CHAPTER 6 COMMUNITY HEALTH AND WELLNESS

MARCOS SENIOR CENT

6 COMMUNITY HEALTH AND WELLNESS

This section addresses community health and wellness in the City of San Marcos. Given that community health and wellness is related to a number of other environmental categories and topics, there are numerous references to other sections in this report. For example, conditions regarding transit options, bicycle facilities, and pedestrian facilities are addressed in greater detail in Section 2.0 (Transportation and Circulation). Parks and recreational facilities are discussed in Section 3.0 (Utilities and Community Services). Hazards and hazardous materials and applicable regulations are addressed in Section 4.0 (Hazards, Safety, and Noise). Air quality and air quality regulations as well as water quality and water quality regulations, are addressed in Section 5.0 (Conservation).

- 6.1 Health and the Built Environment
- 6.2 Health Indicators in San Marcos
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6.1 HEALTH AND THE BUILT ENVIRONMENT- BACKGROUND AND OVERVIEW

This section describes the relationship between health and the built environment and outlines the manner in which city planning and policy can directly impact resident health.

6.1.1 Historical Background

The field of city planning and the role of city planners grew out of concerns for public health and welfare during the periods of rapid industrialization and urban growth in American cities in the early 20th century. These concerns were related to pollution and unsanitary conditions in cities where industrial operations such as tanneries and slaughter houses abutted homes and schools, and tall skyscrapers blocked light and air from streets. Poor living conditions for city residents often resulted in infectious disease outbreaks and public health emergencies. Early planners required sanitary sewers to prevent cholera epidemics and zoned city blocks to buffer residential neighborhoods from polluting industries, often resulting in a strict separation of uses that is still common today.

These land use restrictions, infrastructure requirements, and development regulations went far beyond the 19th Century Common Law Theory of Nuisance that addressed public health and safety by prohibiting 'unreasonable' uses of land to prevent similar outbreaks of infectious diseases.

By 1926, the U.S. Supreme Court's decision on *Village of Euclid vs. Ambler Realty Co.* established the right of local governments to control land use through zoning laws and introduced the concept of 'Euclidean' Zoning that segregated land uses to minimize conflicts. While these laws and trends prevented factories from locating close to neighborhoods, and offered centralized wastewater and waste disposal services which decreased instances of disease and epidemics, they also resulted in a shift in the built environment.

Strong zoning regulations that separated industrial and residential uses gave rise to the rapid expansion of suburbs and the "suburban lifestyle" during the 1950s. Increased U.S. investments in the national

highway system, and the increased accessibility of the automobile to average American families resulted in people living further and further away from their place of work, schools, shopping centers, and recreational centers. Improvements in the transportation system, including the construction of freeways, further weakened the connection between work, home, retail, and other daily services, isolating them from one another and making them accessible only by car.

While these laws and trends prevented factories from locating close to neighborhoods, and offered a means to escape from the polluted city center, they also provided local governments the power to exclude and segregate communities, and supported the growth of suburbs. People were protected from infectious diseases such as tuberculosis and cholera, but they now faced new epidemics such as obesity, asthma, heart disease, and diabetes, all related to the design of the built environment.

Despite the historical connection between public health and planning, addressing public health through city planning became less common as the 20th century progressed. One reason is that early planning practices successfully resolved many of the public health issues plaguing urban areas during the early 20th century, such as overcrowding and the close proximity of housing to heavy industry. Public health professionals began to focus on disease treatment, education, and discouraging unhealthy behaviors, while planning professionals shifted their attention to such issues as economic development and transportation. In particular, planners focused on how to accommodate rapid population growth and the desire for unlimited personal mobility through driving. Zoning increasingly became a means to protect property values and bolster the tax base, and infrastructure projects more often served to provide for efficient movement of vehicles.

In recent decades, however, there has been a rediscovery and professional shift in city planning that recognizes the role our built and natural environments play in public health and well-being. The environmental movement in the 1970s gave rise to the environmental review process, including the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Other urban planning concepts such as new urbanism and smart growth are attempting to reverse the impacts of urban development policies of the previous decades. All these efforts attempted to return to the traditional neighborhoods and urban form that valued a mix of uses, pedestrian and transit amenities and compact development.

6.1.2 Current Trends

The places where people live, work, and play profoundly shape the health of a community. Transportation options, accessible parks, crosswalks, the availability of grocery stores, and the prevalence of fast-food restaurants, and real or perceived levels of crime and safety are a few examples of physical indicators that provide a framework for a community, sculpt the daily routines of residents, impact lifestyle choices, and ultimately affect public health and longevity. Collaborative work between city planners and public health professionals can help strategically develop spaces and systems for safe and healthy human activity.

A growing body of evidence supports the idea that the built environment (urban form, design, and street configurations) has a strong impact on the public's health. Between 1995 and 2010, the number of Americans who are overweight or obese (as measured by body mass index, or BMI) increased from

15.9 percent to 27.6 percent.¹ Additionally, between 2004 and 2010, the percentage of Americans diagnosed with diabetes increased from 7 percent to 8.7 percent.

Based on current obesity trends, for the first time in American history, children are not predicted to live as long as their parents.² Increasing rates of these chronic conditions in the US have paralleled higher levels of physical inactivity, auto-dependence, and consumption of foods high in calories and low in nutrients. There is a movement to better understand our decisions about the way we structure our community. Walkable urban form, more compact development, mix of land uses, transportation choices, and access to recreation spaces all increase physical activity, which can improve health outcomes.³

California is among a select few states that have reported modest decreases in childhood obesity rates. Although California is meeting the Healthy People 2020 State targets, a significant percentage (25.4%) of California adults and adolescents (15.8%) are obese, and obesity rates among low-income children 2 to 4 years old (17.2%) and 5 to 19 years old (23.3%) exceed the State targets.⁴

Land use and planning decisions play a role in determining community members' behavioral and lifestyle choices that ultimately impact their physical health and mental well-being. The quality, safety, location, and convenience of the pedestrian or bicycle environment, such as sidewalks, bicycle lanes, signals, and crosswalks, may impact a resident's decision to use them, which in turn influences physical activity levels. Similarly, neighborhood parks and open space provide an avenue for increased physical activity. Infrastructure and zoning to support local food processing and distribution enables local food to be used in the community where it was grown. Access to full-service grocery stores and farmers' markets is also correlated with increased consumption of fruits and vegetables. The physical presence and distribution of health care providers and facilities influence how easily people can access health care.

Furthermore, urban design and maintenance can contribute to or decrease levels of crime and perceptions of pedestrian comfort and safety. Poor mental health is associated, in part, with a number of factors related to planning, including long commute times, exposure to crime, lack of transportation choice, driving related stress, lack of access to public spaces, and lack of opportunities for recreation and physical activity. Emissions from transportation sources are strongly linked with respiratory diseases, and various toxic air contaminants are known or suspected to cause asthma and cancer. Driving carries with it the risk of accidents that are fatal and or cause injuries for drivers, cyclists, or pedestrians. Automobile accidents alone kill roughly 30,000 Americans each year. Additionally, in 2014,

¹Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, Prevalence and Trends Data: California 2010. Available at http://apps.nccd.cdc.gov/brfss. Accessed on June 21, 2016.

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

³ Frank, L.; Kavage, S; Litman, T. (2006). Promoting Public Health through Smart Growth. Prepared for *Smart Growth BC*: page 6.

⁴ California Department of Public Health (2014 Report) Obesity in California The Weight of the State 2000-2012

4,884 pedestrians were killed in auto related accidents.⁵ Crash data trends and analysis for the City is provided in Section 2.0 (Transportation and Circulation) of this Background Report.

Addressing public health and wellness in the San Marcos General Plan Update acknowledges the profound effects of the built environment on travel choices, access to food, levels of physical activity, and exposure to risk from accidents or pollution. Each of these has a health impact, and the General Plan provides an opportunity to prevent further disease and injury and sustain healthy lifestyle choices for San Marcos residents. Though the creation of a healthy general plan, San Marcos can focus on opportunities to affect changes in the overall health and well-being of the community.

6.2 HEALTH INDICATORS IN SAN MARCOS

6.2.1 Leading Cause of Death

The California Department of Public Health provides detailed statistics on deaths throughout California. Table 6-1 shows the percentage of deaths by age for San Diego County and California in 2013. These statistics indicate that San Diego County residents tend to live longer lives and pass away later in life than California residents as a whole.

Age	San Diego County	California
<1	1.0 %	0.95%
1-4	0.2%	.15%
5-14	0.2%	.23%
14-24	1.1%	1.20%
25-34	1.6%	1.75%
35-44	2.3%	2.72%
45-54	6.3%	6.77%
55-64	12.2%	12.79%
65-74	15.0%	16.26%
75-84	23.4%	23.32%
85+	36.7%	33.86%

Table 6-1 Percentages of Death by Age

Source: California Department of Health, Death Profiles By County, Data Files from 2013. Data Originally Downloaded at: https://data.chhs.ca.gov/dataset/leading-causes-of-death-by-zip-code. Accessed March 2020.

Table 6-2 shows the leading causes of death in the City of San Marcos and the County of San Diego in 2017, as reported by the California Department of Health. As of 2017, the leading cause of death in San Marcos was cancer, which was also the leading cause of death in San Diego County. The second leading cause of death in San Marcos in 2017 was heart disease, which aligns with the County totals. Generally, the top ten leading causes of death in San Marcos reflects the leading causes in San Diego County as a whole, with minor variations.

⁵ National Highway Traffic Safety Administration, Fatality Analysis Reporting System, National Statistics. (2014). Accessed May 7, 2016. Accessible at: http://www-fars.nhtsa.dot.gov/Main/index.aspx.

Case	San Marcos	San Diego County
Cancer	152	5,033
Heart Disease	143	4,764
Stroke	52	1,376
Alzheimer's	50	1,450
Lower Respiratory Disease	31	1,025
Injury (Unintentional)	30	1,118
Diabetes	16	799
Suicide	15	426
Hypertension and Renal Disease	14	469
Liver Disease or Cirrhosis	12	364
Pneumonia or Influenza	9	393
Kidney Disease, Nephritis, and Nephrosis	Data not available	79

Table 6-2 Causes of Death San Marcos and San Diego(2017)

Source: California Department of Health and human services, Leading Causes of Death Workbook San Diego County. Data files from 2017. Available at: Accessed March 2020.

6.2.2 Obesity and Overweight Trends

Evidence demonstrates that risk of cancer, heart disease, stroke, Alzheimer's, and diabetes can be decreased by avoiding obesity or being overweight through lifestyle and behavior changes such as increased physical activity6 and reduced consumption of foods high in calories, sugar, and fat.⁷ As shown above, heart disease and cancer are the two most prevalent causes of death in San Marcos.

The California Health Interview Survey (CHIS) is the nation's largest state health survey. A randomdial telephone survey conducted every two years on a wide range of health topics, CHIS data gives a detailed picture of the health and health care needs of California's large and diverse population. Data regarding obesity for populations age 18 and up is available from CHIS for the City of San Marcos, San Diego County and the entire State. Adult obesity trends are shown in Table 6-3 and child and teen obesity trends are shown in Table 6-4.

	2014	2016
San Marcos	27.4%	24.3%
San Diego County	24.1%	25.0%
California	25.8%	28.0%

Table 6-3 Obesity Trends - Adults (18+) BMI 30.0 or Higher

⁶ Giles-Corti, B., ad Donovan, R.J. (2002). "The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity". *Social Science & Medicine* 54: 1793-1812.

⁷ Morland, K., Roux, A., & Wing, S. (2006). "Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study". *American Journal of Preventive Medicine 30*(4):333-339.

Source: California Health Interview Survey. CHIS 2014, and 2016 Adult Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/ Accessed March 2020.

As shown in Table 6-3, obesity status in adults, or those with a body mass index (BMI) of 30.0 or higher, are lower in San Marcos than statewide, and County trends. In addition, the data shows that the City of San Marcos has significantly reduced their obesity percentage from the year 2014 to the year 2016 by approximately 3 percent.

	Children- Overweight for Age (Age 2-11) Weight ≥ 95th percentile		Overweight Teens 85th percentile	(Age 12-17) BMI ≥
	2014	2016	2014	2016
San Marcos	11.2%	12.3%	Data Not Available	26.8%
San Diego County	9.5%	12.8%	31.0%	30.4%
California	13.3%	15.1%	33.1%	38.2%

 Table 6-4 Obesity and Overweight Trends- Children & Teens (Age 2-11; 12-17)

Source: California Health Interview Survey. CHIS 2014, and 2016. Teen Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/ Accessed March 2020.

As shown in Table 6- 4 above, overweight status for children and teens is lower in San Marcos than County and Statewide rates, generally indicating that San Marcos' younger generation may experience fewer health risks later in life.

6.2.3 Physical Activity and Fitness

Lack of physical activity is a major risk factor for many chronic diseases and leading causes of death, including cancer, heart disease, diabetes, stroke, and Alzheimer's. CHIS includes data regarding activity levels for children and teens in San Marcos, San Diego County, and the state. As shown in Table 6-5 below, in 2016, 17.5% of children in San Marcos between the ages of five and 17 identified being physically active for at least one hour a week, which is one percent higher than the statewide average, but lower than the San Diego County average by approximately two percent. Although activity among children in San Marcos is higher than the State average, according to the results shown in Table 6-6, the physical activity for adults in San Marcos is roughly the same as state averages, and lower than County averages.

Table 6-5 Children a	nd Teens (A	ge 5-17) wh	o engaged i	in at least	60 minutes	of physical
activity in the past w	eek					

	2014	2016
San Marcos	17.6%	17.5%
San Diego County	19.0%	19.3%
California	20.7%	16.5%

Source: California Health Interview Survey. CHIS 2014, and 2016 Physical Activity Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/ Accessed March 2020.

	2014	2016
San Marcos	36.8%	38.4%
San Diego County	35.1%	41.2%
California	33.0%	38.9%

Table 6-6 Adults (18+) who walked for at least 150 minutes in the past week

Source: California Health Interview Survey. CHIS 2014, and 2016 Physical Activity Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/. Accessed March 2020.

Physical Fitness Testing

In addition to CHIS data, another indicator of physical activity and fitness for children and teens is the California Department of Education's Physical Fitness Testing (PFT) Program, which is administered by local school districts to all fifth, seventh, and ninth graders annually.⁸ The test assesses six major fitness areas, including aerobic capacity (cardiovascular endurance), body composition (percentage of body fat), abdominal strength and endurance, trunk strength and flexibility, upper body strength and endurance, and overall flexibility. The PFT Program provides a statewide snapshot of physical fitness. However, its data is collected at the local school district level by people who are not health professionals, and tests for each of the fitness areas are difficult to administer consistently. Consequently, its results are prone to some margin of error over time and from place to place.

California Physical Fitness Test PFT Results for the San Marcos Unified District, and statewide results for the 2018-2019 academic year are shown in Table 6-7.

# of Physical Areas Meeting the Statewide San Marcos Unified District % Zone HFZ within Healthy Fitness Zone HFZ*		San Marcos Unified District % within Healthy Fitness Zone HFZ*		Statewide % Zone HFZ	within Healt	hy Fitness
	Gr. 5	Gr. 7	Gr. 9	Gr. 5	Gr. 7	Gr. 9
Aerobic Capacity	74.1%	71.2%	69.2%	60.2%	61.0%	60.0%
Body Composition	65.3%	65.4%	65.6%	58.7%	60.0%	62.2%
Abdominal Strength	76.2%	76.6%	71.8%	69.1%	77.1%	81.2%
Trunk Extension Strength	83.1%	82.4%	88.5%	83.8%	86.0%	89.3%
Upper Body Strength	72.1%	66.1%	69.7%	60.8%	62.9%	68.5%
Flexibility	70.3%	78.0%	87.4%	70.4%	78.5%	83.1%

Table 6-7 Student Physical Fitness Testing (PFT) Results (2018-2019)

Note: *the healthy fitness zone (HFZ) is defined by standards established by the Cooper Institute that represents levels of fitness that offer some degree of protection against diseases that can result from sedentary living. These standards are organized by gender and age and can be accessed on the California department of education website.

Source: California Department of Education, Physical Fitness Testing Results (2018-2019). Available at: www.cde.ca.gov. Accessed March 2020.

⁸ California Department of Education. Physical Fitness Testing Results, Accessed on May 27, 2016. Accessible at: http://www.cde.ca.gov

As shown in Table 6-7 above, the PFT results for 5th 7th and 9th graders in the San Marcos Unified District between 2018-19 show that for a majority of fitness indicators, local children surpass the statewide averages or are within 1% of statewide averages. This trend shows that San Marcos students are generally performing better than or consistent-with the average California student.

6.2.4 Asthma and Heart Disease

Local air quality conditions can be a strong indicator of asthma rates within a community. Table 6-8 includes data from CHIS for asthma rates for San Marcos. Detailed data on local air quality conditions is contained in Section 5.0 (Conservation) of this report.

Region	Ever Diagnosed with Asthma (Age 1-17)	Ever Diagnosed with Asthma (Age 18+)
San Marcos	11.0%	13.2%
San Diego County	12.1%	14.4%
California	14.6%	15.0%

Table 6-8 Asthma Rates in San Marcos

Source: California Health Interview Survey. CHIS 2016 Asthma Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/ Accessed March 2020.

As shown in Table 6-8 above, 11 percent of San Marcos children and 13.2 percent of San Marcos adults have been diagnosed with asthma at some point in their lives as of the year 2016. The percentage of people diagnosed with asthma in San Marcos is lower than the rates in both San Diego County and the State of California.

6.2.5 Alcohol, Drug and Tobacco Use

Tobacco use is the leading cause of preventable disease and death in the United States, and nearly all tobacco use begins during youth and young adulthood. The Center for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) analyzed data from the 2011–2017 National Youth Tobacco Surveys (NYTS) to determine patterns of current (past 30-day) use of seven tobacco product types among U.S. middle school (grades six to eight) and high school (grades nine to 12) students and estimate use nationwide.

Among high school students, current use of any tobacco product decreased from 24.2 percent (estimated 3.69 million users) in 2011 to 19.6 percent (2.95 million) in 2017. Among middle school students, current use of any tobacco product decreased from 7.5% (0.87 million) in 2011 to 5.6 percent (0.67 million) in 2017. In 2017, electronic cigarettes (e-cigarettes) were the most commonly used tobacco product among high (11.7 percent; 1.73 million) and middle (3.3 percent; 0.39 million) school students. During 2016–2017, decreases in current use of hookah and pipe tobacco occurred among high school students, while decreases in current use of any tobacco product, e-cigarettes, and hookah occurred among middle school students. Current use of any combustible tobacco product, \geq 2 tobacco products, cigarettes, cigars, smokeless tobacco, and bidis did not change among middle or high school students during 2016–2017. Comprehensive and sustained strategies can help prevent and reduce the use of all forms of tobacco products among U.S. youths.

According to the CDC, e-cigarette use among both high school and middle school students tripled in one year, increasing from 4.5 percent in 2013 to 13.4 percent in 2014 among high school students,

and from 1.1 percent in 2013 to 3.9 percent in 2014 among middle school students. Youth use of ecigarettes has now surpassed youth cigarette smoking.⁹

In 2016, approximately 9.5 percent of adults in San Marcos reported to the CHIS that they were currently tobacco smokers, which is lower than the state average of 12.4 percent and lower than the County average of 10.7 percent.

The American Medical Association (AMA) reports that approximately 11 million American youth under the age of 21 drink alcohol. Nearly half of them drink to excess, consuming five or more drinks in a row, one or more times in a two-week period. Alcohol is the most frequently used controlled substance by high school seniors, and its use is increasing. Boys usually try alcohol for the first time at just 11 years old, while the average age for American girls' first drink is 13. The AMA reports the following facts for teen-related drinking10:

- Underage drinking is a factor in nearly half of all teen automobile crashes, the leading cause of death among teenagers.
- Alcohol use contributes to youth suicides, homicides and fatal injuries the leading cause of death among youth after auto crashes.
- Alcohol abuse is linked to as many as two-thirds of all sexual assaults and date rapes of teens and college students.
- Alcohol is a major factor in unprotected sex among youth, increasing their risk of contracting HIV or other transmitted diseases.

Research indicates that the density of alcohol outlets may be correlated to the level of crime, domestic violence, and sexual assault in a community. Alcohol outlet is defined as a locations where alcohol can be purchased and can be moved into on-premise setting such as a bar or restaurant, or off-premise settings (e.g., packaged liquor stores, grocery stores, convenience stores). Areas with a higher density of alcohol outlets also tend to have higher rates of vehicular accidents and fatalities, underage drinking, and adult alcohol and drug use.¹¹ In San Marcos, there is a total of 175 retail license for alcohol sales. To calculate retail license per capita, we utilized U.S. Census population data for the year 2018. The San Marcos retail license per capita density is slightly larger than the surrounding cities of Vista, Oceanside, and Escondido. Table 6-9 summarizes retail liquor licenses per capita in San Marcos, and other cities in the region.

⁹ Centers for Disease Control and Prevention. Tobacco Use Among Middle and High School Students - United States, 2011–2014. Morbidity and Mortality Weekly Report April 17, 2015; 64(14):381-5

¹⁰ American Medical Association, Facts About Youth and Alcohol (Published 2011). Available at: http://www.amaassn.org/ama/pub/physician-resources/public-health/promoting-healthy-lifestyles/alcohol-other-drug-abuse/facts-about-youthalcohol.page. Accessed November, 2019.

¹¹ Kearns, M. C., Reidy, D. E., & Valle, L. A. (2015). The role of alcohol policies in preventing intimate partner violence: a review of the literature. Journal of studies on alcohol and drugs, 76(1), 21–30.

City	Active Retail Licenses	Density per Capita
San Marcos	175	1/553
Vista	166	1/610
Oceanside	307	1/574
Escondido	252	1/604

Table 6-9: Retail Liquor Licenses per Capita (2018-2019 Fiscal Year)

Source: Department of Alcoholic Beverage Control, Alcoholic Beverage Licenses, March 2020. Available at: http://www.abc.ca.gov

6.3 **OPPORTUNITIES FOR PHYSICAL ACTIVITY**

This section focuses on levels of neighborhood walkability and existing commercial services (and other destinations) that enable or encourage physical activity. Other chapters of this General Plan Existing Conditions Report address topics that also impact physical activity and health – these include Circulation (Section 2.0), Utilities and Community Services (Section 3.0), and Conservation (Section 5.0).

6.3.1 Neighborhood Walkability

One factor that determines physical activity levels is the distance between the home and other neighborhood amenities, including shopping centers, parks, transit, schools and places of work. If this distance is perceived as "walkable" (safe, pleasant, and distance-appropriate), residents may be more likely and willing to walk to those amenities. A distance of 1/4 mile is a commonly cited threshold for how far most people are willing to walk for neighborhood services, while many people are willing to walk up to 1/2 mile for work or access to regional transit. Many factors contribute to a neighborhood's real or perceived walkability. Land uses, pedestrian facilities such as lighting and benches, commercial services, urban design, and residents' perceptions of safety, distance, and relative need for goods and services are some indicators that may promote or impede the decision to walk, rather than drive. Residents of higher-density, mixed-use areas make fewer vehicle trips and drive fewer miles than residents of lower-density, more single-use areas.¹²

Within San Marcos, different areas of the City have different levels of walkability. One way of measuring walkability is with Walkscore, which is based on access and proximity to various destinations and amenities from a selected location within a community.¹³ Walkscore provides numerical rankings of an area's walkability on a scale of 0-100. A description of the numerical ranking system is provided below.

- 90-100: Daily errands do not require a car.
- 70-89: Most errands can be accomplished on foot.
- 50-69: Some amenities within walking distance.
- 25-49: Most errands require a car.
- 0-24: Almost all errands require a car.

Table 6-10 shows the Walkscore calculated for <u>various areas</u> within San Marcos. The intent of this table is to generally illustrate sample areas of the City, but is not intended to serve as a description of all

¹² Crane, R. (2000). The Influence of Urban Form on Travel: An Interpretive Review. Journal of Planning Literature; 15(1), 3-23.

¹³ Walkscore assessments and methodology are available at www.walkscore.com. Accessed May 9, 2016

areas of the City. The information should be considered for reference purposes only. As described above, a Walkscore above 70 indicates that most daily errands can be accomplished on foot, while a Walkscore below 50 indicates that few amenities are within walking distance.

Table 6-10 Walkability Scores in San Marcos

(Map Code)-City Points of Interest	Street Address	Walk Score
(1)- Cal State San Marcos	333 South Twin Oaks Valley Rd.	41
(2)- San Marcos Community Center	3 Civic Center Dr.	67
(3)- San Elijo Recreation Center	1105 Elfin Forest Rd.	50
(4)- San Marcos High School	1615 W. San Marcos Blvd.	69
(5)- Better Buzz Coffee	904 W. San Marcos Blvd.	56
(6)- Palomar College	Comet Circle	40

Source: www.walkscore.com. Accessed March 2020.

The results in Table 6-10 show that most areas in the City of San Marcos have "few" to "some" amenities within walking distance. Areas surrounding Cal State San Marcos and San Marcos High School have the highest walk score of the 6 areas assessed. Though no areas assessed had a Walkscore above 70, indicating that most errands can be accomplished on foot. Figure 6-1 shows a map of locations and walkability scores for the City of San Marcos.

These findings complement empirical evidence: in a comprehensive study of transportation, land use, air quality, and health, researchers found that when many destinations are near the home and there is a direct path to get there, people are more likely to engage in active transportation for at least 30 minutes on any given day.¹⁴ These results highlight the importance of urban form and of a comfortable, safe, and inviting pedestrian environment. They suggest that a mix of land uses and development densities, a connected and well-maintained pedestrian network, and traffic calming measures can increase physical activity and health.

Sidewalks

More information on the existing pedestrian facilities and sidewalks in San Marcos can be found in Section 2.0 Transportation.

Active Transportation Use

Active transportation is any form of transportation that is non-motorized. The use of active transportation during a daily commute increases physical activity levels. Increased physical activity has positive health benefits; including mortality risk reduction, disease prevention, cardiorespiratory fitness, and metabolic health. Communities that are disadvantaged often have disproportionately

¹⁴ Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., and Saelens, B. E. (2005). "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ". *American Journal of Preventive Medicine, 28* (2, Supplement 2), 117-125.

poorer health outcomes. Increasing opportunities for active transportation within a City can improve the overall health outcomes of disadvantaged communities.

The American Community Survey (ACS) 2017 5-year estimates reports that the majority of workers living in San Marcos (79.7 percent) drive alone to work, 8.2 percent carpool, 1.6 percent take public transit, 2.4 percent walked, and 8.1 percent use some other mode of getting to work. Other modes of transportation include bicycling, or working from home.¹⁵ Based on this data, it is clear that active transportation use within San Marcos is not very prevalent. Utilizing active transportation is an effective way of engaging in physical exercise and can be a factor in improving community health outcomes in disadvantaged communities. More details on active transportation use and bicycle facilities can be found in the Public Facilities section and Section 2.0 (Circulation).

6.4 FOOD ACCESS

Residents of neighborhoods with higher concentrations of "unhealthy" food outlets – such as fast food and liquor stores rather than full-service grocery stores have more health problems and higher mortality rates than residents of neighborhoods with more full-service grocery stores and other vendors selling fruits and vegetables, even when other factors are held constant.¹⁶ The presence of a grocery store in a neighborhood is linked to higher fruit and vegetable consumption and reduced prevalence of persons who are overweight or suffering from obesity.¹⁷ Fresh, minimally processed, local food is generally the most nutritionally valuable and the least detrimental to the environment. Access to affordable specialty grocery stores and farmers markets increases the likelihood that people will eat healthy, locally sourced food.

The concentration of food outlets is important, but it is more significant to concentrate on the impacts of the system as a whole. In response to the environmental and health implications of food systems, the popularity of local food is on the rise. The proliferation of the term "food miles" to measure the impact of the food system on the environment reinforces the logic of local production. Locally sourced food attempts to address the negative externalities associated with packaging, preparing, and shipping food, which is higher for fresh food that is grown at long distances; because many foods do not travel a single or logical route, but take many steps along the supply chain from "field to plate."

6.4.1 Retail Food Environment

San Marcos' retail food environment includes non-restaurant shopping options that are located within the city. Table 6-12 provides examples of retail food options within the city limits.

¹⁵U.S. Census. American Community Survey, 2017

¹⁶ Mari Gallagher Research and Consulting Group. (July 2006). "Examining the impact of food deserts on public health in Chicago". Accessed July 8, 2014. Available at:

http://www.marigallagher.com/site_media/dynamic/project_files/Chicago_Food_Desert_Report.pdf.

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

Retail Food Type	Examples	Quantity
Non-restaurant Food Vendors		
Grocery Stores	Circle Market, Sprouts, Stater Bros, etc.	14
Small and/or Specialty Markets	Asian Grocery, Mexican Grocery stores,	7
Convenience & Discount Stores	7 Eleven, Circle K, Dollar General, etc.	18
Liquor Stores	Nordahl Liquor, etc.	12

Table 6-12 Retail Food Environment Summary

Sources: google.com, Accessed March 2020. Note: Table 6-12 does not provide an exhaustive list of all food retailers.

As shown in Table 6-12, there are many food options within the city including grocery stores, and specialty food shops, which provide residents with a full range of grocery options and also provide a wide variety of healthy, and organic grocery options. There is also a weekly farmers market located at 251 North City Drive, which provides local, nutritional food options to the community year-round

With respect to restaurants, the City of San Marcos has a range of dining options that vary from chain restaurants to unique dining experiences. Many of the unique dining opportunities in San Marcos of are located at the Old California Restaurant Row and in North City.

6.4.2 Eating Habits

A person's overall health and well-being is strongly correlated to food choices. Fast foods tend to be high in saturated fats, high in simple sugars, and low in fiber and nutritional value. Recent studies suggest that junk food consumption alters brain activity in a manner similar to addictive drugs. 18 After many weeks on a junk food diet, the pleasure centers of rat brains became desensitized, requiring more food for pleasure. After the junk food was taken away and replaced with a healthy diet, the rats starved for two weeks instead of eating nutritious fare.

More than 80 percent of people with Type 2 diabetes, the most common form of the disease, are obese or overweight. Data from the Centers for Disease Control and Prevention (CDC) National Health and Nutrition Examination Survey III shows that two-thirds of adult men and women in the U.S. diagnosed with Type 2 diabetes have a body mass index (BMI) of 27 or greater, which is classified as overweight and unhealthy.

According to the California Center for Public Health Advocacy, scientific evidence also suggests that sugar-sweetened beverages and sodas are contributing to the obesity epidemic. One 20-ounce bottle of soda has almost 17 teaspoons of sugar and contains 250 calories. Drinking a sugar-sweetened soda daily can increase a child's risk for obesity by 60 percent.¹⁹

Table 6-13 below, shows the percentage of adults (18+) that drink at least one sugary drink (soda or sweet beverages) a day. San Marcos residents were compared to residents throughout California (from the time the 2016 CHIS survey was conducted). According to CHIS data from 2016, approximately

¹⁸ Johnson, Paul M.; Kenny, Paul J. (2010). "Dopamine D2 receptors in addiction-like reward dysfunction and compulsive eating in obese rats". Nature Neuroscience 13 (5): 635.

¹⁹ California Center for Public Health Advocacy, Resources: Soda Consumption. Accessed in March 2020. Accessible at http://www.publichealthadvocacy.org/resources_soda.html.

12.7 percent of San Marcos residents drink one or more 12 ounce soda daily. This percentage for San Marcos is higher than both the County and Statewide rates for sugary drink consumption for the year 2016.

Table 6-13 Percentage of Adults that Consume 1-	+ Sugary Drinks a	Day (2016)
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Location	Percentage of Adults 18+
San Marcos	12.7%
San Diego County	11.1%
California	11.0%

Source: California Health Interview Survey. CHIS 2016 Sugar Drinks Source File. Los Angeles, CA: UCLA Center for Health Policy Research. Available at: www.chis.ucla.edu/. Accessed March 2020.

6.5 ACCESS TO HEALTHCARE AND HEALTH FACILITIES

Access to health care and mental health services is an important determinant of health and disease prevention, and increased access is very likely to improve public health. Preventive measures, such as screening for common health problems like diabetes and respiratory illnesses, dental care, and vaccinations have been shown to reduce the incidence and severity of illnesses,²⁰ and are often less expensive than care once someone has become sick.

San Marcos has a number of health care providers. This includes a Kaiser Medical Center and a new Kaiser Hospital, The Village Square Healthcare Center, and Children's Medical Group.

6.6 LOCAL POLICY PROGRAMS RELATED TO HEALTH AND WELLNESS

San Marcos has taken steps to ensure the health and wellness of the community. This section describes some of the steps the City has taken that aid in the development of a healthy community.

6.6.1 Mental Health and Social Capital

Poor social ties and networks and weak mental health is associated with a number of factors related to planning, including long commute times, exposure to crime, lack of transportation choice, and lack of access to public spaces. Social capital — often characterized by level of neighborhood trust and community participation — within a neighborhood is associated with many health benefits, such as increased physical activity.

Based on 2016 CHIS results, 16.4 percent of adult respondents ages 18 and older needed help for emotional/mental or alcohol/drug problem in the past 12 months, which is consistent with the statewide percentage of 16.9 percent. In addition, over 91.5 percent of San Marcos adults reported having no significant psychological distress during the past year, which is about the same as the statewide rate of 91.7 percent.

The City of San Marcos offers numerous programs to foster community activities especially for senior citizens and families. The San Marcos Senior Activity Center is used for a variety of events and activities

²⁰ U.S. Department of Health and Human Services Agency for Healthcare Research and Quality, *National Healthcare Disparities Report*, pg. 112, Rockville, Maryland. July 2003.

including senior classes, community meetings, small business conferences, church functions, non-profit functions and more. In addition, the City of San Marcos Parks and Recreation Department contracts with independent contractors to provide recreational classes for all ages. Programs include fitness, sports, dance, music, art, specialty classes and parent/child activities year-round. Other programs offered by the City include, Family Night, Fun Friday Nights!, and other family-centered activities.

6.6.2 Parks, Open Space and Street Trees

One of the elements of a sustainable and healthy city is adequate urban parks, open space, and street trees, which contribute to a local healthy environment. San Marcos has a number of parks that provide the community with many benefits including: improved air quality, shade, assist in calming traffic, and reduce urban heat island effects. These facilities are described in detail in Chapter 3, Utilities and Community Services.

6.7 REFERENCES

- American Medical Association, Facts About Youth and Alcohol (Published 2011). Available at: <u>http://www.ama-assn.org/ama/pub/physician-resources/public-health/promoting-healthy-</u> <u>lifestyles/alcohol-other-drug-abuse/facts-about-youth-alcohol.page</u>. Accessed July 7, 2016.
- California Department of Education. Physical Fitness Testing Results, Accessed on March 2020. Accessible at: http://www.cde.ca.gov
- California Center for Public Health Advocacy, Resources: Soda Consumption. Accessed on March 2020. Accessible at http://www.publichealthadvocacy.org/resources_soda.html.
- California Department of Public Health (2016 Report) Obesity in California The Weight of the State 2000-2012.
- Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, Prevalence and Trends Data: California 2010. Available at http://apps.nccd.cdc.gov/brfss. Accessed March 2020.
- Centers for Disease Control and Prevention. Tobacco Use Among Middle and High School Students -United States, 2011–2014. Morbidity and Mortality Weekly Report April 17, 2015; 64(14):381-5.
- Crane, R. (2000). The Influence of Urban Form on Travel: An Interpretive Review. *Journal of Planning Literature*; 15(1), 3-23.

Frank, L.; Kavage, S; Litman, T. (2006). Promoting Public Health through Smart Growth. Prepared for *Smart Growth BC*: page 6.

- Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., and Saelens, B. E. (2005). "Linking Objectively Measured Physical Activity with Objectively Measured Urban Form: Findings from SMARTRAQ". *American Journal of Preventive Medicine, 28* (2, Supplement 2), 117-125.
- Giles-Corti, B., ad Donovan, R.J. (2002). "The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity". *Social Science & Medicine 54*: 1793-1812.

- Johnson, Paul M.; Kenny, Paul J. (2010). "Dopamine D2 receptors in addiction-like reward dysfunction and compulsive eating in obese rats". *Nature Neuroscience* 13 (5): 635.
- L. Besser and A. Dannenberg, Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations.
- Mari Gallagher Research and Consulting Group. (July 2006). "Examining the impact of food deserts on public health in Chicago". Accessed July 8, 2014. Available at: <u>http://www.marigallagher.com/site_media/dynamic/project_files/Chicago_Food_Desert_Repo_rt.pdf</u>. 32, Issue 4, American Journal of Preventative Medicine, at 273-280 (November 2005).
- Morland, K., Roux, A., & Wing, S. (2006). "Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study". *American Journal of Preventive Medicine 30*(4):333-339.
- National Highway Traffic Safety Administration, Fatality Analysis Reporting System, National Statistics. (2014). Accessed May 7, 2016. Accessible at: http://www-fars.nhtsa.dot.gov/Main/index.aspx.
- Number of Deaths by Zip Code of Decedent's Residence by Gender and Age of Decedent and Select Leading Causes of Death California, 2016: Available At: http://www.cdph.ca.gov/DATA/STATISTICS/PAGES/DEATHPROFILESBYZIPCODE.ASPX
- S. Inagami et al. (2006). "You Are Where You Shop: Grocery Store Locations, Weight, and Neighborhoods". American Journal of Preventive Medicine; 31(1): 10-17.; K. Morland et al. (2006). "Supermarkets, Other Food Stores, and Obesity: The Atherosclerosis Risk in Communities Study". American Journal of Preventive Medicine; 30(4): 333-339.
- San Gabriel Valley Energy Wise Partnership's Home Energy Assessments. Accessed at <u>http://www.ci.la-verne.ca.us/index.php/home-sp-254/bulletins/272-san-gabriel-valley-energy-wise-partnership-s-home-energy-assessments</u> on February 20, 2018.
- University of California Los Angeles (UCLA) Health Policy Center 2010-2016 California Health Interview Survey. Available At: http://ask.chis.ucla.edu & http://healthpolicy.ucla.edu/Pages/home.aspx
- U.S. Department of Health and Human Services Agency for Healthcare Research and Quality, *National Healthcare Disparities Report*, pg. 112, Rockville, Maryland. July 2003.
- U.S. Department of Transportation National Highway Traffic Safety Administration 2014. Fatality Analysis Reporting System (FARS) Available At: http://www-fars.nhtsa.dot.gov/ and http://www.nhtsa.gov/FARS
- WalkScore 2020. Walkscore for San Marcos Points of Interest. Available At: <u>https://www.walkscore.com/</u>



Community Health and Wellness

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