



11 COMMUNITY HEALTH

A key objective of the Lake Merritt Station Area Plan is to provide for community development that is equitable, sustainable, and healthy. This Chapter looks at indicators in the Planning Area that are known to influence health, and highlights the connections between public health, planning and land use efforts. Written in collaboration with Asian Health Services and Health Impact Partners, this Chapter presents an overall baseline health condition, which will be built upon in a future detailed health impacts analyses.

11.1 Social Profile

According to the 2004 Oakland Health Profile (Profile), prepared by the Alameda County Public Health Department’s Community Assessment, Planning, and Education (CAPE) unit, several demographic characteristics have been shown to be related to health outcomes. According to the Profile, substantial evidence indicates that health and well-being are strongly associated with the social and economic characteristics of communities and neighborhoods. Therefore, this section discusses important social and economic characteristics in the Planning Area that have been presented throughout this report and how they influence community health.

The Profile identifies the following key recommendation for neighborhoods with high poverty rates and poorer health outcomes – focus on supporting and working with communities as partners to address social and environmental factors associated with good health. Specific issues include access to healthy foods, parks and playgrounds, housing, transportation, education, employment, universal access to quality health care and clean air.

Income

Income level has been documented as a determinant of health. According to the U.S. Census Bureau poverty thresholds for 2009¹, a one-person household is considered to be living in poverty if they earned less than \$10,952. A two-person household is considered to be living in poverty if they earned less than \$14,001. In the Planning Area, 32.5% of households have a household income of less than \$15,000 a year and approximately 78.2% of the households in the Planning Area consist of one or two-person households. This shows that there is currently a segment of the population in the Planning Area living in poverty. Figure 11.1 shows that there is a higher percentage of the Planning Area households with a household income of less than \$15,000 per year, compared to the City of Oakland (16.1%).

¹ U.S. Census Bureau, <http://www.census.gov/hhes/www/poverty/threshld/09prelim.html>, accessed April 27, 2010.

Housing

In the Planning Area, 78.8% of the housing units in the Planning Area are renter occupied. A higher proportion of Planning Area residents rent housing than residents of the City of Oakland (58.9%). According to the Profile, despite the relatively lower cost of housing in Oakland compared to cities in the Bay Area, affordability is low because of relatively lower salaries and Oakland households have to pay more of their income compared to other Alameda County cities.

Unemployment

The City of Oakland’s unemployment rate for March 2010 was 17.7%.² Unemployment puts the health of individuals in a community at risk as it has both psychological and financial consequences. According to the Profile, one of the results of unemployment is a lack of health insurance, which can limit access to essential medical care and adversely affect health status.

² City of Oakland, <http://www.business2oakland.com/main/laborforce.htm>, accessed April 28, 2010.

Figure 11.1: HOUSEHOLD INCOME (2009)

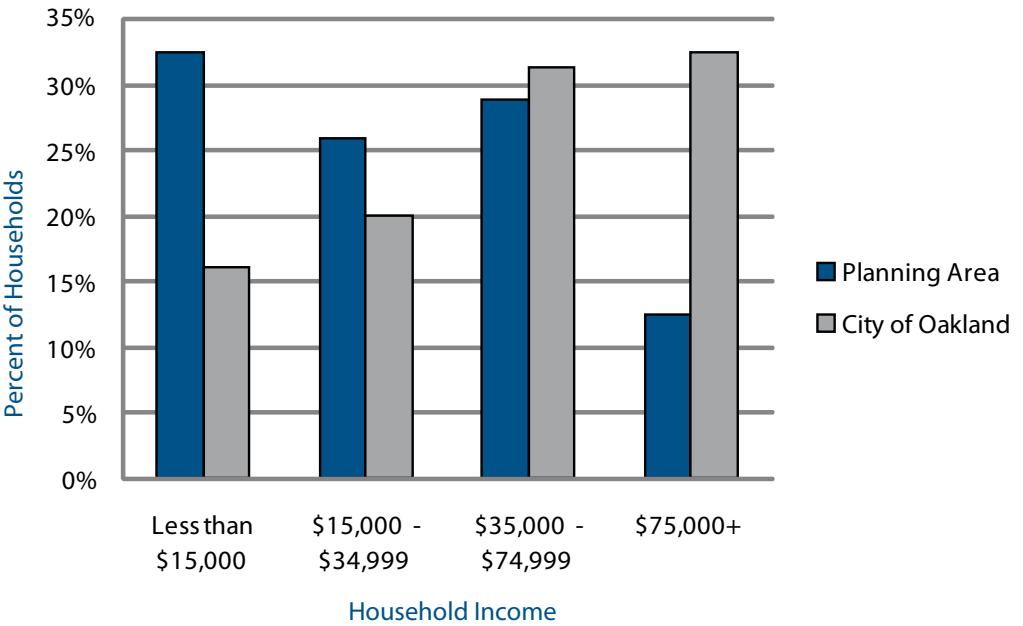
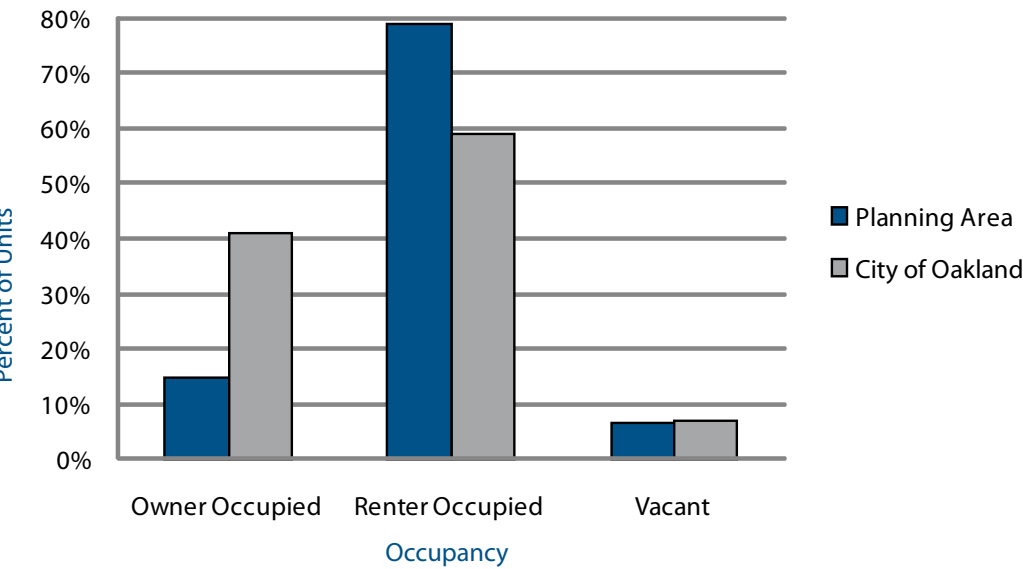


Figure 11.2: HOUSING OCCUPANCY (2009)



11.2 Health Factors

Health Care

Among the common conditions that are associated with living in poverty is lack of health insurance. Being uninsured is associated with poor health status. According to the 2007 Select Health Indicators for Cities in Alameda County prepared by CAPE (Select Health Indicators), the 2003 and 2005 California Health Interview Survey found that the rates of uninsured in Oakland (17.8%) are significantly higher than the county rate. In addition, access to health care may also be limited by language. The Profile shows that a high proportion of Asian and Pacific Island language households in Oakland experience linguistic isolation (47.9%).

A majority of the population in the Planning Area is Asian or Pacific Islander, with 58% of households speaking an Asian/Pacific Islander language at home. According to the Profile, persons in non-English speaking households are “linguistically isolated” if there is not an English speaker over the age of 14 years old in the household. Although a person may not be linguistically isolated from their own communities, they may experience barriers in accessing or utilizing health care.

There is a dearth of health care providers able to provide linguistically accessible health services for the Asian and Pacific Islander population throughout Alameda County, and there are only 35 physicians who provide Asian and Pacific Islander language interpretation in the entire City of Oakland, which results in a ratio for the Oakland population to primary care physicians that provide Asian and Pacific Islander language interpretation of 10,454:1.³

Table 11.1 shows the leading causes of death by race/ethnicity in Alameda County.

TABLE 11.1: LEADING CAUSES OF DEATH BY RACE/ETHNICITY IN ALAMEDA COUNTY (2002-2004)

RACE/ETHNICITY		NUMBER	PERCENT
AFRICAN AMERICAN	TOTAL	6,080	100.0
	Diseases of the heart	1,521	25.0
	Cancer	1,369	22.5
	Stroke	511	8.4
	Unintentional Injuries	262	4.3
	Diabetes	258	4.2
AMERICAN INDIAN	TOTAL	71	100.0
	Cancer	12	16.9
	Diseases of the heart	8	11.3
	Chronic liver disease and cirrhosis	8	11.3
	Diabetes	5	7.0
	Unintentional injuries	5	7.0
ASIAN	TOTAL	3,263	100.0
	Cancer	898	27.5
	Diseases of the heart	772	23.7
	Stroke	331	10.1
	Unintentional injuries	137	4.2
	Diabetes	117	3.6
LATINO	TOTAL	2,414	100.0
	Cancer	515	21.3
	Diseases of the heart	510	21.1
	Unintentional injuries	177	7.3
	Stroke	158	6.5
	Diabetes	122	5.1

RACE/ETHNICITY		NUMBER	PERCENT
MULTI-RACE	TOTAL	139	100.0
	Cancer	28	20.1
	Diseases of the heart	27	19.4
	Stroke	9	6.5
	Certain conditions originating in the perinatal period	8	5.8
	Unintentional injuries	8	5.8
PACIFIC ISLANDER	TOTAL	149	100.0
	Diseases of the heart	38	25.5
	Cancer	32	21.5
	Diabetes	13	8.7
	Stroke	11	7.4
	Chronic lower respiratory diseases	6	4.0
WHITE	Unintentional injuries	6	4.0
	TOTAL	16,174	100.0
	Diseases of the heart	4,629	28.6
	Cancer	3,865	23.9
	Stroke	1,202	7.4
	Chronic lower respiratory diseases	924	5.7
	Influenza and pneumonia	537	3.3

Source: Alameda County Public Health Department CAPE Unit, Select Health Indicators for Cities, 2007.

3 AHS Phone Survey August 2009 and U.S. Census American Community Survey 2005-2007.

Health Indicators

Coronary Heart Disease

As shown in Table 11.1, diseases of the heart is one of the leading causes of death of Alameda County residents. Coronary Heart Disease (CHD) is the most common cause of death in the United States, accounting for more than one of every five deaths. Table 11.2 shows the CHD-related hospitalization rates for the Planning Area zip codes from 2006 to 2008. The rates in 94606, which the Eastlake sub-area is within and 94607, which the Chinatown sub-areas are in, had rates that were lower than that of the City of Oakland and Alameda County. The rate in 94612, which includes the 14th Street Corridor sub-area had a CHD rate that was higher than the City of Oakland but lower than the Alameda County rate.

According to the Select Health Indicators, several risk factors for coronary heart disease can be modified through lifestyle changes. The risk of developing CHD can be reduced significantly through a healthy diet, regular exercise, reducing stress level, and not smoking, in addition to reducing or controlling high blood pressure, high blood cholesterol, and diabetes. Socio-economic status, environment, and culture are also important risk factors in the development of the disease.

Asthma

From 2006 to 2008, asthma-related emergency room visits in zip codes 94607 and 94612 was higher than the rate of the City of Oakland and Alameda County. The rate in zip code 94606 was lower than the City of Oakland and Alameda County. According to the Profile, childhood asthma hospitalization rates in Oakland were found to be concentrated in North and West Oakland, Downtown, and Chinatown.

Mental Health

The Surgeon General defines mental illness as any of the collection of mental disorders. “Mental disorders are health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.”⁴ The most common mental disorder is depression.

From 2006 to 2008, the mental disorder-related emergency room visits in Planning Area zip codes 94607 and 94612 were higher than the rates of the City of Oakland and Alameda County. For zip code 94606, the rate was lower than the two other Planning Area zip codes, and the City of Oakland and Alameda County. Speaking to the social support and mental health needs of the Asian/Pacific Islander population, the percent of Asian/Pacific Islanders in Alameda County that saw a health professional for emotional/mental health problems (3.7%) is the lowest rate of all ethnic/racial groups and is about one-third the rate of the general Alameda County population, which is 10.5%.⁵

4 U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institute of Mental Health. Mental Health: A Report of the Surgeon General – Executive Summary. Rockville, MD. 1999.

5 California Health Interview Survey 2005.

TABLE 11.2: HOSPITALIZATION RATES¹ (2006-2008)

	PLANNING AREA ZIP CODES			OAKLAND	ALAMEDA COUNTY
DISEASE	94606	94607	94612		
Coronary Heart Disease	662.8	790.4	888.1	815.3	924.6
Diabetes	918.1	1,144.7	1,355.3	1,057.5	937.4
1 Rate per 100,000					

Source: Alameda County (Zip & Oakland) Inpatient and ED Data, 2006-2008, 3-year Counts, 3-Year Average Age-Adjusted Rates.

TABLE 11.3: EMERGENCY ROOM VISIT RATES¹ (2006-2008)

	PLANNING AREA ZIP CODES			OAKLAND	ALAMEDA COUNTY
DISEASE	94606	94607	94612		
Asthma	519.8	1,114.1	1267.1	726.3	505.2
Mental Disorder	701.2	1,566.4	2,831.6	1,087.1	925.1
1 Rate per 100,000					

Source: Alameda County (Zip & Oakland) Inpatient and ED Data, 2006-2008, 3-year Counts, 3-Year Average Age-Adjusted Rates.

Diabetes

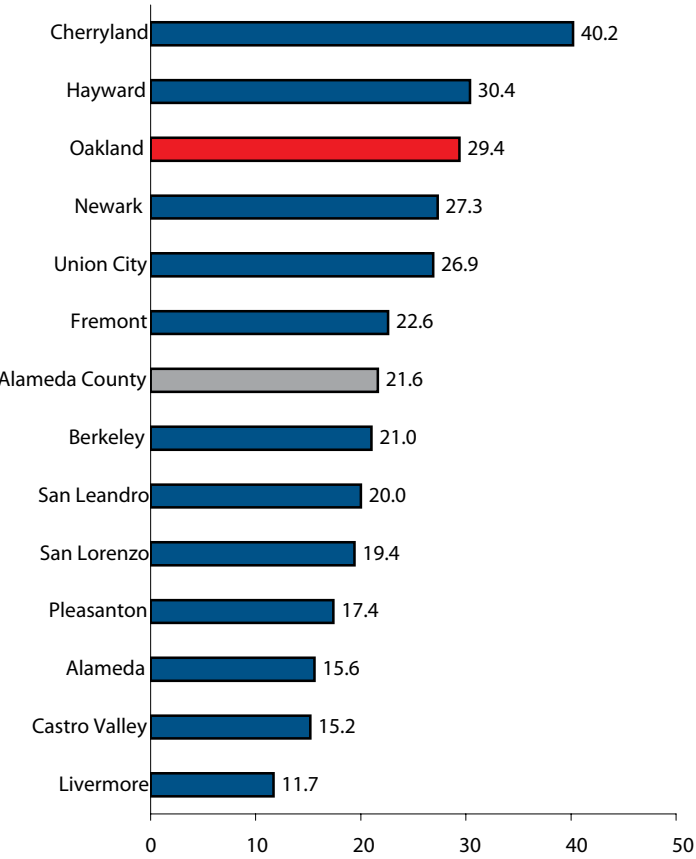
From 2006 to 2008, the rate of diabetes-related hospitalization rates in the Planning Area zip codes 94607 and 94612 were higher than that of the City of Oakland and Alameda County. The rate of hospitalizations in zip code 94606 was lower than that of the City of Oakland and Alameda County. According to the Profile, the burden of diabetes hospitalizations is concentrated in West and East Oakland, Downtown, Chinatown, and parts of North Oakland. Figure 11.3 shows that the City of Oakland’s diabetes mortality rate is higher than the County’s. Adult and senior Asian/Pacific Islanders in Alameda County, and in particular those living in poverty, have a higher prevalence of diabetes then the general adult population in the county.⁶

Cancer

From 2002 to 2004, there were 6,721 cancer deaths from all types in Alameda County, an average of 2,240 deaths per year. The age-adjusted death rate was 168.9 per 100,000 population. The City of Oakland’s Cancer Mortality rate was higher than that of the County’s, as shown in Figure 11.4. According to Table 11.1, cancer is the leading cause of death for Asians in Alameda County.

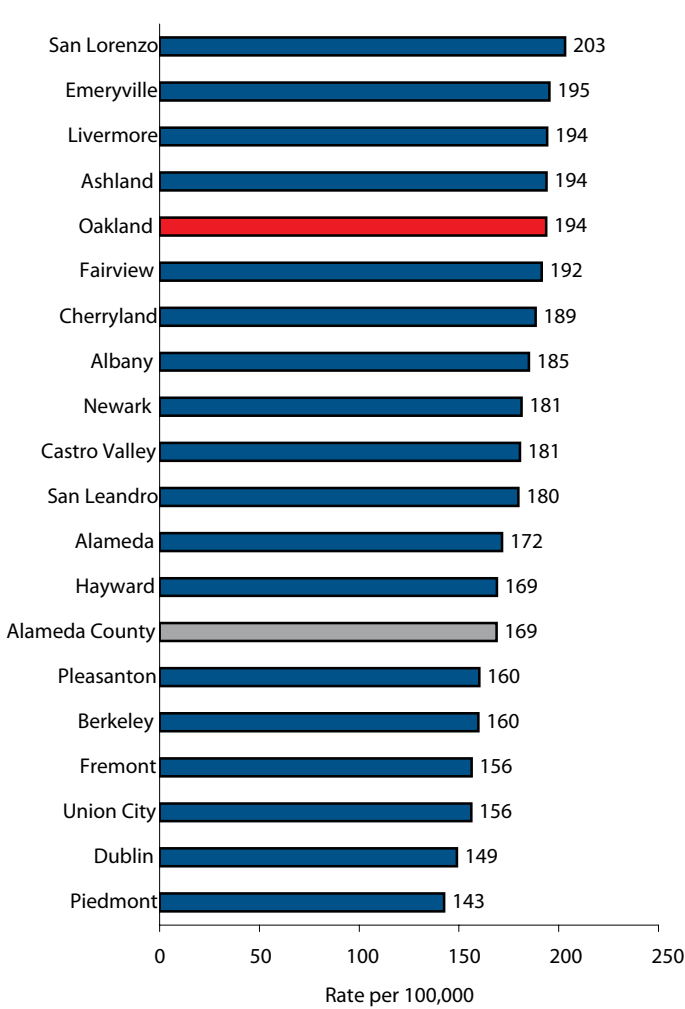
6 California Health Interview Survey 2007.

Figure 11.3:
DIABETES MORTALITY BY CITY (2002-2004)



Source Document: Alameda County Public Health Department CAPE Unit, 2007
Select Health Indicators for Cities in Alameda County, August 2007.

Figure 11.4:
CANCER MORTALITY BY CITY (2002 - 2004)



Source Document: Alameda County Public Health Department CAPE Unit, 2007 Select
Health Indicators for Cities in Alameda County, August 2007.

Obesity, Access to Healthy Food, Physical Activity

Obesity

Table 11.4 shows the adult obesity prevalence in Oakland, based on the 2003 California Health Survey. The table shows that the prevalence of obesity is highest among 40-64 year olds (27.2%). In addition, the prevalence of obesity is highest among African Americans in Oakland, followed by Latino, and then Asian/Pacific Islander. In addition, the prevalence of obesity is higher among lower income families. Approximately 20.3% of adult Oakland residents are obese.

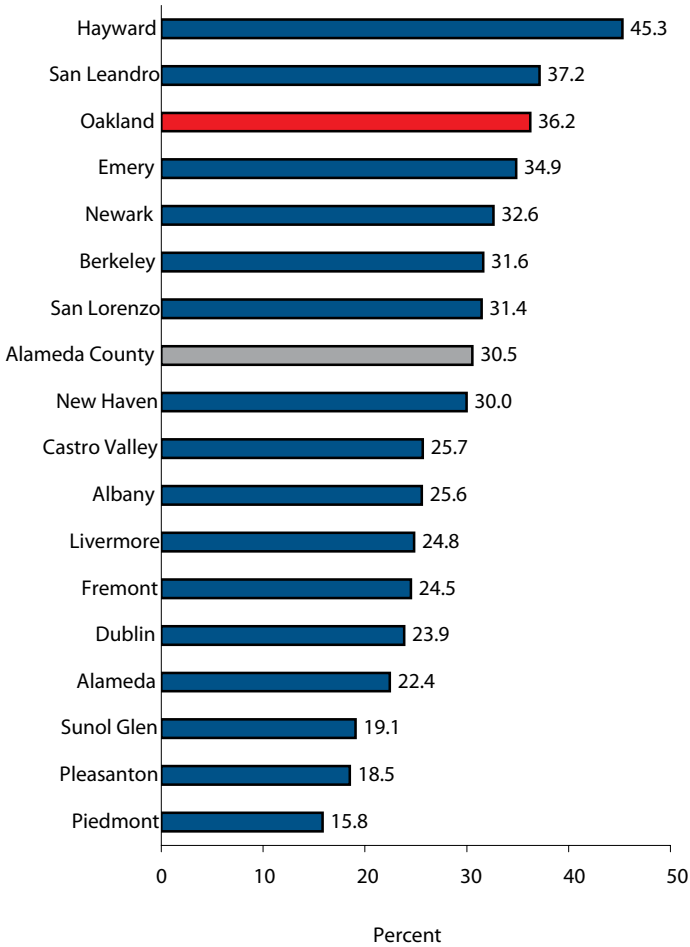
Figure 11.5 shows the percentage of overweight children in the Oakland Unified School District is the third highest among the

TABLE 11.4: ADULT OBESITY PREVALENCE IN OAKLAND (2003)

	PERCENTAGE
AGE GROUP	
18-39	14.3
40-64	27.2
65-79	20.9
80+	19.9
RACE/ETHNICITY	
White	11.3
Latino	23.9
African American	33.4
Asian/Pacific Islander	13.0
FEDERAL POVERTY LEVEL (FPL)	
0-99% FPL	23.1
100-199% FPL	22.7
200-299% FPL	22.7
300% FPL and Above	17.6
Total	20.3

Source: California Health Interview Survey, 2003.

Figure 11.5: PERCENT OVERWEIGHT BY SCHOOL DISTRICT (2005-2006)



Source Document: Alameda County Public Health Department CAPE Unit, 2007 Select Health Indicators for Cities in Alameda County, August 2007.

school districts in Alameda County. Obesity is linked to several factors including nutritional, behavioral, and environmental.

Access to Healthy Food

A common condition associated with living in poverty is lack of access to nutritional food. Fast food and processed foods are generally cheaper than fresh food. Often, a family may forego fresh produce to purchase a larger amount of food. In addition, low-income areas generally lack grocery stores and have a higher number of fast food establishments and liquor stores.

Table 11.5 shows that only 23.7% of adults in Oakland eat five or more daily servings of fruits and vegetables. Fruits and vegetables are a critical source of nutrients and other substances that help protect against chronic diseases. The federal dietary Guidelines for Americans recommend the consumption of five to nine daily servings of fruits and vegetables. According to Table 11.5, the prevalence of eating five or more daily servings of fruits and vegetables was lowest among adults between the ages of 18 to 24. Approximately 16.3% of African Americans consumed five or more daily servings of fruits and vegetables while approximately 21.1% of Asian/Pacific Islanders and of Latinos consumed five or more daily. Families that have a higher income are more likely to consume five or more daily servings of fruits and vegetables.

In Chinatown, historically, more than 80% of retail was from food and restaurant outlets. Today, Chinatown has a more even distribution of sales between the convenience, comparison, eating & drinking categories. Convenience goods include grocery stores, drug stores, and other food stores. Comparison goods include apparel, general merchandise and home furnishings and appliances. Table 11.2 shows the number of establishments by type. Information regarding retail opportunities in the Planning Area can be found in the 2010 Lake Merritt Station Area Plan Market Opportunity Analysis.

Chinatown currently has almost twice as many eating and drinking establishments as convenience establishments. Chinatown has a fair number of grocery markets and a nearby weekly farmers market in Old Oakland, but the community has also acknowledged the need for grocery stores, farmers markets, and restaurants that not only sell nutritious but also affordable food to the community. The presence of grocery stores and farmers markets can assist in reducing chronic disease rates and obesity,⁷

7 Morland K, Diez Roux AV, Wing S. Supermarkets, other food stores, and obesity: the atherosclerosis risk in communities study. Am J Prev Med. 2006;30(4):333-9.

⁸ as well as foster community building⁹ and reduce crime rates.¹⁰ In addition, locating these types of businesses not only increase access to nutritional food, it may also encourage more physical activity. Neighborhoods with a mix of shops and businesses within easy walking distance are more “walkable” and can lead to more exercise and less obesity by significantly reducing the need to drive.^{11,12}

Physical Activity

According to the Centers for Disease Control and Prevention, physical activity can benefit health in a number of ways. Physical activity can help weight management, develop stronger bones and muscles, reduce the risk of cardiovascular disease such as heart disease and stroke, reduce the risk for Type 2 Diabetes and metabolic syndrome, reduce the risk of some cancers like lung cancer, and improve mental health and mood.

- 8 Inagami S, Cohen DA, Finch BK, Asch SM. You are where you shop: grocery store locations, weight, and neighborhoods. Am J Prev Med. 2006;31(1):10-7.
- 9 La Trobe, H. Farmers’ markets: consuming local rural produce. International Journal of Consumer Studies. 2001;25;(3): 181-192.
- 10 Kuo FE, Sullivan WC. Environment and crime in the inner city: does vegetation reduce crime? Environment and Behavior. 2001;33(3):343-367.
- 11 Handy, S. 1996 Understanding the link between urban form and non-work traveling behavior. Journal of Planning Education and Research. 15:183-98.
- 12 Inagami S, Cohen DA, Finch BK, Asch SM. You are where you shop: grocery store locations, weight, and neighborhoods. Am J Prev Med. 2006;31(1):10-7.

TABLE 11.5: ADULTS EATING FIVE OR MORE DAILY SERVINGS OF FRUITS AND VEGETABLES IN OAKLAND (2003)

	PERCENTAGE
AGE GROUP	
18-24	18.7
25-39	29.1
40-64	20.9
65-79	19.5
80+	30.6
RACE/ETHNICITY	
White	32.6
Latino	21.5
African American	16.3
Asian/Pacific Islander	21.1
FEDERAL POVERTY LEVEL (FPL)	
0-99% FPL	13.7
100-199% FPL	15.3
200-299% FPL	28.3
300% FPL and Above	29.7
Total	23.7

Source: California Health Interview Survey, 2003.

TABLE 11.7: MERCHANDISING MIX IN CHINATOWN (2006)

TYPE	NUMBER OF ESTABLISHMENTS
Convenience	35
Comparison	95
Eating & Drinking	63
Total	196 ^a
a Missing sales data indicates data that cannot be reported in compliance with State confidentiality laws.	

Source: Conley Consulting Group, JRDV Architects, Strategic Economics, 2008 Oakland Retail Enhancement Strategy, 2008.

TABLE 11.6: PHYSICALLY INACTIVE ADULTS IN OAKLAND (2003)

	PERCENTAGE
AGE GROUP	
18-24	14.3
25-39	19.7
40-64	18.6
65-79	30.6
80+	57.5
RACE/ETHNICITY	
White	7.6
Latino	24.1
African American	27.1
Asian/Pacific Islander	37.6
FEDERAL POVERTY LEVEL (FPL)	
0-99% FPL	39.6
100-199% FPL	29.4
200-299% FPL	22.3
300% FPL and Above	11.0
Total	21.3

Source: California Health Interview Survey, 2003.

According to Table 11.6, 21.3% of adult Oakland residents are physically inactive. In this case, physically inactive is defined by individuals reporting that they had not done any moderate physical activities in their free time for at least 10 minutes within one week. The highest percentage of adults who are physically inactive were ages 65 and over. The highest percentage of physically inactive adults by race/ethnicity were Asian/Pacific Islanders. In addition, families with lower incomes are more likely to be physically inactive.

Pedestrian Injuries and Circulation

According to Oakland’s Pedestrian Master Plan, Oakland residents suffer approximately 85.5 vehicle injuries to pedestrians per 100,000 people every year including three pedestrian fatalities per 100,000 people per year.¹³ A significant number of Oakland pedestrian injuries occur in the neighborhoods and streets within and surrounding the Planning Area (e.g., Downtown, Jack London Square, Chinatown, Lakeshore, East Lake, Lower San Antonio, International Blvd). In fact, Oakland Chinatown has the highest concentration of pedestrian, bicycle, and vehicle collisions in the City of Oakland.¹⁴ Furthermore, the neighborhoods surrounding this project contain sensitive populations more vulnerable to impacts on pedestrian safety, including children, the elderly, walking-dependent, and the low-income transit-dependent. Chapter 7 presents information regarding pedestrian collisions at intersections within the Planning Area.

The US Department of Health and Human Services (USDHHS) establishes National objectives for the rate of pedestrian injuries, which are that non-fatal vehicle injuries to pedestrians are to be no greater than 19 injuries per year per 100,000 people and fatal vehicle injuries to pedestrians are no greater than one injury per year per 100,000 people.¹⁵ Rates of pedestrian collisions per 100,000 population in most parts of the Planning Area exceed the Healthy People 2010 target of 20 or fewer pedestrian injuries per 10,000 people.¹⁶ Rates are especially high in the Chinatown commercial area. Pedestrian collisions are discussed in greater detail in Chapter 7.

13 Oakland Pedestrian Master Plan.

14 SWITRS 1997-1999.

15 US Department of Health and Human Services. Healthy People 2010 Objectives.

16 US Department of Health and Human Services. Healthy People 2010; Understanding and Improving Health, 2nd ed Washington, DC: US Government Printing office, November 2000. Based on the HP 2010 targets of 10 nonfatal pedestrian injuries + 1 pedestrian death per year per 100,000 population.

Transportation systems can have powerful effects on social and individual travel behavior, which in turn impact health. A dense mix of uses that are well-served by pedestrian routes and public transit can ensure access to essential needs and services and increase physical activity. Physical activity is associated with various health benefits including reductions in premature mortality, the prevention of chronic diseases such as diabetes and hypertension, and improvements in psychological well-being. A complete and diverse circulation network can also reduce personal vehicle trips and in turn, alleviate negative air quality impacts and associated respiratory health impacts, as well as reduce injuries and fatalities resulting from collisions.

As presented in Chapter 7, 33.7% of the population in the Planning Area drove alone to work. Besides driving, 25.1 % of the population used public transportation to work and 24.3% walked to work. This shows that public transportation is the second most popular way people. However, according to the Profile, the cost of transportation is higher in Oakland than in the United States. As Chapter 7 shows, the cost of local travel (around Oakland) on BART from Lake Merritt is \$1.75 one-way while the cost is \$2.00 one-way on AC Transit. While it might be less expensive to use BART, travelers may not be able to get to as many places as one can on AC Transit. The cost of traveling to the Downtown San Francisco from Lake Merritt is also less expensive using BART, costing \$3.10 one-way compared to \$4.00 for AC Transit.

Current vehicle miles traveled (VMT) in the Planning Area as well as existing traffic counts will be measured for the Environmental Impact Report (EIR) for the Plan. The EIR will evaluate transportation impacts of the Plan.

Crime

Crime can have an impact on a community in many ways. Violent crime and property crime can have psychological, physical, and financial effects on the community. Living in an area with high actual and perceived crime can decrease use of public space, including sidewalks, retail, parks, and community centers. Crime may indirectly impact health by causing fear, feeling unsafe, stress, and poor mental health.¹⁷ The fear of crime can limit mobility or physical activity in a community, leading to poor health outcomes and quality of life. This has an impact on rates of physical exercise and social networks, which subse-

17 Guite H, et al. The impact of the physical and urban environment on mental well-being. Public Health (2006), doi:10.1016/j.puhe.2006.10.005

TABLE 11.8: VIOLENT AND PROPERTY CRIME RATES

JURISDICTION	VIOLENT CRIME		PROPERTY CRIME	
	NUMBER	RATE	NUMBER	RATE
Alameda County	9,749	649	63,034	4,195
Alameda County Sheriff Dept ¹	505	372	3,160	2,327
Alameda Police Dept	232	324	1,959	2,736
Albany Police Dept	55	337	776	4,754
Berkeley Police Dept	570	558	7,976	7,805
Dublin	79	212	807	2,167
Emeryville Police Dept	94	1,124	1,187	14,188
Fremont Police Dept	521	256	4,803	2,358
Hayward Police Dept	641	452	5,473	3,862
Livermore Police Dept	141	180	1,659	2,113
Newark Police Dept	175	409	1,977	4,620
Oakland Police Dept	5,692	1,421	23,027	5,748
Piedmont Police Dept	11	102	306	2,838
Pleasanton Police Dept	96	145	1,555	2,342
San Leandro Police Dept	465	583	4,069	5,105
Union City Police Dept	416	600	2,507	3,613
Other Jurisdictions ²	56	n.a.	1,793	n.a.
1 The Alameda County Sheriff Department also patrols Dublin. Numbers are for unincorporated Alameda County only.				
2 Includes UC Berkeley, UC Livermore Lab, CSU East Bay, East Bay Municipal Utility District, East Bay Regional Park District, BART, Union Pacific Railroad, Calif. Highway Patrol.				

Source: Alameda County Public Health Department CAPE Unit, Select Health Indicators for Cities, 2007.

quently can impact many physical and mental health outcomes. Violent crime, additionally, can cause injury and death and can influence stress levels. Crime is also a deterrent to community cohesion and support.

The rate of violent crime in Alameda County in 2005 was 649 per 100,000, while the property crime rate was 4,195 per 100,000. Oakland had the highest violent crime rate of any jurisdiction. The violent crime rate in Oakland was roughly two times higher than the county rate. More detail on crime is included in Chapter 8.

Displacement

In some parts of the Bay Area, increased migration into existing transit-oriented neighborhoods has been associated with rent increases, evictions, loss of affordable housing units, and disrupted social networks.¹⁸ The fear of displacement is potent for residents living in lower-income neighborhoods where TOD is planned—often the same communities that were the targets of Urban Renewal or other redevelopment projects that were not intended to bring benefits to current residents and led to their displacement.¹⁹

A challenge for TOD is maintaining affordability and preventing displacement of lower-income residents in revitalized neighborhoods. It is essential that the opportunities created through TOD are available to all, including low-income residents who are most in need of the cost savings and potential health benefits of living near transit.

Displacement can have several health impacts. Increased mobility associated with displacement in childhood is correlated with academic delay in children, school suspensions, and emotional and behavioral problems.²⁰ Moreover, moving frequently is associated with higher rates of stress, mental health issues, child abuse, and neglect.²¹

18 Chapple, Karen, et al. Mapping Susceptibility to Gentrification. Center for Community Innovation, UC-Berkeley. 2009.

19 Assocaition of Bay Area Governments, Development Without Displacement: Development with Diversity. October, 2009.

20 Cooper M. Housing affordability: a children’s issue. Discussion Paper No. F-11. Ottawa, ON: Canadian Policy Research Networks; 2001. Available at: <http://www.cprn.com/en/doc.cfm?doc=176>. Accessed July 1, 2009.

21 Dong M. Childhood residential mobility and multiple health risks during adolescence and adulthood. Arch Pediatr Adolesc Med. 2005;159:1104-1110.

Parks and Recreation Space

Access to parks and recreation space can also help address obesity. Community spaces, such as recreation centers, community centers, and parks, serve to enhance social cohesion among neighborhood residents. Social connection has a variety of health benefits, ranging from stress reduction, longer lifespan, and access to emotional and physical resources.²²

Access to public parks and recreational facilities has been strongly linked to reductions in crime and to reduced juvenile delinquency.²³ Recreational facilities keep at-risk youth off the streets, give them a safe environment to interact with their peers, and spend time during which they could otherwise get into trouble.²⁴ In addition, access to places for physical activity is associated with higher levels of physical activity.^{25 26 27 28 29}

Environmental Issues

Environmental exposures to air quality, noise levels, exposure to hazardous materials, and unsanitary conditions impact health in a variety of ways. Environmental issues are discussed in greater length in Chapter 10; a summary of some health impacts follows.

22 Poortinga W. Social relations or social capital? individual and community health effects of bonding social capital. Soc Sci Med. 2006;63:255-270.

23 Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.

24 Trust for Public Land. The Benefits of Parks: why America needs more city parks and open space. 2006.

25 Centers for Disease Control. Increasing Physical Activity: A Report on Recommendations of the Task Force on Community Preventive Services. October 26, 2001. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5018a1.htm>.

26 Kahn EB. The effectiveness of interventions to increase physical activity. American Journal of Preventive Medicine. 2002;22(4):73-107.

27 Powell DE, Martin LM, Chowdhury PP. 2003. Places to walk: Convenience and regular physical activity. American Journal of Public Health 93(9):1519-1521.

28 Humpel N, Owen N, Leslie E. 2002. Environmental factors associated with adults participation in physical activity: A review. American Journal of Preventive Medicine 22(3):188-199.

29 Takano T, Nakamura K, Watanabe M. 2002. Urban residential environments and senior citizens longevity in megacity areas; the importance of walkable green.

Air emissions from vehicles and industrial sources contain pollutants such as ozone, carbon monoxide, particulate matter, nitrogen dioxide, sulfur dioxide, and diesel exhaust. These chemicals cause a wide range of health effects including respiratory diseases and cancer.³⁰ Long-term exposure to chronic levels of noise can adversely affect sleep, school and work performance, blood pressure and cardiovascular disease.³¹ The presence of hazardous materials in groundwater, soil, and surface soil can lead to human exposure to a variety of hazardous chemicals. Examples include exposure to indoor air impacts from a buried underground storage tank below a building, or exposure of a child to contaminated surface soil while playing outside. Unsanitary conditions in public outdoor spaces can impact disease transmission. In addition, the presence of litter, drug syringes, and other waste can contribute to an unaesthetic urban environment, which can impact desire to exercise, social cohesion, and pride in one’s community.

Trees and green space remove also pollution from the air, mitigating heat island effects in urban areas, which lower energy demands and associated emissions during warm periods.^{32 33}

30 Bhatia R, Rivard T. 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review. Program on Health, Equity, & Sustainability, Occupational & Environmental Health Section, Department of Public Health City and County of San Francisco.

31 Berglund B, Lindvall T, Schwela DH. Guidelines for Community Noise. WHO. Available at: <http://www.who.int/docstore/peh/noise/guidelines2.html>.

32 US Dept of Agriculture, Forest Service pamphlet #FS-363, cited in Benefits of Trees in Urban Areas. Colorado Tree Coalition. Available at <http://www.coloradotrees.org>.

33 Sherer PM. 2003. Parks for people: Why America needs more city parks and open space. San Francisco: The Trust for Public Land. Available at <http://www.tpl.org/>.



Food scraps left on the street from merchants can attract pigeons and rodents.



Trash accumulates under the freeway is an eyesore for the community.

11.3 Health Goals

According to the AHS Community Engagement Process Report, community health is a major concern of community members in the Planning Area. Responses to a survey administered by Asian Health Services identified crime and violence, air pollution, unsafe public spaces, noise, and insufficient parks and recreational facilities as health hazards. Respondents expressed desire for additional parks, athletic fields and public indoor recreational facilities. According to survey results, almost a third of the respondents have a serious or chronic health condition. Additional health and medical services was identified as a service needed in the Planning Area.

The community identified the following goals for addressing health issues in the Planning Area:

- 1. Improve air quality as a public health measure.
- 2. Increase health and medical services available to the community.
- 3. Cleanup air, soil and water contamination (including trash on the streets).
- 4. Reduce noise levels.
- 5. Ensure the cleanliness of public outdoor places.
- 6. Provide public bathrooms and trash containers.
- 7. Conduct anti-litter campaigns.



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4. Reduce noise levels.



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2. Increase health and medical services available to the community.



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