07

ENVIRONMENTAL + COMMUNITY HEALTH

DRAFT

The health of the environment and community is dependent on a multitude of factors that are interrelated, and coordinated planning efforts are needed to foster healthy and safe environments for people to live, work, and play. This section discusses some of the most common factors that contribute to the health of an environment and community, including air quality and pollution burden; access to parks, recreation, and open space; access to transit and mobility options; access to public facilities and services; and access to healthy foods.

7.1 Air Quality and Pollution Burden

Air quality is defined by the concentration of pollutants that affect human health. Concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution of air pollutants include terrain, wind, and sunlight. Therefore, in addition to the amount of air pollutant emissions released by existing air pollutant sources, ambient air quality conditions within the local air basin are also influenced by such natural factors as topography, meteorology, and climate. The San Diego Air Basin (SDAB) encompasses all of San Diego County, approximately 4,200 square miles. Harmful air contaminants are most likely to occur in areas of higher population density, heavier traffic patterns, or concentrated industrial sources - particularly in the western portion of the county.

According to the American Lung Association's 2020 "State of the Air" annual air quality report, the nation's two most widespread types of outdoor air pollutants are ozone pollution and particulate matter, also referred to as smog and soot, respectively. The report determined that the San Diego metropolitan area ranked sixth for most ozone pollution nationwide (six out of 229 metropolitan areas). Ozone is both naturally occurring through atmospheric reactions as well as pollutants released by transport and industrial activities. Ozone rankings are all based on unhealthy air days, as recorded using the Air Quality Index that was adopted with the 2015 National Ambient Air Quality Standards for Ozone. In 2018, the Environmental Protection Agency (EPA) officially designated all or parts of the 25 most polluted cities as "nonattainment" areas for that ozone air quality standard. That action requires these areas to take steps to clean up the sources of pollution going forward.

According to the County of San Diego's Air Pollution Control District (APCD), the county is currently in nonattainment at both the federal and State pollutant levels for Ozone (8-Hour) and is in nonattainment at the State level for Ozone (1-Hour), Particulate Matter (PM) 10, and PM 2.5. Per the American Lung Association's 2020 "State of the Air" report, the San Diego metropolitan area ranked 40 for 24-hour particle pollution out of 216 metropolitan areas and 41 for annual particle pollution out of 204 metropolitan areas. Attainment indicates that an area complies with the national and/or California Ambient Air Quality Standards. These standards are set by the EPA or the California Air Resources Board (CARB) for the maximum level of a given air pollutant which can exist in the outdoor air without unacceptable effects on human health or the public welfare. The APCD develops strategies and regulations to achieve the pollution emission reductions necessary to meet all health-based standards. Data from monitors throughout the county document the continued downward concentration trends of pollutants.

Future planning efforts can focus on active transportation, transit-oriented development, and healthy community design to reinforce improvements in local and regional air quality.

CALENVIROSCREEN AND POLLUTION BURDEN

Disadvantaged communities are communities that are disproportionately affected by a combination of economic, health, and environmental burdens. Senate Bill (SB 1000) specifies the California Communities Environmental Health Screening Tool 3.0 (CalEnviroScreen) as the primary screening method for identifying disadvantaged communities. Developed by the California Environmental Protection Agency (CalEPA), CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state. The score assigned to each census tract is a product of adverse environmental effects caused by pollution, the presence of sensitive populations (i.e. those with asthma, cardiovascular disease, or low birthweight infants), and socioeconomic factors (i.e. low household income, low educational attainment, and unemployment) that can disproportionally burden a community. Tracts that score in the top quartile are defined as disadvantaged communities.

There are no census tracts within the plan area that meet the definition for a disadvantaged community—all tracts score in the 50th statewide percentile or less, as shown in **Figure 7-1**. However, some parts of the College Area are more affected by certain environmental health exposures than others, and some areas are home to communities that are more vulnerable to these negative effects. When these scores are broken down by Pollution Burden and Population Characteristics, certain tracts score comparatively higher than others. Population Characteristics represent biological traits, health status, or community characteristics that can result in increased vulnerability to pollution. Notably, Tract 28.01 has a higher Pollution Burden than other tracts due to higher exposure to particulate matter from Kumeyaay Highway (Interstate 8) traffic and proximity to hazardous waste generators. Tract 28.03 has higher rates of asthma, low birth weight, and linguistic isolation, contributing to their higher Population Characteristics percentile.

Some parts of the College Area are more affected by certain environmental health exposures than others and are more vulnerable to these negative effects, particularly census tracts that are adjacent to high-frequency traffic corridors like Interstate 8.

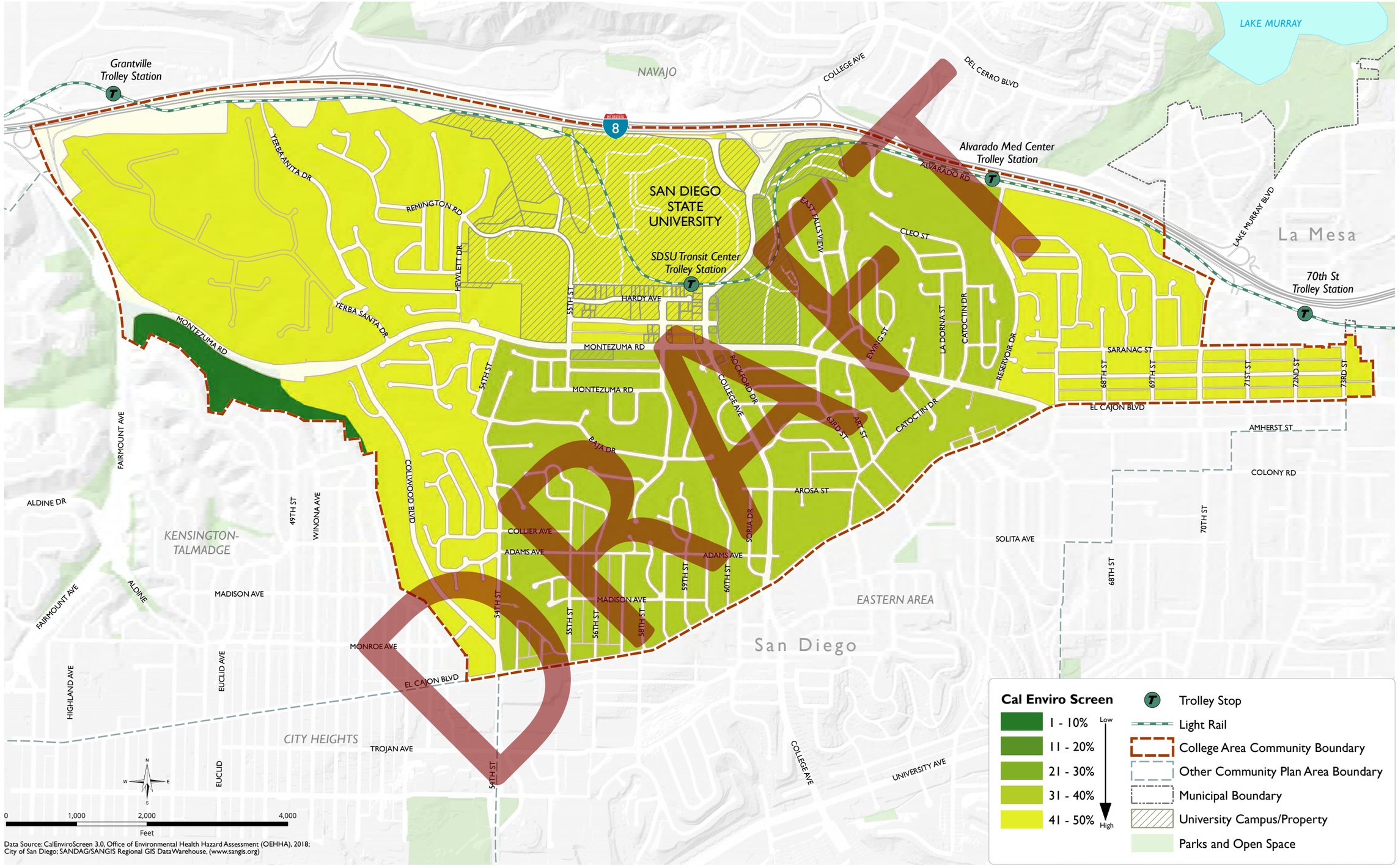
Table 7-1: CalEnviroScreen and Pollution Burden

Tract	Overall CalEnviroScreen Percentile Range	Pollution Burden Percentile	Pollution Characteristics Percentile
Tract 20.02	5-10%	15%	8%
Tract 28.01	45-50%	69%	33%
Tract 28.03	40-45%	21%	62%
Tract 28.04	35-40%	30%	44%
Tract 29.04	35-40%	38%	39%
Tract 29.05	40-45%	32%	46%

Source: California Communities Environmental Health Screening Tool 3.0

DRAFT

Figure 7-1 **CalEnviroScreen and Pollution Burden**



7.2 Access to Parks, Recreation, and Open Space

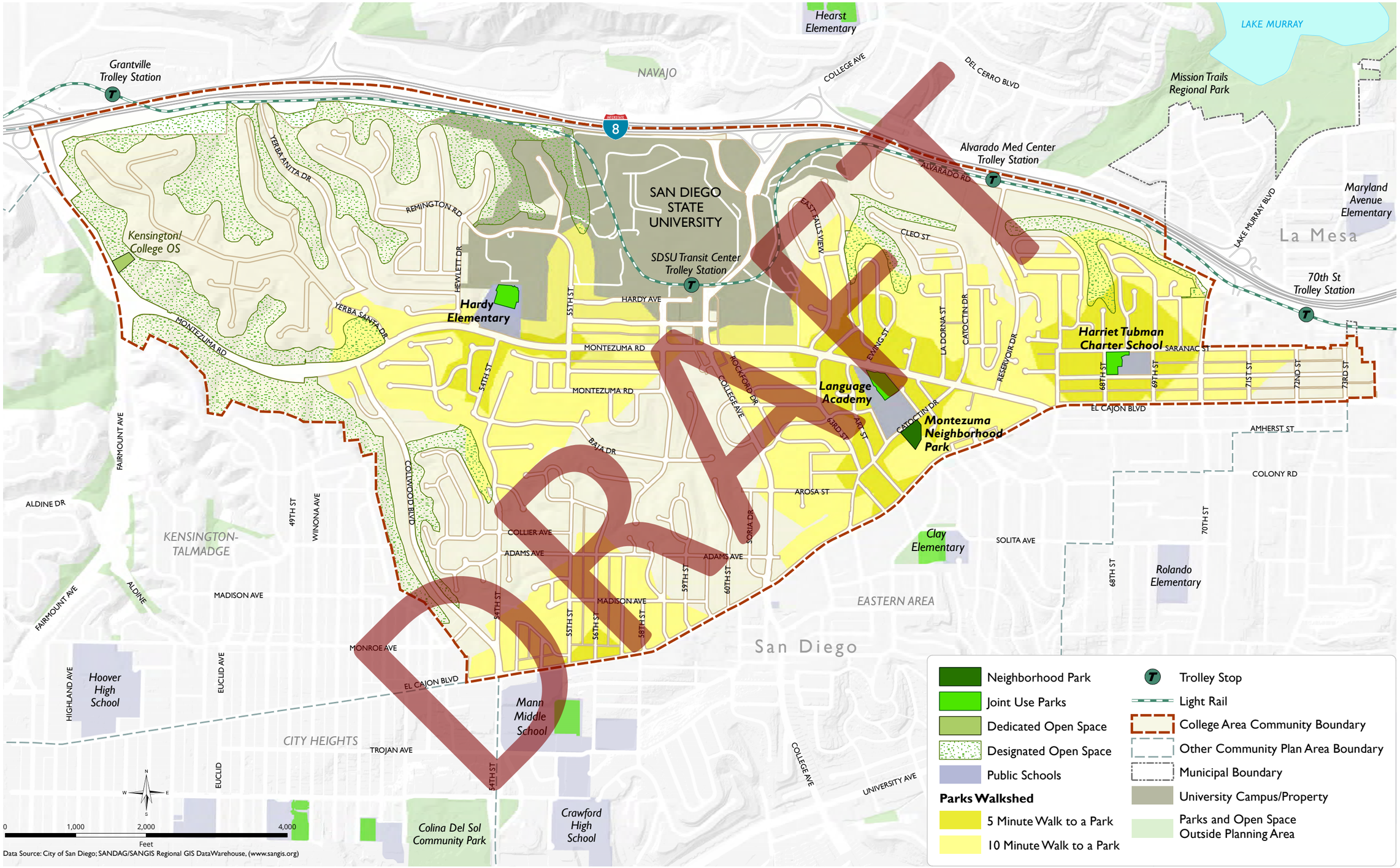
Safe and convenient access to parks, recreational facilities, and open space is a key component of a healthy community environment. In addition to improving air and water quality, providing habitat for wildlife, and adding natural buffers to urban landscapes, parks and natural spaces increase property values, spur local economies, and improve general quality of life. Benefits to physical health are also linked to park access: people who live within 5-minute walking distance (1/4 mile) of a park are 25% more likely to meet their minimum weekly exercise recommendation[1], which reduces risk of chronic diseases and premature mortality and can improve mental and emotional health.

The western portion of the plan area includes designated and dedicated open space, and the City has joint use agreements to use facilities at Harriet Tubman Charter School, the Language Academy, and Hardy Elementary. The community's sole neighborhood park, Montezuma Neighborhood Park, is located on Catoctin Drive south of the Language Academy. As shown in **Figure 7-2**, areas lacking park access include residential areas to the west of SDSU and north of Montezuma Road, and also in residential areas west of College Avenue and south of Montezuma Road.

Montezuma Neighborhood Park is the sole neighborhood park and there are some residential areas that lack park access. Future planning efforts can focus on increasing safe and convenient access to parks, recreational facilities, and open space to support community health.

DRAFT

Figure 7-2 **Access to Parks, Recreation, and Open Space**



Data Source: City of San Diego; SANDAG/SANGIS Regional GIS DataWarehouse, (www.sangis.org)

7.3 Access to Transit and Mobility Options

A robust, affordable, and reliable transit system helps to ensure better access to education and jobs, recreational and after-school activities, healthier food options, health care facilities, daily errands, and connections to people. Convenient access to public transit supports people's mobility options and encourages getting around by means other than the car, which also reduces emissions and improves air quality. Access to affordable public transit also increases physical activity, since there is almost always walking or biking associated with taking a bus or train. Almost one-third of Americans who commute to work via public transit meet their daily requirements for physical activity (30 or more minutes a day) by walking as a part of their daily life, including to and from the transit stop.[2] In addition to transit, the presence and quality of walking and biking facilities contribute to either positive or negative experiences of alternative transportation that greatly influence how people choose to get around.

As shown in **Figure 7-3**, most of the College Area is within a five to ten-minute walk to transit facilities, with the exception of the neighborhood to the west of SDSU, Alvarado Estates, and a few small pockets of the community. The San Diego Metropolitan Transit System (MTS) operates trolley service with Green Line stops in and near the community, including stops at SDSU, Alvarado Medical Center, and 70th Street. MTS also operates bus service with frequent stops along the three main travel corridors in the plan area: El Cajon Boulevard, Montezuma Road, and College Avenue. The 2019 "College Area Community Plan Update Report" prepared by the College Area Community Council and Planning Group noted that while there are ample bus stops through the commercial area along El Cajon Boulevard, access to stops in single-family neighborhoods can be lacking. Further, very few bus stops were observed to have transit amenities such as sheltered stops or benches—such conditions contribute to a less positive experience of alternative transportation. The Report also identified the following with regard to overall walkability, bicycling, and auto-use in the plan area [edited for clarity]:

- The College Area is well served by sidewalks; however, a lack of pedestrian amenities, high vehicular speeds, and wide crossings (many unregulated) can lead to increased chance of pedestrian injuries and modest pedestrian usage. Additional information on pedestrian amenities can be found in Chapter 5, Mobility.
- Existing bicycle facilities in the community consist primarily of Class III Bike Routes and some Class II Bike Lanes. Lack of adequate facilities and major gaps in existing facilities make bicycling in the community feel unsafe for many users, especially less confident riders. Collisions occur primarily along transit corridors that connect the community to surrounding communities, including El Cajon Boulevard and Montezuma Road.
- Major streets cut through the community following natural topography features. East-west traffic flows primarily along El Cajon Boulevard and Montezuma Road, while north-south traffic runs primarily on College Avenue and Collwood Boulevard: College Avenue is the only north-south street that runs through the entire community. Of the major corridors within the commercial areas, College Avenue and El Cajon Boulevard feature higher levels of traffic volumes, while Montezuma Road features comparatively low traffic volumes.

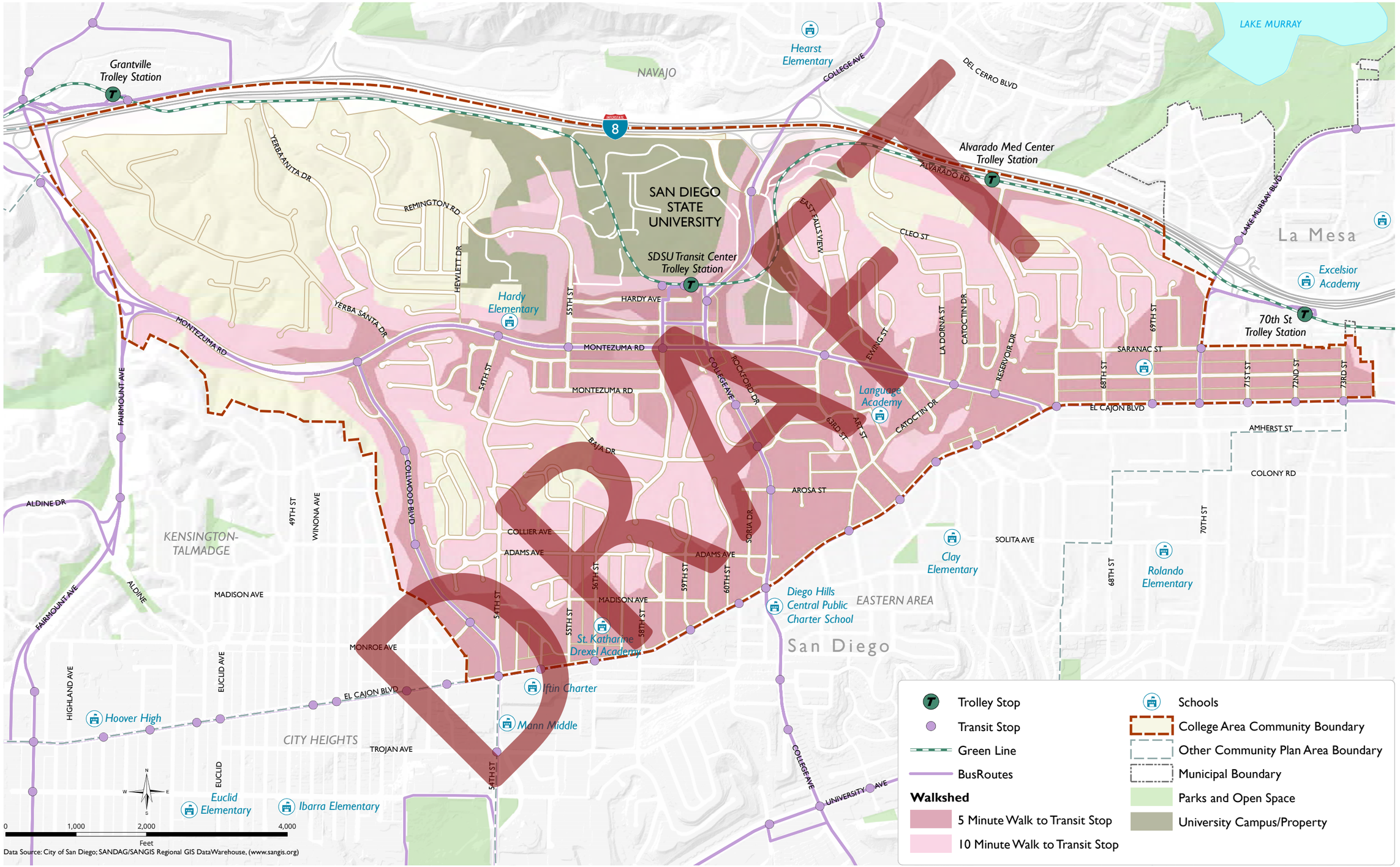
Likely strategies in future planning efforts can focus on making getting around without a car safer, more convenient, and more comfortable. Further, popular emerging technologies such as on-demand ride-hailing and ride-sharing, electric vehicle (EV) charging stations, and pay-as-you-go scooter and bike rentals should be considered as integral to the mobility ecosystem.

Most of the College Area is within a five to ten-minute walk to transit facilities, with the exception of a few small areas and the neighborhood to the west of SDSU. Future planning efforts can focus on making getting around without a car safer, more convenient and comfortable, and also more environmentally sustainable.

2 *L. Besser and A. Dannenberg, "Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations". Vol. 32, Issue 4, American Journal of Preventive Medicine, at 273-280 (November 2005).*

DRAFT

Figure 7-3 **Access to Transit and Mobility Options**



7.4 Access to Public Facilities and Services

The College Area has adequate access to basic community facilities and services, such as health care facilities, libraries, schools, and emergency services; this access supports the health of individuals and families and improves quality of life.

A healthy community has convenient access to medical services (see **Figure 7-4**). When health care facilities are accessible via public transit, medical care is more readily accessible to those who do not drive or own cars. Alvarado Hospital and its surrounding medical cluster are adjacent to the Green Line's Alvarado Station, providing comprehensive medical and emergency services with convenient access by trolley. Student Health Services at the Calpulli Center provide no-cost or low-cost care at the college campus, accessible by trolley from the SDSU Transit Center. Alliance Health Clinic, a primary care facility specializing in services for refugee communities, and City Heights Family Health Center, a primary and specialty care provider, are located on El Cajon Boulevard and serve the southern portion of the College Area, accessible by Bus Rapid Transit (BRT) and local bus routes.

A healthy community also provides convenient access to other neighborhood services, such as libraries, schools, and emergency services. Libraries promote literacy, provide Internet access, and offer a community-gathering place. They are particularly important resources for low-income residents, who may lack funds to purchase reading materials or Internet service access. In 2005, the College-Rolando branch of the San Diego Public Library system was opened at 6600 Montezuma Road (east of SDSU) to replace the former College Heights branch, which was built in 1955. The College-Rolando Library is a 15,000 square-foot state-of-the-art library three times larger than the former College Heights Library.

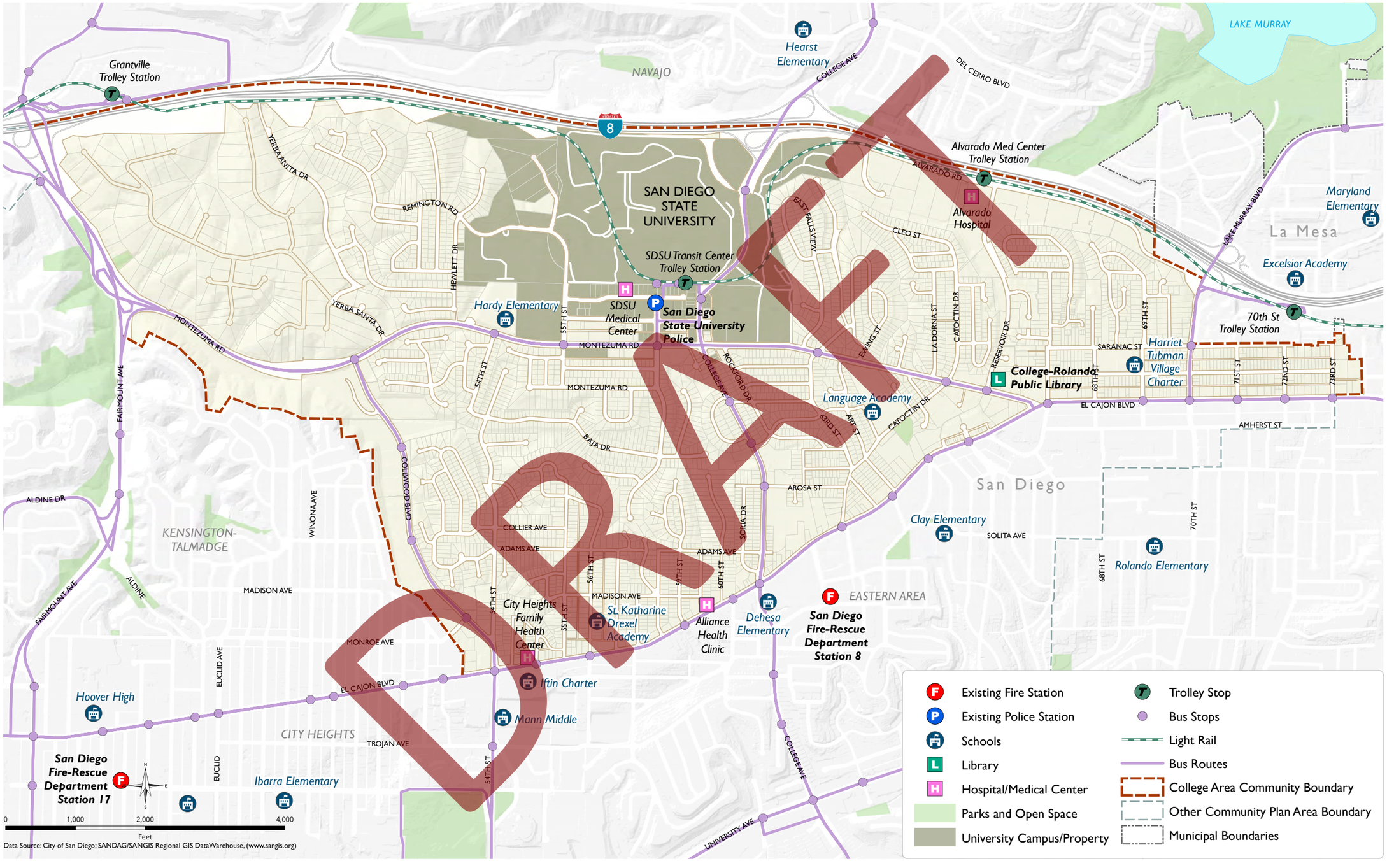
Convenient access to schools facilitates good health by making it easier for children to walk or bike to school, which is associated with higher overall physical activity throughout the day. Schools serving the plan area include Harriet Tubman Village Charter (serving grades K-8); the Language Academy (serving grades K-8); Hardy Elementary (serving grades K-5); and St. Katharine Drexel Academy (serving grades K-8). As shown in **Figure 5-5** in Chapter 5, Mobility, the areas surrounding these schools are well-served by adequate sidewalks.

Proximity to services that keep residents safe, including fire safety, ensures good response times during emergencies. Due to its vegetation, weather, and slope, western portions of the community are within a very high fire hazard severity zone.[3] In 2019, a major brush fire occurred near the SDSU campus. The City of San Diego Fire-Rescue Department (SDFD) is the primary responder to fires in the College Area. Station 10 is located just outside the plan area to the south, in the Eastern Area Community. Another fire station location is proposed near the SDSU campus. While SDSU has its own campus police, the majority of College Area residents are served by the Eastern Division of the San Diego Police Department.

DRAFT

3 City of San Diego, 2019. Official Very High Fire Severity Zone Map. https://www.sandiego.gov/sites/default/files/legacy/fire/pdf/maps/grid20.pdf

Figure 7-4 **Access to Public Facilities and Services**



7.5 Access to Healthy Foods

According to the United States Department of Agriculture (USDA), consumer choices about food spending and diet are likely to be influenced by the accessibility and affordability of food retailers—travel time to shopping, availability of healthy foods, and food prices. Some people and places, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which may negatively affect diet and food security. The presence of a supermarket in a neighborhood is linked to higher fruit and vegetable consumption, as well as a reduced incidence of obesity.[4] The College Area has access to grocery stores that offer fresh produce affordable for a range of incomes, including a Trader Joe's near campus, a Ralphs and Starlight Market in College East, and a Grocery Outlet, Vons, and Smart and Final on the southern side of El Cajon Boulevard. While the College Area may have multiple access points to healthy foods, within San Diego County as a whole, food insecurity remains an issue to be conscientious of in future planning efforts. According to the San Diego Hunger Coalition's August 2019 "Issue Brief," based on 2017 data, the county's food insecure population was one in seven people, or approximately 14% of the total population. Likely strategies in future planning efforts can focus on supporting efforts to maintain/enhance vibrant local food economies and ensuring healthy, affordable, and culturally appropriate food access.

While the College Area may have multiple access points to healthy foods, within San Diego County as a whole, food insecurity remains an issue to be conscientious of in future planning efforts.

4 *Inagami, S., et al., "You Are Where You Shop: Grocery Store Locations, Weight, and Neighborhoods", Vol. 31, Issue 1, American Journal of Preventative Medicine, at 10-17 (2006). See also K. Morland et al., "Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study", Vol. 30, Issue 4, American Journal of Preventative Medicine, at 333-339 (2006).*

7.6 Relationship to the San Diego Climate Action Plan

The City of San Diego's Climate Action Plan (CAP), adopted in December 2015, is a roadmap towards a sustainable future that serves all citizens. Sustainability means making better use of resources such as water, energy and waste; designing neighborhoods to be more pedestrian and bicycle friendly and livable; and investing in the future by supporting clean-energy technology, innovation, and jobs. The CAP calls for eliminating half of all greenhouse gas emissions in the City and aims for all electricity used in the City to be from renewable sources by 2035. The City has identified five bold strategies to reduce Greenhouse Gas (GHG) emissions to achieve these targets:

1. Energy & Water Efficient Buildings
2. Clean & Renewable Energy
3. Bicycling, Walking, Transit & Land Use
4. Zero Waste (Gas & Waste Management)
5. Climate Resiliency

These viable strategies will leverage the City's existing efforts and provide clear direction for meeting the challenges of a changing climate. The College Area Community Plan can incorporate goals, actions, and policies that support the strategies outlined in the CAP to reduce GHG and remove harmful pollutants from the air and water, improving both public health and environmental health.

7.7 Environmental and Community Health Summary

This section summarizes key information related to environmental and community health for the College Area presented in this chapter.

- The San Diego metropolitan area ranks **sixth** in the nation for most **ozone pollution**.
- Future planning efforts can focus on active transportation, transit-oriented development, and healthy community design to reinforce improvements in local and regional **air quality**.
- Some parts of the College Area are more affected by certain environmental health exposures than others and are more vulnerable to these negative effects, particularly census tracts that are adjacent to high-frequency traffic corridors like **Interstate 8**.
- **Montezuma Neighborhood Park** is the sole neighborhood park, and there are some residential areas that lack park access. Future planning efforts can focus on increasing safe and convenient access to parks, recreational facilities, and open space to support community health.
- Most of the College Area is within a **five** to **ten-minute** walk to **transit facilities**, with the exception of a few small areas and the neighborhood to the west of SDSU. Future planning efforts can focus on making getting around without a car safer, more convenient and comfortable, and also more environmentally sustainable.
- The College Area has good access to basic **community facilities** and services, such as health care facilities, libraries, schools, and emergency services; this access supports the health of individuals and families and improves quality of life.
- While the College Area may have multiple access points to healthy foods, within San Diego County as a whole, **food insecurity** remains an issue to be conscientious of in future planning efforts.

DRAFT

DRAFT

PLAN
COLLEGE AREA

DRAFT