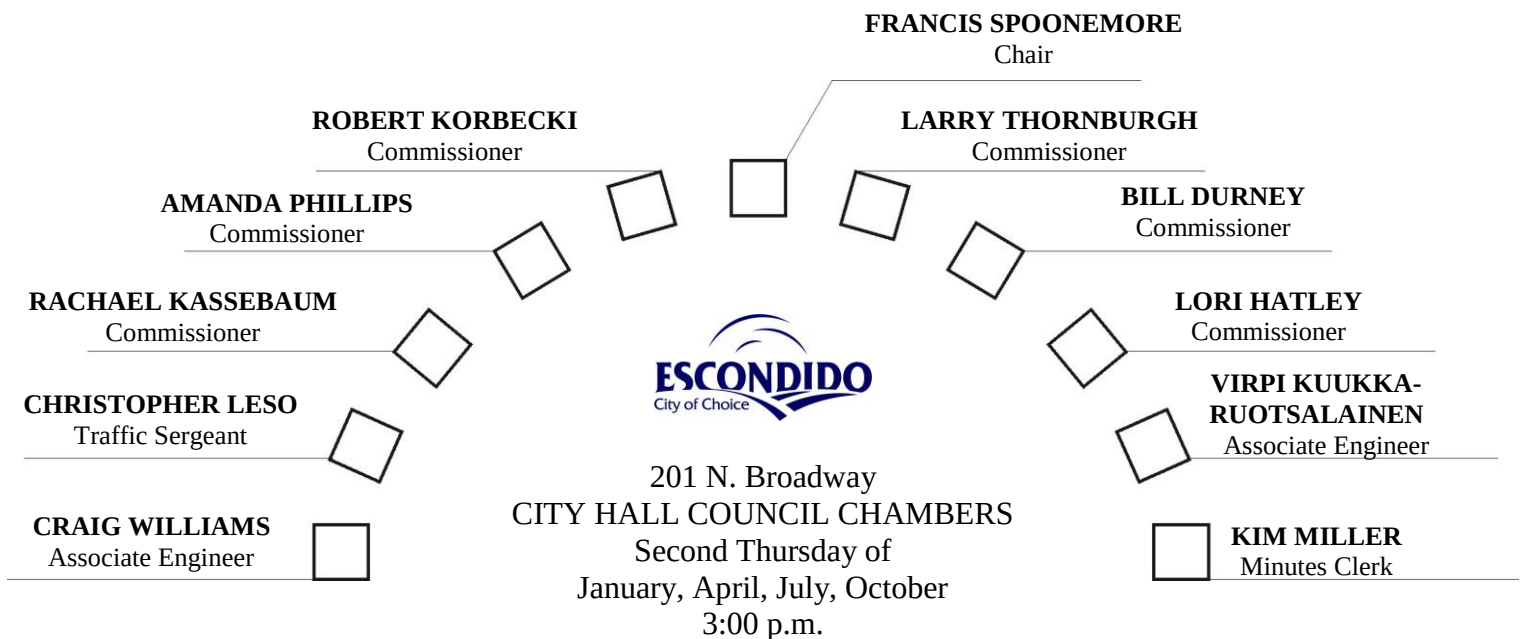


CITY OF ESCONDIDO

Transportation & Community Safety Commission



AGENDA

October 8th, 2020

Page | 1

- A. FLAG SALUTE
- B. ROLL CALL AND DETERMINATION OF QUORUM, VICE-CHAIR
- 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 January 9th, 2020 and July 9th, 2020 MEETING

E. CONSENT ITEMS – None.

F. NEW BUSINESS

1. 2020/2021 Traffic Management Project List (TMPL) Final List of Projects

Source: Staff
Recommendation: Approve Staff Recommendation
Previous action: Commission review and approval

2. Speed Surveys – Various locations Citywide

Source: Staff
Recommendation: Approve Staff Recommendation
Previous action: None

3. Local Roadway Safety Plan

Source: Staff
Recommendation: Receive and File
Previous action: None

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. Traffic Signals in Design: Felicita/Escondido Blvd and Juniper St/Felicita-17th Ave. protected left-turns; part of Active Transportation Fund project; consultant selected for design. Two new signals: Country Club Ln/Gary Ln and Country Club Ln/Nutmeg St (The Villages). Signal Modifications: El Norte Pkwy/Country Club Ln and El Norte Pkwy/Nutmeg St. (The Villages).

- b. Traffic Signals – Under Construction: El Norte Pkwy/E. Lincoln Avenue (Henry's Ranch).
- c. FY19/20 TMPL Project Updates – Lincoln/Ash Crosswalk Improvements completed and Citrus/Oak Hill Crosswalk Improvements with RRFB: under construction.
- d. Roundabout at Country Club Lane/Golden Circle (The Villages).

H. SCHOOL AREA SAFETY

- a. Del Dios Academy – School Bond Improvements. Signing/Striping design and crosswalk improvements including Rectangular Rapid Flashing Beacon for 9th Avenue reviewed.
- b. Juniper Elementary. School Bond Improvements for parking lot and drop off/pick up areas. City Active Transportation Grant project to improve sidewalk, relocate student crosswalk and install RRFB. Two signal modifications for protected left-turns in design.
- c. ATP Grant Submittal for Citrus Ave sidewalk.

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

- a. NONE

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

January 9, 2020

The regular meeting of the Escondido Transportation and Community Safety Commission was called to order at 3:04 p.m., Thursday, by Vice Chair McManus, in the City Council Chambers, 201 North Broadway, Escondido, California.

Commissioners present: Vice Chair McManus, Commissioner Thornburgh, Commissioner Durney, Commissioner Korbecki, and Commissioner Kassebaum,

Commissioners absent: Chair Spoonmore.

Staff present: Julie Procopio, Director of Engineering Services; Owen Tunnell, Assistant City Engineer, Ali Shahzad, Associate Engineer/Traffic Division; Miriam Jim, Associate Engineer, Virpi Kuukka-Ruotsalainen, Engineering II, Christopher Leso, Traffic Sergeant, and Kimberlianne Miller, Minutes Clerk

ORAL COMMUNICATIONS:

None

CONSENT ITEMS: None

ACTION:

MINUTES:

Moved by Vice Chair McManus, seconded by Commissioner Durney, to approve the minutes of the October meeting. Motion carried unanimously.

NEW BUSINESS:

1. Traffic Signal Permitted Protected Left Turn Phasing (PPLT)

Ali Shahzad provided an overview of the PPLT, PPLT Phasing Criteria and the three (3) Left-turn Phase Ranked Intersections. PPLT phasing Pilot project is recommended for Metcalf/Mission Ave. Signal modification on new signal projects to be prioritized before decision to proceeding with Pilot.

Action: Motion to approve staff recommendation by Chair McManus, seconded by Commissioner Durney, Commissioner Korbecki opposed motion to approve. Item approved 4 ayes and Korbecki voting No.

2. Audible Pedestrian Signal (APS) Ranking Criteria for Policy:

Ms. Kuukka-Ruotsalainen last presented the prioritization in January 2019. Eight locations have been installed, with three remaining.

Action: Motion to approve staff member recommendation by Commissioner Thornburg, seconded by Commissioner McManus to approve. Motion carried unanimously.

3. Creek Trail Crossing (Rose and Midway):

Ms. Kuukka-Ruotsalainen presented crosswalk treatments for seven Creek Trail Crossings. \$1.6M in ATP funding. Pedestrian signal warranted on Midway Drive.

Action: Motion to approve staff member recommendation by Commissioner Durney, seconded by Commissioner Kassebaum. Motion carried unanimously.

School Area Safety:

Central Elementary School, Farr Elementary, Rose, and Oak Hill. Looking to improve and add to future TMPL projects.

COUNCIL ACTION: None.

ORAL COMMUNICATIONS: None

OLD BUSINESS:

1. An overview of various projects involving the City
 - a. Traffic Signals in Design: Contract awarded new signal at Valley Parkway/Date El Norte/Fig (25 weeks for poles). Felicita/Escondido signal modification is grant funded.
 - b. Traffic Signals: El Norte Bike path signal contract awarded. Under construction: La Terraza Hotel, CCP/Mission, Escondido Blvd/Lincoln, Broadway/Lincoln and Fig/Lincoln signal modification, Encino/17th, East Valley Parkway/Lake Wohlford complete.

TRANSPORTATION COMMISSIONERS:

Korbecki requested information regarding potential future improvements on Bear Valley Parkway/ East Valley Parkway corridor from Valley Center to I-15. Shahzad explained widening of East Valley Parkway to three lanes in each direction, coordinating signal timing on East Valley Parkway. Bear Valley Parkway was coordinated three years ago from East Valley Parkway to the Westfield Mall. Awaiting Caltrans implementation of signal timing at Via Rancho Parkway. County improved a portion of Bear Valley Parkway recently. The section at Las Palmas lies within the County.

Korbecki asked about the Vision Zero program. The City was recently awarded a grant for \$72k to evaluate highest priority safety areas. Each year evaluate bicycle and pedestrian accidents. Review every report to see if there are countermeasures, we can install.

Korbecki suggested education prior to implementing PPLT phasing.

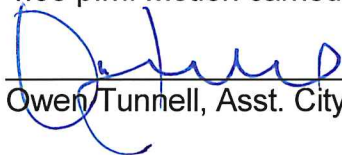
Chris Leso, OTS has a media person that works with the Police Department that works with the City of San Diego. Approach to be proactive to reduce accidents. Education on how to reduce accidents.

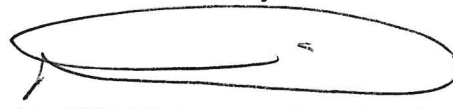
Thornburg asked about possibly restriping of Via Rancho Parkway to allow the middle or right lanes to feed into the southbound. This area lies within Caltrans right of way.

Thornburg stated a preference of continental style high visibility crosswalks. The City standard is the ladder style.

ADJOURNMENT:

Motion by Commissioner Durney, Seconded Chair McManus to adjourn the meeting at 4:08 p.m. Motion carried unanimously.


Owen Tunnell, Asst. City Engineer


Kim Miller, Minutes Clerk

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

July 9th, 2020

The regular meeting of the Escondido Transportation and Community Safety Commission was called to order at 3:00 p.m., Thursday, by Chair Spoonemore, in the City Council Chambers, 201 North Broadway, Escondido, California.

Commissioners present: Chair Spoonemore in person; via video: Commissioner Kassebaum, Commissioner Durney, and Commissioner Hatley

Commissioners absent: Commissioner Korbecki, Commissioner Phillips, Commissioner Thornburgh, and Traffic Sergeant Leso

Staff present: Julie Procopio, Director of Engineering Services; Owen Tunnell, Assistant City Engineer; Virpi Kuukka-Ruotsalainen, Associate Engineer; Craig Williams, Associate Engineer; Amanda Bajhart, Engineer I, Kimberlianne Miller, Minutes Clerk and Jennifer Vasquez, Minutes Clerk via video

ORAL COMMUNICATIONS:

None

CONSENT ITEMS:

None

ACTION:

MINUTES:

Chair Spoonemore stated that the minutes of the January 9th, 2020 meeting will be approved during the October 8th, 2020 meeting as quorum for approval is not met.

NEW BUSINESS:

1. Review and Discuss Implementation of the 2020/2021 Traffic Signal Priority List (TSPL) and the Left Turn Priority List (LTPL)

Craig Williams presented the Traffic Signal Priority List, cost estimates, available funding and Phase I implementation plan for the 13 priority locations. Commissioner Hatley proposed that the installation of Protected Permissive Left Turn phasing at the intersection of Metcalf and Mission Avenue would be considered a lower priority on the priority list, and therefore not be included in the list of intersections moving forward.

Action: Motion to approve staff recommendation with the amendment that the design of the intersection of Metcalf and Mission should not begin until funding will be available. Motion was made by Commissioner Durney, seconded by Commissioner Hatley. Motion carried unanimously.

2. 2020/2021 Traffic Management Project List (TMPL) Preliminary List of Projects

Ms. Kuukka-Ruotsalainen presented the prioritization of five (5) projects citywide. The top three (3) ranking projects were proposed to be selected for design and funding.

Action: Motion to approve staff recommendation by Commissioner Durney, seconded by Commissioner Kassebaum to approve. Motion carried unanimously.

OLD BUSINESS:

1. An overview of various projects involving the City

Source: City Staff

Virpi Kuukka-Ruotsalainen and Craig Williams provided an overview on traffic signals in design, TMPL updates and street widening projects and completed projects.

SCHOOL AREA SAFETY:

Virpi Kuukka-Ruotsalainen provided information related to school area safety activities at Del Dios Academy, Juniper Elementary and Del Lago Academy.

COUNCIL ACTION:

None.

ORAL COMMUNICATIONS:

None

TRANSPORTATION COMMISSIONERS:

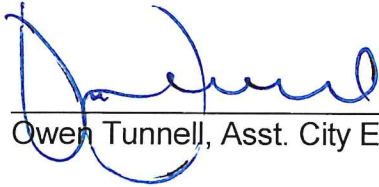
Chair Spoonemore explained that the new Vice-Chair must be appointed in the next meeting.

Commissioner Kassebaum asked staff to evaluate the safety and traffic signal timing at the intersection of Juniper St and 5th Avenue. Commissioner Hatley asked if any

improvements are planned for the intersection of Mission and Fig. Staff will report back.

ADJOURNMENT:

Motion by Commissioner Durney, Seconded Kassebaum to adjourn the meeting at 4:15 p.m. Motion carried unanimously.



Owen Tunnell, Asst. City Engineer



Jennifer Vasquez, Minutes Clerk



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: October 8th, 2020

Item No.: F1

Location: Citywide

Initiated By: Staff

Request: Final Review and Approval of City of Escondido 2020/21 Traffic Management Project List (TMPL)

Background:

At its January 9, 2014 meeting, the Transportation and Community Safety Commission (TCSC) adopted a policy to evaluate and prioritize traffic safety improvement projects using a Traffic Management Project List (TMPL). A scoring criteria for prioritization of the projects was presented to and approved by TCSC on April 9, 2014. High priority projects are selected by TCSC each year. Detailed design and cost information for selected projects has been provided.

City of Escondido 2020/21 Traffic Management Project List (TMPL) and the projects preliminary prioritization based on approved scoring criteria were presented to TCSC at the July 9th, 2020 meeting. Three projects were selected for detailed design and possible funding in the 2020/21 funding cycle.

Discussion & Purpose:

The following three projects were selected by TCSC at their July 2020 meeting for final design and approval.

1. Crosswalk Improvements at Maple Street and 4th Avenue (Central Elementary School) (estimated cost: \$30,000)

The crosswalk at the intersection of Maple Street and 4th Avenue at Central Elementary School frontage has been recommended by Escondido Union School District (EUSD) to be included on this year's TMPL due to the high volume of students utilizing this crosswalk and the amount of school traffic on Maple Street. This centrally located school (122 W 4th Avenue) has approximately 600 students and 90 staff. EUSD data shows that most students live within walking distance from the school. Pedestrian counts provided by COMPACT reflect that 30 to 50 students cross Maple Street on the north side of the intersection, and 40 to 60 students cross Maple Street on the south side during school pick-up and drop-off.

The intersection of Maple Street and 4th Avenue is a three-legged intersection with stop control on 4th Avenue. Yellow crosswalks (two parallel stripes type) were in place at all three legs of the intersection. The two crosswalks on Maple Street are uncontrolled. School staff assist students crossing the southern crosswalk on Maple Street during school pick-up and drop-off. Figure 1 depicts the location of the existing crosswalks at the intersection of Maple Street and 4th Avenue and Figure 2 shows the existing crosswalks on Maple Street at 4th Avenue.

Maple Street is a two-lane roadway without two-way-left-turn lane. On-street parking is allowed. Concrete sidewalk is provided on both sides of the roadway. The average daily traffic on Maple Street between 3rd Avenue and 5th Avenue is 1,100 vehicles per day and the speed limit is 25 MPH.

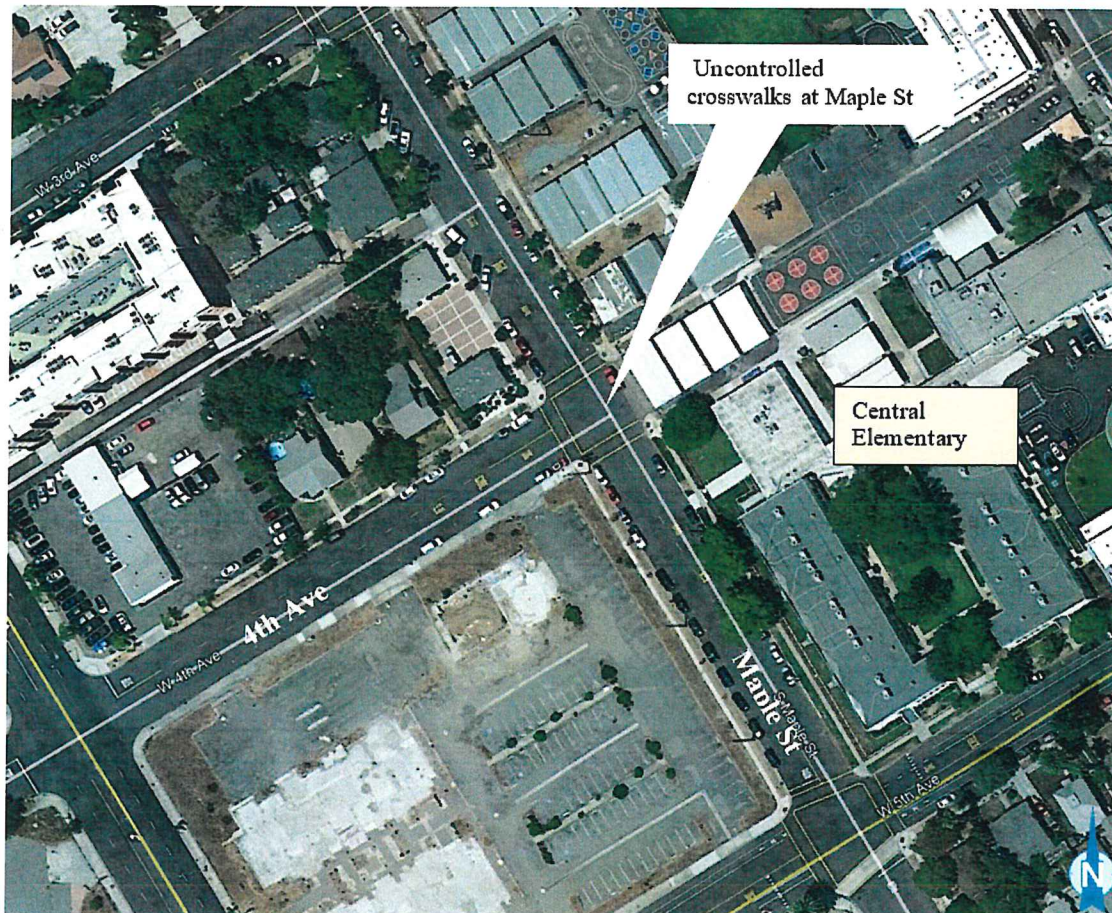


Figure 1: Crosswalks at Maple Street and 4th Avenue



Figure 2: Safety Lighting and crosswalks on Maple Street at 4th Avenue

Recommended Improvements

Concerns expressed by EUSD, and COMPACT include perceived speeding on Maple Street, cars not yielding to students crossing the street, and parents double-parking along Maple Street during pick-up and drop-off blocking traffic flow and visibility of crosswalks. Staff then conducted evaluations and concluded that pedestrian safety at this location can be improved by ensuring that drivers are aware of the crossing students.

Analysis shows that both the Basic Warrants and the Points Warrants required by City's Crosswalk Policy are met. After this, the most appropriate crossing treatment for this location was selected based on the cross section and the Average Daily Traffic (ADT).

The preliminary analysis recommended the installation of RRFB for the crosswalk as the Average Daily Traffic is expected to exceed 1,500 vehicles per day on Maple Street. ADT was to be confirmed with traffic counts at the beginning of the 2020/21 school year. However, due to Covid-19 school closures since March 2020, Staff has not been able to conduct counts that would reflect the Average Daily Traffic under normal conditions. The latest traffic count (2016) shows the ADT of 1,100 vehicles. Since these counts were taken, area's development and the standard annual traffic increases are anticipated to have increased traffic volumes to 1,500 absent Covid-19 impacts. In addition, future increases in traffic volume are likely once additional new developments are constructed.

Based on field evaluations, EUSD and COMPACT feedback and existing traffic data and roadway classification following treatments are recommended:

- Removal of the northern crosswalk

- Installation of High-visibility crosswalk for southern crossing
- Installation of solar-powered RRFB for southern crossing
- Installation of new yield-lines and Yield Here to Pedestrians (R1-5, R1-5a) signs placed 20 to 50 feet in advance of the crosswalk crossing signage

The recommended improvements are shown in Figure 3. The estimated cost of the project is \$30,000.



Figure 3: Recommended Crosswalk Improvements at S Maple St and W 4th Avenue

2. Crosswalk Improvements at Rose Street and Oak Hill Drive Intersection (Oak Hill Elementary School) (estimated cost: \$10,000)

Pedestrian safety improvements at the intersection of Rose Street and Oak Hill Drive have been recommended by COMPACT to be included in this year's TMPL. Rose Street and Oak Hill Drive is an All-Way-Stop controlled intersection located about 1,600 feet west of Oak Hill Elementary School. Figure 4 shows the location of the intersection.

Oak Hill Elementary School with a student population of 720 is located at 1820 Oak Hill Drive. According to COMPACT staff, students and parents walking to school and crossing at this intersection have voiced traffic safety concerns; these include no striped crosswalks at the intersection and cars failing to stop for pedestrians crossing the street.

Rose Street is a two-lane local collector roadway without a two-way-left-turn lane. On-street parking is allowed on both sides of the street. Roadway speed limit for Rose Street is 30 MPH and the average daily traffic volume is 5,100 Vehicles per day. Oak Hill Drive is a two-lane local collector roadway with a two-way-left-turn lane provided west of Rose Street. On-street parking is allowed on both sides of Oak Hill Drive which has a posted speed limit of 35 MPH and an average daily traffic volume of 5,200 vehicles per day. Currently there is no crosswalk striping, designating an area for pedestrians to cross the street.

Proposed Improvements

Proposed improvements include

- Installing yellow crosswalks (two parallel bars type for controlled crosswalk) at all four legs of the intersection
- Installing new stop-bars 4 feet from crosswalk, refreshing Stop-pavement legends on all approaches
- Refreshing all striping 50 feet from intersection
- Eliminating parking 25 feet prior to crosswalk to improve visibility of the Stop-signs and crosswalk, trimming vegetation obstructing signage
- Increasing the size of the existing STOP signs from 30 inches to 36 inches to increase drivers' awareness and adding "All Way" plaques below Stop-signs for all legs
- Installing Stop-Ahead signage for Northbound approach, refreshing EB signage (other approaches have signage in place)
- Install School Advanced Crossing Assembly signage for all approaches

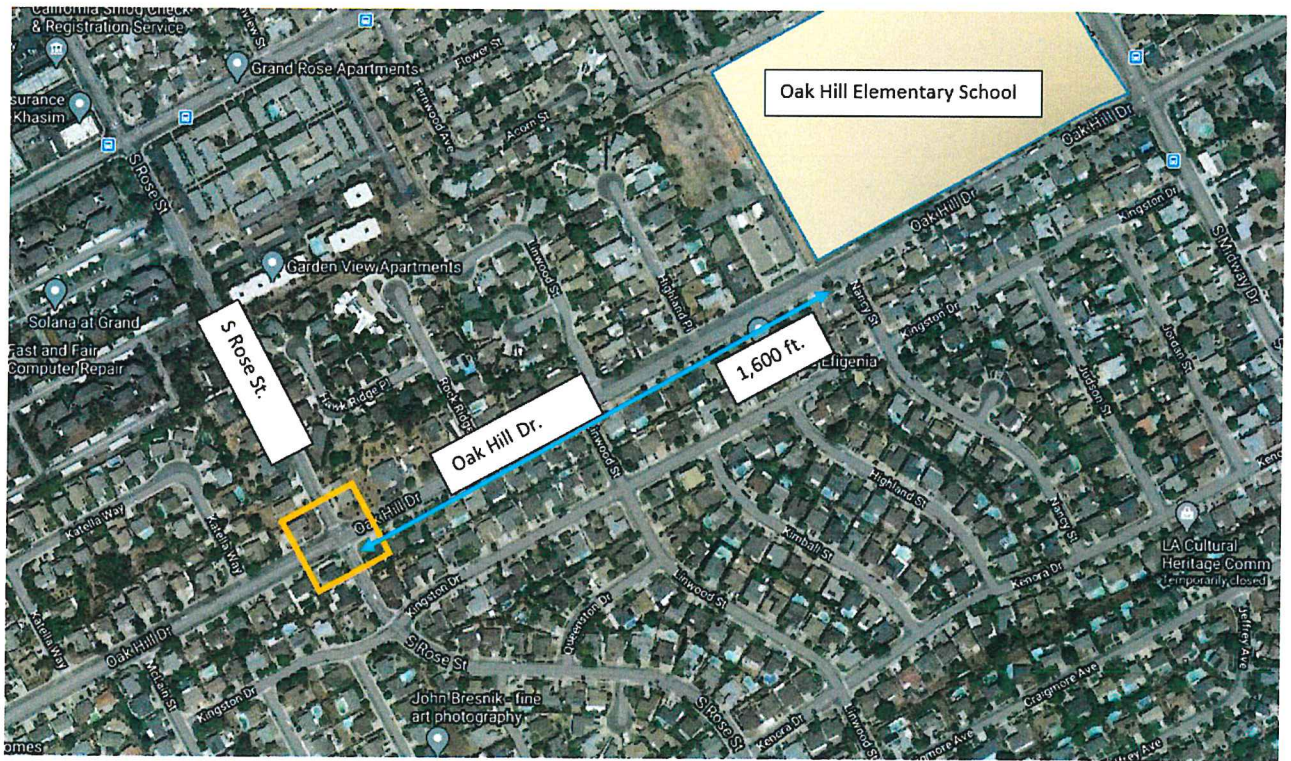


Figure 4: Intersection of Rose Street and Oak Hill Drive is located 1,600 feet from Oak Hill Elementary School.

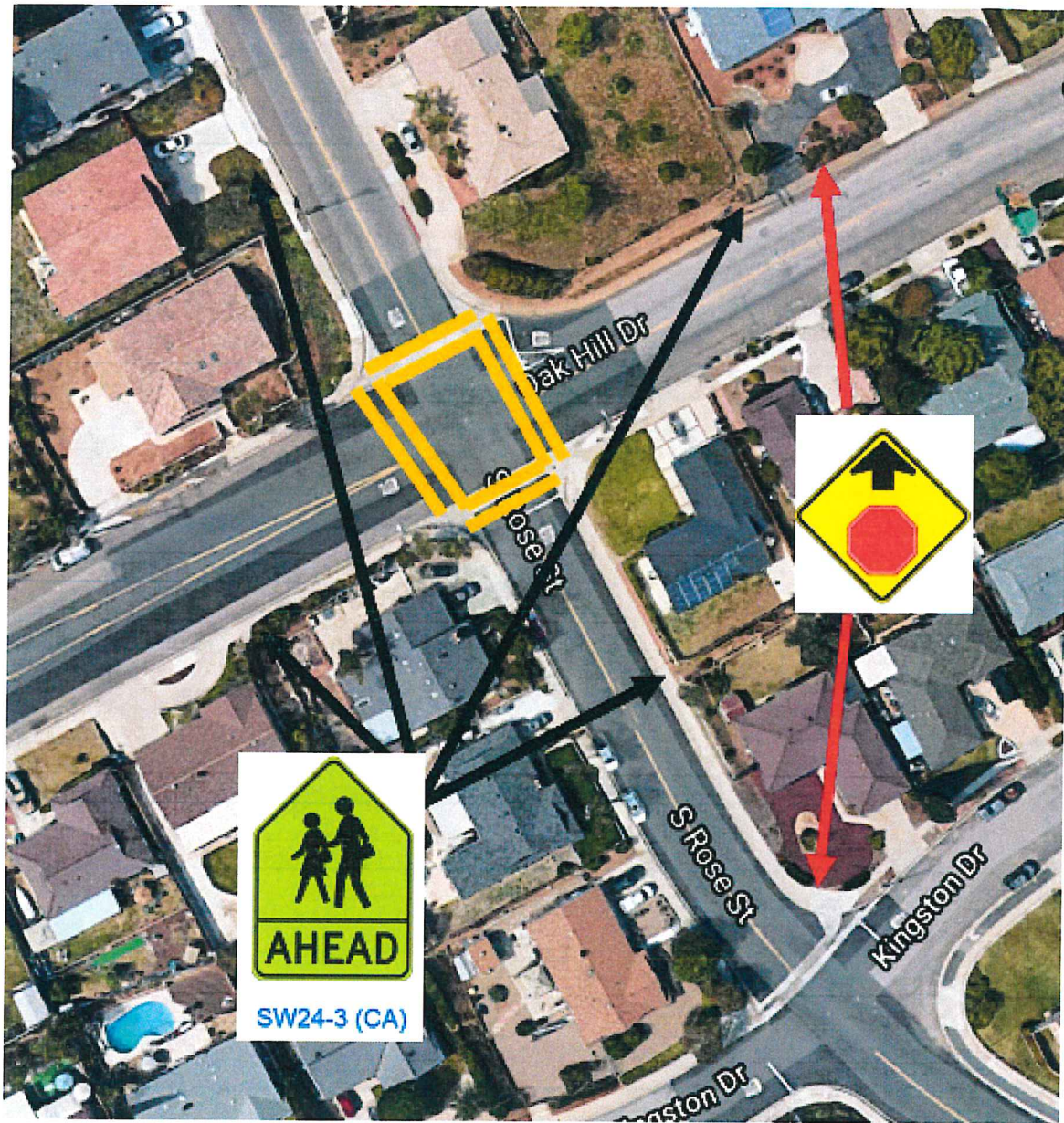


Figure 5: Proposed Improvements at Rose Street and Oak Hill Drive Intersection



Figure 6: Existing Stop-sign may be difficult to see due to horizontal curve. New Stop-ahead signage will alert northbound drivers.



Figure 7: Some parking will be eliminated to improve view of Stop-sign and the new crosswalk. Size of Stop-sign will be increased to 36 inches.

3. Countdown Pedestrian Indications in School Zones (estimated cost: \$10,000)

COMPACT has provided the recommendation on the top four signalized intersections for upgrades based on the amount of students crossing at the location and its proximity to existing schools. The total number of new pedestrian countdown timers required would be thirty (30) units. The estimated cost for the project is \$10,000.

- 1) El Norte Parkway and North Ash Street (Conway Elementary School) (8 units)
- 2) Bear Valley Parkway and Oak Hill Road (Oak Hill Elementary School and Orange Glen High School) (8 units)
- 3) N. Broadway and Country Club Road/Rincon Avenue (N. Broadway Elementary School) (8 units)
- 4) N. Broadway and Reidy Creek School (Reidy Creek Elementary School) (6 units)

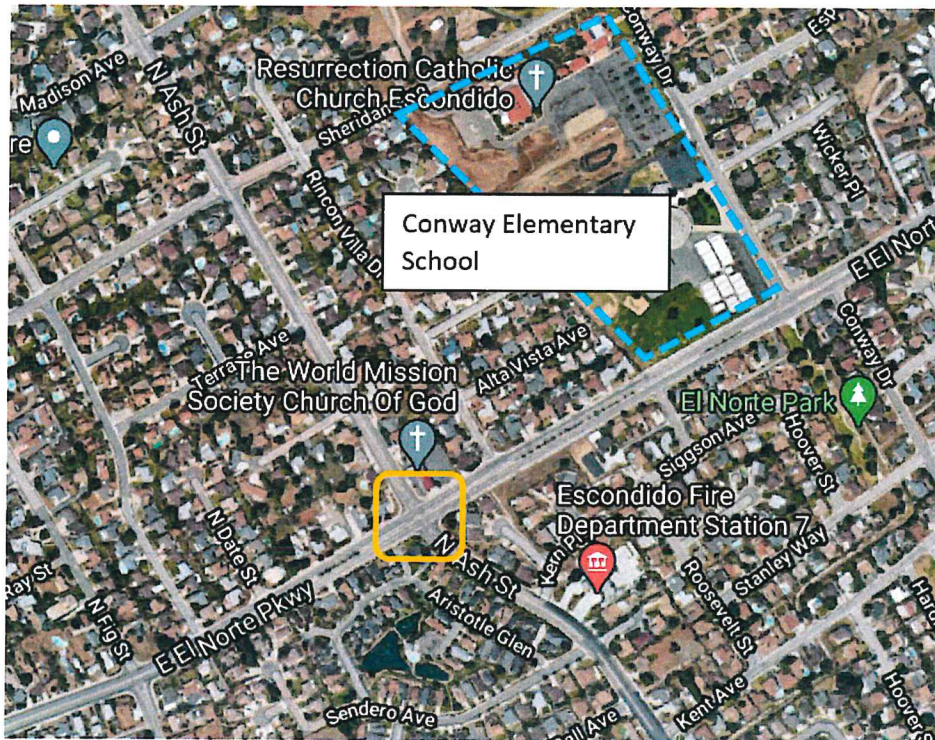


Figure 8: El Norte Parkway and North Ash Street

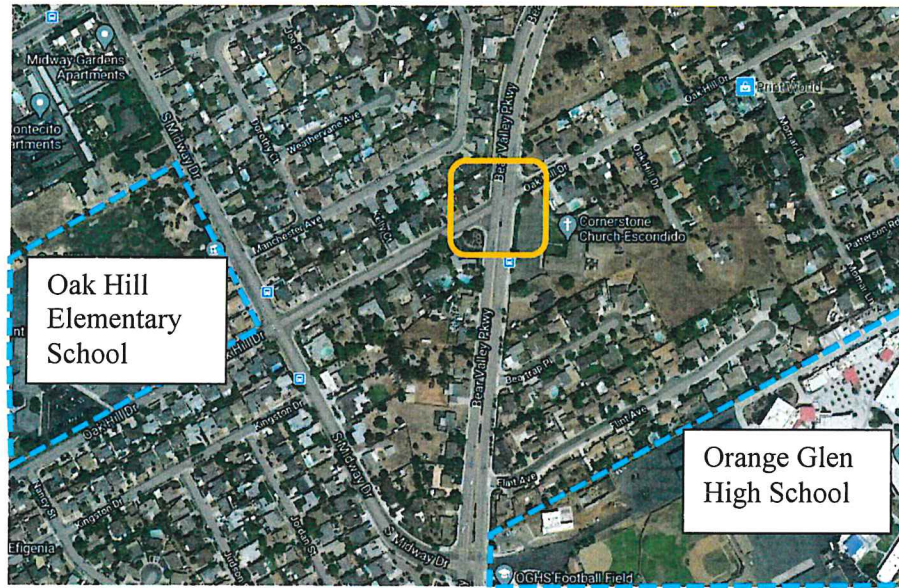


Figure 9: Bear Valley Parkway and Oak Hill Road

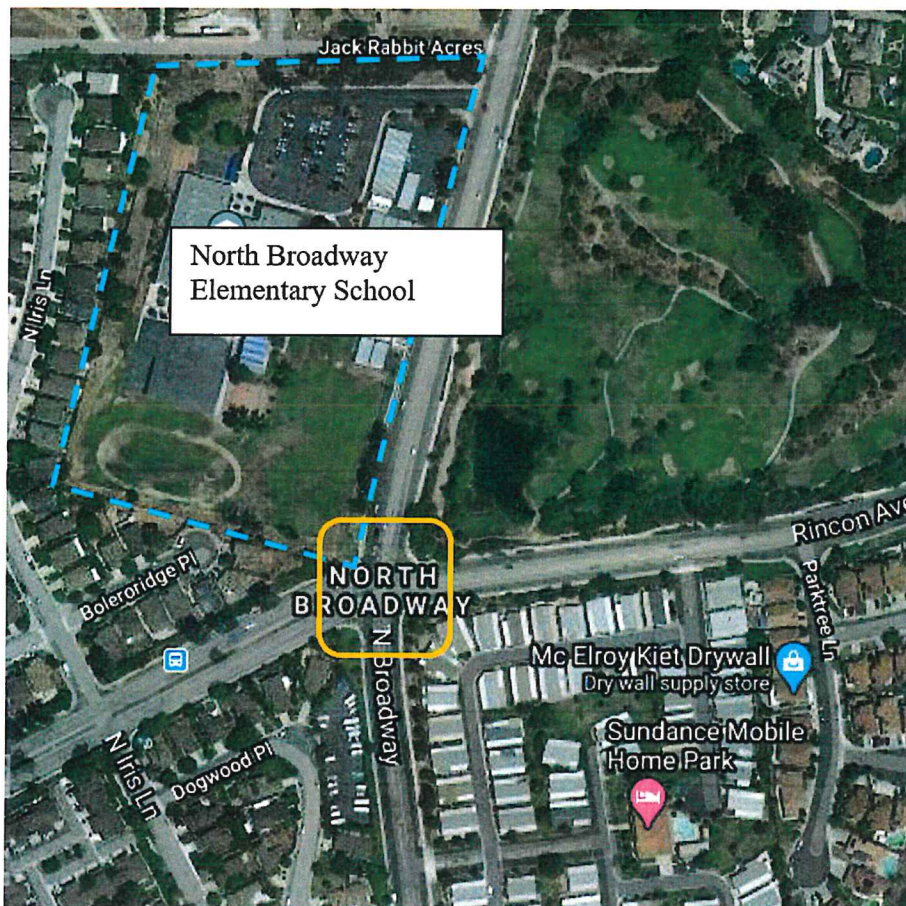


Figure 10: N. Broadway and Country Club Road/Rincon Avenue

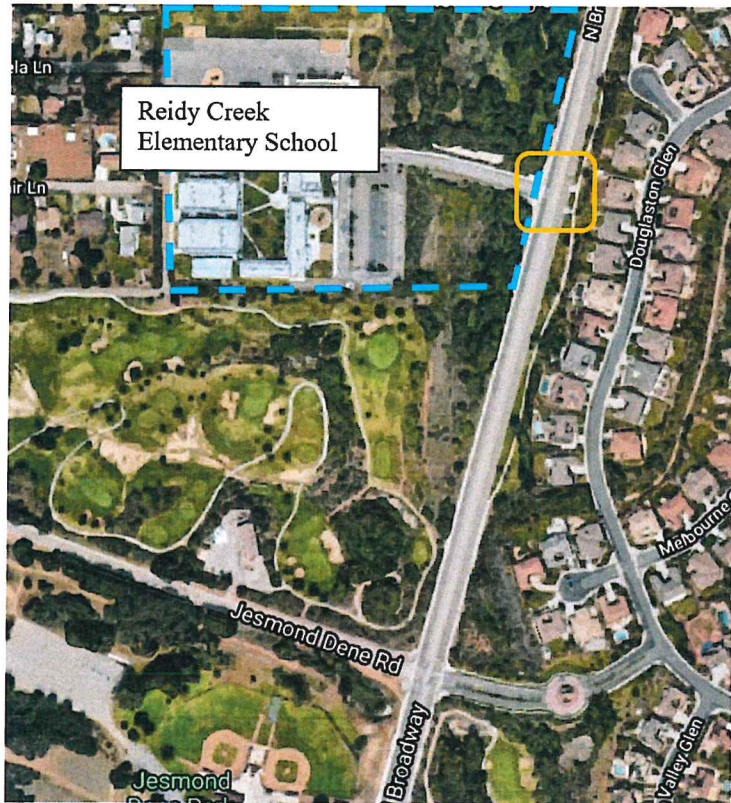


Figure 11: N. Broadway and Reidy Creek School

TMPL Prioritization:

At July 9th, 2020 TCSC meeting five projects were evaluated and scored using the point-based scoring criteria. The TCSC selected three top ranked projects for implementation considering an estimated \$50,000 budget.

Recommendation: Staff recommends intersection improvements at Rose Street at Oak Hill Drive and Maple Street at 4th Avenue as well as countdown pedestrian indicators at four intersections.

Necessary Council Action: None.

Respectfully submitted,

Prepared by:

Virpi Kuukka-Ruotsalainen
Associate Engineer

Reviewed by:

Owen Tunnell, PE
Assistant City Engineer

Approved by:

Julie Procopio, PE
Director of Engineering Services/City Engineer

Attachment 1: City's Crosswalk Policy – Treatments (1 of 2)

3. Treatments

If a 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.

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. + RRFB**	Std. + RRFB** + one from (A)	D
Two-lane roads (with TWLTL)	Std. one measure from (B)	For SL < 35 Std. + RRFB** For SL ≥ 35 Std. + RRFB** + one measure from (B)	Std. + RRFB** + one measure from (B)	D
Four Lanes or more	N/A	Std. + RRFB** + one measure from (C)	For SL < 35 Std. + RRFB** + one measure from (C) For SL ≥ 35 Measure D	Signal or HAWK

* SL: Speed Limit of the roadway

** RRFB (Rectangular Rapid Flashing Beacons), or other approved flashing beacon.

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. All Signing and Striping shall comply with CA-MUTCD standards.

MEASURES:

(A)

1. Raised Crosswalk or other traffic calming treatment in accordance with C.O.E. TMPL Guidelines
2. Speed Radar Feedback Signs for both approaches

(B)

1. Raised Crosswalk
2. Speed Radar Feedback Signs for both approaches
3. Pedestrian refuge islands

(C)

1. Road Diet
2. Raised Crosswalk
3. Speed Radar Feedback Signs for both approaches
4. Pedestrian refuge islands
5. Road Diet

Attachment 1: City's Crosswalk Policy – Treatments (2 of 2)

- (D)** 1. 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.
2. HAWK Hybrid Beacon if the CA MUTCD warrants are met.
3. Horizontal deflection traffic Calming treatment (**) with RRFBs if the City of Escondido's Traffic Calming Guidelines are met to include:

- a. Pedestrian refuge islands & Bulbouts
- b. Road Diet
- c. Roundabouts

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



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: October 8th, 2020

Item No.: F2

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 2018 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 2014 California Manual on Uniform Traffic Control Devices (CA-MUTCD) Revision 5 dated March 27, 2020,

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, Revision 5 dated March 27, 2020,

“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).

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 Revision 5 dated March 27, 2020, 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 11 segment locations, with data being collected for each segment. Staff recommends approval of the speed limit per Table 1 below.

Based on the above guidelines, all of the surveyed segments were evaluated. 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 surveys 2, 3, 6, 7, 10 and 11 the recommended speed limit is set based on the 85th-percentile speed of the new speed survey. The posted speed limit will remain unchanged for survey 2, 3, 6, 7, 10 and 11.
- For speed survey 1, 4, 5, 8, and 9, 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, the posted speed limit will remain unchanged for survey 1, 4, 5, 8, and 9:

Table 1 - Overview of Speed Surveys

Segment No.	Street Name	Segment		Previous Speed Survey	Posted Speed Limit (MPH)	Classification	85 th Percentile (MPH)	Rounded speed Limit (MPH)	Speed Limit to be posted, per Traffic Engineer
	Zone	From	To			Design Speed			
1	Ash 2	City Limit (Hubbard Ave)	El Norte	03/22/16	35	C	42	40	35**
2	Conway Dr 1	Rincon	Cleveland	05/23/12	35	LC	34	35	35
3	Del Lago Blvd 1	Via Rancho	I-15 bridge Abutment	06/26/12	40	LC	38	40	40
4	Encino 1	Seventeenth	Idaho	05/30/13	35	LC	38	40	35**
5	Encino 2	Bear Valley	Seventeenth	05/29/13	35	LC	40	40	35**
6	Escondido 3	Washington	Grand	11/07/13	35	C	35	35	35
7	Escondido 4	Grand	Fifth	11/07/13	35	C	35	35	35
8	Fig 1	Sheridan	El Norte	11/05/13	25	LC	32	30	25**
9	Juniper 4	Fifth	Ninth	09/05/13	35	C	38	40	35**
10	Juniper 5	Ninth	Chestnut	09/05/13	35	C	37	35	35
11	Reed Road 1	Citrus Avenue	End	08/30/13	40 25(WC AP)	C	42	40	40 25(WCAP)

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

Respectfully submitted,

Prepared by:

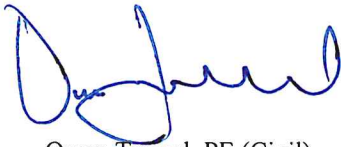


Amanda Bajhart, EIT
Engineer I/Traffic Division



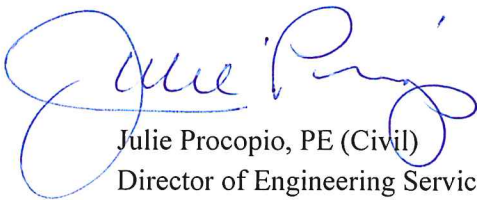
Virpi Kuukka-Ruotsalainen
Associate Engineer/Traffic Division

Reviewed by:



Owen Tunnel, PE (Civil)
Assistant City Engineer

Approved by:



Julie Procopio, PE (Civil)
Director of Engineering Services/City Engineer



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: October 8thth, 2020

Item No.: F3

Location: Citywide

Initiated By: Staff

Request: Notice of Award and Intent to Seek Consultant Assistance with Local Roadway Safety Plan

Background:

Last December 2019, the City was notified that they were selected to receive grant funds from the Caltrans Highway Safety Improvement Program (HSIP) to prepare a Local Roadway Safety Plan (LRSP).

The LRSP Program is an effort supported and funded by Caltrans, as part of the state-wide Strategic Highway Safety Plan. The program uses a consistent approach to examine accident history and apply known countermeasures to address identified deficiencies city-wide. The process of preparing an LRSP creates a framework to systematically identify and analyze safety problems and recommend safety improvements. The process results in a prioritized list of improvements and actions that can demonstrate a defined need and contribute to the statewide plan.

Importantly, the effort provides a data-driven traffic safety plan that places a city in a better position to apply for and receive Highway Safety Improvement Program (HSIP) funds. Caltrans is requiring all agencies to have a Local Roadway Safety Plan in order to be eligible for Highway Safety Improvement Program funds during the next grant cycle, anticipated in 2022.

Discussion & Purpose:

The City has recently issued a Request for Proposals from qualified consulting firms for the development of the City's Local Roadway Safety Plan. The Plan will be customized for improving traffic safety within the City of Escondido, using measures under the various E's: Engineering, Education, Encouragement, Enforcement, Emerging technologies, and Evaluation.

The consultant will utilize the latest 5-year collision data, along with associated analysis, and identify priority safety corridors and intersections (a minimum of top 30 intersections) that experience the highest number of fatality and severe injury collisions, as well as overall numbers of collisions. The locations and data supporting their selection will be identified and discussed with Traffic Engineering and Police Department staff for evaluation and input.

Greater depth of issues identification and countermeasures will be conducted by the Consultant for the priority safety intersections and roadway segments that experience high crash volumes, high crash severity, high numbers of vulnerable user crashes, and location characteristic variety. The Consultant will then identify countermeasures that are applicable citywide under the various E's. Particular attention will be paid to collisions involving vulnerable road users including pedestrians, cyclists, seniors, disabled persons, school age children, etc.

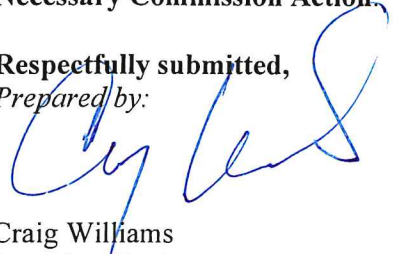
This project has an anticipated duration of six to eight months. We anticipate presenting a draft version of the plan to TCSC in July, 2021.

Recommendation: Information item only.

Necessary Commission Action: None.

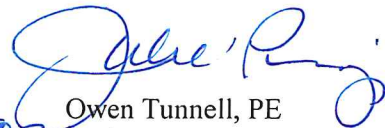
Respectfully submitted,

Prepared by:



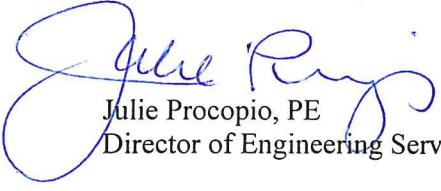
Craig Williams
Associate Engineer

Reviewed by:



Owen Tunnell, PE
FOR Assistant City Engineer

Approved by:



Julie Procopio, PE
Director of Engineering Services/City Engineer