



Appendix B

---

EXISTING  
CONDITIONS

This appendix contains additional existing conditions data for Lake Los Angeles, Walnut Park, Westmont/West Athens, and West Whittier-Los Nietos.

## LAKE LOS ANGELES

### Residential Density

At 1,601 people per square mile, Lake Los Angeles is ranked 220 (lowest) residential density out of 265 communities in Los Angeles County and the highest residential density out of 12 communities in the Antelope Valley. The majority of land in Lake Los Angeles is designated for residential uses, with commercial uses clustered on 170th Street East and Avenue P. Both of these intersections and the corridor along 170th Street are designated as Rural Town Center in the Antelope Valley Area Plan. These areas are prioritized for pedestrian-oriented design and connectivity to link between commercial development and the surrounding residential areas (Figure B-1 on next page).

### Demographics

#### POPULATION, AGE, SEX

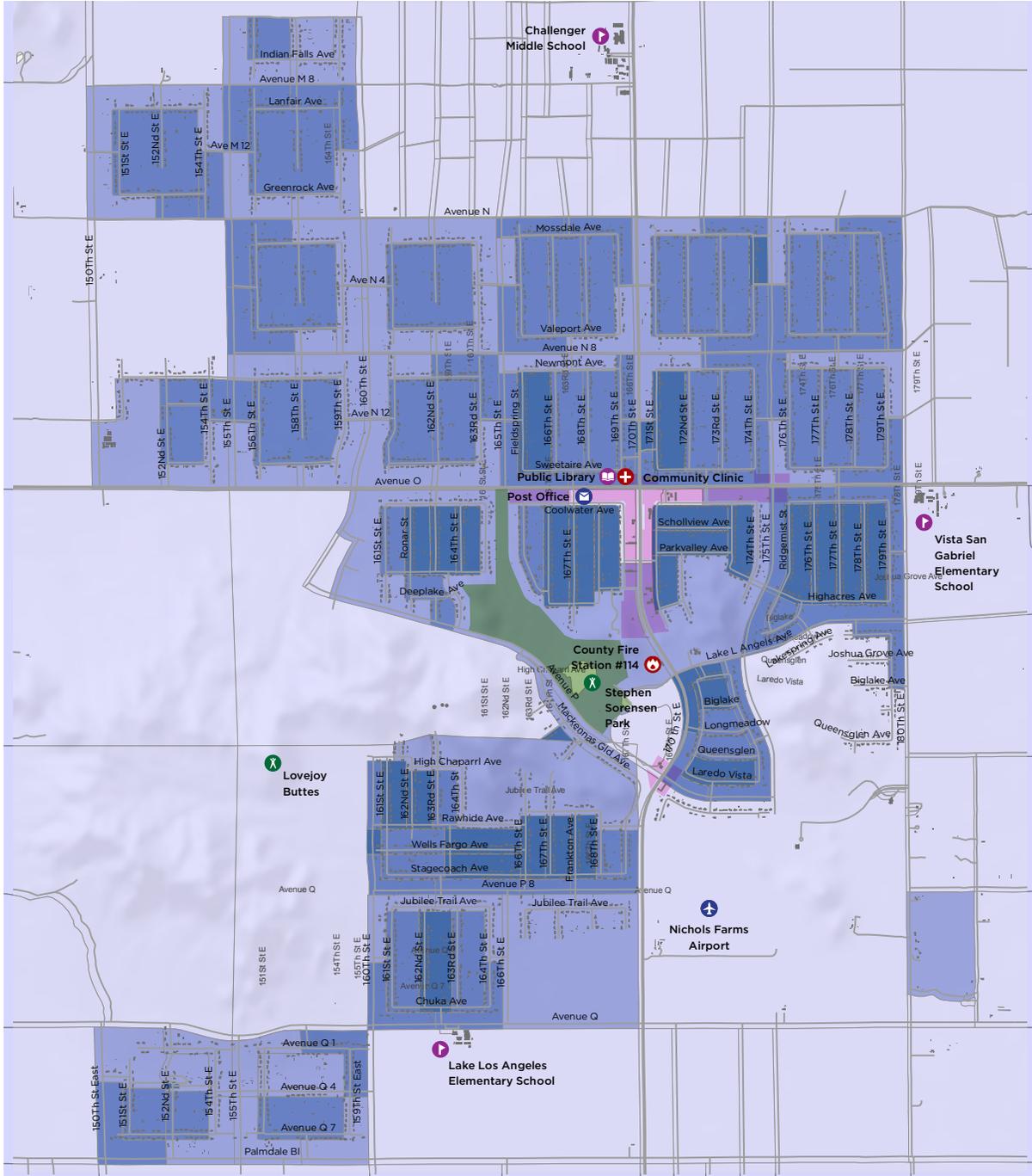
As of 2014, Lake Los Angeles had a population of 12,323. 49.8 percent of Lake Los Angeles' population is female, slightly lower than the County (50.7 percent). Lake Los Angeles is a relatively young community with 33.2 percent of the population under 18 years of age compared with 23.2 percent at the County level and 23.9 percent for the state. Because youth do not have drivers' licenses, they are more likely to depend on walking, bicycling, and transit to get around. Approximately 7.6 percent of Lake Los Angeles' population are seniors (age 65 and older)—significantly below the County level of 11.9 percent and California level of 12.5 percent. Seniors are

**Table B-1: Population, age, and sex in Lake Los Angeles**

	Total Population	Percent Female	Percent Under 18 Years	Percent 18-64 Years	Percent 65 and Older
Lake Los Angeles	12,323	49.8	33.2	59.2	7.6
Los Angeles County	10,017,068	50.7	23.2	64.9	11.9
California	38,332,521	50.3	23.9	63.6	12.5

Source: American Community Survey, 5-year estimate 2010-2014

Figure B-1: Lake Los Angeles residential density



Source: EPA Smart Location Database, 2016



**RESIDENTIAL DENSITY**

**DESTINATIONS**

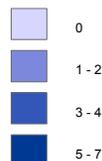
- SCHOOL
- LIBRARY
- PARK/RECREATION
- BUILDING

- EMERGENCY SERVICES
- HEALTHCARE
- POST OFFICE
- AIRPORT

**EXISTING INFRASTRUCTURE**

- ROAD NETWORK

**RESIDENTIAL DENSITY (PPL/ACRE)**



another population that may rely more on walking and transit as they age and are no longer able to drive. Seniors may also require special pedestrian planning considerations, such as extended crosswalk times and ADA compliant curb cuts.

**HOUSEHOLD COMPOSITION**

Household composition is important to consider because caretakers are often the sole transportation provider for children not old enough to drive. On an average day, caretakers spend more than one hour driving, traveling 29 miles and making more than five trips. In Lake Los Angeles, over 37 percent of households include children under the age 18. Moreover, nearly 13 percent of households include single parent families (Table B-2). Providing transportation for children to and from school and activities can be a time-consuming burden for all families, but especially for single-parent households. Improving pedestrian access for youth to travel to school and to parks can help reduce the time and mental stress of transporting children for these Lake Los Angeles households.

**Table B-2: Household composition in Lake Los Angeles**

	Total Households	Percent of Households with Children Under Age 18	Percent of Single-Parent Households with Children Under Age 18
Lake Los Angeles	3,388	37.5	12.9

Source: American Community Survey, 5-year 2010-2014

**Health**

Because public health data is not always available at the Census Designated Place level, this plan uses health data at the zip code level when necessary. Lake Los Angeles is split between Zip Code 93591 and 93535, which also includes neighboring Antelope Valley communities with similar socio-demographics and built environment. See Table B-3 on following page.

**Mental Health**

As shown in Table B-4, about 11.9 percent of adults self-reported psychological stress in the Lake Los Angeles area, which is higher than the County average of eight percent. While the impact of walking on physical health is well known and documented, it is also important to note that walking has a demonstrated impact on improving mental health by increasing social interaction and reducing depression.

**Table B-4: Mental health in Lake Los Angeles**

Serious Psychological Distress (Adults age 18 years +)	
Percent in Zip Code 93535	12.2
Percent in Zip Code 93591	-
Percent in Zip Codes 93535 & 93591	11.9
Percent in Los Angeles County	8.0

Source: California Health Interview Survey, Neighborhood Edition, 2012

**Table B-3: Mortality rates (total deaths, percentage of deaths, and ranking)**

Cause of Death	Zip Code 93535			Zip Code 93591			Los Angeles County		
	Ranking	Total Number of Deaths	Death Rate*	Ranking	Total Number of Deaths	Death Rate*	Ranking	Total Number of Deaths	Death Rate*
Heart Disease	2	79	109.4	2	7	19.4	1	15,916	26.9
Malignant Neoplasms (Cancer)	1	104	144	1	11	30.6	2	14,330	24.2
Cerebrovascular Disease (Stroke)	7	21	29.1	5	3	8.3	3	3,401	5.7
Chronic Lower Respiratory Disease (CLRD)	4	37	51.2	5	3	8.3	4	2,809	4.7
Alzheimer's Disease	6	22	30.4	10	1	2.8	5	2,528	4.3
Unintentional Injuries	5	31	42.9	6	2	5.6	6	2,060	3.5
Diabetes Mellitus	8	16	22.2	10	1	2.8	7	2,220	3.8
Pneumonia and Influenza	10	7	9.7	6	2	5.6	8	2,053	3.5
Chronic Liver Disease and Cirrhosis	9	9	12.5	-	0	0.0	9	1,281	2.2
Essential Hypertension and Hypertensive Renal Disease	11	5	6.9	2	7	2.7	10	1,261	2.1
Intentional Self Harm (Suicide)	13	2	2.8	6	2	5.6	11	764	1.3
Nephritis, Nephrotic Syndrome and Nephrosis	12	3	4.2	-	0	0.0	12	890	1.5
All Other Causes	3	67	92.8	4	4	11.1		9,643	16.3
Total	-	403		-	260	100		59,156	100

\*Death rate per 100,000 population

Source: Death Profiles by Zip Code, California Department of Public Health, 2012

### **Grocery Access**

Access to fresh, affordable, nutritious food is important for health. For individuals with limited or no automobile access, walkable, bikeable or transit accessible grocery stores are necessary for a healthful diet. Food deserts are areas where residents' healthy food access is restricted due to the absence of grocery stores within convenient travel distance. According to the US Department of Agriculture, about 2.3 million people (about two percent of all US households) live more than one mile away from a supermarket and do not own a car.

Lake Los Angeles has one grocery store. According to the US Department of Agriculture, Lake Los Angeles qualifies as a "low access" community where a significant number of residents are more than one mile from food access.

### **Disadvantaged Communities**

One objective of the Lake Los Angeles Pedestrian Plan is to serve disadvantaged communities by improving pedestrian infrastructure, safety, and accessibility. This goal is reflected in Caltrans Active Transportation Program (ATP) which allocates a minimum of 25 percent of program funding for sidewalks and bicycle amenities in disadvantaged communities. Proceeds from the state's cap-and-trade program (SB 535) are also allocated for improving public health, quality of life, and economic opportunity in California's most burdened communities. At the same time, these investments are reducing the emissions that cause climate change.

There is no universal definition for disadvantaged communities. California has included the term in several state laws, but the underlying criteria used to identify these communities has not been consistent. The ATP sets three possible criteria: 1) household median income, 2) California Communities Environmental Health Screening Tool 2.0 (CalEnviroScreen 2.0) and 3) percentage of students participating in the National School Lunch Program. California's cap-and-trade program currently also relies on CalEnviroScreen 2.0 to identify disadvantaged communities.

The Public Health Alliance of Southern California developed a composite index to identify cumulative health disadvantage in California. The purpose of the Health Disadvantage Index (HDI) is to help jurisdictions identify areas of need and prioritize public and private investments, resources and programs. HDI includes diverse non-medical economic, social, political and environmental factors that influence physical and cognitive function, behavior and disease. These factors are often called health determinants or social determinants of health and form the root causes of disadvantage.

Lake Los Angeles qualifies as a disadvantaged community based on National School Lunch Program Participation and Median Household Income. One of two census tracts (6037900104) qualifies it as a health disadvantaged community based on the Health Disadvantage Index, which ranks community health based on a composite

score based on an array of indicators (Table B-5). Based on these indicators, Lake Los Angeles may receive funding prioritization from the Caltrans Active Transportation Program and other funding sources.

**Table B-5: Disadvantaged Community Indicators in Lake Los Angeles**

	Result	Disadvantaged Community
CalEnviroScreen 2.0	25-55%	No
National School Lunch Program Free and Reduced Lunch Program Participation (Greater than 80% student participation)	Greater than 80% student participation	Yes
Median Household Income (Less than 80% California Median Household Income)	\$40,227	Yes
Health Disadvantage Index (Top 25% are disadvantaged)	Census Tract 6037900103	No
	Census Tract 6037900104	Yes

**Table B-6: Poverty rates in Lake Los Angeles**

	Percent in Zip Code 93535	Percent in Zip Code 93591	Percent in Zip Codes 93535 & 93591	Percent in Los Angeles County
Persons in Poverty	26.7	36.4		18.7
Children in Poverty	33.3	53.0		29.5
Median Household Income	\$42,835	\$39,880		\$55,870

Source: American Community Survey, 5-year estimate 2010-2014

## Economic Indicators

The median household income for Zip Code 93535 is \$42,837 and for Zip Code 93591 \$39,880, approximately 23 and 28.6 percent respectively less than the County average. The Lake Los Angeles area also has a significantly higher poverty rate than the County average. The child poverty rate in Zip Code 93591 is almost 90 percent greater than the County average, as shown in Table B-6.

Improving pedestrian connections to public transit can reduce household expenditures on transportation, allowing for increased expenditures on healthcare, education, and nutritious food. According to the Bureau of Labor Statistics, 17.6 percent of household expenditures nationwide were on transportation in 2013, the second highest household expenditure behind housing. The benefits of active transportation can also result in lower healthcare cost burdening.

## Pedestrian Environment

### LEVELS OF WALKING AND DRIVING

One major objective of any pedestrian investment is to increase the percentage of people who choose to walk, rather than drive. Table B-7 shows the percent of work trips taken by mode in Lake Los Angeles, including walking.

According to ACS data, no employed Lake Los Angeles residents commute to work primarily by walking or by bicycling. Census data does not include the number of people who walk for recreation or for utilitarian purposes, or students who walk to school, and is therefore likely to undercount true walking rates. However, this rate is still lower than both the County and statewide rates.

Number of vehicles in a household is another factor that may impact reliance on walking to commute. Overall, more than 99 percent of residents have access to at least one car, but fewer with two or more vehicles available (see Table B-8).

**Table B-8: Vehicles Available for Transportation to Work by Household in Lake Los Angeles**

Vehicle Available per Household	Percent in Lake Los Angeles	Percent in Los Angeles County
No vehicle	0.8	4.3
1	35.1	22.4
2	36.4	38.3
3+	27.8	35.0

Source: Community data: American Community Survey, 2010-2014 5-Year Estimates; County data: American Community Survey, 2015 1-Year Estimate

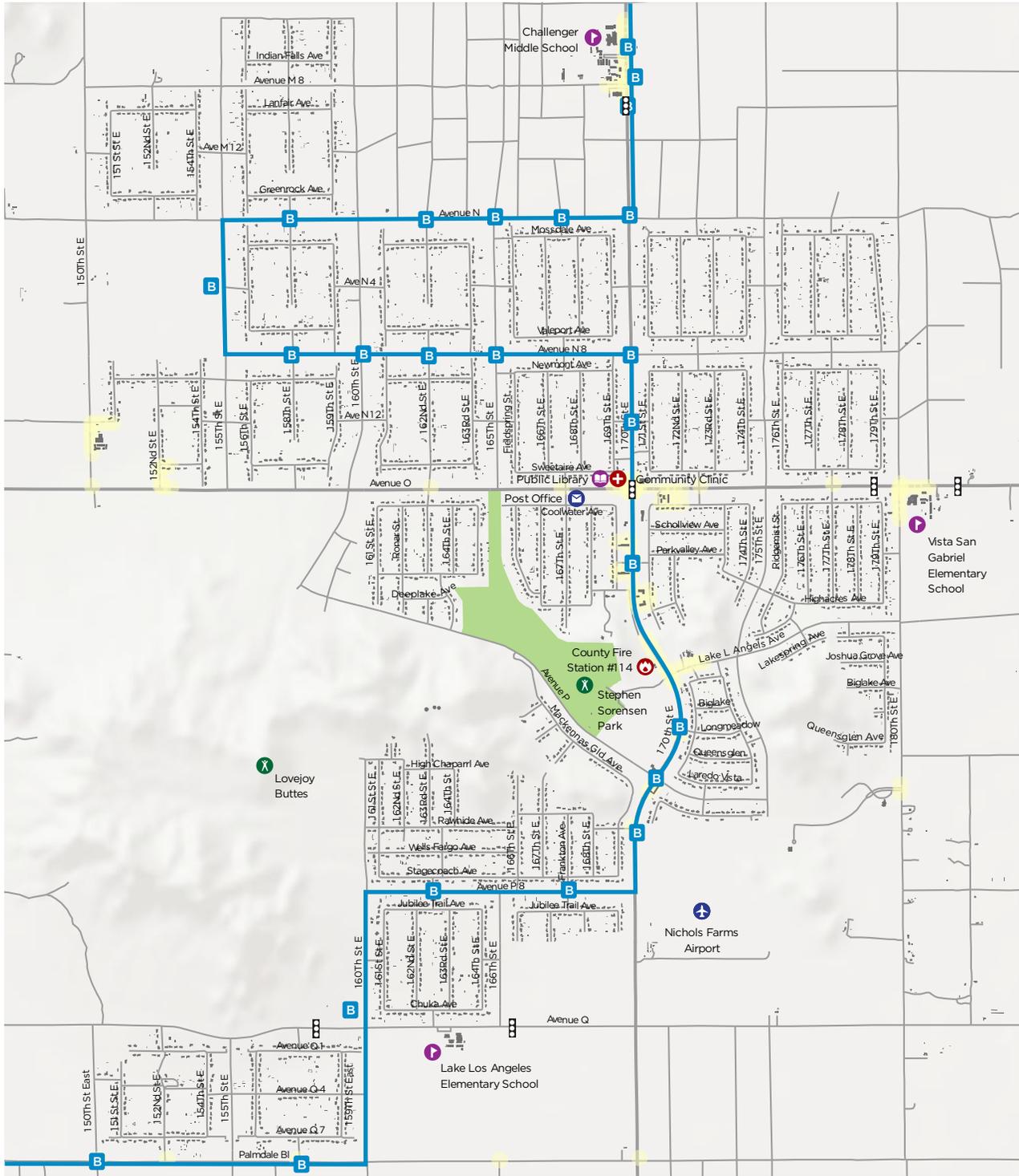
Only one percent of employed Lake Los Angeles residents primarily take transit to work, which may be because there is limited transit service in the community. Lake Los Angeles is served by one transit agency, Antelope Valley Transit, with only one bus line running through the community (Figure B-2, following page).

**Table B-7: Journey to work mode share compared to the county, state, and nation**

Mode	Percent Nationwide	Percent Statewide	Percent in Los Angeles County	Percent in Lake Los Angeles
Walk	2.8	2.7	2.9	0.0
Bicycle	0.6	1.1	0.9	0.0
Public Transit	5.1	5.2	7.0	1.0
Drive Alone	76.4	73.2	72.6	83.9
Carpool	9.6	11.1	10.3	9.2
Other	1.2	1.3	1.3	1.5
Worked from home	4.3	5.4	5.0	4.4

Source: American Community Survey, 2010-2014 Five-Year Estimates

Figure B-2: Map of transit access in Lake Los Angeles



TRANSIT ACCESS



- | DESTINATIONS       | EXISTING INFRASTRUCTURE | EXISTING PUBLIC TRANSIT NETWORK |
|--------------------|-------------------------|---------------------------------|
| SCHOOL             | ROAD NETWORK            | AVTA                            |
| LIBRARY            | TRAFFIC SIGNAL          | BUS STOPS                       |
| PARK/RECREATION    | STREET LIGHT            |                                 |
| EMERGENCY SERVICES |                         |                                 |
| HEALTHCARE         |                         |                                 |
| POST OFFICE        |                         |                                 |
| AIRPORT            |                         |                                 |
| PARK               |                         |                                 |

### Pedestrian-Involved Collision Analysis

This section examines collisions that involved pedestrians in Lake Los Angeles between 2009 and 2016. It examines historical, geographic, and time of day trends over this five-year period, as well as factors at play in these collisions, to better understand why these collisions happened and how to reduce them in the future.

Reported collision data may not accurately reflect all collisions that occur in a community. In some cases, individuals may not report a collision to the Sheriff's Department for a variety of reasons such as fear or discomfort in interacting with law enforcement. This is especially true in disadvantaged communities such as Lake Los Angeles if economic hardship or legal issues interfere with individuals' ability to secure a legal driver's license, current automobile insurance, or legal work documentation. Moreover, even when collisions are reported the traffic report may be inaccurate. A study on the validity of police report data revealed that police report data is often inaccurate especially when reporting collision with indirect causes (DUI, fatigue, driver inexperience) and environmental causes (obstructed view, wet road conditions). Some studies indicate that pedestrian and bicyclist-related collisions are incomplete due to lack of self-reporting.

### HISTORICAL TRENDS

Between 2009 and 2016, there were a total of eight pedestrian involved collisions in Lake Los Angeles (Table B-9). On average, there were two pedestrian related collisions per year, which made up 10 percent of total collisions in the Lake Los Angeles area over that time period. The highest number of pedestrian involved collisions occurred in 2011 and 2016, with three collisions each year (21 percent of the total collisions during the year).

**Table B-9: Pedestrian-involved collisions by year in Lake Los Angeles**

Time Period	Pedestrian-Involved Collisions	Percent of Total Collisions
2009	1	8.0
2010	0	0.0
2011	3	21.4
2012	2	8.3
2013	2	13.3
2014	1	7.1
2015	1	4.5
2016	3	7.5
Total	13	--
Average per year	2	8.8

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

## GEOGRAPHIC TRENDS

The majority of collisions involving pedestrians between 2009 and 2016 in Lake Los Angeles occurred along 170th Street East and Avenue O, where most of the residential and community activity generators and attractors are, such as the library and retail shops. Table B-10 shows the number of pedestrian-involved collisions along those corridors, and shows where these collisions occurred on a map of the area.

**Table B-10: Roadways with the most pedestrian-involved collisions in Lake Los Angeles**

Roadway	Pedestrian-Involved Collisions
170th Street East	7
Avenue O	3

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

## TEMPORAL TRENDS

The majority of pedestrian-involved collisions which occurred in Lake Los Angeles between 2009 and 2016 took place between Tuesday and Thursday (Table B-11). The number of collisions ranged from one to three collisions per day of the week.

**Table B-11: Highest pedestrian-involved collision days in Lake Los Angeles**

Day	Pedestrian-Involved Collisions
Monday	2
Tuesday	3
Wednesday	2
Thursday	2
Friday	1
Saturday	1
Sunday	2
Total	13

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

The highest percentage of pedestrian-involved collisions occurred during dawn and dusk (46.2 percent). This could be related to increased vehicular traffic on roadways during these times or decreased visibility in the dark (Table B-12).

**Table B-12: Pedestrian-involved collisions by time of day in Lake Los Angeles**

Time of Day	Number of Collisions	Percent of Collisions	Percentage of Day (out of 24 hours)
Daylight (9AM-5PM)	5	38.5	33.0
Dawn and Dusk (6AM-9AM & 5PM-8PM)	6	46.2	25.0
Nighttime (8PM-6AM)	2	15.3	42.0
Commuting Hours Only (7AM-9AM & 4PM-6PM)	3	23.1	17.0

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### DEMOGRAPHIC TRENDS

The largest proportion of those involved in collisions (33 percent) were 55-64 years old, followed by under 18 years old (22 percent).

**Table B-13: Pedestrian-involved collisions by age in Lake Los Angeles**

Age of Victim	Number of Collisions	Percentage of Total
Under 18	5	38.5
18-24	1	7.5
25-34	0	0
35-44	0	0
45-54	2	15.5
55-64	4	31.0
65+	1	7.5
Total	13	100

### COLLISION FACTORS

From 2009 to 2016, pedestrians were determined to be at fault in 54 percent of reported pedestrian-involved collisions in Lake Los Angeles (Table B-14). Pedestrian violations refer to collisions occurring while the pedestrian did not have the legal right-of-way, such as when crossing mid-block outside of a crosswalk. Pedestrian right-of-way violations refer to collisions occurring while the pedestrian had legal

right-of-way and the motorist failed to yield, such as when a pedestrian is struck while crossing in a marked (or unmarked) crosswalk at an intersection. (In some instances, pedestrians struck while crossing in an unmarked crosswalk at an intersection may be incorrectly attributed as a pedestrian violation, rather than a pedestrian right-of-way violation, by law enforcement officers. Pedestrian violation statistics should therefore be approached with caution).

**Table B-14: Pedestrian-involved collisions by violation category in Lake Los Angeles**

Violation Category	Number of Collisions	Percentage of Total
<b>Motorist At-Fault</b>		
Unsafe Speed	1	7.5
Improper Turning	1	7.5
Hazardous Parking	1	7.5
Pedestrian Right of Way	1	7.5
Other Hazardous Violation	1	7.5
Pedestrian Violation	7	54.0
Other Than Driver (or Pedestrian)	1	7.5
Total	13	100

Half of the pedestrian-involved collisions which took place in Lake Los Angeles between 2009 and 2016 were classified as 'Hit and Run' (Table B-15). All four of these were filed as felonies, indicating that all of the hit and run incidents involved injuries.

**Table B-15: Pedestrian-involved collisions by hit and run classification in Lake Los Angeles**

Hit and Run	Number of Collisions	Percentage of Total
Yes	6	46.0
No	7	54.0
Total	13	100

Of the 13 reported cases of pedestrian-involved collisions from 2009-2016 in Lake Los Angeles, two involved a fatality, and 69 percent involved a severe or visible injury (Table B-16).

**Table B-16: Pedestrian-involved collisions by severity in Lake Los Angeles**

Severity	Number of Collisions	Percentage of Total
Fatal	2	15.5
Severe Injury	4	30.5
Visible Injury	5	38.5
Complaint of Pain	2	15.5
Total	13	100

## WALNUT PARK

### Residential Density

The majority of land in Walnut Park is designated for residential uses. However, residential density patterns are not uniform across Walnut Park. The map in Figure B-3 displays residential population density by Census block. Darker blocks with higher densities are prominent along three corridors, Santa Fe Boulevard, Pacific Boulevard and Seville Avenue. Denser residential areas create a critical mass of users for public facilities (e.g. schools, parks, bus stops, and libraries) and create a customer base for neighborhood businesses (e.g. restaurants, laundromats, childcare, and grocery stores). In Walnut Park, a diversity of uses like convenience stores, retail shops, restaurants, schools, churches, and park space are within walking distance (one-quarter mile) of the highest residential areas. The lowest density residential areas located in the eastern part of Walnut Park have fewer commercial uses and destinations within walking distance.

Although the County's General Plan designates most residential uses as very low density (Less than six dwelling units per acre (du/ac)), Walnut Park is one of the densest communities in Los Angeles County. At 22,028 people per square mile, it is ranked 8/265 (from highest to lowest

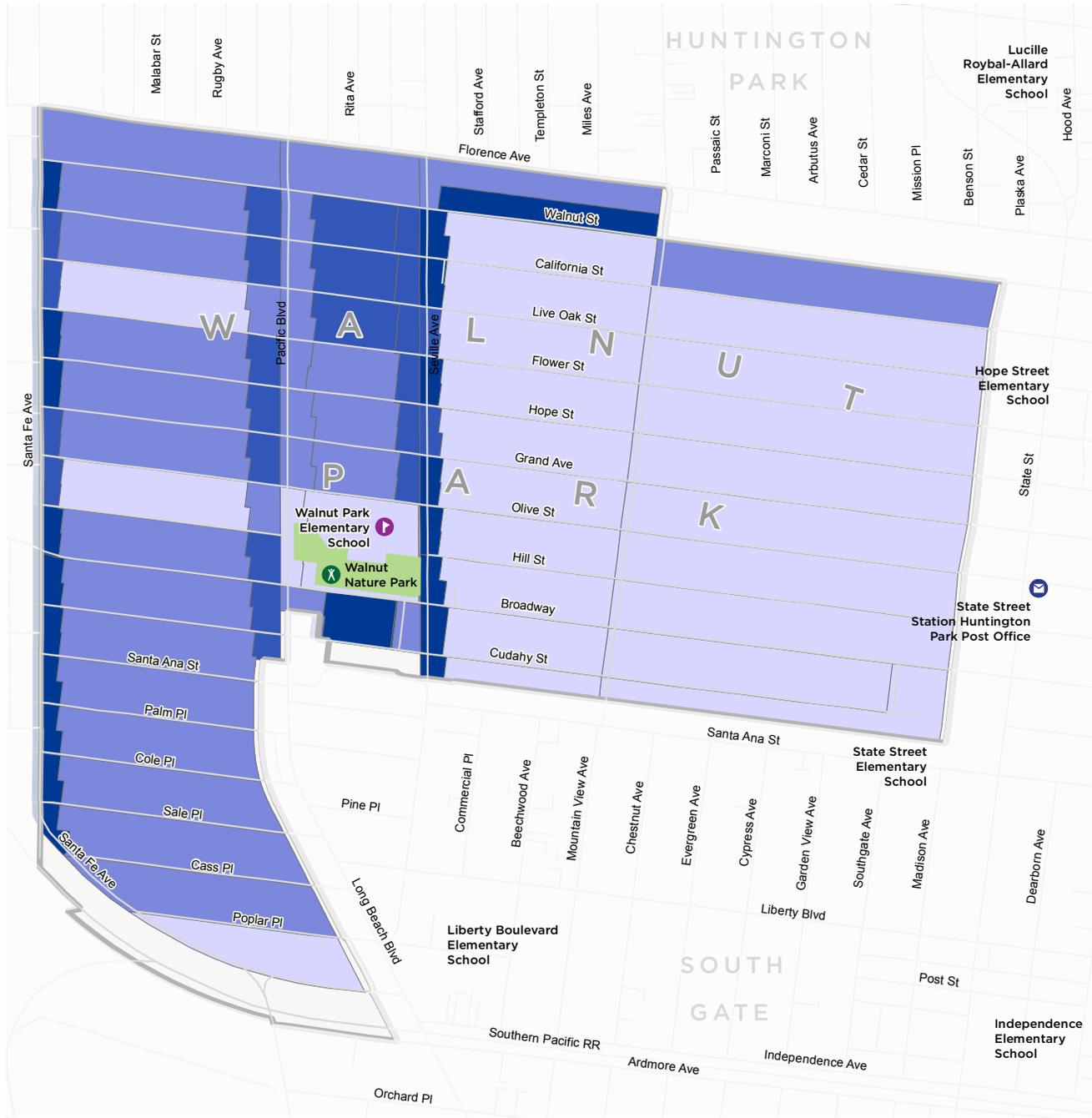
density) among Los Angeles County communities. The result is severe overcrowding in Walnut Park.

### Demographics

#### POPULATION, AGE, AND SEX

As of 2014, Walnut Park had a population of 16,039. Nearly 49.6 percent of Walnut Park's population is female, slightly higher than the County average (47.0 percent). Walnut Park is a relatively young community with 29.7 percent of the population under 18 years of age compared with 23.2 percent at the County level and 23.9 percent for the state. Because youth do not have drivers' licenses, they are more likely to depend on walking, bicycling, and transit to get around. Approximately 8.1 percent of Walnut Park's population are seniors (age 65 and older) — significantly below the County level of 11.9 percent and California level of 12.5 percent (Table B-17). Seniors are another population that may rely more on walking and transit as they age and are no longer able to drive. Seniors may also require special pedestrian planning considerations, such as extended crosswalk times and ADA compliant curb cuts.

Figure B-3: Walnut Park Residential Density



Source: EPA Smart Location Database, 2016

### RESIDENTIAL DENSITY

**DESTINATIONS**

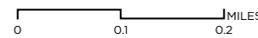
- SCHOOL
- PARK/RECREATION
- POST OFFICE

**INFRASTRUCTURE**

- ROAD NETWORK

**RESIDENTIAL DENSITY (PPL/ACRE)**

- 0-2
- 2-7
- 7-22
- 22-74



## Health

Because public health data is not always available at the Census Designated Place level, this plan uses health data at the zip code level when necessary. Walnut Park is in Zip Code 90255, which also includes Huntington Park, an adjacent community with similar socio-demographics and built environment. (Table B-18. following page.)

## Grocery Access

Access to fresh, affordable, and nutritious food is important for health. For individuals with limited or no automobile access, walkable, bikeable or transit accessible grocery stores are necessary for a healthful diet. Food deserts are areas where residents' healthy food access is restricted due to the absence of grocery stores within convenient travel distance. According to the US Department of Agriculture, about 2.3 million people (or about two percent of all US households) live more than one mile away from a supermarket and do not own a car.

According to the US Department of Agriculture, Walnut Park does not qualify as a food desert. Walnut Park has four stores in the community that sell fresh and healthy food.

## Disadvantaged Communities

One objective of the Walnut Park Pedestrian Plan is to serve disadvantaged communities by improving pedestrian infrastructure, safety, and accessibility. This goal is reflected in the Caltrans Active Transportation Program (Senate Bill 99, Assembly Bill 99, 2013), which allocates a minimum of 25 percent of program funding for disadvantaged communities. Twenty-five percent of proceeds from the state's cap-and-trade program are also allocated for improving public health, quality of life, and economic opportunity in California's disadvantaged communities.

There is no universal definition for disadvantaged communities. California has used the term disadvantaged communities in several state laws, but the underlying criteria used to identify these communities has not been consistent. The ATP sets three possible criteria: 1) household median income, 2) California Communities Environmental Health Screening Tool 2.0 (CalEnviroScreen 2.0) and 3) percentage of students participating in the National School Lunch Program. California's cap-and-trade program currently also relies on CalEnviroScreen 2.0 to identify disadvantaged communities.

**Table B-17: Population, age, and sex in Walnut Park**

	Total Population	Percent Female	Percent Under 18 Years	Percent 18-64 Years	Percent 65 and Older
Walnut Park	16,039	49.6	29.7	62.2	8.1
Los Angeles County	10,017,068	50.7	23.2	64.9	11.9
California	38,332,521	50.3	23.9	63.6	12.5

Source: American Community Survey, 5-year estimate 2010-2014

**Table B-18: Mortality Rates (Total Deaths, Percentage of Deaths, and Ranking)**

Cause of Death	Zip Code 90255*			Los Angeles County		
	Ranking	Total Number of Deaths	Death Rate**	Ranking	Total Number of Deaths	Death Rate**
Heart Disease	1	65	25.0	1	15,916	26.9
Malignant Neoplasms (Cancer)	2	57	21.9	2	14,330	24.2
Cerebrovascular Disease (Stroke)	3	21	8.1	3	3,401	5.7
Chronic Lower Respiratory Disease (CLRD)	9	6	2.3	4	2,809	4.7
Alzheimer's Disease	10	5	1.9	5	2,528	4.3
Unintentional Injuries	6	12	4.6	6	2,060	3.5
Diabetes Mellitus	4	17	6.5	7	2,220	3.8
Pneumonia and Influenza	7	8	3.1	8	2,053	3.5
Chronic Liver Disease and Cirrhosis	5	14	5.4	9	1,281	2.2
Essential Hypertension and Hypertensive Renal Disease	8	7	2.7	10	1,261	2.1
Intentional Self Harm (Suicide)	11	3	1.2	11	764	1.3
Nephritis, Nephrotic Syndrome and Nephrosis	11	3	1.2	12	890	1.5
All Other Causes		42	16.2		9,643	16.3
		260	100		59,156	100

\*Walnut Park is in Zip Code 90255, which also includes Huntington Park

\*\*Death rate per 100,000 population

Source: Death Profiles by Zip Code, California Department of Public Health, 2012

The Public Health Alliance of Southern California has developed a composite index to identify cumulative health disadvantage in California. The purpose of this Health Disadvantage Index (HDI) is to help identify areas of need and prioritize public and private investments, resources, and programs. HDI includes diverse non-medical economic, social, political, and environmental factors that influence physical and cognitive function, behavior, and disease. These factors

are often called health determinants or social determinants of health and form the root causes of disadvantage. Walnut Park qualifies as a disadvantaged community on all four disadvantaged community indicators, which are outlined in Table B-19. Based on these indicators, Walnut Park may receive funding prioritization from the Caltrans Active Transportation Program and potentially other funding sources.

**Table B-19: Disadvantaged community indicators for Walnut Park**

	Result	Disadvantaged Community?
CalEnviroScreen 2.0	Top 20%	Yes
National School Lunch Program Free and Reduced Lunch Program Participation	Greater than 80% student participation	Yes
Median Household Income	\$41,202 (Less than 80% California Median Household Income)	Yes
Health Disadvantage Index	Top 25% of Disadvantage Communities	Yes

**Housing**

The U.S. Census Bureau defines overcrowded housing as a unit with more than one person per room, including living and dining rooms. Households with more than one-and-a-half persons per room are considered severely overcrowded. Overcrowding can directly influence one’s physical and mental health, childhood development, and education. In some cases, overcrowded housing conditions contribute to higher rates of infectious disease, higher mortality rates, and higher rates of mental illness and stress. Studies have found a relationship between overcrowding and respiratory health, meningitis, and tuberculosis in children. For adults, a relationship exists between overcrowding and some forms of cancer and respiratory disease.

Walnut Park has one of the highest rates of overcrowding in the nation, ranking third highest of 33,120 zip codes nationwide. Walnut Park’s rate of household overcrowding is more than double that of Los Angeles County (31.7 percent compared to 12 percent), with renters experiencing more overcrowding than homeowners. Garage conversions are particularly prevalent in this community, which can be attributed to the lack of affordable housing in Walnut Park.

Overcrowding and active transportation are indirectly related because housing and transportation costs are the top two largest expenditures for American households. According to the Bureau of Labor Statistics, housing was the largest component (33.6 percent) of overall household expenditures in 2013, followed by transportation (17.6 percent). These costs have also been on the rise in recent years, increasing from 32.8 percent in 2012 to 33.6 percent in 2013. Individuals may opt to reduce housing costs by increasing room occupancy, resulting in overcrowding. Reducing transportation costs through walking can assist with the burden of housing costs.

**Pedestrian Environment**

LEVELS OF WALKING AND DRIVING

One major objective of any pedestrian investment is to increase the attractiveness and usefulness of walking. Table B-20 shows the percent of work trips taken by mode in Walnut Park, including walking.

Approximately 2.6 percent of employed Walnut Park residents commute to work by walking. Census data does not include the number of people who walk for recreation or for utilitarian purposes, students who walk to school, or people who walk from outside of Walnut Park, and is therefore likely to undercount true walking rates in the community. Overall, the rate of Walnut Park residents who walk to work is similar to the rate of those who walk in the County and statewide.

Number of vehicles in a household is another factor that may impact reliance on transit use or walking to commute. Compared to the County average, Walnut Park has more households with no vehicles available, but also more households with three or more vehicles available (see Table B-21). These patterns can be understood in the context of community economic challenges, including low incomes (relating to no-vehicle households) and overcrowding (relating to households with three or more vehicles).

**Table B-21: Vehicles available for transportation to work by household**

Vehicle Available per Household	Percent in Walnut Park	Percent in Los Angeles County
No vehicle	6.2	4.3
1	19.0	22.4
2	31.5	38.3
3+	43.2	35.0

Source: Community data: American Community Survey, 2010-2014 5-Year Estimates; County data: American Community Survey, 2015 1-Year Estimate

According to ACS data, 9.6 percent of employed Walnut Park residents commute to work primarily by transit. This is significantly higher than the Los Angeles County average of seven percent, which is itself higher than state and national averages. Based on Metro 2016 Quality of Life Report, 86 percent of bus riders and 68 percent of rail riders in Los Angeles County access transit by walking; therefore, it can be assumed that a number of transit riders in Walnut Park walk to the bus or rail stations in Florence-Firestone.

**Table B-20: Journey to work mode share compared to the county, state, and nation**

Mode	Percent Nationwide	Percent Statewide	Percent in Los Angeles County	Percent in Walnut Park
Walk	2.8	2.7	2.9	2.6
Bicycle	0.6	1.1	0.9	1.6
Public Transit	5.1	5.2	7.0	9.6
Drive Alone	76.4	73.2	72.6	68.0
Carpool	9.6	11.1	10.3	12.8
Other	1.2	1.3	1.3	1.1
Worked from home	4.3	5.4	5.0	4.2

Source: American Community Survey (ACS), 2010-2014 Five-Year Estimates (B08006)

The most significant regional transit connection near Walnut Park is the Florence Station of the Metro Blue Line, located less than a quarter-mile from the intersection of Florence Avenue and Santa Fe Avenue. Walnut Park itself is served extensively by transit, including Metro bus service on Pacific Boulevard (Rapid), Santa Fe Avenue, Pacific Boulevard, Seville Avenue, Broadway and Mountain View Avenue. Metro Shuttles #611 and #612 also serve the Walnut Park community. Major transit connections in Walnut Park are illustrated in Figure B-4 (following page). Los Angeles County Public Works also operates a circulatory bus that connects Walnut Park to the Blue Line station and parks located in Florence-Firestone.

### Motor Vehicle Speeds and Volumes

Speeding on residential streets appears to be an issue, as the County has installed speed cushions on a number of east-west local streets. In fact, every residential street between Florence Avenue and Santa Ana Street features traffic calming devices for the purposes of speed reduction (see Table B-22). However, none of these streets feature traffic calming devices that reduce motor vehicle volumes (such as diverters).

### Tree Canopy

Trees and landscaping play an important role in transforming the pedestrian realm and promoting walkability in a community. Tree canopy provides shade for people walking on hot days and creates a more attractive area for walking. Large trees and landscaping can provide a buffer between sidewalks and traffic, and also serve as traffic calming.

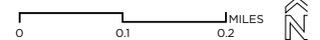
**Table B-22: Existing Traffic Calming Devices in Walnut Park**

Street	From	To	Type
Walnut Street	Santa Fe Avenue	Mountain View Avenue	Speed cushions
California Street	Pacific Boulevard	State Street	Speed cushions
Live Oak Street	Seville Avenue	State Street	Speed cushions
Flower Street	Pacific Boulevard	Seville Avenue	Speed cushions
Flower Street	Mountain View Avenue	State Street	Speed cushions
Hope Street	Seville Avenue	State Street	Speed cushions
Grand Avenue	Mountain View Avenue	State Street	Speed cushions
Olive Street	Seville Avenue	State Street	Speed cushions
Hill Street	Seville Avenue	State Street	Speed cushions
Broadway	Seville Avenue	State Street	Speed cushions
Cudahy Street	Seville Avenue	State Street	Speed cushions

Figure B-4: Walnut Park transit access



TRANSIT ACCESS



DESTINATIONS

- SCHOOL
- PARK/RECREATION
- POST OFFICE
- PARK

EXISTING INFRASTRUCTURE

- ROAD NETWORK
- TRAFFIC SIGNAL

EXISTING PUBLIC TRANSIT NETWORK

- BUS STOPS
- LA COUNTY (LINK)
- LA METRO (LOCAL)
- LA METRO (RAPID)
- LADOT DASH

The western portion of Walnut Park has the least tree canopy coverage relative to population at 69.6 percent in the southwestern portion and 65.2 percent in the northwestern and central portions. The northern portion has greater canopy coverage with only 58.6 percent census-weighted population lacking in canopy coverage, and 54.8 percent in the eastern portion. For perspective, according to the Public Health Alliance, Health Disadvantage Index, Walnut Park is ranked in the lowest fifth percentile (worst) for tree canopy coverage. Opportunities to increase tree canopy coverage, as well as landscape and other shade structures will be considered in the development of the Walnut Park Pedestrian Plan.

### **Pedestrian-Involved Collision Analysis**

This section examines collisions that involved pedestrians in Walnut Park between 2009 and 2016. It examines historical, geographic, and time of day trends over these past five years, as well as factors at play in these collisions, to better understand why these collisions happened and how to reduce them in the future.

Reported collision data may not accurately reflect all collisions that occur in a community. In some cases, individuals may not report a collision to the Sheriff's Department for a variety of reasons such as fear or discomfort in interacting with law enforcement. This is especially true in disadvantaged communities such as Walnut Park if economic hardship or legal issues interfere with individuals' ability to secure a legal driver's license, current automobile insurance, or legal work documentation. Moreover, even when collisions are reported the traffic report may be inaccurate. A study on the validity of police report data revealed that police report data is often inaccurate, especially when reporting collision with indirect causes (DUI, fatigue, driver inexperience) and environmental causes (obstructed view, wet road conditions). Collision level variables with the least reported accuracy included road character and collision severity. In addition, some studies indicate that pedestrian collision data is incomplete due to lack of self-reporting.

### HISTORICAL TRENDS

Between 2009 and 2016, there were a total of 58 pedestrian-involved collisions in Walnut Park, as shown in Table B-23. On average, there were seven pedestrian related collisions per year, which made up 18 percent of total collisions in Walnut Park over that time period. The highest number of pedestrian involved collisions occurred in 2012, with 12 collisions (27 percent of the total collisions that year).

**Table B-23: Pedestrian-Involved Collisions by Year in Walnut Park**

Time Period	Pedestrian-Involved Collisions	Percent of Total Collisions
2009	5	19.2
2010	11	25.5
2011	9	17.3
2012	12	27.3
2013	8	15.4
2014	5	13.5
2015	5	11.4
2016	3	15.0
Total	58	--
Average	7	18.2

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### GEOGRAPHIC TRENDS

Twenty-one pedestrian-involved collisions occurred along Pacific Avenue, and eleven along Santa Fe Avenue, both major highways, during the study period. Table B-24 shows where these collisions occurred in Walnut Park.

**Table B-24: Highest pedestrian-involved collision roadways in Walnut Park**

Roadway	Pedestrian -Involved Collisions
Pacific Boulevard	21
Santa Fe Avenue	11
Florence Avenue	11
Seville Avenue	6
Broadway	6

### TEMPORAL TRENDS

The number of pedestrian-involved collisions in Walnut Park between 2009 and 2016 ranged between 5 and 12 collisions per day of the week, with a higher number of pedestrian-involved collisions occurring on Thursdays, closely followed by Fridays and Sundays (Table B-25).

**Table B-25: Highest pedestrian-involved collision days in Walnut Park**

Day	Pedestrian-Involved Collisions
Monday	8
Tuesday	6
Wednesday	5
Thursday	12
Friday	11
Saturday	5
Sunday	11
Total	58

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

The highest percentage of pedestrian-involved collisions occurred from dawn to dusk, and during daylight (43 percent each). The percentage of collisions that occurred during commuting hours is also high, at 34.5 percent, compared to the percent of the day these hours represent, as shown in Table B-26.

**Table B-26: Pedestrian-involved collisions by time of day in Walnut Park**

Time of Day	Number of Collisions	Percent of Collisions	Percentage of Day (out of 24 hours)
Daylight (9AM-5PM)	25	43.1	33.0
Dawn and Dusk (6AM-9AM & 5PM-8PM)	25	43.1	25.0
Nighttime (8PM-6AM)	8	13.8	42.0
Commuting Hours Only (7AM-9AM & 4PM-6PM)	20	34.5	17.0

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

**DEMOGRAPHIC TRENDS**

The largest proportion of those involved in collisions (19 percent) were under 18 years old. Age groups 45-54 (17 percent) and 65 or older (17 percent) also had relatively high pedestrian-involved collision rates.

**Table B-27: Pedestrian-involved collisions by age in Walnut Park**

Age of Victim	Number of Collisions	Percentage of Total
Under 18	11	19.0
18-24	5	8.6
25-34	6	10.3
35-44	8	13.8
45-54	10	17.2
55-64	8	13.8
65+	10	17.2
Total	58	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

**COLLISION FACTORS**

In Walnut Park, from 2009 to 2016, pedestrian right-of-way violations and pedestrian violations were the most common type of violation recorded (approximately 46.6 percent and 31 percent respectively), indicating the involvement of pedestrians who failed to follow traffic rules and were found to be at fault during the great majority of the reported collisions (Table B-28). When pedestrians were not found to be at fault, collisions were most frequently caused by alcohol (10.3 percent) and improper turning (5.2 percent).

Pedestrian violations refer to collisions occurring while the pedestrian did not have the legal right-of-way, such as when crossing mid-block outside of a crosswalk. Pedestrian right-of-way violations refer to collisions occurring while the pedestrian had legal right-of-way and the motorist failed to yield, such as when a pedestrian is struck while crossing in a marked (or unmarked) crosswalk at an intersection. (In some instances, pedestrians struck while crossing in an unmarked crosswalk at an intersection may be incorrectly attributed as a pedestrian violation, rather than a pedestrian right-of-way violation, by law enforcement officers. Pedestrian violation statistics should therefore be approached with caution).

**Table B-28: Violation category of pedestrian-involved collisions in Walnut Park**

Violation Category	Number of Collisions	Percentage of Total
Pedestrian Right of Way	27	46.6
Pedestrian Violation	18	31
Driving or Bicycling Under the Influence of Alcohol or Drug	6	10.3
Improper Turning	3	5.2
Unsafe Speed	1	1.7
Unsafe Starting or Backing	1	1.7
Unknown	2	3.4
Total	58	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

Approximately 19 percent of these pedestrian-involved collisions which occurred in Walnut Park from 2009-2016 were classified as 'Hit and Run', as shown in Table B-29. Of these 11 collisions, 10 were filed as felonies, indicating that all of the hit and run incidents involved injuries, and one was a misdemeanor

**Table B-29: Pedestrian-involved collisions by hit and run classification in Walnut Park**

Hit and Run	Number of Collisions	Percentage of Total
Yes	11	19.0
No	47	81.0
Total	58	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

Of the 58 collisions involving pedestrians from 2009-2016 in Walnut Park, four were fatalities. While a third were minor injuries with only complaints of pain, the majority (59 percent) suffered either a severe or visible injury, as shown in Table B-30.

**Table B-30: Pedestrian-involved collisions by severity in Walnut Park**

Severity	Number of Collisions	Percentage of Total
Fatal	4	6.9
Severe Injury	11	19.0
Visible Injury	22	37.9
Complaint of Pain	21	36.2
Total	58	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

## WESTMONT/WEST ATHENS

### Residential Density

At approximately 17,000 people per square mile, Westmont/West Athens has the eighth highest residential density out of 265 communities in Los Angeles County. As shown in Figure B-5 (following page), the majority (64 percent) of land use in Westmont/West Athens is designated as residential, while 30 percent is commercial. Approximately 42 percent of the residential land is designated as lower density—single family homes under eight dwelling units per acre.

### Demographics

#### POPULATION, AGE AND SEX

As of 2014, Westmont/West Athens had a population of 40,582. Nearly 53 percent of Westmont/West Athens's population is female, slightly above the County average of 47.0 percent.

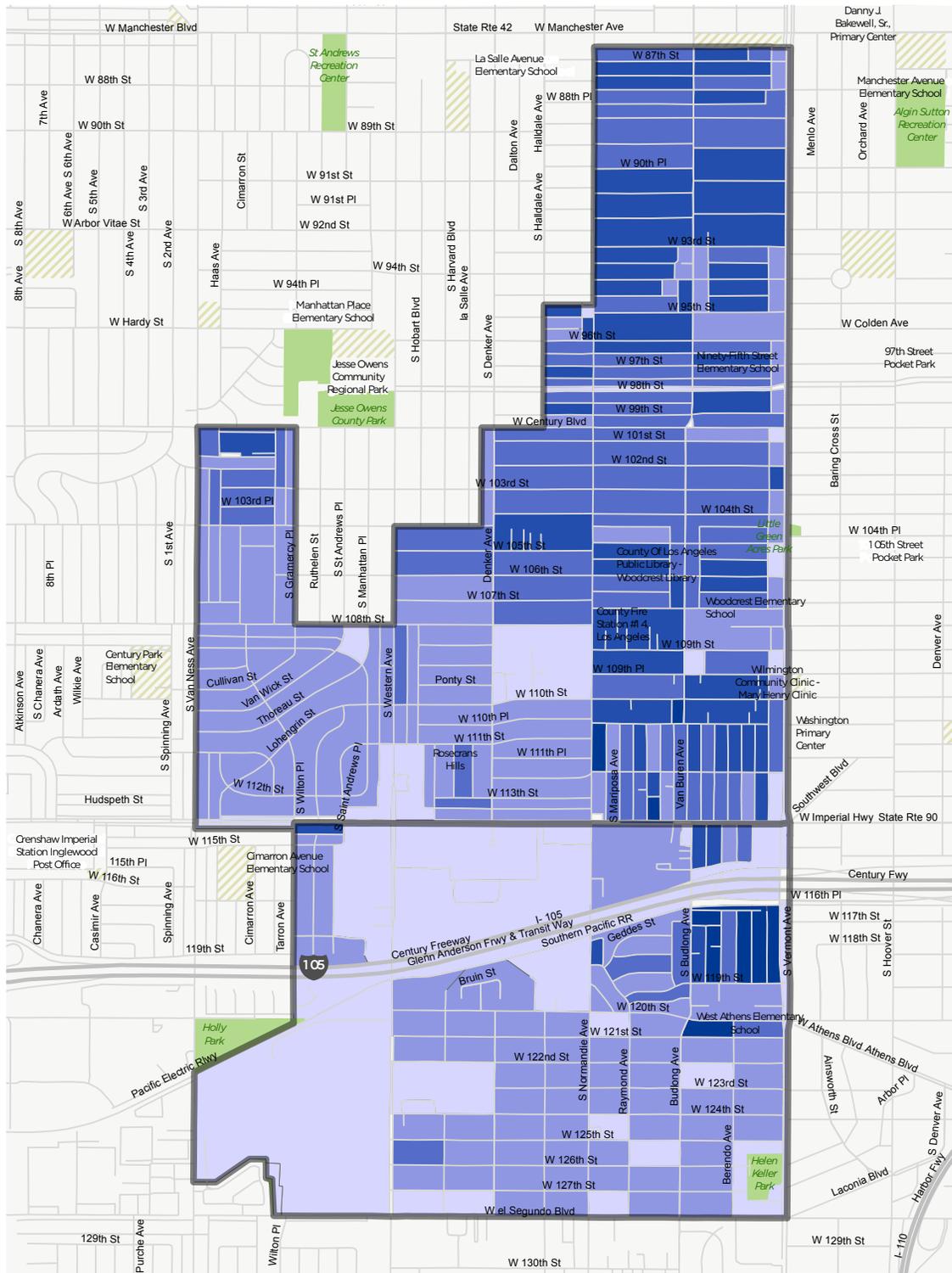
Westmont/West Athens is a relatively young community with 29.1 percent of the population under 18 years of age compared with 23.2 percent at the County level and 23.9 percent for the state. Because youth do not have drivers' licenses, they are more likely to depend on walking, bicycling and transit to get around. Approximately 8.9 percent of Westmont/West Athens' population are seniors (age 65 and older)—significantly below the County level of 11.9 percent and California level of 12.5 percent. Seniors are another population that may rely more on walking and transit as they age and are no longer able to drive. Seniors may also require special pedestrian planning considerations, such as extended crosswalk times and ADA compliant curb cuts.

**Table B-31: Population, Sex, and Age in Westmont/West Athens**

	Total Population	Percent Female	Percent Under 18 Years	Percent 18-64 Years	Percent 65 and Older
Westmont/West Athens	40,582	53.0	29.1	62.0	8.9
Los Angeles County	10,017,068	50.7	23.2	64.9	11.9
California	38,332,521	50.3	23.9	63.6	12.5

Source: American Community Survey, 5-year estimate 2010-2014

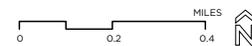
Figure B-5: Westmont/West Athens residential density



Source: EPA Smart Location Database, 2016

**RESIDENTIAL DENSITY**

DESTINATIONS	EXISTING INFRASTRUCTURE	RESIDENTIAL DENSITY (PPL/ACRE)
SCHOOL	ROAD NETWORK	0 - 8 PERSONS/ACRE
LIBRARY		9 - 23 PERSONS/ACRE
POST OFFICE		24 - 37 PERSONS/ACRE
HOSPITAL		38 - 55 PERSONS/ACRE
FIRE STATION		56 - 122 PERSONS/ACRE
PARK/RECREATION		



**IMMIGRATION AND CITIZENSHIP**

Immigrant status is related to health outcomes in varied and complex ways. Foreign-born individuals may face barriers to accessing jobs, education, and services due to social exclusion or linguistic isolation. However, there are also positive health outcomes known as the “healthy migrant effect.” First generation immigrants are often healthier than U.S. born residents due to cultural diets, active lifestyle habits, or strong social ties within an immigrant community. These benefits often diminish with each later generation. As shown in Table 32, approximately 23 percent of Westmont/West Athens residents are foreign born, significantly less than the County average (35.7 percent).

**Table 32: Immigration in Westmont/West Athens**

	Percent in Westmont/ West Athens	Percent in Los Angeles County
U.S. Born	77.0	64.3
Foreign Born	23.0	35.7

Source: American Community Survey, 5-year estimate 2010-2014

**LINGUISTIC ISOLATION**

Over 18 percent of households in Westmont/West Athens are linguistically isolated, meaning that all household members five years old and over have at least some difficulty with English. This is significantly higher than the 14.4 percent of Los Angeles County and nearly 10 percent of California households classified as “linguistically isolated” (Table B-33). Because most business and civic discourse is in English, the ability to communicate and comprehend English is a critical skill. While not all jobs require fluency in English, linguistic isolation serves as a barrier to obtaining most jobs (particularly living wage jobs) and to obtaining quality medical and social services. Assessing linguistically isolated households is important for identifying disadvantaged communities. It is also an important factor to consider for conducting community outreach for the development of the Westmont/West Athens Pedestrian Plan. Outreach events and materials should be translated in order to reach linguistically-isolated households.

**Table B-33: Linguistically Isolated Households in Westmont/West Athens**

Households that are Linguistically Isolated	
Percent in Westmont/West Athens	18.5
Percent in Los Angeles County	14.4
Percent Statewide	9.9

Source: American Community Survey, 5-year estimate 2010-2014

## Health

Because public health data is not always available at the Census Designated Place level, this plan uses health data at the zip code level when necessary. Westmont/West Athens is in zip codes 90044 and 90047.

## LIFE EXPECTANCY AND LEADING CAUSES OF DEATH

The most common causes of death can vary by geographic location, sex, age, race/ethnicity, education level, and occupation. A risk factor is something that is likely to increase the chances of a particular event, such as a specific disease

**Table B-34: Mortality Rates (Total deaths, percentage of deaths, and ranking)**

Cause of Death	Zip Code 90044,90047*			Los Angeles County		
	Ranking	Total Number of Deaths	Death Rate**	Ranking	Total Number of Deaths	Death Rate**
Heart Disease	1	245	26.7%	1	15,916	26.9%
Malignant Neoplasms (Cancer)	2	215	23.4%	2	14,330	24.2%
Cerebrovascular Disease (Stroke)	3	53	5.8%	3	3,401	5.7%
Chronic Lower Respiratory Disease (CLRD)	4	45	4.9%	4	2,809	4.7%
Alzheimer's Disease	9	21	2.3%	5	2,528	4.3%
Unintentional Injuries	8	22	2.4%	6	2,060	3.5%
Diabetes Mellitus	5	42	4.6%	7	2,220	3.8%
Pneumonia and Influenza	6	27	2.9%	8	2,053	3.5%
Chronic Liver Disease and Cirrhosis	10	20	2.2%	9	1,281	2.2%
Essential Hypertension and Hypertensive Renal Disease	7	23	2.5%	10	1,261	2.1%
Intentional Self Harm (Suicide)	12	6	0.7%	11	764	1.3%
Nephritis, Nephrotic Syndrome and Nephrosis	11	15	1.6%	12	890	1.5%
All Other Causes		183	20.0%		9,643	16.3%
Total	-	917	100%		59,156	100%

\*Westmont/West Athens CDP is in Zip Code 90044, 90047

\*\*Death rate per 100,000 population

Source: Death Profiles by Zip Code, California Department of Public Health, 2012

or medical condition. Lifestyle-related risk factors for the leading causes of death include an unhealthy diet, high blood pressure, smoking, insufficient physical activity, exposure to toxins and obesity. Table B-34 shows the leading causes of death in Westmont/West Athens.

#### GROCERY ACCESS

Access to fresh, affordable, nutritious food is important for health. For individuals with limited or no automobile access, walkable, bikeable or transit accessible grocery stores are necessary for a healthful diet. Food deserts are areas where residents' healthy food access is restricted due to the absence of grocery stores within convenient travel distance. According to the US Department of Agriculture, about 2.3 million people (or 2.2 percent of all US households) live more than one mile away from a supermarket and do not own a car.

Westmont/West Athens has two grocery stores that are within or adjacent to the unincorporated community boundary. According to the US Department of Agriculture, while Westmont/West Athens does not meet the strict one-mile distance definition of a food desert, a significant number of low-income residents live greater than half-mile from a grocery store. Overall, West Athens has greater grocery stores access than Westmont residents. Walking greater than half-mile may discourage residents from walking or may be too strenuous for the elderly or disabled.

#### DISADVANTAGED COMMUNITIES

One objective of the Westmont/West Athens Pedestrian Plan is to serve disadvantaged communities by improving pedestrian infrastructure, safety and accessibility. This goal is reflected in the Caltrans Active Transportation Program which allocates a minimum of 25 percent of program funding for disadvantaged communities. Twenty-five percent of proceeds from the state's cap-and-trade program are also allocated for improving public health, quality of life, and economic opportunity in California's disadvantaged communities.

There is no universal definition for disadvantaged communities. California has included the term in several state laws, but the underlying criteria used to identify these communities has not been consistent. The ATP sets three possible criteria: 1) household median income, 2) California Communities Environmental Health Screening Tool 2.0 (CalEnviroScreen 2.0) and 3) percentage of students participating in the National School Lunch Program. California's cap-and-trade program currently also relies on CalEnviroScreen 2.0 to identify disadvantaged communities.

The Public Health Alliance of Southern California developed a composite index to identify cumulative health disadvantage in California. The purpose of the Health Disadvantage Index (HDI) is to help jurisdictions identify areas of need and prioritize public and private investments, resources and programs. HDI includes diverse

non-medical economic, social, political and environmental factors that influence physical and cognitive function, behavior and disease. These factors are often called health determinants or social determinants of health, and form the root causes of disadvantage. Westmont/West Athens qualifies as a disadvantaged community on all four disadvantaged community indicators, which are outlined in Table B-35. Based on these indicators Westmont/West Athens may receive funding prioritization from the Caltrans Active Transportation Program and potentially other funding sources.

**Table B-35: Disadvantaged community indicators in Westmont/West Athens**

	Result	Disadvantaged Community
CalEnviroScore 2.0	Top 20%	Yes
National School Lunch Program Free and Reduced Lunch Program Participation	Greater than 80% student participation	Yes
Median Household Income (Less than 80% of state median)	\$29,502	Yes
Health Disadvantage Index	Top 25%	Yes

Source: Health Disadvantage Index, 2016; American Community Survey, 5-year 2010-2014

## OVERCROWDING

The U.S. Census Bureau defines overcrowded housing as a unit with more than one person per room, including living and dining rooms. Households with more than one-and-a-half persons per room are considered severely overcrowded. Overcrowding can directly influence

one's physical and mental health, childhood development, and education. In some cases, overcrowded housing conditions contribute to higher rates of infectious disease, higher mortality rates, and higher rates of mental illness and stress. Studies have found a relationship between overcrowding and respiratory health, meningitis, and tuberculosis in children. For adults, a relationship exists between overcrowding and some forms of cancer and respiratory disease.

Westmont/West Athens has one of the highest rates of overcrowding in the nation, ranking 44th highest of 33,120 zip codes nationwide. Its household overcrowding rate of 24 percent is higher than the overall rate for Los Angeles County (12 percent), with renters experiencing more overcrowding than homeowners. Overcrowding and active transportation are indirectly related because housing and transportation costs are the two largest expenditures for American households. According to the Bureau of Labor Statistics housing was the largest component (33.6 percent) of overall household expenditures in 2013, followed by transportation (17.6 percent). These costs have also been on the rise in recent years, especially in Los Angeles County. Reducing household expenditures on transportation may allow for increased household expenditures on housing and lower room occupancy rates.

## Pedestrian Environment

### LEVELS OF WALKING AND DRIVING

One major objective of any pedestrian investment is to increase the attractiveness and usefulness of walking. Table B-38 shows the percent of work trips taken by mode, including walking.

Westmont/West Athens residents commute by walking far less than the Los Angeles County average. Insufficient jobs within walking distance may partially explain this mode share. Overall, the true walking rate in the community may be higher, as many people access transit by walking as well as to walk to school, run errands or for recreation. The number of Westmont/West Athens commuters who take public transit to work is higher than the county average (15 percent in Westmont, 11 percent in West Athens, and only seven percent in Los Angeles County). Based on Metro 2016 Quality of Life Report, 86

percent of bus riders and 68 percent of rail riders in Los Angeles County access transit by walking, therefore it can be assumed that a number of transit riders in Westmont/West Athens walk to the bus stops or rail station in their community.

Westmont/West Athens is well served by transit (Figure B-6, following page). A number of agencies offer public transit services that stop within the community:

- ▶ Metro (bus routes, including a Rapid bus line, and Green Line stop)
- ▶ GTrans, the City of Gardena's transit provider (bus routes)
- ▶ City of Torrance (bus routes)
- ▶ Los Angeles County Public Works (Link/Athens shuttle)
- ▶ Department of Transportation, City of Los Angeles (Vermont/Main DASH)

**Table B-36: Journey to work mode share compared to the county, state, and nation**

Mode	Percent in West Athens	Percent in Westmont	Percent in Los Angeles County	Percent Nationwide	Percent Statewide
Walk	0.2	1.0	2.9	2.8	2.7
Bicycle	1.2	0.4	0.9	0.6	1.1
Public Transit	11.7	15.1	7.0	5.1	5.2
Drive Alone	66.1	68.8	72.6	76.4	73.2
Carpool	15.5	9.0	10.3	9.6	11.1
Other	0.5	1.1	1.3	1.2	1.3
Worked from home	4.9	5.3	5.0	4.3	5.4

Source: American Community Survey , 2010-2014 Five-Year Estimates (B08006)



## TREE CANOPY

Trees and landscaping play an important role in transforming the pedestrian realm and promoting walkability in a community. Tree canopy provides shade for people walking on hot days and creates a more attractive area for walking. Large trees and landscaping can provide a buffer between sidewalks and traffic and also serve as traffic calming.

The northern and eastern portions of Westmont/West Athens have over 80 percent of the census-weighted population lacking canopy coverage. Tree canopy coverage in the southern and eastern portions is at approximately 50 percent. According to the Public Health Alliance's Health Disadvantage Index, Westmont/West Athens is ranked in the lowest 15th percentile for tree canopy coverage. Opportunities to increase tree canopy coverage, as well as landscaping and other shade structures are considered in the development of the Westmont/West Athens Pedestrian Plan.

## **Pedestrian-Involved Collision Analysis**

This section examines collisions that involved pedestrians in Westmont/West Athens between 2009 and 2016. It examines historical, geographic, and time of day trends over this five-year period, as well as factors at play in these collisions, to better understand why these collisions happened and how to reduce them in the future.

Reported collision data may not accurately reflect all collisions that occur in a community. In some cases, individuals may not report a collision to the Sheriff's Department for a variety of reasons such as fear or discomfort in interacting with law enforcement. This is especially true in disadvantaged communities such as Westmont/West Athens if economic hardship or legal issues interfere with individuals' ability to secure a legal driver's license, current automobile insurance, or legal work documentation. Moreover, even when collisions are reported the traffic report may be inaccurate. A study on the validity of police report data revealed that police report data is often inaccurate, especially when reporting collisions with indirect causes (DUI, fatigue, driver inexperience) and environmental causes (obstructed view, wet road conditions). Collision level variables with the least reported accuracy included road character and collision severity. In addition, some studies indicate that pedestrian and bicyclist-related collision data is incomplete due to lack of self-reporting.

### HISTORICAL TRENDS

Between 2009 and 2016, there were 240 pedestrian-involved collisions in Westmont/West Athens (Table B-37). On average, there were 30 pedestrian-involved collisions per year, which made up 15 percent of total collisions involving vehicles over that time period. The highest number of pedestrian-involved collisions (45) occurred in 2013.

**Table B-37: Pedestrian-involved collisions by year in Westmont/West Athens**

Time Period	Pedestrian-Involved Collisions	Percent of Total Collisions
2009	33	17.8
2010	21	13.5
2011	27	14.4
2012	32	17.5
2013	45	23.9
2014	30	14.6
2015	33	15.1
2016	19	7.5
Total	240	--
Average per year	30	15.2

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### GEOGRAPHIC TRENDS

Table B-38 shows the top five roadways with the most pedestrian-involved collisions based on data from 2009-2016. Fifty-six pedestrian-involved collisions occurred on Vermont Avenue, a major highway, while 52 collisions took place on Normandie Avenue, a secondary highway. Imperial Highway and Western Avenue, both major highways, saw 32 and 28 collisions during the study period, respectively.

**Table B-38: Roadways with the most pedestrian-involved collisions in Westmont/West Athens**

Roadway	Pedestrian-Involved Collisions
Vermont Avenue	54
Normandie Avenue	52
Imperial Highway	32
Western Avenue	28
120th Street	15

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### TEMPORAL TRENDS

The number of pedestrian-involved collisions in the Westmont/West Athens Area from 2009 to 2016 ranged between 23 to 44 collisions per day of the week, with a higher number of pedestrian-involved collisions occurring on Wednesdays and Thursdays, as shown in Table B-39.

**Table B-39: Highest pedestrian-involved collision days in Westmont/West Athens**

Day	Pedestrian-Involved Collisions
Monday	28
Tuesday	23
Wednesday	40
Thursday	44
Friday	38
Saturday	33
Sunday	34
Total	240

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

The highest percentage of pedestrian-involved collisions occurred during daylight hours (49 percent). Thirty-seven percent of the total pedestrian-involved collisions occurred during commuting hours (7AM to 9AM and 4PM to 6PM), even though these six hours make up only 17 percent of a 24-hour day, as shown in Table B-40. This may reflect increased vehicular traffic on roadways during these times.

**Table B-40: Pedestrian-involved collisions by time of day in Westmont/West Athens**

Time of Day	Number of Collisions	Percent of Collisions	Percentage of Day (out of 24 hours)
Daylight (9AM-5PM)	117	48.8	33.3
Dawn and Dusk (6AM-9AM & 5PM-8PM)	86	35.8	25.0
Nighttime (8PM-6AM)	36	15.0	41.7
Commuting Hours Only (7AM-9AM & 4PM-6PM)	89	37.1	16.7

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

DEMOGRAPHIC TRENDS

The largest proportion of those involved in collisions (39 percent) were under 18 years old. Age groups 45-54 (15 percent) and 18-24 (12 percent) also had relatively high pedestrian-involved collision rates.

**Table 41: Pedestrian-involved collisions by age in Westmont/West Athens**

Age of Victim	Number of Collisions	Percentage of Total
Under 18	93	38.8
18-24	29	12.1
25-34	25	10.4
35-44	24	10.0
45-54	35	14.6
55-64	25	10.4
65 or Older	9	3.8
Total	240	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

COLLISION FACTORS

Around 72 percent of pedestrian-involved collisions in Westmont/West Athens from 2009 to 2016 were pedestrian violations and pedestrian right-of-way violations. Pedestrian violations refer to collisions occurring while the pedestrian did not have the legal right-of-way, such as when crossing mid-block outside of a crosswalk. Pedestrian right-of-way violations

refer to collisions occurring while the pedestrian had legal right-of-way and the motorist failed to yield, such as when a pedestrian is struck while crossing in a marked (or unmarked) crosswalk at an intersection. (In some instances, pedestrians struck while crossing in an unmarked crosswalk at an intersection may be incorrectly attributed as a pedestrian violation, rather than a pedestrian right-of-way violation, by law enforcement officers. Pedestrian violation statistics should therefore be approached with caution). Other frequent violations included driving at an unsafe speed, improper turning, and violations at traffic signals and signs, as shown in Table B-42.

**Table B-42: Violation category of pedestrian-involved collisions in Westmont/West Athens**

Violation Category	Number of Collisions	Percentage of Total
Unsafe Speed	10	4.2
Improper Turning	9	3.6
Automobile Right of Way	8	3.3
Pedestrian Right of Way	66	27.5
Pedestrian Violation	108	45.0
Traffic Signals and Signs	8	3.3
Unsafe Starting or Backing	6	2.5
Other Improper Driving	1	0.4
Other Than Driver (or Pedestrian)	3	1.3
Other Hazardous Violation	1	0.4
Unknown	9	3.6
Total	240	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

Table B-43 shows that 60 of the pedestrian-involved collisions from 2009-2016 in Westmont/West Athens were classified as 'Hit and Run', with 59 collisions filed as felonies and one as a misdemeanor, indicating that the vast majority of collisions resulted in injury.

**Table B-43: Pedestrian-involved collisions by hit and run classification in Westmont/West Athens**

Hit and Run	Number of Collisions	Percentage of Total
Misdemeanor/Felony	60	25.0
Not Hit and Run	180	75.0
Total	240	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

Of the 240 collisions which involved pedestrians from 2009-2016 in Westmont/West Athens, 11 were fatalities. While 14 percent were collisions resulted in severe injuries, the majority (82 percent) involved a visible injury or complaint of pain, as shown in Table B-44.

**Table B-44: Pedestrian-involved collisions by severity in Westmont/West Athens**

Severity	Number of Collisions	Percentage of Total
Fatal	11	4.6
Severe Injury	33	13.8
Visible Injury	94	39.2
Complaint of Pain	102	42.5
Total	240	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

## WEST WHITTIER – LOS NIETOS

### Residential Density

West-Whittier-Los Nietos has a population density of 10,138.5 people per square mile. Figure B-7 shows residential population density by Census block. Residential density is evenly dispersed throughout the community. However, residential areas in the central part of West Whittier-Los Nietos are not within walking distance of commercial uses.

### Demographics

#### POPULATION, AGE, SEX

As of 2014, West Whittier-Los Nietos had a population of 26,590. Nearly 50.3 percent of West Whittier-Los Nietos' population is female, slightly lower than the County average (50.7 percent). Overall, West Whittier-Los Nietos has

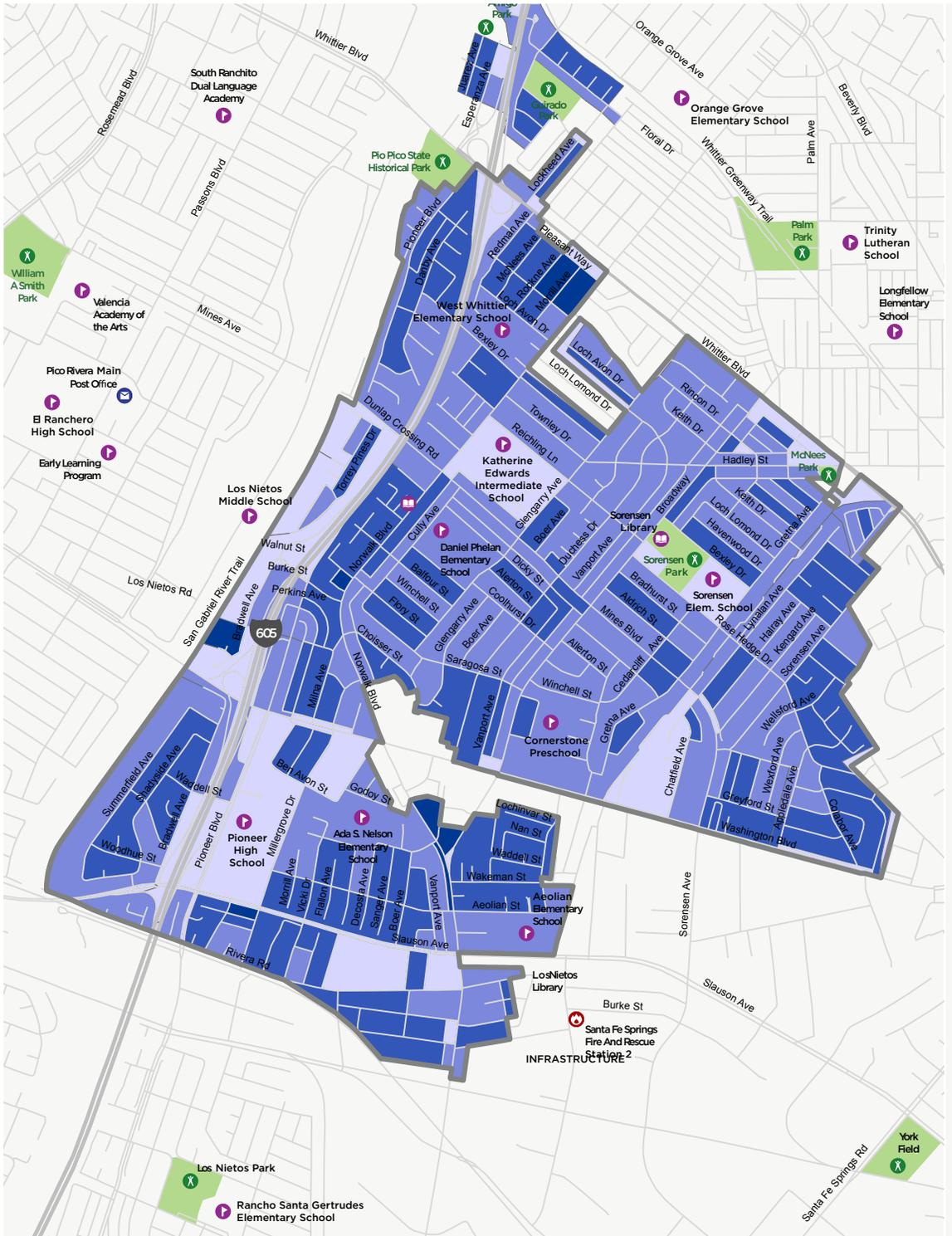
similar female-male and age demographics as the County. West Whittier-Los Nietos is a relatively young community: over a quarter of the population is under 18 years old, compared with 23.2 percent at the County level and 23.9 percent for California. Because youth do not have drivers' licenses, they are more likely to depend on walking, bicycling, and transit to get around. Approximately 12.1 percent of West Whittier-Los Nietos' population are seniors (age 65 and older). Seniors are another population that may rely more on walking and transit as they age and are no longer able to drive. Seniors may also require special pedestrian planning considerations, such as extended crosswalk times and ADA compliant curb cuts.

**Table B-45: Population, Age, and Sex in West Whittier-Los Nietos**

	Total Population	Percent Female	Percent Under 18 Years	Percent 18-64 Years	Percent 65 and Older
West Whittier-Los Nietos	26,590	50.3	26.4	62.0	12.1
Los Angeles County	10,017,068	50.7	23.2	64.9	11.9
California	38,332,521	50.3	23.9	63.6	12.5

Source: American Community Survey, 5-year estimate 2010-2014

Figure B-7: West Whittier-Los Nietos residential density



Source: EPA Smart Location Database, 2016

**RESIDENTIAL DENSITY**

**DESTINATIONS**

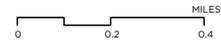
- SCHOOL
- LIBRARY
- POST OFFICE
- PARK/RECREATION
- FIRE STATION

**INFRASTRUCTURE**

- ROAD NETWORK

**RESIDENTIAL DENSITY (PPL/ACRE)**

- 0 - 7
- 8 - 19
- 20 - 41
- 42 - 100



## Health

Because public health data is not always available at the Census Designated Place level, in some cases, this plan uses health data at the zip code level when necessary. West Whittier-Los Nietos is in Zip Code 90606 which also includes some neighboring communities with similar socio-demographics and built environment.

## LIFE EXPECTANCY AND LEADING CAUSES OF DEATH

Table B-49 shows the leading causes of death for West Whittier-Los Nietos compared to the overall County.

**Table B-46: Mortality rates (total deaths, percentage of deaths, and ranking)**

Cause of Death	Zip Code 90606*			Los Angeles County		
	Ranking	Total Number of Deaths	Death Rate**	Ranking	Total Number of Deaths	Death Rate**
Heart Disease	1	68	30.0	1	15,916	26.9
Malignant Neoplasms (Cancer)	2	54	23.8	2	14,330	24.2
Cerebrovascular Disease (Stroke)	4	12	5.3	3	3,401	5.7
Chronic Lower Respiratory Disease (CLRD)	6	9	4.0	4	2,809	4.7
Alzheimer's Disease	3	15	6.6	5	2,528	4.3
Unintentional Injuries	7	8	3.5	6	2,060	3.5
Diabetes Mellitus	5	11	4.8	7	2,220	3.8
Pneumonia and Influenza	10	3	1.3	8	2,053	3.5
Chronic Liver Disease and Cirrhosis	9	4	1.8	9	1,281	2.2
Essential Hypertension and Hypertensive Renal Disease	8	7	3.1	10	1,261	2.1
Intentional Self Harm (Suicide)	11	2	0.9	11	764	1.3
Nephritis, Nephrotic Syndrome and Nephrosis	12	1	0.4	12	890	1.5
All Other Causes		33	14.5		9,643	16.3
Total		227	100		59,156	100

\*West Whittier-Los Nietos is in Zip Code 90606, which also includes surrounding communities.

\*\*Death rate per 100,000 population

Source: Death Profiles by Zip Code, California Department of Public Health, 2012

## GROCERY ACCESS

Access to fresh, affordable, nutritious food is important for health. For individuals with limited or no automobile access, walkable, bikeable or transit accessible grocery stores are necessary for a healthful diet. Food deserts are areas where residents' healthy food access is restricted due to the absence of grocery stores within convenient travel distance. According to the US Department of Agriculture, about 2.3 million people (about two percent of all US households) live more than one mile away from a supermarket and do not own a car.

West Whittier-Los Nietos has one grocery store centrally located at Norwalk Boulevard and two located adjacent to the community on Whittier Boulevard. According to the US Department of Agriculture, the northwestern part of the community qualifies as a "low access" community where a significant number of residents are more than one mile from food access.

## DISADVANTAGED COMMUNITIES

One objective of the West Whittier-Los Nietos Pedestrian Plan is to serve disadvantaged communities by improving pedestrian infrastructure, safety and accessibility. This goal is reflected in the Caltrans Active Transportation Program (ATP) which allocates a minimum of 25 percent of program funding for disadvantaged communities. Twenty-five percent of proceeds from the state's cap-and-trade program are also allocated for

improving public health, quality of life, and economic opportunity in California's disadvantaged communities.

There is no universal definition for disadvantaged communities. California has included the term in several state laws, but the underlying criterion used to identify these communities has not been consistent. The ATP sets three possible criteria: 1) household median income, 2) California Communities Environmental Health Screening Tool 2.0 (CalEnviroScreen 2.0) and 3) percentage of students participating in the National School Lunch Program. California's cap-and-trade program currently also relies on CalEnviroScreen 2.0 to identify disadvantaged communities.

The Public Health Alliance of Southern California developed a composite index to identify cumulative health disadvantage in California. The purpose of the Health Disadvantage Index (HDI) is to help jurisdictions identify areas of need and prioritize public and private investments, resources and programs. HDI includes diverse non-medical economic, social, political and environmental factors that influence physical and cognitive function, behavior and disease. These factors are often called health determinants or social determinants of health, and form the root causes of disadvantage. West Whittier-Los Nietos qualifies as a disadvantaged community based on the Health Disadvantage Index, which ranks community health based on a composite score

based on an array of indicators, as summarized in Table B-47. Based on these indicators West Whittier-Los Nietos may receive funding prioritization from the Caltrans Active Transportation Program and potentially other funding sources.

**Table B-47: Disadvantaged Community Indicators in West Whittier-Los Nietos**

	Result	Disadvantaged Community?
CalEnviroScore 2.0	Greater than 75% percentile	Yes
National School Lunch Program Free and Reduced Lunch Program Participation (Greater than 80% student participation)	Greater than 75% student participation	Yes
Median Household Income (Less than 80% California Median Household Income)	\$62,486	No
Health Disadvantage Index (Top 25% are disadvantaged)	Top 25% percentile	Yes

Source: Health Disadvantage Index, 2016; American Community Survey, 5-year 2010-2014

**Pedestrian Environment**

LEVELS OF WALKING AND DRIVING

One major objective of any pedestrian investment is to increase the attractiveness and usefulness of walking. Table B-48 shows the percent of work trips taken by mode in West Whittier-Los Nietos, including walking.

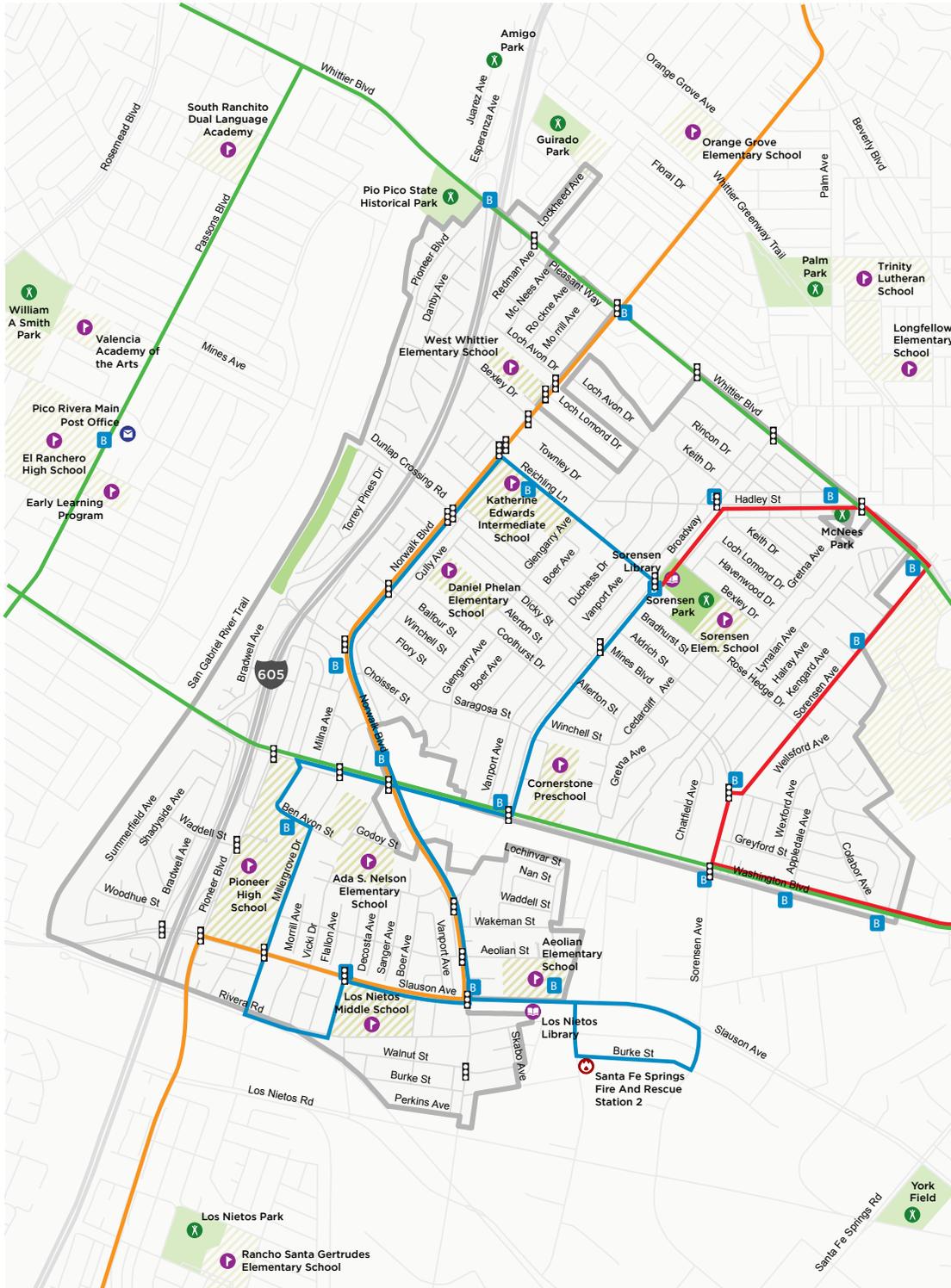
Approximately 1.5 percent of employed West Whittier-Los Nietos residents commute to work primarily by walking, which is about half the rate of those who walk to work in the County and statewide. Insufficient jobs within walking distance may partially explain this mode share. Overall, the true walking rate in the community may be higher, as many people access transit by walking as well as to walk to school, run errands or for recreation. Increased pedestrian investment would also encourage people to walk to transit.

**Table B-48: Journey to work mode share compared to the county, state, and nation**

Mode	Percent Nationwide	Percent Statewide	Percent in Los Angeles County	Percent in West Whittier-Los Nietos
Walk	2.8	2.7	2.9	1.5
Bicycle	0.6	1.1	0.9	0.7
Public Transit	5.1	5.2	7.0	2.0
Drive Alone	76.4	73.2	72.6	80.7
Carpool	9.6	11.1	10.3	9.8
Other	1.2	1.3	1.3	2.8
Worked from home	4.3	5.4	5.0	2.5

Source: American Community Survey, 2010-2014 Five-Year Estimates

Figure B-8: West Whittier-Los Nietos transit access



TRANSIT ACCESS

DESTINATIONS

- SCHOOL
- LIBRARY
- PARK/RECREATION
- EMERGENCY SERVICES
- POST OFFICE
- PARK

EXISTING INFRASTRUCTURE

- ROAD NETWORK
- TRAFFIC SIGNAL

EXISTING PUBLIC TRANSIT NETWORK

- BUS STOPS
- SUNSHINE SHUTTLE - ROUTE A
- NORWALK TRANSIT
- MONTEBELLO TRANSIT
- LOS NIETOS SHUTTLE



Currently, the number of West Whittier-Los Nietos residents who take public transit (two percent) is much lower than the County average at seven percent. Figure B-8 shows existing transit access in the community.

Number of vehicles in a household is another factor that may impact reliance on transit use or walking to commute. Overall, West Whittier-Los Nietos have higher proportions of commuters who have access to a car than in the County (see Table B-49). Almost half have three or more vehicles available in their household, compared with 38 percent, the County average.

**Table B-49: Vehicles Available for Transportation to Work by Household**

Vehicle Available per Household	Percent in West Whittier-Los Nietos	Percent in Los Angeles County
No vehicle	1.6	4.3
1	9.5	22.4
2	33.6	38.3
3+	55.2	35.0

Source: Community data: American Community Survey, 2010-2014 5-Year Estimates; County data: American Community Survey, 2015 1-Year Estimate

West Whittier-Los Nietos is served by three transit agencies: The City of Norwalk’s and City of Montebello’s bus systems, and two shuttles (Sunshine and Los Nietos) provided by the County.

**TREE CANOPY**

Trees and landscaping can play an important role in transforming the pedestrian realm and promoting walkability in a community. Tree canopies provide shade for people walking on hot days and create a more attractive area for walking. Large trees and landscaping can provide a buffer between sidewalks and traffic and also serve as traffic calming.

The Northwestern portion of West Whittier-Los Nietos has the least tree canopy coverage relative to population in the southern and central portion. The northern portion has greater canopy coverage, with only 58.6 percent of census-weighted population lacking in canopy coverage. According to the Public Health Alliance’s Health Disadvantage Index, West Whittier-Los Nietos is ranked in the lowest 10th percentile (worst) for tree canopy coverage. Opportunities to increase tree canopy coverage, as well as landscape and other shade structures are considered in the development of the West Whittier-Los Nietos Pedestrian Plan.

### Pedestrian-Involved Collision Analysis

This section examines collisions that involved pedestrians in West Whittier-Los Nietos between 2009 and 2016. It examines historical, geographic, and time of day trends over this five-year period, as well as factors at play in these collisions, to better understand why these collisions happened and how to reduce them in the future.

Reported collision data may not accurately reflect all collisions that occur in a community. In some cases, individuals may not report a collision to the Sheriff's Department for a variety of reasons such as fear or discomfort in interacting with law enforcement. This is especially true in disadvantaged communities such as West Whittier-Los Nietos if economic hardship or legal issues interfere with individuals' ability to secure a legal driver's license, current automobile insurance, or legal work documentation.

Moreover, even when collisions are reported the traffic report may be inaccurate. A study on the validity of police report data revealed that police report data is often inaccurate especially when reporting collision with indirect causes (DUI, fatigue, driver inexperience) and environmental causes (obstructed view, wet road conditions). Accident level variable with the least reported accuracy included (road character, and collision severity). Some studies indicate that pedestrian and bicyclist-related collisions are incomplete due to lack of self-reporting.

### HISTORICAL TRENDS

Between 2009 and 2016, there were 59 pedestrian involved collisions in West Whittier-Los Nietos (Table B-50). The average number of pedestrian-involved collisions that occurred within this time period is seven per year, which is five percent of the total collisions involving vehicles within West Whittier-Los Nietos (the majority of crashes took place on 605 freeway). The highest number of pedestrian-involved collisions was 13 collisions (6.8 percent of the total collisions) in 2009.

**Table B-50: Pedestrian-involved collisions by year in West Whittier-Los Nietos**

Time Period	Pedestrian-Involved Collisions	Percent of Total Collisions
2009	8	5.6
2010	4	3.5
2011	7	5.5
2012	4	3.5
2013	8	7.0
2014	9	6.3
2015	13	6.8
2016	6	3.4
Total	59	--
Average per year	7	5.2

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### GEOGRAPHIC TRENDS

Table B-51 displays the top five roadways with the most pedestrian-involved collisions based on data from 2009-2016. Washington Boulevard, a major highway, experienced the most pedestrian-involved collisions among roadways in West Whittier-Los Nietos during the study period with eight reported collisions. Broadway and Whittier Boulevard were close behind with seven and six pedestrian-involved crashes, respectively.

**Table B-51: Highest pedestrian-involved collision roadways in West Whittier-Los Nietos**

Roadway	Pedestrian-Involved Collisions
Washington Boulevard	8
Broadway	7
Whittier Boulevard	6
Slauson Avenue	4
605 Freeway on-ramps	4

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

### TEMPORAL TRENDS

The number of pedestrian-involved collisions in Whittier-Los Nietos between 2009 and 2016 ranged between 2 and 15 collisions per day of the week, with a higher number of pedestrian-involved collisions occurring on Thursdays (Table B-52).

**Table B-52: Highest pedestrian-involved collision days in West Whittier-Los Nietos**

Day	Pedestrian-Involved Collisions
Monday	11
Tuesday	11
Wednesday	2
Thursday	15
Friday	4
Saturday	10
Sunday	6
Total	59

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

The highest percentage of pedestrian-involved collisions occurred during dawn and dusk (42 percent), even though these six hours make up only 25 percent of a 24-hour day (Table B-53).

**Table B-53: Pedestrian-involved collisions by time of day in West Whittier-Los Nietos**

Time of Day	Number of Collisions	Percent of Collisions	Percentage of Day (out of 24 hours)
Daylight (9AM-5PM)	21	35.6	33.3
Dawn and Dusk (6AM-9AM & 5PM-8PM)	24	40.7	25
Nighttime (8PM-6AM)	14	23.7	41.7
Commuting Hours Only (7AM-9AM & 4PM-6PM)	21	35.6	16.7

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

#### DEMOGRAPHIC TRENDS

The largest proportion of those involved in collisions (31 percent) were below 18 years old, followed the 18-24 set, at 20 percent (Table B-54).

**Table B-54: Pedestrian-involved collisions by age in West Whittier-Los Nietos**

Age of Victim	Number of Collisions	Percentage of Total
Under 18	18	30.5
18-24	12	20.3
25-34	9	15.3
35-44	4	6.8
45-54	5	8.5
55-64	3	5.1
65+	8	13.6
Total	59	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

#### COLLISION FACTORS

Over 70 percent of pedestrian-involved collisions in Whittier-Los Nietos from 2009 to 2016 were pedestrian violations and pedestrian right-of-way violations, indicating the involvement of pedestrians who failed to follow traffic rules and were found to be at fault during the great majority of the reported collisions. Other violations involved driving at an unsafe speed or under the influence of alcohol (Table B-55).

Pedestrian violations refer to collisions occurring while the pedestrian did not have the legal right-of-way, such as when crossing mid-block outside of a crosswalk. Pedestrian right-of-way violations refer to collisions occurring while the pedestrian had legal right-of-way and the motorist failed to yield, such as when a pedestrian is struck while crossing in a marked (or unmarked) crosswalk at an intersection. In some instances, pedestrians struck while crossing in an unmarked crosswalk at an intersection may be incorrectly attributed as a pedestrian violation, rather than a pedestrian right-of-way violation, by law enforcement officers. Pedestrian violation statistics should therefore be approached with caution.

**Table B-55: Violation category of pedestrian-involved collisions in West Whittier-Los Nietos**

Violation Category	Number of Collisions	Percentage of Total
Driving or Bicycling Under the Influence of Alcohol or Drug	3	5.1
Automobile Right of Way	1	1.7
Unsafe Speed	6	10.2
Pedestrian Right of Way	18	30.5
Pedestrian Violation	24	40.7
Traffic Signals and Signs	1	1.7
Other Hazardous Violation	1	1.7
Unsafe Starting or Backing	2	3.4
Not Stated	3	5.1
Total	59	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

Nine of the pedestrian-involved collisions were classified as ‘Hit and Run’ (Table B-56). Of the nine, eight were filed as felony indicating that there was an injury involved, and one was a misdemeanor.

**Table B-56: Pedestrian-involved collisions by hit and run classification in West Whittier-Los Nietos**

Hit and Run	Number of Collisions	Percentage of Total
Felony	9	15.3
Not Hit and Run	50	84.7
Total	59	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2016

From 2009-2016 there were 59 pedestrian-involved collisions in the Whittier-Los Nietos area, 42 percent were minor injuries with only complaints of pain. While nearly 60 percent involved a severe or visible injury, there were zero fatalities during this period (Table B-57).

**Table B-57: Pedestrian-involved collisions by severity in West Whittier-Los Nietos**

Severity	Number of Collisions	Percentage of Total
Fatal	0	0.0
Severe Injury	15	25.4
Visible Injury	19	32.2
Complaint of Pain	25	42.4
Total	59	100

Source: California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS), 2009-2013