APPENDIX K.
TRANSPORTATION IMPACT STUDY

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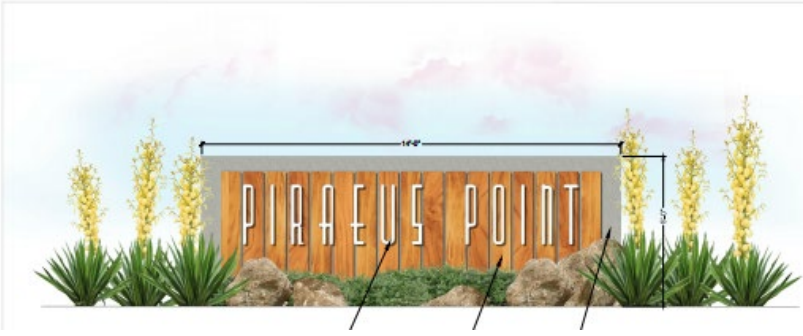
Transportation Impact Study

Piraeus Point

September 21, 2022



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1.0 Introduction

The purpose of this Transportation Impact Study (TIS) is to identify and document any significant transportation related impacts associated with the Piraeus Point project (Proposed Project), and to recommend mitigation measures for identified impacts, as necessary.

1.1 Project Description

The Piraeus Point project entails the development of a 149-home modern townhome community. The project will be utilizing State Density Bonus Law. A Design Review Permit and Coastal Development Permit (both issued by the City of Encinitas) are necessary to allow for development of the property located at the northeast corner of Piraeus Street and Plato Place (APNs 254-144-01-00 and 216-110-35-00) in the Leucadia community of the City of Encinitas (City). The project location is displayed in Figure 1.1.

A Design Review Permit is required in order to ensure project consistency with the design review guidelines established by the City. The Coastal Development Permit is required in conjunction with the issuance of the Design Review Permit, given the project's location within the Coastal Zone.

The community would consist of 52 one-bedroom homes, 37 two-bedroom homes, and 60 three-bedroom homes for a total of 149 residential homes, which would be built within 16 separate three-story residential buildings. A total of 271 parking spaces are planned, including private garage spaces and outdoor shared parking. Proposed amenities include a pool, spa, pool house, and lounge seating. Of the 149 residential homes proposed in the community, 134 would be market-rate homes and 15 would be "very low" income affordable residential homes. The Proposed Project site plan is displayed in Figure 1.2.

The project site is currently vacant land. The site is one of 16 sites included in the *City of Encinitas Housing Element Update*, which was adopted by the City on March 13, 2019. As part of that Housing Element Update, a portion of the project site was designated with an R-30 overlay zone.

Surrounding land uses include single family residences (to the east and south), Piraeus Street and Interstate 5 (to the west), and vacant land (to the north).

1.2 Proposed Project Trip Generation

Table 1 displays the Proposed Project's anticipated trip generation. Trip generation rates were derived from *SANDAG's (Not So) Brief Guide of Vehicular Traffic Generation Rates in the San Diego Region, April 2002*.

Table 1.1 Proposed Project Trip Generation

Land Use	Units	Trip Rate	ADT	AM					PM				
				%	Trips	Split	In	Out	%	Trips	Split	In	Out
Multi-Family Units (20+ DU/Acre)	149 DU	6/DU	894	8%	72	(2:8)	14	58	9%	81	(7:3)	57	24

As shown, the Proposed Project is anticipated to generate a total of 894 daily trips.

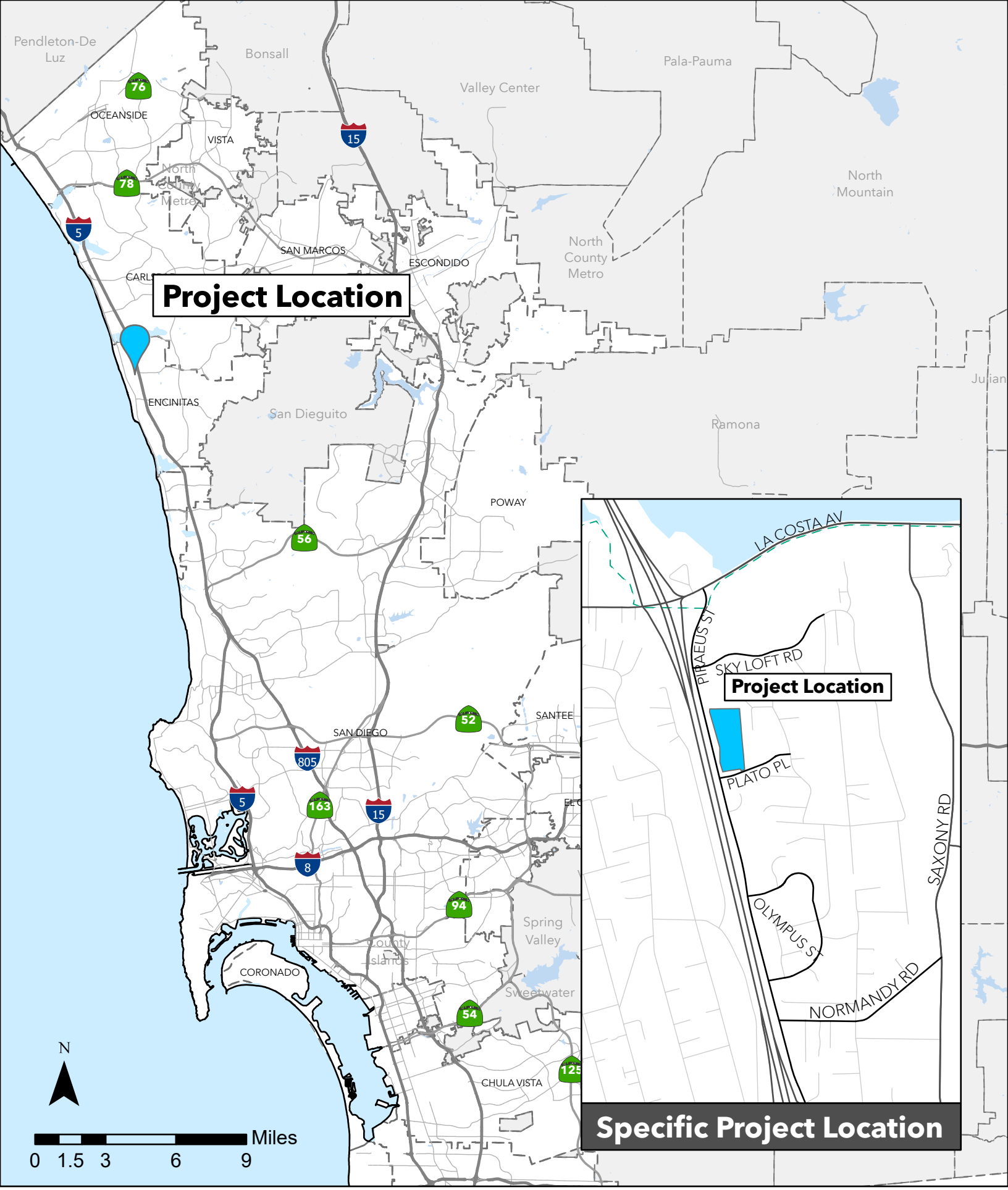
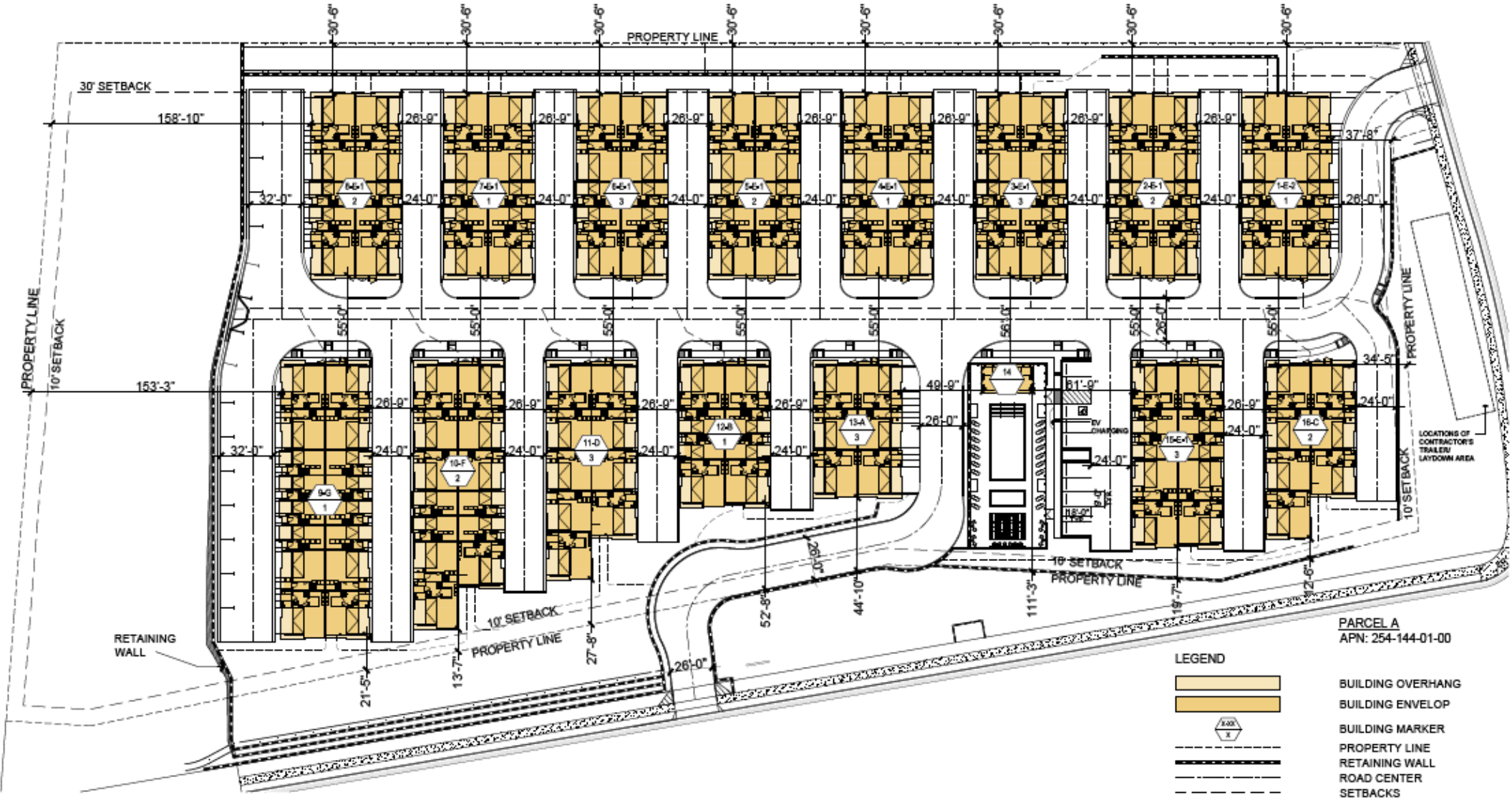


Figure 1.1
Project Location



Piraeus Point

Figure 1.2

Proposed Project Site Plan

1.3 Project Setting

Access to the Proposed Project from the regional transportation network would be provided via Interstate 5 Freeway, La Costa Avenue, Leucadia Boulevard, Piraeus Street, and Plato Place. These roadways would either provide a direct connection to Proposed Project site, via project driveways (on Piraeus Street and Plato Place) or would provide a critical link between the Proposed Project and the regional transportation network. Descriptions of these transportation network facilities are described below:

Interstate 5 (I-5) – Within the project study area, I-5 is a north-south freeway that runs through the entire San Diego region. Access from the I-5 to the study area is taken from the La Costa Avenue and Leucadia Boulevard interchanges. Within the City, I-5 has four northbound and four southbound general purpose lanes. The posted speed limit on I-5 is 65 miles per hour (mph).

La Costa Avenue – Between the I-5 SB Ramps and El Camino Real, La Costa Avenue is a four-lane roadway with a posted speed limit of 55 mph. Parking is prohibited along all both sides of this segment of the roadway. La Costa Avenue has a raised median east of the I-5 NB ramps and a pained median between the I-5 SB and NB Ramps. Six-foot wide Class II Bike Lanes are present on both sides of roadway. Sidewalks are provided on both sides of the roadway between the I-5 SB Ramps and Piraeus Street; however, sidewalks are only provided along the northside of the roadway, along Batiquitos Lagoon, east of Piraeus Street. It should be noted that there are no active land uses on the southside of the roadway for pedestrians to access. There are no transit services or facilities located along La Costa Avenue within the project study area. La Costa Avenue is classified at as Four-Lane Major roadway by the *City of Encinitas Circulation Element, January 2003*; thus, it is built to its ultimate classification.

Leucadia Boulevard – Between the I-5 SB Ramps and Garden View Road, Leucadia Boulevard is a four-lane roadway, with a raised median, and a posted speed limit of 45 mph. Parking is prohibited on both sides of this segment of the roadway. Buffered Class II bike lanes are provided along both sides of the roadway. Sidewalks are provided along both sides of Leucadia Boulevard between the I-5 SB Ramps and Quail Gardens Drive. A nine-foot wide Class I Multi-Use Path is provided on the south side of the roadway east of Quail Gardens Drive. Single family residents as well as the Doug Timmons Golf Course are the fronting land uses to this segment of Leucadia Boulevard. NCTD Bus Route 304 runs along Leucadia Boulevard/Olivenhain Road, between Saxony Road and Rancho Santa Fe Road. Leucadia Boulevard is classified at as Four-Lane Major roadway by the *City of Encinitas Circulation Element, January 2003*; thus, it is built to its ultimate classification.

Piraeus Street – The Proposed Project will take access via a single driveway located on Piraeus Street. Between La Costa Avenue and Leucadia Boulevard, Piraeus Street is a two-lane roadway, divided by a double yellow line, with a posted speed limit of 45 mph. Parking is prohibited on both sides of this segment of the roadway. Class II Bike Lanes are provided on both sides of the roadway, with the exception of the segment between Christine Place and Olympus Street, in which a Class III Bike Route, designated by sharrows, is provided in the northbound direction, with the Class II Bike Lanes continuing in the southbound direction. Sidewalks are generally not provided along Piraeus Street, with the exception of a 300 ft segment on the eastside of the roadway directly north of Normandy Road, as well as along the eastside of the roadway between Leucadia Boulevard and Ocean View Way. There are no land uses that directly front Piraeus Street in which pedestrians would access. There are no transit services or facilities located along Piraeus Street. The *City of Encinitas Circulation Element, January 2003* does not classify Piraeus Street as a Circulation Element roadway.

Plato Place – The Proposed Project will have an emergency access point connection to Plato Place. Plato Place is a two-lane, undivided roadway, with no posted speed limit. Parking is prohibited along both sides of the roadway. There are currently no bicycle, pedestrian, or transit facilities located along Plato Place. Plato Place is fronted by approximately six single family homes, and provides a connection point between a single family neighborhood to the east and Piraeus Street. The *City of Encinitas Circulation Element, January 2003* does not classify Plato Place as a Circulation Element roadway.

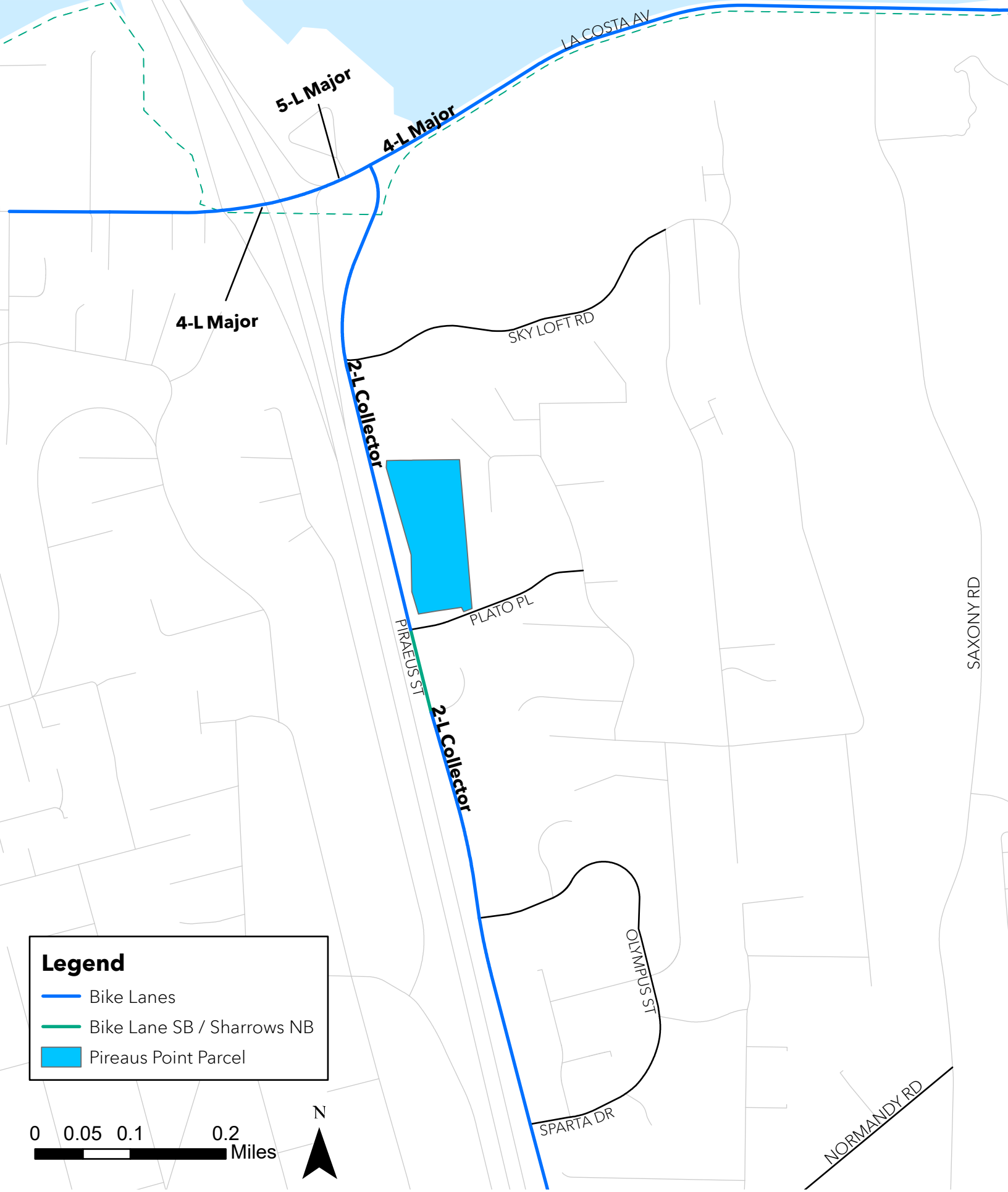
Figure 1.3 display the transportation network around the Proposed Project site.

1.4 Report Organization

Following this Introduction chapter, this report is organized into the following sections:

2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze and identify the transportation related impacts associated with the Proposed Project.

3.0 *Transportation Related Impacts and Mitigation* – This chapter derives and analyzes the projected Vehicle Miles Traveled (VMT) that will be generated by the Proposed Project. This chapter also identifies if the Proposed Project related VMT would create significant project related impacts, as it relates to the standards outlined in the California Environmental Quality Act (CEQA). Finally, the chapter provides recommendations for mitigation measures to reduce the identified transportation related impacts, if necessary, and evaluates the feasibility of the proposed mitigation measures.



Piraeus Point

Figure 1.3
Local Transportation Network

2.0 Analysis Methodology and Threshold

2.1 Background (SB-743)

On September 27, 2013, Governor Edmund G. Brown, Jr. signed California Senate Bill 743 (SB-743) into law, starting a process that is expected to fundamentally change the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes will include elimination of auto delay, level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts.

On December 2018, the Resources Agency certified and adopted the CEQA Guidelines update package, which included the California Natural Resources Agency Guidelines for the Implementation of the California Environmental Quality Act. As a result, the California Governor's Office of Planning and Research (OPR) updated and released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory) in December 2018[1]. Based on these updated guidelines, lead agencies had until July 1, 2020 to comply with the updated CEQA revision. Therefore, all lead agencies are now required to comply with the December 2018 CEQA guidelines, as well as the requirements outlined under SB-743.

2.2 CEQA Guidelines Section 15064.3

Section 15064.3(b) of the CEQA Guidelines outlines how transportation related impacts should be evaluated and identified under CEQA. This section was included within the December 2018 update to implement the requirements outlined within SB-743:

> (1) *Land Use Projects*. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.

As outlined in the section, Vehicle Miles Traveled (VMT) must be used to evaluate the transportation related impacts associated with land use projects.

2.3 Analysis Guidelines and Significance Thresholds

The City has not yet adopted significance thresholds which utilize VMT to assess transportation related impacts, is as required under Section 15064.3(b)(1) of the CEQA Guidelines. Therefore, the methodologies, substantial evidence, and recommended significance thresholds presented in OPR's Technical Advisory were used to assess and identify the VMT related impacts that may be associated with the Proposed Project. It should be noted that the *Guidelines for Transportation Impact Studies in the San Diego Region, May 2019* (Regional Guidelines) is an additional resource that can be used to identify and determine VMT related impacts within the San Diego Region. However, the VMT related significance thresholds presented in Regional Guidelines were derived, and are consistent with, OPR's Technical Advisory. Additionally, no jurisdiction within the San Diego Region has officially adopted or indorsed the Regional Guidelines to this point, thus they are only used for information purposes. Therefore, OPR's

[1] https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

Technical Advisory was used as the primary source in determining the thresholds for the Proposed Project.

2.4 Screening Criteria

OPR's Technical Advisory outlines several screening criteria in which land development can be assumed to have a less than significant VMT related impact, and are thus screened out from conducting a detailed VMT analysis. OPR's identified screening criteria includes small project screening (generates less than 110 daily trips), projects located within a VMT efficient area, projects located within a Transit Priority Area (TPA), 100% affordable housing projects, and locally serving uses. The Proposed Project does not meet any of the identified screening criteria, and therefore is required to conduct a detailed VMT analysis.

2.5 Significance Thresholds

As outlined in Section E.2. of OPR's Technical Advisory (Recommended Numeric Thresholds for Residential, Office, and Retail Projects):

> Recommended threshold for residential projects: A proposed project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita. Proposed development referencing a threshold based on city VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the number of units specified in the SCS for that city, and should be consistent with the SCS.

A threshold of 15% below the San Diego region's[2] base year VMT per capita was used to identify VMT related impacts. Based on SANDAG Series 14 Transportation Forecast (Series ID 458), the average VMT per capita for the San Diego Region is 18.9 miles. Therefore, the significance threshold used to evaluate and identify the Proposed Project's VMT related impacts was 16.1 miles [18.9 miles X (100% - 15%)].

2.6 Cumulative Analysis

As outlined in Section C.1. of the Technical Advisory (Recommendations Regarding Methodology):

> A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa.

Since the Proposed Project's VMT related impacts will be assessed utilizing an efficiency-based metric (VMT per capita), the Proposed Project's direct (project) and cumulative impacts can be assumed to be the same, thus, no additional cumulative analysis is required.

2.7 VMT Analysis Tool

As outlined under CEQA Guidelines Section 15064.3(b):

> *(4) Methodology.* A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional

[2] To be conservative, the regional VMT per capita (18.9 miles) was selected for the threshold over the City's VMT per Capita (22.1 miles).

judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

The SANDAG Series 14 Regional Growth Forecast (ABM2+)[3] is the most up-to-date transportation forecast within the San Diego region. ABM2+ utilizes a tour-based methodology to calculate both vehicular trip generation and VMT output. This is consistent with the recommendations outlined in Section B1 of ORP's Technical Advisory. Based on these findings, the ABM2+ was identified as the most accurate and correct tool to evaluate the Proposed Project's VMT related impacts. As such, the San Diego Region SB-743 VMT Maps[4] was utilized to derive the VMT per capita for the Proposed Project site.

2.8 VMT Reduction / Transportation Demand Management

The quantification of all VMT reductions associated with Transportation Demand Management (TDM) measures were calculated based on the measures and methodologies outlined in the California Air Pollution Control Officers Association's (CAPCOA*) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (GHG Handbook)[5]. The GHG Handbook provides methods to quantify GHG emission reductions from a specified list of measures, primarily focused on project-level actions. The GHG Handbook also includes a method to assess potential benefits of different climate vulnerability reduction measures, as well as measures that can be implemented to improve health and equity, again at the project level. The majority of the measures outlined under the Transportation Section of the GHG Handbook focus on the associated reductions in VMT (as it can be directly associated with GHG) that can be tied to specific TDM measures.

CAPCOA's GHG Handbook is an update to CAPCOA's Quantifying Green House Gas Mitigation Measures, August 2010[6], which has been the main resource used within the State of California to calculate VMT reductions for both Transportation and GHG related impacts over the past decade. CAPCOA's GHG Handbook has refined and added to the VMT reduction methodologies included within the Original CAPCOA Manual to best reflect the on-going research that has occurred over the last 10+ years. Therefore, CAPCOA's GHG Handbook provides the best, and most current, substantial evidence to calculate VMT reductions associated with TDM measures.

[3] The SANDAG Series 14 Regional Growth Forecast is the long-range forecast of population, housing, and employment that was inputted into ABM2+ for the proposed Plan. The Sustainable Communities Strategy (SCS) land use pattern is a subregional allocation of forecasted growth and development (population, housing, and jobs) based on the Series 14 Regional Growth Forecast. Data used to develop the SCS land use pattern are based on the most recent planning assumptions, considering local general plans and other factors, per California Senate Bill 375 (Steinberg, 2008) (SB 375) (Government Code Section 65080[b][2][B]). A detailed description of how the SANDAG Model calculates VMT is provided at the following location: https://www.sandag.org/uploads/2050RTP/F2050RTPTA15.pdf

[4] https://sandag.maps.arcgis.com/apps/webappviewer/index.html?id=5b4af92bc0dd4b7babbce21a7423402a

[5] https://www.airquality.org/residents/climate-change/ghg-handbook-caleemod

[6] http://www.aqmd.gov/docs/default-source/ceqa/handbook/capcoa-quantifying-greenhouse-gas-mitigation-measures.pdf

3.0 Transportation Impact & Mitigation

This chapter derives and analyzes the projected VMT per capita that will be generated by the Proposed Project. This chapter also identifies if the Proposed Project related VMT per capita would create significant project related impact, based on the thresholds outlined in Section 2.0. Finally, the chapter provides recommendations for mitigation measures that may reduce the Proposed Project's impacts to less than significant levels, and evaluates the feasibility of the proposed mitigation measures, if necessary.

3.1 VMT Impact Analysis

Figure 3.1 displays the ABM2+ VMT output for the Proposed Project site. Table 3.1 evaluates the projected VMT per capita in which the Proposed Project's site is anticipated to generate and compares it to the regional significance threshold to identify if the Proposed Project will have a significant VMT related impact.

Table 3.1 VMT Impact Analysis

Project Site VMT Per Capita (Miles)[1]	Regional VMT Per Capita Threshold (Miles)	Difference (Miles)	Difference (%)	Significant Impact?
23.7	16.1	7.6 miles over	+32.1%	Yes

[1]Source: San Diego Region SB-743 VMT Maps (TAZ 1395)

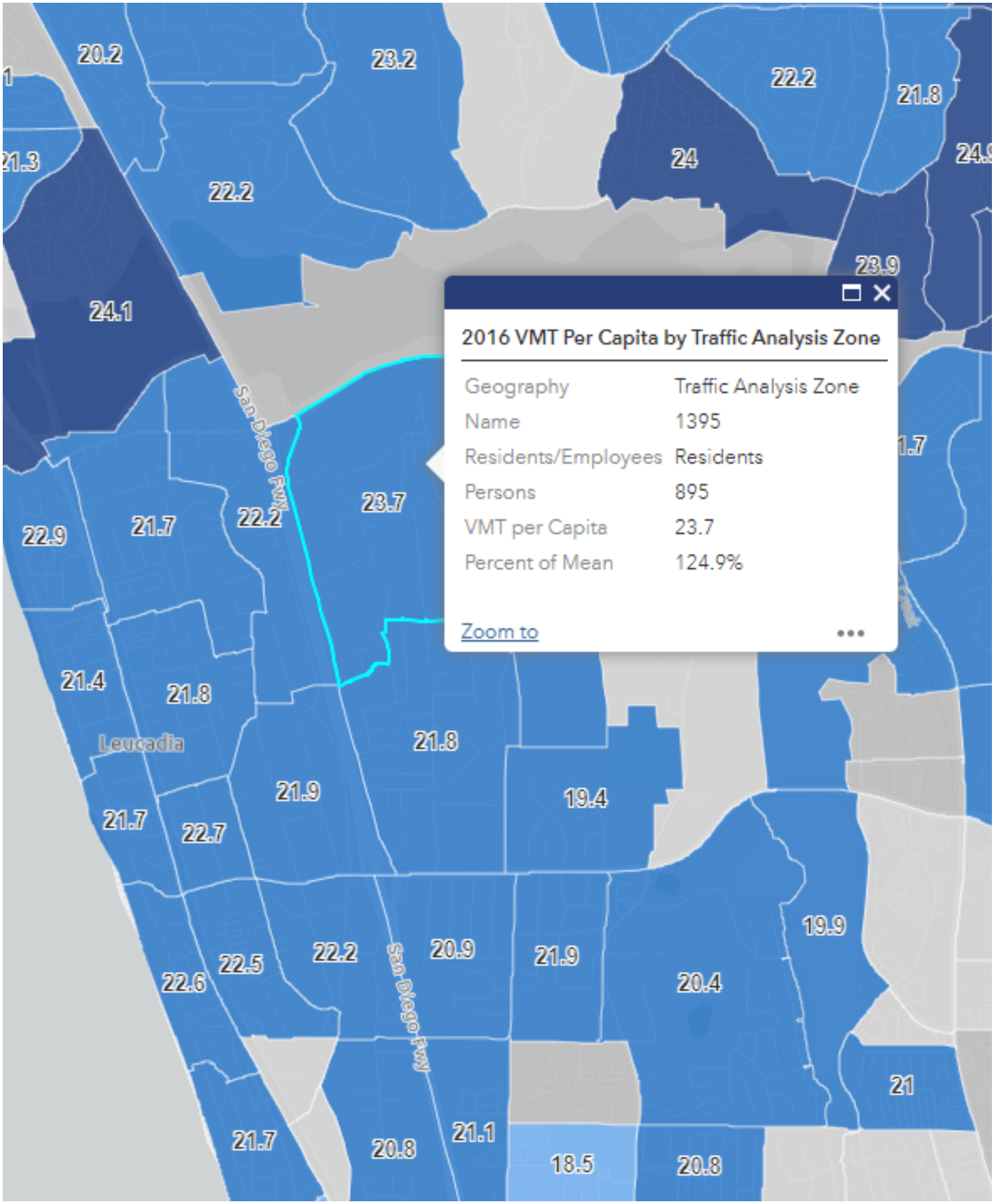
As shown in the table, the Proposed Project site is anticipated to generate a VMT per capita of 7.6 miles per resident over the regional the regional threshold, thus resulting in a significant VMT related impact. The Proposed Project would need to reduce its overall VMT generation by 32.1% (7.6 miles / 23.7 miles) to reduce this impact to less than significant.

3.2 Mitigation

As noted in Section 3.1, the Proposed Project is projected to have a significant VMT related impact. To reduce the impact to a less than significant level, TDM measures will need to be implemented to reduce project related VMT. Therefore, a TDM analysis was conducted using CAPCOA's GHG Handbook to provide an understanding of the types and magnitude of TDM related design features and programs the Proposed Project would need to implement to reduce these impacts to less than significant levels.

It should be noted that the CAPCOA GHG Handbook does not include every potential TDM measure that could potentially reduce the Proposed Project's VMT. However, the effectiveness and methods to calculate VMT reductions for TDM measures not included within the CAPCOA GHG Handbook have not been recognized or agreed upon by the State, the San Diego Region, or the City and may be subject to challenge. Therefore, measures outside of the CAPCOA Handbook were not considered as mitigation strategies and their reductions were not considered due to the lack of substantial evidence to support their effectiveness.

Table 3.2 reviews each of the TDM measures included in the CAPCOA GHG Handbook and identifies if the TDM measure would be applicable to the Proposed Project. The reductions that would be associated with each identified feasible measure were then calculated in Section 3.3.



Source: SANDAG Series 14 Transportation Forecast (Scenario ID 458)

San Diego Region SB743 VMT Maps (arcgis.com)

Figure 3.1

Project Site VMT Generation

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-1	Increase Residential Density	This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units (du) compared to the average residential density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction VMT. This measure is best quantified when applied to larger developments and developments where the density is somewhat similar to the surrounding area due to the underlying research being founded in data from the neighborhood level.	0.0%-30.0% Project VMT	*Yes* - The Proposed Project will have a net density of 21.7 dwelling units per acre. This is well above the residential density of a typical development cited within the CAPCOA Handbook of 9.1 units per acre. Note: VMT reductions associated with increased density may be already accounted for within ABM2+, in which the Proposed Project VMT per capita was calculated. See Section 3.3 for more discussion.
T-2	Increase Job Density	This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of jobs compared to the average job density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing job density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions.	0.0%-30.0% Project VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-3	Provide Transit-Oriented Development	This measure would reduce project VMT in the study area relative to the same project sited in a non-transit-oriented development (TOD) location. TOD refers to projects built in compact, walkable areas that have easy access to public transit, ideally in a location with a mix of uses, including housing, retail offices, and community facilities. Project site residents, employees, and visitors would have easy access to high-quality public transit, thereby encouraging transit ridership and reducing the number of single-occupancy vehicle trips and VMT.	6.9%-31.0% Project VMT	*N/A* – There are currently no transit facilities or services along Piraeus Street or any other roadway directly accessing the Proposed Project. Therefore, it is not feasible for the Proposed Project to be designed as a TOD.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-4	Integrate Affordable and Below Market Rate Housing	This measure requires below market rate (BMR) housing. BMR housing provides greater opportunity for lower income families to live closer to job centers and achieve a jobs/housing match near transit. It is also an important strategy to address the limited availability of affordable housing that might force residents to live far away from jobs or school, requiring longer commutes. The quantification method for this measure accounts for VMT reductions achieved for multifamily residential projects that are deed restricted or otherwise permanently dedicated as affordable housing.	0.0%-28.6% Project VMT	*Yes* - Of the 149 residential homes proposed in the community, 134 would be market-rate homes and 15 (10%) would be "very low" income affordable residential homes. See Section 3.3 for more discussion.
T-5	Implement Commute Trip Reduction Program (Voluntary)	This measure will implement a voluntary commute trip reduction (CTR) program with employers. CTR programs discourage single- occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT. Voluntary implementation elements are described in this measure.	0.0%-4.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-6	Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring)	This measure will implement a mandatory CTR program with employers. CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking, thereby reducing VMT.	0.0%-26.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-7	Implement Commute Trip Reduction Marketing	This measure will implement a marketing strategy to promote the project site employer's CTR program. Information sharing and marketing promote and educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and biking, thereby reducing VMT.	0.0%-4.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-8	Provide Ridesharing Program	This measure will implement a ridesharing program and establish a permanent transportation management association with funding requirements for employers. Ridesharing encourages carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips and VMT.	0.0%-8.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-9	Implement Subsidized or Discounted Transit Program	This measure will provide subsidized or discounted, or free transit passes for employees and/or residents. Reducing the out-of-pocket cost for choosing transit improves the competitiveness of transit against driving, increasing the total number of transit trips and decreasing vehicle trips. This decrease in vehicle trips results in reduced VMT.	0.0%-5.5% Project VMT	*N/A* – There are currently no transit stops within a mile of the Proposed Project site. Due to the lack of transit access within the area, subsidized transit passes would not be effective in reducing the sites overall VMT.
T-10	Provide End-of-Trip Bicycle Facilities	This measure will install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, showers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT.	0.1%-4.4% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-11	Provide Employer-Sponsored Vanpool	This measure will implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. The mode shift from long-distance, single-occupied vehicles to shared vehicles reduces overall commute VMT.	3.4%-20.4% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-12	Price Workplace Parking	This measure will price onsite parking at workplaces. Because free employee parking is a common benefit, charging employees to park onsite increases the cost of choosing to drive to work. This is expected to reduce single-occupancy vehicle commute trips, resulting in decreased VMT.	0.0%-20.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-13	Implement Employee Parking Cash-Out	This measure will require project employers to offer employee parking cash-out. Cash-out is when employers provide employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to or greater than the cost of the parking space. This encourages employees to use other modes of travel instead of single occupancy vehicles. This mode shift results in people driving less and thereby reduces VMT.	0.0%-12.0% Commute VMT	*N/A* - This measure only applies to employment based projects. Therefore, this measure cannot be applied to the Proposed Project since it is only comprised of residential uses.
T-14	Provide Electric Vehicle Charging Infrastructure	This measure is GHG reducing only and does not result in a reduction in VMT.	N/A	*N/A* – Measure does not apply to VMT reductions.
T-15	Limit Residential Parking Supply	This measure will reduce the total parking supply available at a residential project or site. Limiting the amount of parking available creates scarcity and adds additional time and inconvenience to trips made by private auto, thus disincentivizing driving as a mode of travel. Reducing the convenience of driving results in a shift to other modes and decreased VMT. Evidence of the effects of reduced parking supply is strongest for residential developments.	0.0%-13.7% Project VMT	*Not Feasible* – The Proposed Project will provide more parking spaces than what is required by California State Government Code 65915. Thus, this measure would not apply.
T-16	Unbundle Residential Parking Costs from Property Cost	This measure will unbundle, or separate, a residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost. On the assumption that parking costs are passed through to the vehicle owners/drivers utilizing the parking spaces, this measure results in decreased vehicle ownership and, therefore, a reduction in VMT. Unbundling may not be available to all residential developments, depending on funding sources.	0.0%-15.7% Project VMT	*Not Feasible* – The Proposed Project units are designed to incorporate an attached private garage with each unit. As such, unbundling parking from individual uses is not feasible.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-17	Improve Street Connectivity	This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of vehicle intersections compared to the average intersection density in the U.S. Increased vehicle intersection density is a proxy for street connectivity improvements, which help to facilitate a greater number of shorter trips and thus a reduction in VMT.	0.0%-30.0% Community VMT	*N/A* – The Proposed Project will not create any additional intersections or roadway segments.
T-18	Provide Pedestrian Network Improvement	This measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. This mode shift results in a reduction in VMT and GHG emissions.	0.0%-6.4% Community VMT	*Yes* – the Proposed Project will construct over 1,100 linear feet of new sidewalk facilities on both Piraeus Street and Plato Place, along their project frontage. See Section 3.3 for more discussion.
T-19A	Construct or Improve Bike Facility	This measure will construct or improve a single bicycle lane facility (only Class I, II, or IV) that connects to a larger existing bikeway network. Providing bicycle infrastructure helps to improve biking conditions within an area. This encourages a mode shift on the roadway parallel to the bicycle facility from vehicles to bicycles, displacing VMT. When constructing or improving a bicycle facility, a best practice is to consider local or state bike lane width standards. A variation of this measure is provided as T-19-B, Construct or Improve Bike Boulevard.	0.0%-0.8% Parallel Roadway VMT	*N/A* – All bicycle facilities along the Proposed Project frontage have been implemented. Therefore, no additional bicycle improvements are planned to be implemented within the Proposed Project's purview.
T-19B	Construct or Improve Bike Boulevard	Construct or improve a single bicycle boulevard that connects to a larger existing bikeway network. Bicycle boulevards are a designation within Class III Bikeway that create safe, low-stress connections for people biking and walking on streets. This encourages a mode shift from vehicles to bicycles, displacing VMT. A variation of this measure is provided as T-19-A, Construct or Improve Bike Facility, which is for Class I, II, or IV bicycle infrastructure	0.0%-0.2% Roadway VMT	*N/A* – All bicycle facilities along the Proposed Project frontage have been implemented. Therefore, no additional bicycle improvements are planned to be implemented within the Proposed Project's purview.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-20	Expand Bikeway Network	This measure will increase the length of a city or community bikeway network. A bicycle network is an interconnected system of bike lanes, bike paths, bike routes, and cycle tracks. Providing bicycle infrastructure with markings and signage on appropriately sized roads with vehicle traffic traveling at safe speeds helps to improve biking conditions (e.g., safety and convenience). In addition, expanded bikeway networks can increase access to and from transit hubs, thereby expanding the "catchment area" of the transit stop or station and increasing ridership. This encourages a mode shift from vehicles to bicycles, displacing VMT. When expanding a bicycle network, a best practice is to consider bike lane width standards from local agencies, state agencies, or the National Association of City Transportation Officials' Urban Bikeway Design Guide.	0.0%-0.5% Community VMT	*N/A* – All bicycle facilities along the Proposed Project frontage have been implemented. Therefore, no additional bicycle improvements are planned to be implemented within the Proposed Project's purview.
T-21A	Implement Conventional Carshare Program	This measure will increase carshare access in the user's community by deploying conventional carshare vehicles. Carsharing offers people convenient access to a vehicle for personal or commuting purposes. This helps encourage transportation alternatives and reduces vehicle ownership, thereby avoiding VMT. A variation of this measure, electric carsharing, is described in Measure T-21-B, Implement Electric Carshare Program	0.0%-0.15% Community VMT	*Not Feasible* – Public car share programs are not currently available within the City. However, should a car share company want to locate a carshare on the property, the Proposed Project could accommodate its residents. It should be noted that existing rideshare services (Uber & Lyft) would be available to Proposed Project residents. However, they are assumed to be accounted for under the baseline.
T-21B	Implement Electric Carshare Program	The additional GHG reductions associated with this measures, as compared to T-21A do not effect VMT.	N/A	*N/A* – Measure does not apply to VMT reductions.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-22A	Implement Pedal (Non-Electric) Bikeshare Program	This measure will establish a bikeshare program. Bikeshare programs provide users with on-demand access to bikes for short-term rentals. This encourages a mode shift from vehicles to bicycles, displacing VMT. Variations of this measure are described in Measure T-22-B, Implement Electric Bikeshare Program, and Measure T-22-C, Implement Scootershare Program.	0.0%-0.02% Community VMT	*N/A* – See Measure T-22B.
T-22B	Implement Electric Bikeshare Program	This measure will establish an electric bikeshare program. Electric bikeshare programs provide users with on-demand access to electric pedal assist bikes for short-term rentals. This encourages a mode shift from vehicles to electric bicycles, displacing VMT. Variations of this measure are described in Measure T-22-A, Implement Pedal (Non-Electric) Bikeshare Program, and Measure T-22-C, Implement Scootershare Program.	0.0%-0.06% Community VMT	*Not Feasible* – BCycle operates a public electric bicycle share program within the City. However, there are no bike share stations located near the Proposed Project site. Therefore, the program would not encourage a mode shift with project residents.
T-22C	Implement Scootershare Program	This measure will establish a scootershare program. Scootershare programs provide users with on-demand access to electric scooters for short-term rentals. This encourages a mode shift from vehicles to scooters, displacing VMT. Variations of this measure are described in Measure T-22-A, Implement Pedal (Non-Electric) Bikeshare Program, and Measure T-22-B, Implement Electric Bikeshare Program	0.0%-0.07% Community VMT	*N/A* – The City does not currently have a scootershare program.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-23	Provide Community-Based Travel Planning	This measure will target residences in the plan/community with community-based travel planning (CBTP). CBTP is a residential-based approach to outreach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household VMT.	0.0%-2.3% Community VMT	*Yes* - It is assumed that the Proposed Project HOA will provide alternative modes of transportation information to residents and tenant as a part of the "New Resident" or "New Tenant" package. The HOA will also provide residents with transit schedules within the area, and alert residents when new transit services are added, or services are charged. The HOA will also act as Travel Advisor, providing new residents and tenants with information regarding how members of households can travel in alternative ways that meet their needs. See Section 3.3 for more discussion.
T-24	Implement Market Price Public Parking (On-Street)	This measure will price all on-street parking in a given community, with a focus on parking near central business districts, employment centers, and retail centers. Increasing the cost of parking increases the total cost of driving to a location, incentivizing shifts to other modes and thus decreasing total VMT to and from the priced areas.	0.0%-30.0% Community VMT	*N/A* – The proposed Project is not located near any central business districts, employment centers, and retail centers; therefore, this measure is not applicable.
T-25	Extend Transit Network Coverage or Hours	This measure will expand the local transit network by either adding or modifying existing transit service or extending the operation hours to enhance the service near the project site. Starting services earlier in the morning and/or extending services to late-night hours can accommodate the commuting times of alternative-shift workers. This will encourage the use of transit and therefore reduce VMT.	0.0%-4.6% Community VMT	*Not Feasible* – The operation and deployment of transit routes within the City is under the jurisdiction of NCTD. Therefore, the City nor the project applicant have the authority to change or increase the existing transit services.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-26	Increase Transit Service Frequency	This measure will increase transit frequency on one or more transit lines serving the plan/community. Increased transit frequency reduces waiting and overall travel times, which improves the user experience and increases the attractiveness of transit service. This results in a mode shift from single occupancy vehicles to transit, which reduces VMT.	0.0%-11.3% Community VMT	*Not Feasible* – The operation and deployment of transit routes within the City is under the jurisdiction of NCTD. Therefore, the City nor the project applicant have the authority to change or increase the existing transit services.
T-27	Implement Transit-Supportive Roadway Treatments	This measure will implement transit-supportive treatments on the transit routes serving the plan/community. Transit-supportive treatments incorporate a mix of roadway infrastructure improvements and/or traffic signal modifications to improve transit travel times and reliability. This results in a mode shift from single occupancy vehicles to transit, which reduces VMT.	0.0%-0.6% Community VMT	*N/A* – There are currently no transit facilities or services located along Piraeus Street; therefore, the Proposed Project does not have the purview to implement Transit-Supportive Roadway Treatments along its frontage.
T-28	Provide Bus Rapid Transit	This measure will convert an existing bus route to a bus rapid transit (BRT) system. BRT includes the following additional components, compared to traditional bus service: exclusive right-of-way (e.g., busways, queue jumping lanes) at congested intersections, increased limited-stop service (e.g., express service), intelligent transportation technology (e.g., transit signal priority, automatic vehicle location systems), advanced technology vehicles (e.g., articulated buses, low-floor buses), enhanced station design, efficient fare-payment smart cards or smartphone apps, branding of the system, and use of vehicle guidance systems. BRT can increase the transit mode share in a community due to improved travel times, service frequencies, and the unique components of the BRT system. This mode shift reduces VMT	0.0%-13.8% Community VMT	*Not Feasible* – The operation and deployment of transit routes within the City is under the jurisdiction of NCTD. Therefore, the City nor the project applicant have the authority to implement or operate BRT services.

Table 3.2 VMT Impact Feasible Mitigation

#	Measure	Description	Potential Reduction	Feasible?
T-29	Reduce Transit Fares	This measure will reduce transit fares on the transit lines serving the plan/community. A reduction in transit fares creates incentives to shift travel to transit from single-occupancy vehicles and other traveling modes, which reduces VMT. This measure differs from Measure T-8, Implement Subsidized or Discounted Transit Program, which can be offered through employer-based benefits programs in which the employer fully or partially pays the employee's cost of transit.	0.0%-1.2% Community VMT	*Not Feasible* – The operation and deployment of transit routes within the City is under the jurisdiction of NCTD. Therefore, the City nor the project applicant have the authority to change transit fairs.
T-30	Use Cleaner-Fuel Vehicles	This measure is GHG reducing only and does not result in a reduction in VMT.	N/A	*N/A* – Measure does not apply to VMT reductions.

3.3 TDM Program Effectives

As outlined in Table 3.2, the following TDM measures were identified to be feasible for the Proposed Project to include within its design or implement on-site.

T-1: Increase Residential Density
T-4 : Integrate Affordable and Below Market Rate Housing
T-18: Provide Pedestrian Network Improvement
T-23: Provide Community-Based Travel Planning

The VMT related reductions associated with each of the measures outlined above are calculated within the following sections:

T-1: Increase Residential Density

$$A = \frac{B - C}{C} \times D$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	0–30.0	%	calculated
User Inputs				
B	Residential density of project development	[ ]	du/acre	user input
Constants, Assumptions, and Available Defaults				
C	Residential density of typical development	9.1	du/acre	Ewing et al. 2007
D	Elasticity of VMT with respect to residential density	-0.22	unitless	Stevens 2016

The Proposed Project will have a site density of 21.7 units per acre. Using the methodologies provided within CAPCOA's GHG Handbook, the Proposed Project could have up to a 30% reduction in VMT (see calculation below):

$$\frac{(21.7 \text{ DU/Acre} - 9.1 \text{ DU/Acre})}{9.1 \text{ DU/Acre}} \times -0.22 = -30.5\% \text{ VMT Reduction} \Rightarrow 30\% \text{ (Max)}$$

It should be noted that ABM2+ does take into account land use density when calculating the VMT per capita. Therefore, some of the calculated reductions may already be assumed within the model. The land use density for the existing residential uses contained within the Proposed Project's Traffic Analysis Zone (TAZ)[7] is 3.2 dwelling units per acre[8], which is well below the Proposed Project density, as well as the 9.1 unit per acre "Typical Project" density assumed in the equation. It can be assumed that some

[7] A TAZ is a geographic area in which the ABM2+ utilizes to group and evaluate land uses. Its geographic areas is most similar to a Census Block Group.
[8] Density for the existing land uses were based on assessor parcel records. Calculations are provided in Attachment 1.

density reduction should be applied. However, since the exact density reduction(s) assumed within the ABM2+ is unknown, the exact amount of additional reduction cannot be accurately calculated. To be conservative, no density reduction was assumed for the purposes of the CEQA analysis.

T-4 : Integrate Affordable and Below Market Rate Housing

GHG Reduction Formula

$A = B \times C$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from Project/Site VMT for multifamily residential developments	0–28.6	%	calculated
User Inputs				
B	Percent of multifamily units permanently dedicated as affordable	0–100	%	user input
Constants, Assumptions, and Available Defaults				
C	Percent reduction in VMT for qualified units compared to market rate units	-28.6	%	ITE 2021

The Proposed Project will include 15 "very low" income affordable dwelling units, which will make up just over 10% of the total number units (15 affordable units / 149 total units). Using the methodologies provided within CAPCOA's GHG Handbook, this will result in a 2.86% reduction in VMT for the project site (see calculation below):

10% (Affordable Project Units) X -28.6 = 2.86% VMT Reduction

T-18: Provide Pedestrian Network Improvement

The Proposed Project will construct over 1,100 linear feet of new sidewalk facilities along the project frontage. However, there are no other connecting sidewalk facilities along Piraeus Street or Plato Place. Therefore, pedestrians will not have facilities to continue their walk and connect to external destinations, resulting in little to no mode shift. Thus, no VMT additional reductions can be assumed for the implementation of the proposed sidewalk facilities.

T-23: Provide Community-Based Travel Planning

GHG Reduction Formula

$$A = \frac{C}{B} \times D \times -E \times F$$

GHG Calculation Variables

ID	Variable	Value	Unit	Source
Output				
A	Percent reduction in GHG emissions from household vehicle travel in plan/community	0–2.3	%	calculated
User Inputs				
B	Residences in plan/community	[ ]	residences	user input
C	Residences in plan/community targeted with CBTP	[ ]	residences	user input
Constants, Assumptions, and Available Defaults				
D	Percent of targeted residences that participate	19	%	MTC 2021
E	Percent vehicle trip reduction by participating residences	12	%	MTC 2021
F	Adjustment factor from vehicle trips to VMT	1	unitless	assumed

It is assumed that the Proposed Project HOA will provide alternative modes of transportation information to residents and tenant as a part of the "New Resident" or "New Tenant" package. The HOA will also provide residents with transit schedules within the area, and alert residents when new transit services are added, or services are charged. The HOA will also act as Travel Advisor, providing new residents and tenants with information regarding how members of households can travel in alternative ways that meet their needs.

Based on US Census data, the average people per household within the City is 2.49. Therefore, the Proposed Project would be anticipated to have a total of 371 residents (2.49 people per household X 149 units). All project residents would be targeted with the CBTP.

$$\frac{\text{371 CBTP Targeted Residents}}{\text{371 Total Residents}} \text{ X 19% X 12% X 1= 2.3\%VMT Reduction}$$

3.4 Impact After TDM Plan

Table 3.3 summarizes the VMT reductions that are associated with the Proposed Project's TDM plan. As outlined in Section 3.3, it may not be appropriate to assume the full calculated reduction for some measures under CEQA. As such, the table provides both the fully calculated "Potential Reduction" as well as a more conservative "Assumed Reduction." Both numbers are provided to identify the range in which the Proposed Project's VMT may be reduced. However, to be conservative, only the lower "Assumed Reduction" was used to identify the reductions applied to the Proposed Project's VMT related impacts for the purposes of CEQA.

Table 3.3 TDM Reduction Calculation

#	Measure	Potential Reduction	Assumed Reduction	Notes
T-1	Increase Residential Density	30%	0%	As shown in Section 3.3 up to a 30% reduction can be assumed for the Proposed Project; however, since it is unknow how much of this reduction is captured by ABM 2+, no reduction is assumed.
T-4	Integrate Affordable and Below Market Rate Housing	2.86%	2.86%	N/A
T-18	Provide Pedestrian Network Improvement	0%	0%	The Proposed Project will implement over 1,100 linear feet of sidewalk facilities. However, due to the existing lack of sidewalk facilities within the area, no reduction can be assumed.
T-23	Provide Community-Based Travel Planning	2.3%	2.3%	N/A
VMT Reduction Total		**33.6%**	**5.1%**	Note: As per the CAPCOA GHG Handbook, a dampening effect should be applied to all measures when adding them together. Therefore the total reflects the formula below: 1-[(1-T1) X (1-T-4) X (1-T15)…]

As shown in Table 3.3, if all potential TDM measures were fully realized the Proposed Project's VMT would be reduced by 33.6%. However, as noted in Section 3.3, assuming the full reduction for some of these measures may not be appropriate. Therefore, to be conservative, a 5.1% reduction is assumed, which reduces the Proposed Project's VMT per capita to 22.5 miles.

3.5 Project Mitigation

As outlined within the Proposed Project's TDM, the Proposed Project will implement the following mitigation measures:

- The Proposed Project will construct over 1,100 linear feet of new sidewalk facilities on both Piraeus Street and Plato Place, along their project frontage.
- The Proposed Project HOA will provide alternative modes of transportation information to residents and tenant as a part of the "New Resident" or "New Tenant" package. The HOA will also provide residents with transit schedules within the area, and alert residents when new transit services are added, or services are charged. The HOA will also act as Travel Advisor, providing new residents and tenants with information regarding how members of households can travel in alternative ways that meet their needs.
- The Proposed Project will include 15 "very low" income affordable residential homes.

3.6 Impact After Mitigation

Table 3.4 displays the Proposed Project's anticipated VMT per Capita with the implantation of the identified mitigation measures.

Table 3.4 VMT Related Impact After Mitigation

Regional VMT Per Capita Threshold (Miles)	Project Site Base VMT Per Capita (Miles)	Feasible VMT Reduction Through Mitigation	Project Site VMT Per Capita With Mitigation (Miles)	Significant Impact After Mitigation?
16.1	23.7	5.1%	22.5	Yes

With the assumed reductions associated with the Proposed Project mitigation measures, the Proposed Project's VMT per capita is still above the regional threshold and thus would resulting in a significant impact. As outlined in Table 3.2, there are no additional quantifiable VMT reducing measures in which the Proposed Project can feasibility implement. Therefore, the Proposed Project's VMT related impact would be significant and unavoidable.

Attachment A: Neighborhood Density Calculations

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2163322200	1	0.081
2163310200	1	0.144
2163322100	1	0.115
2163322400	1	0.110
2163310100	1	0.113
2164312600	1	0.127
2163322300	1	0.111
2163322800	1	0.095
2163327400	0	0.243
2163310400	1	0.103
2541627500	1	0.269
2541610800	1	0.483
2541611900	1	0.473
2541731000	1	0.289
2541641400	1	0.335
2541741000	1	0.406
2163323900	1	0.126
2163320500	1	0.107
2163323700	1	0.112
2163320900	1	0.112
2161000800	1	0.538
2163311500	1	0.113
2163311200	1	0.103
2163323100	1	0.098
2163326400	1	0.113
2163321300	1	0.124
2163325300	1	0.100
2161001300	2	0.522
2163325000	1	0.118
2163320600	1	0.100
2163325700	1	0.099
2163325800	1	0.119
2163311800	1	0.119
2161000100	0	2.947
2163326100	1	0.101
2163311400	1	0.093
2163311100	1	0.113
2541501400	2	0.571
2541713800	1	0.231
2541611100	1	0.313
2541731800	1	0.378
2541715800	1	0.233
2163320300	1	0.103
2161002600	0	0.192
2161001100	1	0.509
2161001200	1	0.505
2541731100	1	0.298

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2541632400	1	0.230
2541631800	2	0.490
2544133800	1	0.381
2541640600	1	0.343
2541730800	1	0.187
2541626700	1	0.499
2163311000	1	0.118
2541733200	0	0.230
2163311600	1	0.107
2541625400	1	0.247
2541625500	1	0.285
2541624800	1	0.568
2541640100	1	0.535
2541642000	1	0.275
2541631200	1	0.339
2541632000	1	0.259
2164311900	1	0.156
2164310400	1	0.156
2541730700	3	0.340
2163322500	1	0.114
2163327000	1	0.110
2163310700	1	0.107
2163310900	1	0.114
2163322000	1	0.115
2163321600	1	0.118
2163324500	1	0.100
2163312100	1	0.113
2163321000	1	0.116
2163325400	1	0.095
2163311300	1	0.113
2163326000	1	0.107
2163321900	1	0.108
2163326200	1	0.100
2163326700	1	0.103
2163326800	1	0.086
2541632700	1	0.241
2541641300	1	0.269
2541730300	1	0.315
2541740700	1	0.555
2541626800	1	0.263
2541624100	0	0.175
2541714400	1	0.400
2541627200	1	0.237
2541627900	1	0.335
2541501500	1	0.374
2541632800	1	0.207
2541714200	2	0.302

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2541732500	1	0.651
2541626000	1	0.197
2163312700	1	0.096
2541623800	1	0.316
2541501600	1	0.333
2163312600	1	0.096
2541721200	2	1.314
2541632100	1	0.247
2541640500	1	0.243
2163321200	1	0.092
2541501000	1	0.244
2541610700	1	0.300
2541622400	2	0.999
2541740400	1	0.399
2541730900	1	0.283
2163324000	1	0.108
2541640400	1	0.253
2164312700	1	0.197
2163312900	0	16.293
2163326600	1	0.111
2163323600	1	0.113
2541741300	1	0.748
2541640300	1	0.945
2541641600	1	0.500
2541640200	3	0.583
2541632600	1	0.235
2541730100	1	0.680
2163320400	1	0.103
2163324100	1	0.110
2541611700	2	0.688
2541500100	1	0.246
2541715400	1	0.296
2163321400	1	0.114
2163321500	1	0.113
2163323200	1	0.086
2163321100	1	0.100
2541633300	1	0.704
2541642200	1	0.251
2541730600	1	0.705
2541731200	1	0.429
2541731300	1	0.430
2541715600	1	0.278
2541633200	1	0.547
2541732200	1	0.245
2541740900	1	0.435
2541733100	1	0.473
2541624900	1	0.439

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2541730400	1	0.921
2541732000	1	0.410
2541632900	0	1.888
2541731900	1	0.270
2541733000	1	0.230
2541641900	1	0.213
2541500400	1	0.191
2541715500	1	0.282
2541714300	2	0.400
2541720600	1	0.548
2541626900	1	0.284
2541740800	1	0.719
2541740600	1	0.231
2541632500	1	1.423
2541624600	1	0.360
2541714100	1	0.302
2163325200	1	0.118
2161002100	1	1.124
2161001400	1	0.510
2163324800	1	0.105
2163312000	1	0.106
2163311900	1	0.110
2541716100	1	0.602
2541713900	1	0.231
2541627800	1	0.276
2541627400	1	0.209
2163320700	1	0.110
2163324300	1	0.124
2163324700	1	0.093
2161003800	2	0.483
2161003300	1	1.280
2541720300	2	0.898
2541721300	0	1.230
2163322700	1	0.086
2163326300	1	0.111
2163323000	1	0.132
2163323300	1	0.091
2541715900	1	0.410
2541721500	0	0.766
2163312800	1	0.104
2541625300	1	0.251
2541628300	1	0.453
2541500500	1	0.576
2541500700	1	0.410
2541627700	1	0.236
2541713600	1	0.299
2164320200	0	26.256

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2161103100	0	20.063
2164320100	0	1.137
2164311400	1	0.376
2164311500	1	0.298
2164311700	1	0.228
2164311200	1	0.154
2164311800	1	0.151
2164311000	1	0.156
2164312000	1	0.159
2164310900	1	0.142
2164312100	1	0.152
2164310800	1	0.144
2164312200	1	0.173
2164310700	1	0.146
2164310600	1	0.171
2164310500	1	0.159
2164313200	1	0.118
2164313100	1	0.135
2164312500	1	0.149
2164310300	1	0.148
2164313000	1	0.135
2164310200	1	0.131
2164312800	1	0.203
2163327100	0	0.603
2163310300	1	0.117
2163326900	1	0.095
2163310500	1	0.102
2163310600	1	0.111
2163326500	1	0.101
2163310800	1	0.105
2163321800	1	0.113
2163325900	1	0.119
2163323400	1	0.127
2163325600	1	0.116
2163311700	1	0.112
2161000500	1	0.499
2161000400	1	0.496
2163325500	1	0.101
2161003000	1	1.916
2163323500	1	0.127
2163320800	1	0.125
2163312300	1	0.102
2163324900	1	0.110
2161001000	1	0.512
2163312500	1	0.116
2161003600	1	0.930
2161001700	1	0.561

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2163324600	1	0.110
2163324200	1	0.126
2163320100	1	0.116
2163320200	1	0.109
2163324400	1	0.111
2541627300	1	0.246
2541627100	2	0.288
2541714900	1	0.233
2541627600	1	0.235
2541713700	1	0.718
2541500600	1	0.569
2541625600	1	0.241
2541623400	1	0.286
2541623500	1	0.314
2541623600	2	0.321
2541624500	1	0.493
2541625000	1	0.294
2541624700	2	0.342
2541733700	1	0.760
2541730200	1	0.428
2541627000	1	0.218
2541440400	0	0.530
2541633100	1	0.570
2541642100	1	0.210
2541730500	2	0.999
2541440700	0	1.200
2541631700	1	0.538
2541641500	1	0.486
2541731700	1	0.286
2541731500	1	0.430
2544132300	1	0.236
2163322600	1	0.094
2163322900	1	0.147
2161101200	0	18.950
2163321700	1	0.085
2161103500	0	5.237
2163325100	1	0.107
2541710100	2	0.430
2541440100	0	6.642
2541716200	1	0.662
2541625700	1	1.029
2541628200	0	0.478
2541625800	1	0.257
2541625900	1	0.436
2541624300	1	0.388
2541741100	1	0.335
2541740500	1	0.425

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2541721400	1	0.765
2541501100	1	0.243
2541501200	1	0.300
2541720400	2	0.862
2541720500	2	0.598
2541732600	1	0.299
2541732100	2	0.270
2541633400	2	0.773
2541633500	1	0.710
2163323800	1	0.104
2164310100	1	0.224
2164313300	1	0.210
2541625100	1	0.310
2541640700	2	0.268
2541741200	1	0.348
2161002700	1	0.318
2161003200	1	1.003
2541500800	2	0.227
2541500300	2	0.221
2541611800	1	1.309
2541716000	1	0.597
2541716300	1	0.679
2163312400	1	0.103
2163312200	1	0.102
2164312900	1	0.129
2164312400	1	0.140
2164312300	1	0.115
2164311600	1	0.257
2164311300	1	0.152
2164311100	1	0.155
2541500200	1	0.223
2541500900	1	0.192
2541715700	1	0.344
2541733300	1	0.360
2541731600	1	0.284
2541731400	2	0.431
2541440500	0	0.877
2541440300	0	1.231
2541440600	0	0.670
2541633700	1	0.367
2541634000	0	0.775
2541635100	1	0.827
2541635200	1	0.653
2541641200	1	0.307
2541641100	1	0.244
2546000100	1	0.716
2544132600	2	0.906

Piraeus Point
Surrounding Neighborhood Density Analysis

APN	UNITQTY	Area (Acres)
2546000200	1	0.541
2546001400	1	0.643
2544132700	1	0.257
2544132500	1	0.277
2546001200	1	0.540
2546001300	2	0.733
2546001100	1	0.733
2546000300	1	0.532
2546000400	1	0.590
2546001000	1	0.574
2546000500	2	0.530
2546000700	1	0.524
2546000600	2	0.529
2544131700	2	1.900
2544131300	1	2.293
2161002800	0	0.494
2161003100	1	1.253
2541640900	2	0.501
2161000300	1	1.047
2541640800	1	0.429
2541641000	1	0.227
2544133900	1	0.750
2544133600	2	0.891
2544132000	1	0.336
2544134000	0	0.494
2541622500	1	0.957
2541628000	1	0.262
2541628100	1	0.235
2163327300	0	3.401
2163327500	0	0.741
2163327200	0	6.100
Total	366	114.432
Density	3.20	