

# COAST, CANYONS, AND TRAILS COMPREHENSIVE MULTIMODAL CORRIDOR PLAN

Appendix B: Existing and Future Conditions









# **Existing and Future Conditions**

This document includes data extracted from SANDAG's Data Viewer, which combines the most updated datasets on existing and projected demographic and travel trends in San Diego County. Land use, population, and employment play key roles in influencing travel behavior, and are described in more detail below.

# **Population and Employment**

The most densely populated communities within the study area include El Cajon and University City. Moderately dense geographic areas include are La Jolla, North Clairemont, Winter Gardens and Santee. The least densely populated areas are Tierra Santa, Kearny Mesa, Miramar, Scripps Ranch, and Lake Murray.

The total population within the San Diego region is projected to be approximately 4.4 million by 2050, per the 2019 Federal RTP. The biggest increases in population growth in the CCT area will be in Kearny Mesa, El Cajon, and Santee.



Figure B-1 Existing Population Density









Figure B-2 Forecasted Population Growth (2018-2050)

The key employment center within the study area is Kearny Mesa, which is a Tier 1 employment center. Other notable employment destinations include El Cajon, Winter Gardens, Lakeside, south Santee, southwestern Clairemont and University City.



Figure B-3 Existing Employment Density







Figure B-4 Forecasted Employment Growth



#### Land Use

The study area reflects a variety of land uses within several different communities. Primary land uses within the study area include residential, commercial and office, recreational, transportation, and military. Clairemont, University City, Tierrasanta, and the northern Santee area are predominantly residential and characterized by single family homes. Mixed-use areas include University City, the southern area of Santee and the northern portions of El Cajon.

Areas primarily dedicated to commercial and office land uses include areas surrounding Gillespie Field and nearly all of Kearny Mesa. Recreational spaces include Mission Trails Regional Park, Big Rock Park, Rose Canyon, and San Clemente Park.

The corridor also includes several sensitive landscapes including parks, military land and a couple river crossing of the San Diego River. These areas present physical constraints for mobility, and increased risk of wildfires, flooding and landslides.

The corridor also has a number of recreational attractors including Marian Bear Memorial Park and Mission Trails Regional Park. These popular recreational destinations and others provide residents and visitors access to thousands of acres of natural parks. The canyons, parks, and waterways of the corridor are essential elements of its character and serve as important habitat for wildlife.







Figure B-5 CCT Land Use (West)



Figure B-6 CCT Land Use (East)











## **Travel Flows**

Travel in the corridor is highly directional, with 65 to 75 percent of trips occurring in the peak direction, which is westbound in the morning peak period and eastbound in the evening peak period. There are also high peak period volumes relative to other periods, indicating that most trips are work related.

The primary users of the corridor are residents in the eastern communities of Santee, El Cajon, and Lakeside commuting to major employment centers including Kearny Mesa, University City, UCSD, and Sorrento Mesa. Furthermore, the corridor also links La Jolla, Pacific Beach, and other coastal communities with East County and other eastern communities. The corridor links residents and businesses in these communities with the highway and interstate systems. The corridor also facilitates short trips, especially between Clairemont Mesa and Kearny Mesa. Corridor users include people making recreational trips to beaches and parks, especially during the summer months. Users also include residents from East County communities, which is outside of the Study Area.



Figure B-7 AM Peak Period Travel Flow







Figure B-8 PM Peak Period Travel Flow



#### Transit

A variety of multimodal transit services are provided to residents and commuters within the CCT study area. These services include commuter rail, light rail, rapid bus, and local bus service.

- The San Diego Trolley, operated by San Diego Metropolitan Transit System (MTS), provides light rail service to passengers. The Green, Orange, and UC San Diego Blue Line all serve the CCT study area.
  - The Green Line travels from Santee to Downtown San Diego via El Cajon and Mission Valley.
  - The Orange Line travels from south Santee to Downtown San Diego via El Cajon, Spring Valley and Southeast San Diego.
  - The UC San Diego Blue Line travels from Downtown to University Town Center via UCSD.
- Local bus service within the study area is operated by MTS and provides access to University City, Clairemont, Kearny Mesa, Santee, and El Cajon. There is no transit service operating east/west along the corridor.
  - Local bus routes providing transit service within the study area include routes 20, 25, 27, 41, 44, 50, 60, 105, 120, 150, 235, 832, 833, 834, 848, 891, 892, and 928.
- Commuter rail service on the COASTER, between Oceanside and Downtown San Diego, is operated by North County Transit District (NCTD).







Figure B-9 Existing Transit



The table below shows the estimated ridership numbers for the light rail and local bus transit services in the CCT study area, as indicated by the SANDAG 2017–2018 System Performance Monitoring Report.

ROUTE	ROUTE DESCRIPTION	TRANSIT MODE	2018 AVERAGE DAILY PASSENGERS
Green Line Trolley	Santee to Downtown San Diego/12 <sup>th</sup> and Imperial via La Mesa/Mission Valley	Light Rail	31,587
20	Rancho Bernardo to 10 <sup>th</sup> Ave & Broadway	Local Bus	2,046
25	Clairemont Mesa Blvd & Complex Dr to Fashion Valley Transit Center	Local Bus	344

Table B-1 CCT Transit Ridership 2017-2018







# **Active Transportation**

Within the study area, an estimated 1.2 percent of commute trips are made by walking and 1.4 percent by bicycling. When accounting for all trip purposes of 3 miles or fewer, the number of pedestrian trips increases to 16.4 percent, while the share of bicycle trips decreases to 1.2 percent. These findings indicate a considerable existing demand for active transportation. It's





worth noting, the decrease for short trips within the study area (all trip purposes) compared to those which travel outside it (commute) can increase instead with the provision of high-quality and convenient infrastructure that prioritizes shortest-path routes for people walking, biking, or using other micromobility options.

While sidewalks and bicycle facilities are present along major corridors, the existing environment can generally be characterized as disconnected and stressful for active transportation users. Wide roads with posted speed limits greater than 30 mph and high vehicular volumes contribute to the uninviting conditions along roadways serving destinations within the CCT study area and those providing access to adjacent communities.



Figure B-10 CCT Bike Routes

Figure B-12 displays bicycle level of traffic stress (LTS) results for all bikeable roadways within the CCT study area. LTS considers the facility type and posted speed limit to assign a level of stress to the facility/roadway. Generally, a posted speed limit greater than 30 mph requires a facility that is physically separated from vehicular traffic for the general population to feel comfortable, such as a multi-use path or cycle track. LTS 1 or 2 are considered appropriate for most skill levels, while LTS 4 exhibits conditions that may be tolerable to only the most experienced bicyclists.

While the study area largely consists of LTS 1 and 2 environments, these are mostly located in residential neighborhoods and do not necessarily serve destinations or span communities.







Most corridors connecting neighborhoods to one another, commercial shopping centers, or across freeways were found to have LTS 4 environments, which deter trips by bicycle.





## **Vehicle Miles Traveled (VMT)**

VMT provides context to daily traffic volumes traveling through the study area. Senate Bill (SB) 743 removed vehicle level of service (LOS) as an environmental impact and was refined through subsequent guidance to define VMT as the primary metric for determining transportation impacts across the state and is derived from the volume of vehicles and their respective travel lengths. Use of VMT as the metric to evaluate transportation impacts supports the goals of reducing GHG emissions, developing multimodal transportation networks, and allowing for a diversity of land uses.

VMT within the study area is generally at or above the regional mean of 19.0 daily VMT per resident. VMT is highest in the areas of University City, the northwest portion of Clairemont, Tierrasanta, Santee, and the northwest portion of El Cajon.







Figure B-12 SB 743 VMT Per Capita (2016)



#### **Collision Analysis**

The safety of people that walk, ride bicycles or use other transportation modes along the freeway and arterial system were reviewed through five years of collision data (2015–2019) obtained from the University of California, Berkeley's Transportation Injury Mapping System. Areas with a high number of collisions include Clairemont Mesa Boulevard in the Clairemont community of San Diego, Fletcher Parkway in El Cajon, and around Woodside Avenue in the Lakeside community of unincorporated San Diego County.











Figure B-14 Bicycle Collisions (2015–2019)











Figure B-15 Arterial Roadway Collisions, All Modes (2015–2019)

Figure B-16 Freeway Collisions, All Modes (2015–2019)











# **Goods Movement**

Efficient transportation systems provide economic and social opportunities and benefits that result in positive multiplier effects, such as better accessibility to markets, employment, and additional investments.

The figures below summarize the daily and peak average time spent in congestion by freight in the CCT study area. Congested travel times (in minutes) for freight trips are projected to more than double by 2050.



Figure B-17 CCT Daily Freight Average Time in Congestion (minutes) by Facility Type



Figure B-18 CCT a.m./p.m. Peak Freight Average Time in Congestion (minutes) by Facility Type



