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TRAFFIC IMPACT STUDY

Pasqual Heights

County of San Diego, CA

October 10, 2025

C² Reference: 24.142

A WENN4650 Company

C2 CONSULTING COLLECTIVE
Historic Santa Fe Depot
1050 Kettner Blvd, Suite D-551
San Diego, CA 92101
info@c2-mobility.com
858.270.4444

Planning.Design.Technology

www.c2-mobility.com

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TRAFFIC IMPACT STUDY (TIS)

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1. INTRODUCTION

The Consulting Collective (C²) prepared the following Traffic Impact Study (TIS) for the Pasqual Heights project in the County of San Diego. This TIS has been prepared in support of the environmental documentation for the project.

California Environmental Quality Act (CEQA) Guidelines Section 15183 allows a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified.

The County of San Diego certified an EIR for the General Plan Update (GPU) on August 3, 2011. The 15183-exemption process can be used where an individual project can demonstrate that the project's impacts were adequately covered under the County's GPU EIR.

This analysis is tiered from the GPU EIR, consistent with CEQA provisions that allow subsequent projects to rely on prior environmental documents where appropriate. Because the project tiers from an existing certified EIR, the traffic analysis follows the methodologies and significance thresholds in effect at the time that EIR was prepared. Accordingly, this study has been conducted in accordance with the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Transportation and Traffic (2011)*. These guidelines establish the evaluation criteria, analytical procedures, and reporting standards used to assess potential transportation impacts under CEQA.

The purpose of this TIS is to document project-related traffic conditions, assess consistency with the applicable 2011 guidelines, and determine whether the Pasqual Heights Project would result in any new or more severe transportation impacts beyond those identified in the GPU EIR. For additional information please see the County of San Diego, PDS, Zoning Division FAQs CEQA 15183 Exemption Process included in Appendix A.

1.1 PROJECT DESCRIPTION

The project is located at 830 Idaho Avenue on the northwest corner of State Route 78 (SR78)/San Pasqual Valley Road and Idaho Avenue. The project is located within the North County Metro community planning area. The project includes the construction of 42 residential dwelling units, 7 of which will be designated as affordable units, on a 10.35-acre site. The site is currently vacant and undeveloped apart from one (1) single-family dwelling unit that will remain occupied until the project is constructed. Project access is provided via Idaho Ave.

The General Plan land use designation is Village Residential (VR-2) for the project site. The project has been deemed consistent with the General Plan in consideration of a density bonus compliant with California's Density Bonus Law (Government Code Sections 65915 – 65918).

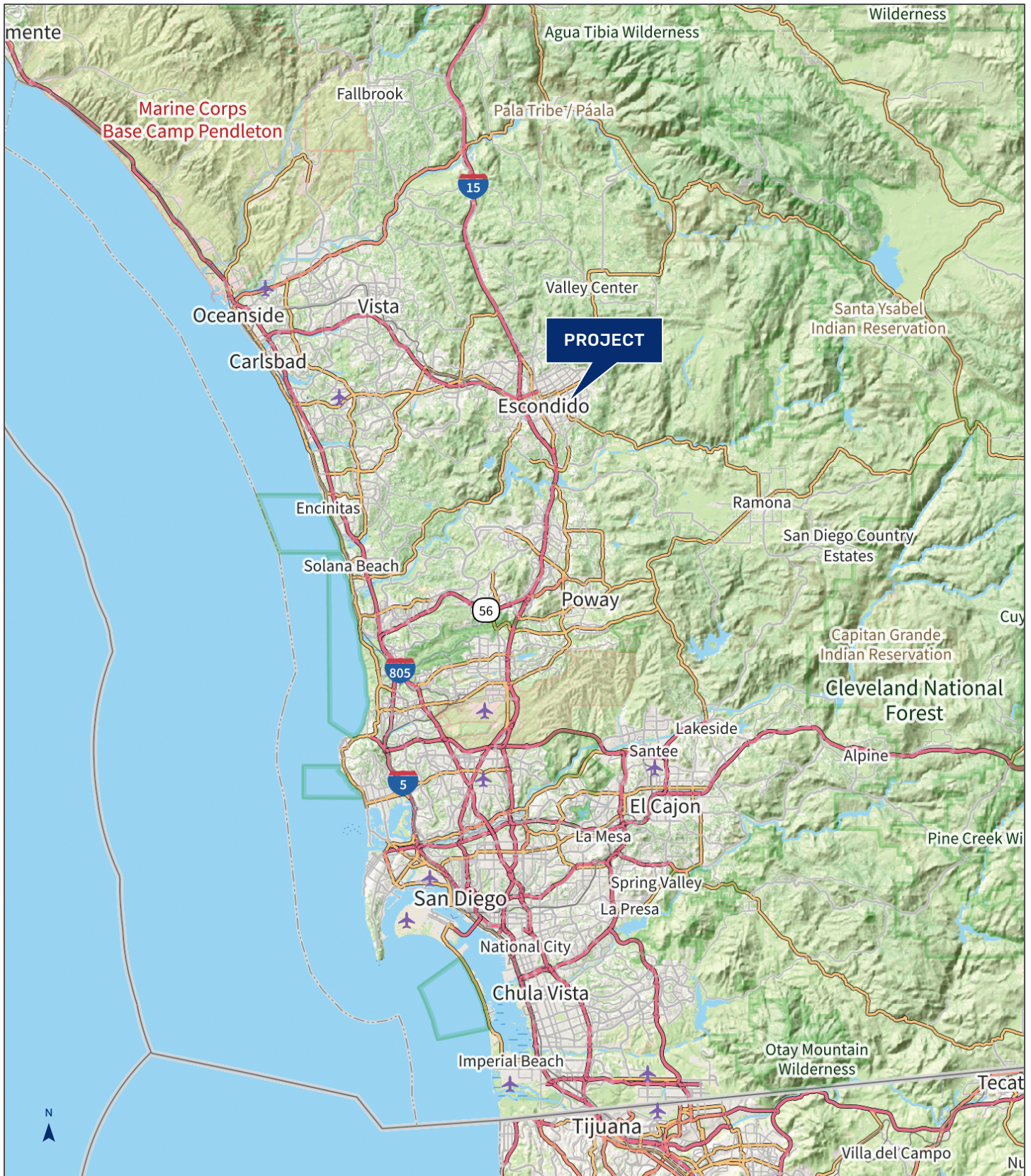
Figure 1-1 shows the regional vicinity map. **Figure 1-2** shows in more detail the local project area map. The project site plan is illustrated in **Figure 1-3**.

1.2 REPORT ORGANIZATION

This report is structured to provide a comprehensive transportation analysis, consistent with County guidelines and industry best practices. The organization of the report is as follows:

1. Introduction
2. Analysis Approach & Methodology
3. Existing Transportation Conditions
4. Opening Year Transportation Conditions
5. Proposed Project
6. Transportation Analysis

Each section is designed to build on the previous one, providing a logical flow from the report introduction to the detailed analysis and finally to recommendations, if any. Relevant figures can be found at the end of each report section.



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Figure 1-1
Regional Vicinity Map

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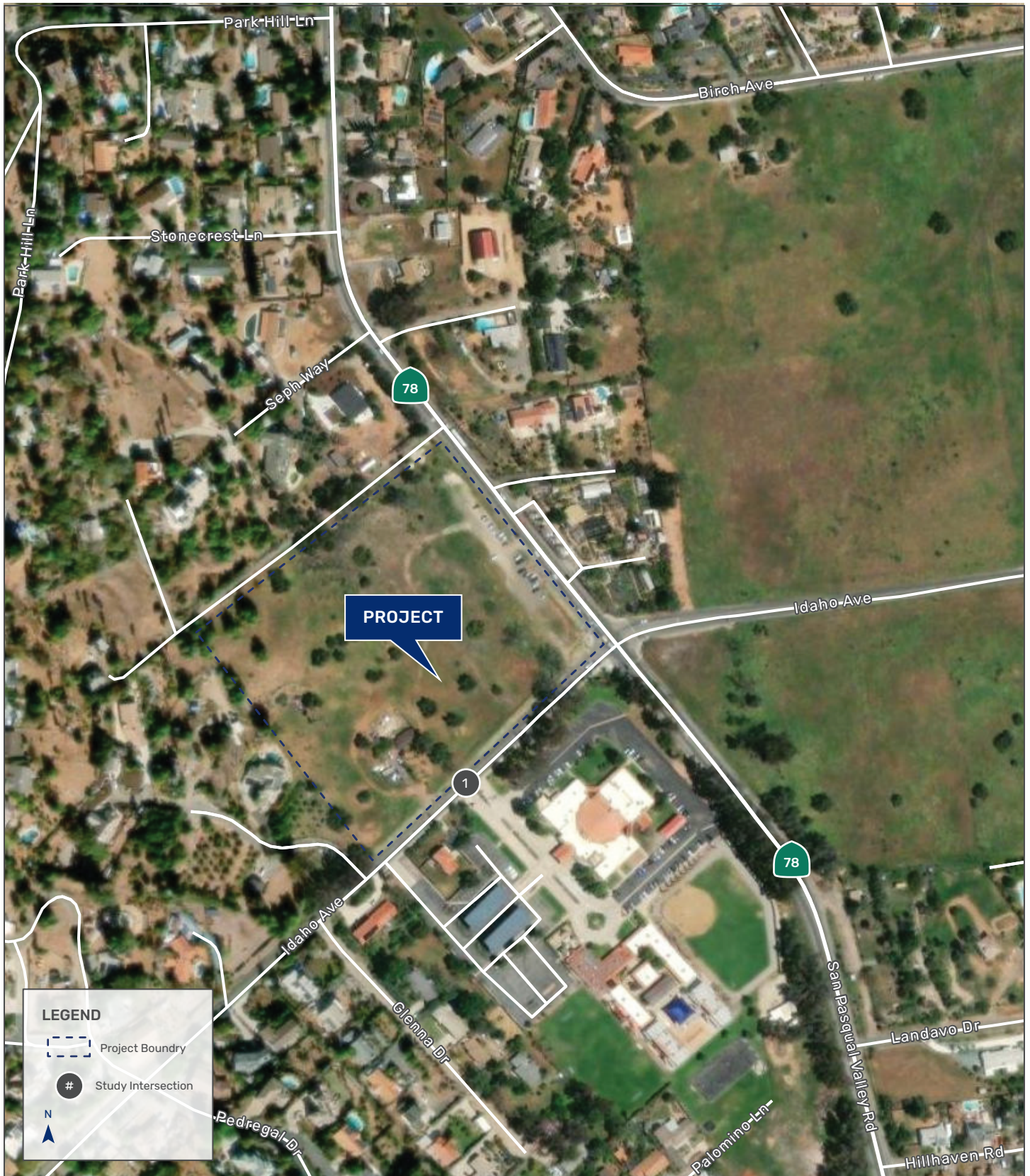
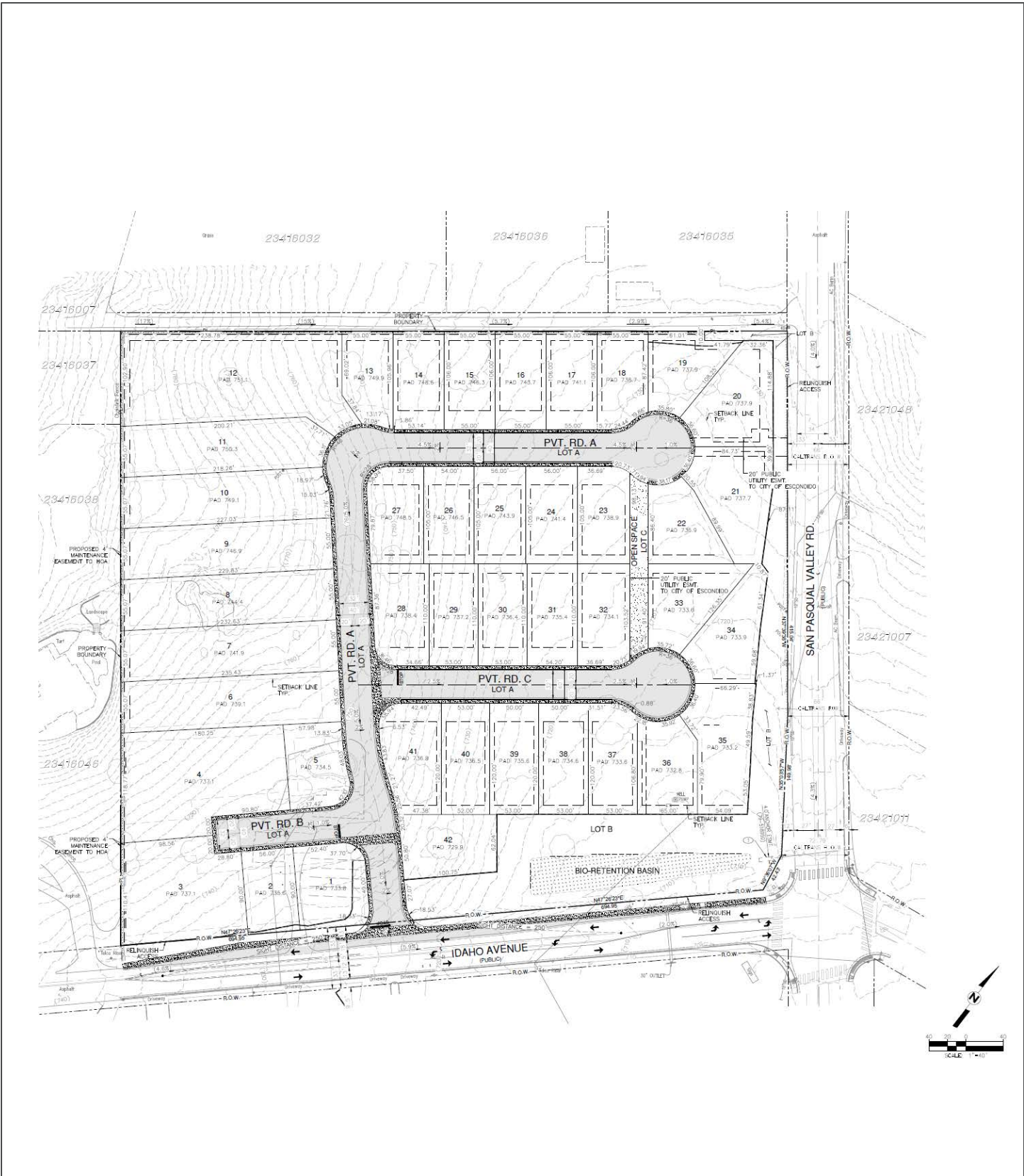


Figure 1-2
Project Area Map

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Figure 1-3
Site Plan

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2. ANALYSIS APPROACH & METHODOLOGY

2.1 STUDY AREA

The study area for this Issue-Specific Traffic Impact Study (TIS) was defined in accordance with the *County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements: Transportation and Traffic (2011)*. As described in Section 5.1, the Pasqual Heights project is expected to generate 396 ADT, or between 200 and 500 average daily trips (ADT), which qualifies the analysis as an Issue-Specific TIS under the County’s criteria as shown in **Table 2-1**. Accordingly, the scope of this study is focused on the nearby roadway segments and intersections that could experience measurable changes in traffic conditions due to the project.

Consistent with County guidance, the study area for an Issue-Specific TIS includes:

- Roadway segments expected to receive more than 200 ADT from project-generated traffic, or more than 100 ADT if operating at LOS F; and
- Intersections expected to receive 21 or more project-generated peak hour trips, or 6 or more peak hour trips on a critical movement if operating at LOS F.

This approach ensures that the analysis focuses on locations where project traffic may have a reasonable potential to affect operations, access, or safety. The defined study area was confirmed through coordination with County staff and a review of the surrounding circulation network, including nearby intersections and access points that could be influenced by project-generated trips.

TABLE 2-1 COUNTY CRITERIA FOR THE NEED TO PREPARE A TRAFFIC IMPACT STUDY (TIS)

Project-Generated Traffic*	Issue-Specific TIS	Focused TIS	Full TIS Needed	Congestion Management Analysis Needed
Less than 200 Average Daily Trips or less than 20 Peak Hour Trips	No*	No*	No	No
200–500 Average Daily Trips or 20–50 Peak Hour Trips	Yes	No	No	No
500 Average Daily Trips or 50 Peak Hour Trips	No	Yes	No	No
1,000 Average Daily Trips or 100 Peak Hour Trips	No	No	Yes	No
2,400 Average Daily Trips or 200 Peak Hour Trips	No	No	Yes	Yes

* Other situations could result in a request for an Issue Specific or Focused Traffic Impact Study. These include, but are not limited to, those issues addressed in this report.

NOTE: Analysis of cumulative traffic impacts may require a Traffic Impact Study, even when project generated traffic volumes alone do not.

2.2 AUTO ANALYSIS

Auto Signalized Intersections

The auto analysis addresses the adequacy of the signalized intersection geometry to serve the existing, forecast, and project traffic through the study intersections. Where applicable, the vehicle delay / turn lane queueing was determined utilizing the methodology found in Chapter 19 of the *Highway Capacity Manual 7th Edition (HCM 7)*, with the assistance of the *Synchro* computer software. A more detailed explanation of the methodology is attached in **Appendix B**.

Auto Unsignalized Intersections

For unsignalized intersections (if applicable) the vehicle delay / turn lane queueing was determined based upon the procedures found in Chapter 20 and Chapter 21 of the *HCM 7* with the assistance of the *Synchro* computer software. A more detailed explanation of the methodology is also attached in **Appendix C**. All-way stop intersections and roundabouts are reported for the entire intersection's average value. Minor side-street stop intersections are reported for the overall intersection and the worst-case minor street movement

Auto Roadway Segments

Roadway segments within the project study area were evaluated in accordance with the County's Auto Level of Service (LOS) standards. To assess existing and future operating conditions along each study corridor, daily traffic volumes were compared to the applicable roadway capacity tables to determine segment LOS. The resulting LOS for each segment is presented for all study scenarios in this TIS. The LOS capacities used in this analysis are derived from the *County of San Diego Department of Public Works Public Road Standards (2012)*, Table 1.

Appendix D provides the County's roadway service volume tables for each road classification, identifying the normal expected daily carrying capacity at various levels of service. These capacities apply to roadways fully improved to County standards and may not represent conditions on partially improved or unimproved segments. The listed values may be adjusted as appropriate to account for roadway geometry, side frictions, or other relevant factors, as determined by the Director of the Department of Public Works.

2.3 ACTIVE TRANSPORTATION ANALYSIS

Active transportation assessment of pedestrian, bicycle, transit, and trail facilities are identified in the Scoping Agreement for private land development projects. For County-initiated projects, assessment of pedestrian bicycle; transit and trail facilities will be identified in coordination with County Department of Public Works and Department of Parks and Recreation.

Pedestrian

Pedestrian facilities review includes the documentation of existing and planned pedestrian facilities and basic deficiencies (missing sidewalk, curb ramps, and major obstructions) within ¼-mile walking distance measured from each pedestrian access point (which may include driveways, internal project sidewalk connections to the street, etc.).

Bicycle

Bicycle facilities review includes the documentation of existing and planned bicycle facilities and basic

deficiencies (bike lane gaps, obstructions) within 1-mile bicycling distance measured from the center of the intersection formed by each project driveway.

Transit

Transit service review includes the identification of the closest transit routes and stops to the project within ¼-mile walking distance and documentation of amenities at existing transit stops (such as shelters, maps, benches, etc.).

Trails

Trails facilities review includes the documentation of all existing and planned trails / pathways identified in the *County's Community Trails Master Plan (CTMP)* within ¼ mile of the project site.

2.4 SIGNIFICANCE CRITERIA

Based on the San Diego County *Report Format & Content Requirements Transportation and Traffic*, dated August 24, 2011, a project may have the following allowable increases on congested roadway segments and intersections as shown in **Table 2-2**.

TABLE 2-2 COUNTY OF SAN DIEGO SIGNIFICANT TRAFFIC IMPACT THRESHOLDS

Allowable Increases on Congested Roads and Intersections					
Level of Service	Road Segments			Intersections	
	2-Lane Road	4-Lane Road	6-Lane Road	Signalized	Un-signalized
LOS E	200 ADT	400 ADT	600 ADT	Delay of 2 seconds or less	20 or less peak hour trips on a critical movement
LOS F	100 ADT	200 ADT	300 ADT	Either a Delay of 1 second, or 5 peak hour trips or less on a critical movement	5 or less peak hour trips on a critical movement

Road Segment Notes:

1. By adding proposed project trips to all other trips from a list of projects, this same table must be used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project that contributes additional trips must mitigate a share of the cumulative impacts.
2. The County may also determine impacts have occurred on roads even when a project's traffic or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.

Intersection Notes:

1. A critical movement is an intersection movement (right turn, left turn, through-movement) that experiences excessive queues, which typically operate at LOS F. Also if a project adds significant volume to a minor roadway approach, a gap study should be provided that details the headways between vehicles on the major roadway.
2. By adding proposed project trips to all other trips from a list of projects, these same tables are used to determine if total cumulative impacts are significant. If cumulative impacts are found to be significant, each project is responsible for mitigating its share of the cumulative impact.
3. The County may also determine impacts have occurred on roads even when a project's direct or cumulative impacts do not trigger an unacceptable level of service, when such traffic uses a significant amount of remaining road capacity.
4. For determining significance at signalized intersections with LOS F conditions, the analysis must evaluate both the delay and the number of trips on a critical movement, exceedance of either criteria result in a significant impact.

A direct impact would occur when the significance criteria are exceeded. If the proposed project exceeds the

values provided in the above table, then the individually proposed project would result in a direct traffic impact. Specific improvements to mitigate direct impacts must be identified.

A cumulative impact would occur when two conditions are met: 1) build-out of all near-term projects results in a cumulative traffic impact and 2) the amount of traffic generated by the individual proposed project contributes (even in a small part) to that cumulative impact. Both conditions must be met for an individual project to result in a cumulative traffic impact.

Potential mitigation measures may include traffic signal improvements (i.e. signal coordination), physical road improvements, street re-striping and parking prohibitions, fair-share contributions, and transportation demand management programs.

3. EXISTING TRANSPORTATION CONDITIONS

3.1 EXISTING ROADWAY & INTERSECTION CONFIGURATIONS

The following is a description of the major roadways within the study area. **Figure 3-1** illustrates existing conditions in the study area in terms of roadway and intersection configurations/controls.

Idaho Avenue is classified as a *2.2D Light Collector* in the County's General Plan – Mobility Element. Within the study area, Idaho Avenue is constructed as a two-lane undivided roadway. The posted speed limit is 25-35mph in the immediate vicinity of the project. Curbside parking is only permitted on the south, improved side of the roadway. Idaho Avenue also provides the primary access to the site.

The *County of San Diego Mobility Element - North County Metro Subregion* network is included in **Attachment B**.

3.2 EXISTING PEDESTRIAN FACILITIES

Existing pedestrian facilities along the study roadways and intersections are illustrated in **Figure 3-2**.

Idaho Avenue provides sidewalks on the south side, along the frontage of the *Escondido Church & Schools* property. Other sections of Idaho Avenue remain unimproved and do not provide sidewalks.

3.3 EXISTING BICYCLE FACILITIES

Existing bicycle facilities along the study roadways are illustrated in **Figure 3-2**.

Idaho Avenue generally remains unimproved and does not provide bicycle facilities within the study area.

3.4 EXISTING LOCAL & REGIONAL TRANSIT SERVICE

The North County Transit District (NCTD) provides transit service in the study area. Existing bus route 371 is located on SR78 / San Pasqual Valley Road, but there are no bus stops in close proximity to the project site. Existing transit routes are illustrated in **Figures 3-3**. NCTD routes information is provided in **Appendix E**.

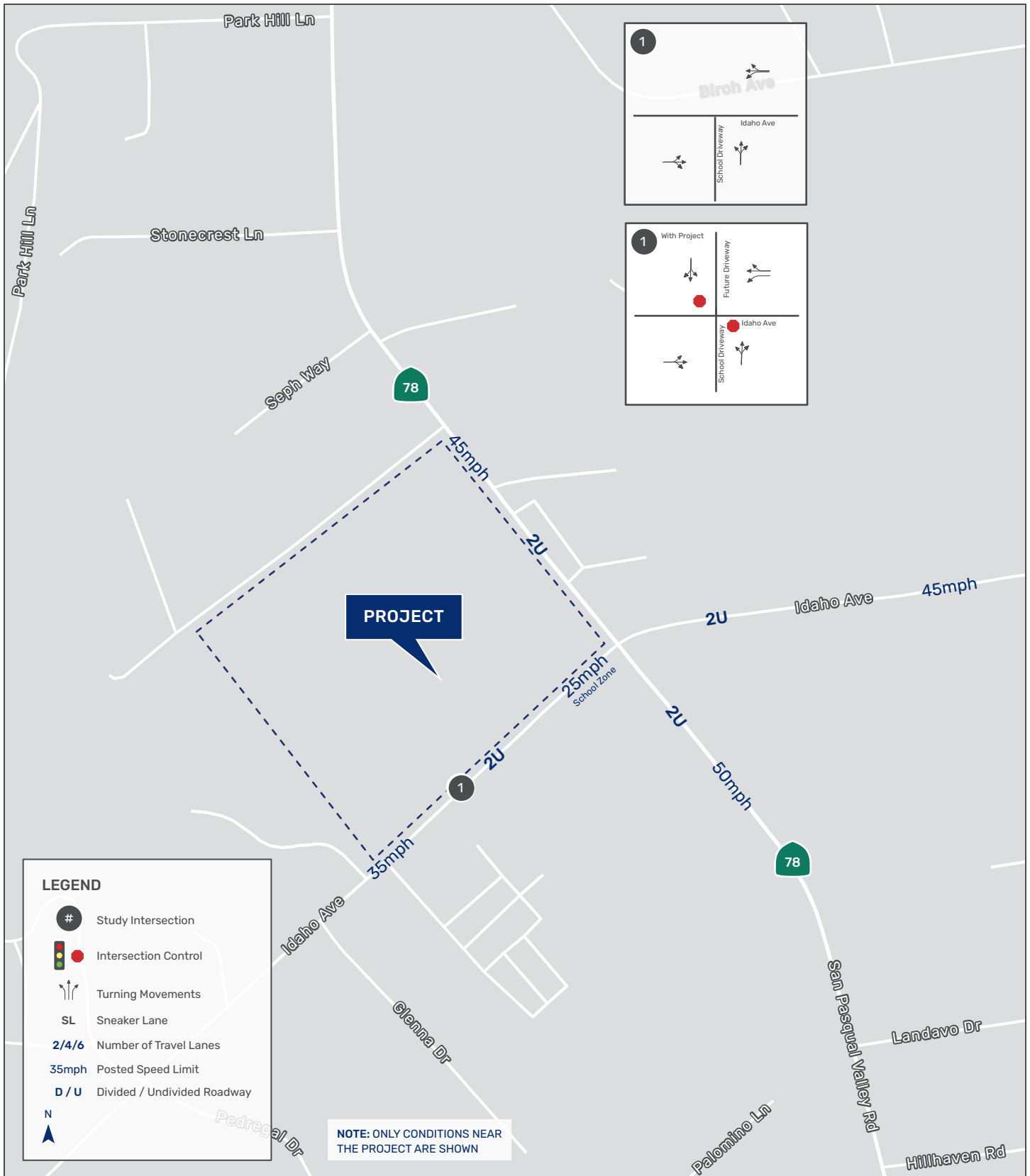
3.5 EXISTING TRAIL FACILITIES

There are no existing or planned trails and pathways identified in the within a ¼-mile of the project site. Additional information on the *County of San Diego's Community Trails Master Plan (CTMP)* is provided in **Appendix F**.

3.6 EXISTING TRAFFIC VOLUMES AND PEDESTRIAN/BICYCLE ACTIVITY

Traffic volumes at the study area intersections and roadway segments were commissioned on Wednesday, September 11, 2024, while adjacent schools were in session. In addition, pedestrian and bicycle activity were captured during the same time periods.

Figure 3–5 illustrates the existing traffic volumes and pedestrian/bicycle activity. The intersection and segment count sheets are provided in **Appendix G**.



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Figure 3-1
Existing Roadway and Intersection Configurations

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Figure 3-2
Existing Pedestrian and Bicycle Facilities

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Figure 3-3
Existing Transit Service

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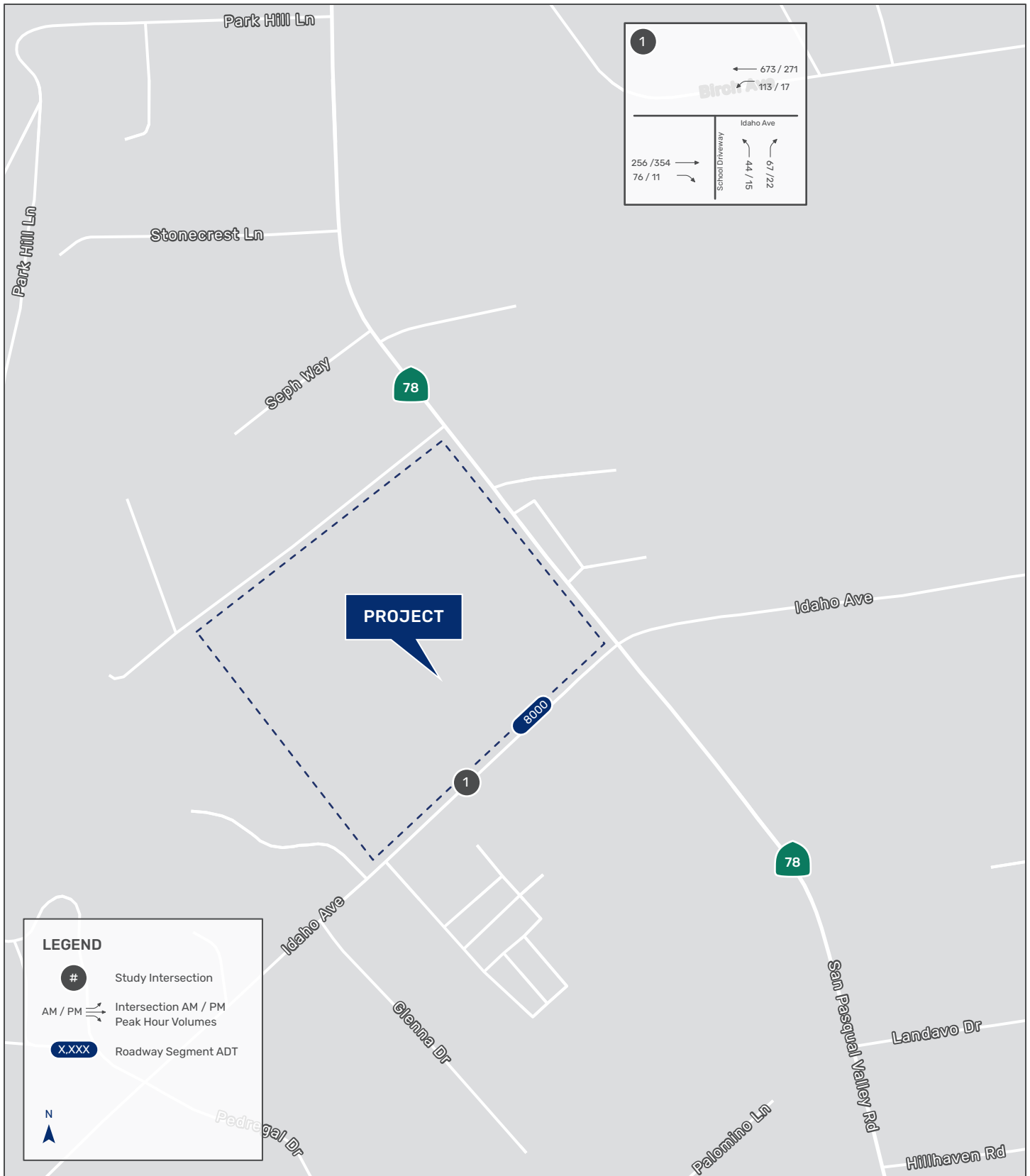


Figure 3-4
Existing Traffic Volumes

4. OPENING YEAR TRANSPORTATION CONDITIONS

Consistent with County guidelines, Opening Year conditions were reviewed. Opening Year conditions represent the approximate point in time in which the project is assumed to be constructed and occupied (and thereby generating vehicle trips and pedestrian/bicycle activity).

4.1 OPENING YEAR ROADWAY & INTERSECTION CONFIGURATIONS

No planned street system or intersections improvements within the study area were assumed. *Figure 3–1* illustrates the transportation conditions assumed for Opening Year conditions.

4.2 OPENING YEAR PEDESTRIAN FACILITIES

For the purposes of this traffic impact analysis, pedestrian improvements were not assumed. This represents a conservative approach. *Figure 3–2* illustrates the pedestrian facilities assumed for the Opening Year conditions.

4.3 OPENING YEAR BICYCLE FACILITIES

Similar to the pedestrian facilities assumption, bicycle improvements were not assumed. *Figure 3–3* illustrates the bicycle facilities assumed for the Opening Year conditions.

4.4 OPENING YEAR CONDITIONS LOCAL & REGIONAL TRANSIT SERVICE

The existing transit routes and existing stations, as illustrated in *Figures 3-3* and *3-4*, were assumed for the Opening Year Conditions. Also, no increase in transit ridership was assumed.

4.5 OPENING YEAR TRAIL FACILITIES

For Opening Year conditions, existing conditions were assumed and therefore no trails or pathways were assumed for the study area.

4.6 OPENING YEAR TRAFFIC VOLUMES AND PEDESTRIAN/BICYCLE ACTIVITY

Given fluctuations in traffic volumes from 2020 to 2023 due to the pandemic, a broader data set was reviewed to establish an ambient growth rate for Opening Year traffic volumes. Vehicle-distance traveled data was sourced from the *Federal Highway Administration's (FHWA) Travel Monitoring Program*. This dataset, which records vehicle-distance in billion miles, was used to analyze historical growth trends and develop projections for future Opening Year traffic volumes. The Compound Annual Growth Rate (CAGR) method was selected and applied to a 10-year period from 2015 to 2024 to best reflect anticipated future trends. The method represents the mean annualized growth rate for compounding values over a given time period and can address the effect of data volatility. This approach yielded an average annual growth rate of 0.75% per year. Additional information is provided in **Appendix H**.

With an anticipated project Opening Day in approximately 2.5 years (i.e. 30 months), the growth rate was applied and compounded within this timeframe. The resultant Opening Year traffic volumes are shown in **Figure 4-6**. For the purposes of this analysis, no growth rate was applied to the pedestrian/bicycle activity.

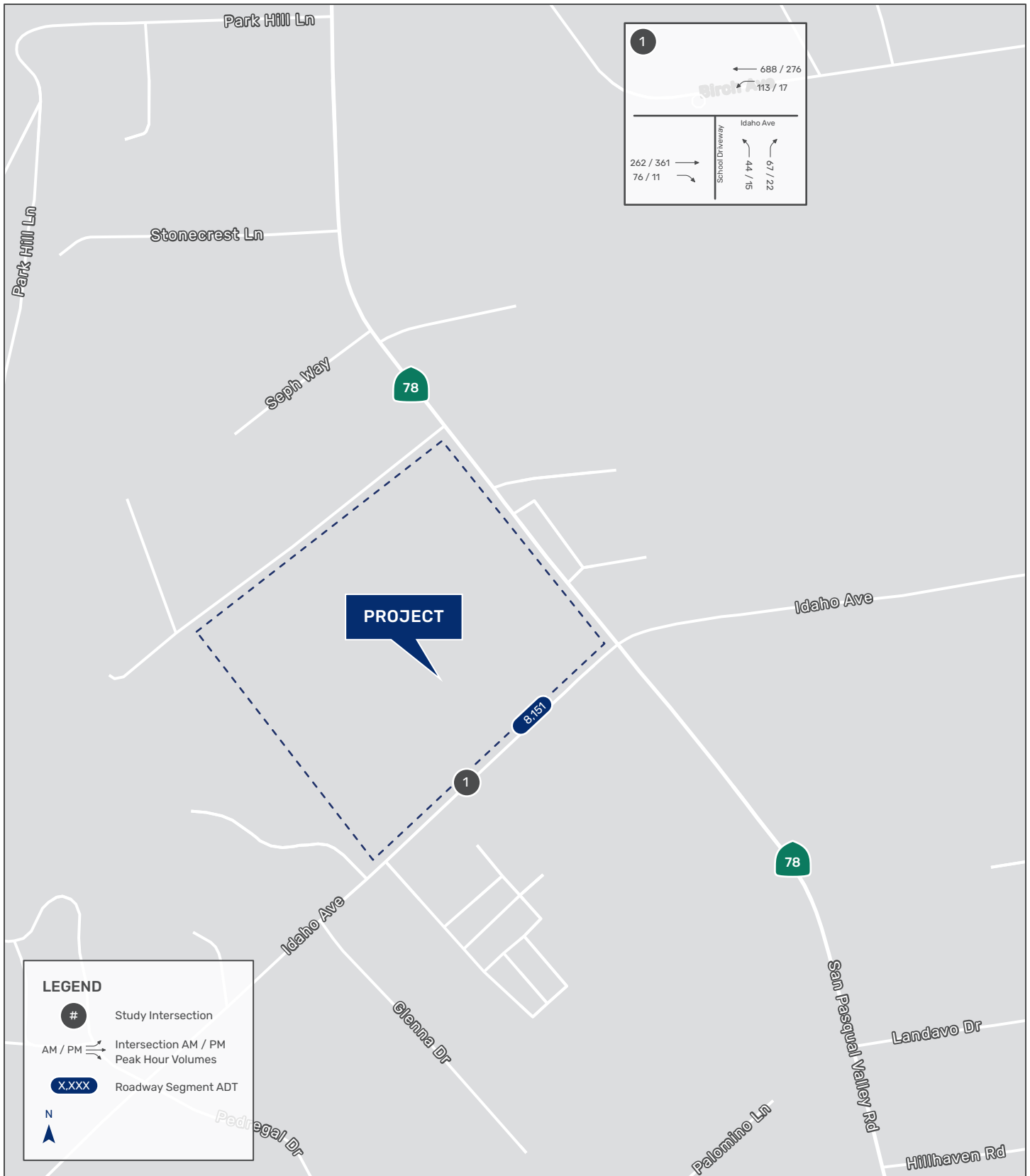


Figure 4-1
Opening Year Traffic Volumes

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5. PROPOSED PROJECT

This section describes the project’s estimated trip generation, trip distribution, and assignment of trips to the adjacent roadway network.

5.0 PROJECT DESCRIPTION

The project includes the construction of 42 residential dwelling units, 7 of which will be designated as affordable units, on a 10.35-acre site. The site is currently vacant and undeveloped apart from one (1) single-family dwelling unit that will remain occupied until the project is constructed. Project access is provided via Idaho Ave.

5.1 TRIP GENERATION

The project’s trip generation was developed for the traffic impact analysis. **Table 5-1** presents the trip generation rates used for the Project and summarizes the forecast trips generated by the Project. No existing trip credits, associated with the existing single family dwelling unit onsite, were assumed. The Project is forecast to generate approximately 396 trips per day, which includes approximately 29 AM peak hour trips and approximately 39 PM peak hour trips.

TABLE 5-1 TRIP GENERATION

Land Use	Size	Trip Rate ^a	ADT ^b	% of ADT	AM Peak Hour ^c				% of ADT	PM Peak Hour			
					In:Out Split	In	Out	Total		In:Out Split	In	Out	Total
<i>Proposed</i>													
Single-Family Detached Residential ^d	42 units	Average Rate	396	7%	25:75	7	22	29	10%	63:37	25	14	39
<i>Existing</i>													
Vacant Lot ^f	10.35 ac	n/a	0	n/a	n/a	0	0	0	n/a	n/a	0	0	0
TOTAL			396			7	22	29			25	14	39

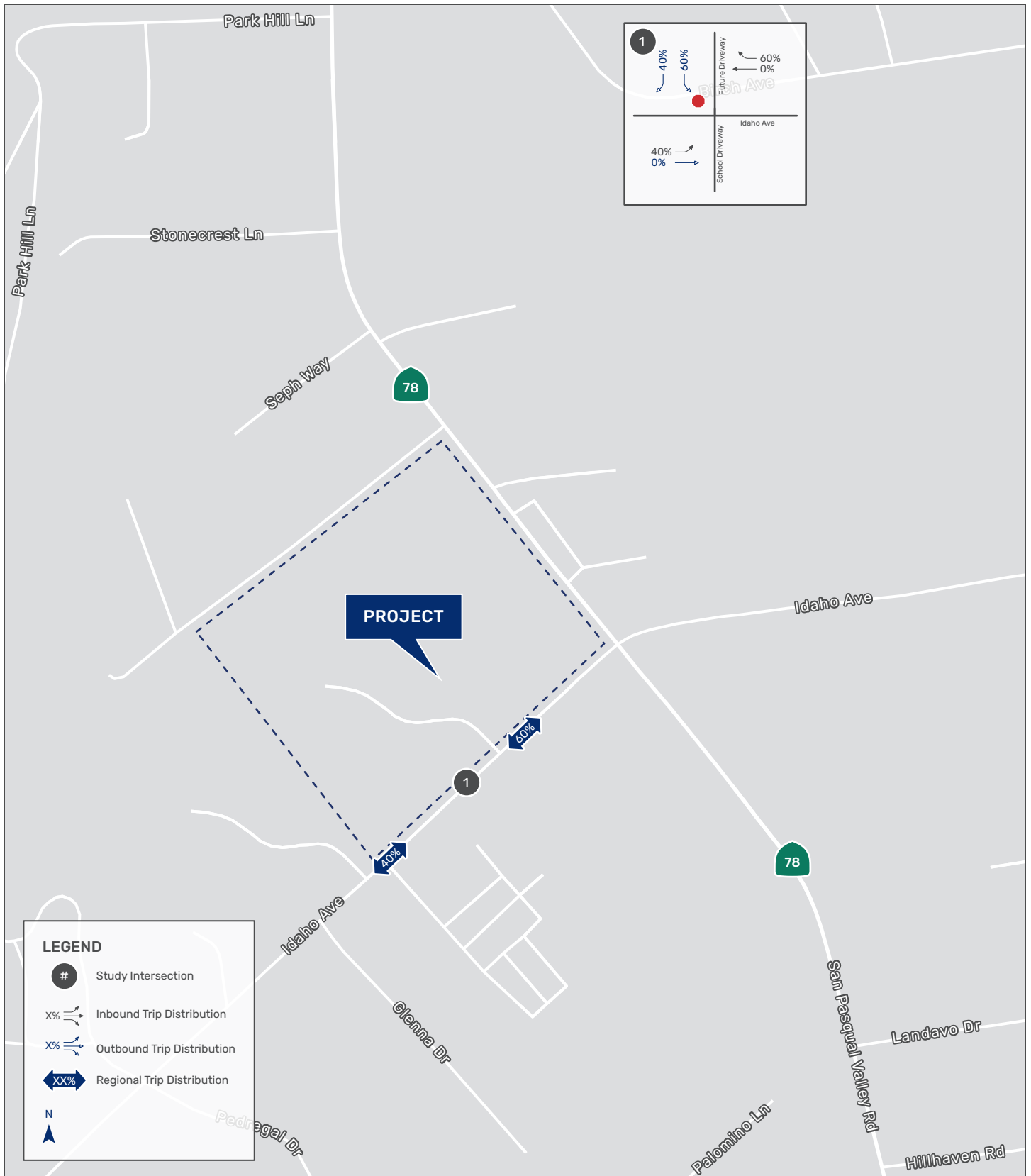
Notes:

- Trip rate based on *Institute of Transportation Engineers’ (ITE) Trip Generation Manual 11th Edition*, land use code 210.
- Average Daily Traffic (ADT)
- AM and PM peak hours are between 6-9am and 4-6pm, respectively.
- ITE Land Use Code 210
- The site is generally vacant apart from one (1) single-family dwelling unit that will remain occupied until the project is constructed. No existing trip credits assumed.

5.2 TRIP DISTRIBUTION & ASSIGNMENT

The project’s trip distribution was developed based on existing travel patterns, access to major road networks in the study area, understanding of surrounding land uses, and the project access scheme. **Figure 5-1** illustrates the inbound/outbound trip distribution within the study area. Based on the trip distribution, project trips were assigned to the study area roadway network. **Figure 5-2** illustrates the trip assignment for AM and PM peak hour and daily traffic volumes associated with the proposed Project.

Figure 5-3 illustrates Existing + Project traffic volumes. **Figure 5-4** illustrates Opening Year + Project traffic volumes. This volume set represents the near-term scenarios.

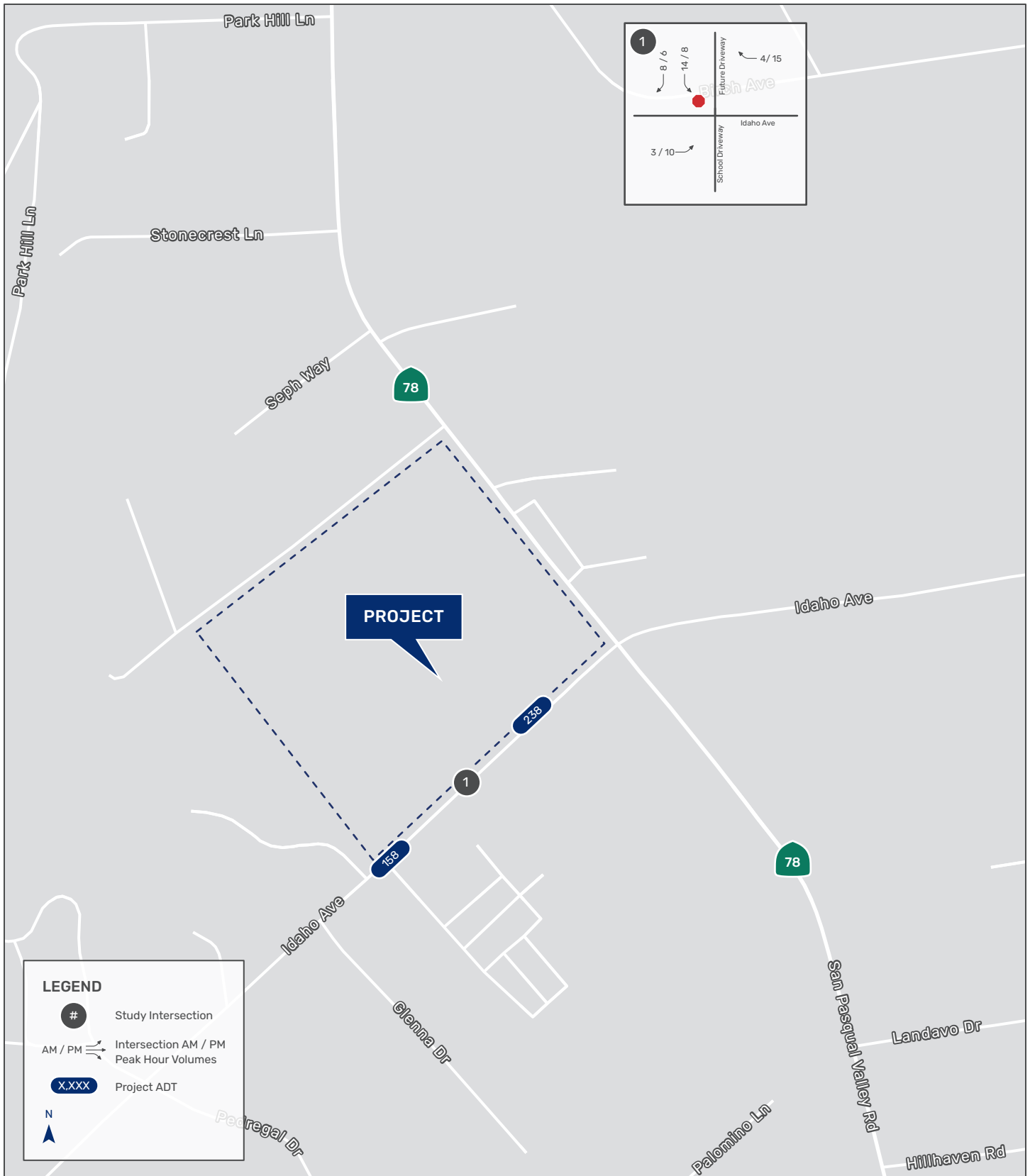


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Figure 5-1
Project Distribution

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Figure 5-2
Project Trip Assignment

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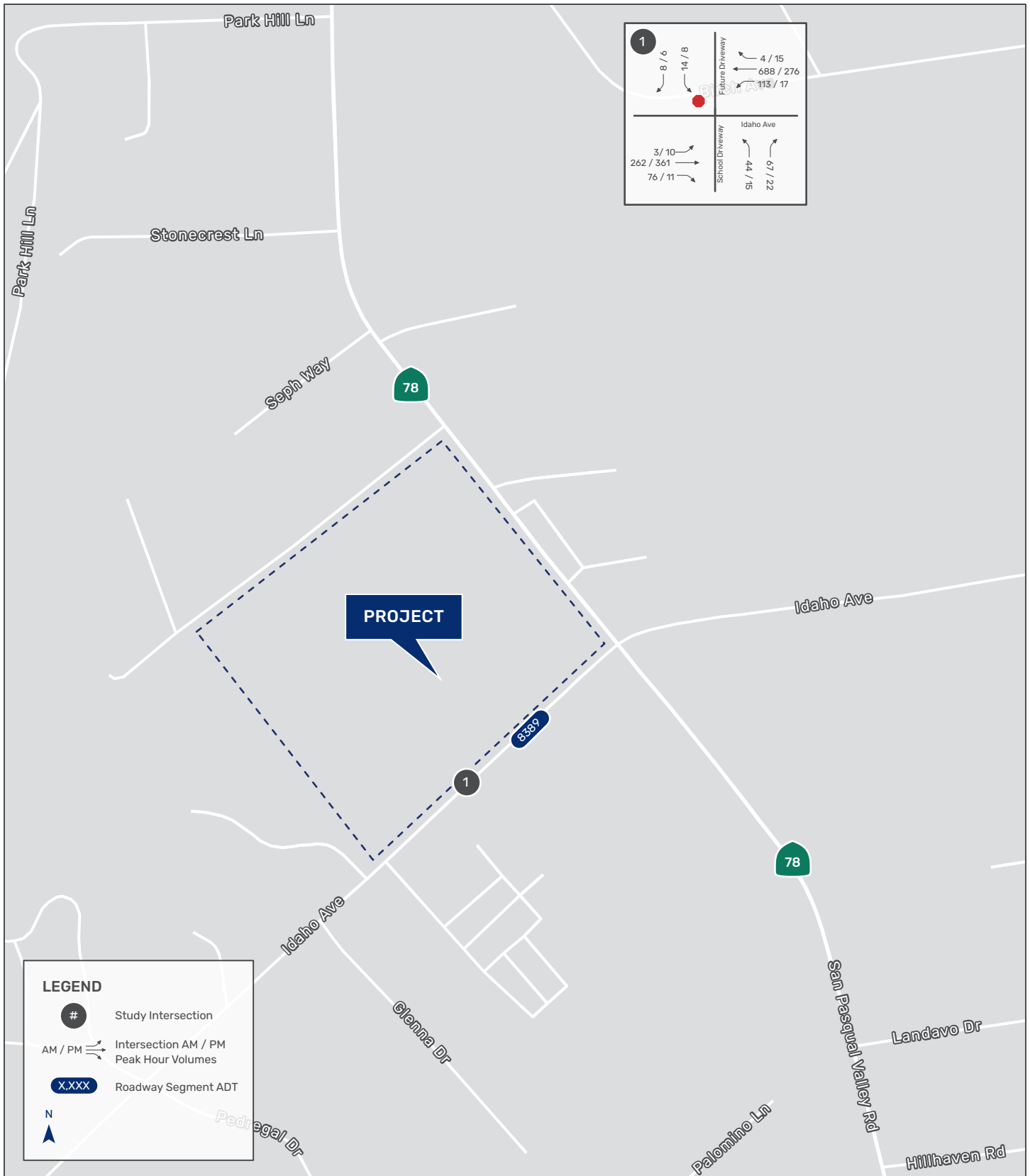


Figure 5-3
Existing + Project Volumes



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Figure 5-4
Opening Year + Project Volumes

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6. TRANSPORTATION ANALYSIS

6.1 AUTO INTERSECTION ANALYSIS

Intersection operations were reviewed for Existing and Opening Year conditions. **Tables 6-1** and **6-2** summarize the results of the auto signalized analysis. The analysis worksheets are included in **Appendix I**. The existing conditions scenario does not include LOS or delay values, as the project driveway does not exist under existing conditions. Overall, the study intersections operate at acceptable operations (i.e. LOS D or better) and no deficiencies were identified under all conditions and under all intersection control types.

Per the County's significance criteria, no project impact was calculated. Therefore, no intersection improvements are required.

TABLE 6-1 INTERSECTION OPERATIONS – EXISTING CONDITIONS

	Intersection (Traffic Control)	Peak Hour	Existing		Existing + Project			LOS Deficient	
			Delay ^{a,b}	LOS ^c	Delay	LOS	Delta ^d		Trips ^e
1	Idaho Avenue & Site Driveway (unsignalized, two-way)	AM PM	-	-	4.3 / 33.8 1.3 / 14.1	A / D A / B	-	-	No No

Notes:

- Signalized and unsignalized (all-way stop): average delay expressed in seconds per vehicle.
- Unsignalized (two-way): average / worst-Case minor street movement delay expressed in seconds per vehicle.
- Level of Service (LOS).
- Increase in delay attributed to the project.
- Project trips added to the overall intersection / worst-case minor street movement at intersections operating at LOS E/F.

UNSIGNALIZED DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

TABLE 6-2 INTERSECTION OPERATIONS – OPENING YEAR CONDITIONS

	Intersection (Traffic Control)	Peak Hour	Opening Year		Opening Year + Project			LOS Deficient	
			Delay ^{a,b}	LOS ^c	Delay	LOS	Delta ^d		Trips ^e
1	Idaho Avenue & Site Driveway (unsignalized, two-way)	AM PM	-	-	4.3 / 34.7 1.2 / 14.3	A / D A / B	-	-	No No

Notes:

- Signalized and unsignalized (all-way stop): average delay expressed in seconds per vehicle.
- Unsignalized (two-way stop): average / worst-Case minor street movement delay expressed in seconds per vehicle.
- Level of Service (LOS)
- Increase in delay attributed to the project at intersections operating at LOS E/F.
- Project trips added to the overall intersection / worst-case minor street movement at intersections operating at LOS E/F.

UNSIGNALIZED DELAY/LOS THRESHOLDS	
Delay	LOS
0.0 ≤ 10.0	A
10.1 to 15.0	B
15.1 to 25.0	C
25.1 to 35.0	D
35.1 to 50.0	E
≥ 50.1	F

6.2 AUTO ROADWAY SEGMENT ANALYSIS

Tables 6-3 and **6-4** summarize the results of the auto roadway segment LOS analysis under Existing and Opening Year conditions respectively. LOS Capacities used in the analysis are derived from County of San Diego Department of Public Works Public Roads Standards (2012) Table 1.

Overall, the study roadway segments operate at acceptable operations (i.e. LOS D or better) and no deficiencies were identified under all conditions. Note that the roadway classification differs between the without-project and with-project conditions, as the project proposes a three-lane section in the vicinity of the site with the addition of a left-turn bay. The analysis reflects this change and this difference contributes to improved level of service compared to baseline conditions. Per the County's significance criteria, no project impact was calculated. Therefore, no street segment improvements are required.

TABLE 6-3 ROADWAY SEGMENT OPERATIONS – EXISTING CONDITIONS

Roadway Segment	Scenario	Functional Roadway Classification	LOS Standard Capacity	ADT	LOS	LOS Deficient
Idaho Ave						
Project Driveway to San Pasqual Valley Rd (SR78)	Existing	2.2E Light Collector - No Median	10,900	8,000	D	No
	Existing + Project	2.2D Light Collector - With Passing Lane	13,500	8,238	C	No

Note:

LOS standard capacity based on County of San Diego Public Road Standards, March, 2012.

TABLE 6-4 ROADWAY SEGMENT OPERATIONS – OPENING YEAR CONDITIONS

Roadway Segment	Scenario	Functional Roadway Classification	LOS Standard Capacity	ADT	LOS	LOS Deficient
Idaho Ave						
Project Driveway to San Pasqual Valley Rd (SR78)	Opening	2.2E Light Collector - No Median	10,900	8,151	D	No
	Opening + Project	2.2D Light Collector - With Passing Lane	13,500	8,389	C	No

6.3 SITE ACCESS / ACCESS MANAGEMENT REVIEW

Access management refers to the design, implementation and management of entry and exit points (i.e., driveways, entrances or exits) between roadways and adjacent properties. The project's access scheme was reviewed from this perspective to ensure efficient operations, mobility for pedestrians and bicyclists, and transit accessibility.

The following access management factors were considered with provided project specific notations and recommendations, where appropriate in **Table 6-5**.

TABLE 6-5 ACCESS MANAGEMENT

Driveway Design	
Sight Distance	<p>Provide adequate vertical/horizontal sight distance at the project driveways.</p> <p><i>A preliminary review does not indicate any deficiencies; however, driveway sight distance will need to be verified to the satisfaction of the County traffic engineer.</i></p>
Location Near Adjacent Intersections	<p>Locate driveways upstream of potential vehicle queue caused when the downstream traffic signal is red.</p> <p><i>The driveway is located +450' from the SR78/San Pasqual Valley Rd and Idaho Ave intersection. The anticipated queue is not expected to extend to project driveway and measurably impact operations. Furthermore, traffic signal timing can be adjusted to better manage traffic signal queues, if required.</i></p>
Location Near Adjacent Driveways	<p>In cases where there is two-way left-turn lane (i.e. TWLTL), aligning driveways to have a positive offset to minimize conflicts between left-turning vehicles is advantageous. Where it is not possible to align driveways with a positive offset, align driveways directly across the street from one another</p> <p><i>The driveway is proposed to align with the Escondido Christina Church and Schools driveway. . Therefore, driveway operations are expected to operate acceptably.</i></p>
Bicycle, Pedestrian and Transit accessibility	
Pedestrian Accessibility	<p>Ensure sidewalks and pedestrian pathways provide direct access to the roadway and local pedestrian facilities.</p> <p><i>The project driveway will provide sidewalks that will afford pedestrian direct access to Idaho Avenue.</i></p>
Driveway Width	<p>Minimize the width of the driveway as much as possible in order to reduce pedestrian crossing distances (i.e., reduce exposure)</p> <p><i>A preliminary review does not indicate any excessive width of the project driveways.</i></p>
Pedestrian Visibility	<p>Place sidewalks and pedestrian driveway crossings so that pedestrians are visible to the drivers, and drivers are visible to the pedestrians. Do not block pedestrian-driver sightlines with landscaping or signage.</p> <p><i>A preliminary review does not indicate pedestrian visibility constraints; however, driveway sight distance will need to be verified to the satisfaction of the County traffic engineer.</i></p>

6.4 PEDESTRIAN REVIEW

The local pedestrian facilities were reviewed to determine whether the project will impact pedestrian facilities and whether improvements are required involves assessing several factors related to pedestrian accessibility, demand, and the existing infrastructure. These factors include:

- **Land Use and Scale:** determine if the project will generate measurably new pedestrian traffic based on the land use and project size.
- **Proximity to Key Destinations:** identify nearby facilities such as transit stops, schools, parks, or downtown areas that pedestrians may likely access.
- **Existing Pedestrian Conditions:** identify the existing pedestrian facilities, potential deficiencies, and identify any network gaps.
- **Applicable Regulations and Standards:** County guidance/planning documents, Americans with Disabilities Act (ADA) compliance.

For the project, the following was determined relative to pedestrian facilities and infrastructure:

- The project will improve the pedestrian infrastructure with frontage improvements providing new sidewalk on the north side of Idaho Ave.
- The project will provide direct pedestrian access to Idaho Ave.
- The project will not measurably change the local pedestrian demand.
- The project is not expected to alter pedestrian movement patterns.
- For improved sections of roadway, the existing pedestrian infrastructure is generally sufficient and compliant with standards.

Therefore, no additional pedestrian improvements are recommended.

6.5 BICYCLE REVIEW

The bicycle facilities were reviewed to determine whether the project will impact bicycle facilities and whether improvements are required involves assessing several factors related to bicycle accessibility, demand, and the existing infrastructure. This ensures that new developments align with community goals for connectivity and sustainability. These factors include:

- **Land Use and Scale:** determine if the project will generate measurably new bicycle activity based on the land use and project size.
- **Proximity to Bicycle Networks:** identify nearby or planned bicycle facilities.
- **Key Destinations:** identify locations bicyclists may access.
- **Existing Bicycle Conditions:** identify the existing bicycle facilities, potential deficiencies, and identify any network gaps.
- **Applicable Regulations and Standards:** County guidance/planning documents.

For the project, the following was determined relative to bicycle facilities and infrastructure:

- The project will not measurably change the local bicycle demand.
- The project is not expected to alter bicycling routes or introduce new traffic conflicts
- For improved sections of roadway, the existing bicycle infrastructure is generally sufficient and compliant with standards.

Therefore, no additional pedestrian improvements are recommended.

6.6 TRANSIT REVIEW

There are no transit stops within the current study area. Given the project size and lack of transit accessibility, no transit-related improvements are recommended. However, it is worth noting that the construction of the project and surrounding area will help increase future demand for transit in the area. Therefore, the project is considered to have a positive long-term influence on local transit.

6.7 TRAILS REVIEW

There are currently no existing or planned trails within the current study area. Given the project size and lack of trails, no trails-related improvements are recommended.

End of Report



TRANSPORTATION LOCAL MOBILITY ANALYSIS (LMA)
Pasqual Heights
County of San Diego, CA

APPENDIX SUMMARY

Appendix A	County of San Diego, PDS, Zoning Division FAQs CEQA 15183
Appendix B	HCM signalized/unsignalized/roundabout methodologies
Appendix C	County of San Diego Mobility Element - North County Metro Subregion
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Appendix I	Synchro Calculation Worksheets



APPENDIX A

County of San Diego, PDS, Zoning Division FAQs CEQA 15183



County of San Diego, Planning & Development Services

FAQs - CEQA 15183 Exemption Process

ZONING DIVISION

What is the CEQA §15183 exemption process?

California Environmental Quality Act (CEQA) Guidelines Section 15183 allows a streamlined environmental review process for projects that are consistent with the densities established by existing zoning, community plan or general plan policies for which an Environmental Impact Report (EIR) was certified.

The County of San Diego certified an EIR for the General Plan Update (GPU) on August 3, 2011. Projects that are consistent with the densities and use characteristics considered by the GPU EIR may qualify for the 15183 exemption process.

How do I know if my project qualifies for a 15183 exemption?

Projects submitted with an Application for an Environmental Initial Study ([PDS-367](#)) will be automatically evaluated for eligibility by the assigned Planning & Development Services (PDS) project manager. In order to qualify for a CEQA 15183 exemption, the following findings must be made:

1. The project is consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified.
2. There are no project specific effects which are peculiar to the project or its site.
3. There are no project specific impacts which the GPU EIR failed to analyze as significant effects.
4. There are no potentially significant off-site and/or cumulative impacts which the GPU EIR failed to evaluate.
5. There is no substantial new information which results in more severe impacts than anticipated by the GPU EIR.

What types of projects qualify for the 15183 process?

Most subdivisions (Tentative Maps, Tentative Parcel Maps) that do not include other discretionary permit types will qualify for the 15183 process. Minor permit types, such as Boundary Adjustments, Site Plans, and Administrative Permits may also qualify if not otherwise exempt from CEQA. Major and Minor Use Permits may qualify only if the use type and operating characteristics are consistent with the analysis performed for the GPU EIR. General Plan Amendments, Specific Plan Amendments, and Rezones will generally not be eligible unless the proposed change is minor in nature and remains consistent with the GPU EIR analysis.

Does Vehicle Miles Traveled (VMT) apply to projects that qualify for a 15183-exemption process?

If a project qualifies for a 15183-exemption process and can demonstrate that the projects impacts were adequately covered under the County's General Plan, no additional VMT analysis would be required. A project would demonstrate this through a traffic study using level of service (LOS) that would show whether the projects impacts are covered by the General Plan EIR. If you have questions about a specific project, please submit a pre-application (Initial Consultation) and staff can review your specific application and let you know what information is needed to make a determination. The Initial

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County of San Diego, PDS, Zoning Division FAQs CEQA 15183 Exemption Process

Continued

Consultation _____ is _____ available _____ at:
https://www.sandiegocounty.gov/content/dam/sdc/pds/zoning/formfields/PDS-PLN-ESUB_Initial_Consult_Meeting.pdf.

Does the 15183-exemption process apply to every project in every circumstance as long as they are consistent with the General Plan and zoning?

No, the 15183-exemption process may not apply to every project in every circumstance, the 15183-exemption process can be used where an individual project can demonstrate that a projects impacts were adequately covered under the County's General Plan, and then no additional VMT analysis would be required. Whether a project qualifies for the 15183-exemption process is determined on a case-by-case basis.

How is the 15183 exemption process different from other CEQA exemptions?

The 15183 exemption process typically requires a more detailed environmental analysis than other CEQA statutory and categorical exemptions. Unlike other exemptions, mitigation may also be required under the 15183 process. Projects which qualify for a categorical or statutory exemption will generally not benefit from the 15183 process.

How is the 15183 process different than the ND or EIR process?

CEQA section 15183 requires an evaluation of direct project impacts in the same manner as the Negative Declaration (ND) and EIR process. However, unlike a ND or an EIR, projects which rely on the 15183 process may benefit from the cumulative analysis contained within GPU EIR and the application of predefined mitigation and avoidance measures. Under this process, public review is not required therefore projects qualifying for the 15183 exemption can generally be completed in less time and at a reduced cost compared with the Negative Declaration and EIR processes.

Are environmental technical studies required under the 15183 process?

A project-specific environmental analysis must be completed as part of the 15183 process. Technical studies, such as a biological technical report or a traffic impact analysis, may be required if a project would result in a potential environmental impact. Please refer to the County's Transportation Study Guide (TSG) for determination of when a project-specific Local Mobility or LOS Analysis may be required to determine if the project will qualify for the 15183 Exemption.
<https://www.sandiegocounty.gov/content/sdc/pds/SB743.html>

Do cumulative impacts need to be studied under the 15183 process?

Additional analysis of cumulative impacts will generally not be required unless it is determined that the project may result in an impact which was not adequately evaluated in the GPU EIR.

Is mitigation required under the 15183 process?

In order to rely on the 15183 process, project proponents must agree to implement any applicable design and/or mitigation measures as prescribed by the GPU EIR. This includes payment into the County's Transportation Impact Fee (TIF) program to address cumulative impact mitigation identified in the GPU EIR. Information on the County's TIF program can be found on the County's website:
<https://www.sandiegocounty.gov/content/sdc/dpw/land/tif.html>.

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**County of San Diego, PDS, Zoning Division
FAQs CEQA 15183 Exemption Process**

Continued

How will the 15183 determination be documented?

Your PDS project manager will complete a Certificate of Determination and a CEQA Guidelines §15183 checklist to document a project's eligibility.

Is a public hearing required?

CEQA requires a noticed public hearing if mitigation or design standards specified in the GPU EIR are proposed to reduce a project impact. Projects which require a public hearing as part of the permit approval process will satisfy this requirement through regular hearings before the Zoning Administrator, Planning Commission, or Board of Supervisors. Special publicly noticed hearings will be held for projects which would not otherwise require a hearing.

Are there any recording Fish and Game or recording fees associated with the 15183 process?

No Fish and Game fees are required; however, a \$50 fee is required to record a Notice of Exemption.

***For additional information, contact
PLANNING & DEVELOPMENT SERVICES
(858) 694-2960
(800) 411-0017 (Toll Free)***

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APPENDIX B

HCM Signalized/Unsignalized/Roundabout Methodologies

INTERSECTION ANALYSIS METHODOLOGY

Signalized Intersections

The analysis of signalized intersections utilized the operational analysis procedure as outlined in the *Highway Capacity Manual (HCM) 7th Edition (HCM7)* Chapter 19 signalized intersection analysis. This represents the most current methodology at the time work began on the analysis.

This method defines Level-of-Service (LOS) in terms of delay, or more specifically, average stopped delay per vehicle. Delay is a measure of driver and/or passenger discomfort, frustration, fuel consumption, and lost travel time. This technique uses 1,900 vehicles per hour per lane (VPHPL) as the maximum saturation volume of an intersection. This saturation volume is adjusted to account for lane width, on-street parking, pedestrians, traffic composition (i.e., percentage trucks) and shared lane movements (i.e., through and right-turn movements originating from the same lane). Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Delay is a complex measure, and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the Volume-to-Capacity (V/C) ratio for the lane group or approach in question.

LEVEL OF SERVICE (LOS)	CONTROLLED DELAY PER VEHICLE (SEC)
A	< 10.0
B	10.1 to 20.0
C	20.1 to 35.0
D	35.1 to 55.0
E	55.1 to 80.0
F	> 80.0

LOS A describes operations with very low delay. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop. Short cycle lengths may also contribute to low delay.

LOS B describes operations with low delay. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than under LOS A conditions, causing higher levels of average delay.

LOS C describes operations with more delay. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in the level. The number of vehicles stopping is significant at this level, although many still pass through the intersections without stopping.

LOS D describes operations with a higher delay. At Level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with a high delay. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with very high delay. This is considered to be unacceptable to most drivers. This condition often occurs with over-saturation (i.e. when arrival flow rates exceed the capacity of the intersection). It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Unsignalized Intersections – Stop Control

The analysis of unsignalized intersections with stop sign control (i.e. All-Way or Two-Way Stop Control) utilized the operational analysis procedure as outlined in the *Highway Capacity Manual (HCM) 7th Edition (HCM7)*. This represents the most current methodology at the time work began on the analysis.

Level of Service (LOS) F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This LOS is generally evident from extremely long control delays experienced by side-street traffic and by queuing on the minor-street approaches. The method, however, is based on a constant critical gap size; that is, the critical gap remains constant no matter how long the side-street motorist waits. LOS F may also appear in the form on side-street vehicles selecting smaller-than-usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior, which are more difficult to observe in the field than queuing.

In most cases at Two-Way Stop Controlled (TWSC) intersections, the critical movement is the minor-street left-turn movement. As such, the minor-street left-turn movement can generally be considered the primary factor affecting overall intersection performance. The lower threshold for LOS F is set at 50 seconds of delay per vehicle. There are many instances, particularly in urban areas, in which the delay equations will predict delays of 50 seconds (LOS F) or more for minor-street movements under very low volume conditions on the minor street (less than 25 vehicle/hour). Since the first term of the equation is a function only of the capacity, the LOS F threshold of 50 sec/vehicle is reached with a movement capacity of approximately 85 vehicle/hour or less.

This procedure assumes random arrivals on the major street. For a typical four-lane arterial with average daily traffic volumes in the range of 15,000 to 20,000 vehicles per day (peak hour, 1,500 to 2,000 vehicle/hour), the delay equation used in the TWSC capacity analysis procedure will predict 50 seconds of delay or more (LOS F) for many urban TWSC intersections that allow minor-street left-turn movements. The LOS F threshold will be reached regardless of the volume of minor-street left-turn traffic. Notwithstanding this fact, most low-volume minor street approaches would not meet any of the volume or delay warrants for signalization of the *Manual on Uniform Traffic Control Devices (MUTCD)* since the warrants define an asymptote at 100 vehicle/hour on the minor approach. As a result, many public agencies that use the HCM Level of Service thresholds to determine the design adequacy of TWSC intersections may be forced to eliminate the minor-street left-turn movement, even when the movement may not present any operational problem, such as the formation of long queues on the minor street or driveway approach.

LEVEL OF SERVICE (LOS)	CONTROLLED DELAY PER VEHICLE (SEC)
A	< 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	> 50.0



C2 CONSULTING COLLECTIVE
Historic Santa Fe Depot
1050 Kettner Blvd, Suite D-551
San Diego, CA 92101
info@c2-mobility.com
858.270.4444
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Unsignalized Intersections – Roundabout Control

The analysis of unsignalized intersections with roundabout control utilized the operational analysis procedure as outlined in the *Highway Capacity Manual (HCM) 7th Edition (HCM7)*. This represents the most current methodology at the time work began on the analysis.

According to the HCM, roundabout operations are defined solely on the control delay of the intersection which is calculated for each approach as well as for the overall intersection. If the Volume-to-Capacity (V/C) ratio of an approach exceeds 1.0 however, the overall intersection operation is determined to be LOS F.

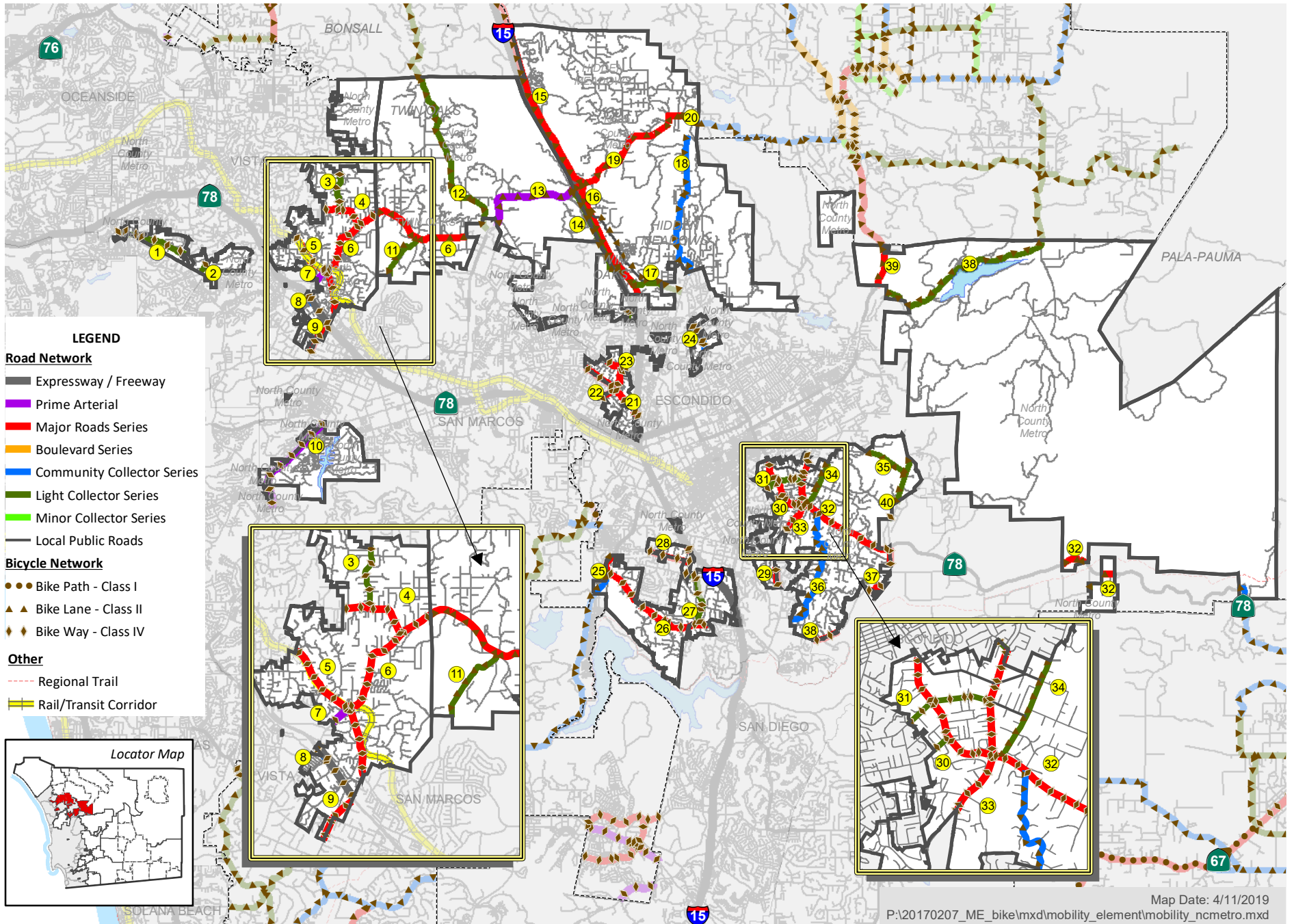
LEVEL OF SERVICE (LOS)	CONTROLLED DELAY PER VEHICLE (SEC) FOR $V/C \leq 1.0$
A	< 10.0
B	10.1 to 15.0
C	15.1 to 25.0
D	25.1 to 35.0
E	35.1 to 50.0
F	> 50.0

Note: If $V/C > 1.0$, the resultant operations is LOS F regardless of the delay.



APPENDIX C

County of San Diego Mobility Element – North County Metro Subregion



NORTH COUNTY METRO MOBILITY ELEMENT NETWORK

MOBILITY ELEMENT NETWORK APPENDIX

Mobility Element Network—North County Metro Subregion Matrix			
ID ^a	Road Segment	Designation/Improvement #. #X = [# of lanes].[roadway classification][improvement]	Special Circumstances
1	Sunset Drive (SC 1190) <u>Segment:</u> Oceanside city limits (near Sky Haven Lane) to Vista city limits (near Melrose Drive)	2.2E Light Collector	None
2	Mar Vista Drive (SA 471) <u>Segment:</u> Cannon Road (Oceanside) to Mar Vista Drive (Vista)	2.2B Light Collector Continuous Turn Lane	North County Parkway Plan Roadway
3	Foothill Drive (SA 500) <u>Segment:</u> Vista city limits to Monte Vista Drive	2.2D Light Collector Intermittent turn Lanes [Unspecified]	None
4	Monte Vista Drive (SC 1791) <u>Segment:</u> Vista city limits to Buena Creek Road	4.1B Major Road Intermittent turn Lanes—Foothill Drive to Buena Creek Road 2.1C Light Collector Intermittent Turn Lanes—Vista city limits to Foothill Drive	None
5	South Santa Fe Avenue (SF 1412) <u>Segment:</u> Vista city limits to San Marcos city limits	4.1A Major Road Raised Median	North County Parkway Plan Roadway
6	Buena Creek Road (SF 1414) <u>Segment:</u> South Santa Fe Avenue to San Marcos city limits (near Twin Oaks Valley Road)	4.1B Major Road Intermittent Turn Lanes	North County Parkway Plan Roadway
7	Sycamore Avenue <u>Segment:</u> South Santa Fe Avenue to SR-78	6.2 Prime Arterial	None
8	State Route 78 <u>Segment:</u> Sycamore Avenue to Smilax Road	6.1 Expressway + 2 HOV lanes	None
9	Smilax Road (SC 1260) <u>Segment:</u> San Marcos city limits (near Oleander Avenue) to South Santa Fe Avenue	4.1B Major Road Intermittent Turn Lanes	None



Mobility Element Network—North County Metro Subregion Matrix			
ID ^a	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
10	Rancho Santa Fe Road <u>Segment:</u> Melrose Drive (Vista) to San Marcos Boulevard (San Marcos)	6.2 Prime Arterial	None
11	Las Posas Road <u>Segment:</u> Buena Creek Road to San Marcos city limits	2.2C Light Collector Intermittent Turn Lanes	North County Parkway Plan Roadway
12	Twin Oaks Valley Road (SC 1170) <u>Segment:</u> Bonsall CPA boundary to San Marcos city limits (near Deer Springs Road)	2.2C Light Collector Intermittent Turn Lanes	None
13	Deer Springs Road (SF 1414) <u>Segment:</u> San Marcos city limits (near Twin Oaks Valley Road) to Centre City Parkway	6.2 Prime Arterial San Marcos city limits to I-15 NB Ramp 4.1B Major Road Intermittent Turn Lanes—I-15 NB Ramp to Centre City Parkway	Accepted at LOS F I-15 northbound ramp to N. Centre City Parkway North County Parkway Plan Roadway
14	Mesa Rock Road <u>Segment:</u> Deer Springs Road to North Centre City Parkway	2.2E Light Collector	None
15	Champagne Boulevard <u>Segment:</u> Bonsall CPA boundary to Mountain Meadow Road	4.1B Major Road Intermittent Turn Lanes	None
16	North Centre City Parkway <u>Segment:</u> Mountain Meadow Road to Escondido city limits (near Nutmeg Street)	4.1B Major Road Intermittent Turn Lanes	None
17	Jesmond Dene Road <u>Segment:</u> Centre City Parkway to North Broadway	2.2D Light Collector Improvement Options	None
18	North Broadway (SC 1000) <u>Segment:</u> Mountain Meadow Road to North Avenue	2.1D Community Collector Improvement Options [Raised Median]	None
19	Mountain Meadow Road (SC 990) <u>Segment:</u> Centre City Parkway to North Broadway	4.1B Major Road Intermittent Turn Lanes	None

MOBILITY ELEMENT NETWORK APPENDIX

Mobility Element Network—North County Metro Subregion Matrix			
ID ^a	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
20	Mirar de Valle Road (SC 990.2) <u>Segment:</u> Mountain Meadow Road to Valley Center CPA boundary	2.1D Community Collector Improvement Options [Raised Median]	Accepted at LOS F Entire segment
21	Rock Springs Road (SC 1361) <u>Segment:</u> San Marcos city limits to Escondido city limits	4.1B Major Road Intermittent Turn Lanes	None
22	Nordahl Road (SA 531) <u>Segment:</u> Rock Springs Road to El Norte Parkway	4.1B Major Road Intermittent Turn Lanes	None
23	El Norte Parkway (SA 510) <u>Segment:</u> Reese Road to Nordahl Road	4.1A Major Road Raised Median	None
24	North Ash Street (SA 540) <u>Segment:</u> Escondido city limits (near Collins Terrace) to Hubbard Avenue	2.1D Community Collector Improvement Options [Unspecified]	None
25	Del Dios Highway (SF 727) <u>Segment:</u> Escondido city limits to San Dieguito CPA boundary	4.1A Major Road Raised Median—Escondido city limits to Via Rancho Parkway 2.2D Community Collector Improvement Options [Raised Median]—Via Rancho Parkway to San Dieguito CPA boundary	Accepted at LOS F <u>Segment:</u> Via Rancho Parkway to San Dieguito CPA boundary
26	Via Rancho Parkway (SA 570) <u>Segment:</u> Del Dios Highway to Montesano Road	4.1A Major Road Raised Median	None
27	Felicita Road (SC 1100) <u>Segment:</u> Hamilton Lane to Via Rancho Parkway	2.2E Light Collector	None
28	Gamble Lane (SA 580) <u>Segment:</u> Escondido city limits (near Mountain Hills Place) to Escondido city limits (near Felicita Road)	4.1A Major Road Raised Median	None
29	Sunset Drive (SC 1105) <u>Segment:</u> Escondido city limits to Bear Valley Parkway	2.2E Light Collector	None



Mobility Element Network—North County Metro Subregion Matrix			
ID ^a	Road Segment	Designation/Improvement #.#X = [# of lanes].[roadway classification][improvement]	Special Circumstances
30	17th Avenue (SC 1100) <u>Segment:</u> Escondido city limits to San Pasqual Valley Road	2.2D Light Collector Improvement Options [Unspecified]	None
31	Idaho Avenue <u>Segment:</u> Escondido city limits (near Pedregal Drive) to Bear Valley Parkway	2.2D Light Collector Improvement Options [Unspecified]	None
32	San Pasqual Valley Road (State Route 78) <u>Segment:</u> Birch Avenue to Cloverdale Road	4.1B Major Road Intermittent Turn Lanes—Birch Avenue to Bear Valley Parkway 4.1A Major Road Raised Median—Bear Valley Parkway to Cloverdale Road	None
33	Bear Valley Parkway (SA 590) <u>Segment:</u> Austin Way to Encino Drive	4.1A Major Road Raised Median	None
34	Citrus Avenue <u>Segment:</u> Escondido city limits (near Coltrane Place) to San Pasqual Valley Road	2.2E Light Collector	None
35	Mountain View Drive (SC 1036) <u>Segment:</u> Royal Oak Drive to Cloverdale Road	4.2E Light Collector	None
36	Mary Lane (SC 1120) /Summit Drive (SC 1110) <u>Segment:</u> Escondido city limits (near Jasmine Place) to San Pasqual Valley Road	2.1E Community Collector	None
37	San Pasqual Road <u>Segment:</u> San Pasqual Valley Road to Bear Valley Parkway (excluding portions with Escondido city limits)	4.1B Major Road Intermittent Turn Lanes	None
38	Lake Wohlford Road (SA 130) <u>Segment:</u> Valley Center Road to Valley Center CPA boundary	2.2F Light Collector Reduced Shoulder	None

MOBILITY ELEMENT NETWORK APPENDIX

Mobility Element Network—North County Metro Subregion Matrix			
ID ^a	Road Segment	Designation/Improvement #. #X = [# of lanes].[roadway classification][improvement]	Special Circumstances
39	Valley Center Road <u>Segment:</u> Valley Center CPA boundary to Escondido city limits	4.1A Major Road Raised Median	None
40	Cloverdale Road (SC 1040) <u>Segment:</u> San Diego city limits to Escondido city limits	2.2E Light Collector	None

a. ID = Roadway segment on Figure M-A-12



APPENDIX D

County of San Diego Department of Public Works Public Roads Standards - LOS

**TABLE 1
AVERAGE DAILY VEHICLE TRIPS***

MOBILITY ELEMENT ROADS		LEVELS OF SERVICE					
Road Classification	# of Travel Lanes	A	B	C	D	E	
Expressway (6.1)	6	<36,000	<54,000	<70,000	<86,000	<108,000	
Prime Arterial (6.2)	6	<22,200	<37,000	<44,600	<50,000	<57,000	
Major Road	w/ Raised Median (4.1A)	4	<14,800	<24,700	<29,600	<33,400	<37,000
	w/ Intermittent Turn Lanes (4.1B)	4	<13,700	<22,800	<27,400	<30,800	<34,200
Boulevard	w/ Raised Median (4.2A)	4	<18,000	<21,000	<24,000	<27,000	<30,000
	w/ Intermittent Turn Lanes (4.2B)	4	<16,800	<19,600	<22,500	<25,000	<28,000
Community Collector	w/ Raised Median (2.1A)	2	<10,000	<11,700	<13,400	<15,000	<19,000
	w/ Continuous Left Turn Lane (2.1B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.1C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.1D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.1E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
Light Collector	w/ Raised Median (2.2A)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Continuous Left Turn Lane (2.2B)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Intermittent Turn Lane (2.2C)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	w/ Passing Lane (2.2D)	2	<3,000	<6,000	<9,500	<13,500	<19,000
	No Median (2.2E)	2	<1,900	<4,100	<7,100	<10,900	<16,200
	w/ Reduced Shoulder (2.2F)	2	<5,800	<6,800	<7,800	<8,700	<9,700
Minor Collector	w/ Raised Median (2.3A)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	w/ Intermittent Turn Lane (2.3B)	2	<3,000	<6,000	<7,000	<8,000	<9,000
	No Median (2.3C)	2	<1,900	<4,100	<6,000	<7,000	<8,000
NON-MOBILITY ELEMENT ROADS**		LEVELS OF SERVICE					
Residential Collector	2	-	-	<4,500	-	-	
Rural Residential Collector***	2	-	-	<4,500	-	-	
Residential Road	2	-	-	<1,500	-	-	
Rural Residential Road***	2	-	-	<1,500	-	-	
Residential Cul-de-Sac or Loop Road	2	-	-	<200	-	-	

* The values shown are subject to adjustment based on the geometry of the roadway, side frictions, and other relevant factors as determined by the Director, Department of Public Works.

** Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

*** Rural Residential Collectors and Rural Residential Roads are intended to serve areas with lot sizes of 2 acres or more which do not have a demand for on-street parking. On-street parking is not assured for these cross sections. Additional right-of-way is needed if on-street parking is in paved area.

**** See Tables 2A and 2B for roadway surfacing and right-of-way widths.



APPENDIX E

NCTD Transit Routes and Headways

Monday - Friday Escondido to Ramona

Lunes a Viernes • Escondido a Ramona

Escondido Transit Center	Ash St. & Grand Ave.	Hwy. 78 & Safari Park	San Diego Zoo Safari Park	Hwy. 78 & San Pasqual Academy	Hwy. 78 & Weekend Villa Rd.	Ramona Station
1	2	3	4	5	6	7
5:40a	5:48a	5:57a	–	6:01a	6:10a	6:22a
7:35a	7:43a	7:52a	*–	8:05a	8:15a	8:25a
2:15p	2:23p	2:32p	–	2:40p	2:50p	3:00p
4:05p	4:13p	4:22p	–	4:30p	4:40p	4:50p
5:45p	5:53p	6:02p	–	6:10p	6:20p	6:30p

Monday - Friday Ramona to Escondido

Lunes a Viernes • Ramona a Escondido

Ramona Station	Hwy. 78 & Weekend Villa Rd.	Hwy. 78 & San Pasqual Academy	San Diego Zoo Safari Park	Hwy. 78 & Safari Park	Ash St. & Grand Ave.	Escondido Transit Center
7	6	5	4	3	2	1
4:46a	4:53a	5:01a	5:06a	–	5:15a	5:27a
6:30a	6:38a	6:47a	6:54a	–	7:06a	7:15a
8:30a	8:38a	8:47a	8:54a	–	9:06a	9:15a
3:05p	3:13p	3:21p	–	3:32p	3:43p	3:52p
4:55p	5:03p	5:11p	–	5:22p	5:33p	5:42p
6:35p	6:43p	6:51p	–	7:02p	7:13p	7:22p

* Trip will drop off at Safari Park only if passengers request to stop there.
El viaje hará una parada en Safari Park solamente si los pasajeros lo solicitan.



APPENDIX F

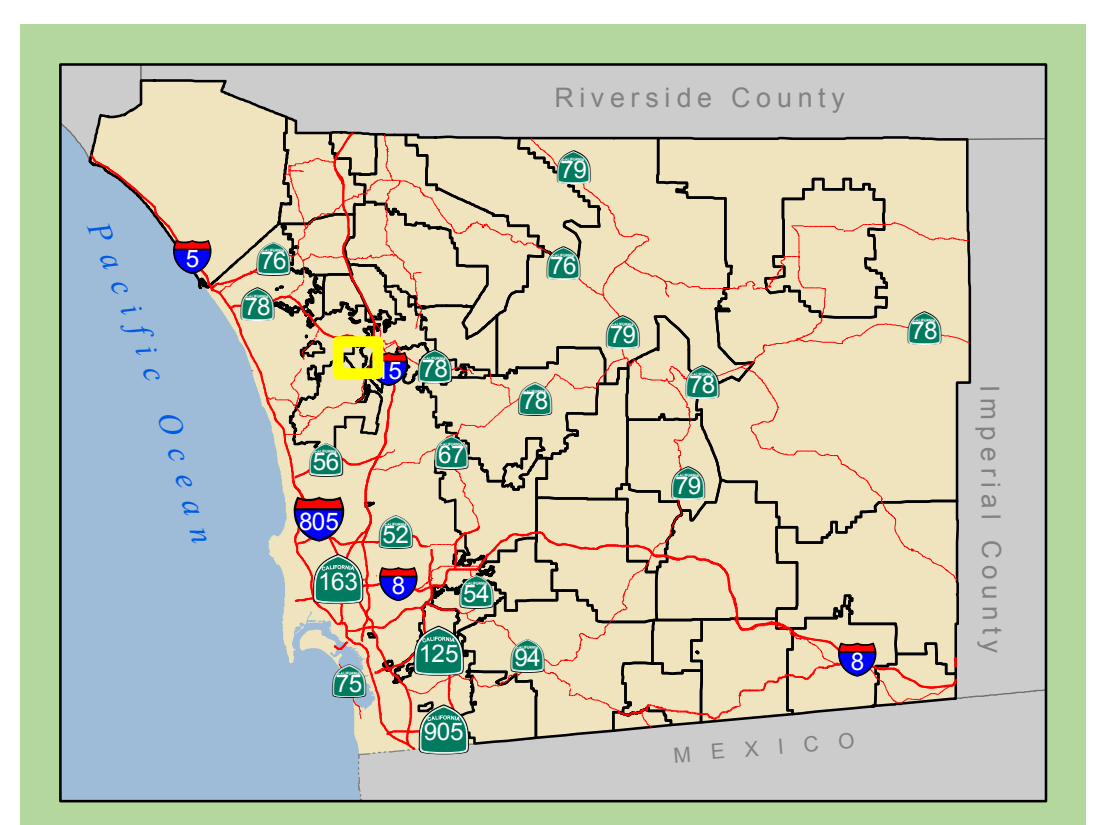
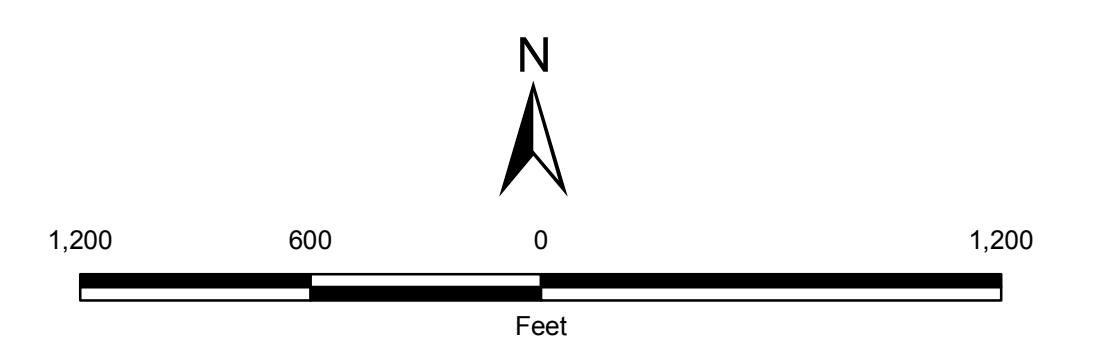
County of San Diego's Community Trails Master Plan (CTMP)

North County Metro

Community Trails and Pathways Plan

FOR PLANNING PURPOSES ONLY

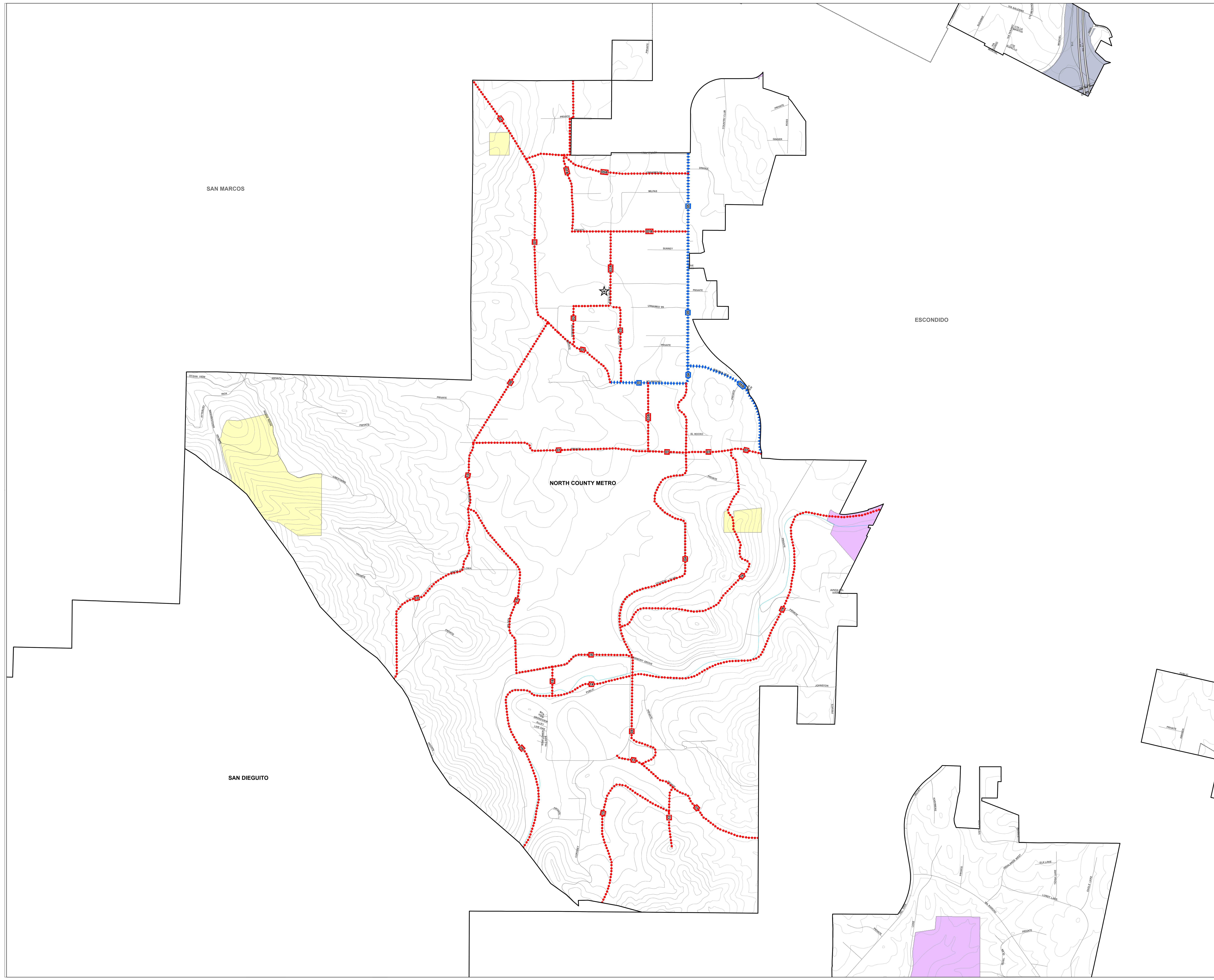
- Regional Trail Proposed
- Regional Trail Existing
- Existing Community Trails
- Proposed Community Pathways
- Proposed Community Trails
- Existing Staging Area
- Proposed Staging Area
- Community Planning Areas
- Municipal Boundaries
- Trail and Pathway Easements
- Biological or Open Space Easement
- County Park Owned, Managed, or Other Property
- Other County Lands
- City Lands
- State Parks
- California Department of Fish and Game
- Bureau of Land Management
- U.S. Fish and Wildlife Service
- U.S. Forest Service
- Military Reservations
- Indian Reservations
- Special District Lands
- Other Federal Lands
- Other State Lands
- Water Body
- Freeway
- Highway
- Roads
- River
- Intermittent Stream
- 40' Topographic Contours



**COMMUNITY TRAILS MAP
APPROVED JANUARY 12, 2005
UPDATE APPROVED JUNE 24, 2009
BY COUNTY OF SAN DIEGO
BOARD OF SUPERVISORS**

County of San Diego
Department of Parks and Recreation
Geographic Information Services
For more information regarding this map please contact:
Department of Parks and Recreation
Maryanne Vancio, Trails Program Coordinator at (858) 966-1372

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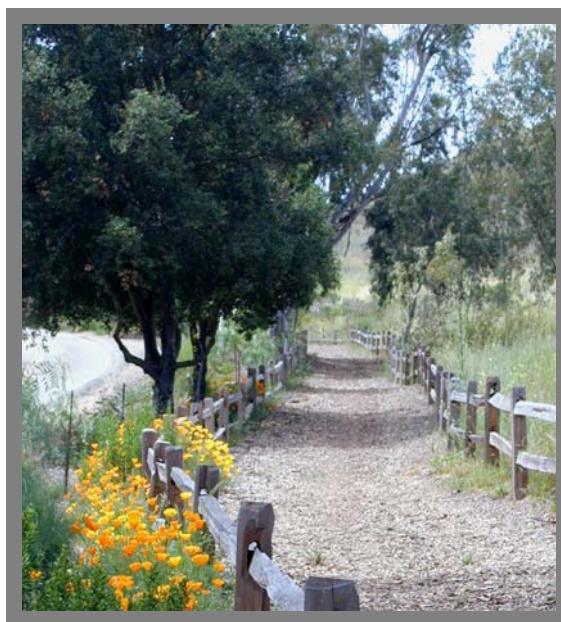


North County Metro Harmony Grove–Eden Valley Community Trails and Pathways Plan

Trails: The Community Connection

The Community Trails Master Plan will be utilized to develop a system of interconnected regional and community trails and pathways. These trails and pathways are intended to address an established public need for recreation and transportation, but will also provide health and quality of life benefits associated with hiking, biking, and horseback riding throughout the County’s biologically diverse environments.

Community trails serve a different function than regional trails, which are focused on the provision of long linear distances. Instead, community trails are “local public facilities” in close proximity to residents that provide transportation, recreation, access, infrastructure, linkages and safe routes throughout a community. The Community Trails Master Plan (CTMP) involves both trail development and management on public, semi-public and private lands. The CTMP has established two forms of non-motorized facilities called “Trails” and “Pathways” that provide passive recreational, and alternative modes of transportation.



Community Trail near Elfin Forest

Trails are typically away from vehicular roads that are primarily recreational in nature but can also serve as an alternative mode of transportation. They are soft-surface facilities for single or multiple uses by pedestrians, equestrians, and mountain bicyclists.

Pathways are a non-motorized transportation facility located within a parkway or road right of way. A riding and hiking trail located in the road right of way is considered a pathway.

They are soft-surfaced facilities intended to serve both circulation and recreation purposes. Pathways help make critical connections and are an integral part of a functional trail system.

COMMUNITY TRAIL STATEMENT

Eden Valley/Harmony Grove is a rural unincorporated area of San Diego County, with a strong sense of community. The residents have fought many battles to preserve their rural lifestyle and protect the fragile environment of this beautiful valley. The important characteristics of our valley include dark night skies, large animal keeping, rural environment, large equestrian properties, creeks, and an open design of the neighborhoods. Our hope is that our entire valley will be walkable along connecting multi-use (no motorized vehicles) trails and pathways.

Currently there are open fields and pathway trails throughout the area. However, development is beginning to happen and most of these important multi-use pathways are disappearing. In the planning of this rural area the residents have stressed the importance of connecting trails and pathways throughout the valley. These trails would enhance the beauty of the area, encourage recreation, decrease dependence on automobiles, provide safe off road routes for residents and their children, and help preserve our rural large animal and horse keeping lifestyles.

THE NEED FOR TRAILS

The community trail needs are based on an equation established by the Trails System Assessment (TSA) in 2001, which identified a minimum baseline level of service for each community by population. The Baseline Level of Service or Trail Need is 0.8 miles of trail per 1,000 people.

The “Trail Need” is the minimum length of trail miles (baseline level of service) for each Community and Subregional Plan Area. The TSA calculations for community trail needs are as follows:

- **Trail Need** = (Community Population /1,000 residents x 0.8 miles of trails)
- **2000 Trail Need** = (2000 population /1,000 residents x 0.8 miles of trails)
- **2020 Trail Need** = (2020 population /1,000 residents x 0.8 miles of trails)

NOTE: *Separate population statistics for Harmony Grove - Eden Valley have not been determined. Currently, Harmony Grove - Eden Valley is included in the North County Metro Planning area. Prior to final approval of the County Trails Program, a baseline level of trails (mileage) will be determined for the Harmony Grove-Eden Valley area.*

For additional information about the baseline level of service and trail needs, please refer to the discussion under “**The Need for Trails**” and **Tables NT-1 and NT-2** in the CTMP.

COUNTYWIDE TRAIL GOALS AND POLICIES

The “**Countywide Goals and Policies**” contained in the CTMP apply to all community and sub-regional plan areas. Community-specific goals and policies are intended to accommodate specific needs and they will be implemented when feasible.

The Harmony Grove-Eden Valley Community developed Community Specific Goals and Policies for their community trails plan. The abbreviations are as follows:

SG = Community Specific Goal
SP = Community Specific Policy

Policy: SP 1

The guidelines for individual trails should remain flexible, and allow for upgrading as new development increases the population and traffic in this area.

Policy: SP 2

When a busy roadway occurs near a once rural trail, then the trail would need to be upgraded and improved.

Policy: SP 3

Mature trees and landscape should be preserved where possible.

Policy: SP 4

Pathways should have a clear, unobstructed line of sight to ensure visibility for entering and exiting driveways or roadways.

Policy: SP 5

While assigning the trail type and designing the trail, ease of maintenance and safety should be the top priority.

Where Community-specific goals and policies are not addressed, the **Countywide Goals and Policies**” contained in CTMP shall apply.

DESIGN AND CONSTRUCTION GUIDELINES

The Harmony Grove-Eden Valley residents recommend using the County’s trail type guidelines.

- Trail Type A is recommended in intense volume areas.
- Trail Type B is recommended in the more rural areas.
- Trail Type C is recommended in the open undeveloped areas.
- Trail Type D, a “pathway”, is recommended along heavily traveled public roads, especially where safety is an issue.

Countywide trail guidelines in the Community Trails Master Plan apply to all community and sub-regional plan areas. Community-specific guidelines are intended to accommodate specific community needs and they will be

implemented when feasible. Where Community specific guidelines are not addressed, the Countywide “**Design and Construction Guidelines**” contained in the CTMP shall apply.

HARMONY GROVE - EDEN VALLEY COMMUNITY TRAILS MAP SUMMARY

As a result of the community trails outreach process for development of the CTMP, the Harmony Grove-Eden Valley Community completed several tasks, and prioritized community trails and pathways as well as their special features. Each trail and pathway was labeled and recorded producing a community trails map and index.

Proposed trails shown on trails maps contained in the Community Trail Master Plan depict corridors of general alignments. The term “general alignment” is used to describe the general location of a future trail within a

designated corridor so that the specific alignment can be determined during the review and approval process when a discretionary application is submitted for a development permit for land that includes a trail corridor. The designated corridor is approximately one-quarter mile wide. A general alignment is useful because it allows the trail to be located to avoid extreme topographical conditions, sensitive habit or other site-specific constraints.

HARMONY GROVE - EDEN VALLEY COMMUNITY TRAILS MAP INDEX

The following community trails map index was completed by the Harmony Grove- Eden Valley Community and will be used as a reference tool. Neighboring communities are italicized and where trail or pathway connections exist, the community trail name and number are included.

HARMONY GROVE - EDEN VALLEY TRAILS MAP INDEX

<p>Trail #: 1</p>	<p>Name: The Groves Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 1.17</p>	<p>Connections: Trail Name (Trail #) <i>San Marcos Border</i> Country Club Dive Connector Trail (5A) Eden Valley Trail (6) Romance Road Loop Trail (2) Mount Whitney Road Pathway (3)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity Setting</p> <p>Special Features: Eden Valley, Jack's Pond, and CSU San Marcos connection. Main trail to connect Escondido to San Marcos Type C or B. Future development may change to type B or D. Request lowest possible elevation trail. Possible Staging Area at north end.</p>
<p>Trail #: 1A</p>	<p>Name: Huston-McCormick Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.89</p>	<p>Connections: Trail Name (Trail #) <i>San Marcos Border</i> Country Club Dive Connector Trail (5A) Romance Road Loop Trail (2) Country Club Drive Pathway (5)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity Setting</p> <p>Special Features: Borders Wetland Preserve with California Live Oak grove. Property owners have equestrian facilities. Heavy equestrian usage currently on private easement. Type B Possible Staging Area at north end.</p>
<p>Trail #: 2</p>	<p>Name: Romance Road Loop Trail</p> <p>Trail Status: (X) Existing () Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.53</p>	<p>Connections: Trail Name (Trail #) The Groves Trail (1) Wetlands Preserve Trail (2A) Mount Whitney Road Pathway (3)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: Pleasant loop bordering many equestrian properties. High equestrian usage existing. Type B.</p>
<p>Trail #: 2A</p>	<p>Name: Wetlands Preserve Trail</p> <p>Trail Status: (X) Existing () Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.25</p>	<p>Connections: Trail Name (Trail #) Huston-McCormick Trail (1A) Eden Valley Lane Staging Area Romance Road Loop Trail (2)</p>	<p>Trail Priority Criteria: Connectivity Loop Medium user opportunity Setting</p> <p>Special Features: Natural trail through California Live Oak Grove. Beautiful trail experience. Main equestrian trail for Eden Valley, Harmony Grove, Harmony Grove Village trail system and staging area connections. This is an important trail connection. Without it Eden Valley will be cut off from rest of trail system. Type C. Possible Staging Area at South-East corner.</p>

HARMONY GROVE - EDEN VALLEY TRAILS MAP INDEX

<p>Trail #: 3</p>	<p>Name: Mount Whitney Road Pathway</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: () Trail (X) Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.25</p>	<p>Connections: Trail Name (Trail #) Country Club Drive Pathway (5) Country Club Drive Trail (4) Romance Road Loop Trail (2) The Groves Trail (1)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: Main east/west equestrian connection. Type D.</p>
<p>Trail #: 3A</p>	<p>Name: Bryans Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.22</p>	<p>Connections: Trail Name (Trail #) Mount Whitney Road Pathway (3) Powerline Trail (7)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: Alternate trail route for windy, narrow and dangerous Country Club Drive trail. Borders two large equestrian facilities. This is an important trail connection. Without it Eden valley may be cut off from rest of trail system. Type B.</p>
<p>Trail #: 4</p>	<p>Name: Country Club Drive Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 1.66</p>	<p>Connections: Trail Name (Trail #) Country Club Drive Pathway (5) Mount Whitney Road Trail (3) Powerline Trail (7) Harmony Grove Trail (19) Harmony Grove Village Trail (16) Escondido Creek Trail (14) Lake Hodges Trail (11)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity Safety</p> <p>Special Features: Main north/south connection. Type B. Dangerous traffic situations. No shoulder, trail must be far enough away from road for safety concerns.</p>
<p>Trail #: 5</p>	<p>Name: Country Club Drive Pathway</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: () Trail (X) Pathway</p> <p>Trail Priority: () 1 (X) 2 () 3</p> <p>Estimated Trail Length in Miles: 0.75</p>	<p>Connections: Trail Name (Trail #) <i>Escondido Border</i> Country Club Drive Connector Trail (5A) Huston-McCormick Trail (1A) Kauana Loa Drive Pathway (5B) Mount Whitney Road Pathway (3) Country Club Drive Trail (4)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity Safety</p> <p>Special Features: Main north/south equestrian pathway. Property owners have equestrian facilities. Eden Valley and Nordahl Industrial Park connection. Commuter usage. School Bus zone. Type A.</p>
<p>Trail #: 5A</p>	<p>Name: Howard Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: () 1 (X) 2 () 3</p> <p>Estimated Trail Length in Miles: 0.56</p>	<p>Connections: Trail Name (Trail #) The Groves Trail (1) Huston-McCormick Trail (1A) Country Club Drive Pathway (5)</p>	<p>Trail Priority Criteria: Connectivity Loop</p> <p>Special Features: Jack's Pond and Industrial Park connection. First portion is existing SDG&E easement. Type B.</p>

HARMONY GROVE - EDEN VALLEY TRAILS MAP INDEX

<p>Trail #: 5B</p>	<p>Name: Kauana Loa Drive Pathway</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: () Trail (X) Pathway</p> <p>Trail Priority: () 1 (X) 2 () 3</p> <p>Estimated Trail Length in Miles: 0.44</p>	<p>Connections: Trail Name (Trail #) Country Club Drive Pathway (5) Powerline Trail (7) <i>Escondido Border</i></p>	<p>Trail Priority Criteria: Connectivity Loop Safety</p> <p>Special Features: Industrial Park connection. Blind curve with speeding vehicles.</p>
<p>Trail #: 6</p>	<p>Name: Eden Valley Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.45</p>	<p>Connections: Trail Name (Trail #) The Groves Trail (1) Powerline Trail (7) San Dieguito Connector Trail (10)</p>	<p>Trail Priority Criteria: Connectivity Loop Setting Large user opportunity Safety</p> <p>Special Features: Alternative natural trail experience for pathway. Jack's Pond, Eden Valley and Elfin Forest connection. Add trail condition to New Urban West development. Type C.</p>
<p>Trail #: 7</p>	<p>Name: Powerline Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.99</p>	<p>Connections: Trail Name (Trail #) San Dieguito Connector Trail (10) Eden Valley Trail (6) Country Club Drive Trail (4) Harmony Grove Trail (19) Kauana Loa Drive Pathway (5B) <i>Escondido Border</i></p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: Eden Valley and Elfin Forest connection. Add trail condition to New Urban West development. SDG&E easement. Type B Located on south side of tension wires, but ok to locate under wires if SDG&E allows use of right-of-way. Community prefers south of current location on County easement.</p>
<p>Trail #: 10</p>	<p>Name: San Dieguito Connector Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.89</p>	<p>Connections: Trail Name (Trail #) Eden Valley Trail (6) Powerline Trail (7) Wilglen Trail (15) <i>San Dieguito/North County Metro Connector Trail (10)</i></p>	<p>Trail Priority Criteria: Connectivity Large user opportunity Setting</p> <p>Special Features: Eden Valley, Harmony Grove, Elfin Forest and San Dieguito connection. Add trail condition to New Urban West development. Beautiful trail experience. Type B.</p>

HARMONY GROVE - EDEN VALLEY TRAILS MAP INDEX

<p>Trail #: 11</p>	<p>Name: Lake Hodges Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.55</p>	<p>Connections: Trail Name (Trail #) Country Club Drive Trail (4) Summit Trail (12) <i>Escondido Border</i></p>	<p>Trail Priority Criteria: Connectivity Loop Setting</p> <p>Special Features: Harmony Grove, Del Dios Highlands Preserve, Elfin Forest Recreational Reserve, San Dieguito River Park and Lake Hodges connection. Drainage underpass at Del Dios Highway and Date Lane near the Highlands Preserve that could be enlarged for multiuse connection. Type B and C.</p>
<p>Trail #: 12</p>	<p>Name: Summit Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.21</p>	<p>Connections: Trail Name (Trail #) Lake Hodges Trail (11) Elfin Forest Trail (13)</p>	<p>Trail Priority Criteria: Connectivity Loop Setting</p> <p>Special Features: Scenic look-out point. Type B and C.</p>
<p>Trail #: 13</p>	<p>Name: Elfin Forest Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: () 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.61</p>	<p>Connections: Trail Name (Trail #) Summit Trail (12) <i>Del Dios Highlands Preserve Border</i></p>	<p>Trail Priority Criteria: Connectivity Setting</p> <p>Special Features: Harmony Grove, Del Dios Highlands Preserve, and Elfin Forest Recreational Reserve connection. Type B and C.</p>
<p>Trail #: 14</p>	<p>Name: Escondido Creek Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Estimated Trail Length in Miles: 2.16</p>	<p>Connections: Trail Name (Trail #) <i>Escondido Border</i> Country Club Drive Trail (4) Harmony Grove Village Trail (16) <i>San Dieguito/ Escondido Creek Trail (14)</i></p>	<p>Trail Priority Criteria: Connectivity Loop Setting Medium user opportunity</p> <p>Special Features: San Dieguito connection. Very high quality trail experience following creek. Portion east of Country Club and Harmony Grove belongs to Escondido Creek Conservancy. Crosses multiple private land owners that have not shown interest in allowing trail access. Type C.</p>
<p>Trail #: 15</p>	<p>Name: Wilgen Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Estimated Trail Length in Miles: 0.73</p>	<p>Connections: Trail Name (Trail #) Harmony Grove Village Trail (16) San Dieguito Connector Trail (10)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: San Dieguito, Eden Valley, Harmony Grove, Del Dios Highlands Preserve and Elfin Forest Recreational Reserve connections. Add trail condition to New Urban West development. Narrow existing road will require easements for trail. Type A.</p>

HARMONY GROVE - EDEN VALLEY TRAILS MAP INDEX

<p>Trail #: 16</p>	<p>Name: Harmony Grove Village Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.36</p>	<p>Connections: Trail Name (Trail #) Country Club Drive Trail (4) Wilglen Trail (15) Escondido Creek Trail (14)</p>	<p>Trail Priority Criteria: Connectivity Loop Large user opportunity</p> <p>Special Features: San Dieguito, Eden Valley, Harmony Grove, Del Dios Highlands Preserve and Elfin Forest Recreational Reserve connections. Add trail condition to New Urban West development. Proposed equestrian park and staging area. Type A or D Flood plain area.</p>
<p>Trail #: 17</p>	<p>Name: Del Dios Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles:</p>	<p>Connections: Trail Name (Trail #) Lake Hodges Trail (11)</p>	<p>Trail Priority Criteria: Connectivity</p> <p>Special Features: Outside planning area in Escondido and San Dieguito on Derbas property purchased by County. Elfin Forest Recreational Reserve, Lake Hodges, Del Dios Highlands Preserve, San Dieguito River Park (Coast to Crest) Trail, and Harmony Grove connections. Drainage underpass at Del Dios Highway and Date Lane near the Highlands Preserve that could be enlarged for multiuse connection. Golden Eagle nesting area. Type C.</p>
<p>Trail #: 19</p>	<p>Name: Harmony Grove Trail</p> <p>Trail Status: () Existing (X) Proposed</p> <p>Trail Type: (X) Trail () Pathway</p> <p>Trail Priority: (X) 1 () 2 () 3</p> <p>Estimated Trail Length in Miles: 0.92</p>	<p>Connections: Trail Name (Trail #) Powerline Trail (7) Country Club Drive Trail (4)</p>	<p>Trail Priority Criteria: Connectivity Loop Setting Medium user opportunity Safety</p> <p>Special Features: Eden Valley and Harmony Grove Village connection. Alternate trail route for windy, narrow and dangerous Country Club Drive trail. Add trail condition to New Urban West development and Quarry reclamation. Steep trail on native soil near quarry pits. May need chain link safety fencing. Sweeping panoramic views with soaring eagles overhead. Rincon del Diablo Municipal Water District utility easement on first portion of trail. Two private property owners are interested in County leasing arrangement. Type C.</p>

STAGING AREA

- Eden Valley Lane



APPENDIX G

Intersection and Street Segment Count Sheets

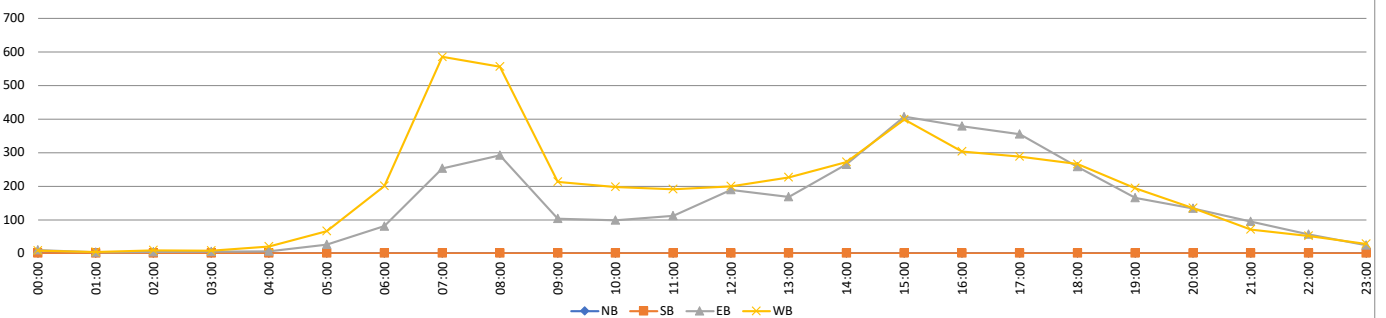
VOLUME

Idaho Ave Bet Old Cedar Rd & Escondido Christian Church Dwy

Day: Wednesday
Date: 9/11/2024

City: Escondido
Project #: CA24_040148_002

DAILY TOTALS						NB	SB	EB	WB	Total	DAILY TOTALS						
						0	0	3,490	4,494	7,984							
15-Minutes Interval											Hourly Intervals						
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00			4	0	4	12:00			52	52	104	00:00 01:00			10	8	18
0:15			4	4	8	12:15			45	54	99	01:00 02:00			3	4	7
0:30			0	3	3	12:30			55	51	106	02:00 03:00			4	9	13
0:45			2	1	3	12:45			37	43	80	03:00 04:00			5	8	13
1:00			1	0	1	13:00			32	50	82	04:00 05:00			6	20	26
1:15			0	1	1	13:15			47	51	98	05:00 06:00			26	66	92
1:30			1	2	3	13:30			45	66	111	06:00 07:00			81	201	282
1:45			1	1	2	13:45			44	59	103	07:00 08:00			253	585	838
2:00			1	2	3	14:00			39	48	87	08:00 09:00			292	556	848
2:15			0	1	1	14:15			55	65	120	09:00 10:00			103	213	316
2:30			1	5	6	14:30			70	89	159	10:00 11:00			99	198	297
2:45			2	1	3	14:45			101	70	171	11:00 12:00			112	191	303
3:00			1	2	3	15:00			101	125	226	12:00 13:00			189	200	389
3:15			1	2	3	15:15			107	112	219	13:00 14:00			168	226	394
3:30			1	3	4	15:30			88	63	151	14:00 15:00			265	272	537
3:45			2	1	3	15:45			111	99	210	15:00 16:00			407	399	806
4:00			0	1	1	16:00			85	76	161	16:00 17:00			379	304	683
4:15			2	5	7	16:15			86	74	160	17:00 18:00			355	288	643
4:30			2	5	7	16:30			87	79	166	18:00 19:00			258	266	524
4:45			2	9	11	16:45			121	75	196	19:00 20:00			165	194	359
5:00			3	12	15	17:00			98	71	169	20:00 21:00			134	135	269
5:15			2	10	12	17:15			79	70	149	21:00 22:00			95	71	166
5:30			11	25	36	17:30			78	65	143	22:00 23:00			57	52	109
5:45			10	19	29	17:45			100	82	182	23:00 00:00			24	28	52
6:00			9	30	39	18:00			63	56	119	STATISTICS					
6:15			23	34	57	18:15			80	85	165						
6:30			25	64	89	18:30			62	78	140	Peak Period	00:00	to	12:00		
6:45			24	73	97	18:45			53	47	100	Volume			994	2059	3053
7:00			41	78	119	19:00			37	49	86	Peak Hour	7:30	7:30	7:30		
7:15			48	114	162	19:15			42	41	83	Peak Volume	365	743	1108		
7:30			69	204	273	19:30			43	54	97	Peak Hour Factor	0.869	0.911	0.975		
7:45			95	189	284	19:45			43	50	93	Peak Period	12:00	to	00:00		
8:00			96	176	272	20:00			35	36	71	Volume			2496	2435	4931
8:15			105	174	279	20:15			47	39	86	Peak Hour	15:00	15:00	15:00		
8:30			57	136	193	20:30			28	26	54	Peak Volume	407	399	806		
8:45			34	70	104	20:45			24	34	58	Peak Hour Factor	0.917	0.798	0.892		
9:00			26	52	78	21:00			31	23	54	Peak Period	07:00	to	09:00		
9:15			21	56	77	21:15			25	22	47	Volume			545	1141	1686
9:30			29	44	73	21:30			23	9	32	Peak Hour	7:30	7:30	7:30		
9:45			27	61	88	21:45			16	17	33	Peak Volume	365	743	1108		
10:00			29	43	72	22:00			16	20	36	Peak Hour Factor	0.869	0.911	0.975		
10:15			26	59	85	22:15			24	17	41	Peak Period	16:00	to	18:00		
10:30			24	48	72	22:30			9	9	18	Volume			734	592	1326
10:45			20	48	68	22:45			8	6	14	Peak Hour	16:15	16:00	16:15		
11:00			28	38	66	23:00			9	8	17	Peak Volume	392	304	691		
11:15			33	34	67	23:15			9	6	15	Peak Hour Factor	0.810	0.962	0.881		
11:30			20	43	63	23:30			2	8	10						
11:45			31	76	107	23:45			4	6	10						
TOTALS	0	0	994	2059	3053	TOTALS	0	0	2496	2435	4931						
SPLIT %	0%	0%	33%	67%	38%	SPLIT %	0%	0%	51%	49%	62%						





APPENDIX H

Ambient Traffic Growth Factor

Federal Highway Administration

1200 New Jersey Avenue, SE

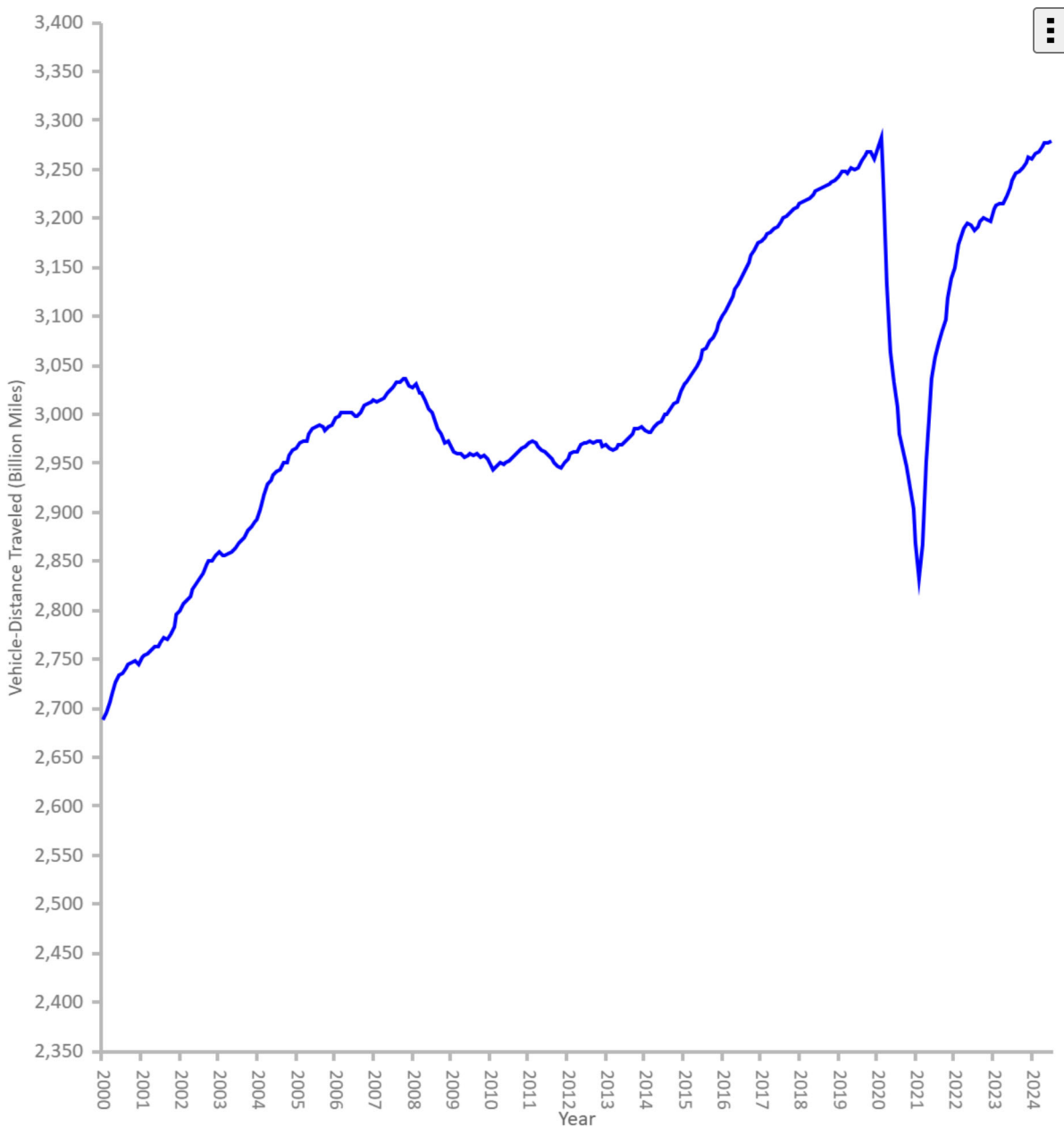
Washington, DC 20590

202-366-4000

[Policy and Governmental Affairs](#) [Office of Highway Policy Information](#)

July 2024 Traffic Volume Trends

Figure 1 - Moving 12-Month Total on All Roads



**Moving 12-Month Total on All US
Roads**

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Jan-00	2,689.0
Feb-00	2,697.0
Mar-00	2,708.0
Apr-00	2,715.0
May-00	2,727.0
Jun-00	2,734.0
Jul-00	2,736.0
Aug-00	2,742.0
Sep-00	2,746.0
Oct-00	2,748.0
Nov-00	2,749.0
Dec-00	2,746.0
Jan-01	2,753.0
Feb-01	2,755.0
Mar-01	2,756.0
Apr-01	2,761.0
May-01	2,763.0
Jun-01	2,763.0
Jul-01	2,768.0
Aug-01	2,773.0
Sep-01	2,771.0
Oct-01	2,776.0
Nov-01	2,784.0
Dec-01	2,796.0
Jan-02	2,801.0
Feb-02	2,808.0
Mar-02	2,811.0
Apr-02	2,815.0
May-02	2,822.0
Jun-02	2,827.0
Jul-02	2,833.0
Aug-02	2,839.0
Sep-02	2,847.0
Oct-02	2,852.0
Nov-02	2,852.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Dec-02	2,856.0
Jan-03	2,860.0
Feb-03	2,856.0
Mar-03	2,857.0
Apr-03	2,859.0
May-03	2,860.0
Jun-03	2,864.0
Jul-03	2,870.0
Aug-03	2,872.0
Sep-03	2,875.0
Oct-03	2,883.0
Nov-03	2,886.0
Dec-03	2,891.0
Jan-04	2,894.0
Feb-04	2,904.0
Mar-04	2,918.0
Apr-04	2,930.0
May-04	2,934.0
Jun-04	2,939.0
Jul-04	2,943.0
Aug-04	2,945.0
Sep-04	2,952.0
Oct-04	2,952.0
Nov-04	2,958.0
Dec-04	2,964.0
Jan-05	2,966.0
Feb-05	2,972.0
Mar-05	2,974.0
Apr-05	2,974.0
May-05	2,980.0
Jun-05	2,987.0
Jul-05	2,988.0
Aug-05	2,990.0
Sep-05	2,988.0
Oct-05	2,985.0
Nov-05	2,988.0
Dec-05	2,989.0
Jan-06	2,998.0
Feb-06	2,999.0
Mar-06	3,003.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Apr-06	3,003.0
May-06	3,003.0
Jun-06	3,003.0
Jul-06	2,999.0
Aug-06	2,999.0
Sep-06	3,003.0
Oct-06	3,010.0
Nov-06	3,012.0
Dec-06	3,014.0
Jan-07	3,015.0
Feb-07	3,013.0
Mar-07	3,016.0
Apr-07	3,018.0
May-07	3,023.0
Jun-07	3,024.0
Jul-07	3,028.0
Aug-07	3,034.0
Sep-07	3,034.0
Oct-07	3,037.0
Nov-07	3,038.0
Dec-07	3,030.0
Jan-08	3,029.0
Feb-08	3,031.0
Mar-08	3,023.0
Apr-08	3,022.0
May-08	3,015.0
Jun-08	3,007.0
Jul-08	3,002.0
Aug-08	2,992.0
Sep-08	2,986.0
Oct-08	2,981.0
Nov-08	2,971.0
Dec-08	2,973.0
Jan-09	2,966.0
Feb-09	2,963.0
Mar-09	2,961.0
Apr-09	2,960.0
May-09	2,957.0
Jun-09	2,958.0
Jul-09	2,960.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Aug-09	2,959.0
Sep-09	2,961.0
Oct-09	2,957.0
Nov-09	2,958.0
Dec-09	2,956.0
Jan-10	2,951.0
Feb-10	2,944.0
Mar-10	2,948.0
Apr-10	2,951.0
May-10	2,950.0
Jun-10	2,952.0
Jul-10	2,953.0
Aug-10	2,957.0
Sep-10	2,960.0
Oct-10	2,964.0
Nov-10	2,967.0
Dec-10	2,968.0
Jan-11	2,971.0
Feb-11	2,973.0
Mar-11	2,972.0
Apr-11	2,968.0
May-11	2,965.0
Jun-11	2,963.0
Jul-11	2,958.0
Aug-11	2,955.0
Sep-11	2,952.0
Oct-11	2,948.0
Nov-11	2,947.0
Dec-11	2,951.0
Jan-12	2,955.0
Feb-12	2,960.0
Mar-12	2,963.0
Apr-12	2,962.0
May-12	2,969.0
Jun-12	2,971.0
Jul-12	2,971.0
Aug-12	2,974.0
Sep-12	2,971.0
Oct-12	2,973.0
Nov-12	2,974.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Dec-12	2,968.0
Jan-13	2,969.0
Feb-13	2,967.0
Mar-13	2,964.0
Apr-13	2,967.0
May-13	2,969.0
Jun-13	2,969.0
Jul-13	2,973.0
Aug-13	2,977.0
Sep-13	2,981.0
Oct-13	2,986.0
Nov-13	2,986.0
Dec-13	2,988.0
Jan-14	2,985.0
Feb-14	2,983.0
Mar-14	2,983.0
Apr-14	2,988.0
May-14	2,991.0
Jun-14	2,994.0
Jul-14	3,000.0
Aug-14	3,001.0
Sep-14	3,006.0
Oct-14	3,012.0
Nov-14	3,013.0
Dec-14	3,024.0
Jan-15	3,031.0
Feb-15	3,034.0
Mar-15	3,039.0
Apr-15	3,045.0
May-15	3,050.0
Jun-15	3,058.0
Jul-15	3,066.0
Aug-15	3,069.0
Sep-15	3,076.0
Oct-15	3,079.0
Nov-15	3,087.0
Dec-15	3,094.0
Jan-16	3,101.0
Feb-16	3,107.0
Mar-16	3,114.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Apr-16	3,121.0
May-16	3,128.0
Jun-16	3,134.0
Jul-16	3,141.0
Aug-16	3,148.0
Sep-16	3,155.0
Oct-16	3,163.0
Nov-16	3,169.0
Dec-16	3,175.0
Jan-17	3,178.0
Feb-17	3,181.0
Mar-17	3,184.0
Apr-17	3,187.0
May-17	3,190.0
Jun-17	3,193.0
Jul-17	3,197.0
Aug-17	3,201.0
Sep-17	3,204.0
Oct-17	3,207.0
Nov-17	3,210.0
Dec-17	3,213.0
Jan-18	3,215.0
Feb-18	3,217.0
Mar-18	3,220.0
Apr-18	3,222.0
May-18	3,225.0
Jun-18	3,228.0
Jul-18	3,230.0
Aug-18	3,232.0
Sep-18	3,234.0
Oct-18	3,236.0
Nov-18	3,238.0
Dec-18	3,240.0
Jan-19	3,244.0
Feb-19	3,248.0
Mar-19	3,249.0
Apr-19	3,247.0
May-19	3,253.0
Jun-19	3,251.0
Jul-19	3,252.0

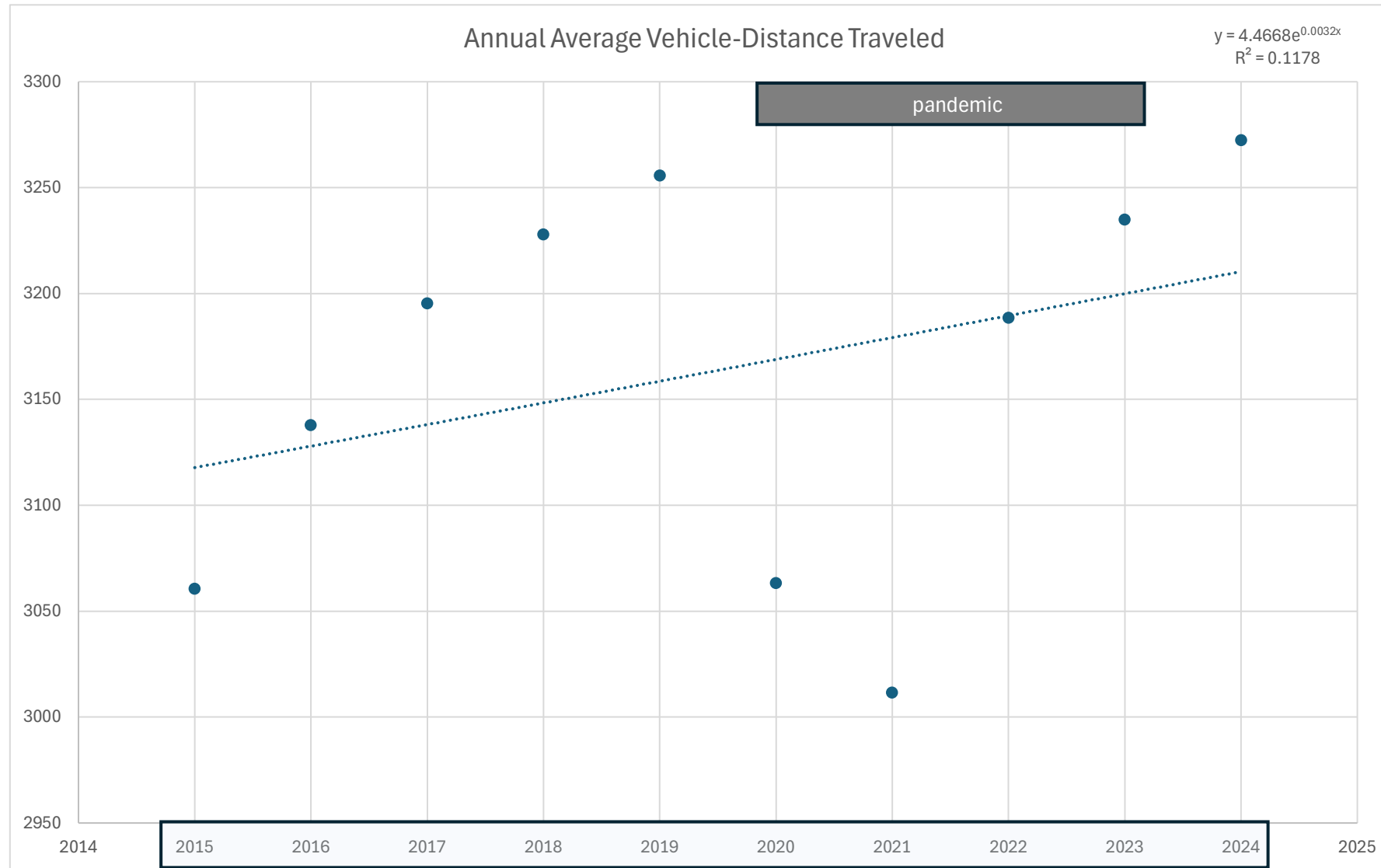
Date	Annual Vehicle-Distance Traveled (Billion Miles)
Aug-19	3,260.0
Sep-19	3,266.0
Oct-19	3,269.0
Nov-19	3,269.0
Dec-19	3,261.0
Jan-20	3,273.0
Feb-20	3,284.0
Mar-20	3,239.0
Apr-20	3,134.0
May-20	3,065.0
Jun-20	3,034.0
Jul-20	3,008.0
Aug-20	2,980.0
Sep-20	2,965.0
Oct-20	2,948.0
Nov-20	2,926.0
Dec-20	2,905.0
Jan-21	2,869.0
Feb-21	2,833.0
Mar-21	2,868.0
Apr-21	2,952.0
May-21	3,008.0
Jun-21	3,037.0
Jul-21	3,059.0
Aug-21	3,074.0
Sep-21	3,086.0
Oct-21	3,097.0
Nov-21	3,119.0
Dec-21	3,139.0
Jan-22	3,150.0
Feb-22	3,174.0
Mar-22	3,184.0
Apr-22	3,190.0
May-22	3,196.0
Jun-22	3,194.0
Jul-22	3,188.0
Aug-22	3,192.0
Sep-22	3,198.0
Oct-22	3,201.0
Nov-22	3,200.0

Date	Annual Vehicle-Distance Traveled (Billion Miles)
Dec-22	3,197.0
Jan-23	3,210.0
Feb-23	3,214.0
Mar-23	3,216.0
Apr-23	3,216.0
May-23	3,223.0
Jun-23	3,232.0
Jul-23	3,240.0
Aug-23	3,247.0
Sep-23	3,249.0
Oct-23	3,252.0
Nov-23	3,258.0
Dec-23	3,264.0
Jan-24	3,262.0
Feb-24	3,267.0
Mar-24	3,269.0
Apr-24	3,275.0
May-24	3,278.0
Jun-24	3,277.0
Jul-24	3,280.0

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Year	Annual Average Vehicle-Distance Traveled
2000	2732
2001	2768
2002	2830
2003	2869
2004	2936
2005	2982
2006	3004
2007	3026
2008	3003
2009	2960
2010	2955
2011	2960
2012	2968
2013	2975
2014	2998
2015	3061
2016	3138
2017	3195
2018	3228
2019	3256
2020	3063
2021	3012
2022	3189
2023	3235
2024	3273

Number of Years	Compound Growth Rate
24 Yrs	0.76%
10 Yrs (2015-2024)	0.75%
5 Yrs	1.66%

source: FHWA Travel Monitoring Program



APPENDIX I

Synchro Calculation Worksheets

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		
Traffic Vol, veh/h	3	256	76	113	673	4	44	0	67	14	0	8
Future Vol, veh/h	3	256	76	113	673	4	44	0	67	14	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	278	83	123	732	4	48	0	73	15	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	736	0	0	361	0	0	1303	1308	320	1264	-	734
Stage 1	-	-	-	-	-	-	326	326	-	979	-	-
Stage 2	-	-	-	-	-	-	977	982	-	285	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	870	-	-	1198	-	-	137	160	721	146	0	420
Stage 1	-	-	-	-	-	-	686	648	-	301	0	-
Stage 2	-	-	-	-	-	-	302	327	-	722	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	870	-	-	1198	-	-	120	142	721	117	-	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	120	142	-	117	-	-
Stage 1	-	-	-	-	-	-	683	645	-	270	-	-
Stage 2	-	-	-	-	-	-	265	294	-	646	-	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.08			1.19			33.83			31.58		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	242	15	-	-	1198	-	-	159
HCM Lane V/C Ratio	0.499	0.004	-	-	0.103	-	-	0.15
HCM Ctrl Dly (s/v)	33.8	9.2	0	-	8.3	-	-	31.6
HCM Lane LOS	D	A	A	-	A	-	-	D
HCM 95th %tile Q(veh)	2.6	0	-	-	0.3	-	-	0.5

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		
Traffic Vol, veh/h	10	354	11	17	271	15	15	0	22	8	0	6
Future Vol, veh/h	10	354	11	17	271	15	15	0	22	8	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	385	12	18	295	16	16	0	24	9	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	311	0	0	397	0	0	744	760	391	746	-	303
Stage 1	-	-	-	-	-	-	412	412	-	340	-	-
Stage 2	-	-	-	-	-	-	332	348	-	407	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1250	-	-	1162	-	-	331	335	658	329	0	737
Stage 1	-	-	-	-	-	-	617	594	-	675	0	-
Stage 2	-	-	-	-	-	-	682	634	-	621	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1250	-	-	1162	-	-	319	326	658	309	-	737
Mov Cap-2 Maneuver	-	-	-	-	-	-	319	326	-	309	-	-
Stage 1	-	-	-	-	-	-	610	587	-	664	-	-
Stage 2	-	-	-	-	-	-	665	624	-	592	-	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.21			0.46			13.58			14.09		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	460	48	-	-	1162	-	-	411
HCM Lane V/C Ratio	0.087	0.009	-	-	0.016	-	-	0.037
HCM Ctrl Dly (s/v)	13.6	7.9	0	-	8.1	-	-	14.1
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

Intersection												
Int Delay, s/veh	4.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		
Traffic Vol, veh/h	3	262	76	113	688	4	44	0	67	14	0	8
Future Vol, veh/h	3	262	76	113	688	4	44	0	67	14	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	95	95	95	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	285	83	123	748	4	46	0	71	15	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	752	0	0	367	0	0	1326	1330	326	1287	-	750
Stage 1	-	-	-	-	-	-	333	333	-	996	-	-
Stage 2	-	-	-	-	-	-	993	998	-	291	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	858	-	-	1191	-	-	133	155	715	141	0	411
Stage 1	-	-	-	-	-	-	681	644	-	295	0	-
Stage 2	-	-	-	-	-	-	295	322	-	717	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	858	-	-	1191	-	-	116	138	715	113	-	411
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	138	-	113	-	-
Stage 1	-	-	-	-	-	-	678	641	-	264	-	-
Stage 2	-	-	-	-	-	-	259	289	-	643	-	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.08			1.17			34.72			32.61		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	234	15	-	-	1191	-	-	154
HCM Lane V/C Ratio	0.499	0.004	-	-	0.103	-	-	0.155
HCM Ctrl Dly (s/v)	34.7	9.2	0	-	8.4	-	-	32.6
HCM Lane LOS	D	A	A	-	A	-	-	D
HCM 95th %tile Q(veh)	2.5	0	-	-	0.3	-	-	0.5

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕		↕		
Traffic Vol, veh/h	10	361	11	17	276	15	15	0	22	8	0	6
Future Vol, veh/h	10	361	11	17	276	15	15	0	22	8	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	200	-	-	-	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	392	12	18	300	16	16	0	24	9	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	316	0	0	404	0	0	757	773	398	759	-	308
Stage 1	-	-	-	-	-	-	420	420	-	345	-	-
Stage 2	-	-	-	-	-	-	337	353	-	414	-	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	-	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	-	3.318
Pot Cap-1 Maneuver	1244	-	-	1154	-	-	324	330	651	323	0	732
Stage 1	-	-	-	-	-	-	611	589	-	670	0	-
Stage 2	-	-	-	-	-	-	677	631	-	615	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	1154	-	-	312	321	651	303	-	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	312	321	-	303	-	-
Stage 1	-	-	-	-	-	-	604	583	-	660	-	-
Stage 2	-	-	-	-	-	-	661	621	-	586	-	-

Approach	EB			WB			NB			SB		
HCM Ctrl Dly, s/v	0.21			0.45			13.73			14.25		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	452	47	-	-	1154	-	-	404
HCM Lane V/C Ratio	0.089	0.009	-	-	0.016	-	-	0.038
HCM Ctrl Dly (s/v)	13.7	7.9	0	-	8.2	-	-	14.3
HCM Lane LOS	B	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1