b. Traffic Signal in Designs: El Norte/Fig & East Valley Parkway/Date – Work in Progress
    c. Traffic Signals – Private Development in plancheck: North Ash/Vista Avenue, North Ash/Sheridan Avenue, El Norte/Vista Verde Way and Hotel Traffic Signal on La Terraza Boulevard Under Construction: Harmony Grove/Citracado Parkway and County/City Signal on Boyle/Bear Valley Parkway.
    d. FY 15/16 TMPL Project Progress

Received.

SCHOOL AREA SAFETY

1. Escondido High School Pedestrian Ramps.
2. High visibility crosswalks at four intersections

Received.

COUNCIL ACTION:

a. Centre City & South Escondido Boulevard and South Centre City & Citracado Stop Signs
b. Ash & Sheridan Stop Signs
c. Increasing 2-hour parking to 3-hour parking on Grand Avenue

Received.

ORAL COMMUNICATIONS:

Veronica Panlagua, Escondido, expressed her concern with vehicles travel fast in the area of Escondido Boulevard and Lincoln where there were numerous pedestrians and there being no stop sign. She noted that she was aware of three accidents occurring in September. She asked that the City look into improving

the safety for this intersection. She then provided signatures of residents in support of improving the subject intersection.

TRANSPORTATION COMMISSIONERS: Received.

ADJOURNMENT:

Chair Durney adjourned the meeting at 5:16 p.m. The next meeting of the Commission would be held January 14, 2016, at 3:00 p.m. in City Council Chambers, 201 North Broadway, Escondido.

Ali Shahzad, Associate Engineer

Ty Paulson, Minutes Clerk

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TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14th, 2016 **Item No.: F1**

Location: Gamble Street

Initiated by: TCSC

Request: Review Analysis of Traffic Volume and Turning Movements on Gamble Street and Provide Feedback

Background:

In 2014, City staff received complaints related to speeding and cut-through traffic on Gamble St. Escondido Police Department (EPD) also expressed its concern regarding speeding on Gamble St. The traffic calming project on this street was included in the 2015 City of Escondido Traffic Management Project List (TMPL) prioritization process and it was presented to Transportation and Community Safety Commission (TCSC) in April. At its July meeting, TCSC recommended staff to design the project and present it to Commission in October for final approval and budget allocation. Two Speed Radar Feedback Signs and Speed Limit pavement legends were approved by TCSC in October. TCSC also suggested staff evaluate the volume of traffic on Gamble St and analyze the turning movements and cut-through traffic on this street.

Discussion and Purpose:

Gamble Street is an unclassified residential street in the City General Plan but it is not built to a Residential street standards and the road remains unimproved in several areas. There are no sidewalks in most of the segment and the cross-section is narrower than required by city standards. The speed limit on Gamble St is 25 mph (Prima Facie) which considering the residential nature of the street, has not been posted. The purpose of this report is to analyze the volume of traffic and turning movements on Gamble St.

Considering the large number of driveways, frequent pedestrian and bicyclist activities and also speeding complaints received from the residents and Escondido Police Department (EPD), implementing traffic management measures selected from the "Traffic Management Toolbox" was proposed. Although not traditionally used for Residential roadway segments, striping chokers, centerline striping, extra signage, pavement marking and speed radar feedback signs have been considered for Gamble Street. At its October meeting, TCSC approved the usage of two Speed Radar Feedback Signs and also Speed Limit pavement legends for Gamble St.

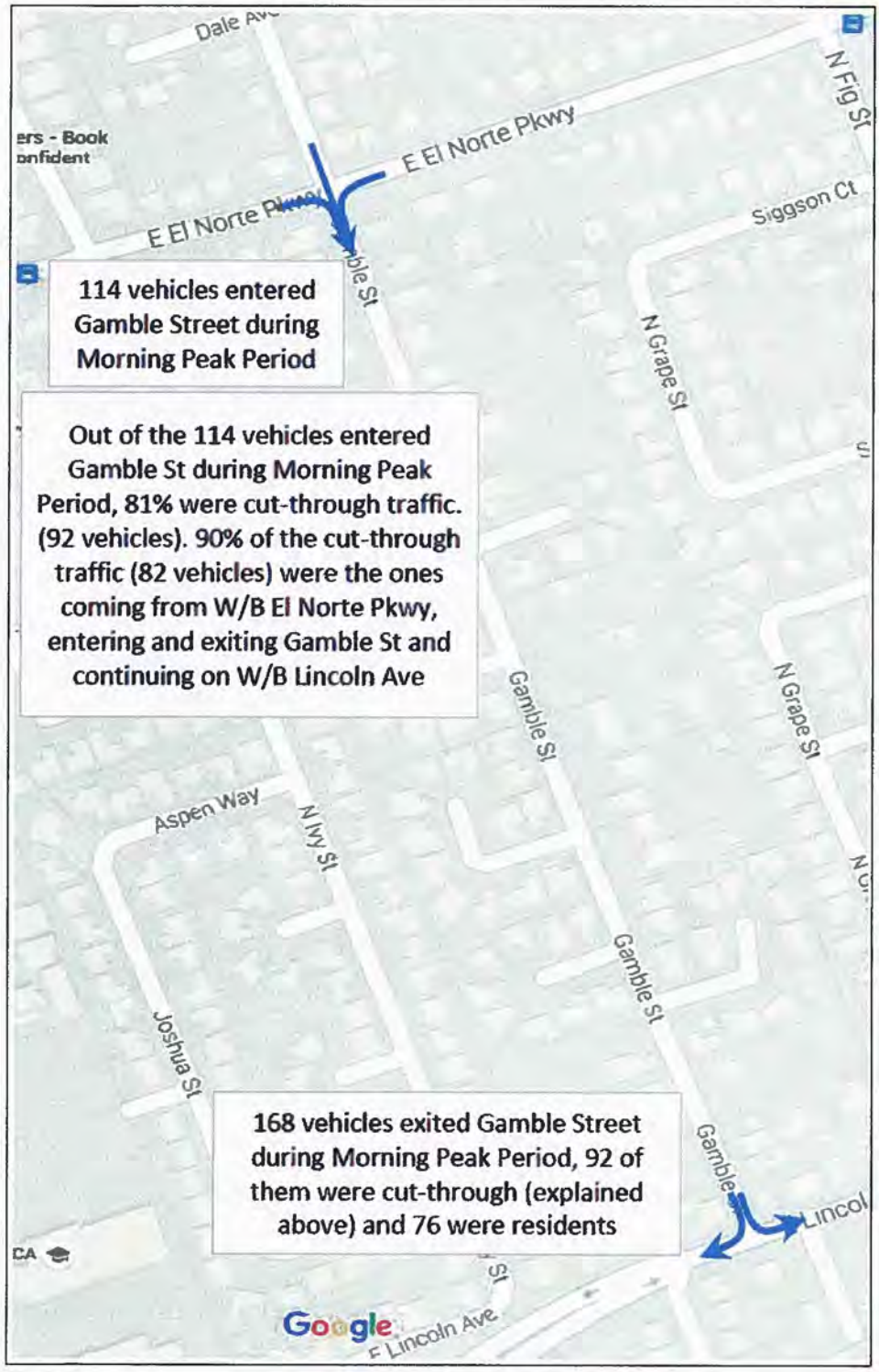
Gamble St Location in City of Escondido

N/B Gamble St (view) at Lincoln Ave

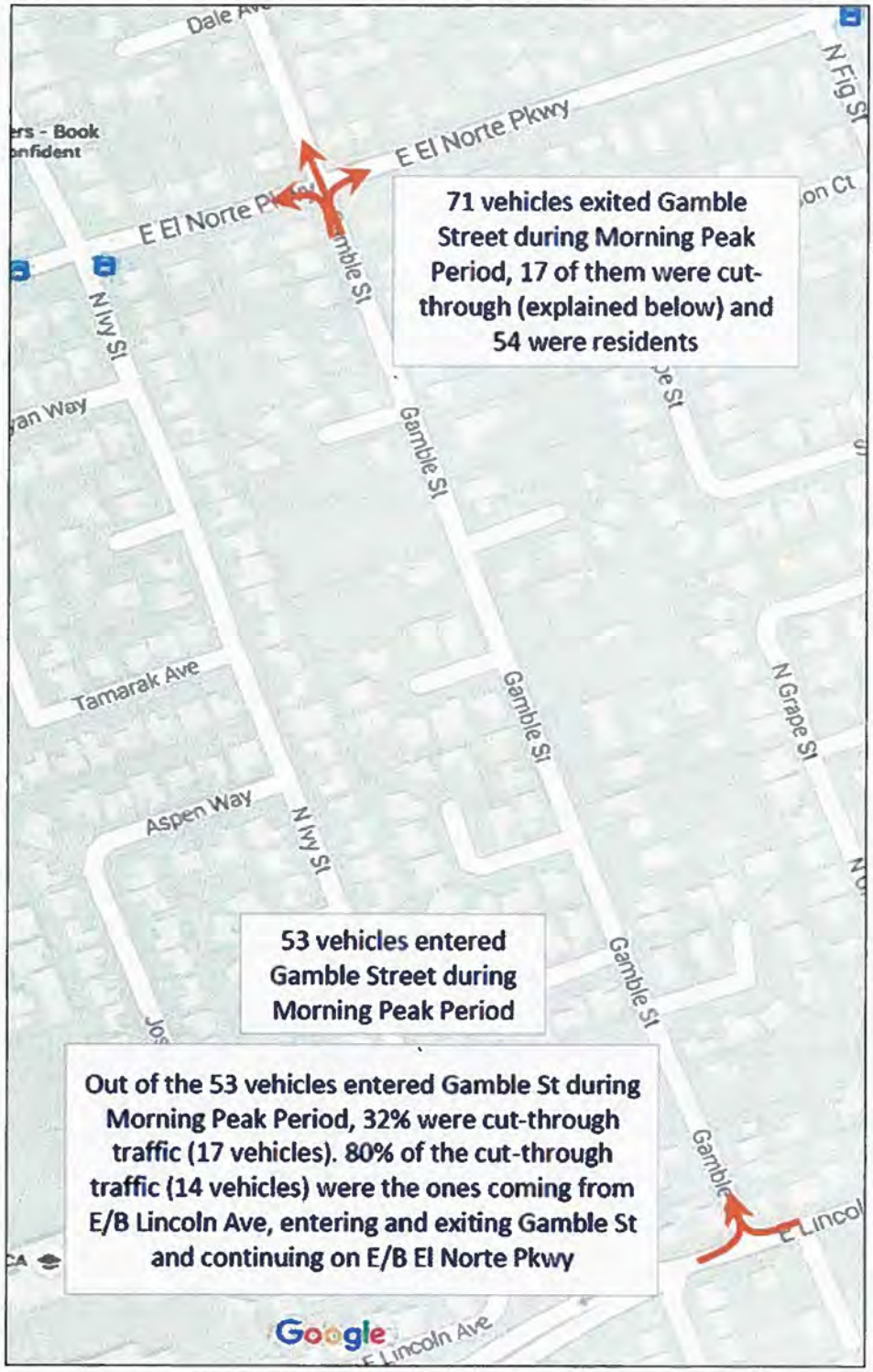
S/B Gamble St (view) at El Norte Pkwy

To analyze the volume of traffic and turning movements on Gamble St, Origin-Destination (OD) surveys were conducted on December 15, 2015 and December 17, 2015 for morning and afternoon peak periods.

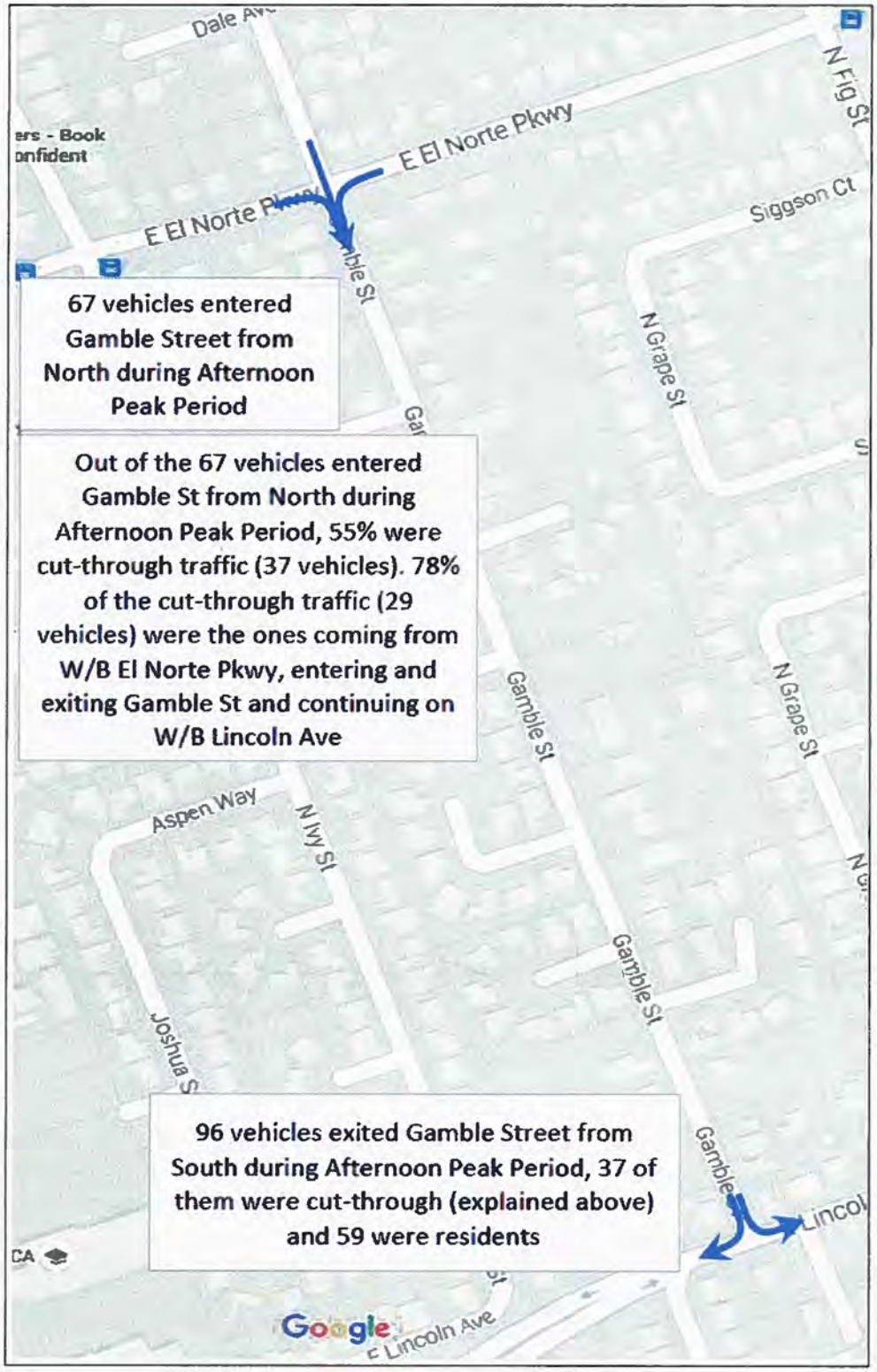
Results for S/B traffic at AM peak period (6:45AM to 8:45AM) survey



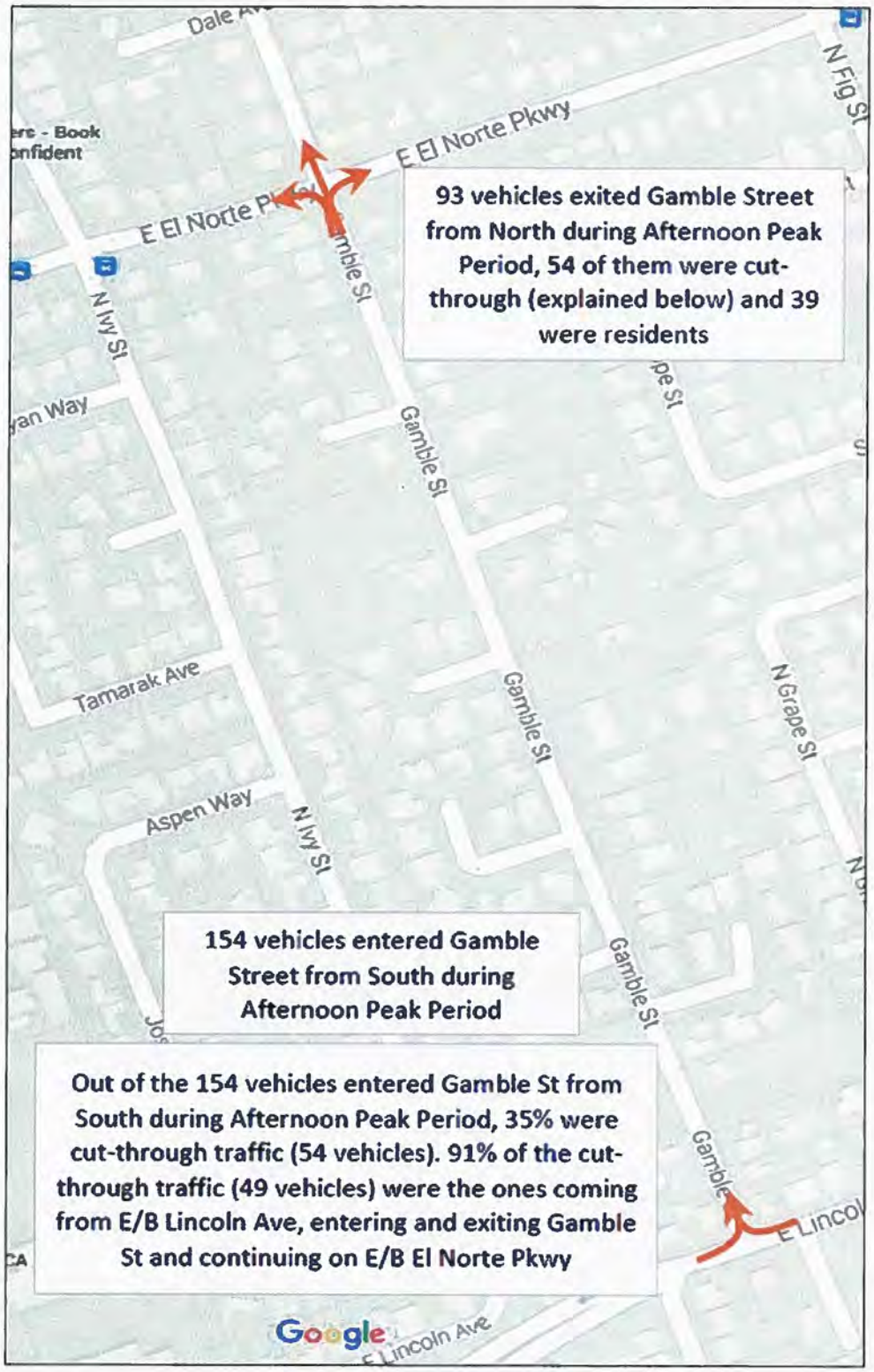
Results for N/B traffic at AM peak period (6:45AM to 8:45AM) survey



Results for S/B traffic at PM peak period (3:45PM to 5:45PM) survey



Results for N/B traffic at PM peak period (3:45PM to 5:45PM) survey

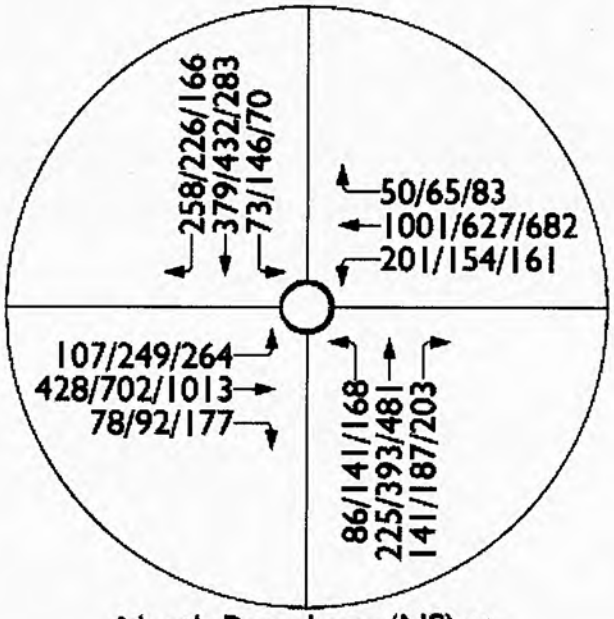


To keep the residential nature of unclassified streets and to help curbside parking, City of Escondido does not mark center-lines on residential streets. Gamble Street does not have any striping or pavement marking at its current condition. TCSC recommended staff to implement measures of traffic calming on Gamble St by installing two Speed Radar Feedback Signs and also adding "25 MPH" pavement legends on the street. City is in the process of purchasing and installing the radars and also painting the "25 MPH" speed limit legends.

As shown in the exhibits, the percentage of cut-through traffic on Gamble St, both in morning and afternoon peak periods, is considerable. However, the volume is very low (less than 50 per hour). The Average Daily Traffic (ADT) of the roadway is relatively low as well. Based on a peak hour volume of approximately 150 vehicles and a Peak-to-Daily Ratio of 10%, the ADT on the roadway would be 1500 veh/day which is well below capacity. A very conservative capacity for an unimproved 2-lane roadway is 5000 per day.

To eliminate cut-through traffic from Gamble St during peak hours, certain turning movements could be prohibited. The most effective turning movement prohibitions would be to prohibit the left-turn from W/B El Norte Pkwy onto S/B Gamble St at AM peak period and to prohibit the left-turn from E/B Lincoln Ave onto N/B Gamble St at PM peak period. There are major problems and consequences with such restrictions which are discussed below.

1. Since El Norte Pkwy and Lincoln Ave don't have medians at their intersections with Gamble St, installation of a No-Left-Turn sign in the middle of the streets will not be feasible and installation of these turn prohibition signs on the curb is usually not effective due to visibility issues.
2. These turn prohibition will be imposed on both residents and non-residents and will make it inconvenient for residents of Gamble St to use the street during peak periods.
3. The cut-through left-turn volume from W/B El Norte onto S/B Gamble St will have to use the intersection of El Norte Pkwy and N Broadway which is already operating at LOS D. If the movement is prohibited in AM peak period, this extra left-turn volume will have a negative impact on the operation of the intersection. The exhibit below shows the existing volumes at AM/MD/PM peak hours. During AM peak period, this movement prohibition will increase the W/B left-turn at the intersection of El Norte Pkwy and N Broadway by 25%.



North Broadway (NS) at
El Norte Parkway (EW)

Considering the disadvantages of the movement prohibitions and considering the low volume of cut-through traffic, staff does not recommend total elimination of cut-through traffic from Gamble St at this time. The two new Speed Radar Feedback signs will be installed and the "25 MPH" speed limit legends will be painted on the street, random enforcement will also be requested from Escondido Police Department. Staff ill monitor the effectiveness of the traffic calming measures and will report back to TCSC in six months. If the measures are found ineffective, extra measures will be considered.

Recommendation:

Authorize staff to continue implementing the approved traffic calming measures and allow staff to monitor the condition and report back to the Transportation Commission in six months.

Necessary Council Action: None

Respectfully submitted,

Prepared by:

Abraham Bandegan, TE, PTP
Associate Engineer/Traffic Division

Reviewed by:

Julie B. Procopio, PE
Assistant Director of Public Works

Approved by:

Edward N. Domingue, PE
Director of Public Works/City Engineer

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TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14th, 2016 **Item No.: F2**

Location: Citywide

Initiated By: Staff

Request: New City of of Escondido Crosswalk Policy

Background:

On June 2, 2015 City of San Diego Council approved an amendment to Council Policy 200-07 "Marked Crosswalk Criteria at Uncontrolled Locations" to incorporate changes in pedestrian safety. The purpose of this policy was to provide comprehensive pedestrian crossing guidelines and to provide for the optimum level of safety and mobility for both pedestrians and motorists. Different warrants and thresholds were introduced for midblock crossing in the new policy to help decision-makers in evaluating the need for midblock crossing at uncontrolled locations and the treatments needed to assure safety of pedestrians.

A summary of Current City of Escondido Crosswalk policy, the new City of San Diego Crosswalk policy and a brief comparison between the policies were presented to Transportation and Community Safety Commission (TCSC) in July and staff received valuable input on how to proceed with updating the current city policy.

On October 8, 2015, the first two chapters of the new City of Escondido Crosswalk Policy including "Basic Warrants" and "Points Warrants" were approved by TCSC. The "Treatments" chapter will be discussed in this item which upon approval, will complete the new City of Escondido Crosswalk Policy.

Discussion & Purpose:

The purpose of this report is to finalize the proposed changes to the existing City of Escondido Mid-block Crossing Policy.

The new City of San Diego midblock crossing policy consisted of "Basic Warrants", "Point Warrants" and "Crossing Treatments". The first two Warrants were similar to current City of Escondido Warrants but nothing similar to the "Treatments" chapter exists in the current city policy.

Revision proposals for the first two chapters were provided to TCSC and were approved in July and October. Current item provides the new proposed "Treatment" chapter for the new City of Escondido Crosswalk Policy.

The recently reviewed "Basic Warrants" and "Points Warrants" of the new city of Escondido Crosswalk Policy are provided on the next pages.

1. Basic Warrants

All of the Basic Warrants must be met in order for an uncontrolled location to be considered for marked crosswalk.

1.1. Pedestrian Volume Warrant

Pedestrian Crossing Volume should be 10 or more per hour.

1.2. Approach Speed Warrant

The 85th percentile approach speed must be equal to or lower than 40 MPH, unless a HAWK or a pedestrian signal will be installed.

1.3. Nearest Controlled Crossing

The proposed location must be farther than 250 feet from the nearest controlled pedestrian crossing in City of Escondido downtown area and farther than 400 feet from the nearest controlled pedestrian crossing in other areas.

1.4. Visibility Warrant

The motorist must have an unrestricted view of all pedestrians equal or greater than the "Stopping Sight Distance" needed for the 85th percentile speed.

1.5. Illumination Warrant

The proposed location must have existing lighting.

1.6. Accessibility Warrant

The proposed location must have existing accessibility to disabled pedestrians or accessibility improvements shall be included as part of the project.

2. Points Warrants

Point warrants are the number of points a location gets along with the Basic Warrants to qualify for a marked crosswalk. A proposed location that meets all the Basic Warrants requires a minimum of 16 points on the Points Warrants to justify an uncontrolled crossing.

2.1. Pedestrian Volume Warrant

No. of Pedestrians (Peak Hour)	Points	Total Available Points
11-30	2	10
31-60	4	
61-90	6	
91-100	8	
Over 100	10	

All effort will be made to count the actual latent demand. However, when not possible to observe and count the latent crossing demand, the counted number of pedestrians will be increased by 30% in the following locations.

- Areas such as commercial areas and high density residential areas
- Where a pedestrian traffic generator exists within 600 feet of the proposed crosswalk
- Other locations with potential latent demand based on engineering judgement

2.2. General Condition Warrant

Condition	Points	Total Available Points
The nearest controlled pedestrian/bicycle crossing is greater than 600 feet from the proposed crosswalk	3	12
The proposed crosswalk will position pedestrians to be seen better by motorists (applicable to uncontrolled intersections only)	2	
An existing bus-stop is located within 100 feet of the proposed crosswalk	2	
The proposed crosswalk will establish a midblock crossing and channelize the flow where pedestrian crossing is spread over a long stretch of road	2	
Other safety related factors	3	

2.3. Gap Time Warrant

Average Number of Vehicular Gaps per Five-Minute Period	Points	Total Available Points
0-0.99	0	8
1-1.99	2	
2-2.99	4	
3-3.99	8	
4-4.99	4	
5-5.99	2	
6 or over	0	

3. Treatments

If the proposed crossing location meets the criteria set by both the Basic and Point warrants, the next step is to evaluate the most appropriate crossing treatment(s) to be installed with the marked crosswalk. This is the section that current City of Escondido Crosswalk Policy does not address and will be addressed in the new policy. The following treatment thresholds are all from the new City of San Diego Crosswalk Policy.

Table 2-3: Crossing Treatment Thresholds for Uncontrolled Marked Crosswalks if Warrants are Met

Crossing Distance[2]	Roadway ADT (vehicles per day)									
	< 1,500	1,501 – 5,000		5,001 – 12,000		12,001 – 15,000		> 15,000	
< 40'	A	B		B		C		C	D[1]
40' to 52'	A	B		C		C	D[1]	D	
> 52'	A	B	C[1]	C	D[1]	D		D	

1. For streets with more than one lane at an approach or posted speed limit 30 mph or greater.
2. Crossing distance can be measured to a pedestrian refuge island if one is present.

Table 2-4: Crossing Treatments for Uncontrolled Marked Crosswalks if Warrants are Met

Category	Crossing Treatments
A	**The following is required:** • (W11-2) Pedestrian Warning Signage with the corresponding (W16-7P) arrow plaque
B	**At least one of the following is required:** • (R1-6) State Law – Yield to Pedestrian sign if median is present • Rectangular Rapid Flashing Beacons (RRFBs) • Raised crosswalk or other traffic calming treatments if the City of San Diego's Traffic Calming Guidelines are met
C	**At least two of the following are required:** • Radar Speed Feedback Signs • Striping changes such as narrower lanes, painted medians, road diets, or other speed reducing treatments. • RRFBs • Staggered crosswalks and pedestrian refuge island • Horizontal deflection traffic calming treatments[1] if the City of San Diego's Traffic Calming Guidelines are met
D	**A Traffic Signal is required if the CA MUTCD warrants are met and it is recommended by a traffic engineering study. Otherwise at least one of the following is required:** • Pedestrian Hybrid Beacon if the CA MUTCD warrants are met • Horizontal deflection traffic calming treatment[1] with RRFBs if the City of San Diego's Traffic Calming Guidelines are met

1. Horizontal deflection treatments include, but are not limited to: roundabouts, pedestrian refuge islands, and pedestrian bulb-outs.

Using paragraphs 09 and 09a of section 3B.18 of the new 2014 CA-MUTCD as a guideline, and also considering City of San Diego proposed treatments for different cross sections, ADTs and speed limits, the following treatment thresholds are proposed to be added to the new City of Escondido Crosswalk Policy.

ADT / Cross Section	<1500	1500 - 5000	5000-12000	>12000
Two-lane roads (without TWLTL)	Std.	Std. + one measure from (A)	For SL* < 35: Std + two measures from (A) For SL ≥ 35: Signal or HAWK	Signal or HAWK
Two-lane roads (with TWLTL)	Std. + one measure from (B)	For SL < 35: Std. + one measures from (B) For SL ≥ 35: Signal or HAWK	For SL < 35: Std + two measures from (B) For SL ≥ 35: Signal or HAWK	Signal or HAWK
Four Lanes or more	Std. + one measure from (C)	For SL < 35: Std. + two measures from (C) For SL ≥ 35: Signal or HAWK	Signal or HAWK	Signal or HAWK

* SL: Speed Limit of the roadway

Std.:
Advanced yield lines with associated Yield Here to Pedestrians (R1-5, R1-5a) signs should be placed 20 to 50 feet in advance of the crosswalk, adequate visibility should be provided by parking prohibitions, pedestrian crossing (W11-2) warning signs with diagonal downward pointing arrow (W16-7p) plaques should be installed at the crosswalk, and a high-visibility crosswalk marking pattern should be used. Details for the high-visibility crosswalk marking patterns will be presented to TCSC in April.

Measures:

(A)

1. Rectangular Rapid Flashing Beacon (RRFB) and Flashing Beacon at School Zones
2. Raised Crosswalk
3. Speed Radar Feedback Signs for both approaches

(B)

1. Rectangular Rapid Flashing Beacon (RRFB) and Flashing Beacon at School Zones
2. Raised Crosswalk
3. Speed Radar Feedback Signs for both approaches
4. Pedestrian refuge islands

(C)

1. Rectangular Rapid Flashing Beacon (RRFB) and Flashing Beacon at School Zones
2. Raised Crosswalk
3. Speed Radar Feedback Signs for both approaches
4. Pedestrian refuge islands
5. Road Diet

Recommendation: Approval of the new City of Escondido Crosswalk Policy

Necessary Council Action: Council Approval

Respectfully submitted,

Prepared by:

Abraham Bandegan, TE, PTP
Associate Engineer/Traffic Division

Reviewed by:

Julie B. Procopio, PE
Assistant Director of Public Works Dept.

Approved by:

Edward N. Domingue, PE
Director of Public Works Dept./City Engineer

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TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14th, 2016 **Item No.: F3**

Location: Citywide

Initiated by: Staff

Request: None. This item is a report on 2014/2015 Traffic Management Projects List (TMPL)

Background:

In January 2014, City staff presented the Traffic Management Projects List (TMPL) policy and its prioritization process to Transportation and Community Safety Commission (TCSC) of City of Escondido. The purpose of the policy was to best prioritize the traffic management projects in the City and assign the available resources in the most proper manner. City receives different requests related to speeding and other traffic issues and considering the limited funds and time available, the policy was needed to help staff prioritize the projects in the City.

The first TMPL of City of Escondido was provided to TCSC in April 2014 for fiscal year 2014/2015 and the projects' description and their preliminary prioritization were presented to the Commission. TCSC provided feedback on the 2014/2015 TMPL and reprioritized the table for staff. Staff was directed to design and implement the high priority projects on the list. Staff received final approval and funding for the design of the projects in July 2014 and all the selected high-ranked projects have been implemented and are complete.

Discussion and Purpose:

The purpose of this item is to report on the implementation of the 2014/2015 TMPL projects.

The below four projects were selected and funded by 2014/2015 TMPL.

1. School Zone Crosswalk Improvements
2. Chestnut Street Traffic Management
3. Escondido High School Sidewalk Expansion
4. Eucalyptus Ave Traffic Management

After the projects were selected in April 2014, each one of the projects was designed and the final designs were presented to TCSC in July 2014 for final approval and budget allocation. The approved projects are provided in the next pages.

1. School Zone Crosswalk Improvements

Based on a preliminary assessment of seven elementary and middle school zones during walk audits conducted by Escondido Union School District (EUSD), valuable data related to pedestrian and bicyclists circulation in the study areas was provided for staff review. Four intersections were selected for implementing transverse crosswalks on all or some legs to enhance safer pedestrian crossing. Installation of crosswalks on the selected intersections was ranked 1st on 2014 TMPL after prioritization and was selected by TCSC. Below are the selected intersections.

- Washington Ave and Rose St: to add crosswalks on all four legs of the intersection
- Citrus Ave and Bear Valley Pkwy: to add crosswalks on all four legs of the intersection
- Lincoln Ave and Fig St: to add crosswalks on all four legs of the intersection
- Citrus Ave and Patterson Rd: to add a crosswalk on the West leg of the intersection

Next figures show the location of the selected intersections and the crosswalks that were installed.

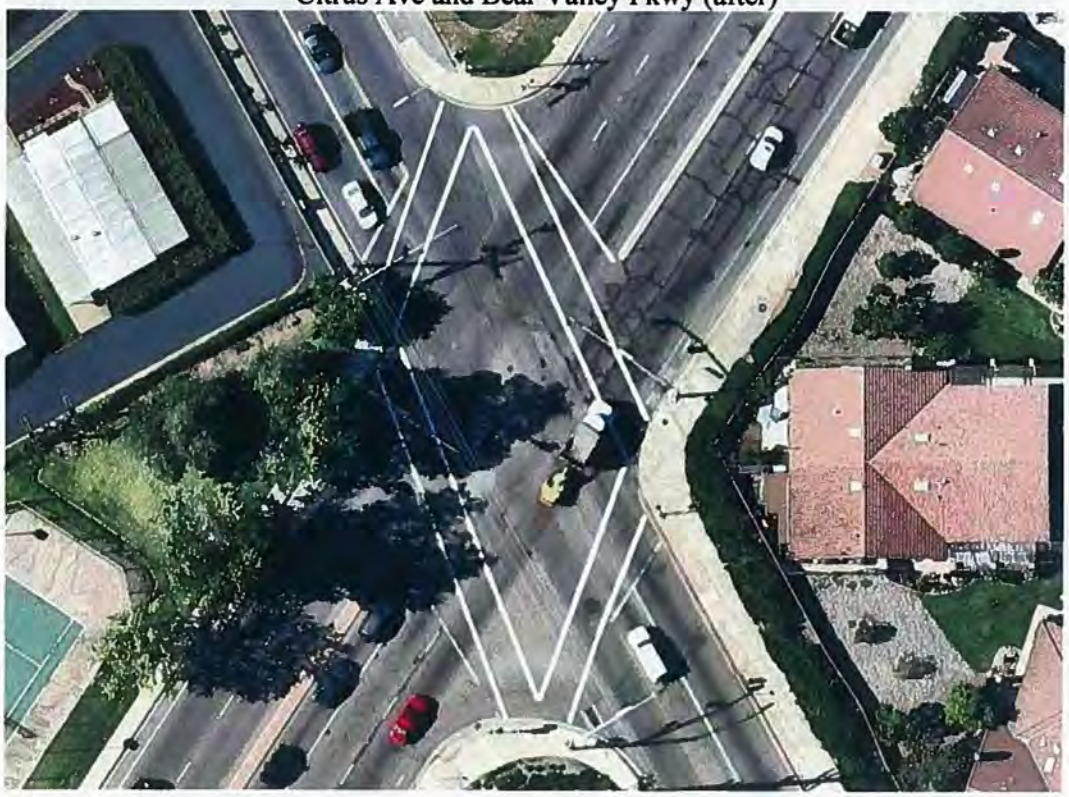
Staff has received several positive comments and feedback from Escondido Unified School District (EUSD) and also Escondido Education COMPACT. Considering the fact that these projects were originally identified and highly requested by students, parents and the school district, they have been very successful projects.

Washington Ave and Rose St (before)

Washington Ave and Rose St (after)

Citrus Ave and Bear Valley Pkwy (before)

Citrus Ave and Bear Valley Pkwy (after)



Lincoln Ave and Fig St (before)

Lincoln Ave and Fig St (after)

Citrus Ave and Patterson Rd (before)

Citrus Ave and Patterson Rd (after)

2. Chestnut Street Traffic Management

Chestnut Street is classified as a collector street in the city General Plan but it is not built to a Collector specification and the road remains unimproved in several areas. There are no sidewalks in most of the segment and the cross section is not meeting city standards. The speed limit on Chestnut St is 40 mph which makes it uncomfortable for pedestrians and bicyclists travelling on this street.

Traffic management on Chestnut St was ranked 2nd on the 2014/2015 TMPL of City of Escondido. Considering the large number of driveways, frequent pedestrian and bicyclist activities and also speeding complaints received from the residents, implementing traffic management measures selected from the "Traffic Management Toolbox" was considered to reduce speeds and improve safety. The following items were considered for traffic management on Chestnut St.

a. Narrowing down the travel lanes
b. Adding a Speed Radar Feedback Sign
c. Adding Class II and Class III bike-lanes
d. Adding a parking lane
e. Evaluation of installing an All Way Stop Controlled intersection at the intersection of Chestnut St and 9th Ave
f. Installation of signs necessary for the new striping plan

The final design was presented to TCSC in July 2014 and was approved. The project implementation is now complete. The latest speed survey of the roadway (before implementation of the traffic management plan) showed the 85th percentile speed was 44 mph. The speed limit on the road is currently 40 mph.

Analysis of the radar data for more than 28,000 vehicles from the last week of October has shown that the 85th percentile speed in the detection area of the radar is now 34 mph. Only 9% of the vehicles are violating the speed limit in that area.

Since the Speed Radar Feedback Sign has been installed only for a few months, staff will be conducting a new speed survey to update the speed limit of the roadway in the near future. So far, staff has received several positive feedbacks from the neighborhood.

Lane narrowing and adding sharrows on Chestnut St (left: before, right: after)

The new Speed Radar Feedback Sign on Chestnut St

The new sharrows and STOP sign at the intersection of Chestnut St and 9th Ave

Lane narrowing, addition of buffered bike lanes and parking lanes on Chestnut St (left: before, right: after)

Lane narrowing and addition of bike lanes on Chestnut St (left: before, right: after)

3. Escondido High School sidewalk improvement at the intersection of N Broadway and Sheridan Ave

   Escondido High School, with student population of 2,520 is located at 1535 N. Broadway, across from Sheridan Avenue. During school traffic peak periods of morning and afternoon, the sidewalks at the intersection of N. Broadway and Sheridan Avenue are impacted by heavy student pedestrian traffic. Staff evaluated various alternatives to assist with pedestrian and bicycle traffic concerns. The effective measure approved by the Commission was to expand the storage area of the sidewalks at the corners of the intersection. By implementing curb expansions, pedestrians and bicyclists would have more storage area to gather and wait for their green light to cross the intersection. This solution would provide a high capacity waiting area for pedestrians together with additional time allowed for the pedestrians to cross N. Broadway.

   The recommendation to expand and improve the storage area was included in Traffic Management Projects List (TMPL) and ranked 3rd on the list. Project was selected by TCSC and the design and funding for the project was approved in July 2014. Project is now complete. Staff has received positive feedback from the school district on the enhancements provided to students and pedestrians.

   Pictures of the project (before and after) are shown on the next page.

4. Eucalyptus Ave Traffic Management

   Staff had received complaint of speed and cut-through traffic on Eucalyptus Ave. After preliminary evaluation, Speed Radar Feedback Signs were installed on Eucalyptus Ave on both N/B and S/B approaches in February 2014. City staff included a potential "Eucalyptus Ave Traffic Calming" project in City's Traffic Management Project List (TMPL) for prioritization. Although the project did not rank high on the list based on the criteria adopted by the Transportation and Community Safety Commission, the Commission directed staff to reevaluate feasible solutions to resolve the issue.

   City staff considered the following items for Eucalyptus Ave traffic management:

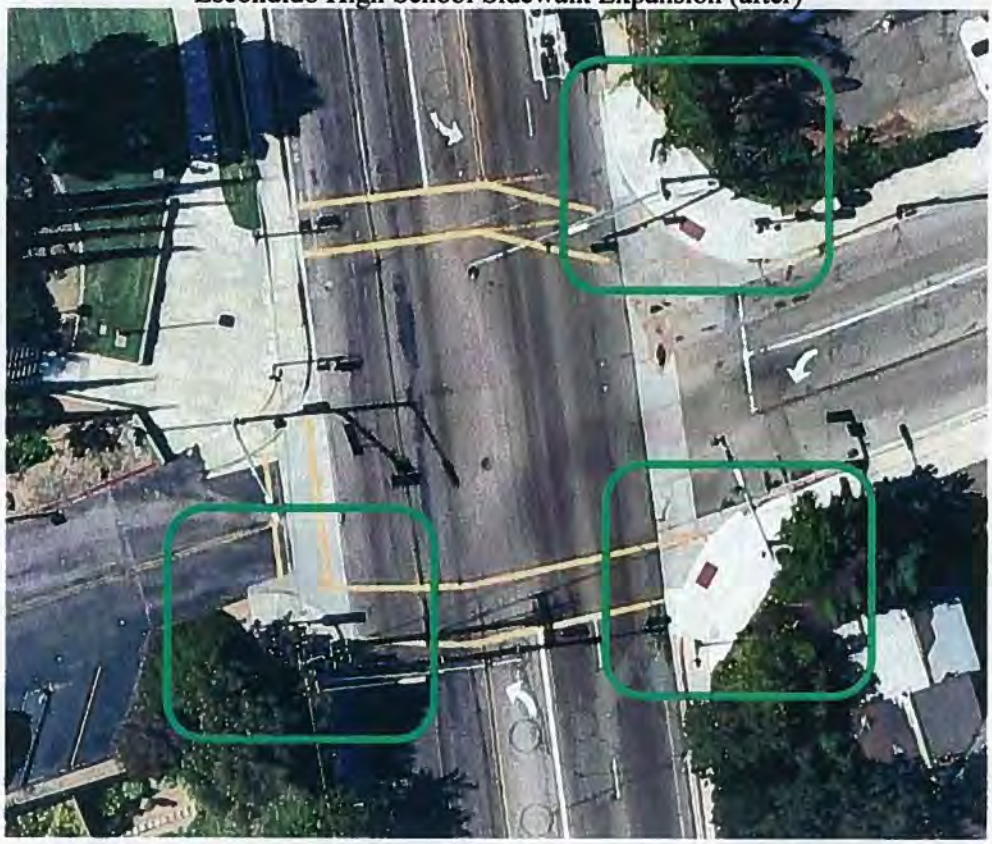
   a. Evaluation of installing an All Way Stop Controlled intersection at the intersection of Eucalyptus Ave and Hamilton Ln
   b. Evaluation of installing an All Way Stop Controlled intersection at the intersection of Eucalyptus Ave and Shalimar Pl
   c. Relocation of the N/B speed radar feedback sign
   d. Continuous Speed enforcement by Escondido PD

   Analysis showed that both intersections of Eucalyptus Ave and Hamilton Ln and Eucalyptus Ave and Shalimar Pl were warranted for All-Way Stop Control (AWSC). Commission approved the new stop signs in July 2014 and also the new location for the N/B Speed Radar Feedback Sign. Both of the two AWSC intersections are complete and the stop signs are installed. The N/B Speed Radar Feedback Sign has been relocated to a new more effective location.

   The speed limit of the road is currently 35 mph. Analysis of more than 5500 vehicles driving on S/B Eucalyptus Ave on the last week of November showed that the 85th percentile speed was 37 mph. 71% of the vehicles drove below the speed limit. 27% drove between 35 mph and 45 mph. Only 2% of the vehicles were driving 45 mph or higher. The radars are both considered to be effective and Escondido Police Department will continue to enforce the speed limit on this street, as necessary.

Escondido High School Sidewalk Expansion (before)

Escondido High School Sidewalk Expansion (after)



Recommendation:

Receive and file report

Necessary Council Action: N/A

Respectfully submitted,

Prepared by:

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Associate Engineer/Traffic Division

Reviewed by:

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Approved by:

Edward N. Domingue, PE
Director of Public Works/City Engineer

ESCONDIDO
City of Choice

CITY OF ESCONDIDO

TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14th, 2016 **Item No.: F4**

Location: Various locations Citywide

Initiated By: City Staff

Request: Recommend approval to the City Council of updated Engineering & Traffic Surveys (E&TS) for posted speeds on various street segments Citywide.

Background & Survey Methodology:

To satisfy the requirements of Section 40802(b) of the California Vehicle Code (CVC), Engineering and Traffic Surveys are required by the State of California to establish speed limits and to enforce those limits using radar or other speed measuring devices. These surveys must be updated periodically (every 5, 7 or 10 years, depending upon specific criteria) to ensure the speed limits reflect current conditions as dictated by the 2015 California Vehicle Code (CVC). The surveys must be conducted in accordance with applicable provisions of Section 627 "Engineering and Traffic Survey" of the California Vehicle Code (CVC), following procedures outlined in the California Manual on Uniform Traffic Control Devices (CA-MUTCD) dated November 7, 2014.

A brief description of the procedure is presented below:

1. **Measurement of Actual Prevailing Speeds**

   The actual speed of 100 vehicles on each street segment was measured using a calibrated radar meter. Both directions of travel were surveyed. From this data, the prevailing or 85th percentile speed (speed at or below which 85 percent of the vehicles sampled were traveling), ten miles per hour pace speed (increment of ten miles per hour containing the greatest number of measurements) and percent of vehicles in the pace were determined.

2. **Accident Records**

   From the accident reports, the number of accidents for each segment was used to calculate the accident rate, which is defined as the number of accidents per million vehicle miles (acc/mvm) of travel on that segment. The accident rate for each segment was then compared to the most recent statewide average for similar type roads. This information is shown on the survey summary sheets.

3. **Traffic and Roadside Conditions**

   Each route was driven and notation made of its features, especially those not readily apparent to reasonable drivers, as well as those that might be combined with other factors to justify downward or upward speed zoning. These features are listed in the survey summary sheets for each segment.

4. **Residential Density**

   A comprehensive review of the residential density was not done, but information regarding the adjacent land use to the roadway segments was noted and included in the survey summary sheets.

5. **Pedestrian and Bicyclist Safety**

   The accident records were used to evaluate the pedestrian and bicyclist safety aspects of the roadway segments.

6. **School Zones**

   Proximity to schools was taken into account to evaluate the speeds through the roadway segments.

The standard used followed procedures outlined in the California Manual on Uniform Traffic Control Devices (CA-MUTCD) Section 2B.13, dated November 7, 2014:

> *"**Standard:***
> *When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th-percentile speed of free-flowing traffic, except as shown in the two Options below.*
> *Option:*
> *1. The posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5. See Standard below for documentation requirements.*
> ***2. For cases in which the nearest 5 mph increment of the 85th-percentile speed would require a rounding up, then the speed limit may be rounded down to the nearest 5 mph increment below the 85th percentile speed, if no further reduction is used. Refer to CVC Section 21400(b).***
>
> ***Standard:***
> *If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.*
>
> *Support:*
> *The following examples are provided to explain the application of these speed limit criteria:*
> *Example 1. Using Option 1 above and first step is to round down: If the 85th percentile speed in a speed survey for a location was 37 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 37 mph speed. As indicated by the option, this 35 mph established speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.*
> *Example 2. Using Option 1 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 33 mph speed. As indicated by the option, this 35 mph speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.*
> *Example 3. Using **Option 2** above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, instead of rounding up to 35mph, the speed limit can be established at 30mph, but no further reductions can be applied (which is allowed in the two examples above).*
>
> ***Standard:***
> *Examples 1 and 2 for establishing posted speed limits shall apply to engineering and traffic surveys (E&TS) performed on or after July 1, 2009 in accordance with the Department's Traffic Operations Policy Directive Number 09-04 dated June 29, 2009.*

Option:
After January 1, 2012, Example 3 may be used to establish speed limits. Refer to CVC 21400(b).
Support:
Any existing E&TS that was performed before July 1, 2009 in accordance with previous traffic control device standards is not required to comply with the new criteria until it is due for reevaluation per the 5, 7 or 10 year criteria."

Discussion & Purpose:
Per California Vehicle Code Section 22354, in order for a posted speed limit to be legally enforceable by the Police Department radar detection, it must be all of the following:

1) Between 25 mph and 65 mph,

2) Supported by an engineering speed survey, and

3) Ratified by City Council by resolution or ordinance.

The guidelines for preparing an engineering speed survey are found within the California Manual on Uniform Traffic Control Devices (CA-MUTCD) 2014 edition, a document published by the Federal Highway Administration and modified by CALTRANS for use in California. The 85th percentile speed (the speed at which 85% of drivers drive at or below) is often referred to as the critical speed; it is the primary speed that determines what drivers believe to be safe and reasonable. When determining speed limits, the California MUTCD gives guidance that states, "*The speed limit should be established at the nearest 5 mph increment of the 85th-percentile speed of free-flowing traffic.*"

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

Although conditions on the roadway such as width, curvature, surface conditions and any other readily apparent features do not provide a basis for downward speed zoning, the CA-MUTCD states that local authorities may consider residential density, as well as pedestrian and bicycle safety.

Recommendation:

As part of the City of Escondido's speed survey program, staff has performed speed surveys at 19 segment locations, with data being collected for each segment.

Based on the above guidelines, all of the surveyed segments were evaluated and speed limits recommended. The overview of the Speed Surveys is presented in Table 1; the last column shows the recommended speed limits on all study segments.

For speed survey 1, 13 & 18 the recommended speed limit is changing (decrease by 5mph) based on the 85th-percentile speed of the new speed survey.

For speed surveys 2, 3,4,8,9 & 14 (as highlighted), the recommended speed limit reflects a reduction of 5mph from the 85th-percentile speed based on **Option 2** in the MUTCD standard, as delineated above. In this case, then, the posted speed limit will not change.

Road Classifications:
- Unclassified – UC (like a LC)
- Local Collector – LC
- Collector – C
- Major – M
- Super Major – SM
- Prime Arterial – PA
- Super Prime Arterial - SPA

Table 1 - Overview of Speed Surveys

Segment No.	Street Name	Segment		Previous Speed Survey	Design Speed & Road Class.	Posted Speed Limit (MPH)	85th Percentile (MPH)	Recomm. Speed Limit (MPH)	Speed Limit to be posted, per Traffic Engineer
		From	To						
1	Chestnut	Juniper	Fifth/Date	07-03-07	35 LC	**40**	37	35	**35**↓
2	Iris Ln	El Norte	Centre City	08-02-07	35 LC	30	37	35	30**
3	Iris Ln	Centre City	Village	06-21-07	35 LC	35	40	40	35**
4	Country Club Ln	Golden Circle	El Norte	08-28-07	40 C	25	31	30	25**
5	Country Club Ln	Centre City	I-15	08-28-07	40 C	35	37	35	35
6	Date	Valley Pkway	Grand	07-10-07	40 C	30	30	30	30
7	Harmony Grove	Enterprise	City Limits	08-23-07	35 LC	40	42	40	40
8	Harmony Grove	Hale	Enterprise	08-23-07	35 LC	35	39	40	35**
9	Howard	Harmony Grove	Auto Park Way (S)	08-22-07	UC	35	40	40	35**
10	Howard	Auto Park Way (S)	Auto Park Way (N)	04-22-09	UC	30	30	30	30
11	La Honda Drive	El Norte	Daley Ranch	08-27-07	35 LC	35	36	35	35
12	Broadway	El Norte	Lincoln/78	03-29-07	50 M	35 (25 WCAP)	41	40	35 (25 WCAP)
13	Ash	Rincon	City Limit	12-12-07	35 LC	40	37	35	**35**↓
14	Sunset	Escondido	East to City Limits	08-21-07	35 LC	35	41	**40**	35**
15	Tulip North	Hale	Valley Parkway	08-13-07	35 LC	40	40	40	40
16	Vermont Avenue	Juniper	Escondido	08-20-07	40 C	35	37	35	35
17	Via Rancho	I-15	West to City Limits	08-14-07	35 LC	50	50	50	50
18	Vista Verde	El Norte	End	04-17-07	35 LC	**35**	29	**30**	**30**↓
19	Valley Center Rd	Lake Wohlford	City Limits	04-12-06	50 SPA	60	60	60	60

* Indicates speed survey which requires City Council approval.

**** Indicates round down the speed limit to the lower five miles per hour increment, per CVC 21400 (b), 22358.5, or higher than average collision rate or pace speed.**

↓ Indicates speed going down.

Necessary Council Action: None. (All recertifications).

Respectfully submitted,

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