

3.14 TRANSPORTATION

This section of the Environmental Impact Report (EIR) analyzes the potential environmental effects of the proposed Project on transportation as defined by the California Environmental Quality Act (CEQA) guidelines. This analysis was prepared based on the Beach Cities Health District (BCHD) Healthy Living Campus Transportation Impact Analysis (Transportation Study) prepared by Fehr & Peers (Fehr & Peers 2021a; see Appendix K). Consistent with the intent of Senate Bill (SB) 743 and the associated updates to the CEQA Guidelines, the Transportation Study provides a discussion of vehicle miles traveled (VMT) associated with the proposed Project. Pedestrian, transit, and bicycle impacts anticipated to result from operation of the proposed Project were also analyzed in the Transportation Study.

- **VEHICLE MILES TRAVELED:**

With the adoption of SB 743, the State of California changed the method of traffic analysis required through the CEQA for publicly- and privately-initiated projects. The previous practice of evaluating transportation impacts used on-road congestion or level of service (LOS). SB 743 requires the amount of driving and length of trips – as measured by “*vehicle miles traveled*” or VMT – be used to assess transportation impacts on the environment for CEQA review. These impacts will be reduced or “*mitigated*” by options such as increasing transit, providing for active transportation such as walking and biking, and participating in mitigation banks. All jurisdictions have the option to tailor requirements to their unique communities.

As discussed in detail within Section 3.14.2, *Regulatory Setting*, changes in State law now require an analysis of VMT by measuring the number and distance of daily vehicle trips, rather than the previous practice of analyzing level of service (LOS) by measuring intersection congestion and roadway capacity. This reflects State policy goals to reduce vehicle energy use, particularly that associated with non-renewable fossil fuels, and associated greenhouse gas (GHG) emissions and their adverse effects on global climate change. VMT is determined by multiplying the number of trips generated by the proposed Project by the average length of the trips (measured in miles). VMT per capita is calculated as the total annual miles of vehicle travel divided by the total population in the planning area (e.g., Project site, city, county, region, etc.). Many factors affect travel behavior, including density, design and diversity of land uses, design of the transportation network, access to regional and local destinations, availability of high-quality transit and active transportation facilities, demographics, and effectiveness and availability of Transportation Demand Management (TDM) plans. Typically, low density suburban style development – with greater separation between different types of land uses (e.g., between residential and commercial uses) and without access to high quality transit, bicycle paths or pedestrian facilities – generate more vehicle miles traveled compared to development located in urban areas characterized by mixed-use development and more travel options.

As discussed in Section 3.14.3, *Impact Assessment and Methodology*, as part of the Transportation Study, Fehr & Peers conducted driveway and pedestrian counts to support the VMT analysis.

At the request of the City of Redondo Beach and the City of Torrance, and separate from the Transportation Study, Fehr & Peers also prepared a Non-CEQA Intersection Operational Evaluation, which contains a detailed assessment of traffic circulation issues, with particular focus on the potential for increases in congestion (i.e., changes in level of service [LOS]) at intersections along avenues, boulevards, and commercial streets in the cities of Redondo Beach and Torrance (Fehr & Peers 2021b; see Appendix J). While this analysis is not discussed further in the EIR, it generally found that due to a minor reduction in peak hour trips, the proposed Project – including the Phase 1 site development plan and the Phase 2 development program – would result in a minor beneficial effect on intersection congestion and roadway capacity within the immediate vicinity of the Project site.

3.14.1 Environmental Setting

Regional Highway and Street Network

Regional access to the Project site is provided via Pacific Coast Highway (State Route [SR-] 1), San Diego Freeway (Interstate [I-] 405), Artesia Boulevard (SR-91), and Hawthorne Boulevard (SR-107). Pacific Coast Highway, located approximately 0.5 miles west of the Project site, is a major State highway running along the majority of the coastline in California. Within Redondo Beach and Torrance, the Pacific Coast Highway has four



Artesia Boulevard provides regional access to Redondo Beach and Torrance and connects other regional highways, such as I-10, I-405, SR-107, and Pacific Coast Highway (SR-1).

lanes and is a designated major arterial. The I-405 freeway, located approximately 2.5 miles northeast of the Project site, is a major highway that extends throughout Orange and Los Angeles County and runs in a northwest-southeast orientation through Redondo Beach and Torrance. It is a grade-separated freeway with eight lanes for mixed flow traffic and two lanes designated for High Occupancy Vehicles (HOV). Artesia Boulevard is a four-lane east-west major arterial located approximately 1 mile north of the Project site. Hawthorne Boulevard, located approximately 1.5

miles east of the Project site, provides eight through lanes that run in a north-south direction within Redondo Beach, and is designated as a major arterial.

City Street Classifications

The Redondo Beach General Plan Circulation Element categorizes the street system according to its functions for mobility (i.e., ease of movement) and access (i.e., ability to arrive at a particular destination) (City of Redondo Beach 2009). These street categories include Freeways, Arterial Streets, Collector Streets, and Local Streets.

- **Freeways** – With a controlled number of entry points and grade-separated from City streets, freeways are intended to provide high speed regional movement. Limited access is provided to abutting properties.
- **Arterial Streets** – Designed to carry up to 50,000 vehicles per day, arterial streets are primarily intended to provide movement. Access to abutting property can be provided, but is minimized. Arterials are frequently further divided into major and secondary arterials.
- **Collector Streets** – Typically carrying up to 15,000 vehicles per day, collector streets allow moderate volumes of through traffic to move between local streets and arterials while also providing access to abutting properties.
- **Local Streets** – Local streets are generally intended to carry less than 2,000 vehicles per day with the highest priority to the function of providing access to abutting properties. Given this intended function, through traffic is discouraged.

The Torrance General Plan Circulation and Infrastructure Element further divides arterial streets into Principal Arterials, Major Arterials, and Minor Arterials (City of Torrance 2010).

Local Street Network in the Project Vicinity

The street network in Redondo Beach is primarily gridded with good connectivity. Arterial streets in the vicinity of the Project site 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 vicinity of the Project site range from 35 to 50 miles per hour (mph), with the majority of streets allowing travel up to 35 mph.

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The Redondo Beach General Plan Circulation Element designates the following major arterials as local truck routes:

- Sepulveda/Pacific Coast Highway;
- Aviation Boulevard;
- Inglewood Avenue (north of Artesia Boulevard);
- Hawthorne Boulevard;
- Marine Avenue;
- Manhattan Beach Boulevard;
- Artesia Boulevard;
- Redondo Beach Boulevard;
- Anita/190th Street; and
- Torrance Boulevard (east of Pacific Coast Highway).

Torrance has designated its one principal arterial (Hawthorne Boulevard) and most major arterials in the City as truck routes. Major arterials designated as local truck routes within Torrance include, but are not limited to, 190th Street, Anza Avenue, Artesia Boulevard, Del Amo Boulevard, Sepulveda Boulevard, and Torrance Boulevard.

As previously described, regional access to the Project site is provided by the Pacific Coast Highway and a network of arterial and collector streets. The arterial street network that serves the area within the vicinity of the Project site includes 190th Street, Anita Street, Anza Avenue, Beryl Street, Del Amo Boulevard, Hawthorne Boulevard, Inglewood Avenue, North Prospect Avenue, and Torrance Boulevard. Local streets include Blossom Lane, Diamond Street, Harkness Lane, Entradero Avenue, Flagler Lane, Towers Street, and Redbeam Avenue.



Hawthorne Boulevard, which supports primarily commercial uses with some industrial and residential, is a designated truck route within Torrance. Planning within the Hawthorne Boulevard Corridor is guided by the Hawthorne Boulevard Corridor Specific Plan.

Arterial Streets

- **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. In the Redondo Beach General Plan Circulation Element and Torrance Circulation and Infrastructure Element, 190th Street is designated as a local truck route.
- **Anita Street** is an east-west major arterial that runs east of the Pacific Coast Highway with two lanes in each direction. Between North Maria Avenue and North Prospect Avenue, Anita Street has a center left-turn lane. East of North Prospect Avenue, 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. Anita Street is designated as a local truck route by Redondo Beach.
- **Anza Avenue** is a north-south secondary arterial that runs from 190th Street south to the Pacific Coast Highway. Within the vicinity of the Project site, Anza Avenue provides two lanes in each direction. Left-turn pockets are provided at most intersections along the avenue. On-street parking is prohibited. However, between Arvada Street and the junction with Halison Street, a service road is provided on the east side of the street, separated by a raised median, and on-street parking is allowed on the service road. Similar to 190th Street, Anza Avenue is designated as a local truck route by both the City of Redondo Beach and City of Torrance.
- **Beryl Street** is a northeast-southwest secondary arterial that runs from Harbor Drive to 190th Street. North of 190th Street, Beryl Street becomes Blossom Lane. Between Catalina Avenue and North Prospect Avenue, Beryl Street provides one lane in each direction with a center left-turn lane. Beryl Street narrows to two lanes east of Flagler Lane. On-street parking is permitted between Catalina Avenue and Flagler Lane and on the south/east side of the street west of Flagler Lane.
- **Del Amo Boulevard** is an east-west major arterial that runs from Diamond Street on the western end to Cerritos in the east. From Diamond Street to North Prospect Avenue, one travel lane is provided in each direction. East of North Prospect Avenue, two travel lanes in each direction are provided with an intermittent raised center median. Between Diamond Street and North Prospect Avenue, on-street parking is permitted on the north side of the street only. East of North Prospect Avenue, on-street parking is permitted for a brief stretch

on south side of the street from Donora Avenue to the bicycle lane transition west of the intersection with Anza Avenue, and is otherwise prohibited.

- **Hawthorne Boulevard (SR-107)** is north-south major arterial that provides four travel lanes in each direction. A raised center median separates opposing traffic. Left-turn lanes are provided at most intersections. On-street parking is prohibited within the vicinity of the Project site. Hawthorne Boulevard is identified as a designated local truck route by both the City of Redondo Beach and the City of Torrance.
- **Inglewood Avenue** is a north-south major arterial that provides two travel lanes in each direction north of 190th Street. South of 190th Street, the roadway transitions to a local road providing one travel lane in each direction. On-street parking is permitted north and south of 190th Street. Inglewood Avenue north of Artesia Boulevard is designated as a local truck route by the City of Redondo Beach.
- **Prospect Avenue** is a north-south secondary arterial that runs from Artesia Boulevard to the Pacific Coast Highway. North of Emerald Street, it is considered North Prospect Avenue and south of Emerald Street, it is considered South Prospect Avenue. Within the vicinity of the Project site, North Prospect Avenue provides two travel lanes in each direction. Left-turn lanes are provided at most intersections.
- **Torrance Boulevard** is an east-west major arterial that provides two travel lanes in each direction west of Anza Avenue and three travel lanes in each direction east of Anza Avenue. A raised median is present from South Prospect Avenue to Wendy Drive. Left-turn lanes are provided at most intersections. On-street parking is permitted on both sides of the street between Henrietta Street and Anza Avenue. Torrance Boulevard is a local designated truck route identified in the Torrance General Plan Circulation and Infrastructure Element.

Local Streets

- **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.
- **Diamond Street** is a northeast-southwest collector street that runs from Catalina Avenue to North Prospect Avenue and provides one travel lane in each direction with a shared left-turn lane. South of North Prospect Avenue, Diamond Street turns into a three-lane roadway with one lane in each direction and a center left-turn lane. On-street parallel parking, Class

II (i.e., striped) bicycle lanes, and 8-foot-wide sidewalks are provided along both sides of the roadway.

- **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** is a north-south collector street that runs from Towers Street to Artesia Boulevard and provides one travel lane in each direction. The portion of Flagler Lane along the western border of Dominguez Park between Anita Street and Beryl Street provides a center left-turn lane and on-street parking. On-street parking along this segment of Flagler Lane includes diagonal parking on the east side of the street facing Dominguez Park and parallel parking along the west side of the street. On-street parking north of 190th Street consists of parallel parking on both sides of the street.



Flagler Lane widens to approximately 62 feet between 190th Street and Beryl Street to support parallel parking along the southbound side of the street and diagonal parking along its boundary with Dominguez Park, as well as two travel lanes and a center left turn lane (left). South of Beryl Street, Flagler Lane narrows to a 36-foot wide, two-lane street until its southern terminus at Towers Street (right).

- **Harkness Lane** is a north-south local street that runs from Rockefeller Lane to Beryl Street and provides one travel lane in each direction. Given its narrow width, on-street parking is prohibited along a majority of Harkness Lane, except on the east side of the street between Morgan Lane and Amour Lane and on both sides of the street between Anita Street and Beryl Street.
- **Towers Street** is an east-west local street that runs from Flagler Lane to Redbeam Avenue and provides one travel lane in each direction. On-street parking is generally allowed on both sides of the street.

- **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.

Local Access to the Project Site

As described in Section 2.0, *Project Description*, the Project site is generally bordered by North Prospect Avenue to the southwest, Diamond Street to the southeast, Flagler Lane and Flagler Alley to the east, and Beryl Street to the north. Local access to the BCHD campus is provided by North Prospect Avenue from the west and southwest. Access to the vacant Flagler Lot is available from Beryl Street to the north.



Within the vicinity of the Project site (i.e., from approximately 200 feet south of Beryl Street to Diamond Street), a smaller parallel frontage road accessible from the southbound lanes of North Prospect Avenue and Diamond Street splits off from the primary travel lanes along North Prospect Avenue to provide access to single-family houses southwest of the Project site. This smaller parallel frontage road is separated from North Prospect Avenue by a raised median and large hedge that partially obscures views of the BCHD campus.

- **North Prospect Avenue** runs in a northwest-southeast direction along the Project site's frontage, with left-turn channelization for traffic turning east into the Project site. There are no bicycle lanes along North Prospect Avenue or street parking along the Project site frontage however, on-site parking is allowed on portions of the road farther from the Project site.
- **Beryl Street** runs in an east-west direction near the Project site along the adjacent Redondo Village Shopping Center and the vacant Flagler Lot providing two eastbound lanes, one westbound lane, and a center turn lane for vehicles entering and exiting the Redondo Village Shopping Center. Beryl Street intersects with Flagler Lane to the east at a four-way stop, with Hawkes Lane to the north at a four-way stop with access into Redondo Village Shopping Center, and with North Prospect Avenue to the west at a signalized intersection. East of Flagler Lane, Beryl Street narrows to two vehicle lanes. Parallel street parking and 8-foot-wide sidewalks are provided along both sides of Beryl street.
- **Flagler Lane** runs in a north-south direction near the Project site with two vehicle lanes along the majority of the roadway. Adjacent to the Project site, Flagler Lane narrows to 40 feet wide and provides parallel parking and sidewalks along the eastern side of the street

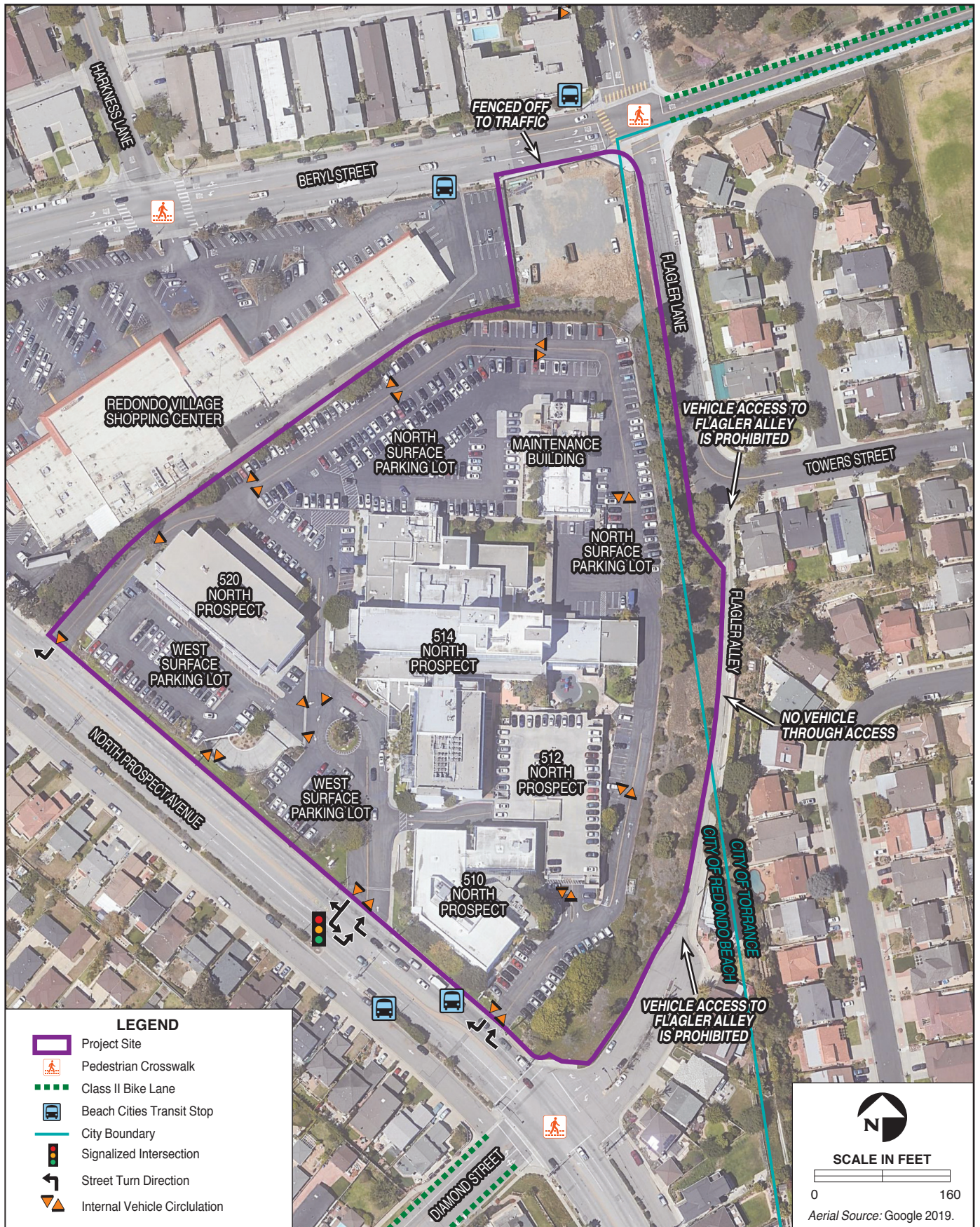
only. Flagler Lane terminates approximately 450 feet south of its intersection with Beryl Street at Flagler Alley. At its southern terminus, the roadway turns east into Towers Street, which provide access to the single-family residential neighborhood to the east, located within Torrance.

- **Flagler Alley** is an approximately 500-foot-long north-south alley that provides a paved pedestrian and bicycle connection between Flagler Lane to the north and Diamond Street to the south (refer to Figure 3.14-1). Flagler Alley is blocked off to vehicles by an existing wooden fence from the north side at the southern terminus of Flagler Lane and a chain-link fence from the south side at the northern terminus of Diamond Street. The 10-foot-wide alley also provides an 8-foot-wide sidewalk.
- **Diamond Street** borders the southeast corner of the BCHD campus, west of North Prospect Avenue. Within the vicinity of the Project site, Diamond Street provides access to six single-family residences immediately southeast of the Project site. Access into this segment of Diamond Street is provided via one lane from the signalized intersection with North Prospect Avenue. Egress from this section of Diamond Street is available via one left-turn lane, one through lane, and one right-turn lane.

Project Site Access

The following three existing driveways provide access to the BCHD campus (refer to Figure 3.14-1):

- The main entrance to the campus is located at a signalized driveway intersection with North Prospect Avenue, approximately 275 feet to the northwest of the intersection of North Prospect Avenue & Diamond Street. This primary entrance provides full left- and right-turn access;
- A secondary driveway is located approximately 100 feet northwest of the intersection of North Prospect Avenue & Diamond Street. This secondary entrance is unsignalized and provides right-turn-only entry/exit to the perimeter circulation road and the southern portion of the campus; and
- Another secondary driveway is located approximately 450 feet northwest of the main entrance along North Prospect Avenue. This secondary entrance is unsignalized and provides right-turn-only entry/exit to the perimeter circulation road and the northern portion of the campus.



wood.

Existing Circulation and Access

**FIGURE
3.14-1**

The main entrance to the campus routes vehicles through a roundabout leading to the existing short-term surface parking lot and drop-off area as well as the entrance to the existing subterranean parking garage. The secondary driveways provide access to a 30-foot-wide perimeter circulation road that runs along the northwest, north, and east borders of the campus and provides access to surface parking spaces at the northern and southern corners of the campus (refer to Figure 3.14-1). Additionally, the vacant Flagler Lot is accessible via a driveway along Beryl Street as well as a locked gate at the corner of the campus's northern parking lot.

Public Transit Services in the Project Vicinity

Local and regional public transit in the Project area is provided by the Los Angeles County Metropolitan Transportation Authority (Metro), Beach Cities Transit, and Torrance Transit. In general, transit service frequency is relatively low in the immediate vicinity of the Project site, presenting challenges to the transit dependent and limiting attractiveness to the non-transit dependent.

- **Metro** – Metro Line 344 provides service between the Harbor Gateway Transit Center in the Gardena and Rancho Palos Verdes to the south. In the Project area, Metro Line 344 travels north-south along Hawthorne Boulevard. Service is provided 7 days per week, with weekday peak period headways of approximately 20 to 30 minutes.
- **Beach Cities Transit** – Beach Cities Transit Line 102 provides local service between the Metro Green Line, the South Bay Galleria, and the Redondo Beach Pier. Within the vicinity of the Project site, Line 102 travels north and south along North Prospect Avenue and northeast and southwest along Beryl Street. Service is provided 7 days per week, with weekday peak period headways of approximately 30 to 45 minutes.
- **Torrance Transit** – Torrance Transit Line 2 provides local service between the Del Amo Fashion Center and the Harbor Freeway (I-110). Within the vicinity of the Project site,



Several bus stops along the Beach Cities Transit Line 102 are located in the immediate vicinity of the Project site, including one across from the vacant Flagler Lot on westbound Beryl Street and one adjacent to the west of Flagler Lot on eastbound Beryl Street.

Line 2 travels east-west along Torrance Boulevard and north-south along Inglewood Avenue. Service is provided 7 days per week, with weekday peak period headways of approximately 60 minutes. Line 3 provides rapid service between Downtown Long Beach and the Redondo Beach Pier. In the Project area, Line 3 travels east-west along Torrance Boulevard. Service is provided 7 days per week, with weekday peak period headways of approximately 10 to 15 minutes. Line R3 provides local service between Downtown Long Beach and the South Bay Galleria. Within the vicinity of the Project site, Line R3 travels north-south along Hawthorne Boulevard. Service is provided on weekdays only. Westbound headways in the AM peak period are approximately 6 to 15 minutes, and 25 minutes in the PM peak period. Eastbound headways are approximately 45 to 55 minutes in the AM peak period and 20 to 25 minutes in the PM peak period. Line 8 provides local service between Torrance and the Los Angeles International Airport (LAX) Transit Center. Within the vicinity of the Project site, Line 8 travels north-south along Hawthorne Boulevard. Service is provided 7 days per week, with weekday peak period headways of approximately 20 to 30 minutes (see Table 3.14-1 and Figure 3.14-1).

Table 3.14-1. Existing Public Transit Services in the Project Area

Route	Line	Description	Hours of Operation		Approximate Headway ¹ (minutes)			
			Weekday	Weekend	Weekday AM	Weekday PM	Saturday	Sunday
Metro Line	344	Harbor Gateway Transit Center – Rancho Palos Verdes	5:09 a.m. – 9:30 p.m.	5:50 a.m. – 9:26 p.m.	20 - 40	30-90	30	60
Beach Cities Transit	102	Metro Green Line, South Bay Galleria, and Redondo Beach Pier	6:05 p.m. – 8:01 p.m.	8:00 a.m. – 7:48 p.m.	30	30	30	20 - 40
Torrance Transit	2	Del Amo Fashion Center – I-110	5:54 a.m. – 10:55 p.m.	6:34 a.m. – 9:21 p.m.	60	60	60	60
	3	Downtown Long Beach – Redondo Beach Pier	4:35 a.m. – 11:33 p.m.	5:30 a.m. – 10:08 p.m.	20 - 30	20 - 30	20 - 30	20 - 30
	R3	Downtown Long Beach – South Bay Galleria	6:20 p.m. – 7:01 p.m.	-	6 - 55	20 - 25	-	-
	8	Torrance – LAX Transit Center	4:43 a.m. – 11:17 p.m.	5:33 a.m. – 10:19 p.m.	20 - 30	20 - 30	60	60

Notes: ¹ Headways are generally defined as the time period between vehicles in a transit system.

Source: Fehr and Peers 2021a.



The Project site is currently directly served by one transit line: Beach Cities Transit Line 102. The northbound Line 102 provides three bus stops adjacent to the Project site: one stop at the BCHD campus's southern secondary vehicle entrance (approximately 100 feet north of the intersection of North Prospect Avenue & Diamond Street), and two stops along the southern side of Beryl Street, at the Shell gas station and just west of the vacant Flagler Lot. The southbound Line 102 provides two bus stops adjacent to the Project site: one bus stop along the western side of North Prospect Avenue, directly across the street from the campus's main entrance, and one stop along the northern side of Beryl Street, directly across the street from the vacant Flagler Lot. The Project site is not served by any Metro or Torrance Transit lines. The nearest Torrance Transit line, Line 2, runs along Anza Avenue approximately 0.80 miles east of the BCHD campus.

Shared Mobility Services

In addition to public transit described above, the WAVE is a senior and disabled curb-to-curb Dial-A-Ride service operating through a cooperative partnership between the City of Redondo Beach and the City of Hermosa Beach. The WAVE provides convenient, inexpensive shared-ride transportation to destinations within Hermosa Beach and Redondo Beach and designated satellite facilities in adjacent communities of Manhattan Beach and Torrance. The service is available to individuals whose disability prevents them from independently boarding an accessible fixed route bus and/or prevents them from getting to or from a boarding location. The service operates on weekdays between 6:00 a.m. and 8:30 p.m. and on weekends between 8:00 a.m. to 8:30 p.m. The WAVE operates from 8:00 a.m. to 5:00 p.m. on holidays including Thanksgiving Day, Christmas Day, and New Year's Day.



Seniors age 62 and older and individuals of any age with impairment or disability are eligible for using the WAVE within the cities of Redondo Beach and Hermosa Beach.

Additionally, the growth of privately operated Transportation Network Companies (TNCs) like Lyft and Uber has also changed the way people move in and around Redondo Beach and Torrance. TNC's provide app-based platforms to connect passengers with drivers who use personal, non-commercial vehicles. Lyft and Uber have become the most recognized and ubiquitous forms of shared mobility and provide both local and to some extent regional linkages. Dockless mobility

devices that offer app-based electric scooters and bicycles, such as Bird and Jump, are prohibited in Redondo Beach.

Pedestrian and Bicycle Facilities in the Project Vicinity

Pedestrian Facilities

Sidewalks are generally present on both sides of the street throughout the vicinity of the Project site, generally ranging in width from 4 feet wide along the south side of Diamond Street to 9 feet wide along the east side of Flagler Lane. Additionally, sidewalks occur along the eastern side of Flagler Lane and Diamond Street, with Flagler Alley providing an informal pedestrian connection between the two roadways.

Crosswalks are provided along all four legs of the intersection of Beryl Street and North Prospect Avenue and along three legs of the intersection of Beryl Street and Flagler Lane. Additionally, there is a crosswalk provided in the middle of this roadway segment at the driveway entrance to the Redondo Village Shopping Center. Crosswalks are also provided along two legs of the intersection of North Prospect Avenue and Diamond Street and across North Prospect Avenue leading to the main entrance to the campus.



The BCHD campus is accessible via sidewalks and crosswalks along North Prospect Avenue, Beryl Street, Flagler Lane, Diamond Street (left). Flagler Alley (right) provides an informal bicycle path and pedestrian sidewalk to connect Flagler Lane and Diamond Street.

Bicycle Facilities

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

- **Class I Bikeway (Bicycle Path)** – A completely separate right-of-way for the exclusive use of bicycles and pedestrians, with vehicle and pedestrian crossflows minimized.
- **Class II Bikeway (Bicycle Lane)** – A restricted right-of-way 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 (Bicycle Route)** – A right-of-way designated by signs or pavement markings for shared use with pedestrians and motor vehicles.
- **Class IV Bikeway (Separated Bikeway)** – A right-of-way for the exclusive use of bicycles which provides a required separation between the bikeway and through vehicular traffic.

The South Bay Bicycle Master Plan, adopted by the Redondo Beach and Torrance City Councils in 2011, identifies major gaps in the regional bicycle network, primarily within Redondo Beach and between the Torrance and the Pacific Ocean. The bicycle paths along Catalina Avenue and Diamond Street in Redondo Beach provide connections between residential and commercial uses and to Czuliger Park, but do not provide through connections between cities or to major popular destinations. Additionally, three major east-west bicycle routes within the City of Torrance (i.e., Torrance Boulevard, Sepulveda Boulevard, and SR-1) terminate roughly at the border of Torrance with no connection to the Pacific Ocean. The South Bay Bicycle Master Plan indicates that additional Class I, II, and III facilities are planned throughout the Project vicinity. However, under existing conditions, bicycle facilities in the immediate project vicinity are limited and lack connectivity to the larger regional system, requiring cyclists to ride on sometimes busy surface streets.



Flagler Alley, which is currently used as an informal bike path, is planned for improvements under the BCHD Bike Path Project. The BCHD Bike Path Project would upgrade Flagler Alley as a formal Class I bicycle path that would connect existing Class II bicycle lanes along Diamond Street and Beryl Street, adjacent to the Project site.

Within 0.5-mile radius of the Project site, Class II bicycle lanes are available on Anza Avenue between 190th Street and Del Amo Boulevard, Beryl Street between Flagler Lane and 190th Street, and Diamond Street between Prospect Avenue and North Catalina Avenue. The Project site has limited connectivity with the existing network of bicycle paths, with no bicycles paths currently bordering the Project site or connecting the Project site with existing regional bicycle paths in the vicinity. (Flagler Alley provides an informal pathway used by bicyclists and blocked to vehicle traffic.) The nearest Class II bicycle lanes are located along Beryl Street between Flagler Lane and 190th Street and along Diamond Street, southwest of its intersection with North Prospect Avenue. These segmented bicycle lanes 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 bicycle lane. Additionally, the Class II bicycle lane along Diamond Street provides connectivity to the existing Catalina Street Class II bicycle path located roughly 0.75 miles to the south, and which provides some north-south access through Redondo Beach.

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 east of Flagler Lane and on West 190th Street east of Beryl Street, as well as Class III bicycle facilities on 190th Street west of Beryl Street. Additionally, separately from the proposed Project, BCHD is currently working with the City of Redondo Beach and the City of Torrance to plan a new protected (i.e., Class I) bicycle facility (BCHD Bike Path Project) along the eastern perimeter of the BCHD campus along Flagler Lane and Flagler Alley between the northern terminus of Flagler Alley and Beryl Street.

Circulation Hazards

Collision History

A traffic collision is considered to be any event where a vehicle strikes any object while moving. That object could be another car, a pedestrian, or something fixed in place like a light post. When collisions cause damage or injury, the details are recorded by the local law enforcement agency and loaded into the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS). The Transportation Injury Mapping System (TIMS) uses SWITRS data to show an area's High Injury Network (HIN). A HIN consists of streets with a high concentration of traffic collisions that result in severe injuries and deaths, with an emphasis on those involving people walking and bicycling. No roadways in the vicinity of the Project site have been identified by the City of Redondo Beach or the City of Torrance as part of the HIN.

A collision analysis using data collected from the SWITRS was conducted for intersections surrounding the proposed Project which are primary intersections used for access. Based on the

most recently available 5-year collision data (between 2013 and 2018), 323 collisions occurred within the vicinity of the Project on streets used to access the Project site, including people driving, walking, and biking. Of the total number of collisions, 12 resulted in serious injury and five resulted in fatalities.

Table 3.14-2. Number of Collisions in Project Vicinity (2013-2018)

Collision Type	Total	Fatal/Significant Injury Collisions	Total Number of Fatalities
Vehicle-Vehicle	279	13	3
Vehicle-Pedestrian	21	4	2
Vehicle-Bicyclist	26	0	0
Total	323	17	5

Source: See Appendix K.

Hawthorne Boulevard had the highest number of vehicle collisions at its intersections; 33 collisions (10.2 percent) occurred at Hawthorne Boulevard & Del Amo Boulevard, followed by 31 collisions (9.5 percent) at Hawthorne Boulevard & West 190th Street. At both intersections, there was one collision that resulted in a fatality. There were 47 collisions over the 5-year period that involved people either walking or biking along the street segments and key intersections used to access the Project site. Amongst these, four collisions (8.5 percent) resulted in serious injury or death to pedestrians. The intersection of West 190th Street & Hawthorne Boulevard had the highest concentration of collisions, with five reported pedestrian collisions.

Immediately adjacent to the Project site, along Beryl Street and North Prospect Avenue, there was a smaller concentration of collisions, as compared to other segments such as Hawthorne Boulevard, West 190th Street, and Del Amo Boulevard. In total, there were 17 collisions (5.3 percent), which were on the Beryl Street and North Prospect Avenue segments and/or within 200 feet of a key 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 & Diamond Street, and 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 regard to collision types (e.g., broadside, rear end, or head-on collisions). Additionally, there are no discernable existing hazards in the vicinity of the Project site due to roadway and driveway configuration.

Closest to the Project site, there were five collisions that involved people walking or biking. These collisions occurred at Beryl Street & Harkness Lane and North 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 North Prospect Avenue. There were no collisions reported at the other intersections immediately adjacent to the Project site, including the Project driveways or the Beryl Street & Flagler Street intersection.

Cut-Through Traffic

As arterial roads become increasingly congested, drivers often seek out ways for avoiding traffic jams. This is usually done by cutting through residential neighborhoods to avoid heavy traffic on arterial roads. This phenomenon is referred to as “*cut-through traffic*.”

The residents within the Torrance neighborhood to the east of the Project site have expressed concerns regarding cut-through traffic between Beryl Street and Del Amo Boulevard (see Appendix A). Cut-through traffic in these neighborhoods is associated with commuting as well as student pick-up and drop-off at Towers Elementary School. To reduce cut-through traffic and associated safety risks between Beryl Street and Del Amo Boulevard, 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. In preparation for the pilot, the City of Torrance conducted license plate surveys during the AM and PM peak periods at four locations on the boundary of the neighborhood, including:

- Beryl Street & Flagler Lane;
- Redbeam Avenue & Del Amo Boulevard;
- Wayne avenue & Del Amo Boulevard; and
- Entradero avenue & Del Amo Boulevard.



Many bicyclists along North Prospect Avenue ride along the street's wide sidewalks, because the on-road conditions are not suitable for bicycle safety. In particular, several collisions have occurred at North Prospect Avenue & Diamond Street.

The results of the license plate surveys showed that cut-through traffic within the Torrance neighborhood to the east of the BCHD campus is highest between Beryl Street & Flagler Lane and Redbeam Avenue & Del Amo Boulevard. During the AM peak period, approximately 47 percent of the vehicles traveling northbound and 41 percent of the vehicle traveling southbound through the neighborhood contributed to cut-through traffic. During the PM peak period, approximately 31

percent of vehicles traveling northbound and southbound through the neighborhood were commuters cutting through the neighborhood (see Table 3.14-3).

Table 3.14-3. Peak Period Cut-Through Traffic Between Beryl Street and Del Amo Boulevard

Direction	Percent of Vehicles Contributing to Cut-Through Traffic	
	AM Peak Period	PM Peak Period
Northbound	47	31
Southbound	41	31

Source: Fehr & Peers 2021a.

Vehicle Miles Traveled

State-wide Vehicle Miles Traveled and Mode Split

State-wide VMT is highly variable and is affected by the density of development and the mix of land uses within an area. Caltrans reports a total of 344.3 billion State-wide annual VMT and 943.3 million daily VMT in 2017 (the most recent data available) (Caltrans 2019; see Table 3.15-1). 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 8,747 miles (approximately 23.97 daily VMT per capita).

Table 3.14-4. 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

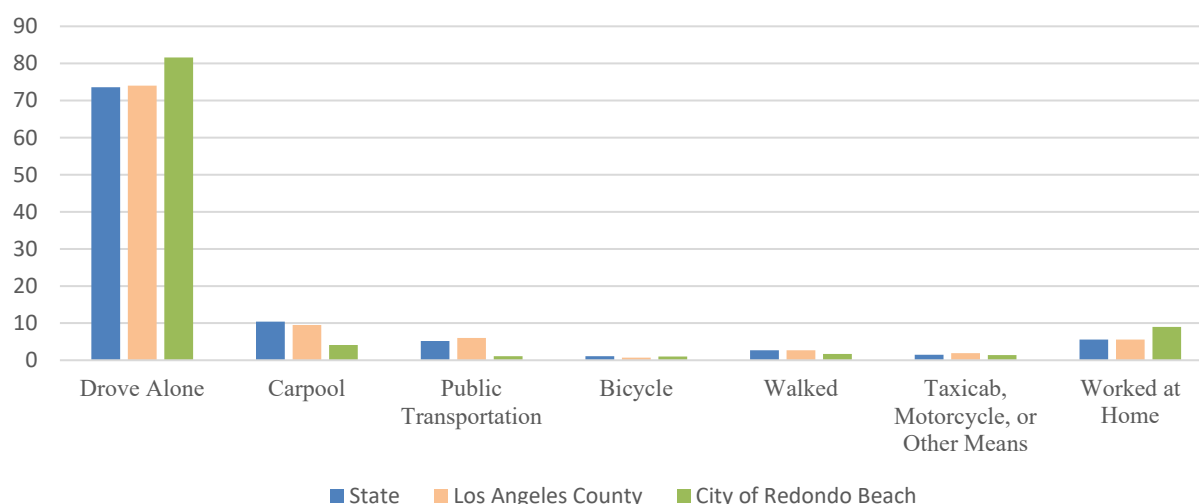
³ All public roads include those owned by cities, counties, and various state and federal agencies

Source: Caltrans 2019.

A majority (approximately 73.6 percent) of the employed population in California drove to work alone in 2017. A smaller portion of the population carpooled (10.4 percent) and took public transit (5.2 percent) to work. Approximately 2.7 percent of the state population walked to work, 1.1 percent biked, and 1.5 percent took a taxi, rode a motorcycle, or chose other means of transportation. Approximately 5.6 percent of the state population worked at home. The average vehicle occupancy (often referred to as “*AVO*”) of workers who drove (alone or carpool) was 1.07 persons per vehicle (see Chart 3.14-1; U. S. Census Bureau 2017). Although data are unavailable,

the COVID-19 pandemic has affected VMT in 2020 and 2021 as a result of restrictions on gatherings, stay at home orders, increased telecommuting and declines in use of public transit; however, its long-term effects on travel behavior are unclear.

Chart 3.14-1. Means of Transportation to Work for the State of California, Los Angeles County, and Redondo Beach



Note: Charted data does not reflect potent effects of COVID-19 pandemic and its effects on commuting.
Source: U.S. Census Bureau 2017.

Regional Vehicle Miles Traveled and Mode Split

According to the Southern California Association of Governments (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 County-wide 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).

Within the County, 74 percent of the employed population drove to work alone in 2017. Less people carpooled to work (9.5 percent) and more people took public transportation (6 percent) than the state averages described above. Similar to the State of California, 2.7 percent of the County's population walked to work, 0.7 percent biked, and 1.9 percent of the population got to work by taxi, motorcycle, or other means. The remaining 5.6 percent of the County's population worked at

home. The average vehicle occupancy of workers who drove (alone or carpool) was 1.07 persons per vehicle, identical to the state average vehicle occupancy (refer to Chart 3.15-1; U. S. Census Bureau 2017).

According to the 2016 SCAG Regional Travel Demand Model (the most recently available model, as the 2020 SCAG Regional Travel Demand Model has not yet been released), the average home-based work VMT per employee (i.e., only vehicle roundtrips between the residence of the trip-maker and their place of work) is 18.4. The average home-based VMT per capita (i.e., all vehicle roundtrips originating from the residence of the trip-maker) for the South Bay Cities Council of Governments (SBCCOG) region is 13.3 (SCAG 2016).

Redondo Beach Vehicle Miles Traveled and Mode Split

Within Redondo Beach, the 2016 annual VMT per capita is 11,753 (32.2 daily VMT per capita). The annual VMT per employee is 5,840 (16.0 daily VMT per employee). City-wide average VMT in Redondo Beach is substantially higher than State-wide or County-wide averages. Within Redondo Beach, a larger portion of the population drove alone to work (81.6 percent) than the State and County averages in 2017. Less of the population carpooled (4.1 percent), walked (1.7 percent), and took public transportation (1.1 percent). Similar to the State and County averages, 1.4 percent of the population traveled to work via taxi, motorcycle, or other means and 1.0 percent of the population biked to work. A larger portion of the Redondo Beach population worked at home (9.0 percent) than the State and County averages. The average vehicle occupancy for workers who drove (alone or carpooled) to work in Redondo Beach was 1.03 persons per vehicle, which is similar to State-wide and County-wide averages (refer to Chart 3.14-1; U. S. Census Bureau 2017).

3.14.2 Regulatory Setting

Federal Laws and Regulations

Americans with Disabilities Act of 1990

Titles I, II, III, and V of the Americans with Disabilities Act (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.

State Laws and Regulations

Assembly Bill 32, Global Warming Solutions Act

Transportation is the largest single sector of the economy that generates GHGs, and changes in transportation are a focus of several State-wide regulations to reduce VMT and increase access to non-vehicular modes of travel. Assembly Bill (AB) 32 commits the State of California to reduce State-wide GHG emissions to 1990 levels by 2020. 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. Achieving these goals requires a reduction of approximately 30 percent from projected State emission levels and 15 percent from 2006 State levels, with even more substantial reductions required in the future. Pursuant to AB 32, the California Air Resources Board (CARB) must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions.

Executive Order B-30-15 and Senate Bill 32

Executive Order B-30-15 established a new State-wide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. This Executive Order acts as an intermediate goal to achieving 80 percent reductions by 2050 as outlined in Executive Order S-3-05. Additionally, this Executive Order aligns California's GHG reduction targets with those of leading international governments, including the 28 nations comprising the European Union. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal established by Executive Order S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 375, Sustainable Communities and Climate Protection Act

The adoption of SB 375 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, the CARB is required to set regional transportation-related GHG reduction targets for 2020 and 2035. Additionally, SB 375 required that those targets be incorporated within a SCS, a required element within the Metropolitan Planning Organization's (MPO's) Regional Transportation Plan (RTP).

On September 23, 2010, CARB adopted transportation-related GHG emissions reduction targets that require a 7 percent to 8 percent reduction by 2020 and between 13 percent and 16 percent reduction by 2035 compared to emissions in 2005 for each MPO. SCAG is the MPO for the Southern California region and is required to work with local jurisdictions, including the City of Redondo Beach and the City of Torrance. CARB has determined SCAG's reduction target for per capita transportation-related GHG emissions to be 13 percent by 2035.

SB 743

SB 743 furthers the State's commitment to the goals of AB 32 and SB 375 and adds Chapter 2.7, Modernization of Transportation Analysis for Transit-Oriented Infill Projects, to Public Resources Code, Division 13, Section 21099. Key provisions of SB 743, include eliminating the measurement of vehicle delay, or LOS, as a metric that can be used for measuring traffic impacts. Under SB 743, the focus of transportation analysis shifts from LOS to VMT and the reduction of GHG emissions 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 (Title 14 of the California Code of Regulations [CCR]) to provide an alternative to LOS for evaluating transportation impacts. Particularly for areas served by transit (i.e., transit priority areas [TPAs]), 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."* OPR also has discretion to develop alternative criteria for areas that are not served by transit, if appropriate.

As a result, Section 15064.3 was added to CEQA Guidelines, which states *"generally, vehicle miles traveled is the most appropriate measure of transportation impacts."* Section 15064.3 requires that lead agencies no longer use 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."*

Pursuant to the mandate in SB 743, in January 2016, OPR published for public review and comment a Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA (Proposed Transportation Impact Guidelines) recommending that transportation

impacts for projects be measured using a VMT metric. The final Proposed Transportation Impact Guidelines were published in December 2018 (OPR 2018). VMT measures the amount and distance that a project might cause people to drive, accounting for the number of passengers within a vehicle. These proposed transportation impact guidelines provide substantial evidence that VMT is an appropriate standard to use in analyzing transportation impacts to protect environmental quality and a better indicator of GHG, air quality, and energy impacts than automobile delay. With the changes to the CEQA Guidelines, automobile delay, as measured by LOS and other similar metrics, no longer constitutes a significant environmental effect under CEQA (Public Resources Code Section 21099). These updated criteria for transportation impact assessment better align transportation analysis with State GHG reduction goals set by SB 375 to encourage infill development and improve public health through increased active transportation.

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 State-wide 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 curbing the growth in VMT (CARB 2017). As it relates to transportation, the Scoping Plan includes measures to reduce VMT and vehicle GHG emissions, including, but not limited to:

- Pursue 15 percent reduction in VMT for light duty vehicles 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.
- Develop 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.
- Accelerate 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 bicycling and walking facilities to increase use.

California Manual on Uniform Traffic Control Devices

The California Manual on Uniform Traffic Control Devices (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 – including each of the new access points on Beryl Street and Flagler Lane – would be required to be designed in accordance with all California MUTCD design requirements on any roadway facilities affected by the proposed Project.

Regional Plans and Regulations

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

As described in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, SCAG's Regional Council unanimously approved and fully adopted the 2020-2045 RTP/SCS (Connect SoCal) (SCAG 2020). The 2020-2045 RTP/SCS includes more than 3 years of consultation with stakeholders and the public to capture the goals and objectives of the people within the region and capture the most current available data for determining future demographic projections. The intent of the plan is to build upon and expand land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal plan achieves per capita GHG emissions reductions relative to 2005 of 19 percent in 2035 (SCAG 2020).

In October 2020, CARB determined that Connect SoCal is consistent with CARB's GHG reduction targets. Successfully meeting these targets will require substantial effort to reduce VMT. The strategies in Connect SoCal focus on reducing the number of drive-alone trips and overall VMT through ridesharing, which includes carpooling, vanpooling and supportive policies for ridesharing services such as Uber and Lyft; redistributing or eliminating vehicle trips from peak demand periods through incentives for telecommuting and alternative work schedules; and

reducing the number of drive-alone trips through increased use of transit, rail, bicycling, walking and other alternative modes of travel.

Of the 10 goals presented in Connect SoCal, the following six are applicable to transportation:

- 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.
- Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.

2020 Long Range Transportation Plan and Congestion Management Program

The 2020 Long Range Transportation Plan (LRTP) provides a detailed roadmap for how Los Angeles Metropolitan Transit Authority (Metro) will plan, build, operate, maintain, and partner for improved mobility in the next 30 years. The LRTP will guide future funding plans and policies needed to move Los Angeles County forward for a more mobile, resilient, accessible, and sustainable future (Metro 2020).

The current LRTP addresses regional public transit and highways and does not propose any transit improvements in proximity to the Project site. On June 28, 2018, the Metro Board of Directors approved initiating the process for the County and all its local jurisdictions to opt out of the California Congestion Management Program, as authorized under the California Government Code Sections 65082 *et seq.* (Metro 2018). The County is now exempt from the Congestion Management Program. On March 12, 2019, the Redondo Beach City Council also voted to opt out of the Congestion Management Program.

South Bay Bicycle Master Plan

The South Bay Bicycle Master Plan is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance for 20 years following its adoption. Implementation of this plan is meant to promote and increase bicycle

ridership for all levels of ability across the South Bay. The Plan's primary objective is to increase the number of bicyclists, as well as create a larger base of utilitarian bicyclists, including bicycle commuters, through safe, accessible and consistent bicycle infrastructure, and supporting policies and programs (Los Angeles County Bicycle Coalition and South Bay Bicycle Coalition 2011).

City of Redondo Beach Local Policies and Regulations

Redondo Beach General Plan Circulation Element

The Redondo Beach General Plan Circulation Element includes goals to reduce trip generation, promote bicycle and pedestrian modes, and link existing and proposed bicycle facilities, creating opportunities for physical activity. The Circulation Element includes a number of goals related to active transportation and alternative modes, including the promotion of alternative modes, the pursuit of bicycle and pedestrian priorities, the enhancement of bicycle infrastructure, and the creation of opportunities for physical activity.

Goal G1: Reduce Year 2030 trip generation by 25 percent compared to 2007 levels.

Goal G4: Residents and visitors should be able to safely and conveniently walk, bike, or take transit in Redondo Beach, as they prefer.

Goal G5: Expand transportation demand management (TDM) programs that decrease the number of single-occupant vehicles on the road.

Goal G6: Redondo Beach favors development that purposefully integrates itself with surrounding transportation facilities.

Policy P1 Support transit-oriented development that reduces current automobile trips.

Policy P4 Encourage mixed-use development that incentivizes residents to support nearby land uses by minimizing travel distance.

Goal G11: Maintain the existing supply of public parking.

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.

Goal G12: Encourage all employers to pursue successful TDM measures already demonstrated in South California.

- Policy P16 Encourage flex hours in work environments.
- 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 incentives.

Goal G13. Link existing and proposed [bicycle and pedestrian] facilities.

- Policy P22 Connect North Redondo Beach and South Redondo Beach with bike facilities.

Goal G14: Increase the provision of bike lockers, bike racks, and lighting for bike facilities.

Goal G15: Ensure that residences 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.

- 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.

Goal G16: Provide reliable, safe fixed-route transit.

- Policy P37 Provide shuttle service to activity areas.

Circulation Element Policy 10 also contains thresholds of significance for signalized intersections. Unrelated to CEQA, plan, policy, and regulatory consistency with these thresholds of significance would be determined as part of the review and approval process with the City of Redondo Beach decision-makers during consideration of discretionary approvals for the Phase 1 site development plan and the Phase 2 development program. The Operational Intersection Analysis may be used to help inform that decision (see Appendix J).

Redondo Beach Climate Action Plan

The City of Redondo Beach, in concert with SBCCOG, prepared the Redondo Beach Climate Action Plan. The Climate Action Plan, which was adopted in 2017, contains goals and policies that incorporate energy use reduction into Redondo Beach'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:
 - Supporting zero emission vehicle infrastructure;
 - Improving pedestrian and bicycle infrastructure;
 - Enhancing public transit service; and
 - Supporting reductions in single-occupancy vehicle use.

Transportation Demand Management (TDM)

Redondo Beach Municipal Code (RBMC) Section 10-2.2406 requires nonresidential developments of 25,000 square feet (sf) or more to provide TDM measures to reduce the number of vehicles traveling to and from the project site. The proposed Project consists of 389,720 sf of new mixed-use development. The following is required of nonresidential developments greater than 100,000 sf:

- A bulletin board, display case, or kiosk displaying transportation information located where the greatest number of employees are likely to see it.
- Not less than 10 percent of the employee parking area, shall be located as close as is practical to the employee entrance(s), and shall be reserved for use by potential carpool/vanpool vehicles, without displacing handicapped and customer parking needs. This preferential carpool/vanpool parking area shall be identified on the site plan upon application for building permit, to the satisfaction of the City. A statement that preferential carpool/vanpool spaces for employees are available and a description of the method for obtaining such spaces must be included on the required transportation information board. Spaces will be signed/striped as demand warrants; provided that at all times at least one space for projects of 50,000 sf to 100,000 sf and two spaces for projects over 100,000 sf will be signed/striped for carpool/vanpool vehicles.
- Preferential spaces reserved for vanpools must be accessible to vanpool vehicles and adequate turning radii and parking dimensions shall be included.
- A safe and convenient on-site zone in which vanpool and carpool vehicles may deliver or board their passengers.
- Bicycle racks or other secure bicycle parking shall be provided to accommodate four bicycles for the first 50,000 sf of nonresidential development and one bicycle per each additional 50,000 sf of nonresidential development.

- Sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development.
- If determined necessary by the City to mitigate the project impact, bus stop improvements must be provided. The City will consult with the local bus service providers in determining appropriate improvements. When locating bus stops and/or planning building entrances, entrances must be designed to provide safe and efficient access to nearby transit stations or stops.
- Safe and convenient access from the external circulation system to bicycle parking facilities on site.

City of Torrance Local Policies and Regulations

Torrance General Plan Circulation and Infrastructure Element

The Torrance General Plan Circulation and Infrastructure Element describes the goals and policies needed to attain circulation objectives and introduces other techniques that can be used to improve traffic flow. As discussed in the General Plan, policies pertaining to improving circulation are addressed in multiple chapters of the General Plan. Objectives and associated policies are presented below (City of Torrance 2010).

Objective CI.4: To provide a safe, efficient, and comprehensive circulation system that serves local needs, meets forecasted demands, and reduces traffic impacts on neighborhoods.

Policy CI.4.1 Protect residential neighborhoods from cut-through traffic by enhancing the capacity of Arterials and Collectors, improving signage, guiding traffic away from residential areas, and employing appropriate traffic-calming methods based on identified needs.

Policy CI.4.7 Consider all alternatives for increasing street capacity before widening is pursued for streets that immediately serve residential neighborhoods.

The City also has a target for intersection operation, which is LOS “D” or better. The LOS “D” objective for the roadway system design reflects the City’s desire to maintain stable traffic flow, realizing that peak-hour congestion may occur at locations near freeways or other locations with unusual traffic characteristics due to regional traffic flow. Unrelated to CEQA, plan, policy, and regulatory consistency with these thresholds of significance would be determined as part of the review and approval process with the City of Torrance decision-makers during consideration of

discretionary approvals for the Phase 1 preliminary site development plan. The Operational Intersection Analysis may be used to help inform that decision (see Appendix J).

Torrance Climate Action Plan

The Torrance Climate Action Plan was prepared by the City in concert with SBCCOG and was adopted in 2017. The Climate Action Plan includes a list of non-binding goals and strategies related to transportation, which are the same as those in the Redondo Beach Climate Action Plan as described above.

Hawthorne Boulevard Corridor Specific Plan

The City of Torrance adopted the Hawthorne Boulevard Corridor Specific Plan in 1996 in order to guide future decision-making regarding land use, development, transportation, streetscape, and other public improvements within the Hawthorne Boulevard Corridor Specific Plan Area. The plan area runs along Hawthorne Boulevard and extends from Redondo Beach Boulevard in the north to Rolling Hills Road in the south, encompassing the Del Amo Fashion Center, the Civic Center, Madrona Marsh, and Torrance Municipal Airport. Relevant goals and policies of the plan include the following:

Policy 6-2 Minimize potential conflicts between through traffic on Hawthorne Boulevard and turning traffic, between vehicles and pedestrians, and between traffic and stopped transit vehicles.

Policy 6-4 Avoid the intrusion of through traffic in residential areas.

3.14.3 Impact Assessment and Methodology

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2020 CEQA Guidelines. For purposes of this EIR, implementation of the proposed Project may have a significant adverse impact on transportation if it would do any of the following:

- a) Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).
- c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- d) Result in inadequate emergency access.

As previously described, 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 GHG generation. The State has set ambitious targets for reductions in GHG generation, which in turn relates to transportation and required reductions in VMT, because transportation is the largest generator (41 percent) of GHGs by sector in the State. Thus, legislation, programs, plans and policies which target GHG emissions and climate change relate directly to transportation and the need to reduce VMT. Regarding VMT, CEQA Guidelines Section 15064.3(b) provides Criteria for Analyzing Transportation Impacts. Applicable guidance includes the following:

- **Land Use Projects.** VMT exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within 0.5-mile radius of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease VMT in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
- **Qualitative Analysis.** If existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.
- **Methodology.** A lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's VMT and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate VMT and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

OPR's Recommendations for Transportation Impact Criteria

As explained above in Section 3.14.2, *Regulatory Setting*, in September 2013, SB 743 directed OPR to revise the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts. In developing the criteria, OPR proposed, and in December 2018 the California Natural Resources Agency certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. CEQA Section 15064.3 defines VMT as *"the amount and distance of automobile travel attributable to a project"* and notes that for determination of significance for transportation impacts, *"[o]ther relevant considerations may include the effects of the project on transit and non-motorized travel."*

VMT replaced analysis of roadway capacity-based or automobile delay-based LOS, as the CEQA metric for transportation impact from land use projects. That is because LOS measures a project's impact on the driving experience of other vehicle drivers (e.g., congestion, delay, etc.) and favors development in exurban areas where existing roadway traffic is light, often leading to longer vehicle trips, or resulting in road-widening projects, which result in adverse environmental and public health impacts through induced vehicle demand and degradation of the biking or walking experience. By contrast, evaluation of a project's impact as measured by VMT evaluates the effect on the environment of project-generated vehicle trips, such as more and/or longer vehicle trips which emit more GHGs, or projects which generate fewer vehicle trips or shorten existing trips such as development of an infill site or facilities that improve bicycle access or walkability.

While OPR recognizes that lead agencies have the discretion to set or apply their own thresholds of significance, the Proposed Transportation Impact Guidelines include recommendations regarding significance thresholds for residential, office, and retail projects. For residential and office projects, the Proposed Transportation Impact Guidelines recommend that a significant impact occurs when a project's VMT exceeds a level of 15 percent below the existing regional or city VMT per capita and per employee, respectively. This target reduction is consistent with the overall VMT reduction goals of the 2017 CARB Scoping Plan. For retail and redevelopment projects, the Guidelines recommend that a significant impact would occur with any net increase in total VMT. The guidelines also recommend significance thresholds for land use plans. A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office, or retail land uses would in aggregate exceed the respective thresholds recommended above.

BCHD does not have adopted CEQA impact criteria for transportation. As the lead agency responsible for preparing the EIR, BCHD has the discretion to select its impact criteria, and use

relevant and defensible sources. BCHD has reviewed and is following OPR's Technical Advisory. The City of Redondo Beach's in-progress guidelines for VMT impact analysis are also being monitored and the currently considered version is applied to this EIR's the VMT analysis, as further described below.

City of Redondo Beach Draft VMT Thresholds

The VMT impact analysis contained in this report considers the City of Redondo Beach's ongoing efforts to develop new transportation analysis guidelines to comply with SB 743 and is consistent with the draft screening methodologies and impact criteria that were presented to the Redondo Beach City Council on November 10, 2020.

While not yet adopted, the Redondo Beach City Council has provided concurrence with the use of the following screening and significance thresholds:

- **Screening criteria:** Several VMT screening options are currently under consideration by the City of Redondo Beach. If a project meets [one or more of] the screening criteria, it would not be required to conduct a VMT impact analysis. The screening options presented to the City Council included:
 - Small Project screening (less than 110 net daily trips);
 - Locally serving retail (10,000 sf or less); or
 - Low VMT Area (based on data from the SCAG Regional Travel Demand Model). The County defines a Low VMT Area in accordance with CARB's recommendation of 16.8 percent 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.
- **Thresholds of Significance:** For projects that do not meet the screening criteria above, the threshold of significance would be 16.8 percent below the baseline existing conditions. CARB has modeled foreseeable emission reductions associated with existing mobile-source regulations and different combinations of advancements in technologies, fuels, and transportation system efficiencies. The results of CARB's modeling show that a 16.8 percent reduction from existing levels in VMT per capita for light-duty vehicles is needed in order to achieve the State required target of 80 percent reduction in GHGs by 2050. CARB's recommendations are slightly higher than OPR's recommendations (i.e., 15 percent below baseline conditions) because the research is based on meeting slightly different goals.

While not yet adopted, the Redondo Beach City Council has confirmed that SBCCOG should be the geographic area to be used as a baseline for comparing project-related VMT performance in the determination of a potentially significant VMT impact. Using the 2016 SCAG Regional Travel Demand Model, Fehr & Peers estimated average VMT per capita and per employee for the SBCCOG region (see Table 3.14-5). 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 work VMT per employee is greater than 15.3 or a project's home-based VMT per capita is greater than 11.1. Home-based work VMT includes only vehicle roundtrips between the residence of the trip-maker and their place of work. Home-based VMT includes all vehicle roundtrips originating from the residence of the trip-maker.

Table 3.14-5. City of Redondo Beach Draft VMT Impact Thresholds of Significance

VMT Metrics	SBCCOG Average VMT		Percent Change
	2016 Baseline	2040 Forecast	
Home-Based Work VMT per Employee	18.4	13.7	-25.5%
<i>Threshold of Significance (16.8% below)</i>	<i>15.3</i>	<i>11.4</i>	
Home-Based VMT per Capita	13.3	11.3	-15.0%
<i>Threshold of Significance (16.8% below)</i>	<i>11.1</i>	<i>9.4</i>	

Sources: Fehr & Peers 2021a; SCAG 2016.

As described in Table 3.14-5, home-based work VMT per employee is forecast to be reduced by 25.5 percent and home-based VMT per capita is forecast to be reduced by 15 percent in the SBCCOG region by 2040. As such, a project's potential to increase VMT is greater using the (2016) base-year model, rather than the cumulative (2040) forecast. Given this characteristic, the City of Redondo Beach Draft VMT Guidelines require that a project's VMT impact analysis be conducted using the (2016) base-year model.

Methodology

The scope of work for the Transportation Study prepared for the proposed Project was determined in consultation with BCHD, the City of Redondo Beach, and City of Torrance to inform the transportation impact analysis, consistent with the requirements CEQA. Input from the cities was solicited in multiple meetings including on September 20, 2019 and December 12, 2019. An analytical approach was confirmed via feedback received on two technical memoranda focused on trip generation, trip distribution, and VMT analysis.

Plans, Ordinance, and Policy Consistency

The plan, ordinance, and policy consistency analysis assesses whether a project would conflict with an adopted plan, ordinance, and policy addressing the circulation system (including transit, roadways, bicycle, and pedestrian facilities as required under CEQA) that is adopted to protect the environment. In general, transportation policies or standards adopted to protect the environment are those that support multi-modal transportation options and a reduction in VMT. A project that does not implement a program, plan, policy, or ordinance would not necessarily result in a conflict or an impact. Many of these programs must be implemented by the City of Redondo Beach and the City of Torrance themselves over time and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the cities from implementing adopted programs, plans, and policies.

This analysis of land use consistency considers whether the proposed Project would be consistent with applicable plans, policies, and regulations. Sources utilized in the development of this section include SCAG's RTP/SCS, Metro's 2020 LRTP, the South Bay Bicycle Master Plan, the Redondo Beach General Plan, and the Torrance General Plan and Hawthorne Boulevard Corridor Specific Plan. Plan and policy consistency are based on whether the proposed Project would result in environmental impacts to transportation as outlined in the applicable plan.

Vehicle Miles Traveled

The potential impacts of Project-related VMT are assessed in the context of CEQA Section 15064.3 and CEQA Appendix G, as well as the City of Redondo Beach's Draft VMT Guidelines. The analysis also accounts for the goals or State, regional, and local plans regarding reduction targets for VMT and GHG emissions, including the 2017 CARB Scoping Plan target VMT reduction of 15 percent.

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

- **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.
- **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 Work VMT” per employee for the employees of a project site and “Home-Based VMT” per capita for residential projects.

Based on OPR’s Technical Advisory and the City of Redondo Beach’s Draft VMT Guidelines, the following screening methods were used to analyze the proposed Project: Small Project Screening and Low VMT Area Screening. The analysis also discusses average trip length for trips generated by the proposed Project as compared to regional average trip lengths in the SBCCOG service area.

VMT Screening & Qualitative Review

As described above, the City of Redondo Beach’s Draft VMT Guidelines consider several VMT screening options, which evaluate whether a VMT impact analysis is required for a project. If a project meets the screening criteria, it would not be required to conduct a VMT impact analysis. The screening options include small project (less than 110 net daily trips), locally serving retail (10,000 sf or less), and low VMT area screening. Because the proposed Project is not a locally serving retail development, the small project screening and low VMT area screening are evaluated for the proposed Project below.

The proposed Project’s generation of daily vehicle trips was estimated to evaluate whether the Project meets the criteria for the small project screening. 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 (i.e., observed) trip generation surveys at locations throughout the country. While ITE Trip Generation is a defensible approach, ITE always recommends utilizing local data where it is available. Based on input from the City of Redondo Beach and the City of Torrance, an empirical trip generation study was conducted at the BCHD campus to validate and calibrate ITE trip generation rates to reflect accurate existing site conditions.

Driveway counts were collected at the Project site over a period of 24 hours on a typical weekday in October 2019 (see Appendix K). While the driveway counts can be used for validating overall campus trip generation, they do not allow for the analysis of trip generation by individual land use type at the BCHD campus. In order to assess the difference in trip generation by land use type, 24-hour pedestrian counts were conducted at the entrances to each

• DATA USED TO CALIBRATE TRIP GENERATION RATES:

- Driveway Counts
- Pedestrian Surveys
- CHF Membership Scans
- BCHD Programming Information
- Bollard King & Associates Market Feasibility Study

building on campus on the same day as the driveway counts. Because the buildings at 510 North Prospect Avenue and 520 North Prospect Avenue both contain exclusively medical office uses,

pedestrian counts at those buildings were used to develop a site-specific medical office trip rate to compare with ITE trip generation rates for medical office uses. Pedestrian trips to the Beach Cities Health Center (514 North Prospect Avenue) could not be fully isolated by land use due to the mix of land use types within the building. However, the Child Development Center has a dedicated entrance to the Beach Cities Health Center. Therefore, pedestrian counts at that entrance were isolated and compared with ITE trip generation rates for day-care center uses. Membership scans of the Center for Health and Fitness (CHF) were used to estimate isolated trip counts for that land use and compare with ITE trip generation rates for health centers/gyms. Trip counts for the remaining uses within the Beach Cities Health Center (i.e., office/administrative, memory care, etc.) could not be isolated by land use type and individually compared with the respective ITE trip generation rate. Therefore, these land use types were collectively counted and compared to ITE trip generation rates. ITE trip generation rates were applied to each existing land use at the BCHD campus based on the existing occupied floor area of each land use type.

Using the ITE trip generation rates, the existing BCHD campus is estimated to generate 5,854 daily trips, including 530 AM peak period trips, and 637 PM peak period trips. However, the results of the 24-hour site-specific driveway and pedestrian counts showed that the BCHD campus generates 6,713 daily trips, 610 AM peak period trips, and 455 PM peak period trips in one day. Therefore, the driveway and pedestrian counts revealed that the BCHD campus generates 16 percent more daily trips, 13 percent more AM peak period trips, and 29 percent fewer PM peak period trips than the ITE trip generation rates estimated. Using the empirical driveway and pedestrian counts, Fehr & Peers calibrated the ITE trip generation rates in order to more accurately reflect existing trip generation at the BCHD campus. The calibrated trip rates were used to estimate projected trip generation for the proposed Project by phase.

Trip generation estimates for new uses were based on available programming information provided by BCHD. ITE does not provide a trip generation rate for aquatic centers such as the one proposed as part of the Phase 2 development program. Therefore, BCHD hired Ballard King & Associates to prepare a market feasibility study, which includes preliminary findings of the market assessment used by Fehr & Peers to estimate potential trip generation (see Appendix J).

Using the calibrated trip generation rates, it was determined that 3,284 of the total existing daily vehicle trips are generated from land uses within the Beach Cities Health Center. Phase 1 of the proposed Project would demolish the Beach Cities Health Center and subsequently remove these 3,284 daily vehicle trips from the roadway network. (The remaining 3,429 existing daily trips are generated by the medical office uses at 510 North Prospect Avenue and 520 North Prospect Avenue, which would remain in operation under Phase 1 of the proposed Project.)

Table 3.14-6. Phase 1 Project Net Trip Generation

	Trip Generation		
	Daily	AM Peak Period	PM Peak Period
<i>Existing Trips to be Removed</i>			
Beach Cities Health Center	3,284	307	222
<i>Phase 1 Trips to be Added</i>			
RCFE Building	1,365	73	64
<i>Phase 1 Net Trip Generation</i>	<i>-1,919</i>	<i>-235</i>	<i>-158</i>

Source: Fehr & Peers 2021a.

During operation of the Phase 1 preliminary site development plan, the proposed uses within the Residential Care for the Elderly (RCFE) Building which would replace the Beach Cities Health Center are expected to generate 1,365 daily vehicle trips, including 73 AM peak period trips and 64 PM peak period trips (refer to Table 3.14-6; see Appendix J). The net trip generation, which is calculated by subtracting the existing trips generated by the Beach Cities Health Center from the estimated trips that would be generated by the proposed RCFE Building, is expected to be negative. This means that more vehicle trips would be removed from the roadway network than the number of trips that would be added to the roadway network from operation of the proposed RCFE Building. Implementation of the Phase 1 preliminary site development plan is estimated to reduce existing trip generation by approximately 1,919 daily trips, 235 AM peak period trips, and 158 PM peak period trips (refer to Table 3.14-6). This is in part because Phase 1 of the proposed Project would replace high trip generating land uses (e.g., medical office), with lower trip generating land uses (e.g., Assisted Living units). This reduction in daily vehicle trips is also attributed to the demolition of a large number of existing uses within the Beach Cities Health Center and the construction of only a small portion of the proposed Healthy Living Campus Master Plan. Because Phase 1 would result in a substantial reduction of Project-related vehicle trips as compared to existing trip generation at the Project site, Phase 1 would generate fewer than 110 net new trips, falling below the threshold identified by OPR and the City of Redondo Beach for small project screening.

However, after completion of Phase 2, the proposed Project is expected to generate a total of 3,360 daily vehicle trips, including 271 AM peak period trips and 195 PM peak period trips (see Table 3.14-7; see Appendix J). After accounting for existing trips being removed from the roadway network, the proposed Project – including the Phase 1 preliminary site development plan and the Phase 2 development program – would generate a net increase of 376 new daily trips as compared with existing conditions. Given that the proposed Project would generate a net increase in 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, the proposed Project – including the Phase 1 preliminary site development plan as well as the Phase 2 development program – cannot be assumed to result in a less than significant impact and the proposed Project is not exempt from requiring a VMT impact analysis.

Table 3.14-7. Total Net Trip Generation Resulting from the Proposed Project

VMT	Trip Generation		
	Daily	AM Peak Period	PM Peak Period
Existing Trips to be Removed			
Beach Cities Health Center	3,284	307	222
Proposed Phase 1 and Phase 2 Trips to be Added			
Phase 1	1,365	73	64
<i>Phase 1 Net Trip Generation</i>	<i>-1,919</i>	<i>-234</i>	<i>-158</i>
Phase 2	3,660	271	195
<i>Phase 2 Net Trip Generation</i>	<i>376</i>	<i>-37</i>	<i>-28</i>
Total Net Trip Generation Resulting from the Proposed Project	376	-37	-28

Note: 3,429 existing daily trips are generated by the medical office uses at 510 North Prospect Avenue and 520 North Prospect Avenue, which would remain in operation under the proposed Project. The Beach Cities Advanced Imaging Building (510 North Prospect Avenue) may be redeveloped under the Phase 2 development program; however, it would be replaced with identical medical office uses and would not result in a change in associated trip generation rates.

Source: Fehr & Peers 2021a.

OPR guidance also states that residential and office projects located within an area that generates low VMT may be presumed to have a less than significant impact and could be screened from a VMT impact analysis. Other employment-related and mixed-use projects may

- **TRANSPORTATION ANALYSIS ZONES:** Geographic polygons representing communities and neighborhoods at a sub-city level of detail.

qualify for low VMT area screening if the project is expected to generate VMT per resident or per worker similar to the existing land uses in the low VMT area. As previously described, the County and the City of Redondo Beach define a low VMT area as a transportation analysis zone (TAZ) that generates VMT on a per capita/employee basis that is at least 16.8 percent lower than the regional average. Pursuant to the City of Redondo Beach's Draft VMT Guidelines, the average VMT in the SBCCOG area is used as the regional baseline for comparing Project-related VMT performance.

Using the SCAG Regional Travel Demand Model, Fehr & Peers calculated employment-related (home-based work) VMT per employee and population-related (home-based) VMT per capita for the TAZ that encompasses the Project site (Project TAZ). Home-based work and home-based VMT generated within the Project TAZ were compared to the SBCCOG regional average home-based work and home-based VMT, respectively (see Table 3.14-8).

- **VMT IMPACT ANALYSIS METRICS:**
VMT impact analysis assesses the Vehicle Miles Travelled (VMT) per person (capita), or per employee per day, or total VMT. For residential projects the metric used is “VMT per capita.” For office projects, the metric used is “VMT per employee.” For retail projects, the metric is “total VMT.” For other land uses not specified in the OPR guidance, the metric best fitting the predominant trip-making variable for that use shall be used.

Table 3.14-8. Low VMT Area Screening for Project TAZ

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

Sources: Fehr & Peers 2021a; SCAG 2016.

Home-based work VMT generated within the Project TAZ is more than 16.8 percent lower than the regional average (refer to Table 3.14-8). Therefore, the Project TAZ is considered a low VMT area for home-based work VMT. However, the home-based VMT generated within the Project TAZ is only 5 percent lower than the regional average (refer to Table 3.14-8). Therefore, the Project TAZ does not meet the screening criteria for low VMT screening and would not be identified as a low VMT area for home-based VMT. The City of Redondo Beach has provided direction that low VMT area screening should only be applied to mixed-use projects if all components of the project can be screened. Therefore, the proposed Project, which contains both employment-related and residential-related uses, does not meet the screening criteria for low VMT area screening.

VMT Analysis Methodology

Fehr & Peers calculated VMT associated with the proposed Project – including the Phase 1 preliminary site development plan and the Phase 2 development program – using the SCAG Regional Travel Demand Model. The socioeconomic data for the Project TAZ was updated within the model to account for Project-related employment and the Assisted Living residents that would not require on care services. These residents would have access to their own vehicles and therefore could generate home-based VMT per capita. The remaining residents of the proposed Assisted Living and Memory Care units would not be expected to generate home-based VMT since they would be less mobile. Fehr & Peers ran the SCAG Regional Travel Demand Model to calculate

Project TAZ home-based work VMT per employee and home-based VMT per capita with the Project-related socioeconomic data changes (see Table 3.14-9).

Table 3.14-9. Project TAZ 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

Sources: Fehr & Peers 2021; SCAG 2016.

As described in Table 3.14-10 below, the ITE trip generation rates vary widely between the types of residential land uses considered by SCAG (single-family homes and multi-family low-rise developments) and the types of residential uses included in the proposed Project (senior adult housing and assisted living). According to ITE trip generation data, Assisted Living uses generate only 35 percent of the daily trips of typical multi-family housing (see Table 3.14-10).

Table 3.14-10. ITE Residential Daily Trip Generation Rates

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

Source: ITE 2017.

While ITE only considers the numbers of trips generated by various land uses, the VMT analysis prepared by Fehr & Peers assumes that the characteristics of those trips (e.g., trip purpose and length) are similarly varied. For example, residents of single-family homes and multi-family low-rise developments may travel long distances daily for work and may group different purpose trips together (e.g., 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, such as the local grocery store or a doctor's appointment.

In order to more accurately evaluate VMT generated by the proposed Project, Fehr & Peers also obtained average trip length data for the BCHD campus using StreetLight location-based service data from 2019, prior to the onset of the COVID-19 pandemic. Using the StreetLight portal, Fehr & Peers mapped the relative weight of the origin/destination grid cells to and from the BCHD campus.

BCHD serves members of the Beach Cities (i.e., Redondo Beach, Hermosa Beach, and Manhattan Beach) communities as well as other South Bay communities. By nature of its service area, BCHD generates a shorter average trip length than typical uses in the SBCCOG subregion. According to the StreetLight portal, the areas (i.e., grid cells) with the greatest share of travel to and from the Project site are clustered within the Beach Cities and adjacent communities. Select grid cells beyond these nearby communities indicate likely concentrations of BCHD employees commuting to and from the Project site; however, these areas are scattered with small shares of travel to and from the BCHD campus. The StreetLight data revealed that the average weekday trip length to and from the BCHD campus is 6.4 miles, and the average weekend trip length is 6.3 miles. Given that the proposed Project would redevelop the existing campus with uses that would continue to serve the Beach Cities and surrounding South Bay communities, existing trip lengths are likely to remain similar under the proposed Project. The existing average weekday trip length for the BCHD campus is 65.2 percent lower than SBCCOG regional home-based work VMT per employee (refer to Table 3.14-5).

To further evaluate whether the Assisted Living and Memory Care residents of the proposed Project would generate less VMT per capita than the SCAG Regional Travel Demand Model's estimates for residential uses, StreetLight data were evaluated for Brookdale South Bay located at 5481 West Torrance Boulevard in Torrance. Brookdale South Bay provides independent Assisted Living units. Therefore, Brookdale South Bay was determined to have representative data for average trip lengths associated with residents of the proposed Project. Fehr & Peers calculated an average trip length of 4.8 miles using the StreetLight data for Brookdale South Bay.

- **SCAG REGIONAL TRAVEL DEMAND MODEL:** SCAG forecasts travel behavior for the Southern California Region using computer-based software programs also known as the Regional Travel Demand Model. The Regional Travel Demand Model provides a common foundation for transportation planning and decision-making by SCAG and other agencies within the Region.
- **STREETLIGHT DATA:** StreetLight is a data vendor that aggregates and summarizes origin destination data using cell phone and app location-based data (e.g., Google Maps) to quantify and measure the travel patterns for a given location. (These data are aggregated into grid cells to maintain individual user privacy.) Unlike the modeled regional data provided by SCAG, StreetLight data are recorded, location specific data that provide for a more refined understanding of trip-making characteristics on a local level.

The VMT impact analysis under Impact T-2 compares Project TAZ home-based work VMT per employee and home-based VMT per capita to the regional averages within the SBCCOG to determine the significance of the increase in VMT associated with the proposed Project (see Table 3.14-11)

Geometric Design Feature or Incompatible Use Hazards & Emergency Access

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 evaluated for both temporary conditions during Project construction and permanent conditions after buildout of the Phase 1 preliminary site development plan and the more general Phase 2 development program under the proposed Project.

Project access plans are reviewed in light of commonly accepted traffic engineering design standards to ascertain whether any deficiencies are apparent in the site access plans which would be considered significant. The determination of significance shall be on a case-by-case basis, considering the following factors:

- The relative amount of pedestrian activity at campus access points.
- Design features/physical configurations that affect the visibility of pedestrians and bicyclists to drivers entering and exiting the Project site, and the visibility of cars to pedestrians and bicyclists.
- Emergency access is analyzed with consideration of the routes of ingress/egress to the Project site, evaluating the potential limits to access for emergency personnel and site evacuation.

Cut-Through Traffic

As described in Section 3.14.1, *Environmental Setting*, the City of Torrance conducted license plate surveys during the AM and PM peak periods at four locations on the boundary of the Torrance neighborhood to the east of the BCHD campus to evaluate cut-through traffic between Beryl Street and Del Amo Boulevard. Independent of the City of Torrance's license plate surveys, Fehr & Peers also collected neighborhood street segment counts on a number of roadways in the Torrance neighborhood. The streets considered in these counts include, but are not limited to,

Flagler Lane between Beryl Street and Towers Street, and 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.

Most cut-through traffic occurs when congestion is high on arterial streets, particularly during commute AM and PM peak periods. As identified within the City of Torrance's license plate surveys, between 31 percent and 47 percent of vehicles traveling through the Torrance neighborhood contribute to cut-through traffic. Assuming cut-through traffic remained constant throughout the day, Fehr & Peers assumed a blended cut-through rate of 37.5 percent of vehicles contribute to cut-through traffic during the midday period between 9:30 a.m. and 4:00 p.m. However, cut-through traffic typically occurs most often during peak commute periods when drivers may attempt to bypass congested locations; therefore, midday cut-through traffic would likely be lower than the AM and PM peak period percentages identified by the City of Torrance.

3.14.4 Project Impacts and Mitigation Measures

Impact Description (T-1)

- a) *The project would conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.*

T-1 The proposed Project – including the Phase 1 preliminary site development plan and the more general Phase 2 development program – would not cause significant environmental impacts due to conflicts with any transportation plan, policy, or regulation. Therefore, impacts would be *less than significant with mitigation*.

The CEQA Guidelines state that a project would have a potentially significant impact if the project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Redondo Beach and Torrance have adopted plans, ordinances, and policies that establish the transportation planning framework for all travel modes. The overall goals of these policies are to achieve a safe, accessible, and sustainable transportation system for all users. In compliance with CEQA, this analysis also assesses consistency with applicable plans in the vicinity of the Project site.

As described in Section 2.5.1.5, *Sustainability Features*, the proposed Project would implement a TDM plan with trip reduction strategies to reduce single-occupancy vehicle trips to the Project site. While the proposed Project would not generate daily vehicle trips or VMT that would result

in a significant transportation impact (see Impact T-2), the TDM plan is included as a recommended mitigation measure that provides additional information on the proposed TDM measures pursuant to the requirements of RBMC Section 10-2.2406. The TDM plan would also encourage visitors to travel to the campus via active (e.g., walking, biking, etc.) transportation, consistent with BCHD's mission to promote health and well-being. For example, BCHD would provide a bicycle sharing program for access to the adjacent bicycle paths and local surroundings as well as bicycle facilities, such as bicycle parking, a bicycle repair station, and employee shower and locker facilities. The TDM plan would also include transit and carpool incentives for employees, such as subsidized Beach Cities Transit passes and designated parking for vanpools and carpools. The Assisted Living, Memory Care, and PACE services would also share and use vans to transport several participants at once, which would reduce vehicle trips to the BCHD campus. BCHD would provide incentives to guests and employees for hybrid and/or electric car parking. The proposed Project would also include ride-share amenities as well as an emergency ride home program for employees and visitors. See MM T-1 for a list of measures that would be considered in the required TDM plan.

Although the proposed Project would generate 376 net new daily vehicle trips and incrementally increase VMT, it would be substantially consistent with adopted plans and policy framework established in Connect SoCal, Metro's 2020 LRTP, the South Bay Bicycle Master Plan, Redondo Beach General Plan Circulation Element, Torrance General Plan Circulation and Infrastructure Element, and Torrance Hawthorne Boulevard Corridor Specific Plan. Therefore, a comprehensive analysis of consistency with applicable long-range planning documents and policies is provided in Section 3.10, *Land Use and Planning*. This analysis includes a rigorous discussion of consistency with development standards, including design guidelines and vehicle trip reduction strategies, to minimize transportation impacts associated with the proposed Project. In addition, because the South Bay Bicycle Master Plan currently does not provide specific policies or goals for individual development projects, this analysis describes how the proposed Project would support the overall goal of this plan. As discussed in further detail below, the proposed Project is consistent with all applicable development standards, design guidelines, and other transportation-related strategies.

Connect SoCal

Connect SoCal aims to reduce or limit new trip generation and associated regional growth in traffic congestion and VMT by focusing growth, density, and land use intensity within existing urbanized areas. Connect SoCal also strives to enhance the existing transportation system, maximize multi-modal transportation, and integrate land use into transportation planning. The RTP/SCS recommends local jurisdictions accommodate future growth within existing urbanized areas to

reduce VMT, congestion, and GHG emissions. The proposed Project supports these goals by redeveloping an existing developed site with a mix of residential, community service, medical office, and community health and wellness uses in close proximity to several stops along Beach Cities Transit Line 102, which are within walking distance of the Project site. The proposed Project would also encourage pedestrian activity through the provision of 114,830 sf of pedestrian-only on-site open space. The proposed Project would also provide electric vehicle (EV) charging stations and bicycle parking spaces for visitors and employees improving overall access to active bicycle facilitates. As described in Section 3.10, *Land Use and Planning* the proposed Project would be consistent with all applicable goals of Connect SoCal.

Metro 2020 Long Range Transportation Plan

Metro's 2020 LRTP focuses on improving transportation and the environment with the implementation of trip reduction strategies and TDM measures, such as transit-oriented development (TOD), to reduce single-occupant vehicle trips and VMT. While the area within the vicinity of the Project site is generally transit poor, lacking multiple transit routes, the proposed Project would support transit-oriented communities by developing 157 new residential units, new jobs, and community center uses conveniently located in close proximity to residential and commercial land uses and adjacent to several stops along the Beach Cities Transit Line 102. As previously described, the proposed Project would implement a TDM plan (see recommended MM T-1) with transit and carpool incentives for employees (e.g., designated parking for carpools and vanpools on-site), shared vans to transport several Assisted Living, Memory Care, and PACE participants at once, and ride-share pick-up amenities (e.g., the main entrance roundabout and passenger drop off driveway). The proposed Project would also reduce vehicle trips and VMT by providing publicly accessible ground-level open space with pedestrian pathways and on-site bicycle facilities (e.g., bicycle parking, employee showers and lockers, etc.) to encourage active transportation to and from the Project site. Therefore, the proposed Project would enhance active transportation usage in the vicinity of the Project site, and would be consistent with the goals of the LRTP.

South Bay Bicycle Master Plan

The Project site is located adjacent to the Class II bicycle lanes on Diamond Street and Beryl Street as well as the informal bike path along Flagler Alley. Implementation of the proposed Project would not physically interfere with any future bicycle facilities identified in the South Bay Bicycle Master Plan. The proposed Project would also not conflict with local goals and policies to increase bicycle trips in the cities of Redondo Beach and Torrance. Rather, the proposed Project would

encourage employees, tenants, and visitors to use existing bicycle facilities throughout the area through implementation of a TDM plan and the provision of on-site bicycle amenities such as secure bicycle parking, showers, and personal locker facilities. Therefore, the proposed Project would support the goals and actions of the South Bay Bicycle Master Plan.

Redondo Beach General Plan Circulation Element

The Redondo Beach General Plan Circulation Element serves as a planning document governing the transportation networks within Redondo Beach. The Circulation Element establishes goals related to reducing trip generation, promoting alternative modes of transportation, expanding TDM, and coordinating transportation and land use planning. The complete list of the goals and policies adopted by the City of Redondo Beach is described in Section 3.10, *Land Use and Planning*. As discussed in Section 3.10, *Land Use and Planning* implementation of the proposed Project would be consistent with the City of Redondo Beach's goals, policies, and programs for transportation management, alternative transportation, and walkable communities.

One of the stated goals of the Redondo Beach General Plan Circulation Element is the City-wide goal to encourage all employers to pursue TDM measures already demonstrated to be successful in Southern California, such as the implementation of flexible hours in work environments, incentives for employer-based carpools and vanpools, and shared transportation vehicles. The proposed Project would maximize mobility and accessibility through implementation of a TDM plan (see recommended MM T-1), which would include trip reduction strategies, such as transit and carpool incentives for employees (e.g., designated parking for carpools and vanpools on-site), to reduce single-occupancy vehicle trips to the Project site. Additionally, the Assisted Living, Memory Care, and PACE services developed during Phase 1 would share vans to transport several participants at once, which would reduce vehicle trips to the BCHD campus. A majority of the BCHD campus employees would continue to work with a flexible schedule, which allows an employee to work hours that differ from the normal company start and stop time to reduce peak period vehicle trips and associated roadway congestion.

The Redondo Beach General Plan Circulation Element also establishes the goal to reduce Year 2030 trip generation by 25 percent compared to 2007 levels. This goal will be achieved by changing travel behavior associated with both existing and future development in Redondo Beach. To achieve the goal of reducing Year 2030 trip generation by 25 percent compared to 2007 levels, the Circulation Element provides a framework for integrating land use and transportation to reduce vehicle trips; encouraging walking, bicycling, and transit use; and creating active, pedestrian-oriented neighborhoods. The proposed Project is expected to reduce daily vehicle trips during

operation of Phase 1 as compared to existing conditions and would generate an increase of only 95 daily vehicle trips during operation of Phase 2 (see Impact T-2). The Circulation Element goal of reducing Year 2030 trip generation by 25 percent compared to 2007 levels is not a requirement to be applied on a project-by-project basis. Rather, the intent of this goal is to reduce vehicle trips for existing and future uses on a City-wide basis through implementation of land use and transportation policies, programs, and projects that support and invest in the transportation system. The Circulation Element encourages that new projects be designed to support the use of alternative forms of transportation by providing housing, jobs, and local-serving community services in close proximity to public transit and incorporating design elements that would encourage walking and bicycling. As previously described, the proposed Project would be served by Beach Cities Transit Line 102. The proposed Project would also promote active and multi-modal transportation by providing pedestrian linkages through the site and bicycle facilities on-site, which would assist in reducing Project-related vehicle trips and VMT. For example, the proposed Project would include publicly accessible ground-level open space traversed with pedestrian pathways which would provide on-site and off-site connectivity with the existing sidewalks adjacent to the Project site on North Prospect Avenue, Beryl Street, Flagler Lane and Flagler Alley, and Diamond Street. The proposed new two-tiered stairway would provide an additional pedestrian entrance to the Project site adjacent to the intersection of Beryl Street & Flagler Lane, and the pedestrian-only open space on the ground level of the proposed Project would enhance active transportation usage in the Project vicinity. Open space areas would include an entry plaza featuring directional signage, public art, seating areas, and water feature, a tree-lined pedestrian promenade, and a relocated demonstration garden, making walking safe, interesting, and enjoyable. Additionally, the proposed Project would provide secure, on-site short-term bicycle parking, a bicycle repair station, and shower and locker facilities for visitors and employees to encourage active transportation to and from the Project site and reduce vehicle trips.

Additionally, by developing a mix of land uses on a single site in Redondo Beach and adjacent to Torrance, the proposed Project would increase accessibility to multiple other destinations including restaurants, grocery stores, commercial, recreational, and residential uses. As a result of increased destination accessibility, the proposed Project would support the City-wide goal of reducing overall vehicle trips and VMT.

As described in Section 3.10, *Land Use and Planning* the proposed Project would be consistent with all applicable goals of the Redondo Beach General Plan Circulation Element.

Torrance General Plan Circulation and Infrastructure Element and Hawthorne Boulevard Corridor Specific Plan

The Torrance General Plan Circulation and Infrastructure Element identifies a transportation system capable of responding to growth occurring consistent with the Land Use Element. This element describes physical improvements needed to attain circulation objectives for automobiles, pedestrians, cyclists, and transit riders, and introduces other measures (e.g., restricted street parking, transportation systems management plans) that can be used to improve traffic flow. The Hawthorne Boulevard Corridor Specific Plan provides a framework of detailed standards and guidelines for integrating land use and transportation to reduce vehicle trips; encouraging walking, bicycling, and transit use; and creating active, pedestrian-oriented neighborhoods. The primary goals of the General Plan Circulation and Infrastructure Element and Hawthorne Boulevard Corridor Specific Plan with regard to the circulation system within Torrance are focused on maintaining or improving the existing LOS at intersections during peak periods, protecting residential neighborhoods from cut-through traffic, and reducing the dependence on single-occupant vehicles.

The proposed Project is expected to reduce daily and peak period trip generation during operation of Phase 1 when compared to existing conditions, as detailed under Impact T-2. While operation of Phase 2 of the proposed Project is expected to generate an increase of 376 net new daily vehicle trips, AM peak period trips would be reduced by approximately 37 and PM peak period trips are expected to be reduced by approximately 28, as compared to existing conditions (refer to Table 3.14-7). Therefore, implementation of the proposed Project would reduce trip generation during peak periods and result in a mildly positive effect on intersection operations along key corridors in Torrance, such as Hawthorne Boulevard.

With implementation of the Construction Traffic and Access Management Plan (MM T-2), the proposed Project would avoid construction traffic through residential neighborhoods within Torrance to the maximum extent feasible (refer to Figure 2-13 for the proposed construction vehicle haul routes). Additionally, the proposed driveways on Flagler Lane south of Beryl Street would be restricted to left turns only, preventing traffic from cutting through the Torrance residential neighborhood to the east of the Project site. Further, service and delivery vehicles would be instructed to enter the driveway from Flagler Lane to the north in order to avoid cut-through traffic within this residential neighborhood (see Impact T-3 for further discussion of Project impacts related to cut-through traffic).

As described in Section 3.10, *Land Use and Planning* the proposed Project would be consistent with all applicable goals of the Torrance General Plan Circulation and Infrastructure Element. As noted above, the proposed Project would also be consistent with the Hawthorne Boulevard Corridor Specific Plan.

Summary of Consistency Discussion

As described above, the proposed Project is consistent with all applicable development standards, design guidelines, and other transportation-related strategies. The proposed Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and impacts would be *less than significant*.

Impact Description (T-2)

- b) *The project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).*

T-2 Additional vehicle miles traveled (VMT) generated during construction would be minimized with implementation of a Construction Traffic and Access Management Plan. Long-term operation of the proposed Project would generate an incremental increase in VMT that would be *less than significant*.

Construction

Construction activities associated with development of the proposed Project would result in additional construction VMT in the vicinity of the Project site and on the PCH and I-405 freeways. Construction-related traffic would include haul trucks, cement trucks, equipment delivery trucks, and construction worker vehicles. During excavation, haul trucks would be required for import and export of materials. Construction activities associated with Phase 1 of the proposed Project would generate up to approximately 1,825 haul truck trips for export of demolished asphalt and excavated soil, and 2,000 haul truck trips for export of demolition debris. Additionally, construction of the RCFE Building would require approximately 1,237 truck trips for concrete delivery. Backfill of the Beach Cities Health Center basement would require approximately 875 truck trips for import of clean soil (refer to Section 2.5.1.3, *Construction Activities*). Construction activities associated with the Phase 2 development program would require approximately 1,660 trips associated with export of demolition debris and excavated soil and approximately 2,149 trips associated with concrete and steel deliveries (refer to Section 2.5.2.4, *Construction Activities*).

The majority of excavation and soil export would occur during the construction of the RCCE Building under Phase 1 construction. The timing and frequency of haul truck trips would be dictated by the rate of excavation activities within the proposed parking structure footprint; however, it is estimated that the rate of export would be up to 1,250 haul truck trips over a 1-month period. All construction and demolition (C&D) waste would be exported to a mixed C&D debris recycling facility approved by the City of Redondo Beach pursuant to a Construction & Demolition Waste Management Plan. This phase of construction would also involve vehicles trips and associated VMT to provide construction materials, support excavation, and transport construction workers. Construction worker vehicles, materials deliveries, and other construction-related trips are expected to result in additional haul truck trips on area streets throughout the construction period. Construction-related increases in VMT would occur would be temporary in nature and *less than significant*. Further, the implementation of MM T-2 would reduce this impact by requiring the preparation of a Construction Traffic and Access Management Plan, which would include provisional measures to reduce construction traffic, maintain public safety, and reduce associated VMT.

Operations

The VMT screening conducted for the proposed Project determined that operation of the proposed Healthy Living Campus following the completion of Phase 2, would not meet the screening criteria for small project screening or low VMT area screening. Therefore, Fehr & Peers prepared a VMT analysis to determine whether implementation proposed Project would result in a significant increase in VMT.

The proposed Project – including the Phase 1 preliminary site development plan and the Phase 2 development program – would result in a net increase of 376 new daily trips (refer to Table 3.14-7). The projected increase in daily vehicle trips under the proposed Project would subsequently result in an increase in daily VMT at the Project site as compared to existing conditions.

As described in Section 3.14.3, *Impact Assessment and Methodology*, the City of Redondo Beach's Draft VMT Guidelines concur with a VMT significance threshold of 16.8 percent below the SBCCOG regional average VMT for home-based work trips and home-based trips. As described in Table 3.14-11, the SCAG Regional Travel Demand Model determined that home-based work VMT generated within the Project TAZ is 14.8 miles, which is 19 percent lower than the SBCCOG regional average of 18.4 miles. Therefore, Project TAZ home-based work VMT does not exceed the threshold of 16.8 percent below the SBCCOG regional average VMT, and impacts related home-based work VMT under the proposed Project are considered to be *less than significant*.

Table 3.14-11. Project VMT Impact Analysis

VMT Metrics	VMT Estimates
SBCCOG Average Home-Based Work VMT per Employee	18.4
Project TAZ Home-Based Work VMT per Employee	14.8
<i>Threshold of Significance (16.8% below regional average)</i>	<i>15.3</i>
Above Threshold?	No
SBCCOG Average Home-Based VMT per Capita	13.3
Project TAZ Home-Based VMT per Capita	12.8
<i>Threshold of Significance (16.8% below regional average)</i>	<i>11.1</i>
Above Threshold?	Yes

Source: Fehr & Peers 2021; SCAG 2016.

As described in Section 3.14.3, *Impact Assessment and Methodology*, StreetLight data for the Project site show that existing trip lengths to the Project site are significantly lower than those calculated using the SCAG model. For example, the average home-based VMT generated within the SBCCOG region is 13.3 miles as estimated by the SCAG Regional Travel Demand model (refer to Table 3.14.11), while the average weekday trip length to/from the BCHD campus is 6.4 miles as calculated using StreetLight data. StreetLight data relies not on a forecast, but on actual observed behavior. While the proposed Project's Assisted Living program 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.

StreetLight data were evaluated for Brookdale South Bay located in the City of Torrance as an example data source of average trip lengths for Assisted Living residents. Brookdale South Bay provides independent living units the proposed Assisted Living program under Phase 1 of the proposed Project. Based on StreetLight data, the average trip length of Brookdale South Bay residents was 4.8 miles in 2019. This average trip length is less than 50 percent of the home-based VMT per capita calculated for the Project TAZ using the SCAG Regional Travel Demand model. It should be noted that the average trip length of 4.8 miles from Brookdale South Bay includes employee travel; therefore, the average residential trip length is likely even shorter than 4.8 miles. With this additional evidence of shorter average trip lengths associated with independent Assisted Living residents, the home-based VMT per capita for the proposed Project would be less than 11.1 (16.8 percent below the SBCCOG regional average; refer to Table 3.14-11). Because average trip lengths associated with independent Assisted Living residents is shorter than 4.8 miles, Project-related VMT would be below the threshold of significance for home-based VMT per capita. The potential for Project-related impacts to home-based VMT per capita is determined to be *less than significant*.

As demonstrated by the above analysis, while the proposed Project would generate a net increase of 376 daily vehicle trips, the average trip length associated with the BCHD campus would be substantially lower than the regional average. Further, the proposed Project would implement several transportation-related sustainability features that are not accounted for in the SCAG Regional Travel Demand Model estimation of home-based VMT. As previously described, the Assisted Living, Memory Care, and PACE services would share and use vans to transport several participants at once, which would reduce vehicle trips and associated VMT to the BCHD campus. The proposed Project would also include ride-share amenities as well as an emergency ride home program for employees and visitors in order to encourage active transportation to the campus. BCHD would provide a bicycle sharing program for access to the adjacent bicycle paths and local surroundings as well as bicycle facilities, such as bicycle parking, a bicycle repair station, and employee shower and locker facilities. BCHD would also incentivize the use of hybrid and EVs by providing designated parking with free EV charging stations.

While the proposed Project would not generate VMT that would result in a significant transportation impact, MM T-1 is recommended to assist in implementing the TDM plan required for the proposed Project by RBMC Section 10-2.2406 . Implementation of the TDM plan would include promotion of alternative transportation modes and carpool incentives for employees, which would further reduce Project-related VMT. The TDM plan would also encourage visitors to travel to the campus via active (e.g., walking, biking, etc.) transportation, consistent with BCHD's mission to promote health and well-being. The TDM plan would also include transit and carpool incentives for employees, such as subsidized Beach Cities Transit passes and designated parking for vanpools and carpools. See MM T-1 below for a list of measures being considered for the proposed TDM plan.

Recommended Mitigation Measures (MM)

MM T-1 ***Transportation Demand Management (TDM) Plan.*** *Beach Cities Health District (BCHD) would prepare and implement a comprehensive TDM plan, which would provide trip reduction strategies for BCHD employees, tenants, and campus visitors. The TDM plan would be prepared by a qualified transportation engineer/planner and overseen by a TDM Coordinator to be designated by BCHD. The TDM plan would be developed prior to the issuance of a Conditional Use Permit (CUP) for Phase 1 of the proposed Project and would be continuously maintained and adjusted as needed.*

The BCHD TDM Coordinator would monitor employee, tenant, and visitor mode share with annual surveys and develop annual reports for submittal to the BCHD Board of Directors. The surveys shall capture trip origin data, travel mode, rideshare (e.g., number of people in the party), and other key data and indicators for TDM program performance relative to VMT (e.g., employee incentives for bicycling to work). The BCHD TDM Coordinator would ensure that monitoring efforts capture all BCHD-related travel behavior. Annual monitoring reports would include trip length surveys completed at least biannually by a sample of BCHD employees and tenants by BCHD employees (e.g., trip origin data collection). Survey results would be used to determine the appropriate TDM measures to employ in the coming year to maximize reductions in VMT per capita, champion transit and alternative mode transportation to the BCHD employees, develop appropriate incentives to increase the BCHD's transit mode share incrementally over time, and develop effective marketing tools to advertise transit and non-vehicular travel mode availability and incentives.

Each annual TDM Program monitoring report would:

- Describe the TDM efforts in place at the time to reduce vehicular trips;*
- Summarize collected employee and tenant survey data and results;*
- Evaluate survey data and results, comparing trends and annual changes;*
- Evaluate change in available transportation infrastructure and programs serving the BCHD campus;*
- Provide recommendations for adjustments to the TDM Program to adaptively manage VMT reductions for employees, tenants, and visitors.*

The TDM Coordinator would oversee annual monitoring and reporting to evaluate the effectiveness of the TDM measures being implemented at the BCHD campus and recommend adjustments as needed to the TDM plan on an annual basis. Final annual reports and data (e.g., survey data) shall be shared with the cities of Redondo Beach and Torrance and made readily available for public review and use. Information regarding the TDM plan shall be distributed to all BCHD employees and tenants and shall be posted on BCHD's website and other marketing materials for BCHD visitors and updated annually as needed based on the annual reports.

The TDM Coordinator would consider a range of measures for the TDM plan to reduce employee and visitor VMT per capita, including, but not limited to, the following:

- *Provide employee incentives to participate in a vanpool program and regularly advertise the opportunities to vanpool through a variety of employee communication formats.*
- *Partner with rideshare companies such as Uber or Lyft to guarantee availability of an emergency ride home or provide access to City vehicles for this purpose.*
- *Offer employee TDM benefits for use of active transportation commuter modes, including ridesharing, transit, bicycling walking, carpool/vanpool, etc. Incentives for BCHD employees could include flexible scheduling or options for telecommuting.*
- *Maximize opportunities for BCHD employee to telecommute as part of regular scheduling.*
- *Provide a transportation information center and wayfinding signage for nearby Beach Cities Transit Line 102 bus stops.*
- *Expand the proposed onsite bicycle facilities (i.e., shower, racks, and lockers) for BCHD employees in an amount and location informed by annual employee surveys and monitoring reports.*
- *Encourage bicycles as a primary commute mode for employees and provide incentives for biking to work, including providing free or discounted equipment to employees such as helmets, locks, bicycle commuter gear, and bicycles (electric or non-electric).*
- *Coordinate with the cities of Redondo Beach and Torrance to identify and facilitate new bicycle paths between the BCHD campus and neighboring communities, particularly linkages to existing bicycle path segments. BCHD and the cities of Redondo Beach and Torrance shall ensure that all bicycle paths to the BCHD campus are well-signed and provide lighting, are regularly patrolled by law enforcement.*
- *Provide commuter clubs for BCHD employees and campus visitors to support a collaborative approach to TDM.*
- *Maintain and expand onsite bicycle parking for BCHD visitors in an amount and location informed by visitor surveys and annual monitoring reports.*
 - *Maintain and expand short-term bicycle parking within the BCHD campus to meet changing demands evaluated in the TDM Program annual reports.*
 - *Provide well-lit, clearly signed, bicycle parking that is convenient and in close proximity to the Entry Plaza to encourage bicycling by visitors.*

- *Provide secure short-term bicycle parking and/or a bicycle parking attendant, bicycle valet, or indoor bicycle parking facility to prevent theft and ensure parking availability for BCHD visitors.*
- *Design bicycle racks with space-efficient configurations, such as vertically staggered racks and two-tier racks.*
- *Provide a bicycle station at the campus as a part of the Metro Bike Share or a new bike share program specific to BCHD. Funding shall be determined based on the area required for the bicycle station. The bicycle share station shall be well-lit and located at a safe and convenient location adjacent to the Entry Plaza.*

Residual Impacts

Although not required to mitigate a significant VMT impact, implementation of recommended MM T-1 would further reduce *less than significant* impacts related to VMT.

Impact Description (T-3)

- c) The project would substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

T-3 Construction traffic hazards would be mitigated by implementation of a Construction Traffic and Access Management Plan. Operation of the proposed Project may increase hazards for pedestrians and transit along eastbound Beryl Street due to the proposed new driveway entrance at the Flagler Lot. Construction and operational impacts related to hazards due to design features would be *less than significant with mitigation*.

Construction

Construction traffic would include haul trucks, cement trucks, equipment delivery trucks, and construction worker vehicles. Demolition would require the use of typical construction equipment, such as backhoes, to break up and remove existing asphalt, concrete, and building materials. Heavy equipment, such as bulldozers and excavators, and haul trucks would be used to haul away large amounts of debris to a mixed C&D debris recycling facility approved by the City of Redondo Beach pursuant to a Construction & Demolition Waste Management Plan. During excavation, haul trucks would be needed for import and export of materials. The majority of excavation and soil export would occur during the construction of the subterranean service area and loading dock included in the Phase 1 preliminary site development plan. The timing and frequency of haul trucks would be dictated by the rate of excavation activities within the proposed parking structure footprint; it is estimated that the rate of export would be 1,250 haul truck trips within a 1-month

period. This phase would also involve delivery trucks trips, construction worker vehicle trips, and other construction-related trips that would result in additional trips per day on the surrounding street network and PCH and I-405 freeways throughout the construction period. However, construction-related increases in traffic would be temporary in nature.

Increased construction traffic on freeways and streets, particularly haul trucks and other heavy equipment (e.g., cement trucks and cranes), may disrupt traffic flows, reduce lane capacities, and generally slow traffic movement. In addition, construction traffic could interfere with or delay transit operations and disrupt bicycle and pedestrian circulation. For example, construction activities associated with the proposed Project may require the temporary or extended closure of adjacent traffic lanes and sidewalks on surrounding streets (i.e., North Prospect Avenue and Beryl Street) to accommodate excavation for utilities, operation of construction equipment, etc. All construction equipment would be staged within secured construction areas within or adjacent to the BCHD campus. The primary construction staging areas for equipment and materials would be the vacant Flagler Lot and the existing northern surface parking lot (refer to Figure 2-12). Nevertheless, frequent haul truck traffic entering and exiting the driveways along North Prospect Avenue and Beryl Street could interfere with pedestrian and bicycle flows along both streets. Other potential construction-related impacts include idling, parked, or queued haul trucks that could potentially obstruct visibility. Haul trucks would exit the I-405 freeway on 190th Street or Hawthorne Avenue to 190th Street and reach the site using Del Amo Street to North Prospect Avenue (refer to Figure 2-13; Section 2.5.1.6, *Construction Activities*).

As a result, construction activities and potential conflicts between vehicles, bicycles, and pedestrians in the Project vicinity would be potentially significant. To avoid construction-related safety hazards, implementation of MM T-2 would require preparation of a Construction Traffic and Access Management Plan to address construction traffic routing and control, safety, construction parking, and vehicle, bicycle, and pedestrian safety. The Construction Traffic and Access Management Plan would require construction flaggers be present during all haul trips and concrete truck trips to maintain the flow of traffic and allow safe passage for pedestrians across crosswalks and crossing the driveway entrances along North Prospect Avenue and Beryl Street. The Construction Traffic and Access Management Plan would include a Construction Traffic Control Plan to be approved by the City of Redondo Beach and the City of Torrance. The Construction Traffic Control Plan would outline designated haul routes and construction staging areas, construction crew parking, emergency access provisions, traffic control procedures, and avoidance of traffic impacts during construction in accordance with the *L.A. County – Department of Transportation Area Traffic Control Handbooks*. The Construction Traffic and Access

Management Plan would address temporary traffic impacts that could occur during each construction activity. With the implementation of MM T-2, construction-related hazards would be reduced to *less than significant with mitigation*.

Specific construction areas within the BCHD campus would be temporarily fenced with 8-foot-high construction fencing and blocked off to employees and campus visitors during construction activities. Larger closures of the campus would be required during the demolition of the Beach Cities Health Center during Phase 1 and during the demolition of the parking structure and potentially the Beach Cities Advanced Imaging Building during Phase 2. All construction equipment would be staged within the secured construction fencing. Additionally, signage would be posted with maps clearly describing pedestrian and vehicle detours on campus. Signage would also clearly show convey warning information and safety regulations (e.g., no trespassing, hard-hats required, etc.) to deter pedestrians from entering the active construction areas. With the implementation of MM T-2, construction-related hazards would be reduced to *less than significant with mitigation*.

Cut-Through Traffic

As described in Section 3.14.1, *Environmental Setting*, cut-through traffic could present a safety hazard associated with speeding through residential neighborhoods and the increased risk of collisions. Cut-through traffic is a major concern for the residents of the Torrance neighborhood and was identified as an area of public concern within the agency and public comment letters received on the Notice of Preparation (NOP) for this EIR (refer to Section 1.8, *Areas of Known Public Controversy*). To reduce cut-through traffic and associated safety risks between Beryl Street and Del Amo Boulevard, Torrance is currently planning to pilot a temporary one-way partial closure of southbound traffic on Flagler Lane between Towers Street and Beryl Street. In preparation for the pilot, the City of Torrance conducted license plate surveys during the AM and PM peak periods at four locations on the boundary of the neighborhood (refer to Section 3.14.1, *Environmental Setting*; refer to Table 3.14-3 for further information regarding the results of the license plate surveys).

In addition to the City of Torrance's license plate surveys to evaluate cut-through traffic between Beryl Street and Del Amo Boulevard, Fehr & Peers collected neighborhood street segment counts on a number of roadways in the Torrance neighborhood to the east of the BCHD campus. The streets considered in these counts include, but are not limited to, Flagler Lane between Beryl Street and Towers Street, and Redbeam Avenue between Norton Avenue and Del Amo Boulevard. 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.

Most cut-through traffic occurs when congestion is high on arterial streets, particularly during commute AM and PM peak periods. Assuming cut-through traffic remained constant throughout the midday period (i.e., between 9:30 a.m. and 4:00 p.m.), a total of 73 vehicles heading southbound on Flagler Lane from Beryl Street could be expected to cut-through the neighborhood during the midday period, for an average of 11 cut-through vehicles per hour. During the nighttime period (i.e., between 6:00 p.m. and 7:30 a.m.), 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. However, cut-through traffic typically occurs most often during peak commute periods when drivers may attempt to bypass congested locations; therefore, midday cut-through traffic would likely be lower than the AM and PM peak period percentages identified by the City of Torrance.

As previously described, the proposed one-way driveway, which would be accessible via a right-turn along eastbound Beryl Street, would provide a left-turn-only exit onto northbound Flagler Lane, immediately south of Beryl Street. Similarly, service vehicles would enter the proposed service area and loading dock by taking a right off of Flagler Lane and exit taking a left turn onto northbound Flagler Lane (refer to Figure 2-8). Unlike the entrances from North Prospect Avenue, the driveways along Flagler Lane would not provide access to long-term parking on the BCHD campus and as such, would not be a primary entrance. Therefore, operation of the proposed driveways along Flagler Lane would not contribute to cut-through traffic within the Pacific South Bay residential neighborhood.

Further, as described in Table 3.14-7, while operation of Phase 2 of the proposed Project is expected to generate an incremental increase of 376 net new daily vehicle trips, AM peak period trips would be reduced by approximately 37 and PM peak period trips are expected to be reduced by approximately 28, as compared to existing BCHD trip generation. Give that buildout of the proposed Project would reduce existing AM and PM peak period trip generation, the proposed Project would slightly reduce overall congestion on major roadways in the area during busy commute times. The reduction in overall congestion would allow for more efficient movement of traffic and less incentive for drivers to cut-through residential neighborhoods. Therefore, the proposed Project would not contribute to operational safety hazards related to cut-through traffic, and impacts would be *less than significant*.

Project Site Access

The design of each Project phase would be required to undergo review by City of Redondo Beach and City of Torrance (where applicable) decision-makers, including a review of roadway improvements and operations so that vehicle, bicycle, and pedestrian access are adequately accommodated without obstructing, hindering, or impairing drivers' reasonable and safe views of other vehicles, people walking, or people bicycling on the same street and/or restricting the ability of a driver to stop a motor vehicle without danger of an ensuing collision. Design features of individual development projects would need to be consistent with State design standards, such as the California MUTCD, as well as City of Redondo Beach and City of Torrance (where applicable) standards, which focus on eliminating existing hazards and designing the transportation network so as to enhance safety of all ways of travel.

The proposed Project would include additional entrances to the Project site and reconfigure the internal circulatory system. As discussed in Section 3.14.1, *Environmental Setting*, access to the BCHD campus is currently available directly from three driveways along North Prospect Avenue. Additionally, the vacant Flagler Lot is accessible via a curb cut along eastbound Beryl Street. Under the proposed Project, the Project site would remain accessible from the three existing driveways along North Prospect Avenue. In addition, Flagler Lot would be developed with a new one-way driveway accessible via a right-turn along eastbound Beryl Street, which would support a pick-up/drop-off zone for the proposed RCFE Building. A service entrance to the RCFE Building would be provided off of Flagler Lane, approximately 150 feet south of Beryl Street. Pedestrian and bicyclist access to the Project site would be preserved at the three existing driveways along North Prospect Avenue. Additionally, a new pedestrian access point would be provided at the southwest corner Beryl Street and Flagler Lane via the tiered staircase leading into the interior portion of the main campus.

As described in Section 3.14.1, *Environmental Setting*, an existing bus stop for the northbound Beach Cities Transit Line 102 is located along eastbound Beryl Street to the north of the Redondo Village Shopping Center parking lot and adjacent to the northwest corner of Flagler lot. The proposed one-way driveway along eastbound Beryl Street would be located adjacent to and east of the existing Beach Cities Transit bus stop. While there is an existing curb cut and driveway into the vacant Flagler Lot, the lot is currently closed off with a gate and does not permit vehicle entry. Implementation of the proposed Project would generate an increase in vehicle entry into Flagler Lot via the proposed one-way driveway and pick-up/drop-off zone for the patrons of the RCFE Building and other visitors to the campus. The proposed Project could result in an increase in vehicle-bus conflicts associated with stopped buses at the Beach Cities Transit stop and vehicles

turning right into the proposed one-way driveway. Implementation of MM T-3 would require the existing Beach Cities Transit Line 102 bus stop to be relocated to the east of the proposed one-way driveway entrance along Beryl Street to avoid the potential for safety hazards associated with transit. With implementation of the bus stop relocation, impacts to safety hazards related to vehicle-bus conflicts would be reduced to *less than significant with mitigation*.



The existing Beach Cities Transit Line 102 bus stop located adjacent to the west of Flagler Lot on eastbound Beryl Street would be relocated to the east of the proposed one-way driveway.

Vehicles accessing the Project site via Beryl Street could also block, delay, or increase traffic hazards associated with existing pedestrian and bicyclist traffic along the south side of Beryl Street. However, the proposed one-way driveway would be designed in accordance with applicable RBMC standards and sight distances would be approved by the Redondo Beach Community Development Department during site plan approval. The proposed one-way driveway would allow for right-turn in only from Beryl Street and would provide access for a very limited portion of the proposed Project's visitors (i.e., primarily visitors to the RCFE Building).

Vehicle traffic from the proposed one-way driveway and service entrance along Flagler Lane would not contribute to pedestrian safety hazards given that there is no sidewalk along the west side of Flagler Lane south of its intersection with Beryl Street. The service area and loading dock entrance would be stop-controlled and would be limited to right-turn in and left-turn out movements. Further, the service access entrance 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. Consequently, vehicle traffic associated with the proposed driveways along Flagler Lane would not interfere with pedestrian, bicycles, or vehicles.

Given that existing site access is currently limited to the three driveways along North Prospect Avenue, the additional proposed access point off of Beryl Street would better distribute Project-related vehicle traffic around the site, and reduce the potential for vehicle-pedestrian and vehicle-bicyclist interactions on North Prospect Avenue as compared to existing conditions. Additionally, implementation of the proposed Project is projected to significantly reduce total trip generation

during Phase 1, including a reduction during the peak period of traffic when conditions are most stressful for pedestrians and bicyclists. While operation of Phase 2 of the proposed Project is expected to generate an incremental increase of 376 net new daily vehicle trips to the surrounding roadways, this general increase in vehicle traffic volumes would be distributed among multiple streets in the vicinity and would not be considered to substantially increase traffic hazards. Further, the AM peak period trips would be reduced by approximately 37 and PM peak period trips are expected to be reduced by approximately 28, as compared to existing conditions (refer to Table 3.14-7). Therefore, implementation of the proposed Project would result in a minor reduction in safety hazards related to vehicle congestion during the AM and PM peak periods.

The proposed new driveways would be engineered to comply with State, County, and local standards and designed to intersect the roadway at a right angle to address line of sight, turning radii, spacing, etc. to avoid potential conflicts with transit services, bicycles, and pedestrian traffic. The one-way driveway entrance would also provide the necessary crosswalk and pedestrian movement controls to meet the State, County, and local requirements to protect vehicle, bicycle, and pedestrian safety. The one-way driveway would also be designed to accommodate mobility services for TNCs (e.g., Uber, Lyft, etc.). The existing Class II bicycle lane would be maintained on Beryl Street east of Flagler Lane following the driveway realignments along eastbound Beryl Street. The final design plans of the proposed new driveways along Beryl Street and Flagler Lane would be subject to review by the Redondo Beach and Torrance Community Development Departments. Thus, with compliance with local standards and regulations and review and approval by various local agencies, the proposed Project would not create potentially hazardous conditions for people driving, and impacts related to driving hazards would be *less than significant with mitigation*.

Internal Campus Circulation

Proposed internal circulation changes would improve vehicle and pedestrian mobility and safety by simplifying travel through the BCHD campus. Vehicular circulation through the Project site would be limited to the southwestern portion of the campus. The existing surface parking lot on-site is located along the northern perimeter of the campus, requiring vehicles to drive through or around the main campus to reach the parking area. During Phase 1 of the proposed Project, the central driveway would lead vehicles directly to the proposed surface parking lot, and would continue to provide access to the existing parking structure at 512 North Prospect Avenue as well as the surface parking lot and subterranean parking garage west of the Providence Little Company of Mary Medical Institute Building. The southern driveway would also continue to lead directly to the existing above ground parking structure. The vehicle driveway and pick-up/drop-off zone at

the western side of the RCFE Building would improve vehicle circulation and would allow vehicles to directly exit the Project site via the northern driveway onto North Prospect Avenue. Therefore, implementation of the Phase 1 preliminary site development plan would promote efficient vehicular circulation on campus. Implementation of the Phase 2 development program would similarly develop an efficient circulation system on-site. Under the Example A site plan scenario, the southern driveway would provide direct access to the proposed new parking garage and the central driveway would lead to the existing western surface parking lot and subterranean garage as well as to the vehicle driveway and pick-up/drop-off zone at the western side of the RCFE Building. Under the Example B and C site plan scenarios, all three driveways along North Prospect Avenue would connect to the main access road on-site, which would provide access to the proposed automated parking structure, the existing western surface parking lot and subterranean garage, and the vehicle driveway and pick-up/drop-off zone at the western side of the RCFE Building.

The interior of the BCHD campus would provide a series of pedestrian pathways ranging from 10 to 26 feet wide, with direct public access to all of the proposed buildings on the BCHD campus. The proposed Main Street promenade would extend from the entry plaza around the perimeter of the central lawn to the eastern border of the campus to provide a complete and intuitive circulation loop for visitors to enjoy proposed green space and landscaping. The pedestrian promenade would also be lined with benches shaded by tree canopies to promote walking through the campus. The on-site pedestrian improvements would also be graded at no more than 5 percent slope to provide more ADA-accessible and pedestrian-friendly navigation for BCHD employees, tenants, and campus visitors. This pedestrian-only open space would be closed off to vehicles to improve visitor safety and mobility through the campus. Pedestrian mobility and safety would be considered in the design of other internal circulation improvements such as the vehicle driveway and pick-up/drop-off zone at the western side of the RCFE Building.

Proposed Project improvements to internal circulation within the BCHD campus would result in minor beneficial and *less than significant* operational impacts to transportation safety hazards.

Mitigation Measures

MM T-2 ***Construction Traffic and Access Management Plan*** *Following preparation of the final design plan for Phase 1 of the proposed Project, the Beach Cities Health District (BCHD) shall expand upon the Construction Traffic Control Plan and prepare, implement, and maintain a Construction Traffic and Access Management Plan to address and manage traffic during construction. The Construction Traffic*

and Access Management Plan shall be subject to review and approval by BCHD, the County Department of Transportation (DOT) and Redondo Beach Community Development Department prior to issuance of a Conditional Use Permit. The Construction Traffic and Access Management Plan shall be designed to:

- *Prevent traffic impacts on the surrounding roadway network;*
- *Minimize parking impacts both to public parking and access to private parking to the greatest extent practicable;*
- *Ensure safety for both those constructing the project and the surrounding community; and*
- *Prevent substantial truck traffic through residential neighborhoods.*

The Plan shall, at a minimum, include the following:

- *Designated haul routes consistent with the Redondo Beach and Torrance General Plan designations;*
- *On-site staging areas, which would avoid residential streets to the maximum extent feasible;*
- *Traffic control procedures (e.g., traffic cones, temporary signs, changeable message signs, and construction flaggers at the three driveways along North Prospect Avenue as well as the proposed driveways along Beryl Street and Flagler Lane) to address circulation requirements and public safety in accordance with the standards in the County DOT Area Traffic Control Handbooks;*
- *Emergency access provisions (i.e., North Prospect Avenue and Beryl Street); and*
- *Construction crew parking.*

Ongoing Requirements throughout the duration of construction:

- *A detailed Construction Traffic Control Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. Such plans shall be reviewed and approved by the Redondo Beach Community Development Department, Redondo Beach Public Works Department, and Torrance Community Development Department prior to issuance of a demolition, excavation, grading, or building permit and implemented in accordance with this approval.*
- *Work within the public right-of-way shall be performed between 9:00 a.m. and 4:00 p.m. This work includes dirt and demolition material hauling and construction material delivery. Work within the public right-of-way outside of these hours shall only be allowed contingent upon the issuance of an after-hours construction permit from the Redondo Beach and Torrance Community Development Department.*

- *Streets and equipment shall be cleaned in accordance with established Redondo Beach and Torrance Public Works Department requirements.*
- *Trucks shall only travel on approved construction routes. Truck queuing/staging shall only be allowed at approved locations. Limited queuing may occur on the construction site itself.*
- *Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be on-site, with a minimum amount of materials within a work area in the public right-of-way, subject to a current City of Redondo Beach permit.*

Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- *Prior to Phase 1 and Phase 2 of Project implementation, BCHD shall advise the traveling public of impending construction activities (e.g., information signs, portable message signs, and media listing/notification) as well as provide a call line for complaints and concerns regarding construction traffic.*
- *BCHD shall provide timely notification of construction schedules to all affected agencies (e.g., public and private transit, Redondo Beach Fire Department [RBFD], Redondo Beach Police Department [RBPD], Public Works Department, and Community Development Department) and to all owners and residential and commercial tenants of property within a radius of 500 feet prior to Phase 1 and Phase 2 of Project implementation.*
- *BCHD shall coordinate construction work with affected agencies in advance of start of work. Approvals may take up to 2 weeks per each submittal.*
- *BCHD shall obtain approval from the cities of Redondo Beach and Torrance of any haul routes for earth, concrete, or construction materials and equipment hauling.*
- *BCHD shall obtain an Excavation Permit, Street/Lane Closure Permit, Sewer Permit, Demolition Permit, and any other applicable permits for construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way.*

MM T-3 ***Relocation of Beach Cities Transit Line 102.*** *To implement the proposed one-way driveway and pick-up/drop-off zone on Flagler Lot, BCHD shall work with the Redondo Beach Community Services Department Transit Division to relocate the existing Beach Cities Transit Line 102 northbound bus stop along eastbound Beryl Street. The bus stop shall be located along the south side of Beryl Street between the proposed one-way driveway entrance to the west and the intersection with Flagler Lane to the east. All proposed transit stop improvements shall be incorporated into final plans and reviewed and approved by the Redondo Beach*

Community Services Department Transit Division prior to the issuance of permits for these improvements.

Residual Impacts

Implementation of mitigation measure MM T-2 would reduce impacts related to construction traffic hazards to *less than significant*. Implementation of mitigation measure MM T-3 would reduce operational impacts associated with sight distance and vehicle-bus conflicts at the proposed one-way driveway along Beryl Street to *less than significant*.

Impact Description (T-4)

d) The project would result in inadequate emergency access.

T-4 Emergency access to the Project site is currently adequate and would be maintained following the construction of the proposed Project. During construction, emergency access could be impeded due to haul truck traffic, temporary lane closures, or other construction activities. However, with implementation of a Construction Traffic and Access Management Plan, impacts of construction on emergency access would be *less than significant with mitigation*.

Construction

During construction, short-term impacts on emergency access to the Project site would be potentially significant due to the presence of perimeter construction fencing, heavy construction equipment, construction workers, and large excavations and/or trenches. To ensure emergency access is maintained during Project construction, MM T-2 would require a Construction Traffic and Access Management Plan to ensure that an alternate entrance and secondary access is available and clearly indicated and that emergency responders could proceed directly to the most efficient entrance without undue delay or confusion. The Construction Traffic and Access Management Plan would address construction traffic routing and control, vehicle, bicycle, and pedestrian safety, street closures, and construction parking. The Construction Traffic and Access Management Plan would also establish procedures for coordination with local emergency services (i.e., RBFD and RBPD), training for flaggers for emergency vehicles traveling through the work zone, and other measures as necessary to facilitate emergency vehicle travel. Thus, the Construction Traffic and Access Management Plan would ensure the continued provision of emergency access during construction of the proposed Project. Implementation of MM T-2 would ensure that construction impacts on emergency access would be *less than significant with mitigation*.

Operational

SR-1 and SR-107, located approximately 0.5 miles west and 1.5 miles east of the Project site, respectively, are designated Primary Disaster Routes by the County of Los Angeles. In addition, the City of Redondo Beach has an adopted emergency evacuation routes for a tsunami, which include North Prospect Avenue, Beryl Street, and 190th Street. The City of Torrance has not designated emergency routes. The proposed Project does not propose changes in, obstructions to, or reconfigurations of public evacuation routes (refer to Section 3.8, *Hazards and Hazardous Materials*).

The proposed Project would include additional entrances to the Project site and improve the internal circulatory system, which would improve direct emergency access to the proposed campus buildings. As discussed in Section 3.14.1, *Environmental Setting*, emergency access to the BCHD campus is currently available directly from three driveways along North Prospect Avenue. Additionally, the vacant Flagler Lot is accessible via eastbound Beryl Street.

Under the proposed Project, the Project site would remain accessible from the three existing driveways along North Prospect Avenue. In addition, Flagler Lot would be developed with a one-way driveway and passenger drop-off zone, which would provide direct access to the proposed RCFE Building. This building would also be accessible to service, delivery, and emergency vehicles (e.g., fire trucks, ambulances, etc.) via an entrance to the subterranean service area off of Flagler Lane, approximately 150 feet south of Beryl Street.

Within the interior of the campus, the existing perimeter road would be removed and replaced with a pedestrian promenade (Main Street) that would wrap around the campus in a U-shape from the southern driveway to the Providence Little Company of Mary Medical Institute Building. However, emergency vehicle access would be maintained as the pedestrian promenade would be closed to vehicular access with removable bollards for emergency vehicles (refer to Figure 2-8). The pedestrian promenade would connect the existing southern and northern driveways and would provide direct access to the southern side of the RCFE Building. The 26-foot-wide drive aisle would provide sufficient space for Class WB-50 trucks (i.e., 5 axles; 55 feet in length) as well as emergency vehicles. The backyard garden lounge along the northern border of the RCFE Building would provide a secondary emergency access road to the RCFE Building, which would be closed to all other vehicles. Therefore, emergency vehicle access would be improved under Project implementation.

An Emergency Plan for the campus would be prepared in coordination with RBFD and RBPB prior to Project operation. Additionally, BCHD would utilize training procedures and an

operational handbook that provides processes and procedures for BCHD staff to provide the first responder services. Emergency Plan approval from the RBFD and RBPB would ensure that proposed Project provides sufficient access for emergency vehicles prior to issuance of a building permit. Therefore, emergency access would be maintained following construction of the proposed Project and impacts would be *less than significant*.

Cumulative Impacts

Consistency with Circulation Plans, Ordinances, and Policies

The proposed Project would include mixed-use development proximate to the Beach Cities Transit Line 102, bicycle and pedestrian improvements, and the implementation of a TDM plan, all of which would encourage the use of alternative transportation. Although trip generation under the proposed Project would result in 376 net new daily vehicle trips, the average trip length associated with the BCHD campus would remain much lower than the regional average, and the proposed Project would be consistent with goals, policies, and regulations related to VMT and GHG reduction in Connect SoCal, Metro's 2020 LRTP, the South Bay Bicycle Master Plan, AB32, SB 32, SB 375, and recommendations of the State Attorney General, OPR and Climate Action Team. Further, several bicycle lane additions and extensions are under design or approved within the cities of Redondo Beach, Torrance, and Hermosa Beach. In particular, BCHD is coordinating the BCHD Bike Path Project (separate from the proposed Project) with the City of Redondo Beach and the City of Torrance to develop a formal protected Class I bicycle path along Flagler Lane east of the Project site to connect the existing Class II bicycle lanes on Diamond Street and Beryl Street. The expansion of the regional bikeway network in the cities of Redondo Beach, Torrance, and Hermosa Beach would achieve the overall goal of the South Bay Bicycle Master Plan and would align with BCHD's mission to promote health and well-being. As such, the proposed Project would not result in a substantial contribution to cumulatively considerable impacts related to transportation plans and policies.

Conflict with CEQA Guidelines Section 15064.3, Subdivision (b)

As discussed under OPR's Technical Advisory, "*metrics such as VMT per capita or VMT per employee, (i.e., metrics framed in terms of efficiency as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less than significant project impact would imply a less than significant cumulative impact, and vice versa.*"

The Project TAZ is in a low VMT area for home-based work VMT, and the home-based VMT in the Project TAZ is approximately 5 percent lower than the average home-based VMT in the SBCCOG region. Additionally, a majority of the cumulative projects listed in Tables 3.0-2, 3.0-3, and 3.0-4 consist of public infrastructure improvements, such as roadway and utility projects, and small (2- to 5-unit) residential projects, which do not generate substantial vehicle trips and VMT. Further, several bicycle lane additions and extensions are under design or approved within the cities of Redondo Beach and Hermosa Beach. BCHD is coordinating the BCHD Bike Path Project (separate from the proposed Project) with the City of Redondo Beach and the City Torrance to develop a formal protected Class I bicycle path along Flagler Lane east of the Project site to connect the existing Class II bicycle lanes on Diamond Street and Beryl Street. The Bike Path Project would also develop sidewalks along the west side of Diamond Street north of Prospect Avenue and the west side of Flagler Lane south of Beryl Street, where there are currently no sidewalks. The Class I bicycle path and new sidewalks adjacent to the BCHD campus, in conjunction with the TDM plan included in the proposed Project, would further promote active transportation in the Project vicinity as well as throughout the South Bay region. Therefore, implementation of the proposed Project would not result in a substantial contribution to cumulatively considerable impacts related to VMT.

Hazards Due to Design Features and Emergency Access

During construction, emergency access could be impeded as a result of the construction traffic particularly haul trucks and other construction equipment (e.g., cement trucks and cranes), that may disrupt traffic flows, limit turn lane capacities, and generally slow traffic movement. However, with the implementation of MM T-2, construction impacts related to emergency access would be reduced to *less than significant*. Potential overlap of construction activities in Redondo Beach and Torrance could potentially result in a significant increase in daily construction vehicle trips within the vicinity. As with the proposed Project, cumulative projects that have discretionary approval would be required to implement a Construction Traffic Control Plan. These plans, which would address construction traffic routing and control, vehicle, bicycle, and pedestrian safety, street closures, and construction parking in the area, would be reviewed by the city with jurisdiction over the proposed project site with an understanding of the other cumulative projects undergoing construction in the vicinity simultaneously. Thus, implementation of the City-approved Construction Traffic Control Plan for cumulative projects would ensure the continued provision of emergency access. With the implementation of MM T-2, the proposed Project would not result in a substantial contribution to cumulatively considerable impacts related to emergency access.

With regard to operation, hazards due to design features and emergency access are generally specific to the Project site, and the proposed Project and associated impacts are generally not additive to other projects. Implementation of the proposed Project would not preclude the City of Torrance converting Flagler Lane to one-way northbound if the closure becomes permanent. Additionally, given that development of the proposed Project would reduce peak period trip generation compared to existing BCHD trip generation, there would 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 proposed Project would not contribute to a cumulatively considerable impact to safety hazards related to cut-through traffic. If the City of Torrance's temporary one-way closure of southbound traffic on Flagler Lane is successful and neighborhood residents support it, the one-way closure could become permanent. This would preclude access for service and delivery vehicles to the subterranean proposed service area and loading dock beneath the RCFE Building. Therefore, service and delivery vehicles would be required to drive through the Torrance neighborhood to travel north on Flagler Lane and turn left into the service area and loading dock entrance. Thus, the permanent closure of southbound traffic on Flagler Lane south of Beryl Street would require service and delivery vehicles to cut-through the Torrance neighborhood and would present a potential conflict associated with cut-through traffic. For this reason, an alternative to the proposed Project with a revised access and circulation scheme is considered under Alternative 3 in Section 5.0, *Alternatives*.

Additionally, implementation of the Class II bicycle lane along Flagler Alley and segments of Flagler Lane and Diamond Street would be designed with consideration of the proposed Project design features to protect pedestrians and bicyclists along the Class II bicycle lanes as they cross Towers Street. Further, as with the proposed Project, each of the cumulative projects would be subject to site plan review and would meet local street design and access requirements. Therefore, implementation of the proposed Project would not result in a substantial contribution to cumulatively considerable impacts related to design features and inadequate emergency access.

