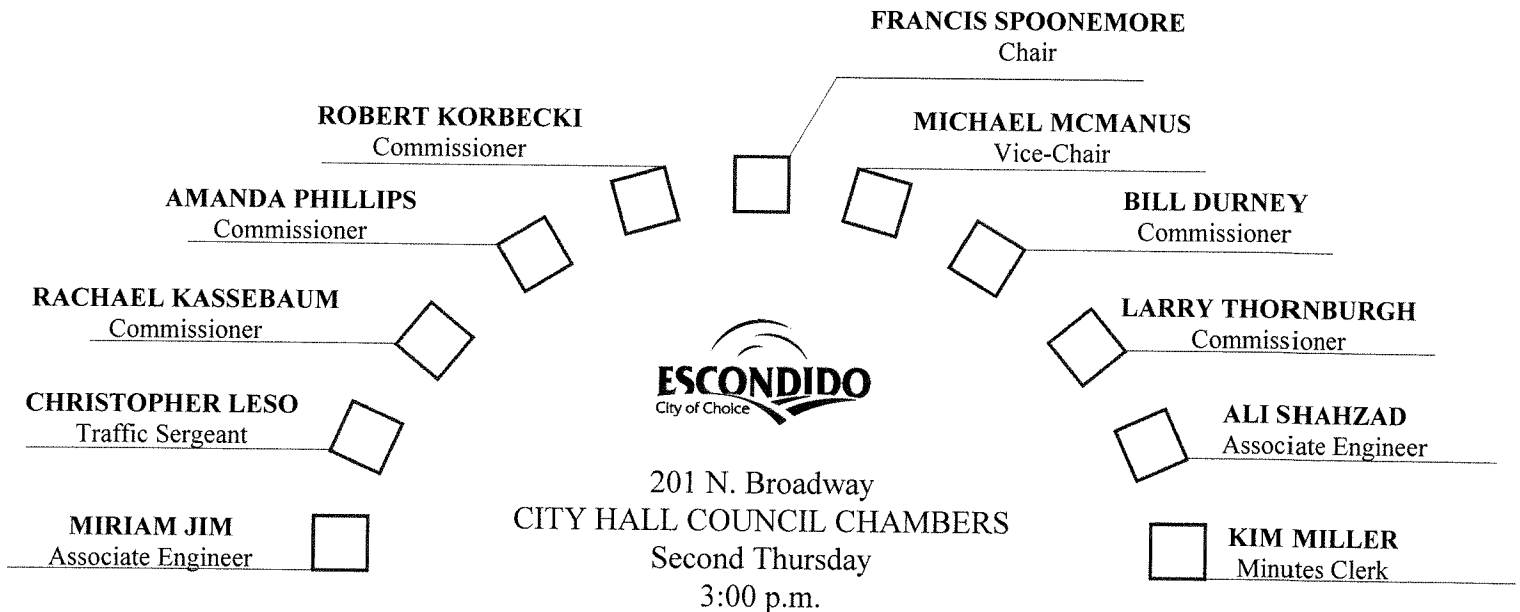


CITY OF ESCONDIDO

Transportation & Community Safety Commission



AGENDA

January 10th, 2019

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- 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 APRIL 12th, 2018 MEETING

E. CONSENT ITEMS – None.

F. NEW BUSINESS

1. Audible Pedestrian Signal (APS) Ranking Criteria for Policy

Source: Staff

Recommendation: Approval

Previous action: None.

2. Speed Surveys.

Source: Staff

Recommendation: Approval

Previous action: None

3. Completion of the Escondido Creek Bikeway Missing Link Project

Source: Staff

Recommendation: Note & File

Previous action: Bicycle Masterplan amendment approval

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: El Norte/Fig & East Valley Pkwy/Date – Project Bid Awarded, preliminary Notice to proceed to contractor issued for Traffic Signal hardware procurement. Felicita/Escondido Blvd LTP signal modification – Design in progress, awaiting ATP Fund Authorization.
- b. Traffic Signals – recently approved: El Norte/Bike Path crossing near bridge over flood control channel (95% plancheck in progress). Under Construction: Hotel Traffic Signal on La Terraza Blvd. Completed construction: Centre City/Mission. Escondido Blvd./Lincoln Ave., Broadway/Lincoln Ave. Modification: Fig/Lincoln Pkwy. Emmanuel Faith Traffic Signal on Encino/17th Ave.; and Lake Wohlford/East Valley Pkwy. and, Beven/East Valley Pkwy. (Mod.) with the road widening on East Valley Pkwy/Valley Center Rd.

H. SCHOOL AREA SAFETY

- a. Bond Projects coordination discussed at Quarterly School Zone meeting.

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

July 12, 2018

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 Mitchell Room, 201 North Broadway, Escondido, California.

Commissioners present: Vice Chair McManus, Commissioner Thornburgh, Commissioner Durney, Commissioner Korbecki.

Commissioners absent: Commissioner Kassebaum, Commissioner Simonson.

Staff present: Julie Procopio, Director of Engineering Services; Owen Tunnell, Assist. City Engineer, Ali Shahzad, Associate Engineer/Traffic Division; Miriam Jim, Associate Engineer, Chris Leso, Traffic Sergeant; and Kimberlianne Miller, Minutes Clerk

ORAL COMMUNICATIONS: Mr. John King. Barricade at 900 S. Ontario and West 9th Avenue. Mr. King expressed his opinion that the temporary barricade should be removed.

ACTION: Commissioner Durney requested staff to determine if barricade was built to be temporary or permanent. Staff to provide update at the next meeting.

MINUTES:

Moved by Commissioner McManus, seconded by Commissioner Durney, to approve the minutes of the April 12, 2018, meeting. Motion carried unanimously.

CONSENT ITEMS: FY18/19 Pavement Rehab and Maintenance Project - Striping cross-sections. (9 segments).

Commissioner Korbecki asked about bike buffer options and the latest Bicycle Master Plan. Miriam Jim, Associate Engineer, confirmed the bike buffer design and the 2012 Bicycle Master Plan is the latest.

ACTION:

The 1st and 2nd motions to approve by Commissioners were unanimously carried out, to approve the consent items. Motion carried unanimously.

NEW BUSINESS:

1. 2018/19 Traffic Management Projects List (TMPL)

Ms. Jim referenced the staff report and noted staff recommended the Commission approve the City of Escondido 2018 Traffic Management Projects List (TMPL).

Top two (2) projects were selected for funding and design: Glenview Elementary School Mid-block Crosswalk Improvements and Countdown Pedestrian Signals at four Intersections in School Zones. Design will be completed in Fall 2018. Implementation of the project will depend on funding availability after November 2018 election.

Mission Middle School crosswalk, traffic signal would be required per City Crosswalk Policy. Cost will exceed TMPL budget. City to coordinate with EUSD on the current campus modernization project and to determine potential funding source.

Commissioner Durney motioned to set aside \$20,000 in funding towards a pedestrian signal at Mission Middle School if district can fund the rest.

Commissioner Thornburgh asked if a pedestrian refuge can be used with a RRFB (Rectangular Rapid Flashing Beacons). Ms. Jim explained that policy requires analysis for a signal.

ACTION:

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

2. Before and After Travel Time report for signal timing synchronization – 2 corridors. West Valley Parkway and Bear Valley Parkway

Ms. Jim referenced the staff report and noted the results of the signal timing project.

Commissioner Thornburgh asked about the striping and signage on Via Rancho Pkwy between I-15 ramps. Ali Shahzad, Associate Engineer, responded restriping on Via Rancho Parkway is planned with pavement rehabilitation project this year and staff will evaluate any revisions to striping and signage.

Commissioner Korbecki asked if the two traffic signals at I-15/Via Rancho Parkway interchange were included in the project. Ms. Jim indicated that proposed signal timing changes for the two traffic signals were provided to Caltrans and implementation pending on Caltrans' review and approval.

Report received and filed.

3. Speed Surveys

ACTION:

The 1st and 2nd motions to approve by Commissioners were unanimously carried out, to approve staff's recommendation to recommend approval to the City Council of the updated Engineering and Traffic Surveys for new posted speeds on various street segments Citywide.

OLD BUSINESS:

1. An overview of various projects involving the City
 - a. Traffic Signals in Design
 - b. Traffic Signals

Report received.

SCHOOL AREA SAFETY:

- a. Escondido High – On-Site circulation in parking lot for Pick-up/Drop-off.
- b. Bond Projects coordination discussion at Quarterly School Zone meeting.
- c. APS ordered for Escondido High signal
- d. Countdown Ped Heads installed at the intersection at six (6) intersections

Report received.

COUNCIL ACTION: None.

ORAL COMMUNICATIONS: Mike Strong: Climate Action Plan Public Workshop will be held July 30th, 2018. Community input is requested.

TRANSPORTATION COMMISSIONERS:

Commissioner Thornburgh pointed out that some other Cities in our region have adopted a continental style pedestrian crosswalk. Our policy uses ladder style crosswalk at mid-block locations. City is using parallel lines at intersections and controlled stops. Commissioner Thornburgh requested for a Pilot project. Mr. Shahzad indicated that presently school district crossing guards like the ladder type as it provides a guided path to stay within the crosswalk, perhaps we would revisit continental style at controlled intersections in the future should they be considered at locations outside the school zone.

Commissioner Korbecki asked staff about the pylons added on City Hall frontage.

Ms. Jim explained that pylons were installed for future Class IV Cycle Track on Broadway and Valley Parkway, which is different from Class II Bike Lane.

Commissioner Thornburgh expressed his concern about east-bound cyclists and west-bound traffic on Valley Parkway and asked if adding more delineators would be beneficial. Ms. Jim explained that in the future, at project completion in November, bike lane will be better delineated. Sergeant Leso pointed out that there is a learning curve with cycle track and parking on Broadway but delineators have helped.

ADJOURNMENT:

Vice Chair McManus adjourned the meeting at 4:00 p.m. The next meeting of the Commission would be held October 11, 2018, at 3:00 p.m. in City Council Chambers, 201 North Broadway, Escondido.



Ali Shahzad, Associate Engineer



Kim Miller, Minutes Clerk



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 10th, 2019

Item No.: F1

Location: Citywide

Initiated By: City Staff

Request: Recommend approval of Ranking Analysis Criteria for adopted Audible Pedestrian Signals (APS) Policy on the use of APS Citywide.

Background:

An Accessible Pedestrian Signal (APS, formerly Audible Pedestrian Signal) is a pedestrian pushbutton at a Traffic Signal that communicates to the pedestrian when to cross the street. The APS provides information in non-visual formats, such as audible tones, speech messages, and/or vibrating surfaces. APS improves pedestrian orientation to their travel direction and provides guidance to pedestrians who are blind or visually impaired when crossing the signalized location.

The City of Escondido Policy on the use of audible (accessible) pedestrian signals was adopted and made part of Traffic Engineering Policies in September, 2005. Initiated by the City's ADA Committee, the policy allows qualified individuals or groups to make a request for an audible signal, and requires the Committee to decide whether the request is appropriate, and whether the ADA Budget will allow for the audible signal to be installed.

Since 2005, Guidelines and evaluation policies for Accessible Pedestrian Signals have been updated. The Federal Highway Administration (FHWA) has published new APS standards in the MUTCD 2009.

In 2012, California Department of Transportation (CALTRANS) "Traffic Operations Policy Directive number 12-01" was adopted. This sets Guidelines for installation of Accessible Pedestrian Signal (APS) Systems at signalized intersections and signalized pedestrian crossings on state highway systems.

This CALTRANS policy was updated with a Memorandum "Installation of accessible pedestrian signals" on September 18, 2014 due to an increase in requests for the installation of Accessible Pedestrian Signals. The Memorandum states that the installation of an APS system is required at all signalized pedestrian crossings. Timing of installation shall be as noted below.

New signalized pedestrian crossings:

1. APS shall be installed and activated at all new signalized pedestrian crossings.

Existing signalized pedestrian crossings:

1. In response to an ADA access request or
2. In conjunction with other electrical work being performed at the intersection (mandatory if 50% or more of the pedestrian signals or pedestrian pushbuttons are being modified) or
3. As funding becomes available for ADA Transition Plan barrier removal projects.

The Memorandum states that installation of APS will not require upgrading of other ADA components (such as curb ramps or sidewalk) unless those components are disturbed.

The current City of Escondido Policy is below:

City of Escondido (Current Policy)
POLICY ON THE USE OF AUDIBLE PEDESTRIAN SIGNALS

- 1.) Audible Pedestrian Signals will only be installed at specific locations requested by blind or vision-impaired individuals, or recognized organizations whose stated purpose is to serve the needs of such individuals.
- 2.) All such requests will be reviewed by City of Escondido staff, generally following the criteria in the California Department of Transportation (Caltrans) "Policy for Accessible Pedestrian Signal Systems," as follows:
 - a) Requests for installation of an audible pedestrian signal system must be submitted by a qualified City resident or business owner that would use the accessible signal.
 - b) The proposed location must be suitable for the installation of an audible signals system, in terms of surrounding land use, traffic patterns, noise level, and neighborhood acceptance.
 - c) An engineering study shall provide a demonstrated need for the audible signal in the form of a request from an individual or group that would use the accessible signal.
 - d) The proposed intersection crossing must be signalized.
 - e) The device should be retrofittable to the existing traffic signal hardware. No external wiring will be allowed.
 - f) The signalized intersection should be equipped with pedestrian push buttons.
- 3.) All such requests will be reviewed by the City of Escondido's ADA Committee. The Committee may choose among three responses; (1.) fund the installation of Accessible Pedestrian Signals from the existing fiscal year's budget; (2.) place the installation of Audible Pedestrian Signals at the requested location on the City's Transition Plan; or (3.) deny the request.
- 4.) The City of Escondido reserves the right to remove any Accessible Pedestrian Signal installed under this policy if it is determined that the factors that originally motivated and justified its installation are no longer present or applicable.

Purpose:

The number of APS requests is increasing. Staff proposed to update the current policy to set forth factors to be used in developing a priority listing of signalized intersection candidates to be retrofitted with audible devices that will provide guidance for the blind community, visually impaired persons and other disabled persons of all ages and abilities.

Policy and Prioritizing Requests

APS shall be installed and activated at all new signalized pedestrian crossings or major signal upgrades.

Installation of the APS system is not required at any signalized intersection or pedestrian crossing that is determined to be not feasible due to the complexity of intersection geometry, uncontrolled vehicular movements, and traffic signal phasing.

Some traffic signals cannot be retrofitted with APS without major costly modifications. Retrofitting of traffic signals with accessible devices shall be subject to approval by the City Engineer.

Retrofitting of existing traffic signals with accessible devices shall be based on factors established herein and that such measurements and computations as may be required in determining priority ranking of candidate locations.

Addition of Ranking Criteria to existing adopted APS policy

In developing ranking criteria staff reviewed policies used by other jurisdictions including City of San Diego and Caltrans. The criteria proposed reflects a combination of factors found.

- 1.) Intersections will be scored using the Prioritization Tool in **Attachment 1** of this report. The preliminary score will be calculated. The relative priority of the requested intersection as compared to other requested intersections is determined.
- 2.) Annually, the Request List will be updated and used to request funding for design and construction of APS. Number of installations may vary annually based on available funds.

Evaluation Procedure and Prioritization Tool

The following basic considerations and evaluation factors shall be utilized to determine whether a location is eligible to be a candidate for the addition of audible signals and to determine its relative position on the priority list. Evaluation and scoring of factors will be conducted by an evaluation team consisting of City of Escondido ADA Coordinator and Traffic Engineering staff.

Basic Considerations

Audible signals normally will be considered for installation only if the following conditions are met:

- Intersection must be signalized.
- Signals must be susceptible to retrofitting.
- Signals should be equipped with pedestrian signal actuations.
- Location must be suitable to installation of audible signals, in terms of surrounding land use,
- Noise level and neighborhood acceptance.
- There must be a demonstrated need for the audible signal device. The need can be demonstrated through a user request by blind or vision-impaired individuals or organization whose stated purpose is to serve the needs of such individuals.

Evaluation Factors

The following factors shall be used to establish a priority listing for potential audible traffic signal candidates. Candidates will be arranged in priority order of those with the highest total points (65 points maximum) on top and then in descending order. Individual factors will be scored 1 to 10, with 1 for the lowest point evaluation, to 10 for the highest. There are 2 evaluation Criteria:

- I. Intersection Characteristics
- II. Pedestrian Usage

I. Intersection Characteristics

- 1. Intersection Configuration:** The number of approaches to an intersection and their geometric configuration (offset, skew, etc.) affect the ability of the blind and visually impaired persons crossing the roadway. In particular, traffic at 3-leg intersections tends not to provide adequate audible clues for the blind to permit them to effectively judge the signal phases.

Configuration Points	Points
4-leg right angle intersection	1
3-leg tee intersection	2
3 or 4-leg skewed intersection	3
4-leg offset intersection	4
Other complex or multiple leg intersections Note: Intersections with 5 or more legs will require special design.	5

2. Crosswalk length:

Wider streets are more difficult for blind travelers to cross. If each leg of the intersection has a different width, points will be assigned on the basis of the widest street on which pedestrians are permitted to cross. Crossing width will be measured at the point pedestrians normally cross the street. Islands and medians will be included in the total crossing distance even if they are equipped with separate pedestrian signal actuators. Blind pedestrians have difficulties interpreting traffic clues at medians and islands. Efforts should be made to permit the blind to cross in one continuous movement. Divided streets with or without a pedestrian signal actuator in the median will be handled as a single crossing, with the width measured across the entire street.

Crosswalk Length	Points
<40 ft	1
40-59 ft	2
60-79 ft	3
80-99 ft	4
100-119 ft	5
>=120 ft	6

3. Vehicle Speed:

The speed of approaching traffic reflects the ability of approaching traffic to stop for a pedestrian clearing the intersection as the lights change. Audible signals help blind pedestrians get a timely start at the beginning of the walk phase, thereby permitting clearing the intersection in a timely manner. Points are assigned on the basis of the **posted speed limit** on the fastest approach leg. More points are assigned on the basis of higher speeds.

Posted Speed (mph)	Points
0-25	1
26-30	2
31-35	3
36-40	4
41 or over	5

4. Intersection safety:

Past pedestrian accidents for 3 years will be studied. Based on reported accident information, points will be given if there are recorded accidents involving a visually impaired pedestrian.

Intersection safety	Points
Pedestrian accident at the intersection	1
Accident involving visually impaired pedestrian	5

5. Traffic Conditions

Traffic volume may impede or assist visually impaired pedestrians. Optimal crossing conditions occur when crossing right angle signalized intersections with a moderate but steady flow of traffic through the intersection on each leg with a minimum of turning movements. Traffic that is either very heavy, or erratic in its flow makes it difficult to pick up audible clues. In such cases, APS can assist in determining when it is possible to safely cross the street. Traffic volume will be separated into different classifications, and points will be given per each classification.

Average Daily Traffic ADT	Points
<1 500 (Low Volume)	1
1 500 - 5 000 (Moderate Volume)	2
5 000 - 12 000 (High Volume)	3
> 12 000 (Very High Volume)	4

Off-peak traffic presence is scored on the basis of the portion of time that at least two vehicles are present at the beginning of a green signal phase in through lanes that are parallel to the path of the pedestrian. Noting the number of signal cycles with two or more through vehicles over 5 to 10 cycles during the off-peak times should be used to score this variable.

Off-Peak Traffic Presence – at least 2 vehicles present on parallel street	Points
Constant, heavy (> 70% of ten cycles)	1
Moderate (50-70% of ten cycles)	2
Light (40-50% of ten cycles)	3
Occasional (<40% of ten cycles)	4
None (i.e., no through lanes present to create surge noise)	5

II. Pedestrian Usage

Blind pedestrians share many characteristics with the sighted population in that they go to public places, business, social, educational and medical facilities. At the same time, they have special needs. For example, they may have a greater reliance on public transportation than sighted persons. Audible signals should be placed to improve mobility of blind persons and make more facilities accessible to them. Proximity of signals to these facilities may assure a greater degree of utilization.

1. **Proximity to facilities for blind or visually impaired:** This includes the Department of Rehabilitation, Social Security offices, Blind Service Center, Blind Recreation Center and other similar blind oriented facilities. Special consideration may be given to senior citizen's complexes or facilities that have one or more blind or visually impaired persons in residence or in regular use. Points are assigned on the basis of distance from proposed audible signal site to subject facility. The closer the two are, the more points are assigned.

Proximity (feet)	Points
>2600 ft	1
2600 ft – 1300 ft	2
1300 ft – 650 ft	3
650 ft – 300 ft	4
<300 ft	5

2. **Proximity to key facilities utilized by all pedestrians (Blind and sighted):** This includes medical, educational, social, recreational, shopping, commercial, business, public and governmental facilities. Points are assigned on the basis of distance from proposed audible signal site to facility in question. In case of multiple facilities, points will be assigned on the basis of the closest facility.

Proximity (feet)	Points
>2600 ft	1
2600 ft – 1300 ft	2
1300 ft – 650 ft	3
650 ft – 300 ft	4
<300 ft	5

3. **Access to public transit:** Because blind and visually impaired persons rely heavily upon public transportation (bus or trolley), special consideration will be given to those proposed audible signal sites that have heavy general use, serve any of the facilities indicated above, or serve as a transfer point and serve 1 or more transit routes within a one-block walking distance. One block = 1/8 mile.

Transit Facilities within a block (1/8 mile) of the intersection - all legs	Points
No transit facilities	0
Single bus route	1
Multiple bus routes	3
Transit mall/rail station	5

4. Distance to Alternative APS Crosswalk location: If there is another signalized crosswalk with APS in close proximity to the intersection being evaluated, the intersection should receive a lower score (lower priority for APS) than a similar intersection where there is no nearby crossing alternative.

Distance to Alternative APS Crosswalk	Points
<300 ft	0
300 - 650 ft	1
650 ft – 1300 ft	2
1300 ft - 2600 ft	3
>2600 ft	4

Request for APS: Audible signals will be considered for installation if there is a demonstrated need for the audible signal device. The need can be demonstrated through a user request by blind or vision-impaired individuals or organization whose stated purpose is to serve the needs of such individuals. If there are several request for the location, higher points should be given.

Request for APS	Points
1	5
2 or more	10

Pedestrian need to Cross: Number of residents using the facility for blind or visually impaired: This includes the Department of Rehabilitation, Social Security offices, Blind Service Center, Blind Recreation Center and other similar blind oriented facilities. Special consideration may be given to senior citizen's complexes. Points are assigned on the basis of number of users at subject facility. Using estimates provided by facility or by the party requesting APS.

The more frequent the usage of the APS, the more points are given.

Need to cross	Points
Occasionally 1 x per week	2
Regularly 3 x per week	4
Daily	6
Daily frequent usage	10

Necessary Council Action:

Recommend approval of Ranking Analysis Criteria for adopted Audible Pedestrian Signals (APS) Policy on the use of APS Citywide.

Respectfully submitted,

Prepared by:



Ali M. Shahzad, PE (Traffic)/ Virpi Kuukka-Ruotsalainen
Associate Engineer/Traffic Division

Reviewed by:



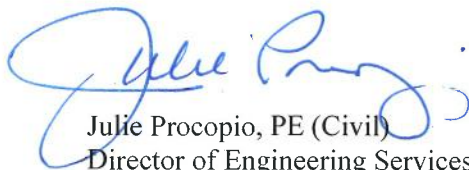
Owen Tunnell, PE (Civil)
Assistant City Engineer

Reviewed by



Jodi Vinson
Risk & Safety Manager, Risk Management

Approved by:



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

Prioritization Tool for Installation of Accessible Pedestrian Signals
Cover Sheet

Location: **City of Escondido**

Evaluator:

Evaluation Date:

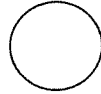
Evaluation Summary	
Enter total crosswalk score or N/A	
Crosswalk A Total Score:	70

For each crosswalk, the total score is the intersection score added to the score from the individual crosswalk worksheet.

Intersection Worksheet

Location: City of Escondido

Sketch: See instructions for information to include. Label crosswalks as A, B, C, D, etc.



Indicate North

Configuration (select one)	Points	Score
4-leg right angle	1	
3-leg T	2	
3 or 4-leg skewed	3	
4-leg offset	4	
Other complex or multiple leg	5	5

Intersection safety 3 years	Points	Score
Pedestrian accident	1	
Visually impaired ped accident	5	5

Transit Facilities within a block (~ 1/8 mile) of the intersection - all legs (select one)	Points	Score
No transit facilities	0	
Single bus route	1	
Multiple bus routes	3	
Transit mall/rail station	5	5

Distance to Facility for Visually Impaired (select one)	Points	Score
> 2600 ft (~1/2 mile)	1	
< 2600 ft (~1/2 mile)	2	
< 1300 ft (~1/4 mile)	3	
< 650 ft (~1/8 mile)	4	
< 300 ft	5	5

Other Intersection Level Issues

Distance to Major Pedestrian Attraction (select one)	Points	Score
> 2600 ft (~1/2 mile)	1	
< 2600 ft (~1/2 mile)	2	
< 1300 ft (~1/4 mile)	3	
< 650 ft (~1/8 mile)	4	
< 300 ft	5	5

*** Select the option with the highest point value that applies to the situation.*

**** The accompanying instructions are essential for accurate completion of this form ****

Intersection Worksheet Score:
(sum of scores on this page)

25

Crosswalk Worksheet (Complete one sheet for each crosswalk)

Location: City of Escondido				Crosswalk Label: A	
Crosswalk Length (select one)		Points	Score	Posted Speed Limit (select one)	
< 40 ft		1		0- 25 mph	
40 - 59 ft		2		26-30	
60 - 79 ft		3		31-35	
80 - 99 ft		4		36-40	
100- 119 ft		5		> 41 mph	
> 120 ft		6	6		
Traffic conditions - ADT (Average Daily Traffic)				Points	Score
<1 500				1	
1 500 - 5 000				2	
5 000 - 12 000				3	
> 12 000				5	5
Need to Cross				Points	Score
Occasionally 1 x per week				2	
Regularly 3 x per week				4	
Daily				6	
Daily frequent usage				10	10
Off-Peak Traffic Presence - at least 2 vehicles present on parallel street				Points	Score
Constant, heavy (>70% of ten cycles)				1	
Moderate (50-70% of ten cycles)				2	
Light (40-50% of ten cycles)				3	
Occasional (<40% of ten cycles)				4	
None (i.e., no through lanes present to create surge noise)				5	5
Distance to Alternative APS Crosswalk (select one)		Points	Score		
< 300 ft		0			
300 - 650 ft (~ 1/8 mile)		1			
650 - 1300 ft (~ 1/4 mile)		2			
1300 - 2600 ft (~ 1/2 mile)		3			
> 2600 ft (~ 1/2 mile)		4	4		
Other Crosswalk Level Issues					
** The accompanying instructions are essential for accurate completion of this form **					

		Points	Score
Requests for APS (required)		Points	Score
1 request		5	
2 or more requests		10	10
Crosswalk Worksheet Score: (score from this page)		45	
Intersection Worksheet Score: (score from intersection form)		25	
Total Crosswalk Score: (add the two above scores)		70	

Supplemental Worksheet

Location: City of Escondido

Supplemental Sketch

Supplemental Notes



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 10th, 2019

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 3 dated March 9, 2018,

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 3 dated March 9, 2018,

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 3, 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 6 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 surveys 1, 3, 4 and 5, the recommended speed limit is set based on the 85th-percentile speed of the new speed survey.
- For speed surveys 2 and 6 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.
- Speed survey 7 shows a correction to July 12, 2018 TCSC Report Item No: F3, Table 1. Table 1 incorrectly showed previous posted speed limit to be 45(25WCAP). Corrected value is 40(25WCAP) with no changes to speed limit and no necessary Council action.

Table 1 - Overview of Speed Surveys

Segment No.	Street Name	Segment		Previous Speed Survey	Posted Speed Limit (MPH)	Classification	85 th Percentile (MPH)	Recommended Speed Limit (MPH)	Speed Limit to be posted, per Traffic Engineer
	Zone	From	To			Design Speed			
1	Morning-view Drive Zone 1***	Lincoln Avenue	El Norte Pkwy	03/22/2016	35	LC 35	36	35	35
2	Jesmond Dene Road Zone 1**	N Broadway	City Limit	11/04/2010	45	C 40	49	50	45
3	Enterprise Street Zone 1	End / Andreason Drive	Harmony Grove Rd	06/14/2012	35	C 40	36	35	35
4	Enterprise Street Zone 2	Auto Pkwy	Mission Rd	05/23/2012	35	C 40	37	35	35
5	Nordahl Rd Zone 1	Mission Rd	S.R 78 ramps	06/14/2012	35	M 50	34	35	35

6	E Valley Pkwy **	El Norte Pkwy	Lake Wohlford	08/20/2008	45 (25WCA P)	P	50	45	45 (25WCAP)
7	Broadway Zone 3 ****	Rincon Avenue	Leslie Ln	04/06/2012	40 (25WCA P)	M 50	42	40	40 (25WCAP)

* Indicates new established 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), or higher than average collision rate.

*** Renewal before Expiration due to changes to the roadway, such as increase or reduction of travel lanes or addition of Bike Lanes / Bike Routes.

**** Correction to July 12, 2018 TCSC Report Item No: F3, Table 1. Table 1 incorrectly showed previous posted speed limit to be 45(25WCAP). Corrected value 40(25WCAP)-> no changes to speed limit, no necessary Council action.

↓ Indicates speed going down.

↑ Indicates speed going up.

Necessary Council Action: None as there are no changes to existing speed limits.

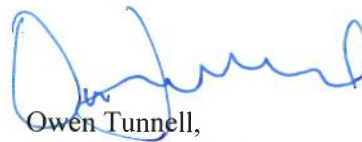
Respectfully submitted,

Prepared by:



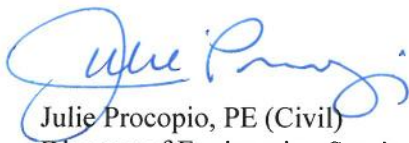
Ali M. Shahzad, PE (Traffic)/ Virpi Kuukka-Ruotsalainen
Associate Engineer/Traffic Division

Reviewed by:



Owen Tunnell,
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: January 10th, 2019

Item No.: F3

Location: Citywide

Initiated By: Staff

Request: Completion of the Escondido Creek Bikeway Missing Link Project

Background:

The Escondido Creek Bikeway Missing Link project was selected by SANDAG to receive a TransNet Active Transportation Program Grant in the amount of \$1,092,000 in March 2015.

On January 13th, 2016, the City Council approved amendment of the 2012 Bicycle Master Plan to include Class IV Bikeway Cycle Track as part of the Escondido Creek Bikeway Missing Link project.

The design of the project began in 2016 and was completed in late 2017. The project was put out to bid in December 2017. The City Council awarded the construction contract to Eagle Paving Company, Inc. in the amount of \$1,042,200 on February 7th, 2018. Construction of the project started in May 2018 and project completion is anticipated in January 2019.

Discussion & Purpose:

The Escondido Creek Bikeway Missing Link Project constructed new bike facilities through the city core and filled a gap between the Escondido Creek Trail on N. Broadway at Woodward Avenue and the Inland Rail Trail on Quince Street just north of the Escondido Transit Center. New bike facilities include a new two-way Class IV Bikeway Cycle Track along N. Broadway and W. Valley Parkway and a new Class I Bike Path west of Centre City Parkway and south of the Escondido Creek between Quince Street and Centre City Parkway. Figure 1 depicts the bikeway alignment of the Escondido Creek Bikeway Missing Link project.



Figure 1: Bikeway alignment of the Escondido Creek Bikeway Missing Link Project

Key features of the project include the following:

- New Class IV two-way Bikeway Cycle Track;
- New bikeway bridge over the Escondido Creek;
- New traffic signal at the intersection of N. Broadway and Woodward Avenue; and
- Relocate the existing pedestrian crosswalk on N. Broadway to north of Sherman Place, in front of the San Diego Children's Discovery Museum with traffic signal control

Staff will present the project with pictures of the new bike facilities at the TCSC meeting.

Recommendations: Note and File Report.

Necessary Council Action: None.

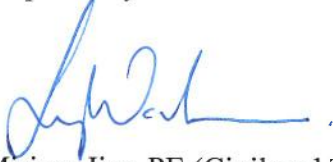
Completion of the Escondido Creek Bikeway Missing Link Project

January 10th, 2019

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Respectfully submitted,

Prepared by:



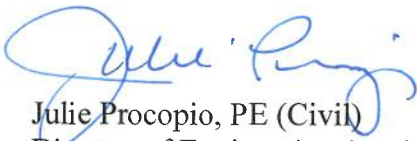
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