



focused general plan

# environmental justice

## existing conditions technical memorandum

city of monrovia

admin draft (staff review)

march 17, 2021

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# INTRODUCTION

This Existing Conditions Memo provides a 2020 snapshot of Monrovia’s environmental justice and community health/wellness conditions. Environmental justice focuses on pollution, environmental and social factors that may burden a neighborhood, community, or city.

This technical memorandum:

- identifies “disadvantaged communities” within the City of Monrovia and its adjacent Sphere of Influence (SOI)
- assesses environmental and pollution hazards; and
- addresses health and wellness conditions, including health insurance coverage, healthcare access, food insecurity, grocery store access, and physical activity.

This technical memorandum provides a foundation for the General Plan’s new Environmental Justice Element’s Policy and Implementation programs.

## Environmental Justice

Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental regulations and policies implemented by local agencies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations and policies.

Equity is grounded in principles of justice and fairness, focused on creating a society in which everyone can participate, prosper, and reach their full potential. Equitable outcomes come about when smart, intentional strategies are put in place to ensure that everyone can participate in and benefit from decisions that shape their neighborhoods and regions.

## Disadvantaged Communities

Disadvantaged communities refer to areas that are most afflicted with a combination of economic, health, and environmental burdens.

California law requires local governments to identify any disadvantaged communities that exist within their jurisdiction. The California Communities Environmental Health Screening Tool “CalEnviroScreen 3.0” was developed by the California Environmental Protection Agency to identify disadvantaged communities using the following indicators of pollution burden and population characteristics:

- **Pollution Burden.** Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.
- **Population Characteristics.** Areas with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, and/or low levels of educational attainment.

The CalEnviroScreen3.0 tool only reports on a census tract level for the entirety of the State. It is important to note that although these attributes are used to characterize the concentration of burdens within a tract, it is not limited to the tract and can have impacts on the surrounding area.

Table 1 summarizes the indicators used in the CalEnviroScreen 3.0 analysis.

**Table 1: CalEnviroScreen 3.0 Indicators**

Pollution Burdens	
<b>Exposure Indicators:</b> <ul style="list-style-type: none"> <li>▪ Ozone concentrations in air</li> <li>▪ PM 2.5 concentrations in air</li> <li>▪ Diesel particulate matter emissions</li> <li>▪ Drinking water contaminants</li> <li>▪ Use of certain high-hazard, high volatility pesticides</li> <li>▪ Toxic releases from facilities</li> <li>▪ Traffic density</li> </ul>	<b>Environmental Effect Indicators:</b> <ul style="list-style-type: none"> <li>▪ Toxic cleanup sites</li> <li>▪ Groundwater threats from leaking underground storage sites and cleanups</li> <li>▪ Hazardous waste facilities and generators</li> <li>▪ Impaired water bodies</li> <li>▪ Solid waste sites and facilities</li> </ul>
Population Characteristics	
<b>Sensitive Population Indicators:</b> <ul style="list-style-type: none"> <li>▪ Asthma emergency department visits</li> <li>▪ Cardiovascular disease (emergency department visits for heart attacks)</li> <li>▪ Low birth weight infants</li> </ul>	<b>Socioeconomic Factor Indicators:</b> <ul style="list-style-type: none"> <li>▪ Educational attainment</li> <li>▪ Housing burdened low-income households</li> <li>▪ Linguistic isolation</li> <li>▪ Poverty</li> <li>▪ Unemployment</li> </ul>

Source: California Communities Environmental Health Screening Tool (CalEnviroScreen 3.0), Office of Environmental Health Hazard Assessment (OEHHA), 2017.

CalEnviroScreen 3.0 produces a percentile ranking of Monrovia’s census tracts (small, relatively permanent statistical subdivisions of a city or county), see Figure 1. The percentile ranking for each census tract demonstrates the degree of burdens present in that tract relative to the rest of the State’s census tracts. Using the 20 indicators listed in Table 1, an overall CalEnviroScreen 3.0 score is created for each census tract.

All census tracts across the State are then ordered from highest to lowest based on their CalEnviroScreen 3.0 score and assigned a percentile rank. A percentile ranking above 75 would mean that the census tract is in the top 25% of all CalEnviroScreen 3.0 scores statewide. Table 2 lists one census tract in the Planning Area (4311.00) with an overall percentile score in the top 25%, qualifying that tract as a Disadvantaged Community (DAC).

Census tract 4311.00 has an irregular shape and is generally bordered by:

- Colorado Boulevard and Wildrose Avenue to the north,
- Shamrock, California, and Mountain Avenues to the east,
- Altern Avenue and Duarte Road to the south, and
- Peck Road and Magnolia Avenue.

Census tract 4311.00 is traversed by Myrtle Avenue, Huntington Drive, Interstate 210, and the Gold Line tracks. Within the census tract is “Old Town Monrovia”, City Hall and Public Library, Transit Station Square, and Monrovia’s Gold Line Station. Residential units, local retail, and office spaces are concentrated in the northernmost area of the census tract while some homes, a variety of manufacturing facilities, retail spaces, and a rail yard are in the southern portion. In 2010, the census tract’s population was 6,520 with an estimated of 2,049 residential units.

No other census tract within the City of Monrovia or its SOI (together known as the “Planning Area”) meets the qualifications to classify as a DAC. Figure 2 illustrates the percentile ranking for all Planning Area census tracts.



**Table 2: CalEnviroScreen (CES) 3.0 Percentile Scores**

Census Tracts	Percentiles and Indicators		
	CES 3.0 Percentile	Pollution Indicators Percentile	Population Characteristics Percentile
<b>Census Tracts in City of Monrovia</b>			
4303.01	18	50	11
4303.02	34	49	26
4309.01	64	78	48
4309.02	60	75	45
4310.01	65	77	50
4310.02	40	73	23
<b>Census Tracts that Overlap City and Sphere of Influence</b>			
4311.00	76	95	50
4312.00	69	86	49
4313.00	26	77	12
4314.00	63	87	41

Source: CalEnviroScreen 3.0 the Office of Environmental Health Hazard Assessment, June 2018.

Note: Census tracts with a percentile of 75 or greater are highlighted, indicating these areas are within the top 25 percentiles in the State.

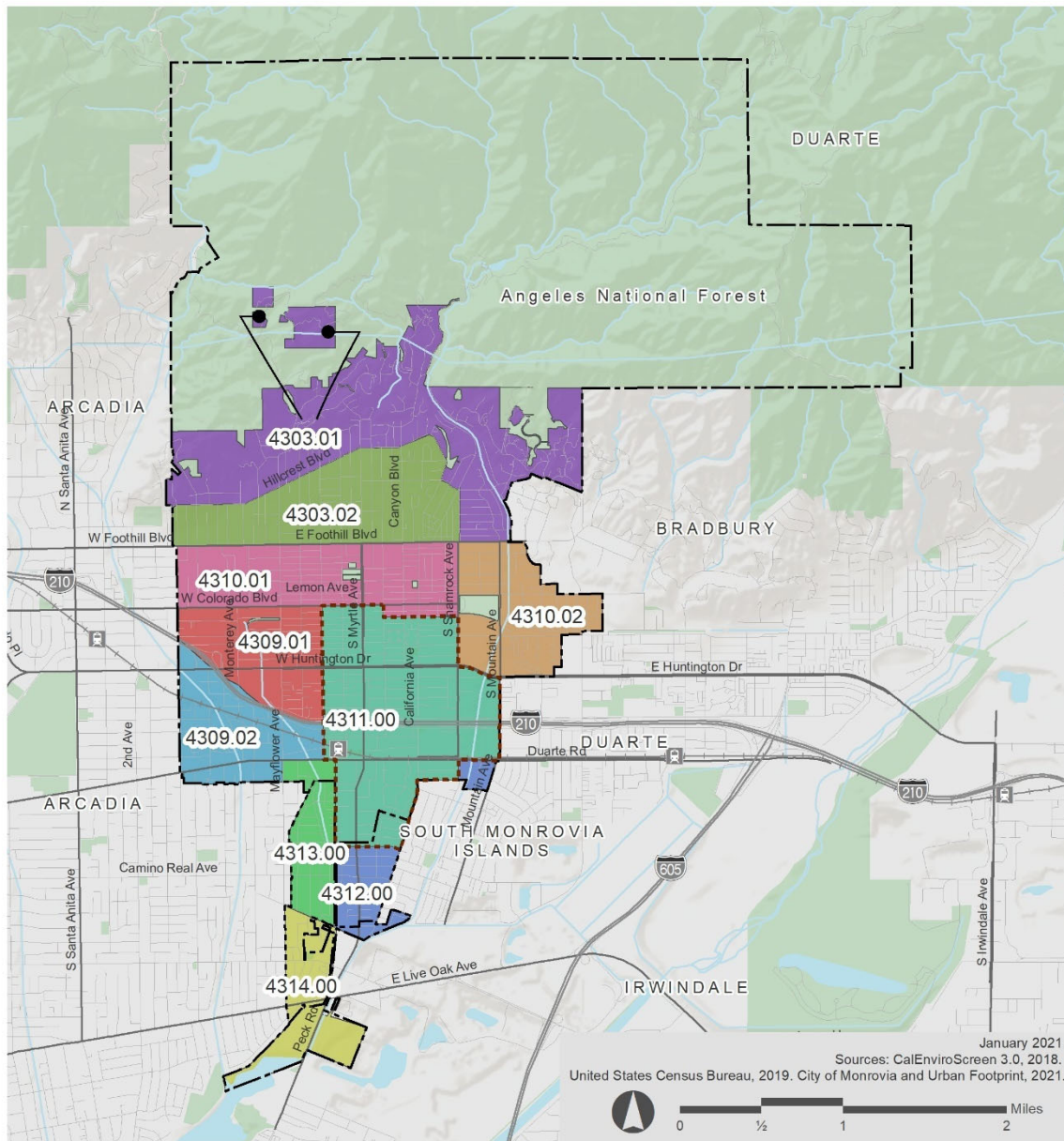
There are several census tracts within the City of Monrovia that rank in the higher percentile of the various pollution indicators, but overall, only one census tract (Tract 4311.00) has an aggregate amount of pollution burdens that designate it as a disadvantaged community.

When compared with the surrounding cities, Monrovia fares equally or better as shown in Table 3.

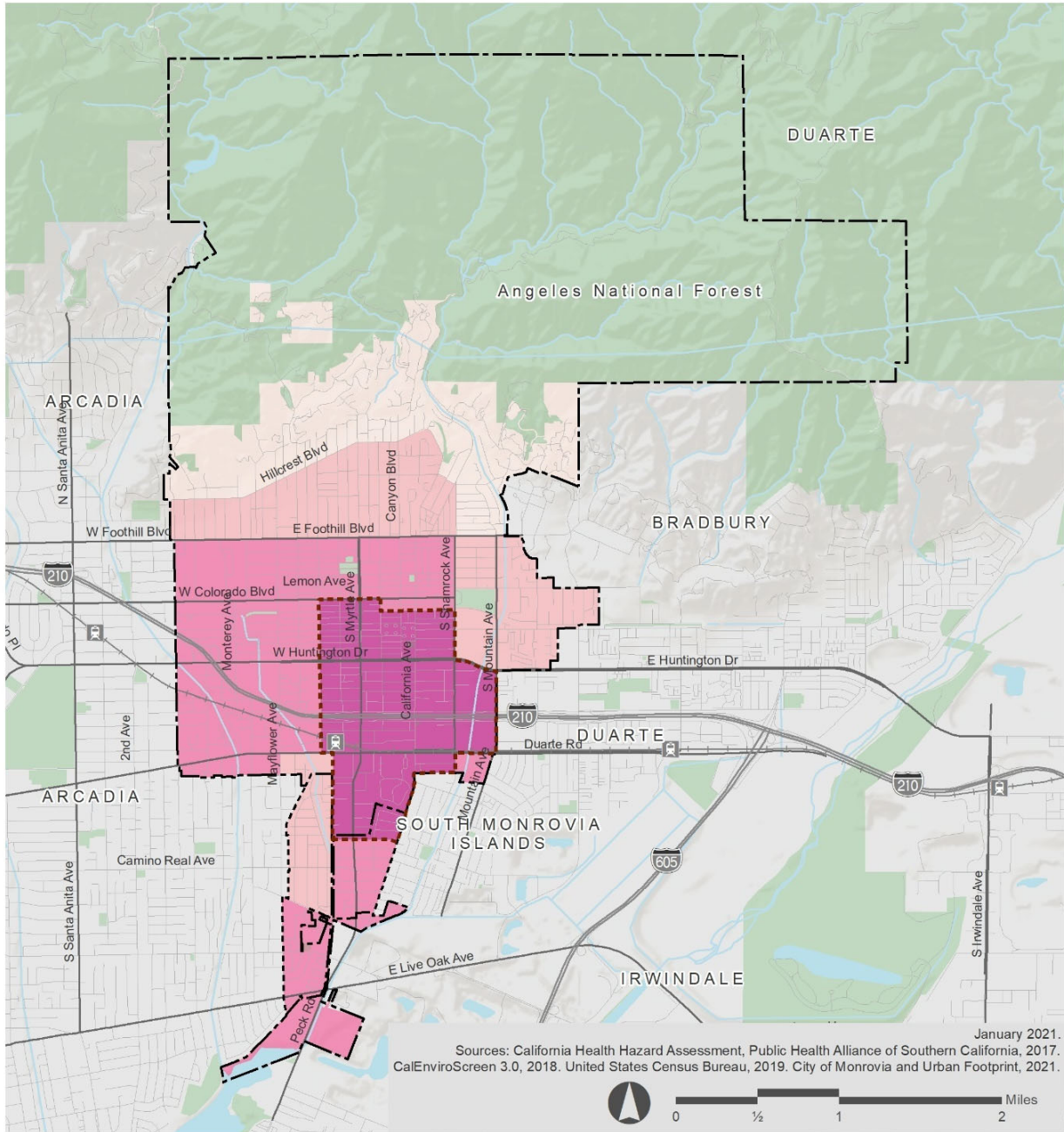
**Table 3: Disadvantaged Communities in Surrounding Cities**

City	Number of Census Tracts	Number of Disadvantaged Communities
El Monte	31	26
Arcadia	16	1
Azusa	16	4
Monrovia	10	1
Duarte	4	1
Bradbury	2	0
Sierra Madre	2	0
Irwindale	1	1

**Figure 1: City of Monrovia Census Tracts**



**Figure 2: Disadvantaged Communities**



January 2021.  
 Sources: California Health Hazard Assessment, Public Health Alliance of Southern California, 2017.  
 CalEnviroScreen 3.0, 2018. United States Census Bureau, 2019. City of Monrovia and Urban Footprint, 2021.

**Disadvantaged Communities (DAC)**

- 24% or Lower
- 25% - 49%
- 50% - 74%
- 75% or Higher (DAC)

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- Metro Rail line and Stations
- Major Streets
- Parks and Open Space
- Waterbodies
- Disadvantaged Communities

## Pollution Burden

The pollution burden for each census tract is calculated by measuring the average of exposure and environmental effects. Each indicator’s method of calculation is discussed below. Table 4 indicates that each Planning Area census tract bears some burden, however, only census tract 4311.00 has a 75<sup>th</sup> percentile score or higher for more than four indicators.

**Table 4: Pollution Burden Indicators Percentile Scores**

Census Tracts	Percentiles and Indicators												
	Overall Pollution Burden	Cleanup Sites	Hazardous Waste	Groundwater Threats	Solid Waste Facilities	Toxic Release Inventory	PM2.5	Traffic Density	Diesel PM	Drinking Water Contaminants	Ozone	Impaired Water Bodies	Pesticides
<b>City of Monrovia</b>													
4303.01	50	11	62	9	33	76	43	12	16	85	74	41	26
4303.02	49	20	62	15	10	77	53	25	18	84	74	41	0
4309.01	78	40	57	24	70	78	53	98	29	84	74	0	0
4309.02	75	39	19	9	62	80	53	98	58	84	74	0	0
4310.01	77	60	91	65	39	78	53	40	18	84	74	29	0
4310.02	73	64	94	78	53	81	54	34	16	45	74	29	0
<b>Split between City and Sphere of Influence</b>													
4311.00	95	74	94	82	88	83	54	84	47	63	74	29	0
4312.00	86	5	70	37	93	89	66	34	58	66	74	29	42
4313.00	77	33	51	22	83	85	54	32	58	90	74	29	0
4314.00	87	0	71	34	91	84	66	43	58	90	69	76	0

Source: CalEnviroScreen 3.0 the Office of Environmental Health Hazard Assessment, June 2018.

Note: Census tracts with a pollution burden percentile of 75 or greater are highlighted, indicating these areas are within the top 25 percentiles in the State

Every Planning Area census tract scores in the top 25 percentile for Toxic Release Inventory. Toxic Release Inventory is toxicity-weighted concentrations of modeled chemical releases to air from facility emissions and off-site incinerations.

Other pollution indicators with Planning Area percentiles higher than 75 are noted and described below:

- Hazardous Waste.** Hazardous waste is created by different commercial or industrial activities containing chemicals that may be dangerous or harmful to health. Only certain regulated facilities are allowed to treat, store, or dispose of hazardous waste. Hazardous waste includes a range of materials from automotive oil to highly toxic waste materials produced by businesses and industries. Hazardous waste may also be transported from businesses that generate waste to permitted facilities for recycling, treatment, storage, or disposal.

Hazardous waste is potentially dangerous or harmful to human health and the environment. Potential health effects associated with living in proximity to hazardous waste processing and disposal sites include diabetes and cardiovascular disease. This indicator sums the number of permitted hazardous waste facilities and hazardous waste generators in each census tracts. The score also is based on how close a generator is to

residential uses. These facilities are not “clean up” sites. For additional information, see California Department of Toxic Substances Control and U.S. Environmental Protection Agency (USEPA). Census tracts 4310.01, 4310.02, and 4311.00 score above the 75<sup>th</sup> percentile for this indicator; each contain a business or other facility generating hazardous waste.

- **Groundwater Threats.** Hazardous chemicals can be stored in containers on land or in underground storage tanks. Common soil and groundwater pollutants include gasoline and diesel fuel, solvents, heavy metals, and pesticides. Leaks from containers and tanks can contaminate soil and pollute groundwater. Man-made ponds containing water produced from oil and gas activities may also contain pollutants. The State Water Resources Control Board maintains a database of places where groundwater may be threatened by certain sources of pollution. The scores for sites that threaten groundwater quality are added together for each census tract. The score is based on information about the type of site and how close it is to residences. Additional information may be provided by State Water Resources Control Board and USEPA. Two Planning Area census tracts have a percentage higher than the 75% threshold specified by CalEnviroScreen 3.0. These tracts are 4310.02 and 4311.00.
- **Solid Waste Sites and Facilities.** Solid waste facilities are places where household garbage and similar kinds of waste are collected, processed, or stored. These include landfills and composting or recycling facilities. Solid waste disposal can release waste gases such as methane and carbon dioxide and may do so for decades after site closure. Exposure to landfill leachate can have adverse impacts on reproductive and respiratory systems. Composting, recycling, and waste treatment facilities may produce odors, attract pests, and increase local truck traffic. Each solid waste facility is given a value based on its type, how much waste it handles, and whether violations occur at the facility. Closed, illegal, and abandoned disposal sites are also included. The solid waste sites and facilities’ proximity to residences is also calculated. The values for all solid waste facilities were summed. Additional information is available at CalRecycle and USEPA. Four census tracts have a percentage higher than the 75% threshold; they are 4311.00, 4312.00, 4313.00, and 4314.00.
- **Toxic Release Inventory.** Facilities that make or use toxic chemicals can release these chemicals into the air. Toxic Release Inventory is toxicity-weighted concentrations of modeled chemical releases to air from facility emissions and off-site incinerations as reported by industrial and federal facilities. The USEPA has additional information regarding toxic releases from facilities. All Planning Area census tracts are in proximity to facilities that handle toxic chemicals.
- **Traffic Density.** Heavy traffic is common in major cities, traffic density is a measure of the number of vehicles on the roads in an area. Major roads and highways can bring air pollution into nearby neighborhoods. Exhaust fumes contain toxic chemicals that can damage DNA, cause cancer, make breathing difficult, and cause low weight and premature births. Children who live or go to schools near busy roads can have higher rates of asthma and other lung diseases. Traffic density is calculated by dividing the traffic volumes on major and some local roads by the total road length in the census tract for the year 2013. Traffic density information is available from California Office of Environmental Health Hazard Assessment (OEHHA), California Department of Public Health, Environmental Health Investigations Branch, and Harvard School of Public Health. Census tracts 4309.01, 4309.02, and 4311.00 all score above the 75 percentiles; all are near Interstate 210.
- **Drinking Water Contaminants.** Most drinking water in California meets requirements for health and safety. However, the water we drink may become contaminated with chemicals or bacteria. Both natural and human sources can contaminate drinking water. Natural sources include rocks, soil, wildlife, and fires. Arsenic, a common contaminant, occurs naturally in some rocks and soil. Human sources include factories, sewage, and agricultural runoff. Nitrates from fertilizer or animal manure can leach into groundwater and contaminate wells. Census tracts can encompass multiple drinking water systems and groundwater sources. As such, the drinking water score doesn’t necessarily not reflect the water that an individual resident is drinking in the census tract. Monrovia’s water meets all federal and state drinking water standards. The indicator is a comparative score between all census tracts in the state. The Drinking Water Contaminants indicator combines information about 13 contaminants and two types of water quality violations that are sometimes found when drinking water samples are tested. The test data is from 2005 to 2013, the most recent complete compliance

cycle. The average concentration is calculated in each water system. Additional information is available from OEHHA, State Water Resources Control Board, and USEPA. Seven of the census tracts have water contaminate scores higher than the 75% percentile; they are 4303.01, 4303.02, 4309.01, 4309.02, 4310.01, 4313.00, and 4314.00.

- **Impaired Water Bodies.** Stream, rivers, and lakes are used for recreation and fishing and may provide water for drinking or agriculture. When water is contaminated by pollutants, the water bodies are considered impaired. These impairments are related to the amount of pollution that has occurred in or near the waterbody. The State Water Resources Control Board maintains information on water bodies in California that are impaired by pollutants. The indicator combines the number of pollutants in all water bodies designated as impaired in each census tract. Census tract 4314.00 is the only census tract experience significant water body impairments.

The individual indicator scores are aggregated together to determine the overall Pollution Burden. Figure 3 shows the Planning Area’s aggregate pollution burden percentile score ranges. Seven census tracts have an aggregate pollution burden score of 75 or more. The scores range from 75 (Tract 4309.02) to 95 (Tract 4311.00).

In addition to the pollution burden indicators, proximity to industrial uses and freeways exposes people to air pollutants and higher noise levels. Industrial uses may generate unhealthy fumes and increase truck traffic near neighborhoods. Major roads and highways can bring air pollutants and noise into nearby neighborhoods as well. Table 5 quantifies and Figure 4 illustrates residential uses near industrial uses and/or Interstate 210 throughout the Planning Area.

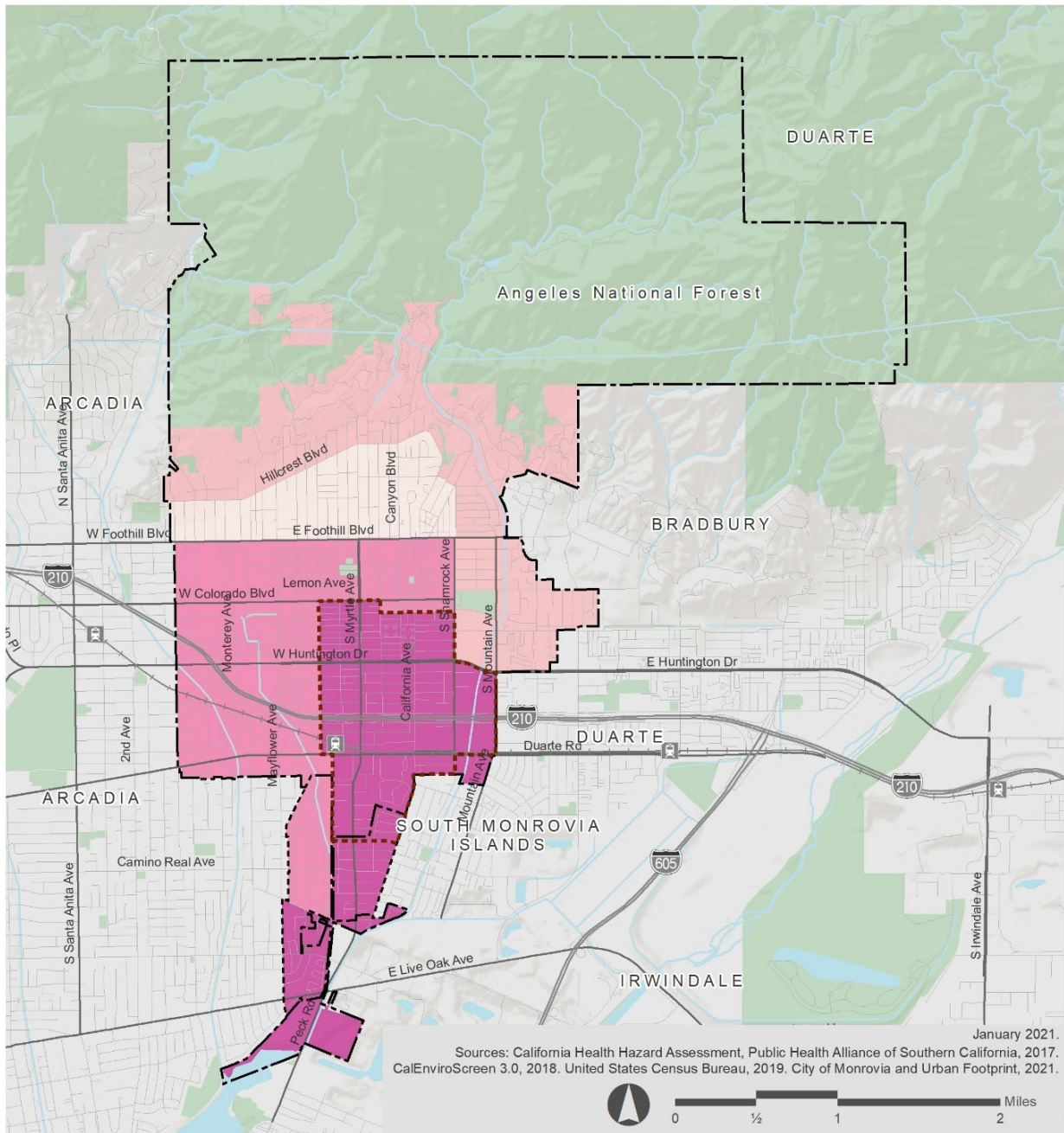
**Table 5: Housing and Population Proximity to Industrial Uses and Freeways**

Housing and Population Proximity to Industrial Uses and Freeways	City		Disadvantaged Communities (Census Tract 4311.00)	
	Housing Units	Population	Housing Units	Population
<b>Proximity to Industrial Uses</b>				
Share property with an Industrial Use	106	327	42	141
Within 500 feet	3,150	9,060	1,670	4,935
<b>Toxic Release Inventory</b>				
Within 500 Feet	173	564	157	518
Within 1,000 Feet	953	2,981	603	1,928
<b>Proximity to Freeways</b>				
Within 500 Feet	1,132	3,073	540	1,427
Within 1,000 Feet	2,143	5,996	789	2,230

Source: City of Monrovia, Los Angeles County, MIG, Urban Footprint, 2020.



**Figure 3: Pollution Burden**



January 2021.  
 Sources: California Health Hazard Assessment, Public Health Alliance of Southern California, 2017.  
 CalEnviroScreen 3.0, 2018. United States Census Bureau, 2019. City of Monrovia and Urban Footprint, 2021.

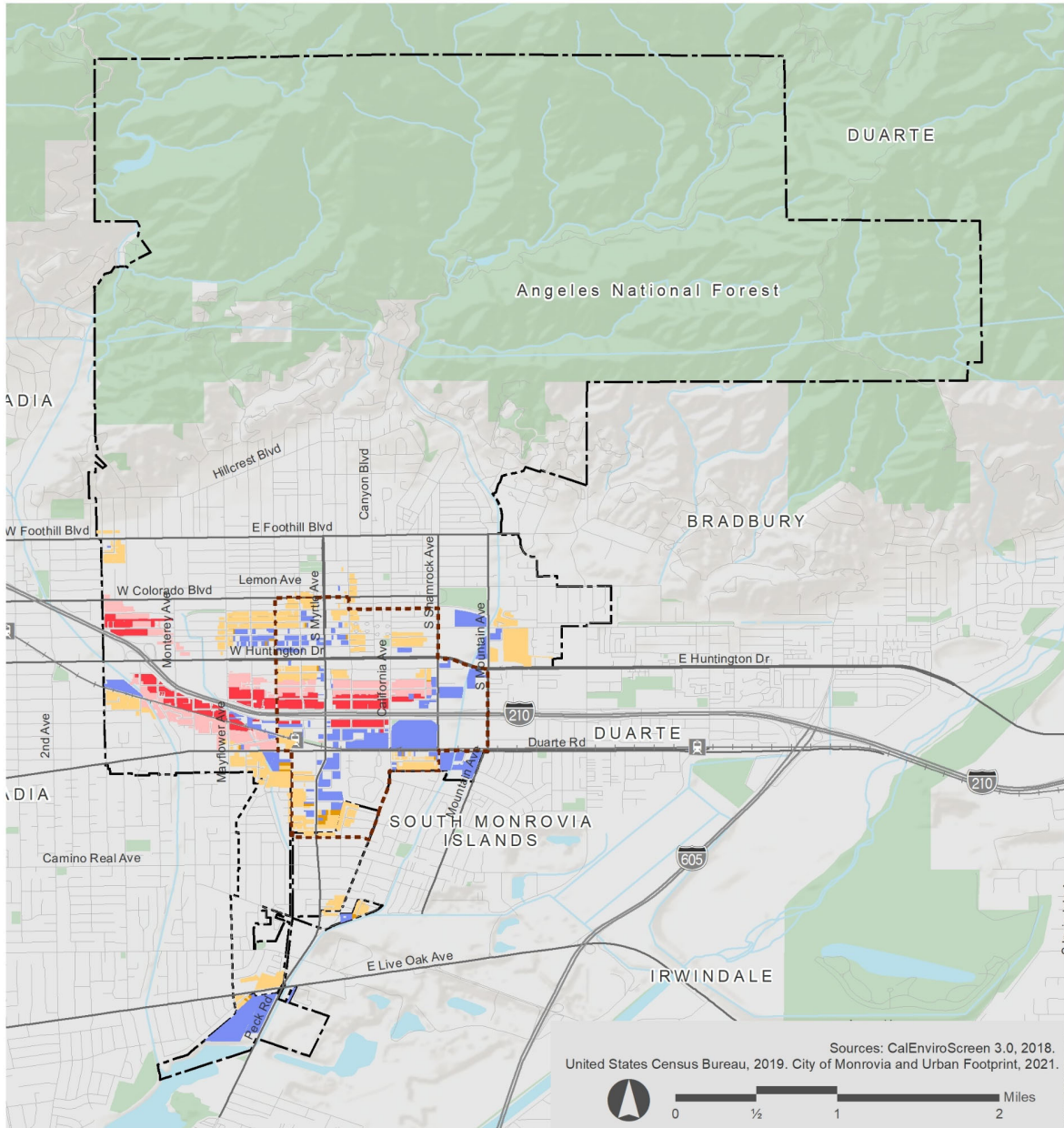


- Pollution Burden (Percentiles)**
- 49% or Lower
  - 50% - 74%
  - 75% - 79%
  - 80% or Higher

- Base Map Features**
- City of Monrovia Boundary
  - Sphere of Influence
  - Metro Rail line and Stations
  - Major Streets
  - Parks and Open Space
  - Waterbodies
  - Disadvantaged Communities



**Figure 4: Proximity of Residential Uses to Industrial Uses and Freeways**



**Residential Proximity**

- Within 500 Feet of Freeway
- Within 1,000 Feet of Freeway
- Share Property with Industrial Uses
- Within 500 Feet of Industrial Uses
- Industrial
- Freeway

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- Metro Rail line and Stations
- Major Streets
- Parks and Open Space
- Waterbodies
- Disadvantaged Communities

Sources: CalEnviroScreen 3.0, 2018.  
United States Census Bureau, 2019. City of Monrovia and Urban Footprint, 2021.



*In Monrovia, nearly 3,150 homes (approximately 9,060 residents) live within 500 feet of an industrial business.*



*Over 2,140 homes (about 6,000 residents) live within 1,000 feet of Interstate 210 (Foothill Freeway).*

## Population Characteristics

Population characteristic indicators considered by the CalEnviroScreen 3.0 include health conditions and socioeconomic factors. Asthma, education, poverty, employment, housing burden, are among those considered, as shown in Table 5. Overall, the Planning Area percentiles are relatively low compared to the Planning Area’s pollution burdens. None of the census tracts have an aggregate population characteristic indicator percentile higher than 50. Meaning, of all the census tracts in California, the Planning Area’s census tracts are experiencing less population characteristics burden compared to half of the State.

Census tract 4310.02 has two population characteristic indicators over the 75<sup>th</sup> percentile —unemployment and housing burden. It is important to note, the identified Disadvantaged Community census tract 4311.00 has a 50<sup>th</sup> percentile for the population characteristics, thus showing that the pollution characteristics “push” the census tract into the Disadvantaged Community category. Figure 6 shows the Planning Area’s aggregate population characteristic percentile score ranges.

**Table 6: Population Characteristics Indicators Scores**

Census Tracts	Percentiles and Indicators								
	Overall Population Characteristics	Asthma	Low Birth Weight	Cardiovascular Disease	Education	Linguistic Isolation	Poverty	Unemployment	Housing Burden
<b>City of Monrovia</b>									
4303.01	11	26	47	35	9	25	2	6	6
4303.02	26	40	30	57	18	35	27	46	5
4309.01	48	40	42	58	47	64	41	67	35
4309.02	45	20	67	28	47	74	31	56	64
4310.01	50	32	51	46	49	43	56	81	58
4310.02	23	12	8	9	40	38	38	86	76
<b>Split between City and Sphere of Influence</b>									
4311.00	50	38	25	54	65	48	66	49	74
4312.00	49	29	58	20	81	73	52	50	59
4313.00	12	22	20	31	40	37	9	19	6
4314.00	41	5	84	13	48	81	50	38	54

Source: CalEnviroScreen 3.0 the Office of Environmental Health Hazard Assessment, June 2018.

Note: Census tracts with a population characteristics percentile of 75 or greater are highlighted, indicating these areas are within the top 25 percentile in the State regarding population characteristics.

Population characteristics indicators impacting the Planning Area census tracts are described below:

- Low Birth Weight.** Babies who weigh less than 5 ½ pounds at birth (full term) are considered to have a low birth weight. Poor nutrition, lack of prenatal care, stress, and maternal smoking are known to increase the risk of having a low-birth-weight baby. Studies suggest that pollution could also be a factor. The California Department of Public Health collects information on where low birth weight infants are born in California. The indicator is the percentage of low weight births, averaged over the 2006-2012 period. Census tract 4314.00 has a score of 84 in low birth weight, despite the tract being primarily comprised of residential properties and not being near any industrial sites or freeways, that can create a higher pollution exposure.
- Housing Burden.** Households with lower incomes may spend a larger proportion of their income on housing and may suffer from housing-induced poverty, which can lead to adverse health effects. The housing burden indicator measures the percent of households in a census tract that are both low income (making less than 80% of the county median family income) and severely burdened by housing costs (paying greater than 50% of their income to housing costs) during the 2009-2013 period. Low-income households paying more than 50% of their income on housing in the region are on the rise. Additional information on housing burden is available from the State of California Legislative Analyst’s Office.

- **Unemployment.** The U.S. Census Bureau considers people over 16 years old who are out of work, able to work, and looking for work as being unemployed. Unemployed figures do not include students, active-duty military, the retired, and people who have stopped looking for work. Stress from long-term unemployment can lead to chronic illnesses, such as heart disease, and can shorten a person’s life. Residents in census tracts 4310.01 and 4310.02 face unemployment at a higher rate (80%) than the rest of the State for the 2011-2015 period. Additional information about unemployment and health is available from the Bureau of Labor Statistics and the Robert Wood Johnson Foundation, Health Policy Snapshot.

## Health and Wellness

This Health and Wellness section presents data and analysis that identify the relationship between economic, education, healthcare, housing, transportation, and environmental decisions and their effects on health and wellness of disadvantaged communities and populations that historically have experienced inequities, institutionalized racism, exclusion, and/or isolation.

### Healthy Places Index

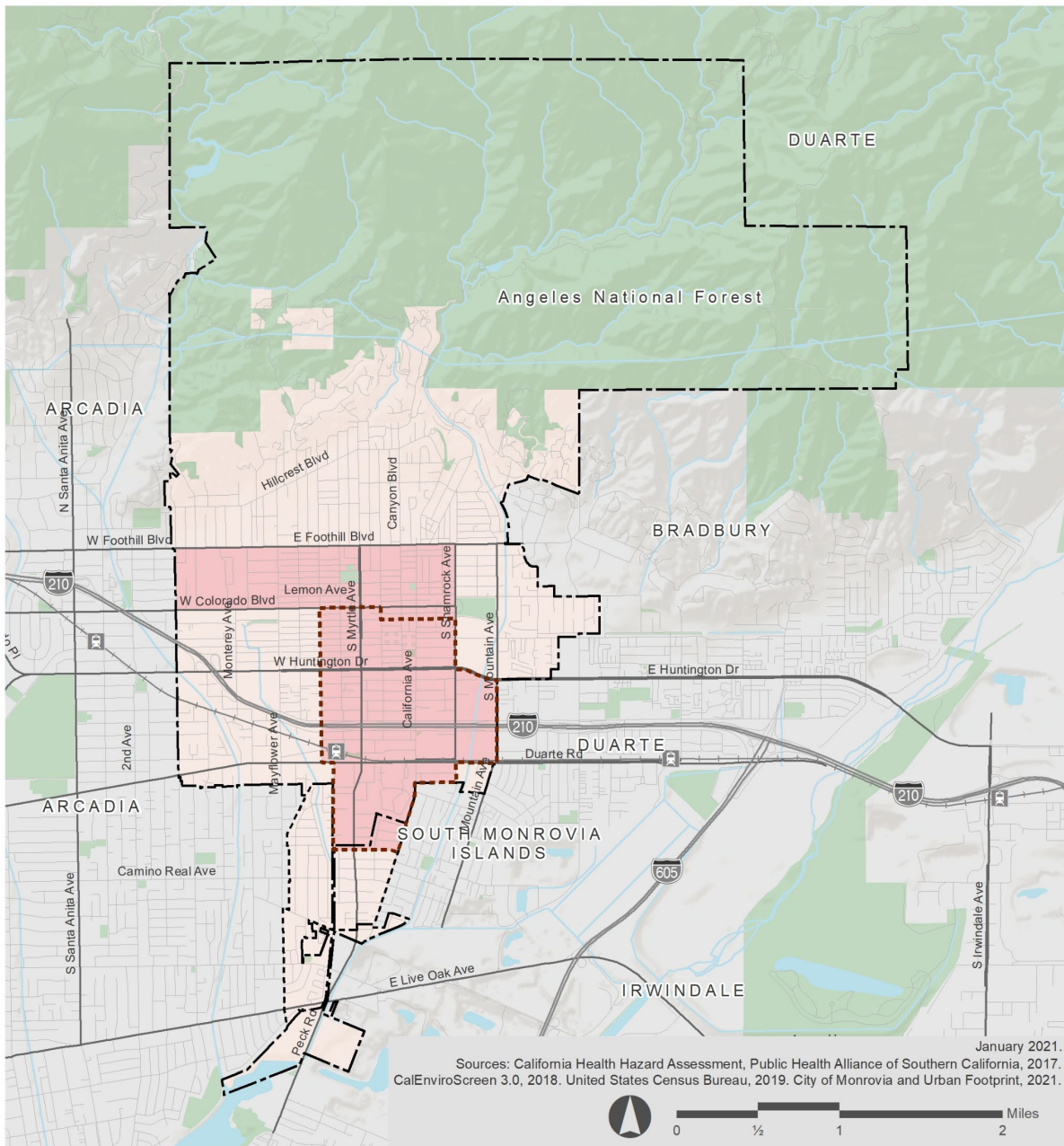
Everyone should have the opportunity to be healthy. A person’s health is shaped dramatically by community characteristics—housing, education, economic, and other social factors—which often are shaped through policy. The California Healthy Places Index (HPI) combines eight indicators comprising 24 community characteristics with weighted scoring into a single indexed HPI Score, as seen in Table 7. The HPI focuses on the City of Monrovia rather than the City *and* its Sphere of Influence (Planning Area), in contrast with the CalEnviroScreen 3.0, which considers the entire Planning Area. Also, the HPI scores are displayed in quartiles, allowing for straightforward comparisons within a specific geography and across California. Ultimately, the Environmental Justice Element will explore opportunities to improve these conditions.

**Table 7: Healthy Places Index Indicator Weights & Community Characteristics**

<b>Economic (32% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Above Poverty</li> <li>▪ Employed</li> <li>▪ Median Household Income</li> </ul>	<b>Education (19% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Pre-School Enrollment</li> <li>▪ High School Enrollment</li> <li>▪ Bachelors Attainment</li> </ul>	<b>Transportation (16% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Automobile Access</li> <li>▪ Active (healthy) Commuting</li> </ul>
<b>Social (10% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Two Parent Household</li> <li>▪ Voting</li> </ul>	<b>Clean Environment (5% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Clean Air - Diesel PM</li> <li>▪ Clean Air - Ozone</li> <li>▪ Clean Air - PM 2.5</li> <li>▪ Safe Drinking Water – Contaminants</li> </ul>	<b>Neighborhood (8% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Retail Density</li> <li>▪ Supermarket Access</li> <li>▪ Parks</li> <li>▪ Tree Canopy</li> <li>▪ Alcohol Establishments Availability</li> </ul>
<b>Housing (5% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Severe Housing Costs Burden</li> <li>▪ Homeownership</li> <li>▪ Housing Habitability</li> <li>▪ Uncrowded Housing</li> </ul>	<b>Healthcare (5% of HPI Score)</b> <ul style="list-style-type: none"> <li>▪ Insured Adults</li> </ul>	

Source: *The California Healthy Places Index (HPI)*, Public Health Alliance of Southern California, 2020.

**Figure 5: Population Characteristics**



**Population Characteristics (Percentiles)**

- 49% or Lower
- 50% - 74%
- 75% - 79%
- 80% or Higher

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- Metro Rail line and Stations
- Major Streets
- Parks and Open Space
- Waterbodies
- Disadvantaged Communities

In contrast to the CalEnviroScreen 3.0 data, where higher percentiles equate to worse conditions, **lower HPI percentiles equate to worse conditions** for both the overall HPI score and contributing indicators.

Monrovia’s HPI percentiles are strong for education and economic characteristics as the percentiles are 76.7 and 74.7, respectively. As shown in Table 8, Monrovia’s HPI score for clean environment characteristic (air quality and clean water) is significantly lower with a 25.8 percentile. The HPI percentiles are mapped in Figure 6.

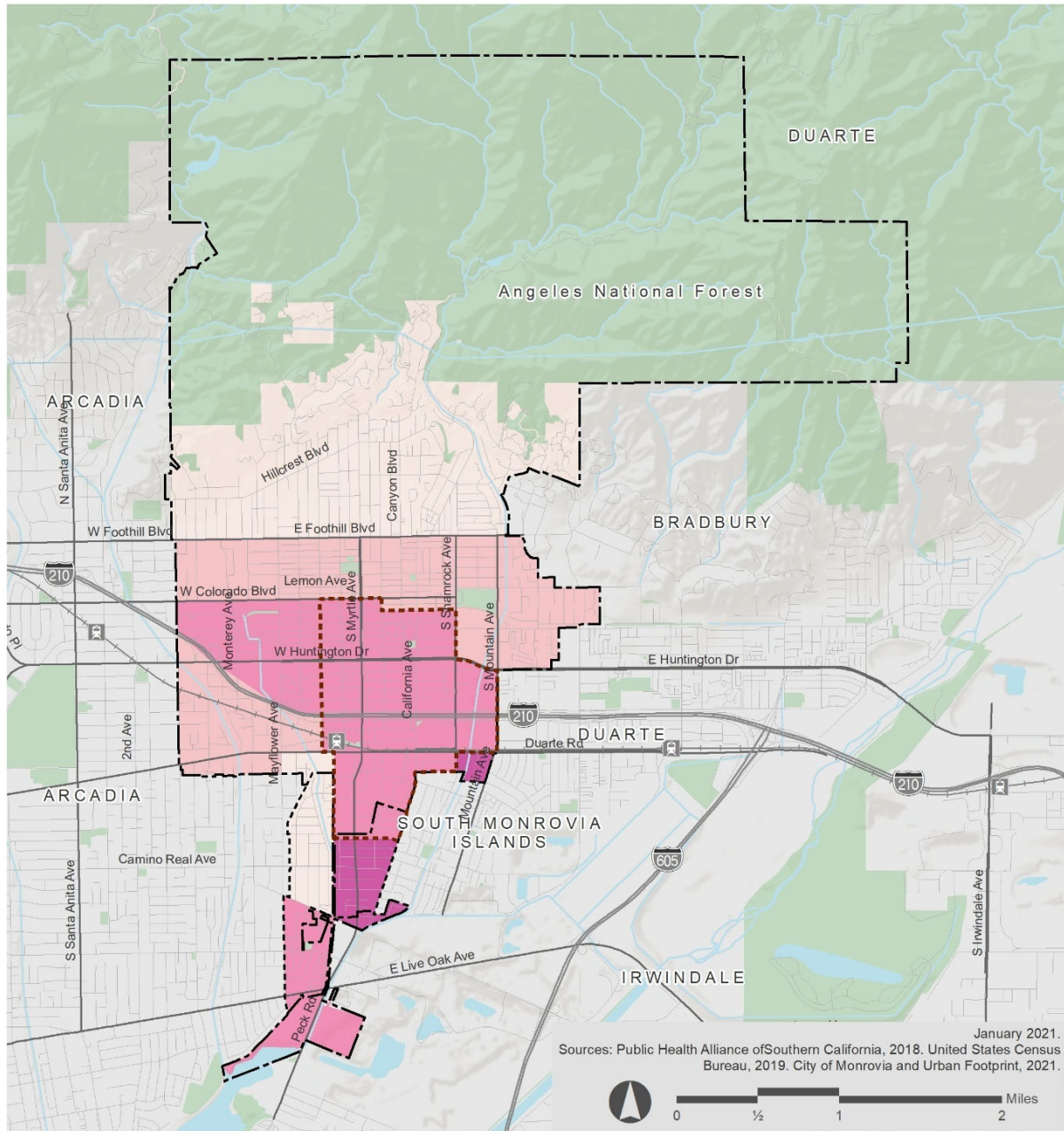
**Table 8: Healthy Places Index Indicators Percentile Scores (City of Monrovia Only)**

Healthy Places Index Indicators and Community Characteristics	Percentile
<b>Economic (32% of HPI Score)</b>	<b>74.7</b>
Above Poverty	64.6
Employed	83.8
Median Household Income	72
<b>Education (19% of HPI Score)</b>	<b>76.7</b>
Pre-School Enrollment	72.8
High School Enrollment	99.4
Bachelor’s Degree Attainment	69.9
<b>Transportation (16% of HPI Score)</b>	<b>66.2</b>
Active (Healthy) Commuting	55.8
Automobile Access	64.6
<b>Social (10% of HPI Score)</b>	<b>37.4</b>
Two-parent Household	30.3
Voting	47
<b>Neighborhood (8% of HPI Score)</b>	<b>66</b>
Retail Density	85.4
Supermarket Access	87.7
Park Access	77.1
Tree Canopy	52.4
Alcohol Establishments Availability	15.5
<b>Healthcare Access (5% of HPI Score)</b>	<b>45.4</b>
Insured Adults	45.4
<b>Housing (5% of HPI Score)</b>	<b>42.3</b>
Severe Housing Costs Burden	43.6
Homeownership	19.7
Housing Habitability	39.5
Uncrowded Housing	44.8
<b>Clean Environment (5% of HPI Score)</b>	<b>25.8</b>
Clean Air - Diesel PM	27.8
Clean Air - Ozone	33.4
Clean Air - PM <sub>2.5</sub>	32.3
Safe Drinking Water – Contaminants	33.4
<b>HPI Score for City of Monrovia</b>	<b>68.1</b>

Source: The California Healthy Places Index (HPI), Public Health Alliance of Southern California, 2020.

Note: Lower percentiles equate to worse conditions when compared to the rest of the State.

**Figure 6: Healthy Places Index**



## Comparative Health Indicators

The City of Monrovia’s HPI score of 68.1 means that Monrovia has healthier community conditions than roughly 68% of other California cities. Monrovia scores much better than 50% of California cities in factors such as Economic, Education, Transportation, and Neighborhood. Characteristics that received a low score include: Social, Healthcare Access, Housing, and Clean Environment. Demonstrating that overall, Monrovia does a good job at accommodating for infrastructural and city elements that promote social viability. However, it needs to prioritize foundational elements that preserve/improve public health and access to health care.

On a subregional basis, Monrovia fairs better than most surrounding cities and Los Angeles County as shown in Table 9.

**Table 9: Healthy Places Index Score**

City or County	Healthy Places Index Score
Sierra Madre	89.6
Arcadia	72.9
<b>Monrovia</b>	<b>68.1</b>
Bradbury	63.2
Duarte	55.3
LA County	50
Irwindale	37.2
Azusa	34.1

Source: The California Healthy Places Index (HPI), Public Health Alliance of Southern California, 2020.

## General Health Conditions

Health estimates from the UCLA Health Policy Center’s California Health Interview Survey (CHIS), the largest state health survey in the United States, is shown in Table 10. Monrovia’s participants responded comparatively similar outcomes as nearby cities and County respondents. It is important to note that Monrovia respondents generally indicated a higher need for mental health services.

**Table 10: Health Condition and Healthcare Service Comparisons**

2016 Health Conditions for Population (Ages 18 and Older in Past 12 months)	Monrovia	Arcadia	Azusa	Los Angeles County
Fair or poor health	15.8%	13.1%	21.5%	20.6%
Needed help for mental health problems	18.5%	12.2%	16.4%	16.5%
Delayed prescriptions/medical services	20.0%	16.7%	18.0%	19.7%
Serious psychological distress	9.2%	6.9%	9.5%	8.6%
Ever diagnosed with diabetes	8.3%	9.9%	10.0%	9.5%

Source: AskCHIS Neighborhood Edition, California Health Interview Survey (CHIS), UCLA, 2016.

## Health Insurance and Healthcare Access

Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing, and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans. People without medical insurance are more likely to lack a usual source of medical care, such as a primary care provider, and are more likely to skip routine medical care due to costs, increasing their risk for serious and disabling health conditions. When they do access health services, they are often burdened with large medical bills and out-of-pocket expenses. Increasing access to both routine medical care and medical insurance is vital toward improving health.

Arcadia’s Methodist Hospital’s 2016 Community Health Needs Assessment reached out to a very diverse list of agencies and organizations/representatives to gain a stronger understanding of the general community’s greatest health concerns, and to identify points of collaboration in approaching the issues facing the communities. Some key takeaways from the assessment revealed that a larger portion of the community identified access to health care (specifically health insurance coverage, availability, language barriers, and transportation limitations) as an issue that needed to be addressed. Another issue identified



focused on disease prevention programs and the promotion of overall health, as several participants expressed concerns related to diabetes, obesity, heart disease, cancer, and other health risks.

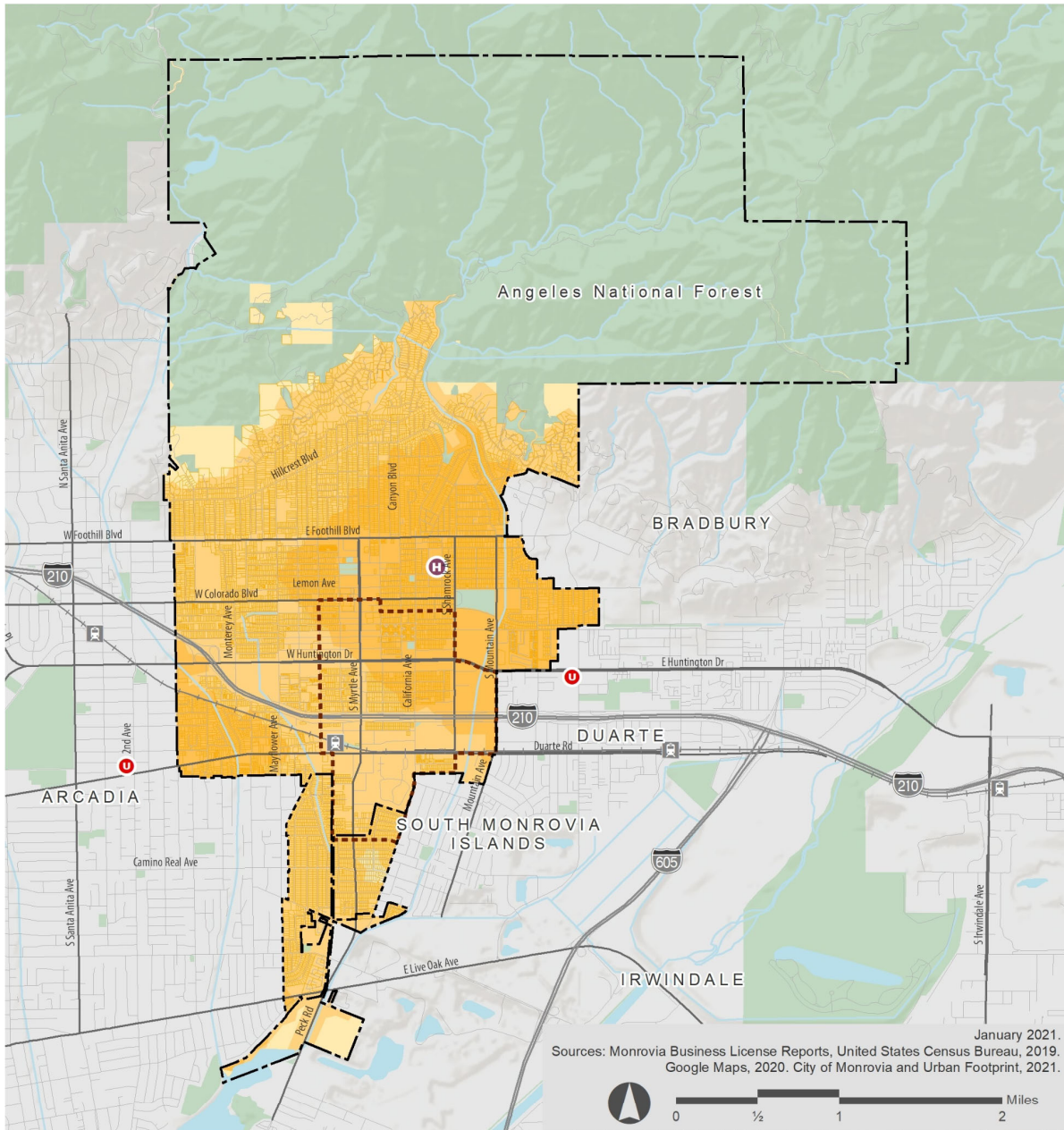
Table 11 shows the percentage of Monrovia’s population with health insurance coverage. Monrovia residents generally have good health insurance coverage compared to all Los Angeles County residents. Additionally, most Monrovia residents have limited access to hospitals and urgent care facilities, as shown in Figure 7. While most neighborhoods within the Monrovia’s corporate boundary are within 1 to 2 miles of a hospital or health clinic/ urgent care, residents would have to travel outside of Monrovia to reach facilities with more capacity and resources.

**Table 11: Health Insurance Coverage**

Health Insurance Status	Monrovia		LA County
	Number	Percent	Percent
<b>Total Population</b>	<b>36,709</b>	<b>100%</b>	<b>100%</b>
<b>With Health Insurance Coverage</b>	<b>34,170</b>	<b>93.1%</b>	<b>90.4%</b>
<b>No Health Insurance Coverage</b>	<b>2,539</b>	<b>6.9%</b>	<b>9.6%</b>
<b>Demographics - With Health Insurance Coverage</b>			
<b>Age</b>			
Under 19 years	7,609	20.7%	96.1%
19-64 years	21,857	59.5%	86.6%
65 years and older	5,444	14.8%	98.5%
<b>Race and Ethnicity</b>			
White Alone	21,614	93.5%	91.3%
Hispanic/Latino (of any race)	13,834	91.5%	85.9%
Black or African American Alone	1,718	86.35	93.5%
<b>Nativity and U.S. Citizenship Status</b>			
Native Born	25,824	95.2%	94.0%
Foreign Born – Naturalized Citizen	4,918	97.1%	94.0%
Foreign Born – Not a Citizen	3,428	75.6%	71.7%

Source: U.S. Census, American Community Survey 5-Year Estimates, 2019.

**Figure 7: Hospital, Health Clinic, and Urgent Care Access**



**Access to Hospitals, Health Clinics, and Urgent Care**

- Within 1-Mile Distance to a Hospital, Health Clinic, or Urgent Care
- Within 2-Mile Distance to a Hospital, Health Clinic, or Urgent Care
- More than 2-Mile Distance to a Hospital, Health Clinic, or Urgent Care

**Land Use**

- H Hospitals
- U Health Clinic/Urgent Care
- Residential Use

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- Metro Rail line and Stations
- Major Streets
- Parks and Open Space
- Waterbodies
- Disadvantaged Communities

## Food Access

### Food Insecurity

The U.S. Department of Agriculture defines food insecurity as a lack of consistent access to enough food for an active, healthy life. A household being unable to afford sufficient, quality food correlates with experiences of unemployment and poverty. Participation in programs designed to address hunger, such as the Supplemental Nutrition Assistance Program (SNAP or food stamps), rises in response to food insecurity.

Approximately 4% of Monrovia households received food stamps/SNAP (also known as CalFresh, California's food stamp program) in 2019 compared to about 9% in Los Angeles County (SNAP, 2019). SNAP can buffer participants against food insecurity and poor health.

Additionally, Supplemental Security Income (SSI) is a federal income supplement program designed to help aged, blind, and disabled people who have little or no income and to meet basic needs for food, clothing, and shelter. Participation in disability assistance programs is relatively high among adults with disabilities, particularly those who are unable to work due to their disability. Food insecurity is more prevalent among SSI recipients, including higher rates of food insecurity due to more severe disabilities. In 2020, about 5% of Monrovia households received SSI income compared to about 7% of Los Angeles County residents (U.S. Census, American Community Survey 5-Year Estimates, 2019).

Residents may also rely on food banks and social service providers throughout Monrovia, including Foothill Unity Center, Love Our Children, and several religious institutions. Families with school-aged children may receive free and reduced-price meals as part of the National School Lunch Program (NSLP), a federally assisted meal program that provides free, nutritionally balanced lunches to children whose families meet eligibility income requirements. The NSLP provides nutritious foods that help reduce the harmful impact of food insecurity and improve outcomes for children. Research sponsored by U.S. Department of Agriculture's Food and Nutrition Service found that children receiving free or reduced price NSLP lunches consume fewer empty calories and more fiber, milk, fruit, and vegetables than income eligible nonparticipants, both at lunch and during a full 24 hours. Free and reduced-price school meals also free up some household resources for other necessary purchases.

### Grocery Store Access

Limited access to supermarkets, grocery stores, farmers' markets, and other sources of healthy and affordable food may make it harder for some residents to eat a healthy diet. Expanding the availability of nutritious and affordable food by developing and equipping grocery stores, small retailers, corner markets, and farmers' markets in communities with limited access is an important part of creating a healthy community. Food deserts are areas in which it is difficult to buy affordable or good-quality fresh food. To define food deserts in Monrovia, the following U.S. Department of Agriculture indicators of access are used:

- Accessibility to sources of healthy food, as measured by distance to a store or by the number of stores in an area
- Individual-level resources that may affect accessibility, such as family income or vehicle availability
- Neighborhood-level indicators of resources, such as the average income of the neighborhood and the availability of public transportation

Figure 8 shows the locations where healthy food options (e.g., produce, fresh meats and seafood, dairy) can be purchased. The map also identifies several low-income and low-vehicle access census tracts that include:

- A poverty rate of 20% or higher, or with a median family income less than 80% of median family income for Los Angeles County
- More than 100 households without access to a vehicle
- A significant number of residents located more than ½ mile from the nearest supermarket
- Residents living in the southernmost and northernmost regions of the city are more than 1-mile from any sort of supermarket or farmers market, making access to healthy food options difficult

- Increase distances may require travel by vehicle or public transit systems. It is important to note that many residents in the southern region of the city have no access to a vehicle, in order to make the necessary travel to find fresh and nutritious food options

## Physical Activity and Park Access

### Physical Activity

Research demonstrates that participating in regular moderate to vigorous physical activity provides many health benefits. Some benefits of physical activity can be achieved immediately, such as reduced feelings of anxiety, reduced blood pressure, sleep improvements, some aspects of cognitive function, and insulin sensitivity. Other benefits—such as increased cardiorespiratory fitness, increased muscular strength, decreased depressive symptoms, and sustained blood pressure reduction—require a few weeks or months of participation in physical activity.

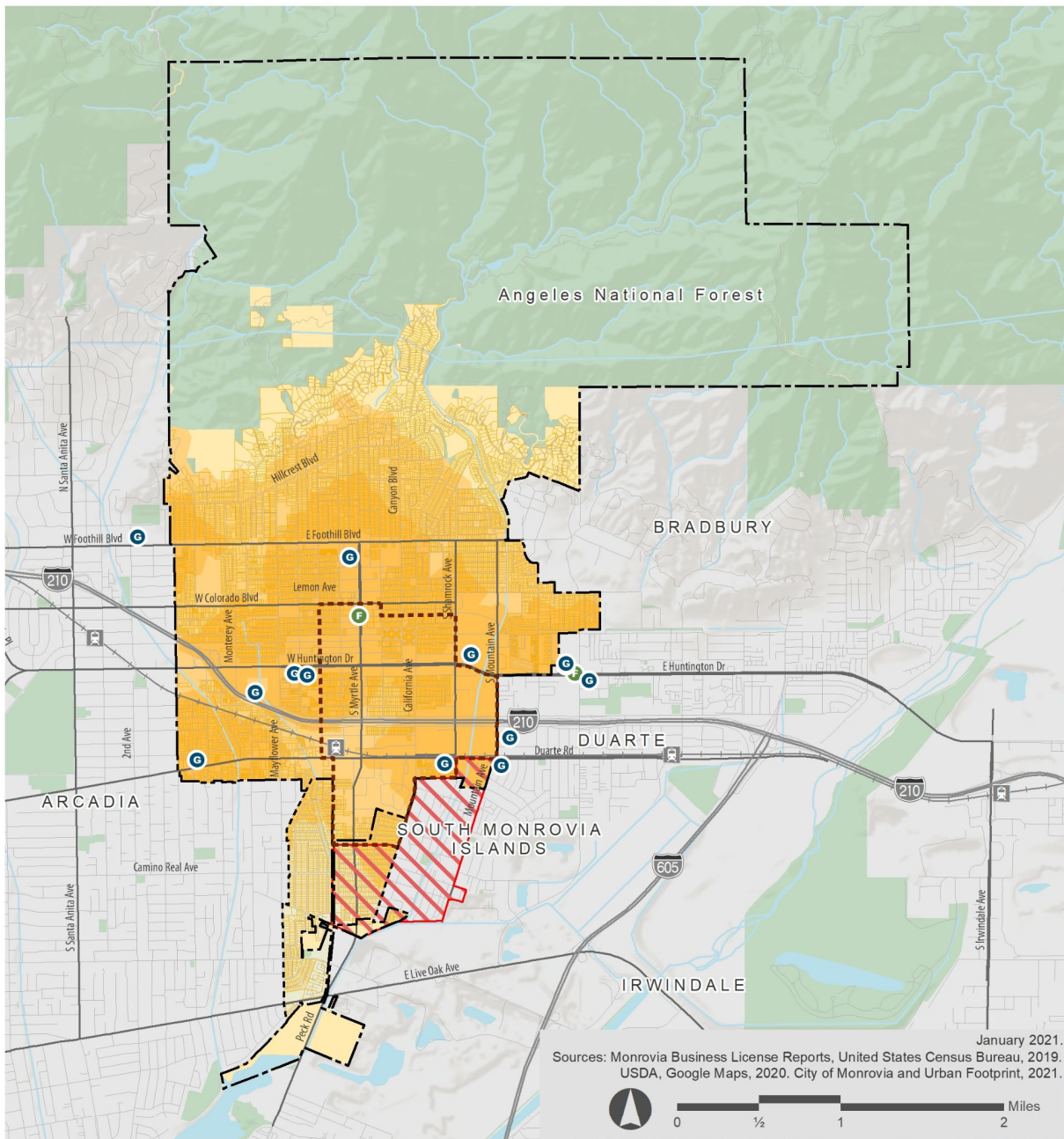
Physical activity can also slow or delay the progression of chronic diseases, such as hypertension and type 2 diabetes. Benefits persist with continued physical activity. Table 12 shows the level of self-reported physical activity in Monrovia and surrounding areas per the CHIS survey. Monrovia respondents generally reported a smaller percentage of overweight/obesity across age groups; however, the percentage of overweight teens seems to about the same as the rest of Los Angeles County.

**Table 12: Weight and Physical Activity**

Weight and Physical Activity (2016)	Monrovia	Arcadia	Azusa	Los Angeles County
Obese Adults (BMI> 30) (Ages 18+)	25.1%	18.4%	31.8%	28.9%
Overweight or Obese Teens (Ages 12 to 17)	35.0%	N/A	40.3%	35.5%
Overweight Children (Ages 2 to 11)	7.7%	5.4%	10.9%	12.1%
Regular Physical Activity (Ages 5 to 17)	19.2%	18.6%	14.2%	14.3%
Walked at least 150 Minutes in Past Week (Ages 18+)	35.9%	35.8%	33.5%	38.4%

Source: AskCHIS Neighborhood Edition, California Health Interview Survey (CHIS), UCLA

**Figure 8: Healthy Food Access**



January 2021.  
 Sources: Monrovia Business License Reports, United States Census Bureau, 2019.  
 USDA, Google Maps, 2020. City of Monrovia and Urban Footprint, 2021.

**Access to Healthy Food Store or Farmers' Market**

- Within 1/2-Mile Distance
- Within 1-Mile Distance
- More than 1-Mile Distance
- Low Income/Low Vehicle Access

**Land Use**

- Healthy Food Store
- Farmers' Market (USDA)
- Residential Use

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- ++ Metro Rail line and Stations
- Major Streets
- Parks and Open Space
- Waterbodies
- Disadvantaged Communities

## Park Access

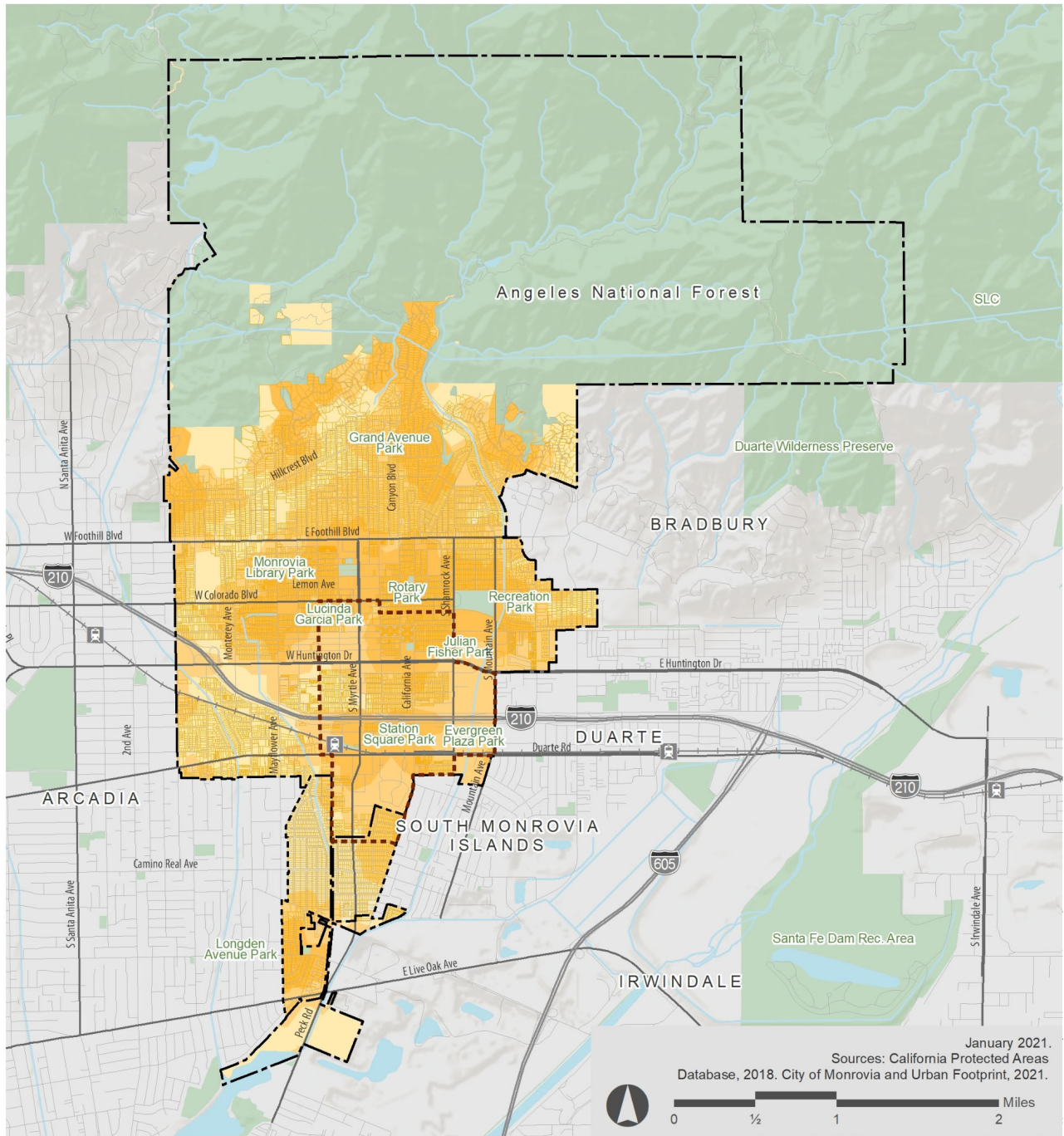
Parks, playgrounds, greenways, trails, and community open spaces help keep residents fit and healthy by providing access to places that support physical activity. Physical activity increases strength, flexibility, and endurance; relieves symptoms of depression and anxiety; improves mood; and enhances psychological well-being.

According to the Centers for Disease Control and Prevention (CDC), only 25% of American adults engage in recommended levels of physical activity, and 29% engage in no leisure-time physical activity at all. This sedentary lifestyle is contributing to an increased incidence of obesity along with obesity-related diseases, such as high blood pressure, diabetes, congestive heart failure, and stroke. As one solution to the increased incidence of obesity, the CDC has called for more parks and playgrounds. Studies have shown that when people have access to parks, they exercise more. Parks provide children with opportunities for play, and play is critical in the development of muscle strength and coordination, language, and cognitive abilities.



*Library Park- Monrovia, CA*

**Figure 9: Park Access**



January 2021.  
Sources: California Protected Areas Database, 2018. City of Monrovia and Urban Footprint, 2021.

**Access to Parks**

- Within 1/4-Mile Distance
- Within 1/2-Mile Distance
- More than 1/2-Mile Distance
- Residential Use

**Base Map Features**

- City of Monrovia Boundary
- Sphere of Influence
- Metro Rail line and Stations
- Major Streets
- Parks and Open Space
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- Disadvantaged Communities

## City Health and Equity Initiatives

The City has initiated several healthy food access and recreation programs to improve Monrovia residents' quality of life.

### City of Monrovia Community Services

Monrovia's Community Services Department offers a series of education and recreational classes to all ages and abilities. Recreation classes include wellness and fitness, meditation, dance, parent & me, organized sports, arts and crafts, games, clubs, excursions, and special events. Educational assistance includes academic support and reading/storytime programs.

### Monrovia Community Garden

The Monrovia Community Garden, launched in July 2019, is a partnership between the city of Monrovia and Mountainside Communion. It is the first community garden in Monrovia that is open to residents. The garden provides a space of community building and education through gardening. Educating residents on topics related to sustainability and ways to lead healthy lives.

### Special Events

The City hosts a series of special events such as the Holiday Parade, Spring Egg Hunt & Healthy Kids Day, 4<sup>th</sup> of July Fireworks to foster a greater sense of community among residents in Monrovia, offering a variety of activities such as arts & crafts, carnival games, and petting zoos, as well as activities that promote wellness and healthy lifestyles.

### Sunshine Company

The Sunshine Company is an Inclusion Recreation Program for teens and adults with special needs. The free program is designed to teach participants life skills, for example, how to shop at the grocery store, use coupons and live on a budget. The program also offers regular social opportunities and teaches participants how to communicate with one another in a safe, supportive environment.

### Youth Commission

The Youth Commission is comprised of young residents passionate about serving the community through volunteerism and advising the Community Services Commission on youth programming in the City of Monrovia.

### Teens Advisory Board

The Teens Advisory Board (TAB) is open to teens in 6<sup>th</sup> through 12<sup>th</sup> grades. The TAB plans, organizes, and conducts events for teens, and volunteer to help with Monrovia age groups.

## Key Takeaways and Policy Implications

- One disadvantaged community (census tract 4311.00), as defined by CalEnviroScreen 3.0 analysis, exists in the City and Sphere of Influence (SOI), also known as the Planning Area.
- The Planning Area scores in the 80th percentile for Toxic Release Inventory, which means that nearly every census tract has facilities that handle toxic chemicals. Additionally, residents in a significant number of tracts experience issues related to drinking water contamination, hazardous waste, and automobile traffic.
- Most areas in the Planning Area score below the 50% of CalEnviroScreen 3.0 population characteristics indicators. Low birth weight and relatively higher rates of unemployment and housing burden occur.
- Monrovia has healthier community conditions than 68% of other California cities. When compared to neighboring cities, Monrovia scores about the same except for cities like Arcadia and Irwindale, which have scores between 34-37%, yet Monrovia scores significantly better than Los Angeles County as a whole.



- Generally, neighborhoods on Monrovia's west and north sides have healthier community conditions than neighborhoods in the east and south.
- Monrovia residents' health insurance coverage is roughly 93% indicating the likelihood of good physical and mental health.
- Generally, residents have good access to local hospitals and urgent care facilities. However, residents' express concerns related to the availability of health care, insurance coverage, transportation, and language barriers.
- Four percent of Monrovia residents receive Food Stamps/SNAP and 7% receive Supplemental Security Income (SSI); both these rates are slightly lower than the Los Angeles County averages.
- Majority of residents in the Planning Area live within ½ to ¼ mile distance from a park that enables recreational and physical activity.
- Majority of residents in the Planning Area live within 1-mile of a Farmer's Market (USDA) or grocery store enabling reasonable access to healthy foods.