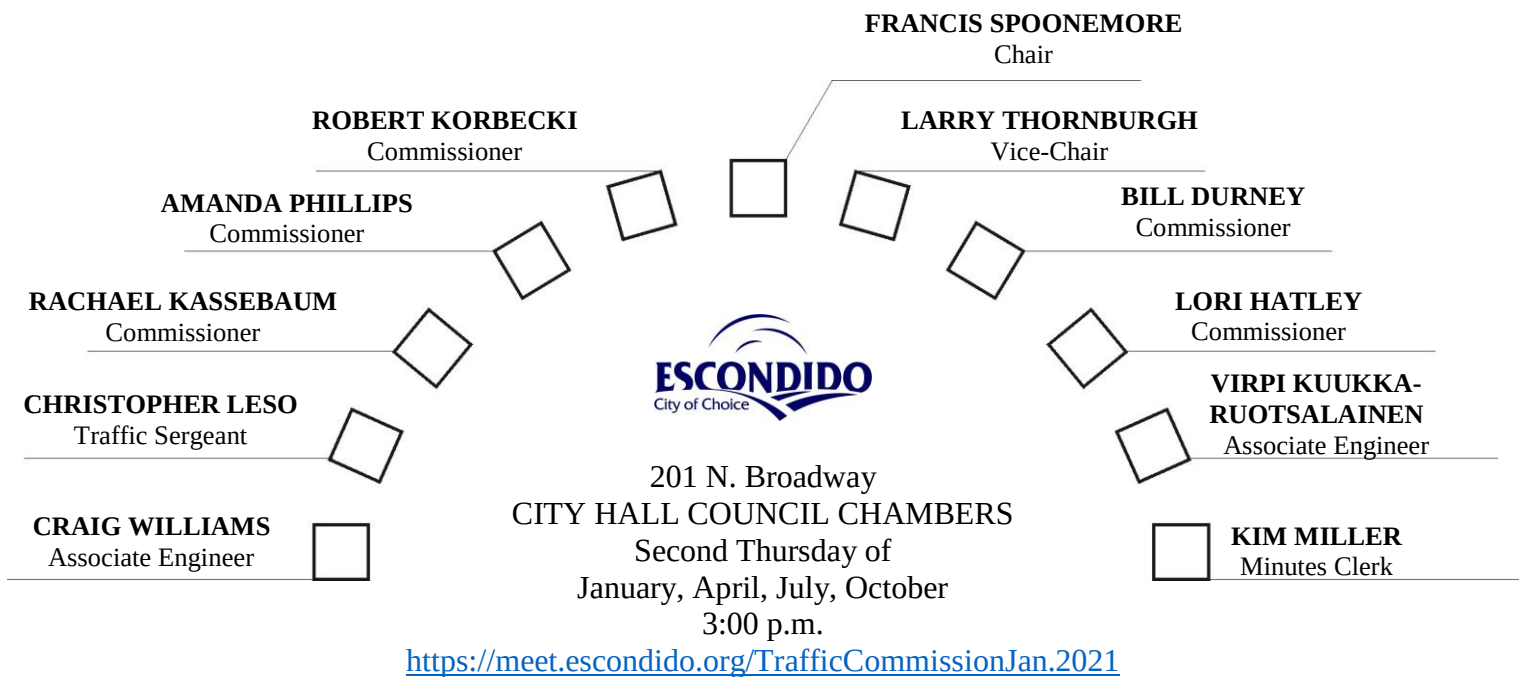


CITY OF ESCONDIDO

Transportation & Community Safety Commission



AGENDA

January 14th, 2021

Page | 1

- 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 8th, 2020 MEETING

E. CONSENT ITEMS – None.

F. NEW BUSINESS

1. VMT Guidelines Progress

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

2. Speed Surveys – Various locations Citywide

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

3. Escondido Creek Trail Crossings - Project

Source: Staff
Recommendation: Note 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. FY19/20 TMPL Project Updates – All projects completed: Lincoln/Ash Crosswalk Improvements and Citrus/Oak Hill Crosswalk Improvements with RRFB.
- b. FY20/21 TMPL Project Updates: Contractor selected for work. Project completion Spring/Summer 2021.
- c. LRSP – Local Road Safety Plan. Request For Proposals was issued.

- d. Traffic Signal Communications Grant Application. Application submitted.
- e. Roundabout at Country Club Lane/Golden Circle (The Villages). Construction nearing completion. Roundabout at Country Club Lane / La Brea construction starting soon.
 - a. City added Roundabout information page to Engineering Services:
<https://www.escondido.org/roundabouts>
- f. Traffic Signals in Design: Felicita/Escondido Blvd and Juniper St/Felicita-17th Ave. protected left-turns; part of Active Transportation Fund project; consultant design at 60%. Two new signals: Design approved: Country Club Ln/Gary Ln and Country Club Ln/Nutmeg St (The Villages). Signal Modifications: Design approved: El Norte Pkwy/Country Club Ln and El Norte Pkwy/Nutmeg St. (The Villages).
- g. Traffic Signals – Under Construction: El Norte Pkwy/E. Lincoln Avenue (Henry's Ranch).

H. SCHOOL AREA SAFETY

- 1. Del Dios Academy – School Bond Improvements. Signing/Striping design and crosswalk improvements including Rectangular Rapid Flashing Beacon for 9th Avenue reviewed.
- 2. 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.
- 3. ATP Grant Submittal for Citrus Ave sidewalk.

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

- 1. 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.

(January 14th, 2021) TCSC Agenda

CITY OF ESCONDIDO

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

October 8th, 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 Thornburgh, Commissioner Durney, Commissioner Hatley, Commissioner Korbecki, Commissioner Phillips, and Commissioner Kassebaum.

Commissioners absent: 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.

DETERMINATION OF QUORUM, VICE-CHAIR:

Commissioner Thornburg was nominated as Vice-Chair. Moved by Commissioner Spoonemore, seconded by Commissioner Durney, to approve the Vice-Chair position. Motion carried unanimously.

ORAL COMMUNICATIONS:

Minutes Clerk, Kimberlianne Miller presented James Evans' email expressing concerns on shared lane sharrow markings and the need for enhanced crossings for the Escondido Creek Trail Crossings.

CONSENT ITEMS:

None

ACTION:

MINUTES:

Moved by Commissioner Spoonemore to approve the minutes of the January 9th, 2020 and the July 9th, 2020 meeting. Motion carried unanimously.

NEW BUSINESS:

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

Ms. Kuukka-Ruotsalainen presented the Traffic Signal Priority List and cost estimate for the three top ranked projects.

Commissioner Kassebaum proposed to increase the amount of red curb to increase visibility at the location of the Central Elementary School Project.

Commissioner Thornburgh proposed to leave the crosswalk on the north face of the intersection for the Central Elementary School Project.

Action: Motion to approve as presented by staff to remove one parking space on each side of S Maple St near the intersection of the Central Elementary School Project without Amendment was approved unanimously. Moved by Commissioner Spoonemore, seconded by Commissioner Thornburgh, to approve staff's recommendation. Motion carried unanimously.

2. Speed Surveys – Various Locations Citywide

Amanda Bajhart recommended approval of eleven speed surveys. The certification of these surveys incorporated four of which needed to be rounded down 5mph from the 85% recommended speed.

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

3. Local Roadway Safety Plan

Craig Williams presented reasons why we should implement a Local Roadway Safety Plan. He mentioned the ways it could reduce accidents, possible treatments and methods that would be incorporated in the plan, and countermeasures that could be applied in this plan that are less invasive for the city.

Commissioner Spoonemore requested what the total funds this would take, and a discussion was made to better understand how the funds will be allocated.

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

OLD BUSINESS:

1. An overview of various projects involving the City

Source: Virpi Kuukka-Ruotsalainen

- a. Traffic Signals in Design: Felicita/Escondido Blvd and Juniper St/Felicita-17th Ave. protected left-turns; part of Active Transportation Fund project; consultant

Signal Modifications: The intersection of El Norte Pkwy and Country Club Ln and the intersection of El Norte Pkwy and Nutmeg St. (The Villages).

- b. Traffic Signals – Under Construction is the intersection of El Norte Pkwy and 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).

SCHOOL AREA SAFETY:

Virpi Kuukka-Ruotsalainen provided information related to school area safety activities at Del Dios Academy, Juniper Elementary and ATP Grant Submittal for the Citrus Avenue sidewalk

COUNCIL ACTION:

None

ORAL COMMUNICATIONS:

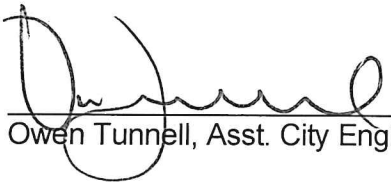
None

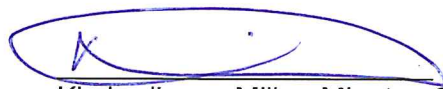
TRANSPORTATION COMMISSIONERS:

None

ADJOURNMENT:

Motion by Commissioner Spoonemore, Seconded by Commissioner Kassebaum to adjourn the meeting which was carried unanimously.


Owen Tunnell, Asst. City Engineer


Kimberlianne Miller, Minutes Clerk



CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14th, 2021

Item No.: F1

Location: Citywide

Initiated By: Staff

Request: Progress Report on Transportation Impact Analysis - VMT Guidelines Development and Decision Points - Recommendation to City Council

Background:

The following excerpt from Caltrans' website provides an excellent view into the intent and purpose of SB 743 and the shift toward examining project impacts through Vehicle Miles Traveled analysis:

“SB 743 was signed in 2013, with the intent to “more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.” When implemented, “traffic congestion shall not be considered a significant impact on the environment” within California Environmental Quality Act (CEQA) transportation analysis.

SB 743 requires the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within CEQA. For land use projects, OPR identified Vehicle Miles Traveled (VMT) per capita, VMT per employee, and net VMT as new metrics for transportation analysis. For transportation projects, lead agencies for roadway capacity projects have discretion, consistent with CEQA and planning requirements, to choose which metric to use to evaluate transportation impacts.”

VMT is a way to measure the amount of vehicular travel that a project will generate. VMT looks at the total amount of miles driven generated by a project, rather than a congestion and delay factor that a project generates at nearby intersections and roadway segments. VMT is also referenced throughout the City's Climate Action Plan as a tool to measure Greenhouse Gas Emissions, energy analysis and air quality analysis.

Since the passage of SB 743, several agencies and entities have been working on interpretation and implementation of the law with the lead statewide agency in this regard being the Office of Planning and Research (OPR). The local San Diego Section of the Institute of Transportation Engineers has also developed interpretation and implementation recommendations for use by local agencies. In addition, SANDAG has created a GIS-based VMT calculator for County agencies to adopt and use in their guidelines. And lastly, a number of other municipalities in the county have moved forward with their interpretation and implementation of SB743. We have included several of these examples in our discussions.

It is important to note, however, that VMT only replaces LOS for CEQA transportation impact analysis. LOS is still a component of the City's General Plan Quality of Life Standards for Transportation and will still be analyzed for that purpose and remain a part of our City Traffic Impact Analysis Guidelines.

Since June 2020, the City has been working with a consultant – Fehr & Peers – to prepare VMT guidelines to be added to and update our current Transportation Impact Analysis Guidelines.

Discussion and Purpose

Over the past several months, City staff have worked closely with our Consultant to develop updated Transportation Impact Analysis Guidelines with an emphasis on adding and adopting VMT Standards. This process has included researching what the key guiding documents suggest as mandates and best practices, what our neighbors are doing with VMT, and then focusing on the best options for the City of Escondido.

This staff report provides an overview of key SB 743 implementation decisions with Staff recommendations that need to be selected by the City of Escondido. Key decisions discussed within this report are:

1. VMT Metrics (methods of measuring VMT impacts)
2. Thresholds (limits that determine when a project may have an impact and therefore needs to provide VMT analysis)
3. Screening Criteria (which projects can be exempted from VMT analysis because of low impact)

The City of Escondido Transportation Impact Analysis Guidelines will serve as a guide for practitioners and reviewers throughout the transportation analysis process.

1. VMT Metric Options

The Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) provides agencies the discretion to choose the most appropriate VMT metrics for their jurisdiction.

Both the OPR Technical Advisory and the San Diego ITE: *Guidelines for Transportation Studies in the San Diego Region* (May 2019), have thoroughly reviewed and presented the metric options below. Further, various of these suggested metrics have been adopted by our neighboring municipalities, as well as the City of San Diego and the County of San Diego.

Staff recommends approval of the following metrics for the City of Escondido:

VMT/Capita metric used for Residential Projects: VMT/Capita is established by dividing the total daily VMT generated by residents living in the geographic area being used as the comparison (e.g., census tract), divided by the population of that geographic area. To analyze the VMT/Capita for a proposed project, the total daily VMT generated by project residents is divided by the project population.

VMT/Employee Metric used for Office and Employment Projects: VMT/Employee is established by dividing the total daily VMT generated by employees of the geographic area being used as the comparison (e.g., census tract), by the number of employees in that geographic area. To analyze the VMT/Employee for a proposed project, the total daily VMT produced by project's employees is divided by the total number of employees working in the project.

Estimates for VMT/Capita and VMT/Employee have been developed by SANDAG and presented in an easily accessed format¹, which will be discussed later in this report. This methodology will be updated from time to time. Since these are the methods developed and supported by SANDAG, they are recommended for use in Escondido.

Net Increase in Total Area VMT for Regional Retail Projects: For regional retail projects, the OPR Technical Advisory recommends a metric of any net increase in total area VMT. Total area VMT is measured for a set

¹ <https://sandag.maps.arcgis.com/apps/webappviewer/index.html?id=5b4af92bc0dd4b7babbce21a7423402a>

geography which can be defined by the City or set on a project-by-project basis. The geography could be set as the region, the City, the market area to be served by the retail project, or a different geography. Our consultant suggests keeping this flexible in the guidelines to be applied based on the general market area of the project.

Other Metric Options (provided as information but not recommended at this time)

An additional metric that has been used by some agencies -- VMT/service population -- was presented for consideration. The VMT/Service Population metric is established by dividing the total VMT generated by a particular geographic area, divided by the population plus employment of that geographic area. Since this metric combines VMT for residents and employees and reflects how accessible all land uses are (for example, geographies with higher density, more shopping, and more jobs will have lower VMT/Service Population) it can be used to evaluate residential and employment projects.

Despite this benefit, VMT/Service Population has drawbacks such as producing unusual results for single-use projects (or projects dominated by a single land use). It is also not supported by SANDAG, is not included in the San Diego Section ITE Regional Guidelines, and was not recommended in the OPR Technical Advisory (OPR has indicated that they are not supportive of the VMT/service population metric). Therefore, this option will not be included in the City's guidelines.

2. Threshold Options

Building on the metric options presented above, the next step is to determine how these metrics are applied. Establishing thresholds is required by the new statutes added by SB 743, as well as traditional guidance contained in CEQA Guidelines Section 15064.7 and new language proposed as part of the *Updated CEQA Guidelines* (2019).

Based on the OPR Technical Advisory and consistency with other San Diego region jurisdictions, staff recommends that significance thresholds for Escondido be established by project type (residential, employment, and retail). The following summarizes the OPR Technical Advisory recommendations:

- Residential Uses Threshold Options: 15% below either the Regional **or** Citywide Average VMT/Capita.
 - The following VMT/Capita averages are produced by the SANDAG ABM 2 model²:
 - VMT/Capita Regional Average: 19.0
 - Threshold Based on Regional Average: 16.2
 - VMT/Capita Escondido Average: 17.2
 - Threshold Based on Citywide Average: 14.6
 - Staff recommendation: Residential Uses Threshold: 15% below Regional Average VMT/Capita. In surveying local agencies in the region, it was determined that the Regional Average was selected by nearly all agencies, except for the County, which created its own evaluation method. Given Escondido's diverse geography and its mix of urban, suburban and rural areas, the Regional Average is most appropriate.
- Employment Uses Threshold Options: 15% below the Regional **or** Citywide Average VMT/Employee.
 - The SANDAG ABM 2 2016 VMT/Employee Regional Average is: 27.2

² <https://sandag.maps.arcgis.com/apps/webappviewer/index.html?id=5b4af92bc0dd4b7babbce21a7423402a>

- For informational purposes, the SANDAG ABM 2 2016 VMT/Employee Citywide Average for Escondido is: 26.0
- Staff recommendation: 15% below the Regional Average VMT/Employee. Again, the majority of local agencies in the region selected the Regional Average.
- Retail Uses Threshold: Use of the net increase in total “area” VMT, with area defined on a project by project basis. (Recommended by staff)
- Industrial Employment Threshold:
 - Staff recommends one deviation from the thresholds recommended in the OPR Technical Advisory -- related to industrial employment (since OPR does not include a category for Industrial Employment). Purely industrial employment uses are desired to be located in less VMT efficient, higher VMT areas in the City of Escondido. Placing these land intensive uses in areas with less efficient VMT allows land in efficient VMT areas to be more effectively utilized as high density residential and commercial uses. This will encourage lower VMT-generating industrial uses to develop in locations appropriate for industrial uses, leaving infill and more VMT efficient areas available for more dense uses. Chula Vista, Oceanside, Carlsbad, and the City of San Diego have all set the threshold for industrial employment at the average VMT (instead of 15% below).
 - Staff recommendation: Industrial Employment Threshold At or Below Regional Average

Table 1 provides recommended thresholds for projects in Escondido. These are generally consistent with the OPR Technical Advisory and other local agencies.

Table 1: Recommended Thresholds

Land Use		Thresholds
Residential		15% below the Regional Average VMT/Capita
Employment		15% below the Regional Average VMT/Employee
Regional Retail		Any increase in total Regional VMT
Industrial Employment		At or below Regional Average VMT
Regional Public Recreational Facilities	&	Any increase in total Regional VMT

3. Screening Criteria

Screening procedures allow jurisdictions to quickly determine whether projects can be presumed to have a less-than-significant VMT impact, and therefore do not need to conduct CEQA-related VMT transportation analysis. The OPR Technical Advisory provides recommendations for screening criteria based on research. OPR suggests the following types of projects can be presumed to have a less-than-significant transportation VMT impact:

- Low VMT Generating Area
- Small Project (<110 Daily Trips)
- Locally Serving Retail (<50,000 sf)
- Near Major/High-Quality Transit

- Infill Affordable Housing

If one of the screening criteria is met, then the project can be presumed to have a less than significant transportation VMT impact. The following sections describe each screening criteria.

Maps are used to display the locations within a region that are VMT efficient. SANDAG has produced maps³ for the SANDAG Region using the Series 14, Activity-Based Model 2 (ABM 2), base year travel demand model for both VMT/Capita and VMT/Employee. These maps display data for each census tract. Census tracts are geographic units that are used to organize demographic and other data collected by the U.S. Census Bureau. Census tracts are used frequently for general planning purposes and are larger geographic areas than transportation analysis zones (TAZs) and provide less variation in VMT information. Some jurisdictions in the region have opted to display data for each TAZ. TAZs are usually used in travel demand forecasting. When data is extracted from the SANDAG model, the data is presented at the TAZ level. TAZs are smaller geographic areas than census tracts and for this reason, provide a more fine-grained view of VMT efficiency within the City. The City of Escondido includes 34 census tracts and 250 TAZs.

The City has a choice of whether to display data at a census tract or TAZ level. To aid in the decision, maps were provided that displayed VMT/Capita and VMT/Employee by census tract and TAZ. The following VMT efficiency maps are provided in the attachments:

- Figure 1: 2016 VMT/Capita by Census Tract compared to the Regional Average
- Figure 5: 2016 VMT/Capita by TAZ compared to the Regional Average

Table 2: Pros and Cons of Displaying VMT Data by Census Tract vs. TAZ

<i>Option1: Displaying VMT Data Census Tract Level Data</i>	
PROS	CONS
• Maintains consistency with the geographic unit that SANDAG is using to display VMT data. • Provides a familiar geographical unit for project applicants. • Census tracts are large enough to “smooth” out the data. TAZs that have limited land use data must be eliminated (or combined with other TAZs) to provide reasonable results.	• Specificity of the data is reduced when amalgamated at a larger scale.
<i>Option2: TAZ Level Data</i>	
PROS	CONS
• Maintains consistency with the geographic unit that data is presented at when first extracted from the SANDAG model. • Provides location-specific information (greater specificity) than at the census tract.	• TAZs that have limited land use data must be eliminated (or combined with other TAZs) to provide reasonable results. • SANDAG is using the census tract level to display information, therefore, TAZ level maps would need to be created for the City when the SANDAG model is updated.

Staff recommendation: Utilize Census Tract, but allow TAZ as an unpublished option should a developer provide support that the Census Tract data is not representative of the project area.

³ <https://sandag.maps.arcgis.com/apps/webappviewer/index.html?id=5b4af92bc0dd4b7babbce21a7423402a>

Low VMT Generating Area (VMT Efficient Area Screening Maps)

Residential and office projects, for example, that are located within a low VMT generating area may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

Small Projects

The OPR Technical Advisory recommends that a small project is defined as generating 110 daily trips or less. This value was determined by OPR using the ITE Trip Generation manual for office land uses. In CEQA, it is possible to qualify for a categorical exemption for building additions of up to 10,000 square feet. Therefore, OPR identified a small project as a 10,000 square foot office building and determined that on average, using the ITE Trip Generation rates, an office building of that size would generate 110 daily trips. For context, projects generating less than 110 daily vehicle trips corresponds to the following “typical” development potentials:

- 11 single family housing units
- 16 multi-family, condominiums, or townhouse housing units
- 10,000 sq. ft. of office
- 15,000 sq. ft. of light industrial⁴
- The County of San Diego and Carlsbad are both using 110 or less daily trips to define a small project.

Other jurisdictions in the San Diego region have used the same process for determining the definition of a small project as OPR, but utilized region or city-specific trip generation rates. For example:

- City of San Diego: Small project is 300 or less daily trips. This was developed based on a 10,000 square foot office building, but using the City of San Diego’s city-specific trip generation rates.
- City of Chula Vista: Small project is 200 or less daily trips. This was developed based on a 10,000 square foot office building, but using the SANDAG (Not So Brief) Guide Trip Generation Rates.
- The San Diego ITE Regional Guidelines suggest using either 200 daily trips or less, OR 500/1,000 daily trips or less depending on inconsistent/consistent with the city’s general plan.
- The City of Escondido’s Traffic Impact Analysis Guidelines currently set the threshold for analysis at 200 ADT or greater.

For consistency with the OPR Technical Advisory, using a 10,000 square foot office building and SANDAG trip generation rationale, Staff recommends setting the small project definition at 200 daily trips.

Locally Serving Projects

OPR identified local serving retail projects as being presumed to have a less-than-significant impact absent substantial evidence to the contrary. Local serving retail projects (less than 50,000 square feet) generally improve the convenience of shopping close to home and have the effect of reducing vehicle travel.

The City can define a locally serving project as 50,000 square-feet or less or can identify a different size that corresponds to locally serving with evidence to support the decision.

⁴ Threshold may be higher depending on the tenant and the use of the site. This number was estimated using rates from ITE’s Trip Generation Manual (10th Edition).

For comparison:

- San Diego County defines a locally serving retail project as 50,000 square feet or less.
- Chula Vista defines a locally serving retail project as 125,000 square feet or less (consistent with SANDAG's community/neighborhood commercial trip generation rates). They also indicate that a market study may be required to demonstrate that the project is locally serving.
- City of San Diego defines a locally serving retail project as 100,000 square feet or less consistent with their definition of community/neighborhood commercial. They require a market study to demonstrate that the project is locally serving.

In addition to local serving retail, many agencies have also identified several public facilities and other types of land uses as locally serving. The following list summarizes land uses that other agencies have defined as locally serving:

- Local-serving K-12 schools (may or may not include private or charter schools)
- Local parks
- Local-serving retail uses less than 50,000 square feet, including:
 - Gas stations
 - Banks
 - Restaurants
 - Shopping Center
- Student housing projects on or adjacent to a college campus
- Community institutions (public libraries, fire stations, local government)

Staff Recommendation: Define a locally serving project as 50,000 square-feet or less with developer demonstration that the business is local-serving.

Transit Priority Area (TPA) Screening

Projects located within a Transit Priority Area (TPA) may be presumed to have a less than significant impact absent substantial evidence to the contrary. OPR simply describes this area as ½ mile from a transit stop on a high-priority transit line (service at least every 15 minutes). The transit screening presumption may **not** be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the City (if the City requires the project to supply parking);
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Staff Recommendation: Allow projects within a ½ mile walking distance (along a high-quality walk route) to a stop on a high-priority transit line to meet screening criteria for a less-than-significant VMT impact.

Active Transportation Accessibility Evaluation

Staff recommends that all projects, including those 'screened-out,' conduct an evaluation of accessibility to destinations such as schools and transit and look for opportunities to fill gaps and improve accessibility proportionate with the project size.

Following is a summary of the staff recommendations for the City's VMT implementation:

Table 3: Summary of SB 743 Implementation for the City of Escondido

VMT Metrics	Significance Thresholds	Screening Criteria
Residential: VMT/Capita Employment: VMT/Employee Retail: Change in Total Regional VMT - Using SANDAG ABM2 Model	Residential and Employment: 15% below the regional average Industrial: at or below regional average Retail, Public, & Recreational Facilities: Any increase in total area VMT.	- Projects located in efficient VMT areas - Locally serving retail - Locally serving community-purpose facility - Small Projects (generating 200 or fewer daily trips) - Redevelopment generating less VMT than the existing development - A Mixed-use project's individual land uses evaluated independently - Project near major transit stops or high-quality transit corridors

Recommendation: Recommend to City Council to accept Staff recommendations for VMT Methods, Thresholds and Screening Criteria.

Necessary Commission Action: Approval.

Respectfully submitted,
 Prepared by:

Craig Williams
 Associate Engineer

Reviewed by:

Owen Tunnell, PE
 Assistant City Engineer

Approved by:

Julie Procopio, PE
 Director of Engineering Services/City Engineer

Attachments:

- Figure 1
- Figure 5

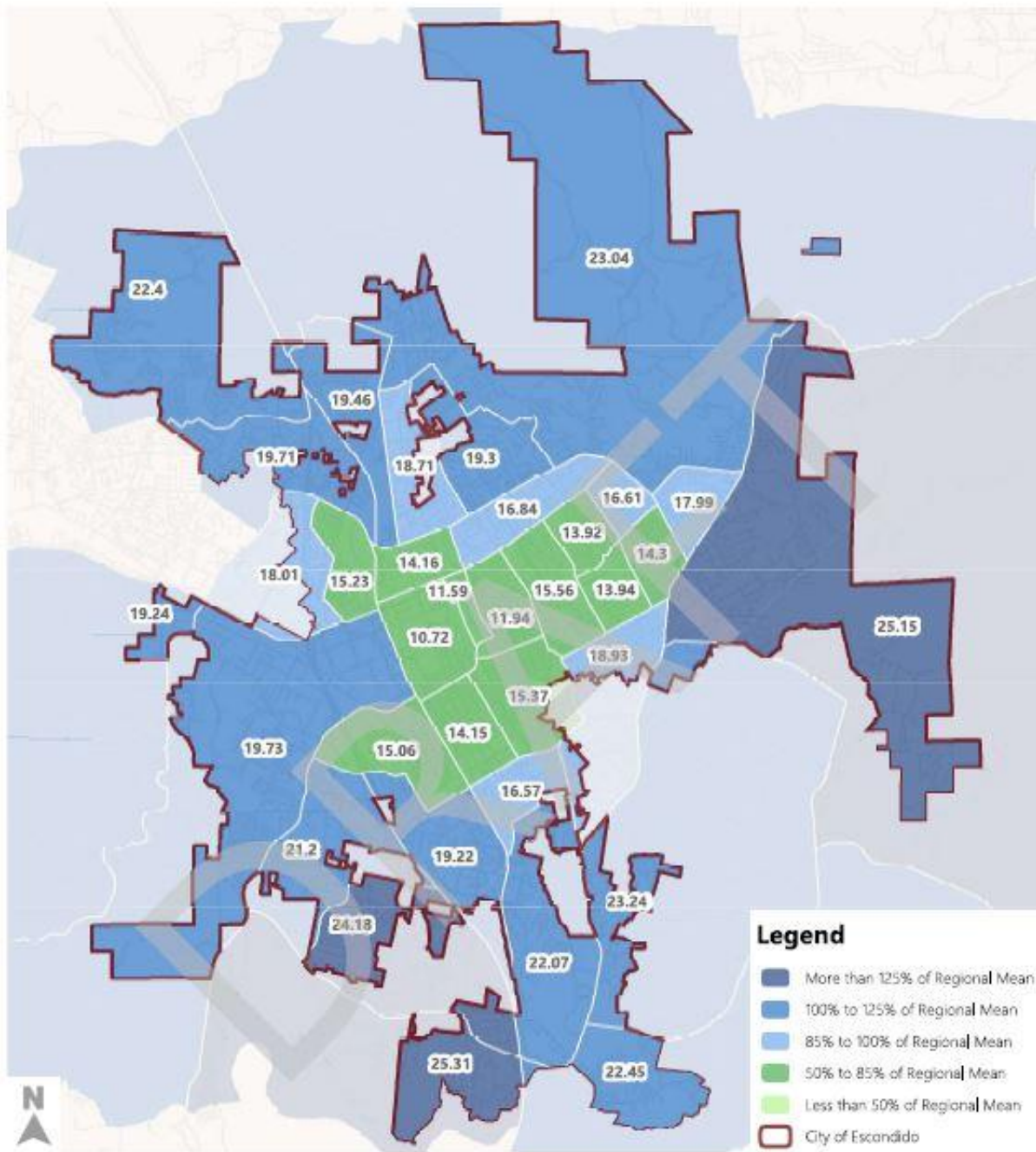


Figure 1

2016 Vehicle Miles Traveled (VMT) per Capita by Census Tract Comparison to Regional Average (19.0 VMT/Capita)

Escondido TIA Guidelines and VMT Mitigation



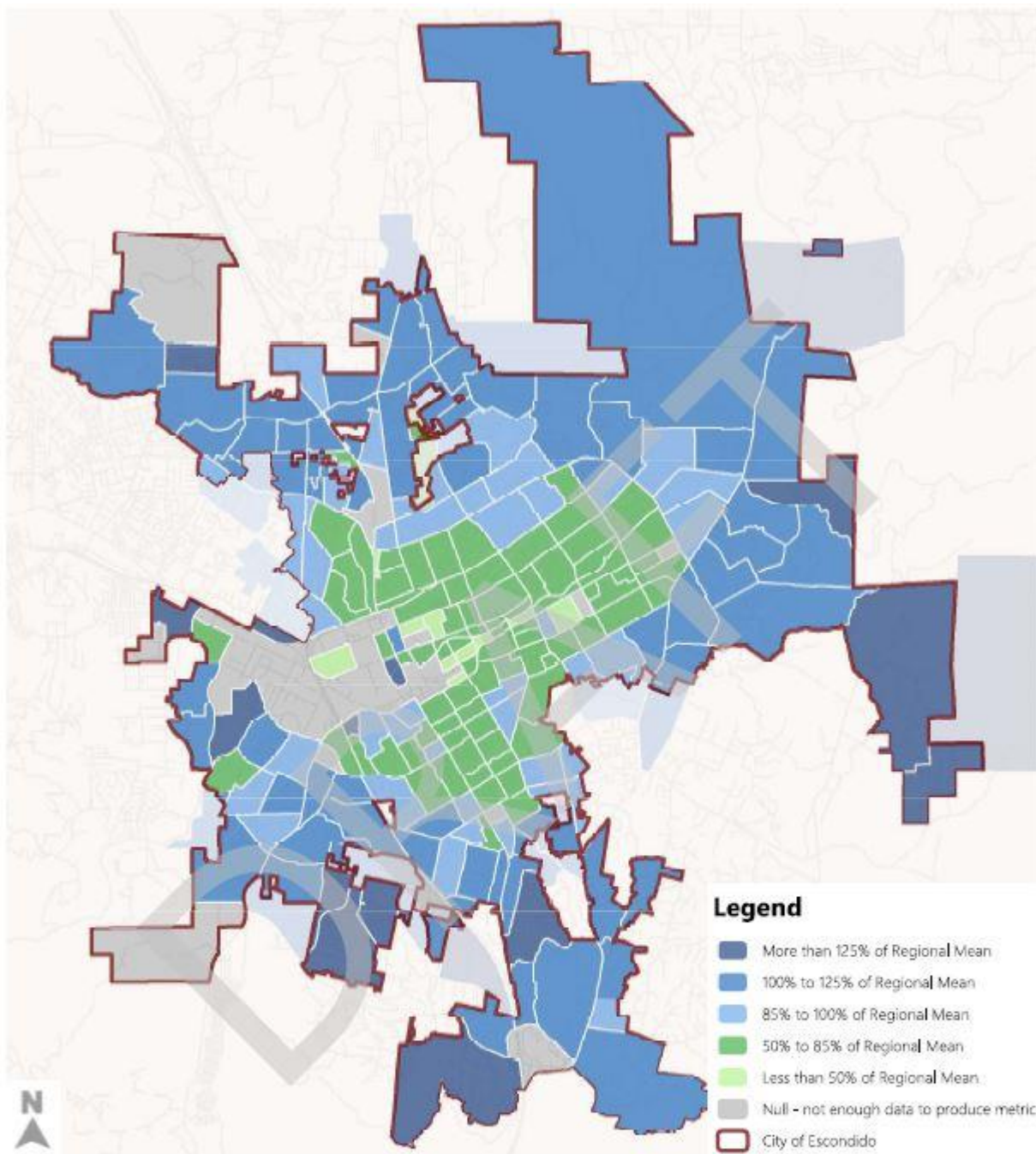


Figure 5

2016 Vehicle Miles Traveled (VMT) per Capita by TAZ
Comparison to Regional Average (19.0 VMT/Capita)

Escondido TIA Guidelines and VMT Mitigation





CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION

Commission Report of: January 14, 2021

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 considered 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 27 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 1, 3, 5, 8, 11, 13, 16, 20, and 23-25, 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 1, 3, 5, 8, 11, 13, 16, 20, and 23-25.
- For speed survey 2, 4, 6, 7, 9, 10, 12, 14, 15, 17-19 and 21, 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 2, 4, 6, 7, 9, 10, 12, 14, 15, 17-19 and 21.
- For speed surveys 22 and 26, the recommended speed limit is set based on the 85th-percentile speed of the new speed survey. The posted speed limit will decrease 5mph from the existing speed survey and posting.

Table 1 - Overview of Speed Surveys

[illegible]

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			
15	Second/Grand 1	N/Leg Tulip	Centre City	11/06/13 30	35	PA	39	40	35***
16	Second 2	Centre City	Grand	08/30/13	30	PA	31	30	30
17	Sheridan 2	Archwood Place	Ash St	05/29/13	30	LC	36	35	30***
18	Sheridan 4	Conway Drive	Vista Verde Drive	05/30/13	30	LC	36	35	30***
19	Valley Parkway E8	El Norte Parkway	Lake Wohlford Road/SR6	12/18/18	45 25(WCAP)	PA	50	50	45*** 25(WCAP)
20	Valley Parkway E2	Ash	Hickory/Valley Blvd	11/05/13	35	M	35	35	35
21	Valley Parkway E1	Hickory/Valley Blvd	Broadway	11/05/13	35	PA	39	40	35***
22	Via Rancho 2	Bear Valley	I-15	05/28/13	50	PA	45	45	45 ↓
23	Washington W6	Broadway	Escondido	11/12/13	35	MA	37	35	35
24	Washington W5	Escondido	Centre City	11/12/13	35	MA	33	35	35
25	Washington W4	Centre City	Quince	11/12/13	35	MA	33	35	35
26	Washington W1	Hale	Mission	11/12/13	40	MC	35	35	35 ↓

** Indicates round down the speed limit to the lower five miles per hour increment, per CVC 21400 (b)

***Indicates speed limit downgraded 5 mph due to conditions not readily apparent to the driver.

↓ Indicates speed going down.

Respectfully submitted,

Prepared by:



Amanda Bajhart, EIT
Engineer I/Traffic Division



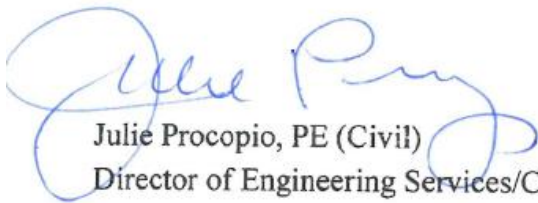
Virpi Kuukka-Ruotsalainen
Associate Engineer/Traffic Division

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 January 14th, 2021

Item No.: F3

Location: Citywide

Initiated By: City Staff

Subject: Escondido Creek Trail Crossings -Project

Background

In 2010, a community driven vision of the Escondido Creek as a linear park resulted in the following important planning documents: Revealing Escondido Creek Vision Plan and the Escondido Creek Trail Master Plan. The two priorities that emerged were to complete the Missing Link Bike Path between Broadway and Centre City Parkway and to create safe mid-block crossings along the length of the Creek Trail. To meet these needs the City actively competed for Grant Funding, such as ATP - The Active Transportation Program that encourages increased use of active modes of transportation, such as walking and biking.

In 2019, the **Missing Link** project was completed, installing a Class IV Cycle Track, and filling the gap in the Creek Trail between the Escondido Transit Center and Broadway. In 2020 signalized pedestrian crossing was constructed for the **El Norte Parkway Creek Trail Crossing**. Grant funding to add signalized crossings at **Quince St. and Tulip St.** has also been secured.

Escondido Creek Trail Bike Path Improvements – Project focuses on 2.5 miles of the Escondido Creek Trail between Juniper Street and Citrus Avenue. In the Escondido Creek Trail Master Plan (2012), pedestrian crosswalks were planned for these locations. Since the acceptance of the Creek Trail Master Plan, the City has adopted a **Traffic Management Toolbox** as well as a **revised City of Escondido Crosswalk Policy** (Traffic Policy #4). These new standards allow for innovative traffic calming and traffic safety measures in addition to those discussed in the Master Plan, including pedestrian activated rapid flashing beacons, high visibility crosswalks, pedestrian refuges, and pedestrian signals.

The City applied for an Active Transportation Program (ATP) Grant for the Creek Trail Bike Path Crossing Improvement Project and in 2018 was awarded a grant in the amount of \$1,632,000 for design and construction of the Creek Trail Crossing Project. This project will provide appropriate pedestrian crosswalk treatments at seven creek trail crossings, at Juniper Street, Hickory Street, Fig Street, Harding Street, Rose Street, Midway Drive, and Citrus Avenue. **Figure 1** shows the seven crossing locations included in the project. These pedestrian crosswalk treatments per the City's Crosswalk Policy and Traffic Management Toolbox include RRFB, pedestrian signals, lighting, signage, striping, and pedestrian ramps as necessary. In addition, missing segments of sidewalk will be constructed at Midway Street and Citrus Avenue crossings. The Project will result in a fully connected trail extending through Escondido's urban core from the Transit Center to the eastern City limits nearly five (5) miles away. Further, the Escondido Creek Trail connects to the Inland Rail Trail, which SANDAG expects to ultimately connect Escondido with the beaches of Oceanside that are 21-miles away.

A Request for Proposals (RFP) for the design of the project was published and proposals were received in July 2019. KOA was selected as the Design Consultant and in December, 2020 the final plans for the seven crossings have been submitted.

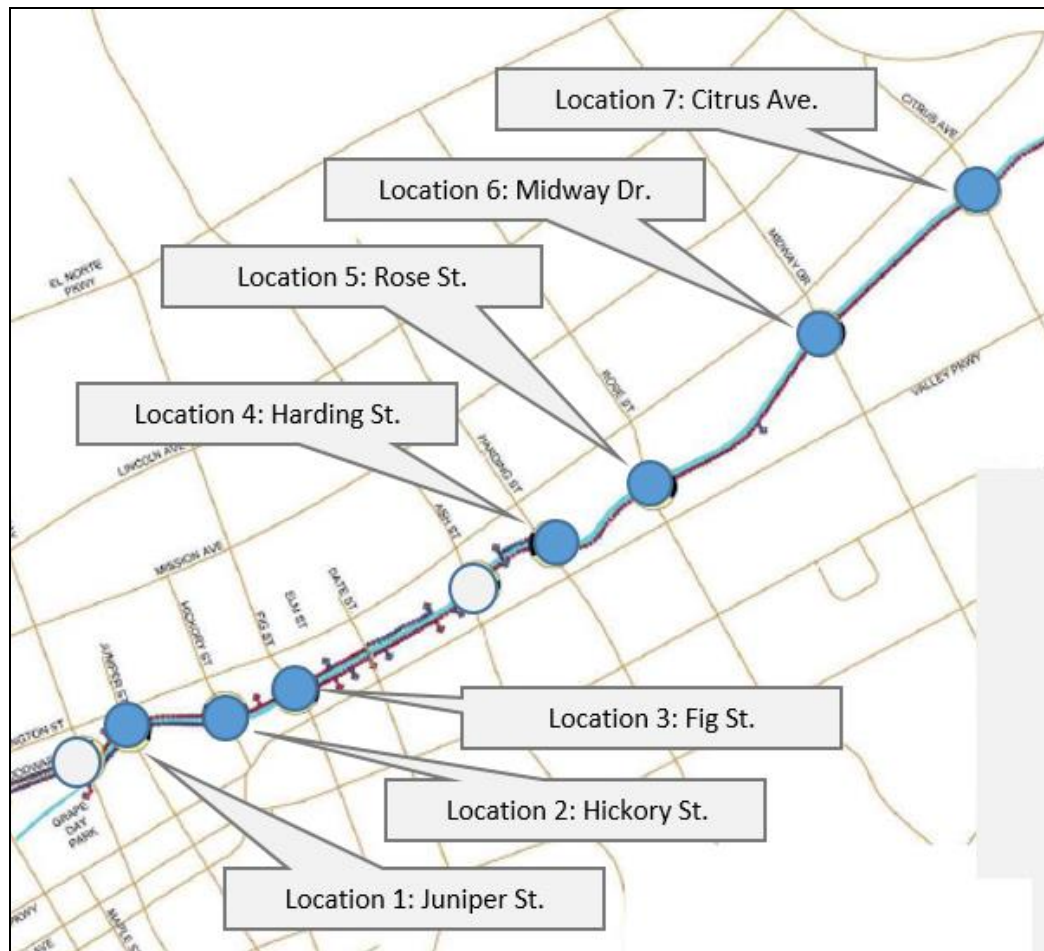


Figure 1: Creek Trail Bike Path –Project Crossing Locations.

On January 9th, 2020 the TCSC reviewed and approved the proposed crosswalk treatments for the project as shown in **Table 1**. The warrant for a signal at Midway Dr. was also approved. The potential for a signal at Rose Street was also evaluated but determined not to be warranted.

Crosswalk Treatments per City of Escondido Crosswalk Policy

The updated City of Escondido Crosswalk Policy (**Attachment 1**) was approved by the TCSC on January 14, 2016, and revisions to the Policy were approved by TCSC at its July 13, 2017 meeting. The Policy provides guidelines on mid-block crosswalk warrants and descriptions on evaluation of the appropriate treatments for crosswalks based on roadway characteristics such as cross section, Average Daily Traffic (ADT), and speed limits.

Table 1: Creek Trail Crossing Treatments – Final Design after warrant analyses and feasibility studies.

ADT Cross Section	<1500	1500 - 5000	5000-12000	>12000
Two-lane roads (without TWLTL)			Fig St Std. + RRFB + Lighting	
Two-lane roads (with TWLTL)		Juniper St For SL< 35 Std. + RRFB + Bulb- outs Hickory St For SL< 35 Std. + RRFB + Bulb- outs+Lighting	Harding St Std. + RRFB + Bulb- outs+Median refuge+Lighting Citrus Ave Std. + RRFB + Bulb- outs+Lighting	Rose St Std.+RRFB+Bulb- outs+Lighting Midway Std.+Signal+Median refuge+Lighting
<i>SL: Speed Limit of the roadway</i> <i>RRFB: Rectangular Rapid Flashing Beacons, or other approved flashing beacon.</i> <i>Std.: Advanced yield line with Yield Here to Pedestrians (R1-5) sign, Pedestrian Crossing Warning Sign (W11-2) with diagonal arrow (W16-7p) signs, High Visibility Crosswalk</i>				

The following treatments have been designed at each crossing location.

Proposed Improvements at Juniper Street - RRFB, Bulb-outs, Crosswalk

Juniper Street is a two-lane Collector Road with ADT of 2,330 vehicles and speed limit of 25 mph. Land use is both commercial and residential with Senior Community and single and multiple family homes. On-street parking is allowed giving the area a residential feel. Lighting along the Creek Trail has been upgraded and Trail is used daily by over 600 pedestrians.

Based on Crosswalk Policy, the design includes RRFB in addition to standard striping and signage enhancements. Bulb-outs will reduce bike and pedestrian exposure to crossing vehicles.



Figure 2: Existing conditions at Juniper Street.



Figure 3: Proposed improvements at Juniper Street.

Proposed Improvements at Hickory Street – RRFB, Bulb-outs, Crosswalk, Lighting

Hickory Street carries higher pedestrian and vehicle volumes than Juniper but is similar in nature. The ADT on this two-lane Collector road is 4,120 vehicles and the speed limit is 30mph. Land use is mostly residential with some commercial. The Creek Trail crosses on the north-side and crossing is used by over 700 pedestrians daily. However, this location did not meet the warrants for HAWK installation due to low hourly volumes. Then, based on the Crosswalk Policy RRFB should be installed at this location. In addition, bulb-outs were designed to reduce bike and pedestrian exposure to crossing vehicles. And lastly, lighting at the crosswalk will be upgraded to current standard.



Figure 4: Existing conditions at Hickory Street.



Figure 5: Proposed improvements at Hickory Street.

Proposed Improvements at Fig Street – RRFB, Crosswalk, Lighting

Fig Street consists of 2 lanes and is classified as Collector Road. Traffic volumes are moderate with an ADT of 7,340. The posted speed limit is 30 mph. Land use is mostly residential and on-street parking is not allowed due to narrow width.

Based on Crosswalk Policy, standard striping and RRFB should be installed. One additional measure from category A should be selected: Raised Crosswalk, Traffic Calming Treatment, or Speed Radar Feedback Signs.

Due to the narrow width of Fig Street at the crossing location, no other treatments are feasible except the speed radar feedback signs. However, given the existing width constriction and the latest speed survey there is no indication that excessive speed on Fig Street is a major issue. A recent speed survey shows the 85th% speeds of 33mph, only 3 miles over the speed limit. Therefore a radar speed feedback sign is not recommended for this location but other improvements will include re-grading the sidewalks and trail to be fully ADA compliant and enhancing striping to reduce vehicle speeds.



Figure 6: Existing conditions at Fig Street.



Figure 7: Proposed improvements at Fig Street.

Proposed Improvements at Harding Street – RRFB, Bulb-outs, Median Refuge, Crosswalk, Buffered Bike Lanes, Lighting

Harding Street carries a moderate traffic volume of ADT 6,980 vehicles. Land use is commercial with grocery store, restaurants, bank and residential with two retirement communities. Current striping consists of 4 lanes separated by a TWLTL. At the north-end lanes are separated by a wide, raised planter median. On-street parking is not allowed. The Creek Trail crossing crosses Harding diagonally, which increases the pedestrian and bicycle exposure to traffic.

Based on the Crosswalk Policy Harding Street meets the threshold for a high visibility crosswalk, a pedestrian crossing sign, an advanced yield line, yield here signs, a RRFB installation, and a selection of either road diet, raised crosswalk, speed radar feedback signs, or pedestrian refuge island. As mentioned before, raised crosswalks or speed radar signs are not encouraged due to maintenance concerns.

Harding Street provides only one through lane southbound at Valley Parkway, and only one through lane northbound at Washington Street. Therefore, providing only a single lane in each direction between Washington Street and Valley Parkway is a reasonable solution, suggesting a road diet treatment. The average daily traffic volume of 6,980 would also suggest that a road diet would be appropriate. The outside lanes in each direction will be converted to class 2 buffered bike lanes, with the future extension of a class III bike facility north all the way to El Norte Parkway. The center turn lane at the crossing will be converted to a median refuge, providing a secondary treatment enhancement.

Road diet brings the number of lanes down to 2 and with this change traffic signal becomes unnecessary per crosswalk treatment matrix.



Figure 8: Existing conditions at Harding Street.

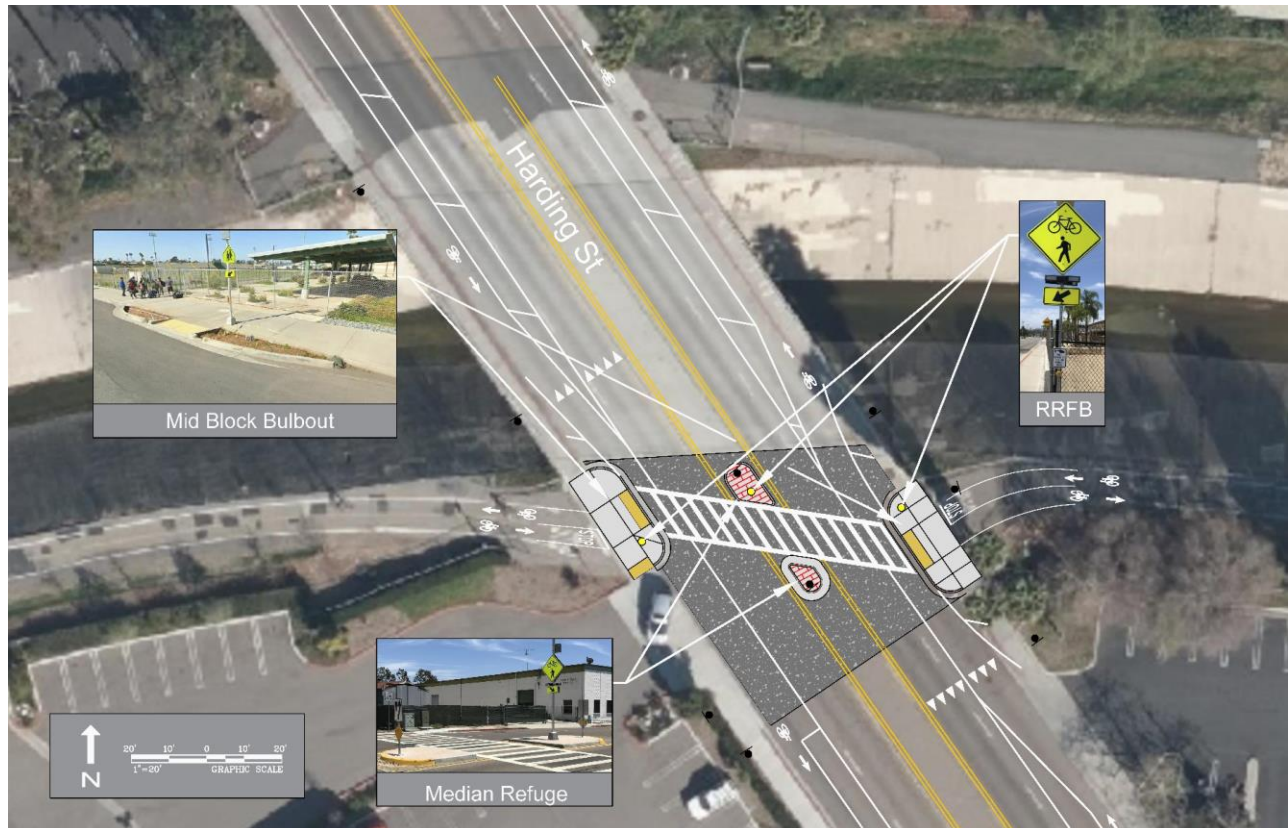


Figure 9: Proposed improvements at Harding Street.

Proposed Improvements at Rose Street – RRFB, Bulb-outs, Crosswalk, Lighting

Rose Street is a two-lane Collector Rd with ADT of 12,800 vehicles and a speed limit of 30 mph. On-street parking is not allowed. Land use is both residential and commercial. Washington Park and Pool are located north of the crossing.

As discussed during the January 9th, 2020 TCSC meeting both the traffic signal and HAWK warrants would not be met at Rose Street. City's Crosswalk Policy requires the substitution of a traffic calming treatment with RRFB. It is recommended that standard signage and striping enhancement, RRFB and pedestrian bulb-outs along with edgeline striping to reduce lane width be installed at Rose Street Crossing.

Because both the traffic signal and HAWK warrants would not be met at Rose Street, per City's Crosswalk Policy, horizontal deflection calming treatment with RRFB should be installed instead. It is recommended that standard signage and striping enhancement, RRFB, and a traffic calming treatment be installed at Rose Street crossing.



Figure 10: Existing conditions at Rose Street.

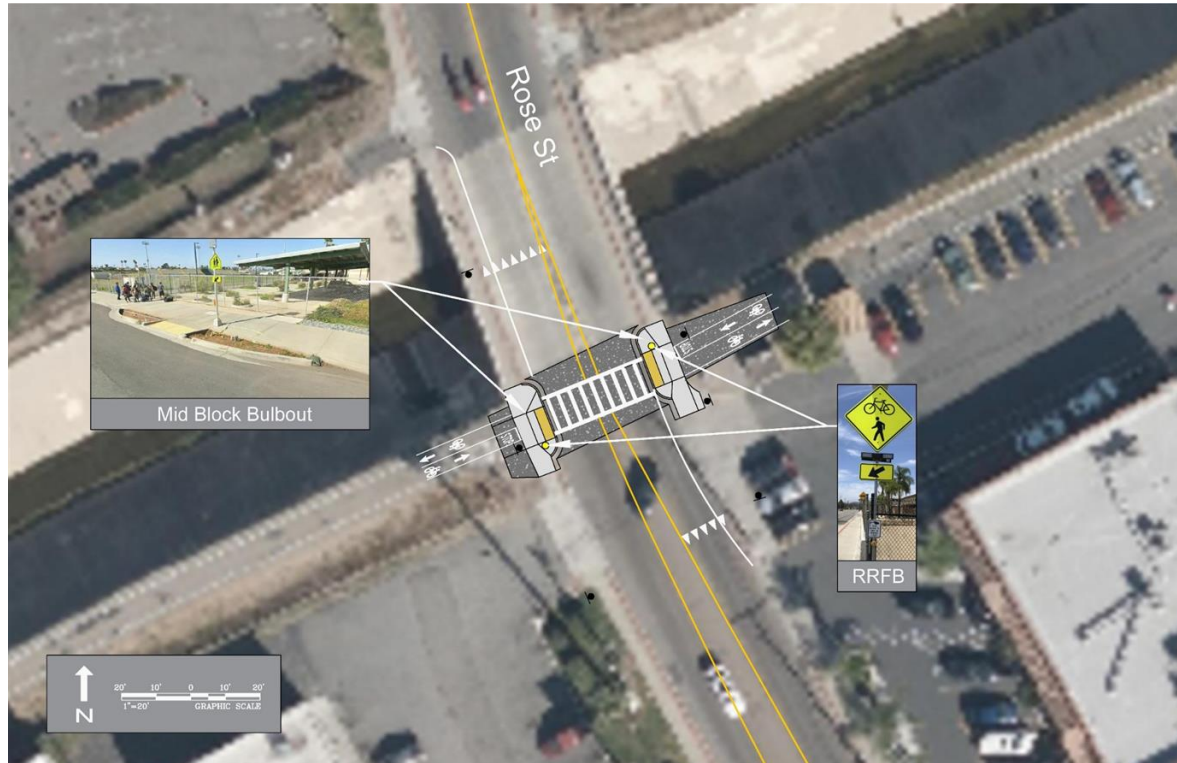


Figure 11: Proposed improvements at Rose Street

Proposed Improvements at Midway Drive – Median Refuge, Traffic Signal, Crosswalk, Lighting

Midway Drive is currently striped with two lanes separated with a TWLTL. Land use is commercial and residential in nature and limited on-street parking is allowed. Fire station #2 is located near Valley Parkway and regular bus traffic serves several bus-stops on the segment.

Per the City's Crosswalk Policy, a traffic signal warrant analysis was conducted. The Midway Drive crossing did not meet traffic signal warrants but HAWK signal warrant analysis showed that based on pedestrian and vehicle volumes the crossing meets the CA MUTCD Guidelines for the installation of a HAWK. It's the City of Escondido's preference and recommendation in this case to install a regular traffic signal in place of a HAWK. This complies with CA MUTCD Section 4F.01 Application of Pedestrian Hybrid Beacons Support: *A conventional traffic control signal operation with a standard signal face displaying green, yellow and red (steady and/or flashing red) indications, at a mid-block crosswalk is an alternative to the pedestrian hybrid beacon (CAMUTCD p. 959)* . In their January 2020 meeting, TCSC approved a traffic signal as a crosswalk treatment for the Midway Drive crossing.

Median refuge is designed to shorten the distance of pedestrian exposure to vehicles. Bike lanes will be added to the segment between Washington Avenue and Valley Parkway.



Figure 12: Existing conditions at Midway Drive.

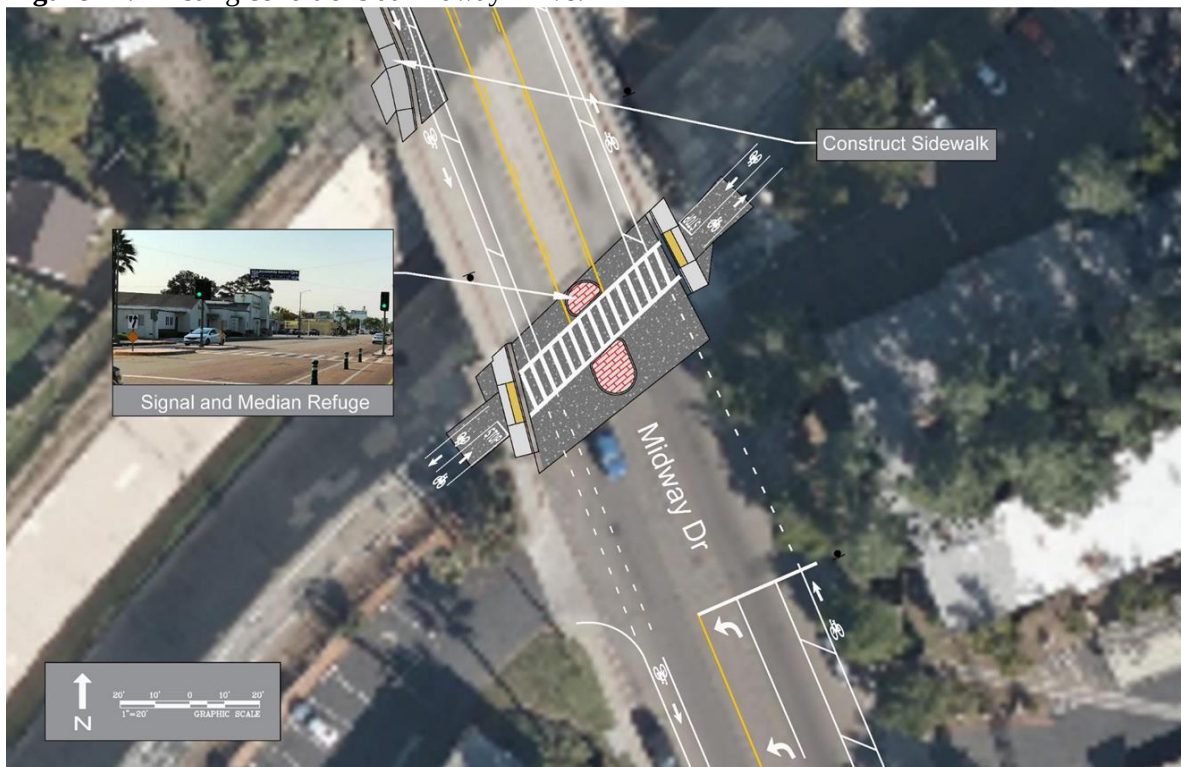


Figure 13: Proposed improvements at Midway Drive include a traffic signal.



Figure 14: Bike lane and sidewalk improvements extend to East Washington Avenue.

Proposed Improvements at Citrus Avenue – RRFB, Bulb-outs, Bike Lanes, Crosswalk, Lighting

Citrus Avenue is currently striped as two travel lanes separated by a TWLTL. The current ADT is 9,510 vehicles per day and the speed limit is 35mph.



Figure 15: Existing conditions at Citrus Avenue.

At Citrus Avenue the width of the roadway at the crossing is not sufficient for a construction of a median refuge. Adding a refuge island would make the travel path too narrow for fire trucks. Other measures such as raised crosswalks and a radar feedback signs were also considered but disregarded due to maintenance concerns. Instead bike and pedestrian exposure will be reduced by adding bulb-outs, striping lane narrowing edgelines and a RRFB.

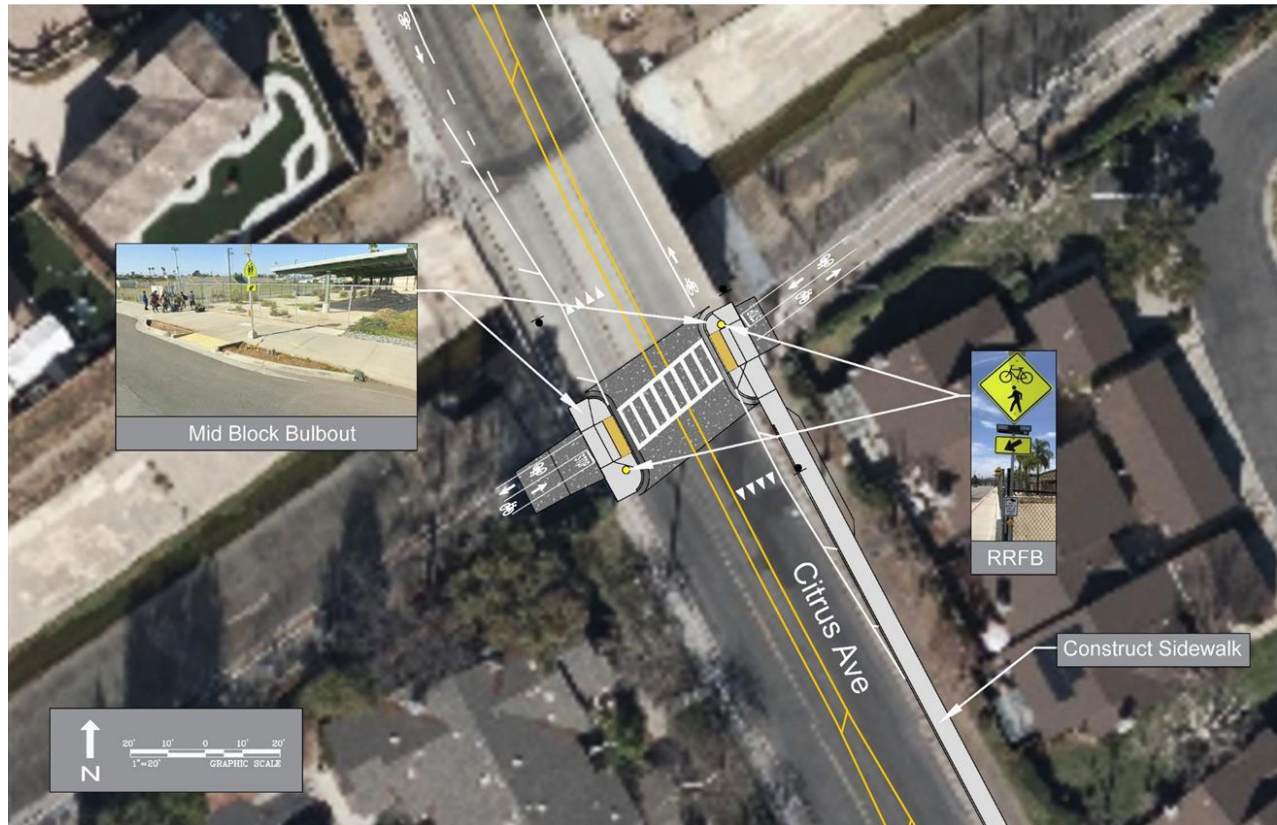


Figure 16: Proposed improvements at Citrus Avenue.

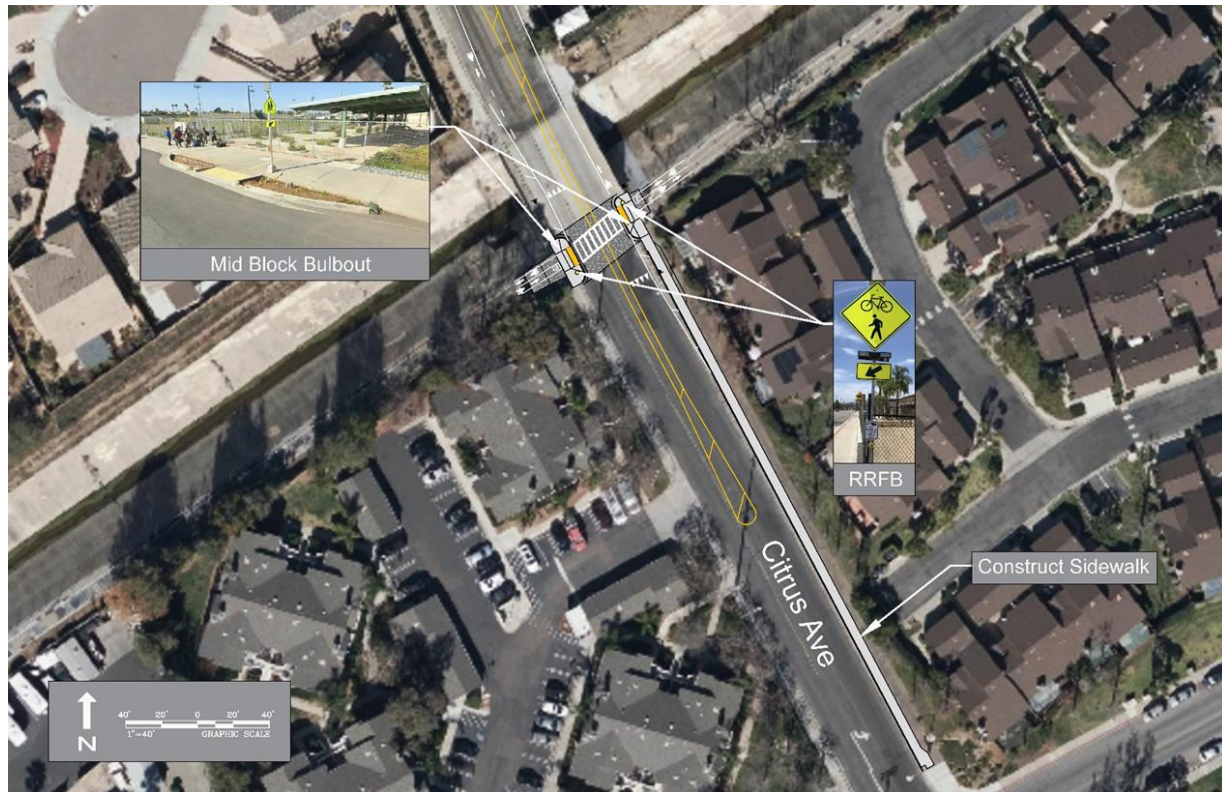


Figure 17, 18: Sidewalk improvements are planned for both sides of Citrus Avenue.

The project evaluated the possibility for the installation of Gateway Signage, similar to El Norte Parkway signage, to all crossing locations. Installations will be completed in phases as the funding becomes available.



Figure 19: The first Gateway Sign was installed at El Norte Parkway Bike Path Crossing.

Quince Street Color 	<i>Symbol</i> 	Harding Street Color 	<i>Symbol</i> 
Juniper Street Color 	<i>Symbol</i> 	Rose Street Color 	<i>Symbol</i> 
Hickory Street Color 	<i>Symbol</i> 	Midway Street Color 	<i>Symbol</i> 
Fig Street Color 	<i>Symbol</i> 	Citrus Street Color 	<i>Symbol</i> 

Figure 20: Neighborhood specific colors and symbols were designed to be incorporated in the Gateway Signage.



Figure 21: Rendering of a Gateway Sign at Juniper Crossing.

Proposed Improvements – Cost estimates

The estimated cost for the proposed improvements for all seven (7) crossing locations and sidewalk extensions is \$1,200,000.00. This includes the construction of the traffic signal at Midway Drive but excludes the Gateway Signage. Staff will be seeking the California Transportation Commission allocation of construction funding in March 2021 and award is anticipated this summer with construction to follow in early Fall.

Recommendation: Note and File.

Necessary Council Action: None.

Respectfully submitted,

Prepared by:



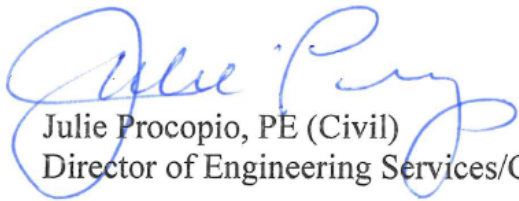
Virpi Kuukka-Ruotsalainen
Associate Engineer

Reviewed by:



Owen Tunnel, PE (Civil)
Assistant City Engineer

Approved by:



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

Attachments:

Attachment 1: City of Escondido Crosswalk Policy



**CITY OF ESCONDIDO
TRANSPORTATION and
COMMUNITY SAFETY COMMISSION**

Commission Report of: July 13th, 2017

Item No.: F1

Location: Citywide

Initiated By: Staff

Request: Approval of City of Escondido Updated Crosswalk Policy for Mid-Block Crosswalks

Background:

Chronology:

On July 9, 2015 Transportation and Community Safety Commission was presented with the City of San Diego policy which was approved in June of 2015 and a comparison of it with the City of Escondido Policy, Commission's approval was to proceed with the amendment of the COE Crosswalk Policy.

On October 8, 2015, Transportation and Community Safety Commission approved the "Basic Warrants" and "Points Warrants" Chapters of the new City of Escondido Crosswalk Policy. On January 14, 2016, Transportation and Community Safety Commission approved the new City of Escondido Crosswalk Policy that included Chapter 3 "Crosswalk Treatments".

On January 14, 2016, Transportation and Community Safety Commission approved the new City of Escondido Crosswalk Policy that included Chapter 3 "Crosswalk Treatments".

At the present July 13, 2017, Transportation and Community Safety Commission staff is presenting some changes to the New City of Escondido Crosswalk Policy approved on January 14, 2016. The changes are highlighted in the report for the commissioners.

Discussion & Purpose:

The purpose of the Updated Crosswalk Policy is to finalize City's Crosswalk Policy by revising the Basic Warrant and Treatment Chapters to provide more clarification of the policy. The proposed revisions are based on further evaluation of the requirements and better understanding of applicability of the treatment safety measures for City of Escondido's roadways and public safety needs.

The proposed revisions are:

- 1). Basic Warrant Chapter: Section 1.1 "Pedestrian Volume Warrant" has been revised to clarify the threshold of 10 more pedestrians applies during the peak pedestrian period. Section 1.5 has been revised to allow for providing lighting in case of inadequate lighting at the proposed crosswalk location.
- 2). Treatment Chapter: Crosswalk safety measure requirements to specify the Rectangular Rapid Flashing Beacon (RRFB) as a preferred treatment for crosswalks on low to mid-volume roadways. Measure D requiring Signal or HAWK warrant analysis and traffic calming measures has been added to mirror the City of San Diego Policy. The proposed revisions are reflected in the treatments table and measures.

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 pedestrian per hour or more during the peak pedestrian 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. Any other sight restrictive features will require special attention.

1.5. Illumination Warrant

The proposed location must have adequate existing lighting or adequate lighting shall be provided prior to the installation of the crosswalk.

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 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

- (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: January 14th, 2021

Item No.: G1-A

Location: Citywide

Initiated By: Staff

City of Escondido 2019/20 Traffic Management Project List (TMPL) – Completed Projects

Background

TMPL is an annual Program that was created to prioritize and ensure funding for the most critical transportation safety related projects. The current annual funding of \$50,000 is used to fund the highest priority projects nominated by members of the public, School District officials, COMPACT and City staff.

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 in April and staff reports back in July with detailed design and cost information for TCSC review and budget approval of the selected projects.

City of Escondido 2019/20 Traffic Management Project List (TMPL) and the projects' preliminary prioritization based on approved scoring criteria were presented to TCSC at the April 11, 2019. Four projects were selected by the TCSC for detailed design and possible funding in the 2019/20 funding cycle. In July 11th, 2019, the top four ranked projects were selected for implementation.

This report provides details and before/after photographs on the projects completed as a part of the FY19/20 TMPL

1. Crosswalk Improvements at Citrus Avenue and Oak Hill Drive

The crosswalk at the intersection of Citrus Avenue and Oak Hill Drive near **Hidden Valley Middle School** was recommended by Escondido Union School District (EUSD) to be included on TMPL due to the high volume of students utilizing this crosswalk and the amount of traffic on Citrus Avenue. The intersection of Citrus Avenue and Oak Hill Drive is side-street-stop-controlled on Oak Hill Drive with no marked crosswalk on Oak Hill Drive and a marked mid-block crosswalk on Citrus Avenue. Figure 1 depicts the location of the existing mid-block crosswalk on Citrus Avenue at Oak Hill Drive.

Hidden Valley Middle School, with student population of approximately 1,022, is located at 2700 Reed Road. Pedestrian counts provided by COMPACT reflect that 75 and 110 students crossed Citrus Avenue, and 23 and 78 students crossed Oak Hill Drive in the AM and PM school peaks, respectively.

Citrus Avenue between Bear Valley Parkway and Glenridge Road is classified as a two-lane Local Collector Road per City's Circulation Element. Under existing conditions, Citrus Avenue is a two-lane roadway with no two-way-left-turn lane. The average daily traffic on this segment of Citrus Avenue is 8,600 and the speed limit is 40 MPH. The 85th percentile speed on Citrus Avenue was measured to be 39 MPH.



Figure 1: Existing Mid-block Crosswalk at Citrus Avenue and Oak Hill Drive

Improvements

Per City's Crosswalk Policy, the improvements include new yield lines, crossing signage, crosswalk marking, solar-powered RRFB, and speed reduction markings on Citrus to slow drivers approaching the crosswalk which is located at a vertical curve. The improvements are shown in Figure 2.

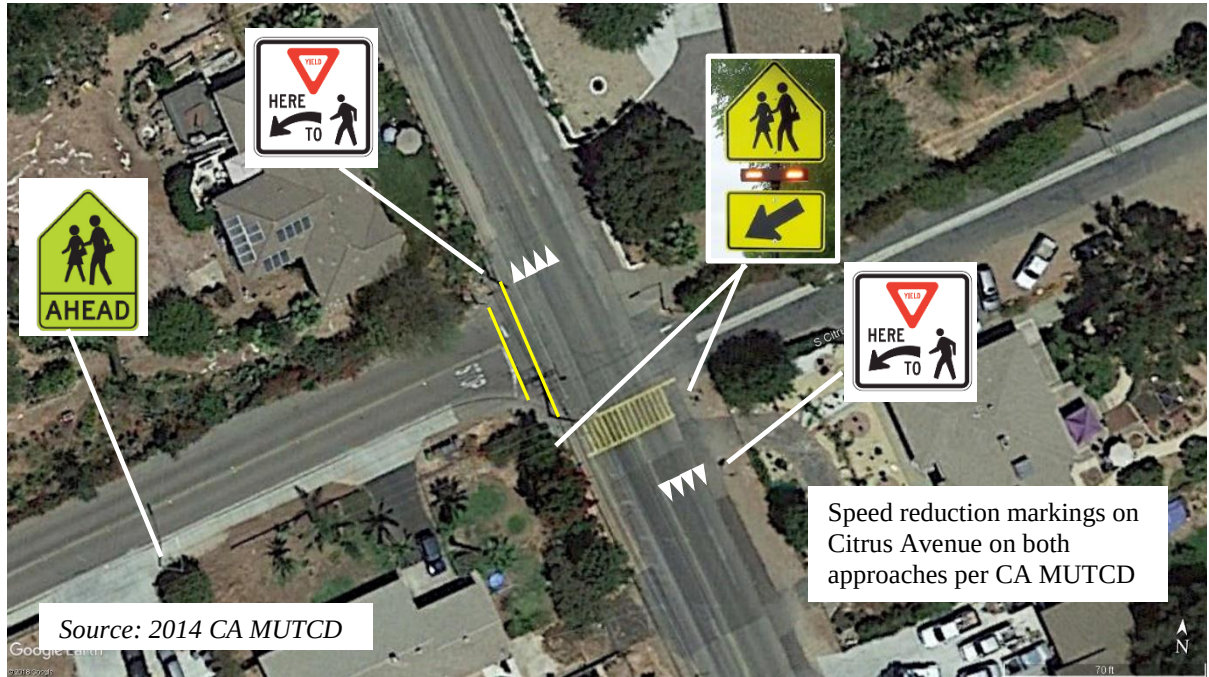


Figure 2: Crosswalk Improvements at Citrus Avenue and Oak Hill Drive

The RRFB was installed in July, 2020 and the striping was completed in October 2020. Pavement repairs were necessary prior to striping. Figures 3,4,5,6,7 and 8 show the conditions prior to project and the completed improvements.



Figure 3: Before the improvements vehicles were failing to yield to pedestrians and stopping too close to the crosswalk.



Figure 4: Northbound approach to crosswalk prior to improvements.



Figure 5: Solar Powered RRFB, signage and high visibility crosswalk in place.



Figure 6: Crosswalk on Oak Hill was also refreshed.



Figure 7: Yield legends now keep vehicles further away from crosswalk and improve visibility of pedestrians.

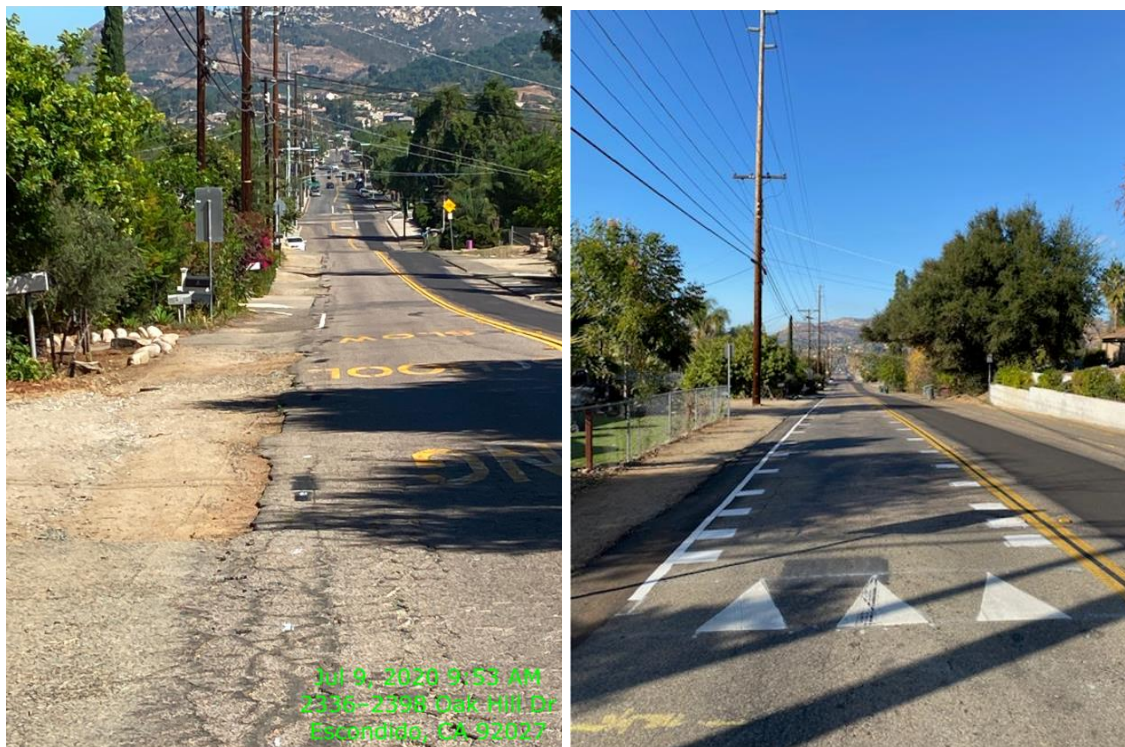


Figure 8: Pavement conditions before and after the project.

2. Pioneer Elementary School Crosswalk Improvements

The uncontrolled crosswalk at the eastbound channelized right-turn lane of the signalized intersection of Lincoln Avenue and Ash Street was recommended by EUSD and COMPACT to be included on TMPL. The intersection is adjacent to the **Pioneer Elementary School** with student population of approximately 740. The location of the uncontrolled crosswalk is shown on Figure 9.

Lincoln Avenue between Fig Street and Ash Street is classified as a Prime Arterial according to City's Circulation Elementary. The existing roadway is a four-lane roadway with no center turn lane. On-street parking is prohibited. The average daily traffic on this segment of Lincoln Avenue is 24,699 and the speed limit is 40 MPH.



Figure 9: Uncontrolled Crosswalk at Lincoln Avenue and Ash Street

Improvements

The improvements include 1) replacing old signs on Lincoln Avenue approaching Ash Street to be compliant with CA MUTCD, 2) adding YIELD pavement legend upstream of the existing yield line to increase drivers' awareness to yield to pedestrians, 3) removing the wild palm tree that casts shadows on the crosswalk in the afternoon, and 4) adding new chevron striping and 6" bottle dots (raised white non-retroreflective markers) to deter drivers from making lane change in the striped gore area.



Figure 9: Improvements on EB Lincoln Avenue at Ash Street



Figure 10, 11: Before the improvements a large palm tree casted shadows on crosswalk, making it difficult to see pedestrians.



Figure 12: Palm tree was removed, new striping, signage and bollards are in place.



Figure 13: Old signage was refreshed at East bound approach to the crosswalk.

3. Countdown Pedestrian Indications in School Zones

COMPACT provides crossing guard services to the Escondido Union School District. The District and EUSD recommended the top five signalized intersections for the addition of pedestrian countdown timers based on the amount of students crossing at the location and its proximity to existing schools. The total of thirty-eight (38) new pedestrian countdown timers were installed.

- 1) Mission Avenue and Ash Street (Mission Middle School)
- 2) Bear Valley Parkway and Citrus Avenue (Orange Glen High School School)
- 3) Bear Valley Parkway and East Valley Parkway (Orange Glen Elementary School)
- 4) Midway Drive and Oak Hill Road (Oak Hill Elementary School)
- 5) Midway Drive and Grand Avenue (Oak Hill Elementary School)

In 2017/18 and 2018/19, TMPL funding made similar improvements possible at eight (8) intersections. In 2020/21 funding was approved for 4 more locations and will include the installation of 30 more units.



Figure 14: Pedestrian countdown indications assist by showing the remaining time assigned for pedestrians.



Figure 15: Five (5) project intersections marked with red dots are near school sites marked with yellow shading.

4. Accessible Pedestrian Signals at Centre City Parkway and El Norte Parkway

In 2019, requests for Accessible Pedestrian Signals (APS) were received from members of the public for six signalized intersections within the City. The ADA Transition funding allowed the installation of APS at two (2) intersections. TMPL-funding was used to install APS at the intersection of Centre City Parkway/El Norte Parkway, ranked 4th on the APS prioritization list. Table 1 below shows the ranking as of April, 2019, at the time when project was selected for TMPL funding.

Additional APS installations were funded as part of a construction or maintenance projects. New HSIP signal projects included installation of APS at Valley Parkway at Date St, and at El Norte Pkwy at Fig Street. In addition, two new signals were added with Missing Link-project. In all, nine (9) intersections were upgraded with APS modules in 2019 and four (4) in 2020.

- South Escondido Blvd at 15th Avenue (ADA funding, 2019)
- El Norte Parkway at Morning View Drive (ADA funding, 2019)
- Centre City Parkway at El Norte Parkway (TMPL funding, completed 12/2019)
- Valley Parkway at Date St (new HSIP signal, 2019)
- El Norte Pkwy at Fig Street (new HSIP signal, 2019)
- 17th at Encino (new signal, 2019)
- N Broadway at Grape Day Park Pedestrian crossing (Missing Link – project, 2019)
- N Broadway at Woodward (Missing Link-project, 2019)
- Valley Parkway at Quince St (Development Project, signal modification, 2019)
- Valley Pkwy at Transit Center (Development Project, new signal, 2020)
- Grand Ave at Spruce St Pedestrian Crossing (Development Project, new signal, 2020)
- El Norte Pkwy at Creek Trail Crossing (new signal, 2020)
- La Terraza Blvd (Development Project, new signal, 2020)

Ranking	Intersection	Total Score	Funding
1	El Norte Pkwy/Morning View Dr	49	Completed 12/2019 with ADA Funding
2	Centre City Pkwy/Valley Pkwy	49	Improvements to be completed by a developer
3	Escondido Blvd/15 th Ave	47	Completed 12/2019 with ADA Funding
4	Centre City Pkwy/El Norte Pkwy	46	Completed 12/2019 with 2019/20 TMPL Funding
5	El Norte Pkwy/Country Club Ln	45	Improvements to be completed by a developer, estimated completion 2021/22
6	El Norte Pkwy/Nutmeg/Nordahl Rd	42	Improvements to be completed by a developer, estimated completion 2021/22
Source: TCSC Staff Report, Ranking Analysis for APS Citywide			

Table 1 – APS Ranking as of April 2019.

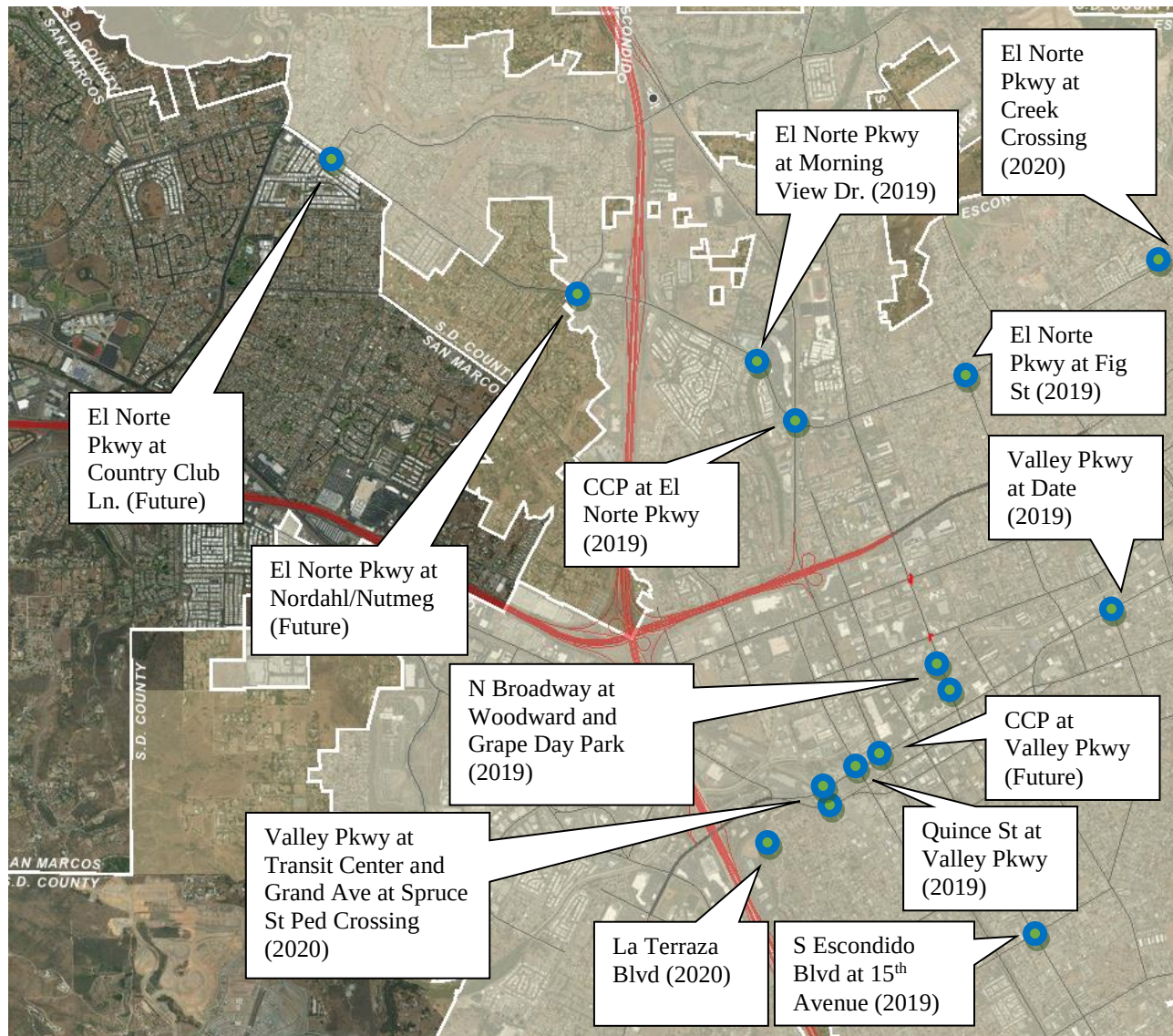


Figure 16: In 2019, APS was installed at nine (9) locations, in 2020 four (4) more locations were added.

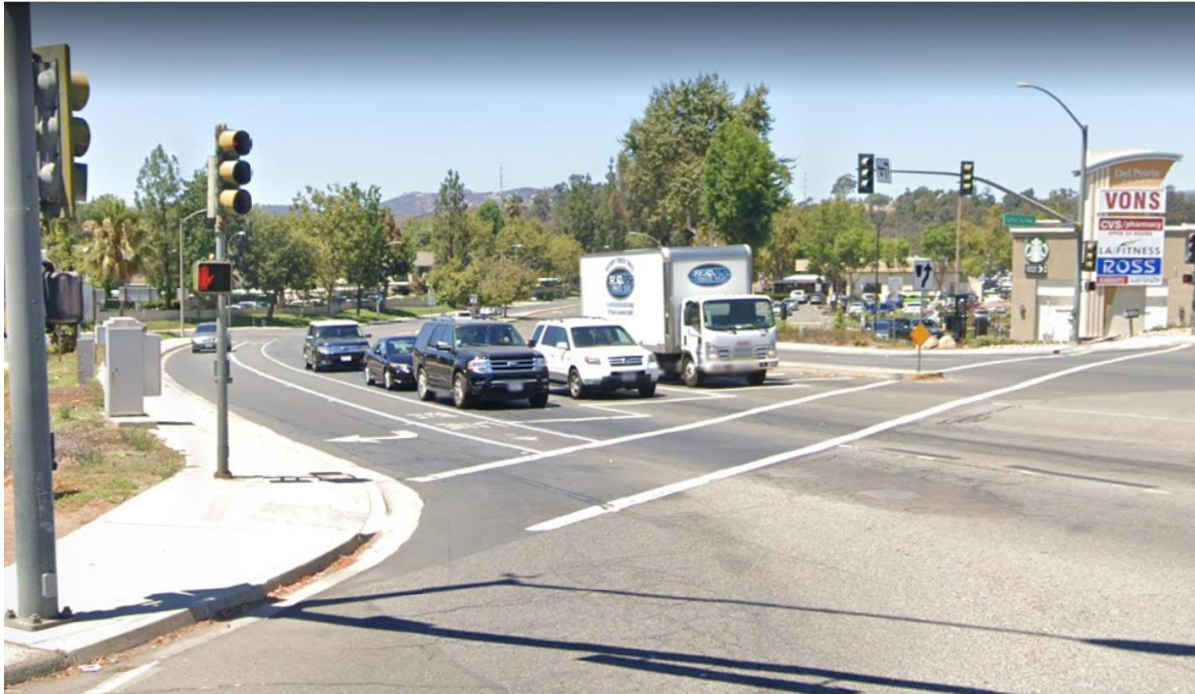


Figure 17: At El Norte Parkway, pedestrian push-buttons were replaced with 8 new APS units using TMPL-funding.

Recommendation: Note and file report.

Necessary Council Action: None.

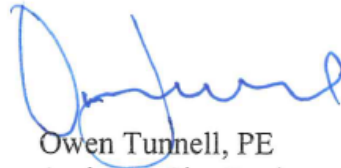
Respectfully submitted,

Prepared by:

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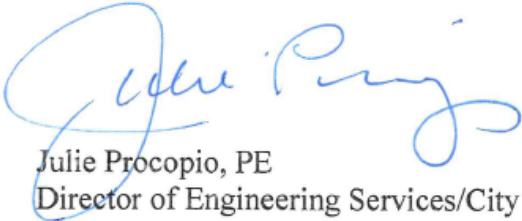
Virpi Kuukka-Ruotsalainen
Associate Engineer

Reviewed by:

A handwritten signature in blue ink, appearing to read 'Owen Tunnell', with a large loop at the beginning and a long horizontal stroke.

Owen Tunnell, PE
Assistant City Engineer

Approved by:

A handwritten signature in blue ink, appearing to read 'Julie Procopio', with a large loop at the beginning and a long horizontal stroke.

Julie Procopio, PE
Director of Engineering Services/City Engineer