

APPENDIX K
VEHICLE MILES TRAVELED STUDY

CEQA Transportation Impact Assessment

Beach Cities Health District Healthy Living Campus Master Plan

Prepared for:

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LB19-0004

FEHR  PEERS

Table of Contents

1. Introduction	1
1.1 Introduction.....	1
1.2 Project Location.....	1
1.3 Project Description.....	1
1.4 Study Scope	5
1.5 Organization of Report.....	5
2. Regulatory Setting	6
2.1 Federal Regulations	6
2.1.1 Americans with Disabilities Act of 1990 (ADA).....	6
2.1.2 US Clean Air Act.....	6
2.2 State Plans and Policies.....	6
2.2.1 California Environmental Quality Act.....	6
2.2.2 Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006	7
2.2.3 Senate Bill (SB) 32 / Executive Order B-30-15	7
2.2.4 SB 375, Sustainable Communities and Climate Protection Act.....	7
2.2.5 SB 743.....	8
2.2.6 California’s 2017 Climate Change Scoping Plan.....	8
2.2.7 AB 1358, the California Complete Streets Act of 2008	9
2.2.8 California Department of Transportation (Caltrans) VMT-Focused Transportation Impact Study Guide (TISG)	9
2.2.9 Caltrans Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioner’s Guide.....	10
2.2.10 California Manual on Uniform Traffic Control Devices (MUTCD).....	10
2.2.11 Highway Design Manual.....	10
2.3 Regional Plans and Policies	10
2.3.1 South Coast Air Quality Management District (SCAQMD).....	10
2.3.2 Regional Transportation Plan/Sustainable Communities Strategy	11
2.3.3 Los Angeles County Metropolitan Transportation Authority (Metro) Our Next LA Long Range Transportation Plan (LRTP) (2020).....	12
2.3.4 Metro Regional Transportation Improvement Plan	12
2.3.5 Metro Regional Complete Streets Policy.....	13
2.3.6 Metro Vision 2028 Plan	13
2.3.7 Metro NextGen Bus Study.....	13

2.4 Local Plans and Policies.....	14
2.4.1 South Bay Bicycle Master Plan (SBBMP)	14
2.4.2 Beach Cities Livability Plan	15
2.4.3 Redondo Beach General Plan – Circulation Element	15
2.4.4 City of Redondo Beach Climate Action Plan	16
2.4.5 Redondo Beach Sustainable City Plan	17
2.4.6 Torrance General Plan – Circulation Element	17
2.4.7 City of Torrance Climate Action Plan	18
3. Environmental Setting.....	19
3.1 Existing Pedestrian and Bicycle Facilities.....	19
3.2 Existing Public Transit Facilities	20
3.3 Existing Roadway Facilities.....	21
3.4 Existing Roadway Safety Conditions	25
3.4.1 Total Collisions	25
3.4.2 Collisions Involving People Walking & Biking.....	28
3.5 Existing VMT	28
3.5.1 State of California	28
3.5.2 Regional VMT	29
3.5.3 City of Redondo Beach VMT	29
3.6 Existing Mode Split	29
4. Methodologies & Thresholds of Significance	31
4.1 Impact Criteria.....	31
4.2 Analysis Methodologies.....	31
4.2.1 Criterion 1: Program, Plan, Ordinance, or Policy (PPOP)	31
4.2.2 Criterion 2: Conflict or be Inconsistent with CEQA Guidelines § 15064.3, Subdivision (b).	31
4.2.3 Criterion 3: Geometric Hazards	34
4.2.4 Criterion 4: Emergency Response.....	34
5. CEQA Transportation Impact Analysis	35
5.1 Criterion 1: Programs, Plans, Ordinances, and Policies Consistency Review.....	35
5.2 Criterion 2: CEQA Guidelines § 15064.3, Subdivision (b) Conflict Review (VMT Analysis).....	39
5.2.1 VMT Screening.....	39
5.2.2 Average Trip Length	44
5.3 Vehicle Miles Traveled Impact Analysis	47
5.3.1 Phase 1 Project VMT	47

5.3.2 Phase 2 Project VMT	47
5.3.3 Impact Determination	47
5.4 Criterion 3: Geometric Design Hazards Impact Review	50
5.4.1 Pedestrian and Bicyclist Access	50
5.4.2 Vehicular Access	51
5.4.3 Cut Through Traffic	51
5.5 Criterion 4: Emergency Access Impact Review.....	53
6. Cumulative Analysis.....	54
6.1 Cumulative Pedestrian and Bicycle Conditions.....	54
6.2 Cumulative Roadway Conditions.....	54
6.3 Cumulative VMT Impact Determination	55
7. Summary	56

List of Figures

Figure 1. Study Area.....	3
Figure 2. Ground Level Site Plan.....	4
Figure 3. Existing and Planned Bicycle Facilities.....	22
Figure 4. Study Area Transit Routes.....	23
Figure 5. Total Collisions in Vicinity of Project.....	26
Figure 6. Pedestrian or Bicycle Collisions in Vicinity of Project.....	27
Figure 7. Means of Transportation to Work: California, Los Angeles County, City of Redondo Beach	30
Figure 8. BCHD Campus Origin/Destination Weights	46

List of Tables

Table 1. Number of Collisions in Project Vicinity (2013-2018).....	28
Table 2. Statewide Annual and Daily VMT in 2017	29
Table 3. City of Redondo Beach Draft VMT Impact Thresholds of Significance.....	33
Table 4. Programs, Plans, Ordinances, and Policies Consistency Review.....	36
Table 5A. Project Trip Calibration	42
Table 5B. Project Trip Generation Estimates.....	43
Table 6. Low VMT Screening for Project TAZ.....	44
Table 7. Project VMT Estimates.....	47
Table 8. Project VMT Impact Analysis	48
Table 9. ITE Residential Daily Trip Generation Rates.....	49
Table 10. SBCCOG Area & City of Redondo Beach Cumulative VMT.....	55

Appendices

Appendix A – Trip Generation Methodology

Appendix B – Driveway & Pedestrian Counts

Appendix C – Ballard*King & Associates Aquatics Center Preliminary Market Feasibility Evaluation

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1. Introduction

1.1 Introduction

This report documents the assumptions, methodologies, and findings of a study conducted by Fehr & Peers to evaluate the potential transportation impacts of the proposed Beach Cities Health District (BCHD) Healthy Living Campus Master Plan (Project).

1.2 Project Location

The proposed Project is located along North Prospect Avenue in the City of Redondo Beach and adjacent to the City of Torrance to the east. The 10.38-acre Project site encompasses two parcels:

- The 9.95-acre existing BCHD campus including the former South Bay Hospital (currently operated as the Beach Cities Health Center) an associated attached maintenance building, and two medical office buildings located at 510 and 520 North Prospect Avenue. The BCHD campus also includes an above ground parking structure, subterranean parking garage surrounded, and paved asphalt surface parking lots.
- A 0.43-acre vacant lot owned by BCHD located at the southwest corner of Flagler Lane and Beryl Street. This lot, which is located within the City of Redondo Beach, is currently undeveloped and is periodically leased by BCHD as a temporary construction staging area for surrounding developments.

Figure 1 shows the Project site in context of the surrounding study area.

1.3 Project Description

The proposed Project would involve the long-term redevelopment of the existing BCHD campus and the adjacent vacant Flagler lot with new public health care and wellness facilities that would address the need to replace seismically vulnerable buildings on-site and expand public health programs and services offered by BCHD. The proposed redevelopment of the BCHD campus would occur in two phases of development that would demolish and replace the Beach Cities Health Center with new, purpose-built facilities on the existing campus and the vacant Flagler lot. The proposed Healthy Living Campus Master Plan presents a site development plan for Phase 1, providing the best available detail given preliminary planning efforts. Phase 2 of development would occur well into the future and is described as a program of proposed uses within a maximum envelope of development.

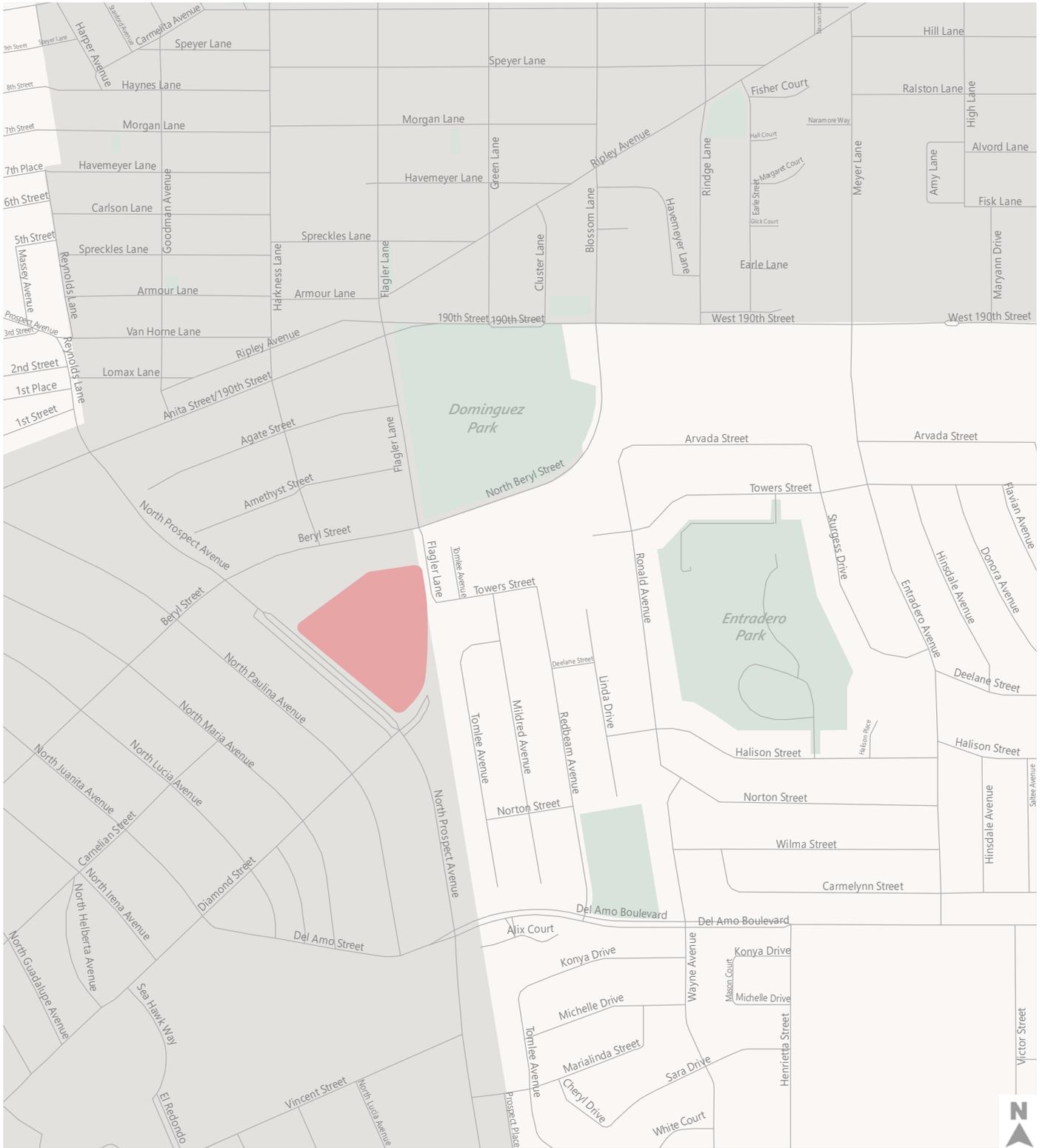
Phase 1 of the development would provide a 203,700-square-foot (sf) Residential Care for the Elderly (RCFE) Building with 157 new Assisted Living units, 60 replacement Memory Care units (replacing the Silverado Beach Cities Memory Care Community located within the existing Beach Cities Health Center), 14,000 sf of space for the Program of All-Inclusive Care for the Elderly (PACE), and 6,270 sf of space for

Community Services. The Beach Cities Health Center would remain in place for the duration of construction of the RCFE Building to allow a majority of BCHD's existing programs to continue, and would be demolished only at the end of Phase 1. However, prior to the beginning of construction, the Center for Health and Fitness (CHF) will be temporarily relocated to an off-site location. Because a fitness center use tends to have a high parking demand, relocating the CHF would alleviate the potential for temporary parking constraints associated with the demolition of the 70,000-sf surface parking lot at the beginning of Phase 1. The primary vehicle ingress and egress would continue to be provided from the main entrance and the two secondary entrances along North Prospect Avenue. However, once completed, the new RCFE Building would include a patient pick-up/drop-off zone within a new one-way porte-cochère driveway located on the vacant Flagler Lot as well as a subterranean service area and loading dock. The porte-cochère driveway would be accessible via a right-turn along eastbound Beryl Street, and would provide a left-turn-only exit onto Flagler Lane, immediately south of Beryl Street. A new service-only access entrance would be provided off of Flagler Lane approximately 150 feet south of Beryl Street, providing a right-turn in and left-turn out service entrance. This driveway would lead directly to the service area and loading dock beneath the RCFE Building, and would be limited to service vehicles and delivery vehicles only and would not be used by staff, residents, participants, or other visitors to the BCHD campus. Phase 1 would also include approximately 125,890 sf of open space and an approximately 36,500-sf surface parking lot with 91 parking spaces (including 6 handicap accessible parking spaces).

The ultimate buildout for Phase 2 may vary due to facility needs, funding, and market conditions. However, to assess the potential for impacts associated with Phase 2, this study assumes the maximum development within the envelope included in the proposed Healthy Living Campus Master Plan. For the purposes of the EIR evaluation to provide a reasonable worst-case assessment, Phase 2 of the development is assumed to consist of a 97,550-sf Community Health and Wellness Center with a 31,300-sf Aquatics Center (including 7,300 sf of outdoor space), a 20,000-sf Center for Health and Fitness, and a 37,150-sf Wellness Pavilion, and 9,100-sf Youth Wellness Center. The footprint of the Community Health and Wellness Center would generally be located within the surface parking lot constructed during Phase 1. Parking would be provided by a 7-story above ground parking structure with up to 739 parking spaces (including 15 accessible parking spaces). As noted above, these estimates of buildout represent the maximum end of potential future Phase 2 development.

Construction of the proposed Project would require demolition of the existing Beach Cities Health Center the associated Maintenance Building at the end of Phase 1 as well as the existing above ground parking structure at 512 North Prospect Avenue at the beginning of Phase 2. Additionally, depending on the scope of development in Phase 2, the proposed Project may involve the demolition of the 510 North Prospect Avenue building and the replacement of existing Medical Office Building (MOB) space in a new purpose-built facility. **Figure 2** illustrates the ground level site plan for the Project.





- ▾ Beach Cities Health District
- City of Redondo Beach

Figure 1
Study Area

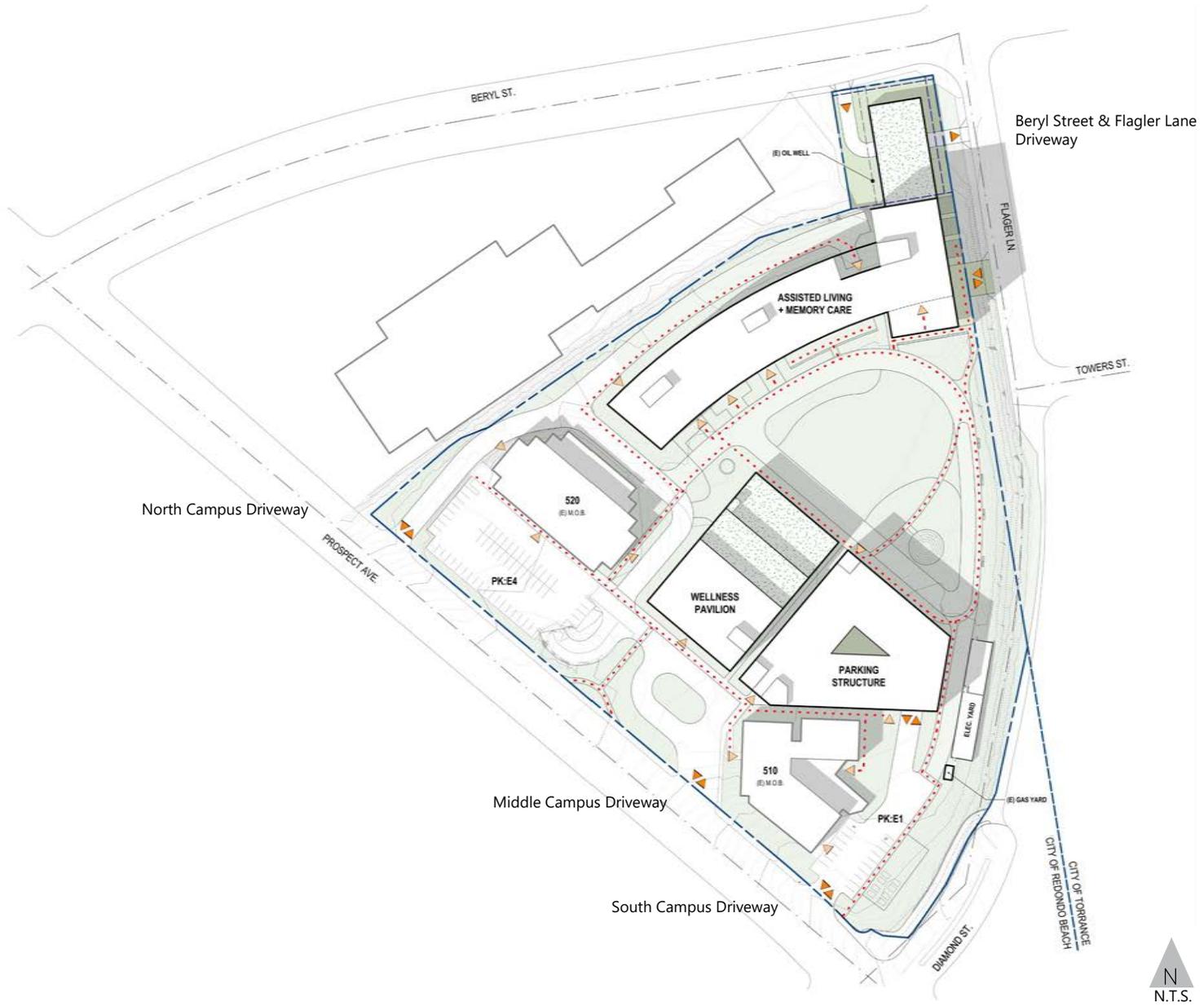


Figure 2

Ground Level Site Plan



CONCEPTUAL - NOT FOR CONSTRUCTION.

1.4 Study Scope

BCHD is lead agency for the project under the California Environmental Quality Act (CEQA), but because the BCHD campus is located within the City of Redondo Beach and adjacent to the City of Torrance this study was prepared in consultation with staff from both cities. Input from the cities was solicited in multiple meetings including September 20, 2019, December 12, 2019 and February 3, 2021, and an analytical approach was confirmed through feedback received on two technical memoranda focused on trip generation, trip distribution, and Vehicle Miles Traveled (VMT) analysis. The scope of work for this study is consistent with CEQA requirements including updates to CEQA transportation impact analysis associated with Senate Bill (SB) 743. This transportation impact study will be incorporated into the environmental impact report (EIR) being prepared for the proposed Project.

1.5 Organization of Report

This report is divided into four chapters, including this Introduction. Chapter 2 describes the relevant regulatory setting. Chapter 3 describes the existing environmental setting for transportation. Chapter 4 details the methodologies and thresholds of significance used to evaluate the Project. Chapter 5 presents the transportation impact analysis for the Project, and Chapter 6 summarizes the findings of the study.

2. Regulatory Setting

This chapter describes the transportation related regulatory setting. The subset of the programs, plans, ordinances, and policies (PPOP) described in this regulatory setting, that have the potential to be affected by the Project are evaluated in Chapter 5.

2.1 Federal Regulations

2.1.1 Americans with Disabilities Act of 1990 (ADA)

Titles I, II, III, and V of the ADA have been codified in Title 42 of the U.S. Code (USC), beginning at Section 12101. Title III prohibits discrimination on the basis of disability in places of public accommodation (i.e., businesses and non-profit agencies that serve the public) and commercial facilities (i.e., other businesses). This regulation includes Appendix A to Part 36, Standards for Accessible Design, which establishes minimum standards for ensuring accessibility when designing and constructing a new facility or altering an existing facility. Examples of key guidelines include detectable warning for pedestrians entering traffic where there is no curb, a clear zone of 48 inches for the pedestrian travelway, and a vibration-free zone for pedestrians.

2.1.2 Federal Clean Air Act

The Federal Clean Air Act establishes National Ambient Air Quality Standards (NAAQS) to improve air quality and protect public health, designates air basins, and requires the development of implementation plans for air basins designated as nonattainment areas. The County of Los Angeles is part of the South Coast air basin and its air quality is monitored and managed by the South Coast Air Quality Management District. The USCAA also introduced the concept of transportation conformity, in which all transportation investments should conform to state air quality plans to ensure that transportation investments further, rather than hinder, efforts to meet Federal air quality standards.

2.2 State Plans and Policies

2.2.1 California Environmental Quality Act

CEQA Guidelines Section 15064.3(a) establishes increases in VMT as the most appropriate measure of transportation impacts, and states that other considerations may include effects on transit and non-motorized travel. VMT as a metric for impacts is consistent with a broad range of state legislation, regional, and local programs, and plans and policies, and the CEQA Guidelines also require consideration of whether a project may conflict either directly or indirectly with plans, policies, programs, or ordinances addressing circulation, particularly related to increases in VMT and associated reductions in greenhouse gas (GHG) generation. The State has set ambitious targets for reductions in GHG generation, which in turn relates to transportation and required reductions in VMT, as transportation is the largest generator of



GHGs by sector in the State (41%). Thus, legislation, programs, plans and policies which target GHG generation and climate change relate directly to transportation and the need to reduce VMT.

2.2.2 Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006 recognizes that California is a major contributor to U.S. GHG emissions. AB 32 acknowledges that such emissions cause significant adverse impacts to human health and the environment, and therefore must be identified and mitigated where appropriate. AB 32 also establishes a state goal of reducing GHG emissions to 1990 levels by 2020 – a reduction of approximately 30% from projected state emission levels and 15% from current State levels, with even more substantial reductions required in the future (California Air Resources Board [CARB] 2014). Pursuant to AB 32, CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. As the largest single generator of GHGs, changes in transportation is a focus of these efforts.

2.2.3 Senate Bill (SB) 32 / Executive Order B-30-15

This executive order sets in place a new State-wide policy goal to reduce GHG emissions 40% below their 1990 levels by 2030. This order acts as an intermediate goal to achieving 80% reductions by 2050. California met the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40% below 1990 levels by 2030 will make it possible to reach the goal established by Executive Order S-3-05 of reducing emissions 80% under 1990 levels by 2050. Such reductions will require major changes in the transportation sector. This intermediate target was codified into law by SB 32, which was signed into law by Governor Jerry Brown on September 8, 2016.

2.2.4 SB 375, Sustainable Communities and Climate Protection Act

The adoption of SB 375 on September 30, 2008 created a process whereby local governments and other stakeholders must work together within their region to achieve the GHG reductions specified in AB 32 through integrated development patterns, improved transportation planning, and other transportation measures and policies. Under SB 375, CARB is required to set regional vehicular GHG reduction targets for 2020 and 2035. Additionally, SB 375 required that those targets be incorporated within a Sustainable Communities Strategy (SCS), a newly required element within the Metropolitan Planning Organization's (MPO's) RTP. On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that require a 7% - 8% reduction by 2020 and between 13% - 16% reduction by 2035 relative to emissions in 2005 for each MPO. Southern California Association of Governments (SCAG) is the MPO for the Southern California region and is required to work with local jurisdictions, including the City. CARB has determined SCAG's reduction target for per capita vehicular emissions to be 8% by 2020 and 13% by 2035. Achieving such reductions will require major changes in the transportation sector, travel behavior and mobility choices.

2.2.5 SB 743

To further the State’s commitment to the goals of SB 375, AB 32, and AB 1358, Governor Brown signed SB 743 on September 27, 2013. SB 743 adds Chapter 2.7, *Modernization of Transportation Analysis for Transit-Oriented Infill Projects*, to Division 13 (Section 21099) of the Public Resources Code, and updates the metric for determining significant impacts under CEQA. Key provisions of SB 743 include eliminating the measurement of vehicle delay, or Level of Service (LOS), as a metric that can be used for measuring traffic impacts. Under SB 743, the focus of transportation analysis shifts from LOS to the reduction of VMT through the creation of multimodal transportation networks and promotion of a mix of land uses to reduce VMT. SB 743 required the Governor’s Office of Planning and Research (OPR) to amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Particularly for areas served by transit (i.e., transit priority areas [TPA], which are areas within one-half mile of a major transit stop), those alternative criteria must “*promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses*” (Public Resources Code Section 21099[b][1]). Measurements of transportation impacts may include “*vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated.*”

Pursuant to the mandate in SB 743, OPR adopted revised CEQA Guidelines which were certified by the Natural Resources Agency in December 2018, recommending the use of VMT for analyzing transportation impacts under CEQA. CEQA Guidelines Section 15064.3 was added to CEQA Guidelines, which states “*generally, vehicle miles traveled is the most appropriate measure of transportation impacts.*” The revised guidelines require that lead agencies remove automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, as a criterion for determining a significant impact on the environment pursuant to CEQA, except in locations specifically identified in the revised guidelines, if any. In accordance with this requirement, CEQA Guidelines Section 15064.3(a) states “*a project’s effect on automobile delay does not constitute a significant environmental impact.*” The requirements of SB 743 took effect on July 1, 2020. The City of Redondo Beach and the City of Torrance are currently in the process of developing local guidelines to implement the changes to CEQA transportation impact analysis as required by SB 743. OPR’s guidance on conducting VMT impact analysis is summarized in its *Technical Advisory on Evaluation Transportation Impacts in CEQA*.¹

2.2.6 California’s 2017 Climate Change Scoping Plan

CARB is responsible for the coordination and administration of both Federal and State air pollution control programs within California. CARB’s 2017 Scoping Plan reflects the new statewide GHG emissions reduction goals called for in SB 32 of 40 percent below 1990 emissions levels by 2030.

In the transportation sector, GHG emissions reducing measures include low carbon fuels, cleaner vehicles, and strategies to promote sustainable communities and improved transportation choices that result in

¹ Accessed on January 15, 2021 from https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf



curbing the growth in VMT (CARB 2017). With regard to transportation, the Scoping Plan includes measures to reduce VMT and vehicle GHGs, including, but not limited to:

- Pursue 15 percent reduction in light duty VMT from Business as Usual by 2050.
- Promote all feasible policies to reduce VMT, including land use and community design that reduce VMT such as transit-oriented development.
- Implement complete street design policies that prioritize transit, biking, and walking
- Increase low carbon mobility choices, including improved access to viable and affordable public transportation and active transportation opportunities.
- Developing pricing mechanisms such as road user/VMT-based pricing, congestion pricing, and parking pricing strategies,
- Reduce GHG emissions through commute trip reduction strategies, and programs to maximize the use of alternatives to single-occupant vehicles, including bicycling, walking, transit use, and shared mobility options.
- Accelerating equitable and affordable transit-oriented and infill development through new and enhanced financing and policy incentives and mechanisms.
- Increase the number, safety, connectivity, and attractiveness of biking and walking facilities to increase use.

CARB updates its Scoping Plan every five years.

2.2.7 AB 1358, the California Complete Streets Act of 2008

Governor Schwarzenegger signed AB 1358 into law on September 30, 2008. AB 1358 requires cities and counties to modify the circulation element to their General Plans for a balanced, multimodal transportation network that meets the needs of all users, including bicyclists, pedestrians, transit riders, children, older people, and disabled people, as well as motorists.

2.2.8 California Department of Transportation (Caltrans) VMT-Focused Transportation Impact Study Guide (TISG)

In May 2020, Caltrans published a VMT-based TISG consistent with SB 743. The TISG replaces the *Guide for the Preparation of Traffic Impact Studies* (Caltrans 2002). A key change is that CEQA documents will now consider different types of transportation impacts than previously examined. When analyzing the impact of VMT on the State Highway System resulting from local land use projects, the focus will no longer be on traffic at intersections and roadways immediately around project sites. Instead, the focus will be on how projects are likely to influence the overall amount of automobile use. The TISG is intended for use in analyzing land use projects or plans that may impact or affect the State Highway System. It includes screening criteria to identify projects presumed to have a less than significant impact on VMT. For projects

without a presumption of less than significant impact, Caltrans suggests use of OPR's 15% below existing city or regional VMT per capita recommended threshold of significance for land use projects and may request mitigation from projects and plans which do not meet those thresholds.

2.2.9 Caltrans Interim Land Development and Intergovernmental Review (LDIGR) Safety Review Practitioner's Guide

In December 2020, Caltrans published a revised interim version of the LDIGR Safety Review Practitioner's Guide. This document establishes project effects on roadway safety as a potential transportation impact area under CEQA. The guidance is interim and does not establish thresholds of significance. The guide details the safety analysis that Caltrans will undertake directly to determine a project's potential to affect safety conditions on the State Highway System. The proposed Project is not expected to affect the State Highway System.

2.2.10 California Manual on Uniform Traffic Control Devices (MUTCD)

The California MUTCD is published by Caltrans and is issued to adopt uniform standards and specifications for all official traffic control devices in California, in accordance with Section 21400 of the California Vehicle Code (CVC). The California MUTCD incorporates the Federal Highway Administration's Manual on Uniform Traffic Control Devices (2009 Edition) and all policies on traffic control devices issued by Caltrans that were issued at the time of its release. Caltrans publishes Standard Specifications, Standard Special Provisions, Standard Plans, and other manuals, which contain specifications and requirements for traffic control devices, including their use and placement. In some cases, those specifications and requirements can vary from and be more stringent than those shown in the California MUTCD. The proposed Project would be required to be designed in accordance with all California MUTCD design requirements on any roadway facilities affected by the proposed Project.

2.2.11 Highway Design Manual

The 7th Edition Highway Design Manual (HDM) establishes uniform standards for the design of roadways in the State. Local design guidance generally conforms to the HDM when feasible though local design standards may deviate when necessary due to local contexts that may differ from overall Statewide standards

2.3 Regional Plans and Policies

2.3.1 South Coast Air Quality Management District (SCAQMD)

The SCAQMD was created to coordinate air quality planning efforts throughout Southern California. The SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, the SCAQMD is responsible for monitoring air quality, as well as planning, implementing and enforcing programs designed to attain and maintain state and federal ambient air quality standards. Programs that were developed by the SCAQMD include adopting air quality rules and regulations that regulate stationary sources, area sources, point sources and certain mobile source emissions. The



SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified or relocated stationary sources do not create net emission increases.

The SCAQMD monitors air quality within the project area. The SCAQMD has jurisdiction over an area of 10,743 square miles, consisting of the Basin, as defined below, and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin is a subregion of the SCAQMD's jurisdiction and covers an area of 6,745 square miles, including all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south.

The Air Quality Management Plan (AQMP) is the management plan for continued progression toward clean air and compliance with state and federal requirements. It includes a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. The AQMP proposes attainment demonstration of the PM_{2.5} standard by 2014 in the Basin through adoption of all feasible measures. Attainment has not been demonstrated at this time and will be addressed in the next AQMP. The AQMP also incorporates current scientific information and meteorological air quality models. It also updates the federally approved 8-hour O₃ control plan with new commitments for short-term NO_x and VOC reductions (SCAQMD, 2012).

2.3.2 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG is the designated MPO for six Southern California counties (Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial), and is federally mandated to develop plans for regional transportation, land use and growth management, and air quality.

SCAG updates its long-range (i.e., minimum 20 years) Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) every 4 years, in compliance with Federal law (23 U.S. Code [USC] §§134 et seq) and State law (SB 375). SCAG's 2020–2045 RTP/SCS "Connect SoCal" was adopted in May 2020 for federal transportation conformity purposes and approved in September 2020.

The SCS is a required element of the RTP that provides a plan for meeting GHG emissions reduction targets set forth by the CARB. It provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the South Coast Air Quality Management District (SCAQMD). CARB has determined SCAG's reduction target for per capita vehicular emissions to be 8% by 2020 and 19% by 2035 relative to the 2005 baseline. Successfully meeting these targets will require substantial effort to reduce VMT. The 2020–2045 RTP/SCS calls for investing \$638 billion over the 25-year term of the plan toward over 4,000 transportation projects, all of which collectively are expected to result in a 5% reduction in daily VMT per capita and a more than 25% decrease in traffic delay per capita. Investments will focus on maintaining and better managing the existing transportation network, expanding mobility choices, and increasing investment in transit and complete streets.

Of the 10 goals presented in the 2020–2045 RTP/SCS, five are applicable to transportation, including the following:

- Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.
- Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.
- Goal 4: Increase person and goods movement and travel choices within the transportation system.
- Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.
- Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.

2.3.3 Los Angeles County Metropolitan Transportation Authority (Metro) Our Next LA Long Range Transportation Plan (LRTP) (2020)

Metro’s 2020 Long Range Transportation Plan, titled Our Next LA and adopted in September 2020, is the first update to the LRTP since 2009, and provides a vision for transportation in Los Angeles County through 2047. The plan aims to address population growth, changing mobility needs and preferences, technological advances, equitable access to opportunity, and adaptation to a changing environment. The plan details construction of an additional 100 miles of fixed-guideway transit, investments in arterial and freeway projects to reduce congestion, and construction of regional-scale bicycle and pedestrian projects to increase active transportation, including the Rail to Rail Active Transportation Corridor and the LA River Path. Other efforts detailed in the plan include traffic management practices for congested roadways (e.g., ExpressLanes toll lanes), maintaining and upgrading the existing transportation system for all modes, and partnering with local, state, and federal agencies, and the private sector. Our Next LA includes transit and highway improvements funded by Measure M, as well as expansion of off-peak transit service, of the active transportation network, and of programs such as ExpressLanes, partnerships to provide bus only lanes and freight management policies, and bold policy proposals, including free transit, faster bus trips, and subregional congestion pricing. There are no LRTP projects proposed within the study area.

2.3.4 Metro Regional Transportation Improvement Plan

The Regional Transportation Improvement Program (RTIP) is a program of highway, local road, transit and active transportation projects that a region plans to fund with State and Federal revenue programmed by the California Transportation Commission in the State Transportation Improvement Program (STIP). The RTIP is developed biennially by the regions and is due to the Commission by December 15 of every odd numbered year. The program of projects in the RTIP is a subset of projects in the Regional Transportation Plan (RTP), a federally mandated master transportation plan which guides a region’s transportation investments over a 20 to 25-year period. The RTP is based on all reasonably anticipated funding, including Federal, State and local sources. Updated every 4 to 5 years, the RTP is developed through an extensive



public participation process in the region and reflects the unique mobility, sustainability, and air quality needs of each region. Metro, as the County Transportation Commission for Los Angeles County, is responsible for developing the county's funding priorities for the State Transportation Improvement Program (STIP), and for submitting the projects to the California Transportation Commission (CTC) by way of the Regional Transportation Improvement Program (RTIP). The RTIP is a listing of state highway and transit projects that Los Angeles County proposes for funding through the STIP covering a five-year period. The 2020 Los Angeles County RTIP was submitted to the CTC and Caltrans on December 13, 2019, and includes projects proposed for funding from Fiscal Year 2020-2021 through 2024-2025. There are no RTIP projects proposed within the study area.

2.3.5 Metro Regional Complete Streets Policy

Metro's recently adopted Complete Streets policy is reinforcing the California Complete Streets Act (AB 1358). Effective January 1, 2017, Metro is requiring that all local jurisdictions within LA County must adopt a Complete Streets Policy, an adopted city council resolution supporting Complete Streets, or an adopted general plan consistent with the California Complete Streets Act of 2008 in order to be eligible for Metro capital grant funding programs, starting with the 2017 grant cycles.

2.3.6 Metro Vision 2028 Plan

The Metro Vision 2028 Plan is a strategic plan that lays the foundation for transforming mobility across the county over the 10-year period ending in 2028. The plan seeks to increase prosperity for all by removing mobility barriers, provide swift and easy mobility anytime throughout Los Angeles County, and accommodate more trips through a variety of high-quality mobility options. The plan seeks to double non-single-occupant auto mode split, including increasing trips via transit, walking, rolling modes such as biking and scootering, shared rides, and carpooling. It also seeks to reduce maximum wait times for any trip to 15 minutes or less, even during peak periods, to improve bus travel speeds by 30%, and to provide reliable, convenient options for users to bypass congestion. There are no Metro Vision projects proposed within the study area.

2.3.7 Metro NextGen Bus Study

Metro initiated the NextGen Bus Study in 2018 to reimagine its bus network to be more relevant, reflective of, and attractive to the diverse customer needs within Los Angeles County. The plan proposes major bus service changes across the Metro Service Area, including development of a new bus network to improve service to current customers, attract new customers, and win back past customers. The NextGen Bus Study represents the first major overhaul to Metro bus service in more than a quarter century. The plan will:

- Align travel patterns with travel propensity
- Develop service tiers
- Establish seamless connectivity with local municipal operators

- Increase the number of routes operating frequently
- Assure all fixed-route services provide headways of 30 minutes or better
- Create standardized frequencies by service tier
- Make the network easier for riders to understand
- Align schedules with midday, evening, and weekend riders
- Consolidate Rapids/Locals into a single service
- Consolidate stops
- Apply all strategies through an equity lens

Metro Board approved the NextGen draft service plan in October 2020, with new services expected to come online by the end of 2021. There are no Metro routes that operate within the study area.

2.4 Local Plans and Policies

2.4.1 South Bay Bicycle Master Plan (SBBMP)

The SBBMP is a multi-city bicycle master plan developed in 2011 by the Los Angeles County Bicycle Coalition (LACBC) and the South Bay Bicycle Coalition (SBBC) with the common goal of improving the safety and convenience of bicycling in the South Bay Region. Seven member cities of the South Bay Cities Council of Government were involved in the development of the SBBMP, including El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance. Relevant policies include:

- Policy 1.1.4 – Review and encourage implementation of policies and facilities proposed in the SBBMP whenever planning new bicycle facilities or capital improvement projects that may be related to bicycle improvements.
 - o Objective 1.3 – Increased mobility through bicycle-transit integration.
- Policy 1.3.1 – Support the development of bicycle facilities that provide access to regional and local public transit services.
- Policy 1.3.2 – Coordinate with transit providers to ensure bicycles can be accommodated on all forms of transit vehicles and that adequate space is devoted to their storage on board whenever possible.
- Policy 1.3.3 – Coordinate with transit agencies to install and maintain convenient and secure short-term and long-term bike parking facilities – racks, on-demand bike lockers, in-station bike storage, and staffed or automated bicycle parking facilities – at transit stops, stations, and terminals.



- Policy 1.4.8 – Work with Metro to provide bicycle parking in proximity to bus stops and other transit facilities.

2.4.2 Beach Cities Livability Plan

In 2011, Hermosa Beach, Redondo Beach and Manhattan Beach City Councils adopted the Beach Cities Livability Plan. The Plan analyzes the built environment and provides a framework to improve livability and well-being through land use and transportation systems. The Plan consists of goals and recommendations for safe walking and biking conditions and sustainable transportation choices. Implementation of this Plan not only improves support for walking and biking, but also reduces congestion and improves air quality.

2.4.3 Redondo Beach General Plan – Circulation Element

The Redondo Beach General Plan Circulation Element was adopted in 2009 and provides goals and policies for the circulation system. Relevant goals of the Circulation Element include:

- Reduce trip generation
 - o Goal G1 – Address the root causes of trip generation rather than simply reacting to the consequences.
 - o Goal G2 – Reduce Year 2030 trip generation by 25% compared to 2007 levels.
- Promote alternative modes
 - o Goal G4 – Allow for safe and convenient walking, biking, or taking transit.
 - o Goal G13 – Link existing and proposed bicycle facilities.
 - o Goal G14 – Increase the provision of bike lockers, bike racks, and lighting for bicycle facilities.
 - o Goal G15 – Ensure that residents will be able to walk or bicycle to destinations such as the beach, the Civic Center, Redondo Beach Pier, Riviera Village, and other activity centers.
- Coordinate land use and transportation
 - o Goal G6 – Encourage development that purposefully integrates itself with surrounding transportation facilities.
- Take action on climate change
 - o Goal G5 – Expand Transportation Demand Management (TDM) programs that decrease the number of single-occupant vehicles on the road.
 - o Goal G7 – Implement plans and programs to reduce greenhouse gas emissions.

- Goal G12 – Encourage all employers to pursue successful TDM measures demonstrated in Southern California.
- Manage public parking effectively
 - Goal G11 – Maintain the existing supply of public parking.
- Provide safe and reliable fixed-route transit
 - Goal G16 – Provide reliable, safe, fixed-route transit.

Relevant policies which address those goals include:

- Policy P1 – Support transit-oriented development that reduces current automobile trips.
- Policy P4 – Encourage mixed-use development.
- Policy P9 – Where feasible, maintain or achieve LOS D at intersections.
- Policy P12 – Require new developments to provide sufficient parking to meet demand.
- Policy P13 – Encourage shared parking between land uses when consistent with industry standards.
- Policy P17 – Provide incentives for employer-based vanpools.
- Policy P20 – Investigate the use of shared transportation vehicles.
- Policy P21 – Work with adjacent cities to coordinate incentives for carpools, vanpools, and other measures for Redondo Beach residents.
- Policy P28 – Close existing gaps in sidewalk infrastructure where necessary, maintain existing sidewalks in good repair, and require sidewalks with all new development.
- Policy P29 – Provide climate-appropriate landscaping, adequate lighting, and street amenities to make walking safe, interesting, and enjoyable.
- Policy P30 – Promote use of alternative transportation for short trips and conduct periodic bicycle and pedestrian counts to assess whether alternative mode use is increasing.
- Policy P 37 – Provide shuttle service to activity areas.

2.4.4 City of Redondo Beach Climate Action Plan

The City of Redondo Beach, in concert with the South Bay Cities Council of Governments (SBCCOG), is committed to providing a more livable, equitable, and economically vibrant community and subregion through the implementation of energy efficiency measures. By using energy more efficiently, it is the City's objective to keep dollars in the local economy, create new green jobs, and improve the community's



quality of life. The CAP, which was adopted in 2017, contains goals and policies that incorporate energy use reduction into the City's daily management of its community and municipal operations. The Climate Action Plan includes a list of non-binding goals and strategies related to transportation:

- Facilitate pedestrian and neighborhood development.
- Identify ways to reduce automobile emissions including:
 - o Supporting zero emission vehicle infrastructure;
 - o Improving pedestrian and bicycle infrastructure;
 - o Enhancing public transit service; and
 - o Supporting reductions in single-occupancy vehicle use.

2.4.5 Redondo Beach Sustainable City Plan

The City's Green Task Force created the Sustainable City Plan, presented to City Council in 2008. The plan is a compilation of sustainable recommendations addressing five issue areas, including Economic Vitality and Regional Issues; Housing and Building; Open Space, Land Use and Trees; Resource Conservation; and Transportation. The Plan consists of benefits, funding, and goals of recommended environmental programs.

The City has a Green Task Force that promotes and implements the policies outlined in the Redondo Beach Sustainable City Plan. The Task Force focuses on environmental responsibility including policies for residential and mixed-use developments.

2.4.6 Torrance General Plan – Circulation Element

The Torrance General Plan Circulation and Infrastructure Element was adopted in 2010 and provides goals and policies for circulation and utility systems to support land use densities and intensities. Relevant goals of the Circulation and Infrastructure Element include:

- Objective CI-3 – Maintenance of LOS D or better at intersections;
- Objective CI-5 – Meeting the parking needs of businesses, residents, and visitors;
- Objective CI-8 – Maintenance of a comprehensive system of pedestrian pathways and bicycle routes.

Relevant policies include:

- Policy CI-5.1 – Require new development to accommodate project-generated parking demand on site.

- Policy CI-5.13 – Expand parking opportunities by encouraging the use of public parking lots and exploring the use of multiple-story parking structures.
- Policy CI-6.2 – Provide for the consistent use of street trees along all sidewalks, parkways, and property frontages.
- Policy CI-8.1 – Provide and maintain safe, efficient, and convenient pedestrian pathways that offer access to activity centers, recreation facilities, schools, community facilities, and transit stops.
- Policy CI-8.4 – Provide and maintain a comprehensive system of bicycle lanes.
- Policy CI-8.5 – Promote the provision of reasonable and secure bicycle storage and shower and locker facilities at major commercial developments and employment centers.
- Policy CI-8.9 – Promote the use of compact electric or similar powered vehicles for local trips.

2.4.7 City of Torrance Climate Action Plan

The City of Torrance, in concert with the South Bay Cities Council of Governments (SBCCOG), is committed to providing a more livable, equitable, and economically vibrant community and subregion through the implementation of energy efficiency measures. By using energy more efficiently, it is the City's objective to keep dollars in the local economy, create new green jobs, and improve the community's quality of life. The CAP, which was adopted in 2017, contains goals and policies that incorporate energy use reduction into the City's daily management of its community and municipal operations. The Climate Action Plan includes a list of non-binding goals and strategies related to transportation, the same as those in the City of Redondo Beach's Climate Action Plan described above.



3. Environmental Setting

This chapter describes the existing environmental setting for transportation, including a discussion of existing bicycle and pedestrian facilities, transit service, roadways, VMT, and mode split. The Project site is located along North Prospect Avenue in an urbanized environment in the City of Redondo Beach and adjacent to the City of Torrance to the east. The transportation system serving this area is a complex, built-out, multimodal network designed to carry both people and goods, consisting of roadways, bicycle facilities, sidewalks, and public transit. However, while the roadway and sidewalk network in the vicinity of the Project site is generally well developed and complete, the area lacks proximate connectivity to rail transit. Rail transit is served by connecting bus service. The bicycle network has limited connectivity in the immediate vicinity of the Project site, but planned bicycle facilities will close some of these gaps.

3.1 Existing Pedestrian and Bicycle Facilities

Sidewalks are generally present throughout the study area, and marked crosswalks are provided at all major arterial intersections. However, there are currently no sidewalks along the west side of Diamond Street north of Prospect Avenue and the west side of Flagler Lane south of Beryl Street. Most signalized intersections of major arterials and collector streets in the study area provide marked crossings on all four legs of the intersection, while some do not provide crossing facilities on all four legs of the intersection. Pedestrian access to the Project site is provided via a sidewalk on Prospect Avenue, with marked crosswalks provided at the intersection of Prospect Avenue & Diamond Street, Prospect Avenue & Beryl Street, Harkness Lane & Beryl Street, and Flagler Lane & Beryl Street.

Bicycle facilities are classified based on the Caltrans Highway Design Manual (2006) terminology:

- Class I Bikeway (Bike Path) – A completely separate ROW for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflows minimized
- Class II Bikeway (Bike Lane) – A restricted ROW designated for the use of bicycles, with a striped lane on a street or a highway. Vehicle parking along with vehicle and pedestrian crossflows are Permitted
- Class III Bikeway (Bike Route) – A ROW designated by signs or pavement markings for shared use with pedestrians and motor vehicles.
- Class IV Bikeway (Separated Bikeway) – A ROW for the exclusive use of bicycles which provides a required separation between the bikeway and through vehicular traffic.

The Project site has limited connectivity with the existing developed bike path systems, with no bike paths currently bordering the Project site or connecting the Project site with existing regional bike paths in the vicinity. Two existing Class II (i.e., striped) bike lanes located on Diamond Street southwest of the Project site and Beryl Street to the east provide some bicycle connectivity to the site with surrounding

neighborhoods, including the Redondo Beach waterfront area and the coastal Marvin Braude Bike Trail via the Diamond Street bike lane. Additionally, the Class II bike lane along Diamond Street provides connectivity to the existing Catalina Street Class II bike path located roughly 0.75 miles to the south, which provides some north south access through the City of Redondo Beach. Within a 0.5-radius of the Project site, existing Class II bike lanes are available on Beryl Street between Flagler Lane and 190th Street, Anza Avenue between 190th Street and Del Amo Boulevard, and Diamond Street between Prospect Avenue and North Catalina Avenue. An existing Class III bicycle route is available on Flagler Lane, heading north from Beryl Street. There are no existing Class I bicycle paths or Class IV separated bikeways within the study area. The nearest existing bicycle access to the Project site is provided via the Class II bike lanes on Diamond Street and Beryl Street, but there are no existing facilities which provide direct access.

The South Bay Bicycle Master Plan indicates that additional bicycle facilities are planned throughout the study area, including Class II bicycle lanes on Beryl Street and West 190th Street east of Beryl Street, and Class III sharrowed bicycle facilities on 190th Street west of Beryl Street. Additionally, separately from the proposed Project, as part of a grant awarded to BCHD, BCHD is developing a new protected bicycle facility (BCHD Bike Path Project) along the eastern perimeter of the campus on the existing Flagler Alley (Class I), which currently provides an informal pathway used by bicyclists and is blocked off to vehicle traffic, and along Flagler Lane (Class IV) between the end of the alley and Beryl Street. These additional corridors will enhance bicycle connections to the Project site.

Existing and planned bicycle facilities are presented in **Figure 3**.

3.2 Existing Public Transit Facilities

The immediate study area is served only by Beach Cities Transit's (BCT) Line 102, which also provides a connection to regional transit service via the Metro C (Green) Line.

BCT Line 102 provides local service between the Metro C (Green) Line, the South Bay Galleria, and the Redondo Beach Pier. In the study area, Line 102 travels north and south along Prospect Avenue and northeast and southwest along Beryl Street. Service is provided 7 days per week with six stops adjacent to or within easy walking distance of the Project site. Weekday peak period headways are approximately 30 to 45 minutes. Travel time between BCHD and the Metro Green Line Redondo Beach Station via Line 102 is approximately 30 minutes.

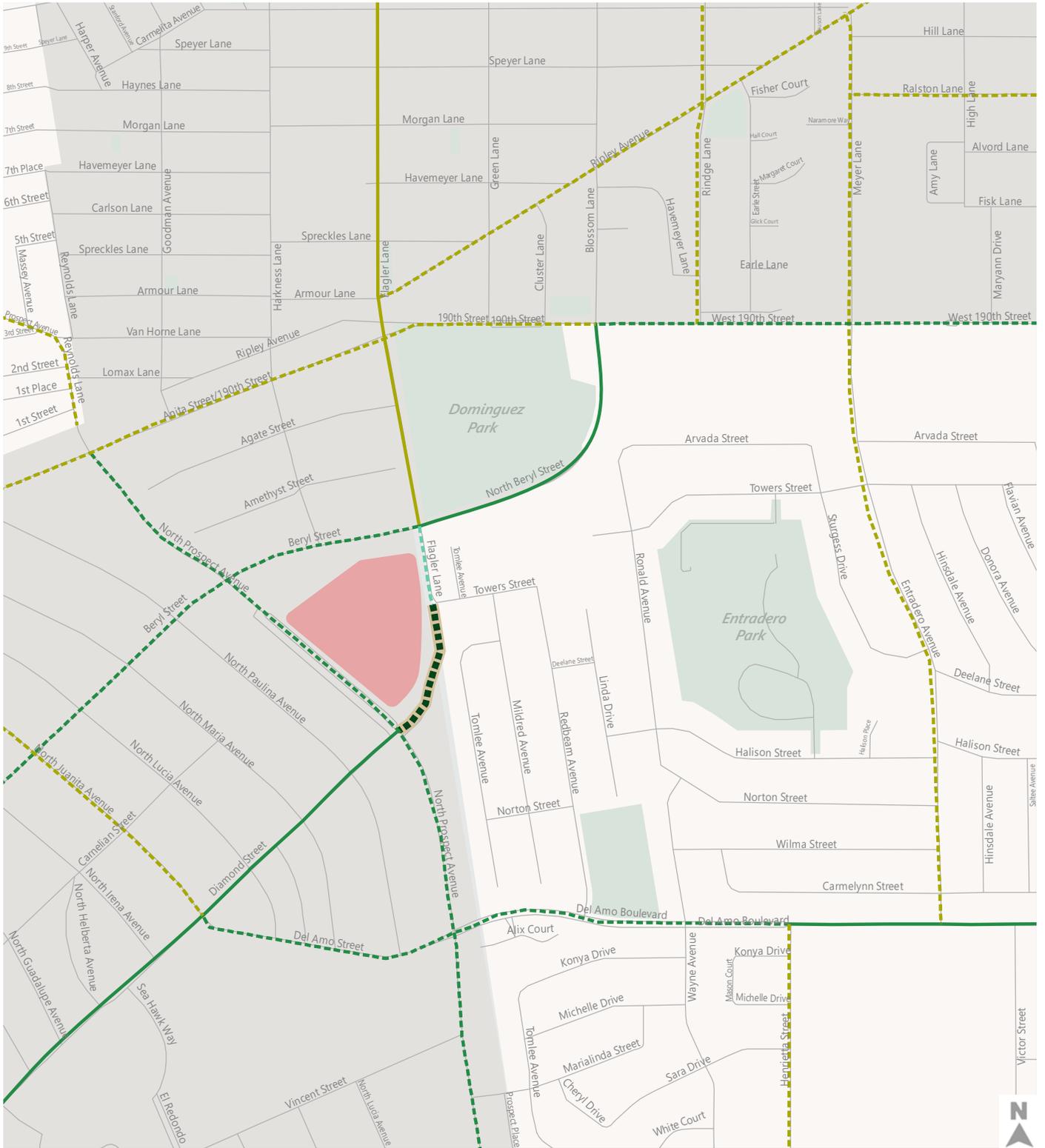
The utility of transit service and its attractiveness to non-transit dependent users is affected by frequency of service or "headways," with ideal peak hour service providing headways of 15 minutes or better – a measure that BCT Line 102 does not meet. The nearest regional transit services with shorter headways and direct service to major destinations are located more than the one half-mile walk transit riders might reasonably be expected to walk to/from the BCHD campus, on Pacific Coast Highway (0.7 miles), Torrance Boulevard (1.0 miles), and Hawthorne Boulevard (1.7 miles). Given existing transit conditions and the lack of planned transit improvements within the vicinity of the Project, transit is unlikely to provide a viable transportation alternative to driving alone for the Project.



Figure 4 illustrates transit service in the study area and identifies the location of transit stops adjacent to the Project site.

3.3 Existing Roadway Facilities

The street network in the City of Redondo Beach is primarily gridded with good connectivity. Arterial streets in the study area generally provide two to three vehicle travel lanes in each direction, with left-turn pockets at most intersections and right-turn pockets at some intersections. Posted travel speeds in the study area range from 35 to 50 miles per hour (mph), with the majority of streets allowing travel up to 35 mph. Regional access to the Project site is provided by the Pacific Coast Highway (PCH) and a network of arterial and collector streets. The arterial street network that serves the Project site includes 190th Street, Anita Street, Beryl Street, Del Amo Boulevard, and Prospect Avenue. The local streets include Blossom Lane, Diamond Street, Harkness Lane, Entradero Avenue, Flagler Lane, Halison Avenue, Henrietta Street,



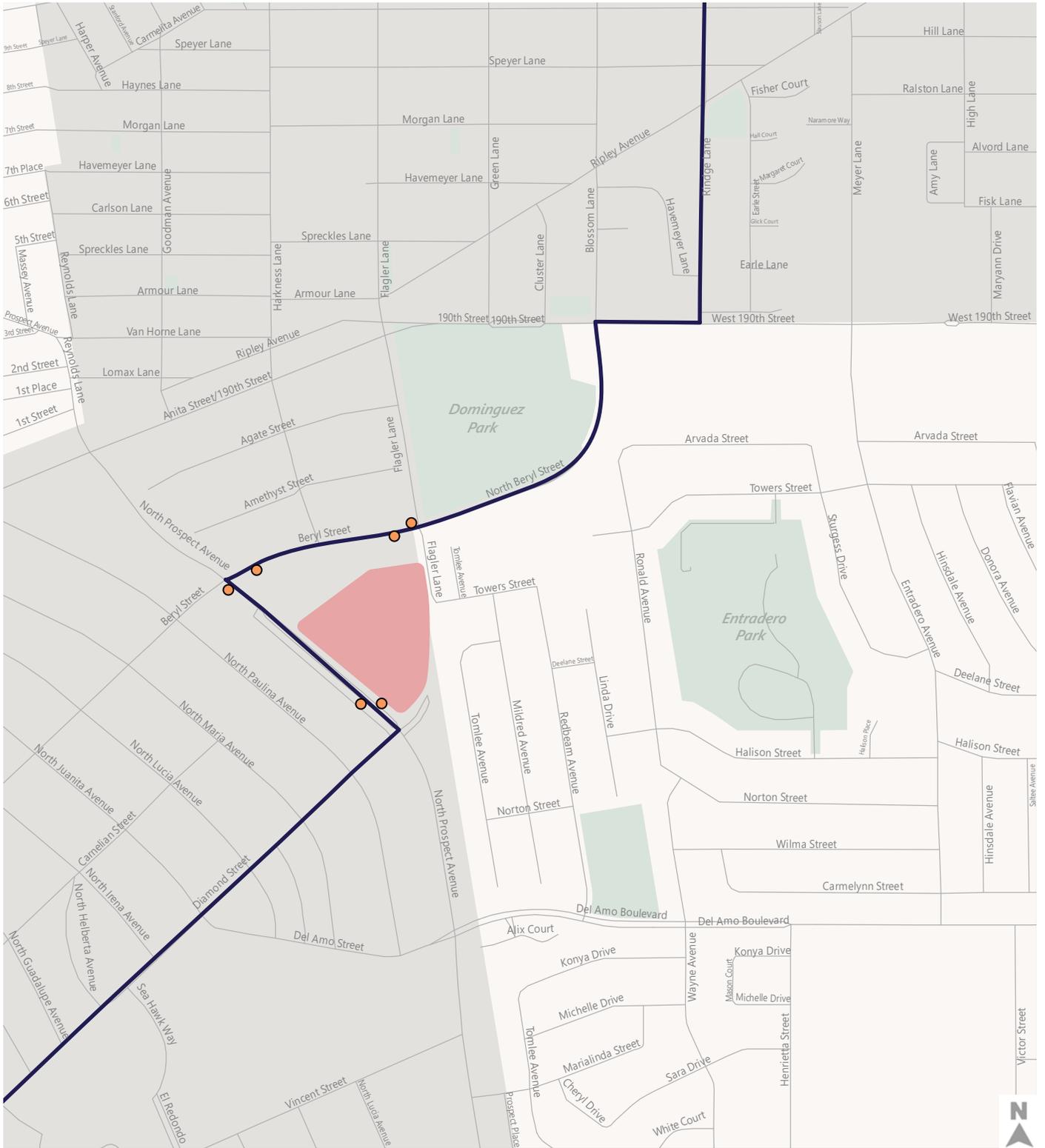
- | Proposed Bicycle Facilities | | Existing Bicycle Facilities | |
|---|-----------|---|------------------------------|
|  | Class I |  | Class II |
|  | Class II |  | Class III |
|  | Class III |  | Beach Cities Health District |
|  | Class IV | | |

Figure 3

Existing & Planned Bicycle Facilities

Source: The South Bay Bicycle Master Plan, 2011





- 102 Bus Route
- Bus Stops
- Beach Cities Health District

Figure 4

Study Area Transit Routes

Redbeam Avenue, and Wayne Avenue. The following describes the key roadway facilities that serve the Project site:

- 190th Street – 190th Street is an east/west major arterial that runs east from Flagler Lane following the transition from Anita Street. The roadway provides two lanes in each direction. There are left-turn pockets at most intersections. On-street parking is generally allowed on the north side of the street, except between Rindge Lane and Phelan Avenue. On the south side of the street, on-street parking is generally prohibited west of Entradero Avenue. West of Flagler Lane, 190th Street transitions to become Anita Street.
- Anita Street – Anita Street is an east/west major arterial that runs east of PCH with two lanes in each direction. Between Maria and Prospect Avenue, it has a center turning lane. East of Prospect, there are left-turn pockets at most intersections, with a raised median. On-street parking is generally permitted on both sides of Anita Street. Anita Street becomes 190th Street at the intersection with Flagler Lane.
- Beryl Street – Beryl Street is an east/west secondary arterial that runs from Harbor Drive to 190th Street. Between Prospect Street and Catalina Avenue, Beryl Street has one lane in each direction with a center turning lane. Beryl Street narrows to two lanes east of Flagler Lane. On-street parking is permitted between Catalina Avenue and Flagler Lane.
- Blossom Lane – Blossom Lane is a local street that runs north/south from 190th Street to Manhattan Beach Boulevard. South of 190th Street, Blossom Lane transitions to become Beryl Street. The roadway provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.
- Del Amo Boulevard – Del Amo Boulevard is an east/west major arterial that runs from Diamond Street on the western end to the City of Cerritos in the east. From Diamond Street to Prospect Avenue, one travel lane is provided in each direction. East of Prospect Avenue, two travel lanes in each direction are provided and a raised center median is provided in places. Between Diamond Street and Prospect Avenue, on-street parking is permitted on the north side of the street only. East of Prospect Avenue, on-street parking is only allowed for a brief stretch on south side of the street from Donora Avenue to the bike lane transition west of the intersection with Anza Avenue, and is otherwise prohibited.
- Diamond Street – Diamond Street is an east/west collector street that runs from Catalina Avenue to Prospect Avenue, culminating in a cul-de-sac east of Prospect Avenue. This street provides one travel lane in each direction with a two-way left-turn lane. On-street parking is provided on both sides of the street.
- Entradero Avenue – Entradero Avenue is a north/south collector street that runs from 190th Street to Del Amo Boulevard and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.



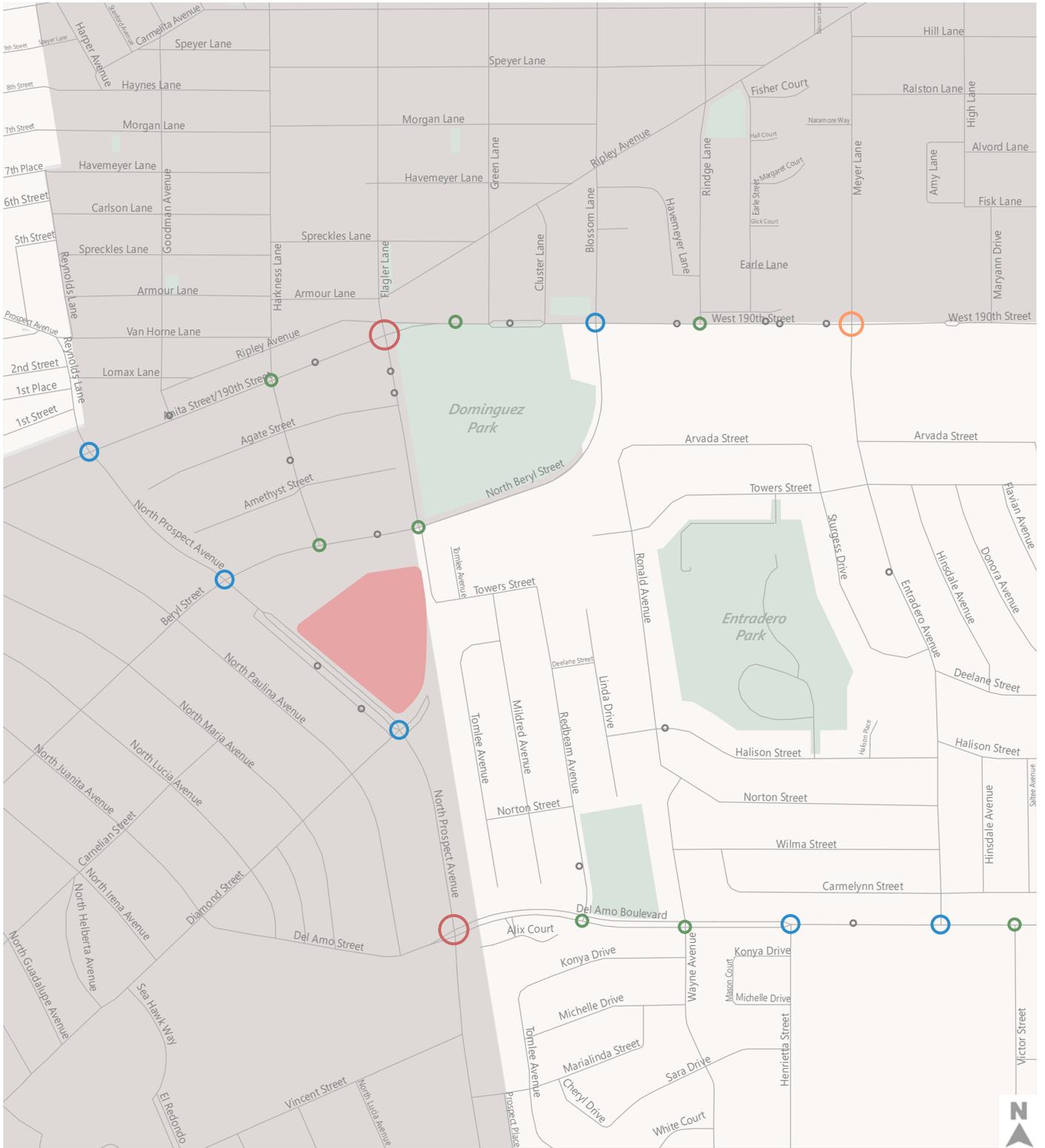
- Flagler Lane – Flagler Lane is a north/south collector street that runs from Towers Street to Artesia Boulevard and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.
- Halison Street – Halison Street is an east/west local street that runs from Linda Street to Hawthorne Boulevard and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.
- Henrietta Street – Henrietta Street is a north/south connector street that runs from Del Amo Boulevard to Torrance Boulevard and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.
- Prospect Avenue – Prospect Avenue is a north/south secondary arterial that runs from Artesia Boulevard to PCH. Within the study area, it provides two travel lanes in each direction. Left-turn lanes are provided at most intersections. On-street parking is prohibited but is facilitated by the presence of a service road on which on-street parking is permitted located to the west of the main roadway, separated by a raised median.
- Redbeam Avenue – Redbeam Avenue is a north/south local street that runs from Towers Street to Del Amo Boulevard and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.
- Wayne Avenue – Wayne Avenue is a north/south local street that runs from Norton Street to Edgemere Drive and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.

3.4 Existing Roadway Safety Conditions

A collision analysis, using data collected from the Statewide Integrated Traffic Records System (SWITRS), was conducted for intersections surrounding the Project site, which are primary intersections used for site access. Based on the most recently available 5-year collision data set, reported collisions that occurred between 2013 and 2018 were analyzed. The 2019 collision data set is still provisional. **Figure 5** and **Figure 6** indicate the concentration of collisions by intersections used to access the Project site for all collision types, and those involving pedestrians and/or bicyclists. **Table 1** summarizes the number, type, and severity of collisions within the study area.

3.4.1 Total Collisions

Over the 5-year period of collision data evaluated, 115 collisions occurred within the vicinity of the Project site on streets used to access the Project site, including people driving, walking, and biking. Of the total number of collisions, six resulted in serious injury and one resulted in a fatality.



Reported Collisions from 2013 - 2018

(Grouped by Number)

- 1
- 2 - 3
- 4 - 6
- 7 - 9
- 10 - 12

◀ Beach Cities Health District



Figure 5

Total Collisions in Vicinity of Project

Source: TIMS, SWITRS Data



Reported Collisions from 2013-2018

- KSI Pedestrian or Bicycle Collision
- Other Pedestrian or Bicycle Collision
- ▾ Beach Cities Health District

Figure 6

Pedestrian or Bicycle Involved Collisions in Vicinity of Project

Source: TIMS, SWITRS Data



Table 1. Number of Collisions in Project Vicinity (2013-2018)

Collision Type	Total	Fatal + Significant Injury Collisions	Total Number of Fatalities
Vehicle-Vehicle	85	6	1
Vehicle-Pedestrian	9	1	0
Vehicle-Bicyclist	11	0	0
Total	115	7	1

Source: SWITRS, 2013-2018.

Immediately adjacent to the Project site, there were 17 collisions, which were on the Beryl Street and North Prospect segments and intersection on roadways used to access the Project site. Only two collisions occurred outside of an intersection area. Of these collisions, three collisions resulted in serious injury and one resulted in a fatality. The fatality occurred at North Prospect Avenue and Diamond Street, which involved a motorcyclist.

Five collisions occurred at North Prospect Avenue & Diamond Street (closest to the southernmost project driveway), which was the highest number of collisions closest to the Project site. There were no discernable patterns with regards to collision types (e.g., broadside, rear end, or head-on collisions). The primary collision factor associated with collisions within the Project study area were vehicle right of way violation (39%), unsafe speed (17%), and improper turning (14%).

3.4.2 Collisions Involving People Walking & Biking

In total, along the street segments and key intersections used to access the Project site there were 20 collisions over the evaluated five-year data period that involved people either walking or biking. Amongst these, one collision (5%) resulted in serious injury or death to pedestrians.

Closest to the Project site, there were five collisions that involved people walking or biking. These collisions occurred at Beryl Street & Harkness Lane and Prospect Avenue & Diamond Street intersections. Of these collisions, two involved children under the age of 18: one walking on Beryl Street and one biking near Prospect Avenue (minor injuries were reported). There were no collisions reported at the other intersections immediately adjacent to the Project Site, including the driveways at Project site or the Beryl Street & Flagler Street intersection.

3.5 Existing VMT

3.5.1 State of California

State-wide VMT is highly variable and is affected by population centers, density of development, and the mix of land uses within an area. As detailed below in Table 2, Caltrans reports a total of over 344 billion State-wide annual VMT and 943 million daily VMT in 2017 (the most recent data available). According to the U.S. Census Bureau, the 2017 population for the State California was 39.36 million (U.S. Census Bureau



2017). Therefore, the 2017 State-wide annual VMT per capita was approximately 8,750 miles (approximately 24.0 daily VMT per capita).

Table 2. Statewide Annual and Daily VMT in 2017

Public Roads	Annual VMT (in billions)	Daily VMT (in millions)
State Highways	187.1	512.6
Local Roads ¹	155.8	426.85
Other Agencies ²	1.4	3.8
Total of All Public Roads³	344.3	943.3

Notes: Totals may not equal sum of components due to independent rounding.

¹ Includes city streets and county roads only

² Includes federal, other state and other local jurisdictions

³ All public roads include those owned by cities, counties, and various state and federal agencies

Source: Caltrans 2019.

3.5.2 Regional VMT

According to the SCAG Transportation Safety Regional Existing Conditions report, the SCAG region includes a population of 19 million and a total of 8,700 annual average of VMT per capita in 2017 (SCAG 2017). The SCAG’s regional VMT equates to a daily VMT per capita of approximately 23.8 within the greater Los Angeles region.

The 2017 population for Los Angeles County was 10,163,507. The countywide annual VMT per capita in 2017 was 8,000 annual VMT per capita (approximately 21.9 daily VMT per capita) (SCAG 2017; County of Los Angeles 2019).

3.5.3 City of Redondo Beach VMT

Using the SCAG model, existing VMT was estimated for the City of Redondo Beach. The annual VMT per capita is 5,273 (14.4 daily VMT per capita). The annual VMT per employee is 5,856 (16.0 daily VMT per employee). Citywide average VMT is substantially lower than statewide or countywide averages.

3.6 Existing Mode Split

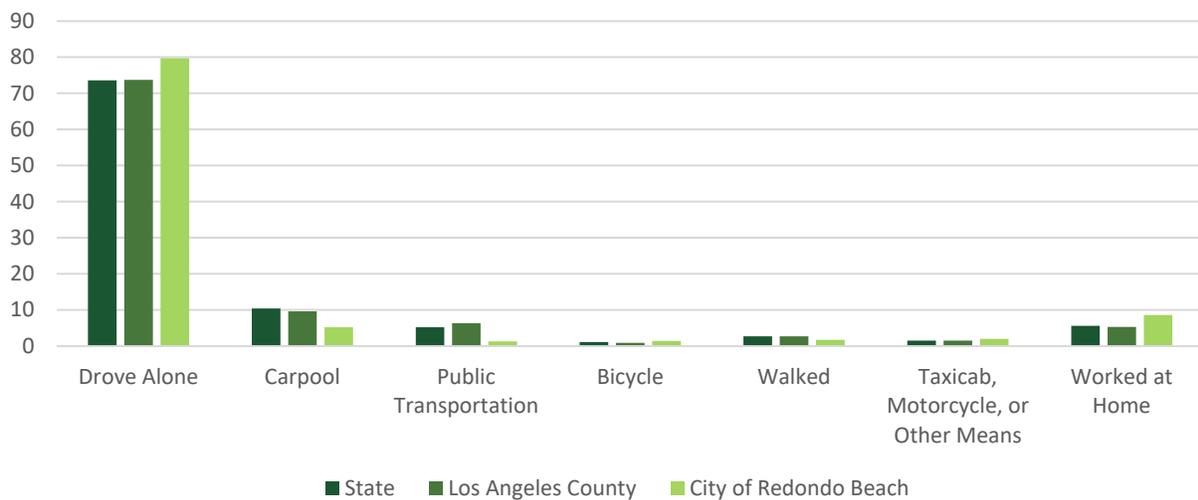
Figure 7 presents the average mode split for the State of California, Los Angeles County, and the City of Redondo Beach.

A majority (approximately 74%) of the employed population in California drove to work alone in 2017. A smaller portion of the population carpooled (10% percent) and took public transit (5% percent) to work. Approximately 3% of the state population walked to work, 1% biked, and 2% took a taxi, rode a motorcycle, or chose other means of transportation. Approximately 6% of the state population worked at home.

In Los Angeles County, 74% of the employed population drove to work alone in 2017. Less people carpooled to work (9.5%) and more people took public transportation (6%) than the state averages described above. Similar to the State of California, 3% of the County’s population walked to work, 1% biked, and 2% of the population got to work by taxi, motorcycle, or other means. The remaining 5% of the County’s population worked at home.

In the City of Redondo Beach, nearly 80% of the employed population drove to work alone. Fewer people carpooled (5.2%) took public transit (1.3%) or walked to work (1.7%) compared with Los Angeles County, but a slightly higher percent biked to work (1.4%).

Figure 7. Means of Transportation to Work: California, Los Angeles County, City of Redondo Beach



Source: U.S. Census Bureau 2017 American Community Survey 5-Year Estimates Means of Transportation to Work

Note: Charted data do not reflect the effects of COVID-19 pandemic and its effects on travel choices.



4. Methodologies & Thresholds of Significance

Consistent with CEQA, the potential for significant transportation impacts as a result of the proposed Project has been evaluated based on the transportation impact criteria of Appendix G to the California CEQA Guidelines.

4.1 Impact Criteria

Pursuant to Appendix G, impacts to transportation would be considered significant if the proposed Project were found to:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). CEQA Guidelines Section 15064.3, subdivision (b) includes the criteria for analyzing transportation impacts for land use projects, as follows: Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact.
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.

4.2 Analysis Methodologies

4.2.1 Criterion 1: Program, Plan, Ordinance, or Policy (PPOP)

The proposed Project will be qualitatively evaluated to determine if it is expected to conflict with a relevant PPOP related to the circulation system. A conflict could occur if the proposed Project would preclude the ability of a local jurisdiction to implement goals or policies.

4.2.2 Criterion 2: Conflict or be Inconsistent with CEQA Guidelines § 15064.3, Subdivision (b).

The BCHD does not have adopted CEQA impact criteria for transportation. As lead agency, the BCHD has the discretion to select thresholds of significance, based on relevant sources supported by substantial evidence. As such, BCHD is complying with the impact analysis guidelines as detailed in OPR's *Technical Advisory*. BCHD is also monitoring the City of Redondo Beach's ongoing update to the City's transportation analysis guidelines.

The OPR *Technical Advisory* describes the four components of a VMT analysis necessary to comply with the new CEQA guidelines:

1. **VMT Screening & Qualitative Review.** The first step is to determine when a VMT analysis is required. OPR recommends that projects be screened from a VMT analysis based on their size, location, and/or accessibility to transit. If a project does not meet the screening criteria requiring a VMT analysis, it can be presumed to have a less than significant impact under this impact criterion.
2. **VMT Analysis Methodology.** If a project is not screened from requiring a VMT analysis, a regional travel demand model is typically used to estimate a project's VMT. OPR recommends that VMT be reported as "Home-Based VMT" per capita for residential projects and "Home-Based Work VMT" per employee for the employees of a project site. Home-Based VMT includes all vehicle roundtrips originating from the residence of the trip-maker. Home-Based Work VMT includes only vehicle roundtrips between the residence of the trip-maker and their place of work.
3. **VMT Impact Thresholds.** Lead agencies, such as the BCHD, have the discretion to develop and adopt their own VMT thresholds, or rely on thresholds recommended by other agencies, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence. See also CEQA Guidelines Section 15064.3(c). OPR recommends that projects should have VMT that is at least 15 percent below existing VMT per capita or per employee when compared to a regional or citywide average of these metrics to avoid a significant impact.

4.2.2.1 City of Redondo Beach Draft VMT Methodologies & Thresholds of Significance

BCHD is the lead agency for the Healthy Living Campus Master Plan. While it does not have its own transportation analysis guidelines, for the purposes of this analysis, BCHD has reviewed and is following OPR's *Technical Advisory*. The City of Redondo Beach's in-progress guidelines for the purposes of the VMT impact analysis are also being monitored and implemented based on BCHD's current understanding of the direction the City is taking. The City of Redondo Beach is currently in the process of developing new transportation analysis guidelines to comply with SB 743. The VMT methodology employed in this study considers the City's ongoing efforts to develop new guidelines and is consistent with the draft screening methodologies and impact criteria presented to the Redondo Beach City Council on November 10, 2020. While not yet adopted, the Redondo Beach City Council has provided confirmation of the following:

- The South Bay Cities Council of Governments (SBCCOG) area would be the geographic baseline used to compare project related VMT performance in the determination of the potential for a significant VMT impact.
- The threshold of significance would be 16.8% below the baseline. CARB developed a scenario-based modeling system (called Vision) that was used to identify foreseeable emission reductions associated with existing mobile-source regulations and to explore different combinations of



further advancements in technologies, fuels, and transportation system efficiencies. The results of CARB’s modeling show that a 16.8% reduction from existing levels in VMT per capita for light-duty vehicles is needed in order to achieve the state required target of 80% reduction in GHGs by 2050. CARB’s recommendations are slightly higher than OPR’s recommendations (15% below) because the research is based on meeting slightly different goals.

- Several VMT screening options are currently under consideration by the City. If a project meets the screening criteria, it would not be required to conduct a VMT impact analysis. The screening options presented to the Council included:
 - o Small project screening (less than 110 net daily trips)
 - o Locally serving retail (10,000 square feet or less)
 - o Low VMT area (based on data from the Southern California Association of Governments [SCAG] travel demand forecasting model). The County of Los Angeles, in their newly adopted VMT impact analysis guidelines, is defining a low VMT area in accordance with CARB’s recommendation of 16.8% below the County’s Baseline VMT. The City of Redondo Beach has selected the same threshold in order to be consistent with the County’s approach and to support State climate goals.

Using the 2016 SCAG RTP model (the most recently available model, as the 2020 SCAG RTP model has not yet been released), Fehr & Peers estimated average VMT per capita and per employee for the SBCCOG region as detailed in Table 3. Consistent with the in-progress criteria being considered by the City of Redondo Beach and using their draft guidance, a significant project-related VMT impact would occur if a project’s home-based VMT per capita is greater than 11.4 (or a project’s home-based work VMT per employee is greater than 15.3. These same thresholds would be used to determine areas in the City which would be considered to have low VMT and could be screened out from requiring VMT analysis and could be presumed to have a less than significant transportation impact.

Table 3. City of Redondo Beach Draft VMT Impact Thresholds of Significance

VMT Metrics	SBCCOG Average VMT
	2016 Baseline
Home-Based VMT per Capita	13.3
<i>Threshold of Significance (16.8% below)</i>	11.1
Home-Based Work VMT per Employee	18.4
<i>Threshold of Significance (16.8% below)</i>	15.3

Source: Fehr & Peers, 2020; SCAG, 2016

4.2.3 Criterion 3: Geometric Hazards

The proposed Project will be evaluated to determine if it is expected to conflict with relevant design standards or introduce new or significantly worsen any existing geometric hazards, particularly related to the design of driveways.

4.2.4 Criterion 4: Emergency Response

The proposed Project will be evaluated to determine if it is expected to worsen emergency response times to the Project site or to the surrounding community.



5. CEQA Transportation Impact Analysis

This chapter assesses the impacts of the proposed Project in accordance with the methodologies and thresholds of significance detailed in Chapter 4.

5.1 Criterion 1: Programs, Plans, Ordinances, and Policies Consistency Review

The table below discusses local plans and policies that could have the potential to be inconsistent with the Project. Relevant design standards from the regulatory framework, such as ADA or the MUTCD are discussed under the evaluation of geometric hazards. Relevant plans, goals, policies and/or objectives that affect transportation and mobility in the City of Redondo Beach and City of Torrance were evaluated and, as summarized in **Table 4**, no conflicts were identified. Therefore, no significant transportation impact is anticipated based on this criterion and no mitigation would be required. Additionally, the proposed Project – including Phase 1 and Phase 2 of development – would have no effect on Metro’s PPOPs, and would not affect the State Highway System (other than a mildly positive benefit on intersection operations due to the net reduction in AM and PM peak hour vehicle trips) as detailed below under Impact Criterion 2, so no conflict with Caltrans PPOPs is expected.

Table 4. Programs, Plans, Ordinances, and Policies Consistency Review

Plans	Description	Relevant Goals, Policies and/or Objectives	Consistency
<p>Southern California Association of Governments Regional Transportation Plan</p>	<p>Every 4 years, SCAG updates its RTP for the 191-city SCAG region. Beginning with the 2012 RTP, SB 375 required the inclusion of a SCS in RTPs prepared by MPOs such as SCAG. The key goal of the SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies. A key objective is for planners and developers to consider how land use patterns influence travel demand.</p> <p>As part of the transportation modeling and analysis for the RTP/SCS, SCAG prepares population and employment growth projections by Transportation Analysis Zone (TAZ) and creates a future transportation network that represents the changes to the existing network based on the regional project list. TAZs are geographic polygons representing communities and neighborhoods at a sub-city level of detail.</p>	<p>1) Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.</p> <p>2) Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.</p> <p>3) Goal 4: Increase person and goods movement and travel choices within the transportation system.</p> <p>4) Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.</p>	<p>The Project site is located within a TAZ that is considered low VMT for employment as described further below under Criterion 2.</p> <p>Development of the proposed Project will result in trip reductions during Phase 1 and very modest increase in total daily trips at the end of Phase II, with per capita or per employee trip lengths anticipated to remain the same as existing. Maintaining low VMT is consistent with the goals of the SCAG RTP/SCS.</p>
<p>South Bay Bicycle Master Plan</p>	<p>The SBBMP is a multi-city bicycle master plan developed in 2011 by the LACBC and the SBBC with the common goal of improving the safety and convenience of bicycling in the South Bay Region. Seven member cities of the SBCCOG were involved in the development of the SBBMP, including the City of Redondo Beach and the City of Torrance.</p>	<p>1) Policy 1.1.4 – Review and encourage implementation of policies and facilities proposed in the SBBMP whenever planning new bicycle facilities or capital improvement projects that may be related to bicycle improvements.</p>	<p>The proposed Project is consistent with the SBBMP because the project would not make any changes to the existing bicycle infrastructure surrounding BCHD. It would not preclude the installation of planned bicycle facilities in the SBBMP, including the proposed bicycle facilities on Beryl Street and Flagler Lane / Flagler Alley. Appropriate striping and/or signage would be installed at driveway approaches to meet MUTCD and City design standards and in accordance with roadway safety best practices. In addition, the proposed Project supports this policy by providing bicycle amenities and parking on-campus for visitors and staff.</p>



Plans	Description	Relevant Goals, Policies and/or Objectives	Consistency
City of Redondo Beach General Plan Circulation Element	The Redondo Beach General Plan Circulation Element was adopted in 2009 and provides goals and policies for the circulation system.	<ol style="list-style-type: none"> 1) Goal G1 – Address the root causes of trip generation rather than simply reacting to the consequences. 2) Goal G4 – Allow for same and convenient walking, biking, or taking transit. 3) Goal G5 – Expand TDM programs that decrease the number of single-occupant vehicles on the road. 4) Goal G11 – Maintain the existing supply of public parking. 5) Goal G12 – Encourage all employers to pursue successful TDM measures. 6) Goal G14 – Increase the provision of bike lockers, bike racks, and lighting for bicycle facilities. 	<p>The proposed Project would reduce overall AM and PM peak period trips as detailed below under Criterion 2 and therefore is consistent with Goal G1. Additionally, as part of the Project development process, BCHD completed a shared parking study to determine how much parking the site needed, rather than simply providing what was code-required. Through that process, it was determined that fewer spaces were needed than would be required by code. By not overparking the Project site, land use can be maximized for productive uses and open space, and discourages excessive driving alone. The Project supports Goal G2 by providing bicycle amenities. (e.g., bike racks, employee showers), but the Project’s location in an area with few bicycle facilities and transit services means it is unlikely that a large share of visitors will arrive via non-auto modes.</p> <p>Goals G5/G12 The Project supports Goal G11 by providing all necessary parking on-site. The Project supports Goal G14 through provision of robust bicycle amenities on-site, including bike lockers and racks and showers.</p>
City of Redondo Beach Climate Action Plan	In partnership with the SBCCOG, the City of Redondo Beach Climate Action Plan contains goals and policies for daily management of the community and municipal operations.	<ol style="list-style-type: none"> 1) Facilitate pedestrian and neighborhood development 2) Reduce automobile emissions 	<p>The development of the BCHD campus will provide new open space and pathways across the campus. These pathways will be open to the public. The Project would add EV chargers on-site to encourage use of zero-emission vehicles, and would not preclude any other elements of the Climate Action Plan.</p>

Plans	Description	Relevant Goals, Policies and/or Objectives	Consistency
City of Torrance General Plan Circulation and Infrastructure Element	The Torrance General Plan Circulation and Infrastructure Element was adopted in 2010 and provides goals and policies for circulation and utility systems to support land use densities and intensities.	1) Objective CI-3 – Maintenance of LOS D or better at intersections. 2) Policy CI-4.1 – Protect residential neighborhoods from cut-through traffic by improving signage, guiding traffic away from residential areas, and employing appropriate traffic-calming methods. 3) Policy CI-8.5 – Promote the provision of reasonable and secure bicycle storage and shower and locker facilities at major commercial developments and employment centers. 4) Policy CI-8.9 – Promote the use of compact electric or similar powered vehicles for local trips.	Because the proposed Project would reduce trip generation in Phase 1 and Phase 2 under peak hours as described in further detail below under Criterion 2 the proposed Project would have a mildly positive effect on intersection operations so the proposed Project would be consistent with Objective CI-3. Additionally, the proposed egress-only driveway on Flagler Lane south of Beryl Street would be restricted to left-turns only, reducing the likelihood that Project traffic would cut through the adjacent residential neighborhood. The Project is consistent with Policy CI-4.1.. Consistent with Policy CI-8.5, the Project includes robust bicycle support facilities, including bike racks, bike lockers, and showers. Consistent with Policy CI-8.9, the Project includes provision of EV charging in preferred parking locations.
City of Torrance Climate Action Plan	In partnership with the SBCCOG, the City of Torrance Climate Action Plan contains goals and policies for daily management of the community and municipal operations. The goals and policies are identical to those included in the City of Redondo Beach’s Climate Action Plan.	1) Facilitate pedestrian and neighborhood development 2) Reduce automobile emissions	The development of the BCHD campus will provide new open space and pathways across the campus. These pathways will be open to the public. The Project would add EV chargers on-site to encourage use of zero-emission vehicles, and would not preclude any other elements of the Climate Action Plan.



5.2 Criterion 2: CEQA Guidelines § 15064.3, Subdivision (b) Conflict Review (VMT Analysis)

5.2.1 VMT Screening

As discussed in Chapter 4, the first step of a VMT impact analysis is to complete a project screening to determine whether a full VMT impact analysis needs to be conducted. Based on OPR's *Technical Advisory* and the City of Redondo Beach's in progress draft VMT methodologies, the following screening methods have been analyzed below for the Project: 110 daily trip screening and Low VMT Area screening. If the Project meets the criteria for either screening method, it is exempt from further VMT analysis. Stated another way, if the project generates less than 110 daily trips but is not in a Low VMT Area or, vice versa, if the Project generates more than 110 daily trips but is located in a Low VMT Area, it is exempt from VMT analysis.

5.2.1.1 110 Daily Trip Screening

To evaluate whether a VMT analysis is required for the proposed Project, a trip generation estimate was prepared. *Trip Generation, 10th Edition* (Institute of Transportation Engineers [ITE] 2017) represents the industry standard for estimating trip generation and is based on a compilation of empirical trip generation surveys at locations throughout the country. Using ITE is an analysis approach that is based on substantial evidence. However, ITE always recommends utilizing local data where it is available. Based on feedback from the City of Redondo Beach and the City of Torrance, an empirical trip generation study was conducted to validate and, if necessary, calibrate ITE trip generation rates to reflect site conditions on the BCHD campus. The trip generation methodology is further detailed in **Appendix A**.

A full day (24 hours) of driveway counts were collected at the Project site on a typical weekday when school was in session in October 2019 (included in this report as **Appendix B**). While driveway counts can be used for validating overall campus trip generation, they do not allow for the analysis of how trip generation rates for a particular land use at the BCHD campus vary from ITE rates. Providing more detailed trip rate validation further enhances the accuracy and defensibility of the trip rates used in this analysis, as well as allowing for the use of locally accurate trip rates by land use, so that the Project trip generation estimates accurately account for the expected trip generation with the changing mix of land uses in the Project.

In order to assess the difference by land use type, 24-hour pedestrian counts were conducted at the entrances to each building on campus on the same day as driveway counts were collected. Buildings 510 and 520 both contain exclusively Medical Office functions, so pedestrian counts at those buildings were used to develop a BCHD Medical Office trip rate to compare with ITE. Pedestrian trips to Building 514 could not be fully isolated by land use due to the mix of land uses contained therein. However, because the Childcare Center has a dedicated entrances to the building, that use could be isolated and compared with ITE. Membership scans of the Center for Health and Fitness were used to estimate trips to that use. The remaining Building 514 uses (Assisted Living, College, General Office), cannot be individually

compared with the ITE rate, but could be compared collectively, as described below in the discussion of the calibration process. Pedestrian counts are included in this report in **Appendix B**.

Table 5A presents the trip calibration for the proposed Project. For the existing campus, ITE rates were applied to each specific land use based on the existing occupied space. Using ITE rates, the BCHD campus is currently estimated to generate 5,854 daily trips, 530 AM peak hour trips, and 637 PM peak hour trips. **Table 5A** also presents the ITE trip generation estimates by building and the land uses that were isolatable, compared with the actual collected counts. As counted during 2019 on-site surveys, the existing BCHD campus generated 6,713 daily trips, 610 AM peak hour trips, and 455 PM peak hour trips. Compared with ITE estimates, the campus generates 15% more daily, 15% more AM peak hour trips, and 29% fewer PM peak hour trips. Most of the isolatable land uses in the count study show a similar trend of generating more trips than would be expected using ITE trip rate estimates, with the exception of the Childcare Center, which generated fewer trips compared with ITE across all time periods.

A combined calibration factor for the non-isolated uses at Building 514 was calculated by deducting the trips to the building destined for the Center for Health & Fitness and the Childcare Center from the total and calculating a factor with the remaining trips.

The Project also includes a proposed Aquatics Center land use and a Youth Wellness Center, which are not included in the current mix of existing uses. The trip generation estimation approach for these land uses is detailed below.

The Aquatics Center is not one that is currently included on the BCHD campus, nor does ITE provide a trip rate for aquatics centers. BCHD contracted with Ballard King & Associates (B*K) to prepare a market feasibility study to inform the development program for the Aquatics Center. B*K provided preliminary findings of the market assessment to be used to estimate potential net external trip generation – these findings have been included in this study as **Appendix C**.

Trip generation estimates for the Youth Wellness Center were based on planned programming information provided by BCHD, including programming for young adults from 9:00 AM – 3:00 PM and programming for middle and high schoolers from 3:00 – 8:00 PM. It was assumed that 75% of young adults would self-drive and arrive alone, while the remaining 25% would arrive via a non-auto mode; 17% of young adult trips would occur during the morning peak hour. For the school age children, it was assumed that 75% would walk or bicycle over after school, while 25% would be dropped off and picked up by a parent in a vehicle; 20% of school age trips would occur during the afternoon peak hour. One hundred percent of Youth Wellness Center staff were assumed to drive alone; 50% would arrive and depart in the peak hours.

The calibrated trip rates from **Table 5A** were applied to a trip generation analysis by phase for each of the two proposed phases in **Table 5B**. The phased analyses include estimated trip generation for the proposed land uses that would be added, with the trip generation of the existing uses to be removed.



5.2.1.1.1 Daily Trip Screening Evaluation – Phase 1

Based on the results of the estimates, in Phase 1, the proposed Project is expected to generate 1,365 daily trips, 73 AM peak hour trips, and 64 PM peak hour trips. After accounting for the existing trips on the roadway network from uses that would be removed to accommodate construction of the proposed uses, the proposed Project is expected to result in negative trip generation – that is, more trips are expected to be removed from the roadway network resulting from the removal of the existing uses than are expected to be added by the proposed Project. The reduction in trips expected with implementation of Phase 1 is estimated to be -1,919 daily trips, -236 AM peak hour trips, and -158 PM peak hour trips. This is in part because the proposed Project would replace high trip generating land uses, such as medical office, with lower trip generating land uses, such as the RCFE, but also because Phase 1 involves the demolition of a large number of existing uses but the construction of only a small portion of the full Master Plan. Phase 1 would result in fewer than 110 net new trips, falling below the threshold identified by OPR and the City of Redondo Beach for small project screening. Therefore, Phase 1 of the proposed Project meets this criterion for this screening threshold, and a VMT impact analysis would not be required as the proposed Project would be presumed to have a less than significant VMT impact at this stage of implementation.

5.2.1.1.2 Daily Trip Screening Evaluation – Phase 2

After completion of Phase 2, the proposed Project is expected to generate 3,360 daily trips, 271 AM peak hour trips, and 195 PM peak hour trips. After accounting for existing trips being removed from the roadway network, the proposed Project, inclusive of Phase 1 and Phase 2, is expected to generate a net of 376 new daily trips, -37 AM peak hour trips, and -28 PM peak hour trips. The Project would be net positive for daily trip generation, and the number of net new trips would exceed the 110-daily trip threshold identified by OPR and the City of Redondo Beach for small project screening. Therefore, the Project cannot be assumed to result in a less than significant impact for Phase 2 and is not exempt from VMT analysis based on this screening criteria.

**Table 5 A
Project Trip Calibration**

Land Use	Existing Occupied Land Use	ITE Rates							ITE Trip Generation							Collected Counts			Calibration Rate		
		Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour			PM Peak Hour			Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
			In	Out	Total	In	Out	Total		In	Out	Total	In	Out	Total						
Existing Uses To Be Removed																					
Building 514 - Child Care Center [c]	9.717 ksf gfa	47.62	53%	47%	11.00	47%	53%	11.12	463	57	50	107	51	57	108	384	91	63	0.829	0.850	0.583
Building 514 - Medical Office [c]	42.103 ksf gfa	34.80	78%	22%	2.78	28%	72%	3.46	1,465	91	26	117	41	105	146	1,556	137	106	1.062	1.167	0.726
Building 514 - Center for Health & Fitness [c]	12.294 ksf gfa	28.82	66%	34%	1.76	47%	53%	2.31	354	15	7	22	13	15	28	797	64	42	2.251	2.909	1.500
Building 514 (Other - Not isolatable)									497			44			52	547	17	11	1.101	0.386	0.212
Building 514 - Memory Care	120 beds	2.60	63%	37%	0.19	38%	62%	0.26	312	14	9	23	12	19	31				1.101	0.386	0.212
Building 514 - College [c]	1.519 ksf gfa	20.25	77%	23%	2.07	50%	50%	1.86	31	2	1	3	1	2	3				1.101	0.386	0.212
Building 514 - General Office [c]	15.810 ksf gfa	9.74	86%	14%	1.16	16%	84%	1.15	154	15	3	18	3	15	18				1.101	0.386	0.212
Subtotal Existing to be Removed									2,779			290			334	3,284	309	222			
Existing Uses Remaining																					
Building 510 - Medical Office [a]	45.913 ksf gfa	34.80	78%	22%	2.78	28%	72%	3.46	1,598	100	28	128	45	114	159				1.062	1.167	0.726
Building 520 - Medical Office [b]	46.881 ksf gfa	34.80	78%	22%	2.78	28%	72%	3.46	1,631	101	29	130	45	117	162				1.062	1.167	0.726
Subtotal Existing to Remain	92.794 ksf gfa	34.80	78%	22%	2.78	28%	72%	3.46	3,229			258			321	3,429	301	233	1.062	1.167	0.726
TOTAL TRIP GENERATION									5,854	380	150	530	208	429	637	6,713	610	455	1.147	1.151	0.714

Notes

[a] Bldg 510 is 51,500 SF GFA. At time of counts 4,998 SF of GLA space was vacant, which is an estimated 5,587 SF of GFA. This has been deducted from the space to reflect the occupied space at the time of the driveway counts.

[b] Bldg 520 is 47,700 SF GFA. At time of counts 815 SF of GLA space was vacant, which is an estimated 819 SF of GFA. This has been deducted from the space to reflect the occupied space at the time of the driveway counts.

[c] Bldg 514 is 157,681 SF GFA, and 132,900 SF of GLA (excluding 4,224 SF of outdoor child care area). At time of counts 13,044 SF of GLA was vacant, which is an estimated 15,476 SF of GFA. This has been deducted from the space to reflect occupied space at the time of the driveway counts. Land uses presented as GFA were estimated by applying overall bldg ratio of GFA to GLA.

**Table 5 B
Project Trip Generation**

Land Use			ITE Rates							Existing Trip Generation			Future Trip Generation								
	Phase 1	Phase 2	Daily	AM Peak Hour			PM Peak Hour			Calibration Rate			Calibrated Trip Generation			Phase 1			Phase 2		
				In	Out	Total	In	Out	Total	Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour	Daily	AM Peak Hour	PM Peak Hour
Proposed Project																					
Youth Wellness Center	9.100 ksf gfa	9.100 ksf gfa														288	24	31	288	24	31
Wellness Pavilion (Office)	0.000 ksf gfa	37.150 ksf gfa	9.74	86%	14%	1.16	16%	84%	1.15	1.147	1.151	0.714				0	0	0	415	50	31
PACE & Community Center (Office)	20.270 ksf gfa	20.270 ksf gfa	9.74	86%	14%	1.16	16%	84%	1.15	1.147	1.151	0.714				226	27	17	226	27	17
Center for Health & Fitness	0.000 ksf gfa	20.000 ksf gfa	28.82	66%	34%	1.76	47%	53%	2.31	2.251	2.909	1.500				0	0	0	1,297	102	69
Aquatics Center (includes outdoor pool deck)	0.000 ksf gfa	31.300 ksf gfa														0	0	0	583	46	31
Assisted Living / Memory Care	297 beds	297 beds	2.60	63%	37%	0.19	38%	62%	0.26	1.101	0.386	0.212				850	22	16	850	22	16
Subtotal Proposed Project																1,365	73	64	3,660	271	195
Existing Uses To Be Removed																					
Building 514 - Child Care Center [c]	-9.717 ksf gfa	-9.717 ksf gfa	47.62	53%	47%	11.00	47%	53%	11.12	0.829	0.850	0.583	384	91	63	-384	-91	-63	-384	-91	-63
Building 514 - Medical Office [c]	-42.103 ksf gfa	-42.103 ksf gfa	34.80	78%	22%	2.78	28%	72%	3.46	1.062	1.167	0.726	1,556	137	106	-1,556	-137	-106	-1,556	-137	-106
Building 514 - Center for Health & Fitness [c]	-12.294 ksf gfa	-12.294 ksf gfa	28.82	66%	34%	1.76	47%	53%	2.31	2.251	2.909	1.500	797	64	42	-798	-63	-43	-798	-63	-43
Building 514 (Other - Not isolatable)										1.101	0.386	0.212	547	17	11						
Building 514 - Memory Care	-120 beds	-120 beds	2.60	63%	37%	0.19	38%	62%	0.26	1.101	0.386	0.212	344	9	7	-344	-9	-7	-344	-9	-7
Building 514 - College [c]	-1.519 ksf gfa	-1.519 ksf gfa	20.25	77%	23%	2.07	50%	50%	1.86	1.101	0.386	0.212	34	1	1	-34	-1	-1	-34	-1	-1
Building 514 - General Office [c]	-15.810 ksf gfa	-15.810 ksf gfa	9.74	86%	14%	1.16	16%	84%	1.15	1.101	0.386	0.212	170	7	4	-170	-7	-4	-170	-7	-4
Subtotal Existing to be Removed													3,285	309	223	(3,284)	(307)	(222)	(3,284)	(307)	(222)
NET NEW TRIP GENERATION (NEW - REMOVED)																-1,920	-235	-158	376	-37	-28

Notes

[a] Bldg 510 is 51,500 SF GFA. At time of counts 4,998 SF of GLA space was vacant, which is an estimated 5,587 SF of GFA. This has been deducted from the space to reflect the occupied space at the time of the driveway counts.

[b] Bldg 520 is 47,700 SF GFA. At time of counts 815 SF of GLA space was vacant, which is an estimated 819 SF of GFA. This has been deducted from the space to reflect the occupied space at the time of the driveway counts.

[c] Bldg 514 is 157,681 SF GFA, and 132,900 SF of GLA (excluding 4,224 SF of outdoor child care area). At time of counts 13,044 SF of GLA was vacant, which is an estimated 15,476 SF of GFA. This has been deducted from the space to reflect occupied space at the time of the driveway counts. Land uses presented as GFA were estimated by applying overall bldg ratio of GFA to GLA.

5.2.1.2 Low VMT Area Screening

OPR guidance states that residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for screening if the project can reasonably be expected to generate VMT per resident or per worker that is similar to the existing land uses in the low VMT area. Low VMT areas for residential projects are defined as transportation analysis zones (TAZs) that generate VMT on a per capita basis that is at least 16.8% lower than the regional average (assumed to be the South Bay Cities Council of Governments area for the purposes of this analysis). Low VMT areas for office projects are defined as TAZs that generate VMT on a per employee basis that is at least 16.8% lower than the regional average.

The SCAG Regional Travel Demand Model, which includes Los Angeles County, is the most appropriate model to use for VMT forecasting within the City of Redondo Beach. Fehr & Peers calculated VMT per capita for population and employment for the TAZ that contains the Project site using the SCAG model. As shown below in **Table 6**, the Project TAZ is identified as a Low VMT Area for employment trips but not for residential trips, meaning that OPR guidance would allow Project-generated employment trips to be screened from VMT analysis, but a VMT analysis would still be required for residential trips. However, the City of Redondo Beach has provided direction that low VMT screening should only be applied if all components of a mixed-use project can be screened.

Table 6. Low VMT Screening for Project TAZ

VMT Type	SBCCOG Average	Project TAZ	% Difference
Home-Based VMT per Capita (Population)	13.3	12.7	-5%
Home-Based Work VMT per Employee	18.4	14.9	-19%

Source: Fehr & Peers, 2020; SCAG, 2016

As discussed above, the Project does not meet the criteria for screening based on location in a Low VMT Area.

5.2.2 Average Trip Length

BCHD is unique in the City of Redondo Beach in terms of its mix of medical office, memory care, education, and health and fitness uses. Additionally, BCHD serves members of the Redondo Beach, Hermosa Beach, and Manhattan Beach communities, as well as allowing for use of some service and facilities by neighboring communities. Therefore, by nature of its service area, the average trip length is likely to be shorter than typical uses in the SBCCOG subregion. Because of the unique nature of the BCHD campus, Fehr & Peers calibrated ITE trip generation rates to empirically-collected counts of the campus to more accurately reflect the traffic patterns of the site.



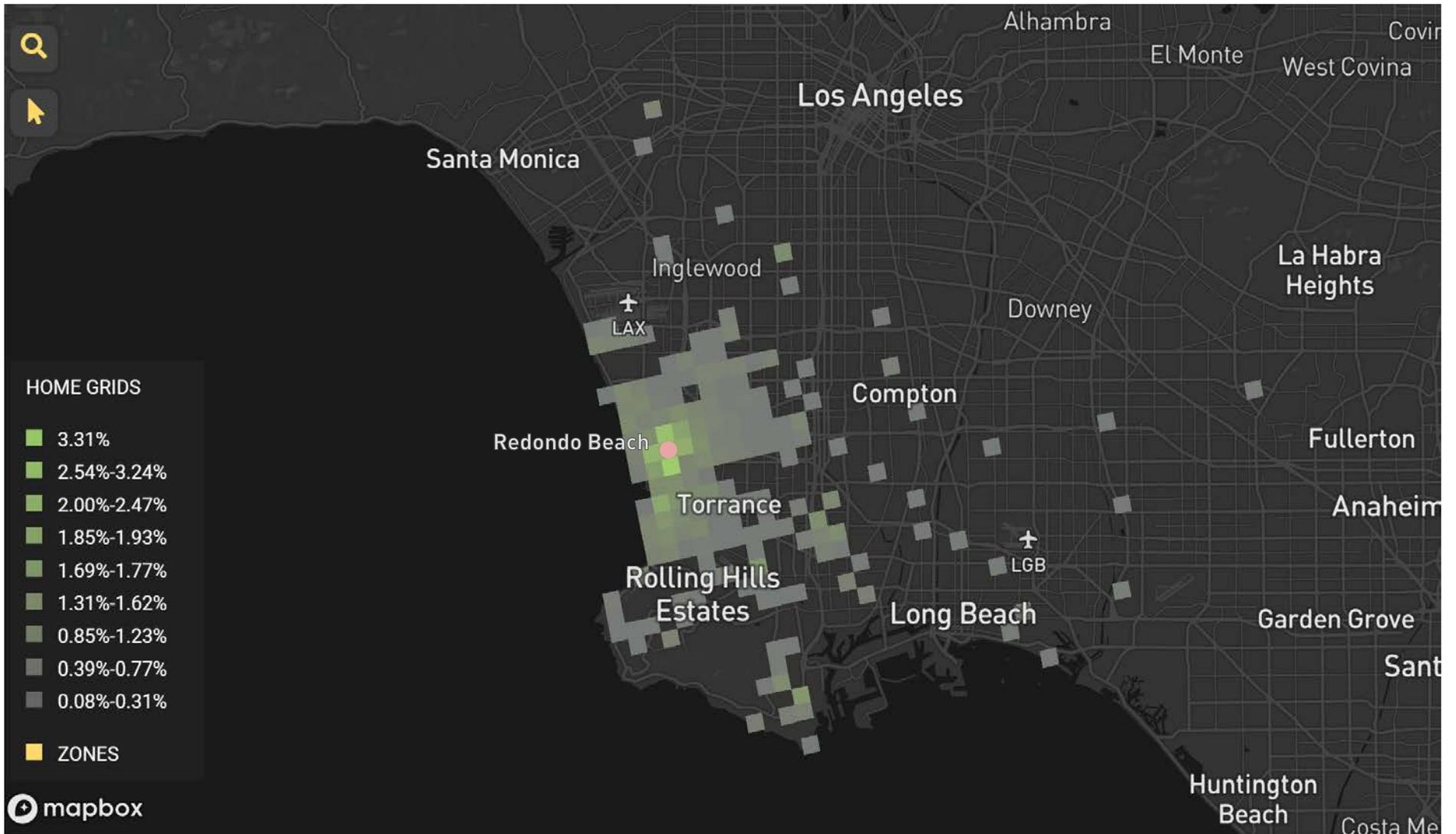
Applying this same general approach to the VMT analysis, Fehr & Peers obtained average trip length data for the BCHD site from the “big data” vendor Streetlight’s data location-based service (LBS) data. StreetLight aggregates and summarizes origin-destination data using cell phone and app location-based data (such as Google Maps) to quantify and measure the travel patterns for a site using the travel patterns of unique cell phone devices. These data are aggregated into grid cells to maintain individual user privacy.

Fehr & Peers input BCHD’s campus into the StreetLight portal and calculated the relative weight of the origin/destination grid cells to/from the BCHD campus. Given that the proposed Project would include similar uses as the current BCHD campus, and the Aquatics Center would be focused on serving a similar market area, existing trip lengths are likely to remain similar in the future.

The relative weight of the origin/destination grid cells to/from the Campus, are illustrated in **Figure 8**, below. The bulk of the grid cells with the greatest share of travel to/from the Project site are clustered within the Beach Cities and adjacent communities. Select grid cells beyond these areas indicate likely concentrations of employees, but these areas are scattered with small shares of travel to/from the Campus.

Calculated using StreetLight data collected for 2019, the average weekday trip length for the BCHD campus was 6.4 miles, and the average weekend trip length was 6.3 miles. Given that the proposed Project would include similar uses as the current BCHD campus, and the Aquatics Center would be focused on serving a similar market area², this trip length is likely to remain similar in the future. Comparing the weekday trip length to the SBCCOG regional average, the existing trip length is 63.4% lower than SBCCOG Regional Home-Based Work VMT per Employee for 2020 and 53.3% lower for 2040. Therefore, while the Project does not meet the criteria for the Low VMT Area screening, the low VMT nature of the proposed Project is confirmed both from the SCAG model for employment, and for the BCHD campus overall via the StreetLight data.

² The Ballard*King & Associates Aquatics Center Preliminary Market Feasibility Evaluation identified the Aquatics Center market area as the communities of Hermosa Beach, Manhattan Beach, and Redondo Beach. See Appendix C for further detail.



● Beach Cities Health District

Figure 8
BCHD Campus Origin/Destination Weights

Source: Streetlight

5.3 Vehicle Miles Traveled Impact Analysis

Based on the outcome of the VMT screening, Phase 1 of the proposed Project is assumed to result in a less than significant impact and VMT analysis is not required. Phase 2, however, does not meet the thresholds for either of the screening criteria, and its impact cannot be assumed to be less than significant. VMT analysis is required to determine whether implementation of Phase 2 would result in a significant impact.

5.3.1 Phase 1 Project VMT

Based on the OPR *Technical Advisory*, because Phase 1 of the proposed Project will reduce trips (and therefore VMT), it can be concluded Phase 1 alone would have a less than significant VMT impact.

5.3.2 Phase 1 and 2 Project VMT

Fehr & Peers calculated Phase 1 + Phase 2 Project VMT using the SCAG model. First, model socioeconomic data (SED) for the Tier 2 Project TAZ³ was updated to account for employment resulting from project implementation not already included in the model, as well as for the assisted living residents planned to not be on care services (66 residents). These residents would have some access to independent vehicles and therefore could generate home-based VMT per capita. The remaining residents of the assisted living and memory care facilities would not be expected to generate home based VMT since they would be less mobile.

Fehr & Peers then ran the SCAG model to calculate Project TAZ home-based VMT per capita and home-based work VMT per employee with the Project related SED changes. **Table 7** presents the results of the VMT analysis for the Project TAZ. As shown, Project TAZ home-based VMT per capita is 12.8 miles, while Project TAZ home-based work VMT per employee is 14.8 miles.

Table 7. Project VMT Estimates

VMT Metrics	VMT Estimates
Project TAZ Home-Based VMT per Capita	12.8
Project TAZ Home-Based Work VMT per Employee	14.8

Source: Fehr & Peers, 2021; SCAG, 2016

5.3.3 Impact Determination

Based on preliminary guidance from the City of Redondo Beach, a significance threshold of 16.8% below the regional average was selected for analysis for the proposed Project, and the regional average was defined as the average VMT per capita and per employee for the SBCCOG area, in which the City of Redondo Beach is located.

³ The SCAG Tier 2 TAZ in which the Project site is located is 21143100. The Tier 1 TAZ is 21143000.

Fehr & Peers compared Project TAZ home-based VMT per capita and home-based work VMT per employee to the regional averages. **Table 8** compares residential and employment VMT per capita or per employee to the regional average, home-based VMT per capita for the Project TAZ is 12.8 miles, which is 5% lower than the SBCCOG average of 13.3 miles, and is less than the 16.8% reduction required to avoid a significant impact. Home-based work VMT per employee is 14.8 miles, which is 19% lower than the SBCCOG average of 18.4 miles so is less than significant and no mitigation is required.

Based on the comparison of Project TAZ VMT to the regional averages using the SCAG model, implementation of Phase 2 of the proposed Project would result in a significant impact to VMT for the residential VMT based on the findings of the SCAG model, whereas the impact on employment VMT would be less than significant. However, because assisted living is a unique residential use which has very different trip and VMT generating characteristics compared with typical residential in the SCAG region, the SCAG model may overestimate the VMT per capita for the residential portion of the proposed Project.

Table 8. Project VMT Impact Analysis

VMT Metrics	VMT Estimates	Significant Impact?
Home-Based VMT per Capita		
<i>Threshold of Significance (16.8% below regional average)</i>	11.1	
Project TAZ Home-Based VMT per Capita	12.8	<i>Preliminarily but determined to be less than significant based on substantial evidence presented in Section 5.3.3.1</i>
Home-Based Work VMT per Employee		
<i>Threshold of Significance (16.8% below regional average)</i>	15.3	
Project TAZ Home-Based Work VMT per Employee	14.8	No
Source: Fehr & Peers, 2021; SCAG, 2016		

5.3.3.1 Assisted Living Trip & VMT Data

As previously discussed, StreetLight data for the Project site revealed that existing trip lengths to the site as a whole are lower than those calculated using the SCAG model (6.3 miles for all trips to the site). StreetLight data relies not on a forecast, but on actual observed behavior. If, as expected, trip making characteristics to the site remain similar after Project implementation, then no significant impact would ultimately occur.

While the Project’s assisted living cohort not on care services is a residential population, it is likely to generate vehicle trips and VMT at a lower level than typical residential uses contained in the SCAG model forecast. **Table 9** below illustrates the differences in trip generation (based on ITE) between the types of residential land uses considered by SCAG (single family homes and multifamily low-rise developments) and the types of residential uses included in the proposed Project (senior adult housing and assisted living).



Table 9. ITE Residential Daily Trip Generation Rates

ITE Code	Land Use	Unit of Measure	Daily Trips
210	Single Family Housing (Detached)	Dwelling Units	9.44
220	Multi-Family Housing (Low-Rise)	Dwelling Units	7.32
252	Senior Adult Housing (Attached)	Dwelling Units	3.70
254	Assisted Living	Beds	2.60

While ITE only considers the numbers of trips generated by various land uses, the characteristics of those trips (trip purpose and length) are likely just as divergent. For example, residents of single family homes and multifamily low rise developments may travel long distances daily for work, trip-chaining school or child care drop-offs and pick-ups with errands along the way, whereas retired residents of adult independent communities may make only short trips to one or two destinations per day, for example to the local grocery store or a doctor’s appointment. Assisted Living uses generate only 35% of the daily trips of typical multi-family housing.

While there is substantial evidence to show that assisted living generates far fewer vehicle trips, to further evaluate whether the residential portion of the project would generate less VMT per capita than estimates directly with the SCAG model, StreetLight data were also used to calculate an average trip length for a nearby assisted living facility.

The Kensington project in the City of Redondo Beach was considered for its applicability as a data source. However, Kensington opened in the fall of 2019, so there were insufficient samples to provide a statistically valid analysis. Additionally, Kensington includes Memory Care beds as part of its residential facilities, and so could result in an underestimate of the potential average trip length, since these residents could not be separated from the analysis.

Based on the recommendation of the City of Torrance, StreetLight data were evaluated for the Brookdale South Bay (Brookdale) Project located at 5481 West Torrance Boulevard in the City of Torrance. Brookdale provides independent living units similar to the 66 beds for assisted living (not on care services) included in the proposed Project, and so would have representative data for trip lengths. The StreetLight samples for 2019 were robust and determined to be statistically valid. Fehr & Peers calculated an average 2019 trip length of 4.8 miles using StreetLight data. This trip length is less than half that for the home based VMT per capita calculated for the proposed Project using the SCAG model. Because the Brookdale trip length also includes employee travel, it is likely that the residential average trip length could be even shorter.

With this additional substantial evidence of assisted living trip generation rates and average trip length, the potential for a Project-related home based VMT per capita impact is determined to be less than significant and no mitigation is required.

5.4 Criterion 3: Geometric Design Hazards Impact Review

This section discusses impacts regarding the potential increase of hazards due to a geometric design feature of the Project Site.

Impacts regarding the potential increase of hazards due to a geometric design feature generally relate to the design of access points to and from the Project site. Impacts can be related to vehicle/vehicle, vehicle/bicycle, or vehicle/pedestrian conflicts as well as to operational delays caused by vehicles slowing and/or queuing to access a project site. These conflicts may be created by the driveway configuration or through the placement of project driveway(s) in areas of inadequate visibility, adjacent to bicycle or pedestrian facilities, or too close to busy or congested intersections. These impacts are typically evaluated for permanent conditions after project completion but can also be evaluated for temporary conditions during project construction.

5.4.1 Pedestrian and Bicyclist Access

Pedestrian access to the Project site would be preserved via the same existing access from Prospect Avenue at the signalized middle BCHD driveway, leading to a series of pedestrian pathways ranging from 10-to-25 feet wide. Additionally, new pedestrian access would be provided from Beryl Street and Flagler Lane. These access points would provide connections between BCHD and adjacent streets, parking facilities, and transit stops. Pedestrian entrances would be separated from vehicular driveways and street trees and other potential impediments to adequate pedestrian visibility would be minimal. These pathways would provide direct public access to other buildings on the BCHD campus. The streets immediately bordering the Project site and nearly all the other streets in the vicinity include sidewalks facilitating pedestrian movement. However, there are currently no sidewalks along the west side of Diamond Street north of Prospect Avenue and the west side of Flagler Lane south of Beryl Street. These facilities would be provided as part of the separate BCHD Bike Path Project. Marked crosswalks are present at all signalized and all-way stop controlled intersections in the study area. Those arriving to the Project site by bicycle would have the same access opportunities as pedestrians and vehicles and would be able to utilize on-site bicycle parking facilities. Short-term bicycle parking facilities would be provided at the main entrance from Prospect Avenue. The Project would not negatively affect pedestrian and bicycle access and would further enhance access with the additional entrances. It additionally would not affect pedestrian and bicycle circulation on the streets bordering the site. The new driveway on Beryl would allow for right-turn in only and would provide access for a very limited portion of the proposed Project's visitors (only those visitors to the RCFE). Given that all project access to the existing site is clustered at the three driveways on Prospect, the additional Project access point on Beryl Street will better distribute project traffic around the site, and reduce the potential for vehicle-pedestrian interactions on Prospect Avenue compared to existing conditions. Additionally, implementation of the proposed Project will lead to a sharp reduction in total trip generation during Phase 1 and a reduction during the peak period of traffic, during the time of day when conditions are most stressful for pedestrians and bicyclists, following full implementation in Phase 2, implementation of the Project, including the new access driveways on Beryl Street and Flagler Lane would not negatively affect pedestrian and bicycle circulation



around the Project site. All Project related changes to the pedestrian circulation network would be designed to meet ADA requirements, and any applicable Federal, State, or Local design standards.

5.4.2 Vehicular Access

The Project would maintain the three existing driveways on Prospect Avenue, including the:

- Full access signalized main driveway
- Right-in/right-out only south driveway
- Right-in/right-out only north driveway

Vehicular access would also be provided at two new driveways, described below:

- One right-in only driveway on Beryl Street west of Flagler Lane
- One left-out only driveway on Flagler Lane south of Beryl Street

The new access locations associated with the proposed Project would be designed to meet State design standards, such as the California MUTCD and HDM, as well as City of Redondo Beach and City of Torrance (where applicable) standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet State requirements, and each city's requirements to protect pedestrian, driver, and bicyclist safety.

As a project design feature, to implement the inbound only driveway on Beryl Street the existing Beach Cities Transit bus stop would be relocated from the south side of Beryl Street adjacent to the proposed driveway to the southwest corner of Beryl Street and Flagler Lane. This would alleviate the potential for sight distance and vehicle-bus conflicts at this proposed driveway.

The proposed Project would not substantially increase hazards or conflicts and would contribute to overall walkability through enhancements to the Project site and additional pedestrian access at Beryl Street and Flagler Lane. Further, the proposed Project is expected to decrease the total number of inbound and outbound peak hour vehicular trips to the BCHD campus and surrounding intersections, which would improve safety. Lastly, the left-out only design of the Flagler Lane driveway will be designed to discourage departing vehicles from turning right into the residential neighborhood to the east of the Project site. Therefore, the proposed Project would have a less than significant impact in regard to geometric design hazards and no mitigation is required.

5.4.3 Cut Through Traffic

Although not listed in the CEQA impact criteria in Appendix G of the CEQA Guidelines, cut-through traffic is a concern expressed by the Pacific South Bay community of the City of Torrance. The City of Torrance is currently planning to pilot a temporary one-way partial closure of southbound traffic on Flagler Lane between Towers Street and Beryl Street as a measure to reduce cut-through traffic and speeding between Beryl Street and Del Amo Boulevard in the Pacific South Bay neighborhood. In preparation for the pilot, the

City of Torrance conducted license plate surveys during the AM and PM peak hours at four locations on the boundary of the neighborhood: at Beryl Street & Flagler Lane, Redbeam Avenue & Del Amo Boulevard, Wayne avenue & Del Amo Boulevard, and Entradero avenue & Del Amo Boulevard. The data showed that cut-through traffic was highest between Beryl Street & Flagler Lane and Redbeam Avenue & Del Amo Boulevard, with the following percentages of vehicles attributed to cut-through traffic during each peak hour:

- AM Peak Hour
 - o 47% northbound
 - o 41% southbound

- PM Peak Hour
 - o 31% northbound
 - o 31% southbound

Cut-through traffic typically occurs most often during peak commute periods when drivers may attempt to bypass congested locations, so daily cut through traffic would likely be lower than the percentages identified by the City of Torrance.

Independent of the City's license plate survey, as part of this study, Fehr & Peers collected neighborhood street segment counts on a number of roadways in the Pacific South Bay neighborhood that overlap with the roadways targeted by the City including on Flagler Lane between Beryl Street and Towers Street, and on Redbeam Avenue between Norton Avenue and Del Amo Boulevard. The counts were collected in January 2020, prior to the onset of the COVID-19 pandemic and on a weekday during a non-holiday week when schools were in session and weather was seasonal. The counts showed 1,350 daily vehicles entering the neighborhood from the north end via Flagler Lane at Beryl Street, and 1,110 daily vehicles exiting on the south end of the neighborhood on Redbeam Avenue at Del Amo Boulevard. In the opposite direction, the counts showed 1,240 daily vehicles entering the neighborhood from the south end on Redbeam Avenue at Del Amo Boulevard, and 1,358 daily vehicles exiting the neighborhood on the north end on Flagler Lane at Beryl Street. While most cut-through traffic occurs when congestion is high on arterial streets, assuming the percentage of cut-through traffic remained constant throughout the day using a blended cut-through rate of 37.5% of vehicles, a total of 73 vehicles heading southbound on Flagler Lane from Beryl Street during the midday period between 9:30 AM and 4:00 PM could be expected to be cutting through, for an average of 11 cut-through vehicles per hour in the midday. During the nighttime period between 6:00 PM and 7:30 AM, a total of 38 cut-through vehicles could be expected to cut through the neighborhood in the southbound direction, for an average of 3 cut-through vehicles per hour.

If the pilot is successful and neighborhood residents support it, the one-way closure could become permanent. Other options being considered include blocking access from Flagler Lane to Towers Street entirely or leaving conditions as is at the end of the pilot. Any permanent change would require resident support. It is unclear when or whether a permanent change would be implemented. By restricting exiting vehicles from the BCHD Campus's Flagler Lane driveway to left-turn only, the proposed Project is eliminating



from the outset the development of any Project visitor travel behavior which would increase cut-through traffic in the Pacific South Bay neighborhood.

Implementation of the proposed Project would not preclude the City of Torrance permanently converting Flagler Lane to one-way northbound, should they wish to do so. Additionally, given that development of the proposed Project will reduce peak hour trip generation compared to existing BCHD trip generation, there will be less overall congestion on major roadways in the area during busy commute times, allowing for more efficient movement of traffic and less incentive for drivers to cut through residential neighborhoods. Therefore, the impact of development of the proposed Project on cut through traffic conditions would be less than significant and no mitigation is required.

5.5 Criterion 4: Emergency Access Impact Review

The Project is expected to reduce the number of vehicles on the road during the AM and PM peak hours compared with existing conditions, as detailed above and shown in **Table 5**. These typical commute periods are when traffic congestion is at its highest within the Cities of Redondo Beach and Torrance, and the time when emergency response times are most affected by transportation conditions. By removing vehicles during these peak hours, the Project is expected to have a mildly positive effect on emergency response times by slightly reducing congestion. The Project would retain the existing driveways on Prospect Avenue and would provide additional ingress and egress points for emergency vehicles should they need to access the site via new driveways on Beryl Street and Flagler Lane. Therefore, the Project is expected to have a less than significant impact in regard to provision of emergency access and no mitigation is required.

6. Cumulative Analysis

6.1 Cumulative Pedestrian and Bicycle Conditions

Separate from the development of the proposed Project, BCHD has received a grant to develop a new protected bicycle facility along Flagler Alley and Flagler Lane between Prospect Avenue and Beryl Street. This bicycle facility will close the gap between an existing Class III facility running north-south on Flagler Lane north of Beryl Street and an existing Class II facility running northeast-southwest on Diamond Street west of Prospect Avenue. The BCHD Bike Path will develop the existing Flagler Alley, which is currently closed to vehicle traffic and is used as an informal pathway by bicyclists, with a Class I bicycle path. Where Flagler Alley meets Flagler Lane/Towers Street, the protected facility will continue north on the west side of the street as a Class IV protected bicycle lane. The BCHD Bike Path project also includes development of sidewalks along the west side of Flagler Lane between Towers Street and Beryl Street where today there are none. Development of the BCHD Bike Path has the potential to result in a modest VMT benefit by providing better access to the project site for non-auto modes. Because both projects are being planned in tandem, development of the proposed Project would not impact or preclude development of the BCHD Bike Path project.

The SBBMP includes a number of planned Class II and Class III bicycle facilities within the study area, including on 190th Street/Anita Street, Prospect Avenue, Del Amo Boulevard, and Entradero Avenue. The City of Redondo Beach is pursuing a Class II bicycle facility on Beryl Street. While the design for that project has not been finalized, it is expected to be implemented ahead of the opening year for the proposed Project. Additional bicycle facilities are expected to have a modest VMT benefit by expanding non-auto network connectivity throughout the study area.. As previously detailed in Section 5.2.1 that development of the proposed Project will reduce peak hour trip generation compared to existing BCHD trip generation, there will be less overall congestion on major roadways in the area during busy commute times, allowing for more comfortable and less stressful movement of bicyclists traveling on Project-adjacent streets. Therefore, the impact of development of the proposed Project on cumulative bicycle and pedestrian conditions would be less than significant.

6.2 Cumulative Roadway Conditions

As detailed above in Section 5.4, the City of Torrance is currently planning to pilot a temporary one-way partial closure of southbound traffic on Flagler Lane between Towers Street and Beryl Street. If made permanent, this would affect the cumulative roadway conditions. However, this would further limit any potential for proposed Project related cut-through traffic and would further improve pedestrian and bicycle safety on Flagler Lane. The proposed Project would not preclude any of these improvements.



6.3 Cumulative VMT Impact Determination

SCAG projects that the region will become more VMT efficient in the future, as transportation improvements, land use changes, and transportation demand management measures get implemented. **Table 10** presents the home-based VMT per capita and the home-based work VMT per employee for the 2016 base year model, and the 2040 cumulative forecast. As shown, VMT per capita is forecast to be reduced by 15% in the SBCCOG area and 12.5% within the City of Redondo Beach by 2040. The home-based VMT per employee is forecast to be reduced by 25.5% (SBCCOG area) and 26.3% (City of Redondo Beach).

Table 10. SBCCOG Area & City of Redondo Beach Cumulative VMT

VMT Metrics		2016 Base Year Model	2040 Cumulative Model	% Change
Home-Based VMT Per Capita	SBCCOG Area	13.3	11.3	-15.0%
	Redondo Beach	14.4	12.6	-12.5%
Home-Based Work VMT Per Employee	SBCCOG Area	18.4	13.7	-25.5%
	Redondo Beach	16.0	11.8	-26.3%

As such, a project’s potential to increase VMT is greater using the base year model, rather than the cumulative forecast. Given this characteristic, the transportation impact analysis guidelines for VMT in most communities, including the in-progress City of Redondo Beach guidelines, require that a project’s VMT impact analysis be conducted using the base-year model. When it is determined whether a project does or does not have a significant impact using the base-year model, that conclusion holds for cumulative conditions as well. As noted above, the Project is projected to have a small net increase in average daily trips and less than significant VMT impact. Furthermore, the Project would be consistent with the applicable goals and objectives of the SCAG 2016 RTP/SCS. Therefore, the Project’s cumulative impact on VMT would not be significant.

7. Summary

This study was prepared to analyze the potential transportation impacts associated with the proposed BCHD Healthy Living Campus Master Plan Project, which includes two phases (Phase 1 and Phase 2) of development. The following summarizes the results of the study:

- The proposed Project involves the demolition of existing structures on the BCHD campus and the long-term redevelopment in two phases of the campus and the adjacent vacant lot with new public health care facilities as well as address deteriorating buildings in need of extensive maintenance. New construction in Phase 1 would include an RCFE structure providing 60 replacement memory care units and 157 new assisted living units, offices for BCHD staff, 14,000 sf of space for PACE, and 6,270 sf of Community Services space. Phase 2 of the Project would include a Community Health and Wellness Center with 31,300 sf of Aquatics Center, 20,000 sf Center for Health and Fitness, a 37,150 sf Wellness Pavilion, and a 7,100 sf Youth Wellness Center. A new subterranean parking garage and surface parking lot would accommodate up to 739 vehicles. Site access would continue to be provided by the three existing driveways on Prospect Avenue, as well as via two new driveways directly into the planned subterranean parking facility at the northeast corner of the campus. The proposed Project is expected to be completed by 2032.
- A transportation impact analysis for the proposed Project was prepared in accordance with the four impact criteria included in Appendix G of the CEQA Guidelines, which are an evaluation of whether the project would (1) conflict with a program, plan ordinance or policy addressing the circulation system; (2) conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) (VMT impact analysis); (3) substantially increase hazards due to a geometric design feature; or (4) result in inadequate emergency access.
- The proposed Project was evaluated and would not be expected to conflict with a program, plan ordinance or policy addressing the circulation system and would, therefore, have a less than significant impact under this criterion.
- The proposed Project is expected to generate fewer vehicle trips compared to those already traveling to the existing BCHD campus during peak hours and in Phase 1. In Phase 2, the proposed Project would generate 376 additional daily trips. Based on the net increase in daily trips, the proposed Project would require that a VMT impact analysis be prepared.
- Using the draft methodologies of the City of Redondo Beach, the proposed Project is not expected to have a significant home-base-work VMT per employee impact. Using the City's methodologies, the proposed Project could have the potential to have a significant home-based VMT per capita impact for the limited number of assisted living residents not on care services. However, based on additional substantial evidence that indicates that assisted living



generates fewer vehicle trips and has a shorter average trip length than the SCAG model indicates, the proposed Project is not expected to have a significant home-based VMT per capita impact.

- The proposed Project was evaluated for its effect on geometric hazards. The proposed new driveway on Beryl Street would require a project design feature that would shift an existing Beach Cities Transit bus stop in order to eliminate the potential for occasional visibility issues with this driveway. With this project design feature, no geometric hazards would be expected, and the Project would have a less than significant impact under this criterion.
- Because the proposed Project would be adding access driveways to the BCHD campus and would be removing vehicles from adjacent roadways during peak commute periods when congestion is at its highest, it would have a mildly positive benefit on emergency response times, and therefore would have a less than significant impact under this criterion.
- Although not listed in the CEQA impact criteria in Appendix G of the CEQA Guidelines, the City of Torrance has evaluated the potential for cut-through traffic in the Pacific South Bay neighborhood. The City's analysis indicated that cut-through traffic is a present share of traffic on these streets during the AM and PM peak hours. The proposed Project is not expected to exacerbate the potential for cut-through traffic, and the City's pilot closure of Flagler Lane for southbound travel will further reduce the potential for the proposed Project to affect cut through traffic.
- Because the proposed Project is not expected to generate any significant transportation impacts, no mitigation measures are required.

Appendix A – Trip Generation Methodology

TRIP GENERATION CALIBRATION APPROACH

Trip Generation, 10th Edition (Institute of Transportation Engineers [ITE], 2017) represents the industry standard for estimating trip generation and is based on a compilation of empirical trip generation surveys at locations throughout the country. Using ITE is generally a defensible approach. However, ITE always recommends utilizing local data where it is available, and based on feedback from the Cities of Redondo Beach and Torrance, Fehr & Peers conducted an empirical trip generation study to validate, and if necessary calibrate ITE trip generation rates to reflect site conditions on the BCHD Campus.

A full day (24-hour) of driveway counts were collected at the Project site on Tuesday October 22, 2019. While driveway counts can be used for validating overall campus trip generation, they do not allow for the analysis of how trip generation rates for a particular land use at the BCHD campus varies from ITE rates. Providing more detailed trip rate validation further enhances the accuracy and defensibility of the trip rates used in the EIR, as well as allows for the use of locally accurate trip rates by land use, so that the Project trip generation estimates accurately account for the expected trip generation with the change in mix of land uses in the Project.

In order to assess the difference by land use type, 24-hour pedestrian counts were conducted at the entrances to each building on campus on the same day. Buildings 510 and 520 both contain exclusively Medical Office functions, so pedestrian counts at those buildings were used to develop a BCHD Medical Office trip rate to compare with ITE. Building 514, because it is mixed use, cannot be fully isolated by land use. However, because the Childcare Center has a dedicated entrance to the building, that use could be isolated and compared with ITE. The Medical Office contained within Building 514 was assumed to have the same patterns as buildings 510 and 520, so those calibration rates were applied.

The remaining Building 514 uses (Assisted Living, Education, General Office), cannot be individually compared with the ITE rate, but could be compared collectively.

Counts of members in the CHF were provided for 2019 for the Center for Health and Fitness (CHF). These data were used to estimate existing trips associated with the CHF for the purposes of validation since the CHF could not be isolated. Weekday member counts were averaged across weekdays and by hour. In order to estimate vehicle trips, the average visit length was assumed to be 90 minutes. Conversion from counted persons to vehicle trips was made by applying the overall average vehicle occupancy of 1.37 for the campus which was calculated by comparing the total pedestrian counts for the building doorways with the vehicle counts of the campus driveways. The CHF is primarily class/program focused and caters to older clientele who are more likely to travel to activities with a companion. CHF estimated existing trips are included in a table in this appendix.

The overall trip rate calibration is included in a table in the body of this report.

TRIP GENERATION METHODOLOGY – AQUATICS & YOUTH WELLNESS CENTERS

The body of this report details the phased trip generation estimates. Appendix C includes the memorandum prepared by the Aquatics Consultant that was used to develop aquatics center trip generation estimates from the market evaluation. The following table in this appendix details the trip generation derived from the market estimates for the Aquatics Center.

Due to the COVID-19 pandemic, and closure of many recreation and aquatics centers in the area, vehicle counts were unable to be collected. The City of Redondo Beach has location of the South Bay Aquatics Center located on Artesia Boulevard. This facility has not been operating with regular class schedules, so would not result in reliable data for validating the trip generation estimates. StreetLight data was reviewed for 2019 for the South Bay Aquatics center as an alternative source for trip generation data. However, it did not have a sufficient sample size to be used as reliable counts.

The Youth Wellness Center program assumptions prepared by the expected operator were used to estimate the overall number of employees and participating students. The assumptions for mode split were made based on reasonable estimates given that the program will primarily be serving students in the immediate area. A table detailing these assumptions are included in this appendix.

Center for Health & Fitness Existing Trip Generation

Time of Count	M-F Average Count Members in Gym	Person Trips			Vehicle Trips		
		Arrival	Departure	Total	In	Out	Total
5:30:00 AM	6	6	0	6	4	0	4
6:00:00 AM	20	14	0	14	10	0	10
6:30:00 AM	35	15	0	15	11	0	11
7:00:00 AM	47	18	6	24	14	4	18
7:30:00 AM	51	18	14	32	13	10	23
8:00:00 AM	65	29	15	44	21	11	32
8:30:00 AM	73	26	18	44	19	13	32
9:00:00 AM	95	40	18	58	29	13	42
9:30:00 AM	98	32	29	61	24	21	45
10:00:00 AM	106	34	26	60	25	19	44
10:30:00 AM	92	26	40	66	19	29	48
11:00:00 AM	94	34	32	66	25	23	48
11:30:00 AM	85	25	34	59	18	25	43
12:00:00 PM	80	21	26	47	15	19	34
12:30:00 PM	66	20	34	54	14	25	39
1:00:00 PM	57	16	25	41	12	18	30
1:30:00 PM	52	16	21	37	12	15	27
2:00:00 PM	48	16	20	36	12	14	26
2:30:00 PM	48	16	16	32	12	11	23
3:00:00 PM	44	12	16	28	9	11	20
3:30:00 PM	41	13	16	29	9	12	21
4:00:00 PM	41	16	16	32	12	11	23
4:30:00 PM	43	14	12	26	10	9	19
5:00:00 PM	45	15	13	28	11	9	20
5:30:00 PM	46	17	16	33	12	12	24
6:00:00 PM	43	11	14	25	8	10	18
6:30:00 PM	38	10	15	25	7	11	18
7:00:00 PM	32	11	17	28	8	12	20
7:30:00 PM	26	5	11	16	4	8	12
8:00:00 PM	19	3	10	13	2	7	9
8:30:00 PM	11	3	11	14	2	8	10
9:00:00 PM	5	0	6	6	0	4	4
Total		552	547	1,099	403	394	797

Aquatics Center Trip Generation Estimates

	NSGA Factors	Beach Cities Population	Swimming Days / Year	Annual Swimming Days	BCHD Market Capture	BCHD Swimming Days	Weekday Swimming Days % [a]	Annual Weekday Visits	Weekend Swimming Days %	Annual Weekend Visits	Avg Weekday Visits	Avg Weekend Visits	% Internal to Site	Avg Vehicle Occupancy	Avg Weekday External Vehicle Trips	Avg Weekend External Vehicle Trips
Service Area Population that swims (7+)		86,145									251	104				
% Frequent Swimmers (112 days)	8.5%	7,322	112	820,064	3.0%	24,602	71%	17,395	29%	7,207	69	69	20%	1	110	110
% Infrequent Swimmers (67 days)	41.7%	35,922	67	2,406,774	3.0%	72,203	25%	51,051	75%	21,152	203	203	10%	2	365	365
% Occasional Swimmers (15 days)	49.8%	42,900	15	643,500	3.0%	19,305	10%	13,649	90%	5,656	54	54	0%	3	108	108
				3,870,338		116,110		82,095		34,015	326	326			583	583

Notes

[a] Ratio of weekday to weekend swimming days for frequent swimmers assumed to be ratio of weekday (non holiday) weekdays to weekend days. Infrequent and occasional assumed to be predominantly swimming on weekends

Youth Wellness Center Trip Generation Estimates (based on Program Assumptions)

	Population Size	Auto Mode Choice	Trips Per Day	Total Average Daily Trips	Program	AM Peak Hour (8-9AM)	PM Peak Hour (4-5PM)	Notes
Clients								
School Age (12-18)	100	25%	4	100	3PM-8PM	0	20	Auto assumed to be all drop off (4 trips instead of 2); assume 1/5 of daily trips in PH
Young Adults (18-25)	100	75%	2	150	9AM-3PM	13	0	Self Drive, assume 1/6 of arrivals in PH
Staff								
Full Time								
Medical	8	100%	2	16		4	4	Self Drive, assume 50% arrive & depart in PHs
Executive	3	100%	2	6		3	3	Self Drive, assume 100% arrive & depart in PHs
Part Time	8	100%	2	16		4	4	Self Drive, assume 50% arrive & depart in PHs
Total				288		24	31	

Appendix B – Driveway & Pedestrian Counts

IN & OUT

Prospect I Medical 510 Dwy N/O Prospect Ave

Day: Tuesday
Date: 10/22/2019

City: Redondo Beach
Project #: CA19_5613_002

DAILY TOTALS				IN	OUT					Total
				653	360					1,013
AM Period	IN	OUT		TOTAL	PM Period	IN	OUT		TOTAL	TOTAL
0:00	2	0		2	12:00	6	6		12	
0:15	0	1		1	12:15	14	6		20	
0:30	0	0		0	12:30	9	10		19	
0:45	0	2	0	1	12:45	10	39	10	32	71
1:00	0	0		0	13:00	16	5		21	
1:15	0	0		0	13:15	17	7		24	
1:30	0	0		0	13:30	7	3		10	
1:45	0	0		0	13:45	13	53	2	17	70
2:00	0	0		0	14:00	4	9		13	
2:15	0	0		0	14:15	7	8		15	
2:30	0	0		0	14:30	8	4		12	
2:45	0	0		0	14:45	8	27	6	27	54
3:00	0	0		0	15:00	11	5		16	
3:15	0	0		0	15:15	6	6		12	
3:30	0	0		0	15:30	9	7		16	
3:45	0	0		0	15:45	9	35	15	33	68
4:00	0	0		0	16:00	8	7		15	
4:15	0	0		0	16:15	11	7		18	
4:30	0	0		0	16:30	16	9		25	
4:45	0	0		0	16:45	7	42	15	38	80
5:00	1	0		1	17:00	12	12		24	
5:15	1	0		1	17:15	10	11		21	
5:30	5	2		7	17:30	11	11		22	
5:45	4	11	0	2	17:45	3	36	9	43	79
6:00	4	1		5	18:00	4	2		6	
6:15	7	0		7	18:15	3	4		7	
6:30	5	1		6	18:30	4	1		5	
6:45	1	17	0	2	18:45	3	14	1	8	22
7:00	11	0		11	19:00	1	1		2	
7:15	17	1		18	19:15	1	0		1	
7:30	18	6		24	19:30	1	0		1	
7:45	29	75	0	7	19:45	2	5	0	1	6
8:00	25	5		30	20:00	1	3		4	
8:15	24	6		30	20:15	1	4		5	
8:30	27	7		34	20:30	0	3		3	
8:45	34	110	0	28	20:45	0	2	0	10	12
9:00	33	14		47	21:00	0	0		0	
9:15	20	9		29	21:15	0	0		0	
9:30	16	4		20	21:30	1	1		2	
9:45	23	92	7	34	21:45	0	1	0	1	2
10:00	17	10		27	22:00	0	2		2	
10:15	12	8		20	22:15	0	1		1	
10:30	11	8		19	22:30	0	0		0	
10:45	19	59	11	37	22:45	0	0		3	3
11:00	11	10		21	23:00	0	0		0	
11:15	10	9		19	23:15	0	0		0	
11:30	5	9		14	23:30	0	0		0	
11:45	7	33	8	36	23:45	0	0		0	
TOTALS	399	147		546	TOTALS	254	213			467
SPLIT %	73.1%	26.9%		53.9%	SPLIT %	54.4%	45.6%			46.1%

DAILY TOTALS				IN	OUT					Total	
				653	360					1,013	
AM Peak Hour	8:15	8:30		8:15	PM Peak Hour	13:00	16:45		16:30		
AM Pk Volume	118	40		155	PM Pk Volume	53	49		92		
Pk Hr Factor	0.868	0.714		0.824	Pk Hr Factor	0.779	0.817		0.920		
7 - 9 Volume	185	35	0	0	220	4 - 6 Volume	78	81	0	0	159
7 - 9 Peak Hour	8:00	8:00		8:00	4 - 6 Peak Hour	16:15	16:45		16:30		
7 - 9 Pk Volume	110	28		138	4 - 6 Pk Volume	46	49		0	0	92
Pk Hr Factor	0.809	0.700	0.000	0.000	0.784	Pk Hr Factor	0.719	0.817	0.000	0.000	0.920

VOLUME

Silverado Beach Cities Memory Care Community Dwy N/O N Prospect Ave

Day: Tuesday
Date: 10/22/2019

City: Redondo Beach
Project #: CA19_5612_001

DAILY TOTALS					IN	OUT						Total
					129	583						712
AM Period	IN	OUT	EB	WB	TOTAL	PM Period	IN	OUT	EB	WB	TOTAL	
00:00	0	1			1	12:00	3	20			23	
00:15	0	1			1	12:15	1	17			18	
00:30	1	0			1	12:30	6	11			17	
00:45	0	1	0	2	0	12:45	6	16	8	56	14	
01:00	0	0			0	13:00	1	10			11	
01:15	0	0			0	13:15	1	10			11	
01:30	0	0			0	13:30	2	15			17	
01:45	0	0			0	13:45	3	7	11	46	14	
02:00	0	0			0	14:00	3	17			20	
02:15	0	0			0	14:15	1	10			11	
02:30	0	0			0	14:30	4	13			17	
02:45	0	0			0	14:45	3	11	10	50	13	
03:00	0	0			0	15:00	4	13			17	
03:15	0	0			0	15:15	1	10			11	
03:30	0	0			0	15:30	1	13			14	
03:45	1	1	0		1	15:45	6	12	12	48	18	
04:00	0	0			0	16:00	1	10			11	
04:15	0	0			0	16:15	4	11			15	
04:30	0	0			0	16:30	3	7			10	
04:45	1	1	0		1	16:45	1	9	16	44	17	
05:00	0	0			0	17:00	5	25			30	
05:15	1	1			2	17:15	3	9			12	
05:30	1	1			2	17:30	1	9			10	
05:45	0	2	0	2	0	17:45	1	10	6	49	7	
06:00	0	1			1	18:00	4	14			18	
06:15	0	2			2	18:15	2	3			5	
06:30	0	2			2	18:30	1	8			9	
06:45	0	3	8		3	18:45	1	8	5	30	6	
07:00	0	2			2	19:00	0	2			2	
07:15	1	1			2	19:15	1	3			4	
07:30	1	2			3	19:30	1	7			8	
07:45	1	3	3	8	4	19:45	0	2	1	13	1	
08:00	2	4			6	20:00	0	3			3	
08:15	1	5			6	20:15	0	1			1	
08:30	2	5			7	20:30	3	4			7	
08:45	3	8	20	34	23	20:45	1	4	2	10	3	
09:00	2	13			15	21:00	5	11			16	
09:15	1	8			9	21:15	1	1			2	
09:30	4	9			13	21:30	0	0			0	
09:45	1	8	18	48	19	21:45	1	7	2	14	3	
10:00	0	22			22	22:00	0	0			0	
10:15	2	17			19	22:15	0	0			0	
10:30	5	16			21	22:30	0	0			0	
10:45	3	10	10	65	13	22:45	0	0			0	
11:00	3	12			15	23:00	0	0			0	
11:15	0	12			12	23:15	0	0			0	
11:30	2	18			20	23:30	0	1			1	
11:45	3	8	12	54	15	23:45	1	1	1	2	2	
TOTALS	42	221			263	TOTALS	87	362			449	
SPLIT %	16.0%	84.0%			36.9%	SPLIT %	19.4%	80.6%			63.1%	

DAILY TOTALS					IN	OUT	EB	WB	Total
					129	583	0	0	712

AM Peak Hour	10:15	09:45		09:45	PM Peak Hour	12:00	16:15		12:00		
AM Pk Volume	13	73		81	PM Pk Volume	16	59		72		
Pk Hr Factor	0.650	0.830		0.920	Pk Hr Factor	0.667	0.590		0.783		
7 - 9 Volume	11	42	0	0	53	4 - 6 Volume	19	93	0	0	112
7 - 9 Peak Hour	08:00	08:00		08:00	4 - 6 Peak Hour	16:15	16:15				16:15
7 - 9 Pk Volume	8	34	0	0	42	4 - 6 Pk Volume	13	59	0	0	72
Pk Hr Factor	0.667	0.425	0.000	0.000	0.457	Pk Hr Factor	0.650	0.590	0.000	0.000	0.600

IN & OUT

Beach Cities Health District Dwy N/O Prospect Ave

Day: Tuesday
Date: 10/22/2019

City: Redondo Beach
Project #: CA19_5613_001

DAILY TOTALS				IN	OUT					Total
				2,603	2,385					4,988
AM Period	IN	OUT	TOTAL	PM Period	IN	OUT	TOTAL			
0:00	0	0	0	12:00	36	61	97			
0:15	0	0	0	12:15	42	64	106			
0:30	0	0	0	12:30	41	62	103			
0:45	0	1	1	12:45	66	185	50	237	116	422
1:00	1	2	3	13:00	60	40	100			
1:15	0	0	0	13:15	63	27	90			
1:30	1	0	1	13:30	55	47	102			
1:45	0	2	1	13:45	62	240	41	155	103	395
2:00	1	0	1	14:00	54	54	108			
2:15	1	0	1	14:15	71	47	118			
2:30	2	1	3	14:30	43	56	99			
2:45	2	6	1	14:45	40	208	44	201	84	409
3:00	1	1	2	15:00	50	50	100			
3:15	1	1	2	15:15	39	40	79			
3:30	0	0	0	15:30	37	57	94			
3:45	0	2	0	15:45	32	158	69	216	101	374
4:00	1	1	2	16:00	32	45	77			
4:15	0	0	0	16:15	47	58	105			
4:30	1	1	2	16:30	29	57	86			
4:45	4	6	0	16:45	21	129	49	209	70	338
5:00	4	0	4	17:00	23	81	104			
5:15	9	1	10	17:15	24	55	79			
5:30	6	0	6	17:30	13	39	52			
5:45	13	32	2	17:45	14	74	34	209	48	283
6:00	12	4	16	18:00	9	44	53			
6:15	13	3	16	18:15	50	50	100			
6:30	28	5	33	18:30	21	28	49			
6:45	35	88	10	18:45	15	95	11	133	26	228
7:00	32	8	40	19:00	12	8	20			
7:15	37	8	45	19:15	24	15	39			
7:30	46	10	56	19:30	9	12	21			
7:45	92	207	15	19:45	22	67	11	46	33	113
8:00	80	24	104	20:00	14	66	80			
8:15	74	26	100	20:15	3	12	15			
8:30	80	27	107	20:30	1	7	8			
8:45	95	329	31	20:45	2	20	8	93	10	113
9:00	75	42	117	21:00	1	15	16			
9:15	61	50	111	21:15	2	3	5			
9:30	68	37	105	21:30	6	1	7			
9:45	71	275	36	21:45	9	18	2	21	11	39
10:00	69	69	138	22:00	3	1	4			
10:15	57	47	104	22:15	1	2	3			
10:30	66	54	120	22:30	2	14	16			
10:45	66	258	49	22:45	0	6	1	18	1	24
11:00	50	68	118	23:00	0	3	3			
11:15	72	64	136	23:15	0	1	1			
11:30	36	81	117	23:30	0	1	1			
11:45	40	198	59	23:45	0	2	7			
TOTALS	1403	840	2243	TOTALS	1200	1545	2745			
SPLIT %	62.6%	37.4%	45.0%	SPLIT %	43.7%	56.3%	55.0%			

DAILY TOTALS				IN	OUT					Total
				2,603	2,385					4,988

AM Peak Hour	8:00	11:00	10:30	PM Peak Hour	12:45	16:15	13:30			
AM Pk Volume	329	272	489	PM Pk Volume	244	245	431			
Pk Hr Factor	0.866	0.840	0.899	Pk Hr Factor	0.924	0.756	0.913			
7 - 9 Volume	536	149	0	0	4 - 6 Volume	203	418	0	0	621
7 - 9 Peak Hour	8:00	8:00	8:00	4 - 6 Peak Hour	16:00	16:15	16:15			
7 - 9 Pk Volume	329	108	0	0	4 - 6 Pk Volume	129	245	0	0	365
Pk Hr Factor	0.866	0.871	0.000	0.000	Pk Hr Factor	0.686	0.756	0.000	0.000	0.869

Pedestrian Study

Location: Facing 520 Building Side Entrance(Key Card Only) N/O N Prospect Ave
 City: Redondo Beach
 Date: 10/22/2019
 Day: Tuesday

TIME	Peds				TOTAL
	Individual Peds		Groups		
	In	Out	In	Out	
12:00 AM	0	0	0	0	0
12:15 AM	0	0	0	0	0
12:30 AM	0	0	0	0	0
12:45 AM	0	0	0	0	0
1:00 AM	0	0	0	0	0
1:15 AM	0	0	0	0	0
1:30 AM	0	0	0	0	0
1:45 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
2:15 AM	0	0	0	0	0
2:30 AM	0	0	0	0	0
2:45 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
3:15 AM	0	0	0	0	0
3:30 AM	0	0	0	0	0
3:45 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
4:15 AM	0	0	0	0	0
4:30 AM	0	0	0	0	0
4:45 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
5:15 AM	0	0	0	0	0
5:30 AM	0	0	0	0	0
5:45 AM	0	0	0	0	0
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	0	0	0	0	0
6:45 AM	0	0	0	0	0
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	1	0	0	0	1
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
9:15 AM	0	0	0	0	0
9:30 AM	0	0	0	0	0
9:45 AM	0	0	0	0	0
10:00 PM	0	0	0	0	0
10:15 PM	0	0	0	0	0
10:30 PM	0	0	0	0	0
10:45 PM	0	0	0	0	0
11:00 PM	0	0	0	0	0
11:15 PM	0	0	0	0	0
11:30 PM	0	0	0	0	0
11:45 PM	0	1	0	0	1
12:00 AM	1	0	0	0	1
12:15 AM	0	0	0	0	0
12:30 AM	0	1	0	0	1
12:45 AM	0	0	0	0	0
1:00 AM	0	0	0	0	0
1:15 AM	0	0	0	0	0
1:30 AM	1	1	0	0	2
1:45 AM	0	0	0	0	0
2:00 PM	0	0	0	0	0
2:15 PM	0	0	0	0	0
2:30 PM	0	0	0	0	0
2:45 PM	0	0	0	0	0
3:00 PM	0	0	0	0	0
3:15 PM	0	0	0	0	0
3:30 PM	0	0	0	0	0
3:45 PM	0	0	0	0	0
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
6:00 PM	0	1	0	0	1
6:15 PM	0	0	0	0	0
6:30 PM	0	0	0	0	0
6:45 PM	0	0	0	0	0
7:00 PM	0	0	0	0	0
7:15 PM	0	0	0	0	0
7:30 PM	0	0	0	0	0
7:45 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
8:15 PM	0	0	0	0	0
8:30 PM	0	0	0	0	0
8:45 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
9:15 PM	0	0	0	0	0
9:30 PM	0	0	0	0	0
9:45 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
10:15 PM	0	0	0	0	0
10:30 PM	0	0	0	0	0
10:45 PM	0	0	0	0	0
11:00 PM	0	0	0	0	0
11:15 PM	0	0	0	0	0
11:30 PM	0	0	0	0	0
11:45 PM	0	0	0	0	0
Grand Totals	3	6	0	0	9

Pedestrian Study

Location: 520 Side Entrance Main Entrance N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL
	Individual Peds		Groups		
	In	Out	In	Out	
12:00 AM	0	0	0	0	0
12:15 AM	0	0	0	0	0
12:30 AM	0	0	0	0	0
12:45 AM	0	0	0	0	0
1:00 AM	0	0	0	0	0
1:15 AM	0	0	0	0	0
1:30 AM	0	0	0	0	0
1:45 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
2:15 AM	0	0	0	0	0
2:30 AM	0	0	0	0	0
2:45 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
3:15 AM	0	1	0	0	1
3:30 AM	0	0	0	0	0
3:45 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
4:15 AM	0	0	0	0	0
4:30 AM	0	0	0	0	0
4:45 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
5:15 AM	0	0	0	0	0
5:30 AM	0	0	0	0	0
5:45 AM	0	0	0	0	0
6:00 AM	0	0	0	0	0
6:15 AM	0	0	0	0	0
6:30 AM	1	0	0	0	1
6:45 AM	4	0	1	0	5
7:00 AM	7	1	1	0	9
7:15 AM	7	2	0	0	9
7:30 AM	15	2	1	0	18
7:45 AM	12	3	1	1	17
8:00 AM	18	2	2	0	22
8:15 AM	12	14	0	1	27
8:30 AM	21	11	1	0	33
8:45 AM	14	17	1	2	34
9:00 AM	26	22	3	1	52
9:15 AM	24	25	3	1	53
9:30 AM	20	24	2	2	48
9:45 AM	32	24	0	2	58
10:00 PM	21	24	2	3	50
10:15 PM	21	21	6	2	50
10:30 PM	26	23	4	5	58
10:45 PM	23	24	4	2	53
11:00 PM	31	32	3	5	71
11:15 PM	27	20	3	2	52
11:30 PM	21	28	1	4	54
11:45 PM	18	20	2	4	44
12:00 AM	15	25	3	4	47
12:15 AM	14	20	2	1	37
12:30 AM	19	28	1	4	52
12:45 AM	23	19	2	1	45
1:00 AM	21	15	3	1	40
1:15 AM	29	10	4	1	44
1:30 AM	21	16	1	1	39
1:45 AM	26	22	2	2	52
2:00 PM	32	25	3	2	62
2:15 PM	18	27	2	3	50
2:30 PM	24	20	0	1	45
2:45 PM	11	21	0	2	34
3:00 PM	26	14	4	2	46
3:15 PM	28	19	4	4	55
3:30 PM	22	25	3	3	53
3:45 PM	22	26	1	6	55
4:00 PM	18	20	3	1	42
4:15 PM	17	17	1	1	36
4:30 PM	10	28	0	2	40
4:45 PM	8	15	0	2	25
5:00 PM	9	20	0	2	31
5:15 PM	6	17	0	1	24
5:30 PM	5	9	0	2	16
5:45 PM	5	7	0	1	13
6:00 PM	1	7	0	2	10
6:15 PM	1	1	0	0	2
6:30 PM	0	3	0	0	3
6:45 PM	0	0	0	0	0
7:00 PM	0	2	0	0	2
7:15 PM	0	0	0	0	0
7:30 PM	0	0	0	0	0
7:45 PM	3	6	0	1	10
8:00 PM	0	0	0	0	0
8:15 PM	0	0	0	0	0
8:30 PM	1	1	0	0	2
8:45 PM	1	1	0	0	2
9:00 PM	0	0	0	0	0
9:15 PM	2	2	0	0	4
9:30 PM	0	0	0	0	0
9:45 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
10:15 PM	0	0	0	0	0
10:30 PM	0	0	0	0	0
10:45 PM	0	0	0	0	0
11:00 PM	0	0	0	0	0
11:15 PM	0	0	0	0	0
11:30 PM	0	0	0	0	0
11:45 PM	0	0	0	0	0
Grand Totals	839	828	80	90	1837

Pedestrian Study

Location: 520 Building Elevator Parking Garage Entrance Underground/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0		
6:30 AM	1	0	0	0	1		
6:45 AM	0	0	0	0	0		
7:00 AM	4	0	0	0	4	14	0
7:15 AM	1	0	0	0	1		
7:30 AM	5	0	0	0	5		
7:45 AM	4	0	0	0	4		
8:00 AM	12	0	2	0	14	33	4
8:15 AM	4	0	0	0	4		
8:30 AM	10	4	1	0	15		
8:45 AM	7	0	0	0	7		
9:00 AM	3	4	0	1	8	15	11
9:15 AM	7	2	0	0	9		
9:30 AM	1	2	0	0	3		
9:45 AM	4	3	1	1	9		
10:00 PM	5	7	0	1	13	18	11
10:15 PM	6	3	0	0	9		
10:30 PM	4	1	0	0	5		
10:45 PM	3	0	0	0	3		
11:00 PM	2	9	0	3	14	11	22
11:15 PM	4	3	0	0	7		
11:30 PM	5	7	1	0	13		
11:45 PM	0	3	0	0	3		
12:00 AM	0	4	0	0	4	11	28
12:15 AM	4	10	0	4	18		
12:30 AM	2	11	1	2	16		
12:45 AM	5	3	0	0	8		
1:00 AM	11	2	1	0	14	32	12
1:15 AM	6	3	0	0	9		
1:30 AM	12	5	1	0	18		
1:45 AM	3	2	0	0	5		
2:00 PM	4	6	0	1	11	18	22
2:15 PM	8	6	1	1	16		
2:30 PM	3	3	0	0	6		
2:45 PM	3	7	0	0	10		
3:00 PM	4	5	1	0	10	17	23
3:15 PM	9	6	2	2	19		
3:30 PM	1	7	0	1	9		
3:45 PM	3	5	0	1	9		
4:00 PM	2	8	1	1	12	9	25
4:15 PM	5	6	1	1	13		
4:30 PM	2	6	0	1	9		
4:45 PM	0	5	0	0	5		
5:00 PM	0	12	0	3	15	4	24
5:15 PM	0	5	0	1	6		
5:30 PM	3	2	1	0	6		
5:45 PM	1	5	0	0	6		
6:00 PM	0	2	0	0	2	2	3
6:15 PM	0	0	0	0	0		
6:30 PM	1	0	0	0	1		
6:45 PM	1	1	0	0	2		
7:00 PM	0	1	0	0	1	1	2
7:15 PM	1	1	0	0	2		
7:30 PM	0	0	0	0	0		
7:45 PM	0	0	0	0	0		
8:00 PM	1	0	0	0	1	4	0
8:15 PM	2	0	0	0	2		
8:30 PM	0	0	0	0	0		
8:45 PM	1	0	0	0	1		
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	190	187	15	25	417		

Pedestrian Study

Location: 520 Building Elevator Parking Garage Entrance Underground/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	1	0
3:15 AM	1	0	0	0	1		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0		
6:30 AM	1	0	0	0	1		
6:45 AM	1	0	0	0	1		
7:00 AM	3	0	0	0	3	14	2
7:15 AM	0	0	0	0	0		
7:30 AM	4	1	0	0	5		
7:45 AM	7	1	1	0	9		
8:00 AM	7	0	1	0	8	38	5
8:15 AM	6	0	1	0	7		
8:30 AM	13	1	3	0	17		
8:45 AM	12	4	3	2	21		
9:00 AM	5	1	2	0	8	14	10
9:15 AM	0	0	0	0	0		
9:30 AM	3	5	1	0	9		
9:45 AM	6	4	0	0	10		
10:00 PM	4	5	0	1	10	14	20
10:15 PM	2	2	0	0	4		
10:30 PM	4	8	0	1	13		
10:45 PM	4	5	1	1	11		
11:00 PM	4	5	1	0	10	14	17
11:15 PM	8	7	2	2	19		
11:30 PM	1	2	0	0	3		
11:45 PM	1	3	0	0	4		
12:00 AM	2	9	0	1	12	14	24
12:15 AM	0	2	0	0	2		
12:30 AM	6	9	0	1	16		
12:45 AM	6	4	0	0	10		
1:00 AM	6	4	0	0	10	23	10
1:15 AM	7	3	0	0	10		
1:30 AM	3	1	1	0	5		
1:45 AM	7	2	2	0	11		
2:00 PM	6	3	1	0	10	22	19
2:15 PM	9	4	2	1	16		
2:30 PM	4	2	1	1	8		
2:45 PM	3	10	0	2	15		
3:00 PM	5	6	1	2	14	12	18
3:15 PM	4	8	1	2	15		
3:30 PM	1	0	0	0	1		
3:45 PM	2	4	1	1	8		
4:00 PM	2	1	1	0	4	5	9
4:15 PM	2	3	0	1	6		
4:30 PM	1	1	0	0	2		
4:45 PM	0	4	0	0	4		
5:00 PM	0	3	0	0	3	2	15
5:15 PM	0	6	0	1	7		
5:30 PM	0	2	0	0	2		
5:45 PM	2	4	0	0	6		
6:00 PM	1	3	0	0	4	1	4
6:15 PM	0	0	0	0	0		
6:30 PM	0	0	0	0	0		
6:45 PM	0	1	0	0	1		
7:00 PM	0	1	0	0	1	5	5
7:15 PM	1	0	0	0	1		
7:30 PM	4	3	1	1	9		
7:45 PM	0	1	0	0	1		
8:00 PM	1	0	0	0	1	2	0
8:15 PM	0	0	0	0	0		
8:30 PM	1	0	0	0	1		
8:45 PM	0	0	0	0	0		
9:00 PM	0	0	0	0	0	1	0
9:15 PM	1	0	0	0	1		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	184	158	28	21	391		

Pedestrian Study

Location: 520 Building Elevator Parking Garage Entrance Underground/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	1	0	0	0	1	8	0
6:15 AM	0	0	0	0	0		
6:30 AM	4	0	0	0	4		
6:45 AM	3	0	0	0	3		
7:00 AM	1	0	0	0	1	10	2
7:15 AM	2	1	0	0	3		
7:30 AM	4	1	0	0	5		
7:45 AM	3	0	0	0	3		
8:00 AM	4	0	0	0	4	10	1
8:15 AM	4	1	0	0	5		
8:30 AM	0	0	0	0	0		
8:45 AM	2	0	0	0	2		
9:00 AM	4	0	0	0	4	13	3
9:15 AM	4	2	0	0	6		
9:30 AM	3	0	0	0	3		
9:45 AM	2	1	0	0	3		
10:00 PM	6	2	0	0	8	16	8
10:15 PM	5	2	0	0	7		
10:30 PM	2	3	0	1	6		
10:45 PM	3	1	0	0	4		
11:00 PM	5	8	0	1	14	8	22
11:15 PM	1	4	0	0	5		
11:30 PM	1	4	0	0	5		
11:45 PM	1	6	0	0	7		
12:00 AM	0	8	0	1	9	11	22
12:15 AM	1	2	0	1	3		
12:30 AM	7	7	1	1	16		
12:45 AM	3	5	0	0	8		
1:00 AM	1	1	0	0	2	10	6
1:15 AM	3	1	1	0	5		
1:30 AM	3	1	0	0	4		
1:45 AM	3	3	1	0	7		
2:00 PM	1	2	0	0	3	5	8
2:15 PM	2	2	0	0	4		
2:30 PM	1	3	0	0	4		
2:45 PM	1	1	0	0	2		
3:00 PM	1	1	0	0	2	3	3
3:15 PM	1	0	0	0	1		
3:30 PM	1	2	0	0	3		
3:45 PM	0	0	0	0	0		
4:00 PM	0	5	0	0	5	0	10
4:15 PM	0	2	0	0	2		
4:30 PM	0	2	0	0	2		
4:45 PM	0	1	0	0	1		
5:00 PM	0	6	0	1	7	0	14
5:15 PM	0	3	0	0	3		
5:30 PM	0	2	0	0	2		
5:45 PM	0	3	0	0	3		
6:00 PM	0	2	0	0	2	0	5
6:15 PM	0	1	0	0	1		
6:30 PM	0	2	0	1	3		
6:45 PM	0	0	0	0	0		
7:00 PM	0	0	0	0	0	0	1
7:15 PM	0	0	0	0	0		
7:30 PM	0	0	0	0	0		
7:45 PM	0	1	0	0	1		
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0		
8:30 PM	0	0	0	0	0		
8:45 PM	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	94	105	3	6	208		

Pedestrian Study

Location: 520 Building Elevator Parking Garage Entrance Underground/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0		
6:30 AM	2	0	0	0	2		
6:45 AM	0	0	0	0	0		
7:00 AM	0	0	0	0	0	11	0
7:15 AM	5	0	0	0	5		
7:30 AM	1	0	0	0	1		
7:45 AM	5	0	0	0	5		
8:00 AM	6	1	0	0	7	14	1
8:15 AM	2	0	0	0	2		
8:30 AM	2	0	0	0	2		
8:45 AM	4	0	0	0	4		
9:00 AM	11	0	2	0	13	31	10
9:15 AM	2	4	0	1	7		
9:30 AM	12	2	2	0	16		
9:45 AM	6	4	0	1	11		
10:00 PM	6	4	1	1	12	25	24
10:15 PM	6	7	0	2	15		
10:30 PM	3	11	1	3	18		
10:45 PM	10	2	1	0	13		
11:00 PM	3	6	1	0	10	6	23
11:15 PM	1	3	0	1	5		
11:30 PM	2	5	0	1	8		
11:45 PM	0	9	0	1	10		
12:00 AM	0	3	0	0	3	11	13
12:15 AM	3	6	1	0	10		
12:30 AM	3	2	0	0	5		
12:45 AM	5	2	0	0	7		
1:00 AM	2	2	0	0	4	6	5
1:15 AM	2	0	1	0	3		
1:30 AM	1	3	0	0	4		
1:45 AM	1	0	0	0	1		
2:00 PM	2	1	0	0	3	6	4
2:15 PM	1	1	0	0	2		
2:30 PM	2	2	0	0	4		
2:45 PM	1	0	0	0	1		
3:00 PM	2	1	0	0	3	4	5
3:15 PM	2	0	0	0	2		
3:30 PM	0	2	0	0	2		
3:45 PM	0	2	0	0	2		
4:00 PM	1	0	0	0	1	2	10
4:15 PM	1	1	0	0	2		
4:30 PM	0	5	0	1	6		
4:45 PM	0	4	0	0	4		
5:00 PM	0	6	0	0	6	1	12
5:15 PM	0	2	0	0	2		
5:30 PM	0	2	0	0	2		
5:45 PM	1	2	0	0	3		
6:00 PM	0	2	0	0	2	0	4
6:15 PM	0	2	0	0	2		
6:30 PM	0	0	0	0	0		
6:45 PM	0	0	0	0	0		
7:00 PM	0	0	0	0	0	1	2
7:15 PM	1	1	0	0	2		
7:30 PM	0	0	0	0	0		
7:45 PM	0	1	0	0	1		
8:00 PM	1	1	0	0	2	1	1
8:15 PM	0	0	0	0	0		
8:30 PM	0	0	0	0	0		
8:45 PM	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	121	114	10	12	257		

Pedestrian Study

Location: 520 Side Entrance (Key Card Only) N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0
9:15 AM	0	0	0	0	0	0	0
9:30 AM	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	4
10:15 PM	0	2	0	0	2	0	0
10:30 PM	0	1	0	0	1	0	0
10:45 PM	0	1	0	0	1	0	0
11:00 PM	0	0	0	0	0	1	3
11:15 PM	0	1	0	0	1	0	0
11:30 PM	1	1	0	0	2	0	0
11:45 PM	0	1	0	0	1	0	0
12:00 AM	1	2	0	0	3	1	3
12:15 AM	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0
12:45 AM	0	1	0	0	1	0	0
1:00 AM	0	0	0	0	0	0	1
1:15 AM	0	0	0	0	0	0	0
1:30 AM	0	1	0	0	1	0	0
1:45 AM	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	2
2:15 PM	0	2	0	0	2	0	0
2:30 PM	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	2
3:15 PM	0	2	0	0	2	0	0
3:30 PM	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	1	1
7:15 PM	0	0	0	0	0	0	0
7:30 PM	1	1	0	0	2	0	0
7:45 PM	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	0	0
9:45 PM	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0
Grand Totals	3	18	0	0	21		

Pedestrian Study

Location: 514 Side Entrance (Key Card Only) N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	1	0
1:15 AM	0	0	0	0	0		
1:30 AM	1	0	0	0	1		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	1	0
2:15 AM	0	0	0	0	0		
2:30 AM	1	0	0	0	1		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	2	0
3:15 AM	1	0	0	0	1		
3:30 AM	1	0	0	0	1		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	3	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	3	0	1	0	4		
5:00 AM	1	0	0	0	1	12	1
5:15 AM	4	1	0	0	5		
5:30 AM	6	0	0	0	6		
5:45 AM	1	0	0	0	1		
6:00 AM	3	1	0	0	4	25	14
6:15 AM	7	4	1	1	13		
6:30 AM	7	3	0	0	10		
6:45 AM	8	6	0	0	14		
7:00 AM	6	3	0	0	9	28	16
7:15 AM	15	3	1	0	19		
7:30 AM	3	4	0	0	7		
7:45 AM	4	6	0	1	11		
8:00 AM	7	7	0	0	14	42	31
8:15 AM	8	4	1	0	13		
8:30 AM	11	6	1	0	18		
8:45 AM	16	14	0	4	34		
9:00 AM	12	8	1	1	22	49	31
9:15 AM	9	6	1	0	16		
9:30 AM	17	3	4	0	24		
9:45 AM	11	14	3	2	30		
10:00 PM	12	9	1	2	24	52	56
10:15 PM	11	24	2	5	42		
10:30 PM	12	10	2	1	25		
10:45 PM	17	13	3	2	35		
11:00 PM	10	18	1	4	33	35	55
11:15 PM	10	7	1	2	20		
11:30 PM	8	15	1	1	25		
11:45 PM	7	15	0	3	25		
12:00 AM	3	16	0	3	22	26	48
12:15 AM	5	16	0	1	22		
12:30 AM	5	10	0	2	17		
12:45 AM	13	6	2	0	21		
1:00 AM	9	10	1	1	21	35	30
1:15 AM	9	5	2	0	16		
1:30 AM	9	5	3	0	17		
1:45 AM	8	10	1	2	21		
2:00 PM	6	14	1	4	25	30	35
2:15 PM	12	4	0	0	16		
2:30 PM	4	6	0	0	10		
2:45 PM	8	11	2	2	23		
3:00 PM	3	12	0	2	17	24	44
3:15 PM	4	7	0	2	13		
3:30 PM	9	12	2	2	25		
3:45 PM	8	13	2	2	25		
4:00 PM	4	1	0	0	5	21	14
4:15 PM	1	6	0	0	7		
4:30 PM	10	4	0	1	15		
4:45 PM	6	3	0	1	10		
5:00 PM	4	8	0	1	13	22	22
5:15 PM	10	5	1	0	16		
5:30 PM	5	2	0	0	7		
5:45 PM	3	7	0	1	11		
6:00 PM	5	14	1	3	23	27	34
6:15 PM	8	9	1	0	18		
6:30 PM	4	6	0	0	10		
6:45 PM	10	5	1	0	16		
7:00 PM	2	4	0	0	6	12	22
7:15 PM	5	7	1	1	14		
7:30 PM	4	8	0	1	13		
7:45 PM	1	3	0	0	4		
8:00 PM	1	22	0	7	30	1	28
8:15 PM	0	1	0	0	1		
8:30 PM	0	3	0	1	4		
8:45 PM	0	2	0	0	2		
9:00 PM	0	1	0	0	1	0	1
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	448	482	46	69	1045		

Pedestrian Study

Location: Patients/Visitors-Ucla Health Entrance/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0		
6:30 AM	0	0	0	0	0		
6:45 AM	0	0	0	0	0		
7:00 AM	1	0	0	0	1	24	1
7:15 AM	1	0	0	0	1		
7:30 AM	4	0	0	0	4		
7:45 AM	18	1	2	0	21		
8:00 AM	8	0	0	0	8	29	9
8:15 AM	9	2	2	1	14		
8:30 AM	4	5	0	1	10		
8:45 AM	8	2	1	0	11		
9:00 AM	1	6	0	0	7	20	28
9:15 AM	5	10	1	3	19		
9:30 AM	4	2	0	0	6		
9:45 AM	10	10	0	3	23		
10:00 PM	3	7	0	1	11	39	25
10:15 PM	13	6	2	0	21		
10:30 PM	15	10	3	3	31		
10:45 PM	8	2	2	0	12		
11:00 PM	4	3	0	1	8	27	18
11:15 PM	7	5	0	1	13		
11:30 PM	6	3	0	0	9		
11:45 PM	10	7	0	0	17		
12:00 AM	3	3	1	0	7	24	12
12:15 AM	4	2	1	0	7		
12:30 AM	5	4	0	0	9		
12:45 AM	12	3	0	0	15		
1:00 AM	4	4	0	0	8	24	19
1:15 AM	5	5	1	1	12		
1:30 AM	7	2	0	0	9		
1:45 AM	8	8	0	1	17		
2:00 PM	12	2	4	0	18	27	16
2:15 PM	8	2	2	0	12		
2:30 PM	3	9	0	2	14		
2:45 PM	4	3	1	1	9		
3:00 PM	6	5	1	1	13	34	29
3:15 PM	11	8	2	2	23		
3:30 PM	7	8	0	1	16		
3:45 PM	10	8	3	1	22		
4:00 PM	9	4	1	2	16	29	25
4:15 PM	9	6	2	0	17		
4:30 PM	5	8	0	0	13		
4:45 PM	6	7	0	1	14		
5:00 PM	3	9	0	2	14	7	23
5:15 PM	1	8	0	1	10		
5:30 PM	2	4	0	0	6		
5:45 PM	1	2	0	0	3		
6:00 PM	3	0	1	0	4	9	7
6:15 PM	3	3	1	0	7		
6:30 PM	3	0	1	0	4		
6:45 PM	0	4	0	1	5		
7:00 PM	1	1	0	0	2	6	7
7:15 PM	2	0	0	0	2		
7:30 PM	2	2	0	0	4		
7:45 PM	1	4	0	1	6		
8:00 PM	0	0	0	0	0	6	10
8:15 PM	2	1	1	0	4		
8:30 PM	0	0	0	0	0		
8:45 PM	4	9	1	1	15		
9:00 PM	0	0	0	0	0	0	1
9:15 PM	0	0	0	0	0		
9:30 PM	0	1	0	0	1		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	305	230	37	33	605		

Pedestrian Study

Location: Employees Only-Ucla Health Entrance N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0		
6:30 AM	0	0	0	0	0		
6:45 AM	0	0	0	0	0		
7:00 AM	0	0	0	0	0	5	1
7:15 AM	2	0	0	0	2		
7:30 AM	3	1	0	0	4		
7:45 AM	0	0	0	0	0		
8:00 AM	2	1	0	0	3	3	5
8:15 AM	0	2	0	0	2		
8:30 AM	1	1	0	0	2		
8:45 AM	0	1	0	0	1		
9:00 AM	1	0	0	0	1	4	5
9:15 AM	0	1	0	0	1		
9:30 AM	1	2	0	0	3		
9:45 AM	2	2	0	0	4		
10:00 PM	0	2	0	1	3	2	14
10:15 PM	0	6	0	2	8		
10:30 PM	0	2	0	0	2		
10:45 PM	2	4	0	1	7		
11:00 PM	0	3	0	1	4	3	18
11:15 PM	0	2	0	0	2		
11:30 PM	2	6	0	0	8		
11:45 PM	1	7	0	2	10		
12:00 AM	4	0	1	0	5	5	3
12:15 AM	0	1	0	0	1		
12:30 AM	1	1	0	0	2		
12:45 AM	0	1	0	0	1		
1:00 AM	0	1	0	0	1	2	5
1:15 AM	0	2	0	0	2		
1:30 AM	2	2	0	0	4		
1:45 AM	0	0	0	0	0		
2:00 PM	1	3	0	1	5	2	12
2:15 PM	1	2	0	0	3		
2:30 PM	0	3	0	1	4		
2:45 PM	0	4	0	1	5		
3:00 PM	1	3	0	0	4	2	12
3:15 PM	0	3	0	0	3		
3:30 PM	0	3	0	1	4		
3:45 PM	1	3	0	1	5		
4:00 PM	0	2	0	0	2	2	11
4:15 PM	0	1	0	0	1		
4:30 PM	0	1	0	0	1		
4:45 PM	2	7	0	1	10		
5:00 PM	1	4	0	0	5	1	5
5:15 PM	0	1	0	0	1		
5:30 PM	0	0	0	0	0		
5:45 PM	0	0	0	0	0		
6:00 PM	0	1	0	0	1	0	1
6:15 PM	0	0	0	0	0		
6:30 PM	0	0	0	0	0		
6:45 PM	0	0	0	0	0		
7:00 PM	0	0	0	0	0	2	2
7:15 PM	0	0	0	0	0		
7:30 PM	0	1	0	0	1		
7:45 PM	2	1	0	0	3		
8:00 PM	1	1	0	0	2	3	4
8:15 PM	0	1	0	0	1		
8:30 PM	1	1	0	0	2		
8:45 PM	1	1	0	0	2		
9:00 PM	0	3	0	1	4	0	3
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	36	101	1	14	152		

Pedestrian Study

Location: The Beach Cities Surgery Center-Ucla Health Entrance N/O N Prospect Ave
 City: Redondo Beach

Date: 10/22/2019
 Day: Tuesday

TIME	Beach Cities Surgery Center Entrance					UCLA Health Entrance					INS	OUTS
	Individual Peds		Groups		TOTAL	Individual Peds		Groups		TOTAL		
	In	Out	In	Out		In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	1	0	0	0	1	0	0	0	0	0	5	2
6:15 AM	3	2	1	0	6	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	1	0	0	0	1	0	0	0	0	0	0	0
7:00 AM	0	1	0	0	1	0	0	0	0	0	3	1
7:15 AM	1	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	1	0	0	0	1	0	0
8:00 AM	1	0	0	0	1	3	0	0	0	3	7	1
8:15 AM	2	0	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	1	0	0	0	0	0	0	0
9:00 AM	4	2	1	1	8	0	0	0	0	0	12	4
9:15 AM	4	0	0	0	4	0	0	0	0	0	0	0
9:30 AM	4	1	1	0	6	0	0	0	0	0	0	0
9:45 AM	0	0	0	0	0	0	1	0	0	1	0	0
10:00 PM	0	1	0	0	1	0	0	0	0	0	3	7
10:15 PM	1	1	0	0	2	0	0	0	0	0	0	0
10:30 PM	0	1	0	0	1	1	2	0	0	3	0	0
10:45 PM	1	1	0	0	2	0	1	0	0	1	0	0
11:00 PM	0	1	0	0	1	1	0	0	0	1	7	6
11:15 PM	3	2	0	1	6	0	0	0	0	0	0	0
11:30 PM	0	1	0	0	1	0	0	0	0	0	0	0
11:45 PM	3	2	0	0	5	0	0	0	0	0	0	0
12:00 AM	3	5	1	2	11	0	4	0	0	4	9	12
12:15 AM	1	0	0	0	1	0	0	0	0	0	0	0
12:30 AM	1	0	0	0	1	0	1	0	0	1	0	0
12:45 AM	3	1	1	0	5	1	1	0	0	2	0	0
1:00 AM	0	0	0	0	0	1	0	0	0	1	4	5
1:15 AM	1	2	0	0	3	0	0	0	0	0	0	0
1:30 AM	2	2	0	0	4	0	0	0	0	0	0	0
1:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
2:00 PM	1	1	0	0	2	0	1	0	0	1	4	6
2:15 PM	2	1	0	0	3	0	0	0	0	0	0	0
2:30 PM	0	2	0	0	2	0	0	0	0	0	0	0
2:45 PM	1	1	0	0	2	0	0	0	0	0	0	0
3:00 PM	1	0	0	0	1	0	0	0	0	0	1	2
3:15 PM	0	0	0	0	0	0	2	0	1	3	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	1	0	0	1	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	3	0	0	3	0	5
5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	1	0	0	0	1	2	2
7:15 PM	0	0	0	0	0	1	1	0	0	2	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	1	0	0	1	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
9:30 PM	0	0	0	0	0	1	0	0	0	1	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	1
11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	1	0	0	1	0	0
Grand Totals	47	34	5	4	90	11	23	0	1	35		

Pedestrian Study

Location: Wellness Center Entrance/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	7	1
5:15 AM	1	0	0	0	1		
5:30 AM	0	0	0	0	0		
5:45 AM	6	1	1	0	8		
6:00 AM	1	0	0	0	1	10	2
6:15 AM	3	1	0	0	4		
6:30 AM	2	1	0	0	3		
6:45 AM	4	0	0	0	4		
7:00 AM	3	3	0	0	6	29	12
7:15 AM	5	5	0	0	10		
7:30 AM	7	0	1	0	8		
7:45 AM	14	4	3	1	22		
8:00 AM	7	3	1	0	11	62	17
8:15 AM	14	1	1	0	16		
8:30 AM	13	0	0	0	13		
8:45 AM	28	13	6	1	48		
9:00 AM	11	4	1	0	16	32	30
9:15 AM	10	4	1	0	15		
9:30 AM	4	4	0	0	8		
9:45 AM	7	18	1	4	30		
10:00 PM	15	10	2	2	29	45	42
10:15 PM	13	17	0	2	32		
10:30 PM	7	9	1	1	18		
10:45 PM	10	6	1	0	17		
11:00 PM	5	9	0	0	14	15	44
11:15 PM	6	17	0	2	25		
11:30 PM	1	10	0	0	11		
11:45 PM	3	8	0	0	11		
12:00 AM	5	17	0	3	25	37	48
12:15 AM	14	13	1	2	30		
12:30 AM	10	13	2	4	29		
12:45 AM	8	5	1	1	15		
1:00 AM	8	4	1	0	13	21	20
1:15 AM	6	6	1	0	13		
1:30 AM	5	8	0	2	15		
1:45 AM	2	2	1	0	5		
2:00 PM	1	3	0	0	4	13	19
2:15 PM	5	6	0	1	12		
2:30 PM	3	2	0	0	5		
2:45 PM	4	8	1	2	15		
3:00 PM	3	3	0	0	6	9	19
3:15 PM	0	4	0	0	4		
3:30 PM	3	6	0	1	10		
3:45 PM	3	6	1	0	10		
4:00 PM	1	2	0	0	3	12	14
4:15 PM	4	3	0	0	7		
4:30 PM	4	1	0	0	5		
4:45 PM	3	8	0	2	13		
5:00 PM	1	10	0	3	14	5	23
5:15 PM	3	4	0	0	7		
5:30 PM	1	4	0	0	5		
5:45 PM	0	5	0	0	5		
6:00 PM	3	3	0	0	6	9	11
6:15 PM	3	5	0	1	9		
6:30 PM	1	2	0	0	3		
6:45 PM	2	1	0	0	3		
7:00 PM	0	2	0	1	3	1	9
7:15 PM	1	5	0	0	6		
7:30 PM	0	2	0	0	2		
7:45 PM	0	0	0	0	0		
8:00 PM	1	5	0	1	7	2	8
8:15 PM	1	1	0	0	2		
8:30 PM	0	2	0	0	2		
8:45 PM	0	0	0	0	0		
9:00 PM	0	1	0	0	1	0	1
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	309	320	29	37	695		

Pedestrian Study

Location: Entrance to Child Development Center/N/O N Prospect Ave

City: Redondo Beach

Date: 10/15/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0		
6:30 AM	1	0	0	0	1		
6:45 AM	0	0	0	0	0		
7:00 AM	11	7	2	1	21	31	19
7:15 AM	5	3	1	0	9		
7:30 AM	8	5	1	0	14		
7:45 AM	7	4	2	0	13		
8:00 AM	24	9	8	2	43	85	40
8:15 AM	14	11	2	2	29		
8:30 AM	27	11	8	0	46		
8:45 AM	20	9	7	0	36		
9:00 AM	21	16	4	4	45	32	27
9:15 AM	6	5	3	0	14		
9:30 AM	5	5	1	1	12		
9:45 AM	0	1	0	0	1		
10:00 PM	2	0	1	0	3	9	5
10:15 PM	4	2	1	0	7		
10:30 PM	0	1	0	0	1		
10:45 PM	3	2	1	0	6		
11:00 PM	1	4	0	1	6	2	5
11:15 PM	0	0	0	0	0		
11:30 PM	1	1	0	0	2		
11:45 PM	0	0	0	0	0		
12:00 AM	0	1	0	0	1	3	4
12:15 AM	1	0	0	0	1		
12:30 AM	0	3	0	0	3		
12:45 AM	2	0	0	0	2		
1:00 AM	0	1	0	0	1	3	3
1:15 AM	1	0	0	0	1		
1:30 AM	0	2	0	0	2		
1:45 AM	2	0	0	0	2		
2:00 PM	0	0	0	0	0	9	7
2:15 PM	5	4	0	0	9		
2:30 PM	2	3	0	0	5		
2:45 PM	2	0	1	0	3		
3:00 PM	5	6	2	2	15	18	26
3:15 PM	4	3	1	1	9		
3:30 PM	3	7	1	3	14		
3:45 PM	6	10	1	4	21		
4:00 PM	7	8	2	2	19	32	53
4:15 PM	9	9	1	4	23		
4:30 PM	8	20	0	9	37		
4:45 PM	8	16	0	8	32		
5:00 PM	4	12	0	3	19	29	43
5:15 PM	9	9	0	0	18		
5:30 PM	6	10	0	3	19		
5:45 PM	10	12	1	5	28		
6:00 PM	4	23	0	7	34	10	27
6:15 PM	1	3	0	1	5		
6:30 PM	0	0	0	0	0		
6:45 PM	5	1	2	0	8		
7:00 PM	0	0	0	0	0	0	4
7:15 PM	0	0	0	0	0		
7:30 PM	0	4	0	1	5		
7:45 PM	0	0	0	0	0		
8:00 PM	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0		
8:30 PM	0	0	0	0	0		
8:45 PM	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	264	263	54	64	645		

Pedestrian Study

Location: Main Entrance to 514 Building/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	2	3
1:15 AM	0	0	0	0	0		
1:30 AM	2	2	0	0	4		
1:45 AM	0	1	0	0	1		
2:00 AM	0	0	0	0	0	5	0
2:15 AM	1	0	0	0	1		
2:30 AM	1	0	0	0	1		
2:45 AM	3	0	1	0	4		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	2	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	2	0	0	0	2		
5:00 AM	1	0	0	0	1	13	1
5:15 AM	3	1	0	0	4		
5:30 AM	3	0	0	0	3		
5:45 AM	6	0	0	0	6		
6:00 AM	8	4	1	0	13	26	14
6:15 AM	6	1	0	0	7		
6:30 AM	4	1	0	0	5		
6:45 AM	8	8	1	1	18		
7:00 AM	10	8	1	3	22	28	11
7:15 AM	5	2	0	0	7		
7:30 AM	5	1	0	0	6		
7:45 AM	8	0	1	0	9		
8:00 AM	8	5	0	0	13	71	24
8:15 AM	14	1	0	0	15		
8:30 AM	26	8	3	0	37		
8:45 AM	23	10	3	1	37		
9:00 AM	25	4	3	0	32	89	30
9:15 AM	12	4	0	0	16		
9:30 AM	27	7	4	0	38		
9:45 AM	25	15	3	2	45		
10:00 PM	17	28	0	5	50	80	77
10:15 PM	21	14	0	1	36		
10:30 PM	16	17	1	1	35		
10:45 PM	26	18	4	2	50		
11:00 PM	16	24	0	3	43	74	84
11:15 PM	25	14	2	2	43		
11:30 PM	18	21	0	1	40		
11:45 PM	15	25	2	3	45		
12:00 AM	8	21	0	0	29	56	69
12:15 AM	17	13	2	1	33		
12:30 AM	16	19	0	1	36		
12:45 AM	15	16	2	1	34		
1:00 AM	14	10	1	1	26	70	57
1:15 AM	18	9	3	2	32		
1:30 AM	16	23	2	5	46		
1:45 AM	22	15	3	2	42		
2:00 PM	22	28	3	1	54	82	78
2:15 PM	31	23	4	3	61		
2:30 PM	13	18	0	1	32		
2:45 PM	16	9	3	1	29		
3:00 PM	8	11	0	2	21	39	68
3:15 PM	15	9	1	0	25		
3:30 PM	7	34	2	7	50		
3:45 PM	9	14	0	2	25		
4:00 PM	13	17	3	2	35	24	51
4:15 PM	5	20	1	3	29		
4:30 PM	5	7	0	0	12		
4:45 PM	1	7	0	1	9		
5:00 PM	5	22	0	3	30	16	44
5:15 PM	2	12	0	4	18		
5:30 PM	1	5	0	0	6		
5:45 PM	8	5	1	0	14		
6:00 PM	8	11	1	0	20	94	29
6:15 PM	39	6	5	0	50		
6:30 PM	33	7	6	0	46		
6:45 PM	14	5	1	0	20		
7:00 PM	4	2	0	0	6	38	17
7:15 PM	22	6	4	0	32		
7:30 PM	6	6	1	2	15		
7:45 PM	6	3	1	1	11		
8:00 PM	10	74	1	20	105	19	94
8:15 PM	6	10	1	2	19		
8:30 PM	0	5	0	2	7		
8:45 PM	3	5	0	1	9		
9:00 PM	2	21	0	5	28	6	23
9:15 PM	0	0	0	0	0		
9:30 PM	1	1	0	0	2		
9:45 PM	3	1	1	0	5		
10:00 PM	4	0	0	0	4	6	14
10:15 PM	1	3	0	1	5		
10:30 PM	1	10	0	3	14		
10:45 PM	0	1	0	0	1		
11:00 PM	0	0	0	0	0	0	1
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	1	0	0	1		
Grand Totals	840	789	83	105	1817		

Pedestrian Study

Location: Entrance to 510 Building West/N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	1	0	0	0	1	1	2
3:15 AM	0	2	0	0	2		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0
5:15 AM	0	0	0	0	0		
5:30 AM	0	0	0	0	0		
5:45 AM	0	0	0	0	0		
6:00 AM	0	0	0	0	0	12	1
6:15 AM	4	0	1	0	5		
6:30 AM	2	1	0	0	3		
6:45 AM	6	0	0	0	6		
7:00 AM	3	0	1	0	4	35	11
7:15 AM	7	4	1	1	13		
7:30 AM	9	0	2	0	11		
7:45 AM	16	7	1	3	27		
8:00 AM	6	6	0	0	12	53	40
8:15 AM	12	12	1	3	28		
8:30 AM	12	7	0	1	20		
8:45 AM	23	15	4	3	45		
9:00 AM	17	13	2	2	34	56	43
9:15 AM	13	11	2	2	28		
9:30 AM	8	7	1	0	16		
9:45 AM	18	12	2	0	32		
10:00 PM	16	14	1	1	32	52	47
10:15 PM	11	13	1	1	26		
10:30 PM	18	8	4	1	31		
10:45 PM	7	12	0	1	20		
11:00 PM	8	19	0	3	30	33	51
11:15 PM	12	15	2	3	32		
11:30 PM	5	11	0	1	17		
11:45 PM	8	6	0	1	15		
12:00 AM	11	10	2	2	25	32	37
12:15 AM	6	19	0	4	29		
12:30 AM	10	6	2	1	19		
12:45 AM	5	2	0	0	7		
1:00 AM	15	6	5	1	27	47	38
1:15 AM	15	11	1	2	29		
1:30 AM	11	5	0	1	17		
1:45 AM	6	16	1	4	27		
2:00 PM	10	13	2	2	27	32	31
2:15 PM	8	6	1	2	17		
2:30 PM	4	9	0	1	14		
2:45 PM	10	3	2	0	15		
3:00 PM	7	11	1	1	20	26	35
3:15 PM	6	14	0	1	21		
3:30 PM	6	4	1	0	11		
3:45 PM	7	6	1	0	14		
4:00 PM	1	3	0	0	4	15	17
4:15 PM	6	6	0	0	12		
4:30 PM	7	7	2	1	17		
4:45 PM	1	1	0	0	2		
5:00 PM	1	1	0	0	2	5	14
5:15 PM	3	5	1	1	10		
5:30 PM	0	3	0	1	4		
5:45 PM	1	5	0	0	6		
6:00 PM	2	3	0	0	5	5	7
6:15 PM	0	0	0	0	0		
6:30 PM	2	4	1	1	8		
6:45 PM	1	0	0	0	1		
7:00 PM	1	0	0	0	1	5	2
7:15 PM	0	2	0	0	2		
7:30 PM	0	0	0	0	0		
7:45 PM	4	0	1	0	5		
8:00 PM	0	3	0	1	4	1	4
8:15 PM	0	0	0	0	0		
8:30 PM	1	1	0	0	2		
8:45 PM	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	0	0
10:15 PM	0	0	0	0	0		
10:30 PM	0	0	0	0	0		
10:45 PM	0	0	0	0	0		
11:00 PM	0	1	0	0	1	1	3
11:15 PM	0	0	0	0	0		
11:30 PM	1	2	0	0	3		
11:45 PM	0	0	0	0	0		
Grand Totals	411	383	50	54	898		

Pedestrian Study

Location: Entrance to 510 Building East N/O N Prospect Ave

City: Redondo Beach

Date: 10/22/2019

Day: Tuesday

TIME	Peds				TOTAL	INS	OUTS
	Individual Peds		Groups				
	In	Out	In	Out			
12:00 AM	0	0	0	0	0	0	0
12:15 AM	0	0	0	0	0		
12:30 AM	0	0	0	0	0		
12:45 AM	0	0	0	0	0		
1:00 AM	0	0	0	0	0	0	0
1:15 AM	0	0	0	0	0		
1:30 AM	0	0	0	0	0		
1:45 AM	0	0	0	0	0		
2:00 AM	0	0	0	0	0	0	0
2:15 AM	0	0	0	0	0		
2:30 AM	0	0	0	0	0		
2:45 AM	0	0	0	0	0		
3:00 AM	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0		
3:30 AM	0	0	0	0	0		
3:45 AM	0	0	0	0	0		
4:00 AM	0	0	0	0	0	1	0
4:15 AM	0	0	0	0	0		
4:30 AM	0	0	0	0	0		
4:45 AM	1	0	0	0	1		
5:00 AM	1	0	0	0	1	4	0
5:15 AM	1	0	0	0	1		
5:30 AM	1	0	0	0	1		
5:45 AM	1	0	0	0	1		
6:00 AM	2	0	0	0	2	10	0
6:15 AM	3	0	0	0	3		
6:30 AM	0	0	0	0	0		
6:45 AM	5	0	0	0	5		
7:00 AM	5	0	0	0	5	56	7
7:15 AM	8	1	1	0	10		
7:30 AM	22	3	2	0	27		
7:45 AM	21	3	2	0	26		
8:00 AM	20	7	3	0	30	71	32
8:15 AM	17	7	4	1	29		
8:30 AM	22	7	3	1	33		
8:45 AM	12	11	0	4	27		
9:00 AM	15	10	1	3	29	61	50
9:15 AM	10	17	1	4	32		
9:30 AM	19	10	3	2	34		
9:45 AM	17	13	4	2	36		
10:00 PM	16	14	2	3	35	60	46
10:15 PM	15	15	2	4	36		
10:30 PM	7	9	0	0	16		
10:45 PM	22	8	6	0	36		
11:00 PM	10	18	0	4	32	46	64
11:15 PM	10	21	2	6	39		
11:30 PM	16	10	4	2	32		
11:45 PM	10	15	1	4	30		
12:00 AM	7	12	3	3	25	38	52
12:15 AM	8	14	0	2	24		
12:30 AM	12	18	2	1	33		
12:45 AM	11	8	3	0	22		
1:00 AM	20	13	3	1	37	68	44
1:15 AM	17	11	0	2	30		
1:30 AM	15	9	1	1	26		
1:45 AM	16	11	6	2	35		
2:00 PM	10	12	0	2	24	46	49
2:15 PM	8	10	0	2	20		
2:30 PM	13	13	3	2	31		
2:45 PM	15	14	1	3	33		
3:00 PM	11	7	1	2	21	33	56
3:15 PM	8	10	0	2	20		
3:30 PM	10	23	2	4	39		
3:45 PM	4	16	0	2	22		
4:00 PM	7	9	1	1	18	26	56
4:15 PM	6	15	0	2	23		
4:30 PM	7	24	1	4	36		
4:45 PM	6	8	2	0	16		
5:00 PM	0	11	0	2	13	8	34
5:15 PM	2	9	0	2	13		
5:30 PM	5	12	1	1	19		
5:45 PM	1	2	0	1	4		
6:00 PM	2	4	1	1	8	5	17
6:15 PM	2	4	0	0	6		
6:30 PM	0	8	0	2	10		
6:45 PM	1	1	0	0	2		
7:00 PM	2	1	0	0	3	2	2
7:15 PM	0	1	0	0	1		
7:30 PM	0	0	0	0	0		
7:45 PM	0	0	0	0	0		
8:00 PM	0	5	0	1	6	0	6
8:15 PM	0	0	0	0	0		
8:30 PM	0	0	0	0	0		
8:45 PM	0	1	0	0	1		
9:00 PM	0	1	0	0	1	0	1
9:15 PM	0	0	0	0	0		
9:30 PM	0	0	0	0	0		
9:45 PM	0	0	0	0	0		
10:00 PM	0	0	0	0	0	1	2
10:15 PM	1	1	0	0	2		
10:30 PM	0	1	0	0	1		
10:45 PM	0	0	0	0	0		
11:00 PM	0	2	0	0	2	0	2
11:15 PM	0	0	0	0	0		
11:30 PM	0	0	0	0	0		
11:45 PM	0	0	0	0	0		
Grand Totals	536	520	72	88	1216		

**Appendix C – Ballard*King &
Associates Aquatics Center Preliminary
Market Feasibility Evaluation**



BALLARD* KING
& ASSOCIATES LTD
Recreation Facility Planning and Operation Consultants

Beach Cities Health District (BCHD) hired Ballard*King & Associates (B*K), a recreation facility planning firm based out of Denver, CO, to be their aquatic consultant. As part of the overall scope of services, B*K is providing BCHD with the market for aquatic services in the area, recommendations for future aquatic facilities, and an operational plan for the facility. This document is meant to further describe the market for aquatic services (swimming), in BCHD.

Primary Service Area. The service area for the potential BCHD aquatic facility is the communities of Hermosa Beach, Manhattan Beach and Redondo Beach. B*K defines a primary service area as the distance that individuals or families are willing to travel on at least a weekly basis to use facilities or participate in programs. The identification of the primary service area is a key component of determining the market and subsequent market penetration. By defining the market as previously stated it does not preclude individuals from outside that service area, ex. Torrance, from using the facility. It does mean that the market numbers and operational projections will be specific to the Primary Service Area.

Using demographic information gathered from Environmental Research Systems Institute (ESRI), the 2020 population estimate in the primary service area is 560,015 with a median age of 40.4 and a median household income of \$94,949. These data points become key indicators when developing participation numbers and market availability.

Participation Statistics. B*K uses information gathered by the National Sporting Goods Association (NSGA)¹ to help determine the market for recreation activities, like swimming. The NSGA conducts an annual survey of how Americans spend their leisure time. In particular they collect data by age range (7 and up), median household income, and region of the country. Using the age distribution of the primary service area, combined with median household income, region of the country, and national average, B*K produces a participation percentage unique to the characteristics of the primary service area.

For the BCHD service area this equates to an average of 16.6% that participate in swimming. The NSGA does not further define swimming, nor do they define if this is pool use, ocean, lake, etc. B*K takes 16.6% and applies it to the population of the primary service area that is age 7 and up, which comes to 86,145. This means that within the primary service area 86,145 individuals, age 7 and up, participate in swimming.

B*K can further extrapolate the number to determine the number of facility visits the 86,145 individuals account for. The NSGA defines swimmers as frequent (more than 110+ visits per

¹ National Sporting Goods Association Sports Participation in the United States 2020 Edition.



year and 8.5% of swimmers), occasional (25-109 visits per year and 41.7% of swimmers), and infrequent (6-24 visits per year and 49.8% of swimmers). For calculation purposes B*K uses the following calculation factors; frequent (112 visits), occasional (67 visits), and infrequent (15 visits). There is a strong possibility that the 112 visits used for frequent could be higher, but B*K provides a conservative estimate.

B*K then completes the following, the total number of swimmers (86,145) are multiplied by the respective percentage; frequent (8.5% = 7,322), occasional (41.7% = 35,922), and infrequent (49.8% = 42,900). Those populations are then multiplied by the number of visits for each category; frequent (7,322 x 112), occasional (35,922 x 67), and infrequent (42,900 x 15). The result is that the population within the primary service area equates to 3,870,407 swimmer days over the course of a calendar year.

It is important to note that the swimmer days are not specific to a single facility, nor are they specific to facilities in the primary service area. These swimmer days could be absorbed at ANY aquatic facility, of ANY type, anywhere, or at the ocean.

Penetration Rate: If a private provider were to develop a recreation focused facility (aquatics) in an area, they would designate a location and draw a 5-mile radius around the location. This would identify their primary service area, and a goal would be to capture 5-10% of the population in that area. For an organization like BCHD that serves a much larger service area than a 5-mile radius the percentage of capture decreases. Based on previous work in the area, work across the country, and the presence of other providers, organizations like BCHD would hope to capture approximately 3% of the swimmer days. This would equate to approximately 116,112 swimmer visits over the course of a calendar year. These visits could come in the way of lap swimming, therapy, group exercise, open/recreational swim, etc. It is also important to note that a percentage would come from the residents of the BCHD campus.

While a 3% penetration may not seem overly ambitious the presence of other pool providers, the beach/ocean, and population concentration make it reasonable. The reality is that a private provider would hope to capture 5-10% of the participants within a 5-mile radius. The proposed BCHD is pulling from a much greater area based on their tax base, thus a larger population. While BCHD, could have a goal of capturing 5%, the reality is the size of facility required to capture that portion of market share would exceed the budget for the project and dedicated footprint for the facility.