

# City of Hawthorne

Environmental Justice White Paper

April 2021



*This page is intentionally left blank.*

# TABLE OF CONTENTS

<b>Table of Contents</b>	ii
<b>A. BACKGROUND &amp; REGULATORY FRAMEWORK</b>	1
<b>B. DISADVANTAGED COMMUNITIES</b>	6
<b>C. KEY FINDINGS &amp; RECOMMENDED NEXT STEPS</b>	13
<b>D. ENVIRONMENTAL JUSTICE ISSUES</b>	19
1. Pollution Exposure and Air Quality	19
2. Public Facilities	29
3. Food Access	35
4. Safe and Sanitary Homes	42
5. Physical Activity	47
6. Community Engagement	55
7. Improvements and Programs Addressing the Needs of DACs	64
<b>References</b>	77



## Tables

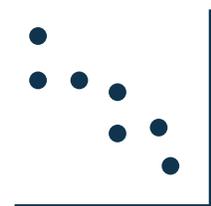
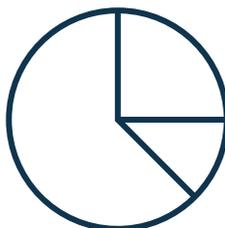
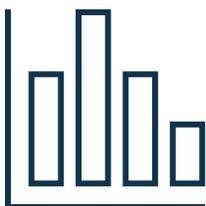
iii

Table 1: Population Characteristics by Sensitive Population and Socioeconomic Factor Indicators	11
Table 2: Population Exposure and Air Quality	21
Table 3: Hazardous Materials and Toxics Sites	23
Table 4: Food Insecurity	36
Table 5: Car Ownership	41
Table 6: Overcrowding by Tenure	43
Table 7: Owner Occupied vs. Renter Occupied Households	44
Table 8: Gross Rent as Percentage of Household Income	45
Table 9: Monthly Owner Costs as Percentage of Household Income	46
Table 10: Housing Affordability	47
Table 11: Commuting Transportation Modes	49
Table 12: City of Hawthorne Parks and Recreation Facilities	52
Table 13: Resident Age	58
Table 14: Languages Spoken at Home	59
Table 15: Educational Attainment	61
Table 16: Race/Ethnicity	63
Table 17: Regional Opportunity Index (ROI) Topics and Indicators	65
Table 18: People-Based Regional Opportunity Index (ROI) DAC Census Tracts	689
Table 19: Place-Based Regional Opportunity Index (ROI) DAC Census Tracts	75

## Figures

iii

Figure 1: Disadvantaged Communities	9
Figure 2: Hazardous Materials and Toxic Sites	27
Figure 3: Public Services	31
Figure 4: Community Facilities	33
Figure 5: Food Access	39
Figure 6: Park Buffers	53
Figure 7: People-Based Opportunities	67
Figure 8: Place-Based Opportunities	723



# A. BACKGROUND & REGULATORY FRAMEWORK

## BACKGROUND

The negative effects of environmental degradation and pollution are well-documented and include severe impacts to human health and longevity, depending on the level of exposure. Within the United States, certain communities have historically been disproportionately affected by environmental threats and the negative health impacts of environmental degradation. These communities include, but are not limited to, low-income communities, communities of color, communities comprising members of tribal nations, and immigrant communities. Increased exposure to environmental pollutants, unsafe drinking water, and contaminated facilities/structures have contributed to poorer health outcomes for these communities. Structural inequalities that disadvantage certain individuals and groups, local and regional policies, zoning, code enforcement deficiencies, and lack of community engagement and advocacy are related to disproportionate environmental and social effects. The field of environmental justice is focused on addressing these disproportionate impacts and improving the wellness of all communities by bolstering community planning efforts, considering exposure to adverse environmental effects, increasing access to amenities and services, and promoting the fair treatment of all people regardless of their race, ethnicity, national origin, or income.

## REGULATORY FRAMEWORK

### STATE

---

#### SENATE BILL 1000

In 2016, the Senate passed Senate Bill 1000 (SB 1000), also known as The Planning for Healthy Communities Act, to amend Section 65302 of the Government Code. SB 1000 requires local California jurisdictions to prepare and maintain an Environmental Justice Element or environmental justice-related goals, policies, and implementation programs in their General Plan's other elements. SB 1000 outlines the approach to identifying disadvantaged communities (DACs), strategies to promote the protection of sensitive land uses within the State and simultaneously mandates that local jurisdictions address the needs of DACs. Through this bill, environmental justice is a mandated consideration in all local jurisdictions' land-use planning policies, regulations, and activities.

SB 1000 specifies seven topics that must be integrated into a stand-alone Environmental Justice Element or through integrated Environmental Justice goals:

1. Pollution Exposure and Air Quality
2. Public Facilities
3. Food Access
4. Safe and Sanitary Homes
5. Physical Activity
6. Community Engagement
7. Address the Needs of Disadvantaged Communities

The key findings within the City of Hawthorne for each of these topics are summarized in section C of this report and more detailed existing conditions are included in section D.

### **SENATE BILL 535**

In 2012, the Legislature passed SB 535, adding Sections 39711, 39713, 39715, 39721, and 39723 to the Health and Safety Code. SB 535 directs 25% of the proceeds from the Greenhouse Gas Reduction Fund (established by the California Global Warming Solutions Act of 2006 AB 52's cap and trade program) to projects that provide a benefit to DACs.

### **ASSEMBLY BILL 1550**

In 2016, the Legislature passed AB 1550, to amend Section 39713 of the Health and Safety Code. AB 1550 amended SB 535 to require all GGRF investments that benefit DACs to also be located within those communities. The law also requires that an additional 10% of the fund be dedicated to low-income households and communities, of which 5% is reserved for low-income households and communities living within a half-mile of a designated DAC.

### **SENATE BILL 673**

In 2015, the Senate passed SB 673, to add Sections 25200.21 and 25200.23 to the Health and Safety Code. SB 673 directs the Department of Toxic Substances Control (DTSC) to include criteria such as cumulative impact and neighborhood vulnerability when issuing or renewing hazardous waste facility permits. The law provides the DTSC with an opportunity to use tools such as CalEnviroScreen (CES), an Internet-based mapping tool described below that helps jurisdictions identify DACs, when making decisions on hazardous waste permitting.

### **ASSEMBLY BILL 523**

In 2017, the Legislature passed AB 523, to amend Section 25711.5 of, and to add and repeal Section 25711.6 of, the Public Resources Code. AB 523 allocates at least 25% of the Electric Program Investment Charge (EPIC) funds administered by the California Energy Commission (CEC) to support technology demonstration and deployment projects located in and benefiting "disadvantaged communities," and dedicates at least 10% of the fund to activities located in and benefiting "low-income" communities as defined by AB 1550.

### **SENATE BILL 43**

In 2013, the Senate passed SB 43, to add and repeal Chapter 7.6 (commencing with Section 2831) of Part 2 of Division 1 of the Public Utilities Code. SB 43 establishes the Green Tariff Shared Renewables program, administered by the California Public Utilities Commission (CPUC), which enables utility customers to meet their energy generation needs through offsite generation of renewable energy projects. The program requires 100 MW of renewable energy projects to be sited in the top 20% of CES scores based on each investor-owned utility (IOU) service territory.

### **ASSEMBLY BILL 2722**

In 2016, legislature passed AB 2722, to add Part 4 (commencing with Section 75240) to Division 44 of the Public Resources Code. AB 2722 requires the California Strategic Growth Council to award competitive grants to specified eligible entities for the development and implementation of neighborhood-level transformative climate community plans that include greenhouse gas emissions reduction projects that provide local economic, environmental, and health benefits to DACs. AB 2722 created the Transformative Climate Communities (TCC) program administered through the California Strategic Growth Council (SGC). The TCC is a GGRF-funded program that supports innovative, comprehensive, and community-led plans that reduce pollution and achieve multiple co-benefits at the neighborhood level.

## CALIFORNIA DEPARTMENT OF TRANSPORTATION'S ACTIVE TRANSPORTATION PROGRAM (ATP)

The California Department of Transportation (CalTrans) Active Transportation Program (ATP) aims to enhance public health and advance California's climate goals by increasing safety and mobility for non-motorized active transportation such as biking and walking. ATP projects in "disadvantaged communities" (defined as census tracts within the top 25% of CES scores along with several other options) are allocated 25% of program funds, while an additional 2% is set aside to fund active transportation planning in DACs.

The City of Hawthorne received funding through the Southern California Association of Governments' (SCAG) Sustainability Grant program to prepare the *Crenshaw Station Active Transportation Plan, Neighborhood Electric and Electric Vehicle Strategies, and Overlay Zone* in June 2015.

## LOCAL

---

### CITY OF HAWTHORNE GENERAL PLAN

A variety of policies contained in the existing City of Hawthorne General Plan support DACs and environmental justice issues through citywide improvements that provide equitable access to facilities and services, transportation network improvements, parks and recreation opportunities, and promoting air and water quality.

Specific goals included within the General Plan that are most related to the topics of environmental justice and DACs include:

#### **LAND USE ELEMENT**

- GOAL 1: The city shall expand current efforts to attract and enhance commercial development.
- POLICY 1.4: The City shall support and encourage the rehabilitation or renovation of existing buildings or structures or the conversion of obsolete and/or chronically vacant storefronts from their original or most recent use to a new compatible, economically viable, and sustainable use.
- POLICY 1.5: The City shall continue to explore and adopt ways to use its assets to promote commercial activity within the city.
- GOAL 2: Every effort shall be made to ensure that both existing and future development will be and will remain compatible with surrounding desirable uses.
- POLICY 2.4: Retention of buffer zones to protect adjacent areas of freeway corridor from noise, exhaust, and light shall be encouraged.
- GOAL 3: A sound local economy which attracts investment, increases the tax base, creates employment opportunities for Hawthorne residents and generates public revenues.
- POLICY 3.7: The retention and expansion of small businesses shall be encouraged through continued changes in zoning regulations.

#### **CIRCULATION ELEMENT**

- POLICY 3.7: The retention and expansion of small businesses shall be encouraged through continued changes in zoning regulations.

- POLICY 1.7: The City shall encourage that adequate mitigation measures be pursued with regard to the potential noise and safety impacts associated with traffic near Hawthorne Municipal Airport.
- POLICY 1.8: The City shall encourage the maintenance and improvement, where appropriate, of the safe and convenient bicycle and pedestrian movement through the City.
- POLICY 1.13: The City shall review and consider the designation of additional bike-lanes where appropriate.
- POLICY 1.16: The City shall review and encourage the use of public transportation through the expansion of local and regional bus systems; encouragement of vanpooling, carpooling, jitneys, and the new light-rail transit system; and consideration of staggered work hours for local businesses.
- POLICY 1.26: The City is encouraged to design arterial streets as complete streets, balancing the needs, safety, and use of public right-of-way for all users of all abilities.
- POLICY 1.27: The City shall identify bicycle corridors within City limits and adjacent municipalities in order to integrate into the regional bicycle plan and connect resident to activity centers.

#### ***CONSERVATION ELEMENT***

- GOAL 1.0: Maintain a safe, clean drinking water supply capable of adequately meeting normal and emergency demands in the city through sound conservation and management practice.
- GOAL 2.0: Protect and upgrade our air resources so that ambient air quality standards are met on a consistent basis.
- POLICY 2.2: The City shall encourage alternate modes of transportation including vanpooling, carpooling, bicycling and mass transit use.
- POLICY 2.3: The City shall encourage development plans that are less automobile oriented.
- POLICY 2.4: The City shall promote an integration of land uses so that alternative modes of transportation such as walking and bicycling, can be utilized for movement between uses.
- POLICY 2.5: The City shall adopt a citywide plan of bicycle routes, and will incorporate bicycle facilities at park-and-ride locations and, where appropriate, along the bicycle routes.
- GOAL 3.0: Encourage the efficient use of energy and promote the conservation of non-renewable energy sources.
- POLICY 3.4: The City shall cooperate with and support the efforts of the Public Utilities Commission in making energy affordable and accessible for everyone.

#### ***ECONOMIC DEVELOPMENT ELEMENT***

- POLICY 1.3: Revitalization of declining commercial and industrial areas through new development, rehabilitation and other means that may be available shall be considered and, if deemed advantageous, implemented.
- POLICY 8.2: To enhance the quality of life in the City, which is an important marketing asset for business attraction, the City shall develop a plan to create publicly accessible

and useable open space throughout the city, but most especially in areas where open space is scarce or non-existent.

### ***HOUSING ELEMENT***

- GOAL 1.0: Provide a variety of types and adequate supply of housing to meet the existing and future needs of the community.
- POLICY 1.2: Preserve the affordability of assisted rental projects in the City.
- GOAL 2.0: Provide opportunity for increasing the supply of affordable housing in the City, with special emphasis on housing for special needs groups.
- POLICY 3.2: Encourage the use of innovative construction and design techniques to reduce housing costs.
- POLICY 3.4: Review ways to provide zoning, land division, and construction incentives to reduce the cost of new and rehabilitated housing.
- POLICY 4.1: Implement land use policies that allow for a range of residential densities.
- GOAL 5.0: Promote equal opportunity for all residents to reside in the housing of their choice.

### ***NOISE ELEMENT***

- GOAL 1.0: Provide for the reduction of noise where the noise environment is unacceptable.
- GOAL 2.0: Protect and maintain those areas having acceptable noise environments.
- GOAL 3.0: Provide sufficient information concerning the community noise levels so that noise can be objectively considered in land use planning decisions.

### ***OPEN SPACE ELEMENT***

- GOAL 1.0: Encourage the development of a variety of recreational opportunities accessible to the public.
- POLICY 1.5: The City shall maintain ongoing program of assessing and providing for open space and recreational needs in multiple family residential zones.
- POLICY 1.12: The City shall assess feasibility and development of a city-wide bicycle trail system which should be tied into regional paths.

### ***SAFETY ELEMENT***

- GOAL 1.0: Minimize the hazards to public health, safety, and welfare and prevent loss of life, bodily injury, and property damage resulting from natural and man-made occurrences.
- POLICY 1.7: The City shall strongly encourage Neighborhood Watch and other similar public-involvement, crime-prevention programs.

## B. DISADVANTAGED COMMUNITIES

The term 'disadvantaged community' (abbreviated as DAC) is a broad designation that includes any community disproportionately affected by environmental, health, and other burdens or low-income areas disproportionately affected by environmental pollution and other hazards. In relation to environmental justice, DACs are typically those communities that disproportionately face the burdens of environmental hazards. Government Code Section 65302, as amended by SB 1000, defines a DAC as follows:

*"...an area identified by the California Environmental Protection Agency (CalEPA) pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation."*

In February 2017, the Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), released Version 3.0 of the California Communities Environmental Health Screening Tool (CalEnviroScreen). CalEnviroScreen identifies communities that are disproportionately affected by environmental hazards. It is a science-based tool that uses existing environmental, health, and socioeconomic data to rank all census tracts in California with a CES score. CalEPA designates the tracts with a CES score in the top 25 percentile as DACs. In June 2018, OEHHA updated CalEnviroScreen 3.0 to address a minor flaw in the software program algorithm used to calculate overall census tract scores. Additionally, on February 22, 2021, OEHHA released the draft CalEnviroScreen 4.0 for public comment. Since it is still in draft form, the results of Version 3.0 are used in this analysis.

Although the scores and DAC status of specific census tracts may change over time (for example, as CalEnviroScreen is periodically updated), the goals, policies, and programs identified in the Environmental Justice element generally apply citywide. Therefore, while certain census tracts may shift in their identification as a DAC, the City's commitment to promoting environmental justice throughout the community remains.

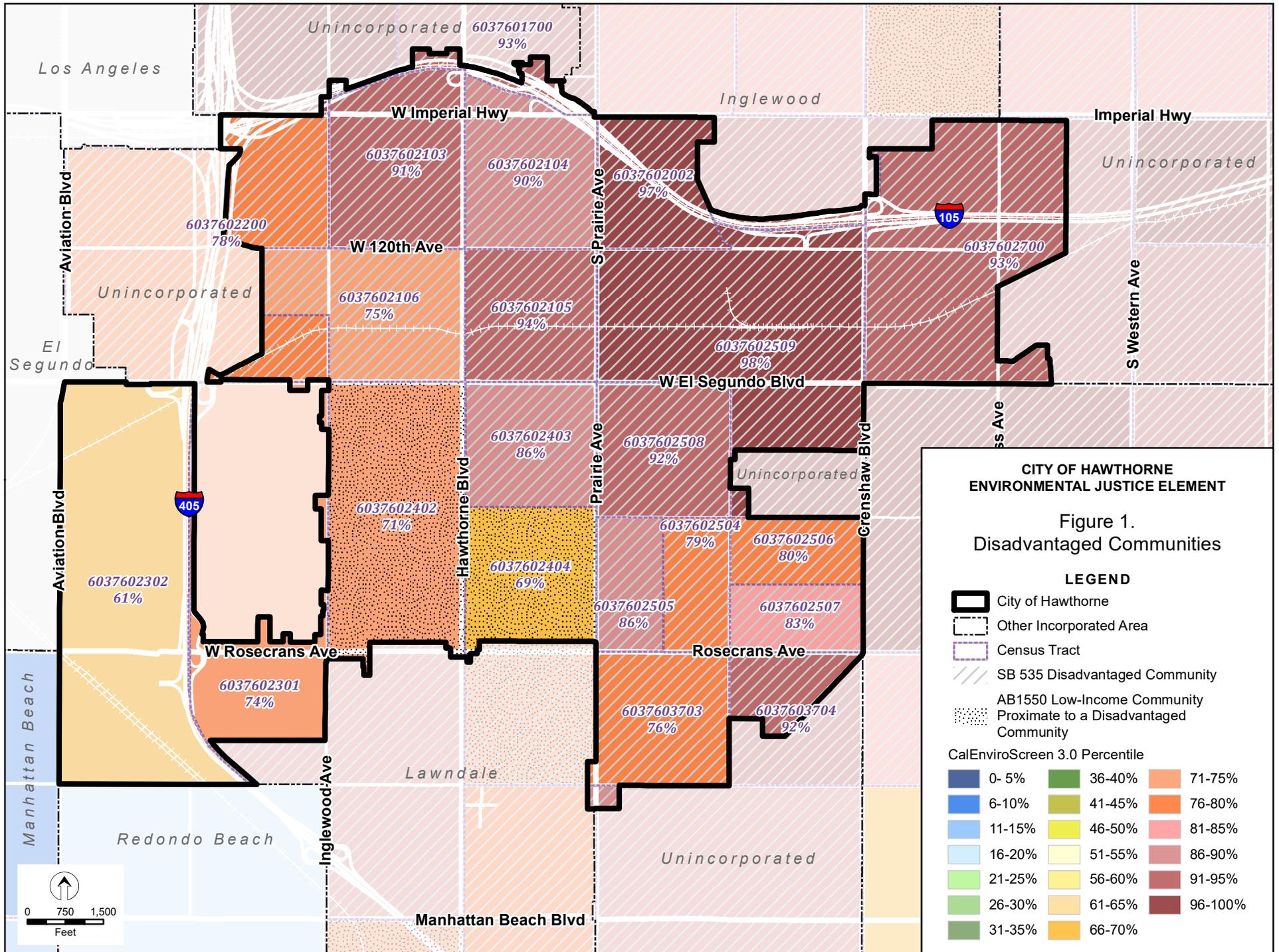
Based on CalEnviroScreen 3.0, 17 out of 21 census tracts within the City are DACs, meaning that their CES score is in the top 25 percentile, as illustrated in Figure 1. Low-income communities disproportionately affected by environmental concerns are also considered an "environmental justice community". These communities can be identified using the California Air Resources Board (CARB) Priority Populations Mapping Tool, which identifies low-income communities located within ½ mile of a CalEPA-identified disadvantaged community. Based on this assessment, two more census tracts (beyond the 17 identified via CalEnviroScreen 3.0) can be considered disadvantaged and are also shown in Figure 1.

Based on the methodology outlined above, as of mid-2021 the City of Hawthorne includes **19 census tracts (out of 21) that are considered disadvantaged communities**. These areas represent approximately 84% of the City acreage, 90% of the City's population, and 90% of the City's households.

To understand the existing health and socioeconomic conditions of each DAC, Table 1 lists the percentiles for sensitive population and socioeconomic factor indicators in the City by census tract. The 19 DAC census tracts are outlined with bold lines. The sensitive population indicators reflect the communities' health and the socioeconomic factor indicators describe educational attainment, income level, employment, and housing conditions and burden. For each indicator, scores of 75% or higher represent a high burden on the population. Out of the 19 DAC tracts, 17 are highly burdened in at least two indicators and have medium or high burdens in six or more of the eight indicators.



*This page is intentionally left blank.*



Sources: Los Angeles County, Cal OEHHA CalEnviroScreen 3.0. Map date: March 18, 2021.

*This page is intentionally left blank.*

**TABLE 1: POPULATION CHARACTERISTICS BY SENSITIVE POPULATION AND SOCIOECONOMIC FACTOR INDICATORS**

Indicator (%)	Census Tracts																				
	6017	6020.02	6021.03	6021.04	6021.05	6021.06	6022	6023.01	6023.02	6024.02	6024.03	6024.04	6025.04	6025.05	6025.06	6025.07	6025.08	6025.09	6027	6037.03	6037.04
<b>Sensitive Population Indicators</b>																					
Asthma	73	68	76	73	84	84	60	84	81	84	84	84	84	84	75	76	84	81	82	83	85
Low Birth Weight	88	90	78	66	95	83	71	54	27	53	87	40	59	87	69	97	76	63	92	77	81
Cardiovascular Disease	75	47	68	62	81	81	45	81	76	81	81	81	81	81	62	64	81	74	64	79	77
<b>Socioeconomic Factor Indicators</b>																					
Education	95	83	84	80	87	59	68	61	31	75	69	71	62	74	74	59	70	81	51	62	81
Linguistic Isolation	85	92	82	70	75	80	36	63	21	78	83	74	70	60	47	60	72	76	5	71	84
Poverty	85	74	74	78	85	58	70	29	14	68	76	66	78	86	77	78	64	68	37	10	80
Unemployment	35	87	60	58	34	56	41	50	25	50	65	55	58	76	66	68	18	21	96	19	62
Housing Burden	99	84	89	90	84	24	36	40	18	46	67	76	71	88	81	80	68	90	57	26	76
<b>Total Population Characteristics Score</b>	<b>92</b>	<b>89</b>	<b>88</b>	<b>81</b>	<b>92</b>	<b>79</b>	<b>56</b>	<b>66</b>	<b>37</b>	<b>77</b>	<b>90</b>	<b>78</b>	<b>81</b>	<b>93</b>	<b>78</b>	<b>86</b>	<b>79</b>	<b>80</b>	<b>71</b>	<b>63</b>	<b>91</b>
<b>CES 3.0 Score</b>	<b>93</b>	<b>97</b>	<b>91</b>	<b>90</b>	<b>94</b>	<b>75</b>	<b>78</b>	<b>74</b>	<b>61</b>	<b>71</b>	<b>86</b>	<b>69</b>	<b>79</b>	<b>86</b>	<b>80</b>	<b>83</b>	<b>92</b>	<b>98</b>	<b>93</b>	<b>76</b>	<b>92</b>

Source: California Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0

Note: DAC census tracts are outlined in bold

**Color Key**

- High Burden: 75.0 - 100.0%
- Medium Burden: 25.0 - 74.9%
- Low Burden: 0.0 - 24.9%

*This page is intentionally left blank.*

## C. KEY FINDINGS & RECOMMENDED NEXT STEPS

The key findings for the seven required Environmental Justice topics are summarized below with recommended next steps. More detail on existing conditions included in section D of this report.

### 1. POLLUTION EXPOSURE AND AIR QUALITY

#### Key Findings:

The various forms and sources of air and water pollution and hazardous waste often disproportionately affect DACs. This is typically due to the existence and relative concentration of pollution-emitting sources close to the communities. There are 12 CES pollution indicators. All census tracts (regardless of their status as a DAC or not) have medium or high burdens in at least seven out of the 12 indicators, including high burdens in particulate matter 2.5 and toxic releases and medium or high burdens in ozone, diesel particulate matter, traffic, and drinking water.

There are 54 hazardous waste sites in the City that are generally clustered in the northeastern area, predominately occupying locations within two DAC tracts. These two DACs are home to approximately half of the City's hazardous waste sites.

#### Next Steps:

- Evaluate sources of pollution with medium and high burdens, especially in DACs.
- Recognize that half of the City's hazardous waste sites are primarily within two DACs and create policies to address unique issues related to these sites.

### 2. PUBLIC FACILITIES

#### Key Findings:

Access and availability of public facilities is an aspect of the built environment that may disproportionately limit the opportunities of DACs. There are three Los Angeles County fire stations evenly dispersed within City boundaries and a fourth just outside of the southern boundary. Two of the fire stations located within the City are within DACs. There is one City of Hawthorne police station and one medical center, both centrally located in the City, which are also within DACs. Several bus lines provide citywide service and there are three Metro stations within City borders. Two of them are within a DAC.

City Hall is in a DAC and centrally located at Hawthorne Blvd. just north of W. El Segundo Blvd. Twelve out of the City's 14 parks and recreation facilities are evenly distributed in DACs throughout the community, though there are 10 DACs notably void of parks. There are two County libraries within City boundaries and two more just outside of the southern and southeastern borders. The Hawthorne Library is centrally located next to City Hall. Daycares are distributed throughout the City, although they are mostly clustered in the central portion.

**Next Steps:**

- Evaluate opportunities to address areas of the City, especially DACs, which have limited access to park or open space facilities.

### 3. FOOD ACCESS

**Key Findings:**

Feeding America, the nation's largest domestic hunger-relief organization, has released a report entitled *Map the Meal Gap* for ten consecutive years to offer insights on how food insecurity and food costs vary at the county and congressional district level. All census tracts in Hawthorne are within the 43<sup>rd</sup> Congressional District. The food insecurity rate in the district is 11.6%, which is slightly higher than County (11.4%), State (10.8%), and national (11.5%) rates.

Four supermarkets, nine specialty food stores, and 12 convenience stores lie within City boundaries. There are no supermarkets in the eastern half of the City. The specialty food stores and convenience stores are fairly well distributed throughout the City, however, there are more in the central portion.

The lack of proximate grocery stores has the greatest affect in locations where residences do not own vehicles or have sufficient access to transit. All census tracts have at least some households without access to a vehicle. Nine census tracts have a higher rate of "no vehicle access" than the citywide rate of 7.5%. One DAC (located in the southeastern portion of the City) has more than double the rate of no vehicle access as the City overall, with two other DACs (also located in the southeastern portion of the City) exhibiting similar patterns of limited vehicle access.

**Next Steps:**

- Explore ways to expand healthy eating options in the eastern half of the City.
- Expand walkable/bikeable healthy food options in census tracts, especially DACs, with higher rates of "no vehicle access" or limited vehicle access.

### 4. SAFE AND SANITARY HOMES

**Key Findings:**

The condition of the housing stock in a DAC may have negative impacts on the well-being of its residents. Housing conditions are considered "substandard" when conditions are found to be below the minimum standard of living conditions defined in the California Health and Safety Code. In addition to structural deficiencies and standards, the lack of infrastructure and utilities often serves as an indicator for substandard conditions. While most homes have access to basic facilities like bathrooms and kitchens, 0.5% of the occupied housing units in Hawthorne lack complete plumbing facilities, and 2.9% lack complete kitchen facilities. About 2.6% of the units have no telephone service available.

Overcrowding within a housing unit is a primary cause of unsafe housing conditions. The City has a higher overcrowding rate (17.7%) than the County (11.3%). Eleven DAC census tracts experienced overcrowding at a higher rate than at the citywide rate. Two DAC census tracts,

one located in the City's northwest area and the other in the southeast area, have the highest overcrowding rates.

The City has a much higher rate of renter-occupied housing units (72.7%) than the County (54.2%). This is significant because renters tend to have lower income than homeowners and spend a higher percentage of their income on housing. Traditionally, housing affordability has been assessed by the "maximum rent standard" which proposes households that spend more than 30% of income on housing costs may be "cost burdened". The City has about the same percentage of renter-occupied cost burdened households (57.7%) as the County (57.6%). Eleven DAC census tracts experienced rental cost burden at a higher rate than at the citywide rate. Three DAC census tracts, two located in the City's northwest area and the other in the northcentral area, have the highest rental cost burden in the City. A higher percentage of renter-occupied units are in the low to extremely low-income levels (75.4% combined) compared to owner-occupied units (35.6% combined), demonstrating a higher housing cost burden for renters.

The City has a slightly higher percentage of owner-occupied cost burdened households (44.5%) than the County (43.5%). Fifteen DAC census tracts experienced ownership cost burden at a higher rate than at the citywide rate. Two DAC census tracts, one located in the City's central area and the other in the southern area, have the highest ownership cost burden in the City.

#### **Next Steps:**

- Prioritize the safety and sanitation of housing stock to create proper living conditions for all residents, especially those living in DACs.
- Explore policies to alleviate substandard and overcrowding conditions in identified DACs.
- Consider programs to expand homeownership and help reduce the number of cost burdened households.

## **5. PHYSICAL ACTIVITY**

#### **Key Findings:**

Residents of DACs are often more likely to experience negative health outcomes. The built environment in DACs can often be limited by land use planning and lack of investment, leaving less opportunities for formal and informal physical activity. Data about active transportation use during daily commutes is one indicator of physical activity levels. Active transportation modes include walking and biking, while powered transportation modes include driving alone, carpooling, public transit, and taxicab, motorcycle, or other means.

Overall, the City of Hawthorne uses active transportation modes less (2.2%) than the County (3.5%). Only 1.7% of Hawthorne commuters reported walking to work and 0.5% reported riding a bike to work. Most Hawthorne commuters drove to work alone (75.1%). Three DAC tracts, two located in the southeastern area of the City and one in the northwestern, have higher rates of commuters who walk and/or bike to work than both the City and County overall. While these tracts do not have the highest overall rate of no vehicle access, they do have a higher rate of no vehicle access than the City.

As previously mentioned, twelve out of the City's 14 parks and recreation facilities are evenly distributed in DACs throughout the community, though there are 10 DACs notably void of parks. Twelve out of 19 DACs are within a ¼-mile or ½-mile walking distance of multiple parks located either within or adjacent to the City, although portions of seven DACs are not.

### **Next Steps:**

- Prioritize increasing opportunities for physical activity within DACs.
- Explore the reasons why some DAC tracts have higher rates of commuters who walk and/or bike to work and if there are actions that can be implemented in other DACs to increase their rates.
- Look into opportunities to increase the number of parks within DACs that do not have any and/or increase the numbers of parks within a ¼-mile or ½-mile walking distance of DACs.

## **6. COMMUNITY ENGAGEMENT**

### **Key Findings:**

An important aspect of planning for environmental justice is the development of effective policies and programs that enable all residents to participate in local decision making. DACs can often be excluded from decision-making when officials and policies do not focus on involving these communities in a strategic manner. Section D of this report outlines the recommended approach to community engagement in development of the Environmental Justice Element.

It is important to start with a baseline analysis of a community's existing level of civic engagement to estimate how likely residents are to participate. The primary means of measuring a community's level of civic engagement is the assessment of voter participation. While Hawthorne had a lower voter registration rate (88.2%) than the County (95.1%) for the 2020 presidential election, the City had a slightly higher voter turnout rate (75.3% vs. 74.1%). Certain demographic categories can also help predict a community's likely level of civic engagement.

Age distribution can help predict the likelihood of a community participating in civic activities and identify constraints associated with engaging different members of the community. Hawthorne's residents are younger than the County as a whole. Only two census tracts (both DACs) are older than the County as a whole, while the remaining DAC tracts are younger than the County as a whole. The City's two tracts that do not qualify as a DAC are both younger compared to the County.

Language is a critical signifier of a population's likely participation in civic activities. Non-native English speakers, and especially those individuals with limited English fluency, are less likely to participate in civic activities. The majority of households in Hawthorne (60.8%) speak a language other than English, an even higher percentage than households in the County (56.6%). More than half of households in 15 census tracts speak a language other than English, and the most common language spoken in Spanish.

Educational attainment is a strong signifier of a population's likely participation in civic activities. Higher educational attainment generally correlates with increased civic

participation. More of Hawthorne’s residents and the census tracts’ populations have a high school diploma or equivalent and at least some college or an Associate’s degree than on the countywide level. Only two census tracts have a higher percentage of residents with a Bachelor’s degree or higher than the County, however. Within DACs, residents who did not complete high school or only obtained a high school degree are of greatest concern. There is one DAC in the northern portion of the City where the highest percentage of residents (38%) have less than a high school education.

Race and ethnicity are important predictors of civic engagement, and numerous studies have shown that whites are more likely to be civically engaged than other groups. Additionally, it is essential to consider the racial make-up of a community when evaluating environmental justice because race is known to correlate with disproportionate environmental burdens. Similar to the County, the City of Hawthorne is majority White, although by a smaller percentage. There is a larger Black or African American population as well as a Hispanic or Latino population in the City than in the County. Fourteen census tracts are more than 50% Hispanic or Latino, and all but one of these are DACs. Six census tracts are majority Black or African American (all DACs), and three census tracts are majority some other race (also all DACs).

**Next Steps:**

- Prioritize engaging DACs in the development of environmental justice plans and programs.
- Focus on methods to effectively engage younger residents.
- Identify ways to engage members of the community who do not speak English.
- Make materials understandable to residents who have less than a high school education.
- Tailor activities and the venues where they take place to accommodate the cultural preferences of different racial/ethnic groups.

## **7. IMPROVEMENTS AND PROGRAMS ADDRESSING THE NEEDS OF DACS**

**Key Findings:**

An integral component of Environmental Justice planning is proactively prioritizing projects and investments that directly benefit DACs. These communities may have specific needs that are distinct from those of the greater community, which may require taking special actions to help improve existing conditions in DACs.

The UC Davis Center for Regional Change and Rabobank, N.A. partnered to develop the Regional Opportunity Index (ROI) intended to help understand social and economic opportunity in California’s communities. The goal of the ROI is to help target resources and policies toward people and places with the greatest need to foster thriving communities. The tool analyzes different indicators within six topics including civic life, health/environment, mobility/transportation, housing, economy, and education. There are two types of indicators: people-based and place-based. The specific indicators are discussed in more detail in Section D of this report.

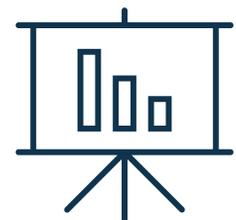
The tool ranks each census tract in terms of highest opportunity to lowest opportunity levels. Highest opportunity tracts indicate that conditions are good across the indicators, while lowest opportunity tracts indicate that improvements need to be made. Hawthorne has mostly lower-opportunity census tracts throughout the City, with place-based opportunities generally scoring better than people-based opportunities.

In terms of **people-based** assets, there are 14 DAC census tracts, mostly located in areas east of Hawthorne Blvd., with low levels of opportunity. Only one of these tracts has one average or higher opportunity (economy). The remaining tracts only have lower opportunities across all six ROI topics.

In terms of **place-based** assets, there are eight DAC census tracts, evenly distributed throughout the City, with low levels of opportunity. One tract has the lowest level of opportunity with challenges across all five applicable ROI topics (mobility/transportation is not considered in the place-based analysis). Civic life (comprised of neighborhood stability and US citizenship) and housing (comprised of affordability and adequacy) are two recurring low-opportunity topics across the other seven census tracts.

**Next Steps:**

- Consider the ROI topics and indicators within identified DAC census tracts when reviewing and establishing policies and programs.
- Prioritize identified DACs for public investments, public services, and/or increased environmental protections.



## D. ENVIRONMENTAL JUSTICE ISSUES

This section includes baseline conditions for the seven topics required to be addressed within the City's General Plan in accordance with Senate Bill 1000.

### 1. POLLUTION EXPOSURE AND AIR QUALITY

The various forms and sources of air and water pollution and hazardous waste often disproportionately affect DACs. This is typically due to the existence and relative concentration of pollution-emitting sources close to the communities. Disproportionate exposure to pollutants is linked to variety of negative health impacts, including but not limited to, asthma, cardiovascular diseases, cancer, and other potentially fatal conditions. There are 12 CES pollution indicators, and the percentile of pollution burden for each census tract are listed in Table 2.

Scores of 75% or higher represent a high pollution burden. All census tracts (regardless of their status as a DAC or not) have medium or high burdens in at least seven out of the 12 indicators, including high burdens in particulate matter 2.5 and toxic releases and medium or high burdens in ozone, diesel particulate matter, traffic, and drinking water.

Several census tracts have values of zero (0) for some of the exposure and environmental effects indicators. This typically implies that monitoring or reporting was conducted, but no impacts were present. For many exposure and environmental effects indicators, this means that no facilities or sites were located within 1,000 meters of a populated area of the tract. Values of zero are not included in the percentile calculation, which would give the false impression that an impact is present.



*This page is intentionally left blank.*

**TABLE 2: POLLUTION BURDEN BY POLLUTION INDICATORS**

Indicator (%)	Census Tracts																				
	6017	6020.02	6021.03	6021.04	6021.05	6021.06	6022	6023.01	6023.02	6024.02	6024.03	6024.04	6025.04	6025.05	6025.06	6025.07	6025.08	6025.09	6027	6037.03	6037.04
<b>Exposure Indicators</b>																					
Ozone	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Particulate Matter 2.5	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Diesel Particulate Matter	93	73	88	88	86	86	86	86	86	86	86	86	72	73	72	72	73	72	68	72	72
Pesticides	62	55	49	44	7	0	4	0	0	0	0	0	0	0	7	8	12	51	0	75	75
Toxic Releases	79	80	79	80	80	81	79	82	83	81	81	80	80	80	80	80	80	80	80	81	81
Traffic	96	97	88	91	68	60	91	98	96	63	69	69	82	80	54	69	82	94	93	79	71
Drinking Water	26	38	41	41	34	42	42	39	26	34	34	34	26	40	26	26	40	38	40	37	26
<b>Environmental Effects Indicators</b>																					
Cleanup Sites	11	57	50	61	76	50	63	42	74	35	60	28	33	28	45	19	86	96	92	0	0
Groundwater Threats	36	71	40	37	69	38	91	58	95	29	63	2	14	0	68	72	88	97	99	0	70
Hazardous Waste	0	70	9	19	31	0	88	46	93	16	31	9	26	16	28	10	75	89	87	9	10
Impaired Waters	72	72	0	72	72	0	0	0	0	0	0	0	72	72	72	72	72	72	72	72	72
Solid Waste	9	0	33	0	0	20	50	0	9	0	0	9	9	9	0	0	0	57	70	50	9
<b>Total Pollution Characteristics Score</b>	<b>82</b>	<b>94</b>	<b>80</b>	<b>87</b>	<b>83</b>	<b>57</b>	<b>91</b>	<b>74</b>	<b>88</b>	<b>51</b>	<b>66</b>	<b>46</b>	<b>63</b>	<b>61</b>	<b>68</b>	<b>65</b>	<b>92</b>	<b>99</b>	<b>97</b>	<b>80</b>	<b>80</b>
<b>CES 3.0 Score</b>	<b>93</b>	<b>97</b>	<b>91</b>	<b>90</b>	<b>94</b>	<b>75</b>	<b>78</b>	<b>74</b>	<b>61</b>	<b>71</b>	<b>86</b>	<b>69</b>	<b>79</b>	<b>86</b>	<b>80</b>	<b>83</b>	<b>92</b>	<b>98</b>	<b>93</b>	<b>76</b>	<b>92</b>

Source: California Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0  
 Note: DAC census tracts are outlined in bold

**Color Key**

- High Burden: 75.0 - 100.0%
- Medium Burden: 25.0 - 74.9%
- Low Burden: 0.0 - 24.9%

*This page is intentionally left blank.*

## HAZARDOUS MATERIALS AND TOXICS

There are 54 hazardous waste sites in the City of Hawthorne that are currently under evaluation or amid cleanup, as detailed in Table 3. These sites are generally clustered in the northeastern portion of the City, predominately occupying locations within DAC tracts 6025.09 (16 sites) and 6027 (12 sites). These two DACs are home to approximately half of the City's hazardous waste sites, as illustrated in Figure 2.

**TABLE 3: HAZARDOUS MATERIALS AND TOXICS SITES**

MAP LABEL	NAME	PROJECT TYPE/ ACTIVITY	ADDRESS	CENSUS TRACT
<b>ENVIROSTOR SITES<sup>1</sup></b>				
A	Cockatoo School Site	School Investigation	Hawthorne Blvd/ Imperial Highway	<b>6021.04</b>
B	Bud Carson Elementary School	School Investigation	13929 Yukon Dr.	<b>6025.04</b>
C	Dana Middle School	School Investigation	13500 Aviation Blvd.	6023.02
D	El Segundo Crenshaw Co.	Evaluation	12801-12851 Crenshaw Blvd.	<b>6025.09</b>
E	Graner Oil Co.	Evaluation	4880 & 4910 W. Rosecrans Ave.	6023.01
F	Hawthorne Municipal Airport	Military Evaluation	12101 Crenshaw Blvd.	<b>6025.09</b>
G	Henkel Corporation	Corrective Action	12607 Cerise Ave.	<b>6025.09</b>
H	Jonas Salk Elementary	School Investigation	14600 Cerise Ave.	<b>6037.04</b>
I	Juan Cabrillo Elementary School	School Investigation	5309 W. 135th St.	6023.02
J	Kornblum Elementary School	School Cleanup	3620 W. El Segundo Blvd.	<b>6025.08</b>
K	LA County/Metro Line/Hawthorne Yard/Lawndale Army Missile Plant	Voluntary Cleanup/ Military Evaluation	14724 Aviation Blvd.	6023.02
L	Northrop Corporation Aircraft Division	Corrective Action	12540 S. Crenshaw	<b>6027</b>
M	Northrop Corporation Aircraft Division	Corrective Action	14525 Oceangate	<b>6025.09</b>
N	Northrop Corporation Aircraft Division	Corrective Action	2815 W. El Segundo	6023.01
O	Northrop Corp/Aircraft Div	Corrective Action	12921 S. Crenshaw	<b>6027</b>
P	Northrop Grumman Corp (Ap)	Corrective Action	12606 Cerise Ave.	<b>6025.09</b>
Q	Northrop Grumman Corp (Ec)	Corrective Action/ Tiered Permit/ Military Evaluation	1 Jack Northrop Ave.	<b>6025.09</b>
R	Northrop Grumman Corporation (Ae)	Corrective Action	3133 W. 131st St.	<b>6025.09</b>
S	Northrop Grumman Corp (Ag)	Corrective Action/ Tiered Permit	3201 W. 131st St	<b>6025.09</b>

<b>MAP LABEL</b>	<b>NAME</b>	<b>PROJECT TYPE/ACTIVITY</b>	<b>ADDRESS</b>	<b>CENSUS TRACT</b>
T	Prairie Vista Middle School	School Investigation	13600 Prairie Ave.	<b>6025.05</b>
U	Production Photo	Tiered Permit	4942 Rosecrans Ave.	6023.01
V	Solec International, Inc.	Tiered Permit	12533 Chadron Ave.	<b>6025.09</b>
W	Teledyne Relays	Corrective Action/ Tiered Permit	12525 Daphne Ave.	<b>6027</b>
X	UDT Sensors, Inc.	Tiered Permit	12525 Chadron Ave.	<b>6025.09</b>
Y	Zeneca/Castrol Tribol	Voluntary Cleanup	4801 & 4845 W. 147th St.	6023.01
<b>GEOTRACKER CLEANUP PROGRAM SITES<sup>2</sup></b>				
1	Aircraft Plating Company	Open - Inactive	12233 S. Prairie Ave.	<b>6021.05</b>
2	Anderson Saw Company	Open - Assessment & Interim Remedial Action	12715 Daphne Ave.	<b>6027</b>
3	Bria Graphics	Open - Assessment & Interim Remedial Action	12727 S. Van Ness Ave.	<b>6027</b>
4	Bria Graphics	Open - Assessment & Interim Remedial Action	2205 & 2215 W. El Segundo Blvd.	<b>6027</b>
5	Cap Barbell	Open - Assessment & Interim Remedial Action	12605 S. Van Ness Ave.	<b>6027</b>
6	Cherokee Chemical Company	Open - Assessment & Interim Remedial Action	12600 Daphne Ave.	<b>6027</b>
7	DSA Properties / Karney Management Company	Open - Site Assessment	3232 El Segundo Blvd.	<b>6025.09</b>
8	DSA Properties, L.P. Property	Open - Site Assessment	12901 Crenshaw Blvd.	<b>6025.09</b>
9	Former New Life Cleaners	Open - Inactive	12601 Hawthorne Blvd.	<b>6021.06</b>
10	Guggenheim Dental Supply	Open - Assessment & Interim Remedial Action	12619 S. Daphne Ave.	<b>6027</b>
11	Hawthorne Market	Open - Assessment & Interim Remedial Action	2701 W. El Segundo Blvd.	<b>6027</b>
12	Hibco Parking Lot Area	Open - Assessment & Interim Remedial Action	12620 Cerise Ave.	<b>6025.09</b>
13	Jonda Enterprises	Open - Inactive	207 W. El Segundo Blvd.	<b>6024.02</b>
14	Nissenson Realty Investment	Open - Assessment & Interim Remedial Action	12624 Daphne Ave.	<b>6027</b>
15	OSI Optoelectronics	Open - Site Assessment	12515 Chadron Ave.	<b>6025.09</b>

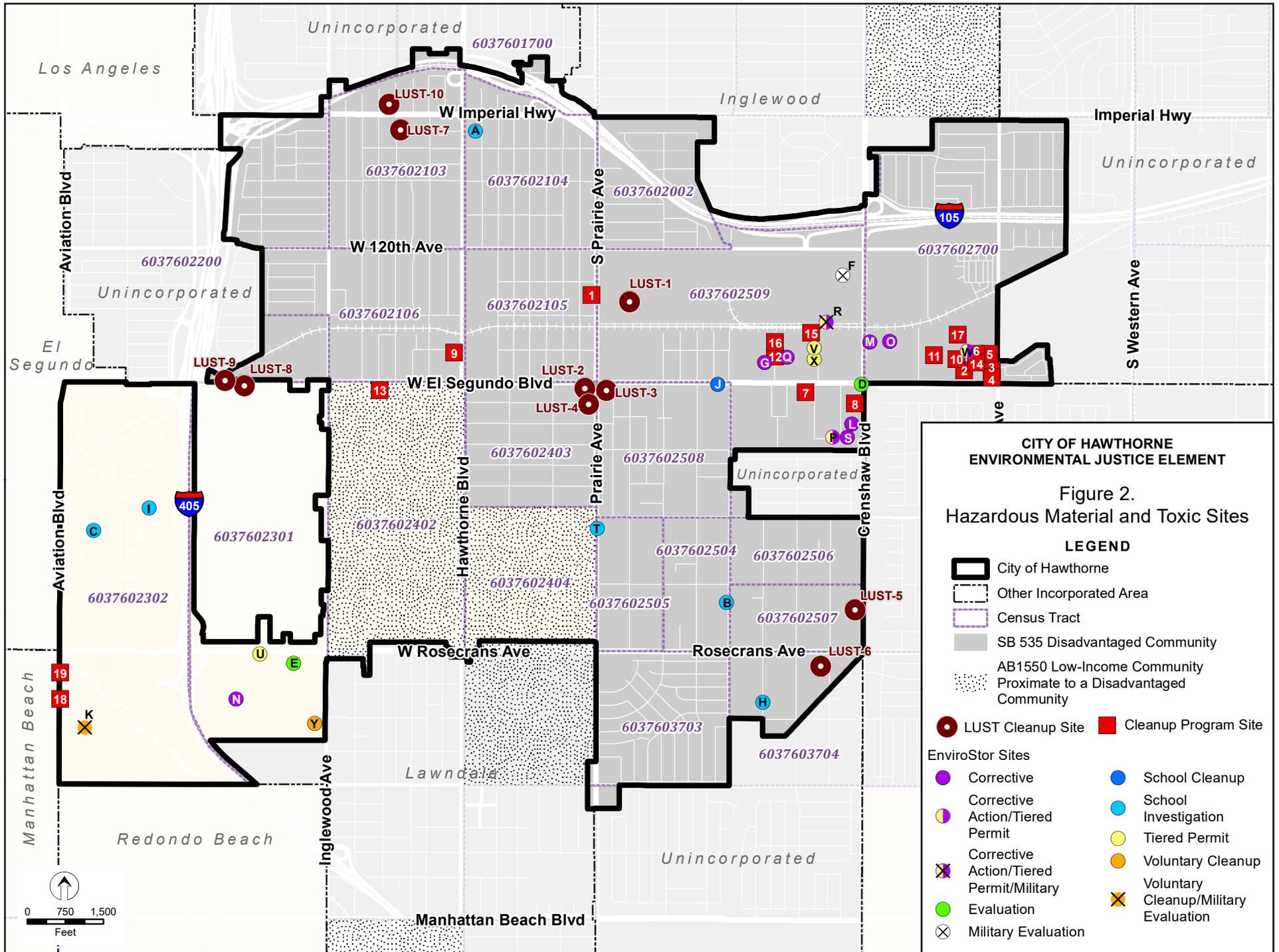
MAP LABEL	NAME	PROJECT TYPE/ ACTIVITY	ADDRESS	CENSUS TRACT
16	Pacific Bell	Open - Assessment & Interim Remedial Action	12520 Cerise Ave.	<b>6025.09</b>
17	Teledyne Relays	Open - Assessment & Interim Remedial Action	1635 E. 126th St.	<b>6027</b>
18	TRW Inc	Open - Inactive	14640 Aviation Blvd.	6023.02
19	TRW Space & Defense - Hawthorne	Open - Remediation	14520 Aviation Blvd.	6023.02
<b>LUST CLEANUP SITES<sup>2</sup></b>				
LUST-1	Rapid Gas Station #35 (Former Rapid Gas)	Open - Remediation	4558 Imperial Hwy. W.	<b>6025.09</b>
LUST-3	Mobil Station (Former)	Open - Verification Monitoring	12815 Prairie Ave. S.	<b>6024.03</b>
LUST-4	Thrifty Oil #253 (Former) Best Calif Gas	Open - Remediation	5038 W. El Segundo Blvd.	<b>6024.03</b>
LUST-5	Dolores S. Wolf Co Trust	Open - Eligible For Closure	14009 Crenshaw Blvd.	<b>6025.07</b>
LUST-6	Chadron Plant	Open - Remediation	14401 Chadron Ave. S.	<b>6037.04</b>
LUST-7	The Leung Trust	Open - Verification Monitoring	12845 Prairie Ave. S.	<b>6021.03</b>
LUST-8	Tosco - 76 Station #4046	Open - Remediation	12806 Prairie Ave. S.	6023.01
LUST-9	Caltrans	Open - Site Assessment	5155 W. El Segundo Blvd.	6023.01
LUST-10	Adolfo's Auto Repair	Open - Site Assessment	4601 Imperial Hwy W.	<b>6021.03</b>

1: Source: California Department of Toxic Substances Control, Envirostor Database, 2021.

2: Source: California Water Resources Control Board Geotracker Database, 2021.

Note: DACs are in bold text.

*This page is intentionally left blank.*



Sources: Los Angeles County, Cal OEHHA, California DTSC Envirostor, California SWRB GeoTracker.

*This page is intentionally left blank.*

## 2. PUBLIC FACILITIES

Access and availability of public facilities is an aspect of the built environment that may disproportionately limit the opportunities of DACs. If DACs have unequal access to public facilities, or if a city does not provide adequate facilities for public use, DACs may be limited in their ability to access necessary key resources. Limited access to resources as a result of inadequate public facilities can lead to reduced lifespan, poorer health outcomes, and diminished mental well-being. The adequate planning of parks and transportation infrastructure can help provide equal access to resources for all communities within a city. The location of public services and community facilities within and adjacent to the City of Hawthorne and with relationship to DACs and low-income communities are illustrated in Figures 3 and 4, respectively. The distribution of these facilities are summarized below.

### PUBLIC SERVICES

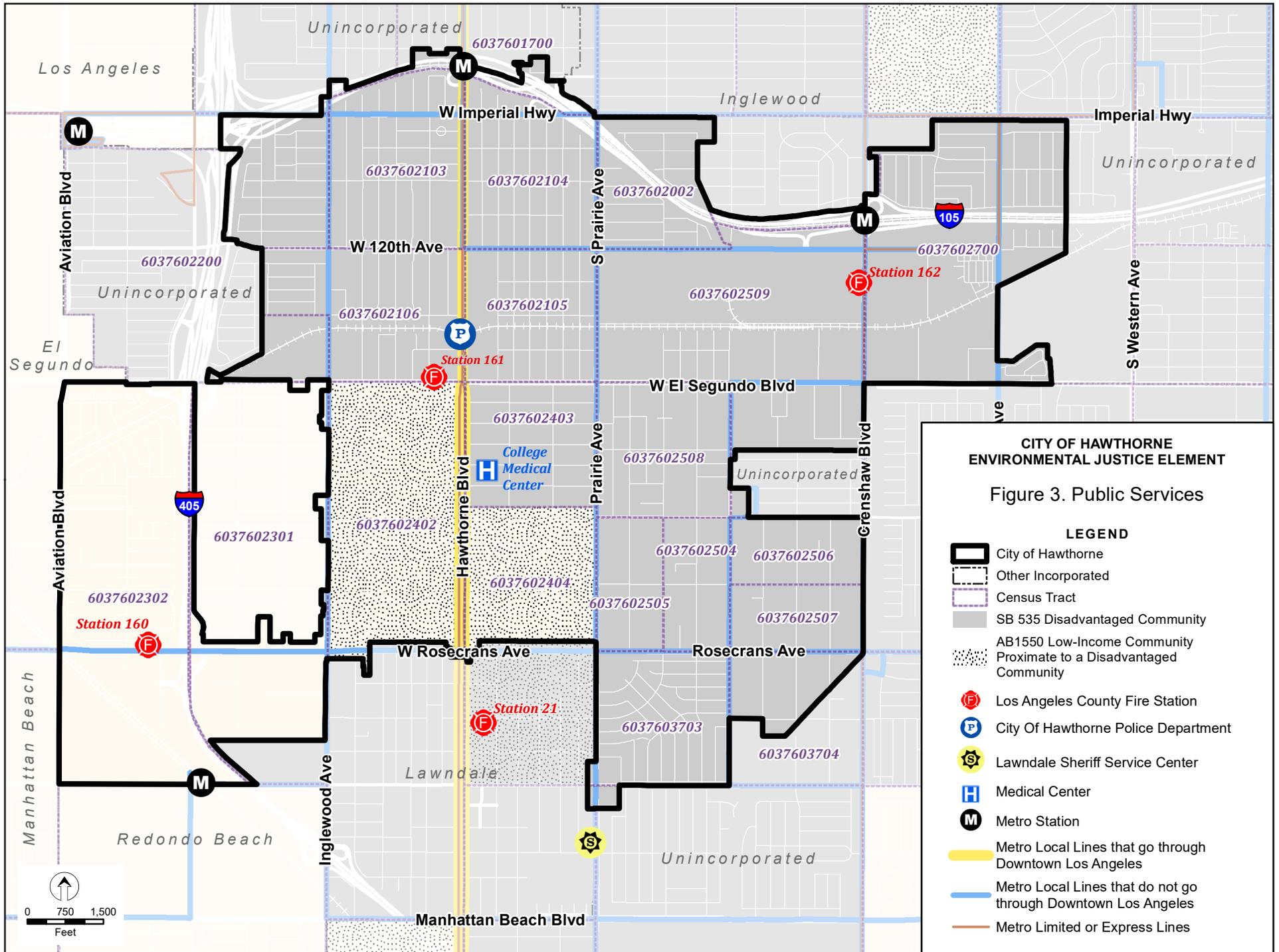
The location of transit stations and routes, medical centers, and emergency services and public safety facilities are shown in Figure 3. There are three Los Angeles County fire stations evenly dispersed within City boundaries and a fourth just outside of the southern boundary. Two of the fire stations are within DAC tracts (6021.03 and 6025.09). There is one City of Hawthorne police station which is centrally located in DAC tract 6021.06. There is one medical center centrally located in DAC tract 6024.03. Several bus lines provide citywide service and there are three Metro stations within City borders. Two of them are within DAC tracts (6017 and 6027).

### COMMUNITY FACILITIES

The location of city and county government buildings, parks, daycare centers, and libraries are shown in Figure 4. City Hall is centrally located in DAC tract 6021.06 at Hawthorne Blvd. just north of W. El Segundo Blvd. Twelve out of the City's 14 parks and recreation facilities are evenly distributed in DACs throughout the community, though there are 10 DACs notably void of parks, including tracts 6021.03, 6021.04, 6021.05, 6024.03, 6024.04, 6025.04, 6025.06, 6025.07, 6037.03, and 6037.04. There are two County libraries within City boundaries and two more just outside of the southern and southeastern borders. The Hawthorne Library is centrally located next to City Hall in DAC tract 6021.06. Daycares are evenly distributed throughout the City although they are mostly clustered in the central portion.

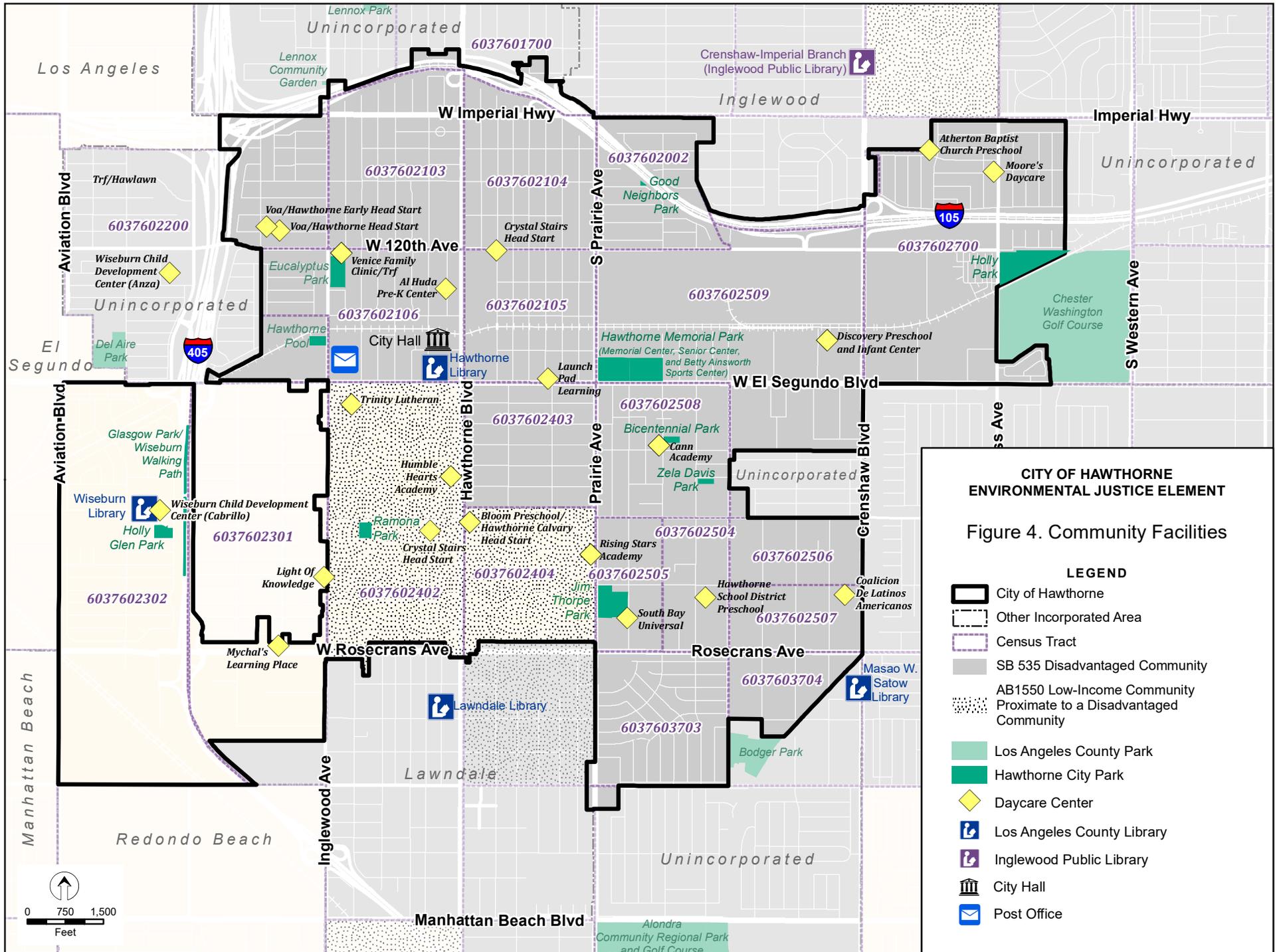


*This page is intentionally left blank.*



Sources: Los Angeles County, Cal OEHHA, LA Metro. Map date: March 22, 2021.

*This page is intentionally left blank.*



Sources: Los Angeles County, Cal OEHHA, California Department of Social Services. Map date: March

*This page is intentionally left blank.*

### 3. FOOD ACCESS

Food access encompasses the following three interrelated topics:

- Nutritionally adequate, culturally appropriate, and affordable food;
- Income sufficient to purchase healthy food; and
- Proximity and ability to travel to a food source that offers affordable, nutritionally adequate, and culturally appropriate food.

Ensuring adequate food access is challenging in many communities. Many communities, and especially low-income areas, lack retailers with a sufficient selection of healthy foods. Consequently, many residents lack access to nutritional foods, known as “food insecurity”, resulting in public health challenges and poor health outcomes. Affected populations cope with food insecurity by consuming nutrient-poor, but calorie-rich foods. This may result in malnutrition; obesity; cognitive, behavioral, and mental health problems in children; and physical and mental health problems and birth complications among pregnant women. Children and communities of color are often disproportionately affected by food insecurity.

#### FOOD INSECURITY AND COST

---

No data about existing conditions on food insecurity and costs currently exists at the city level. As the best possible alternative, Feeding America, the nation’s largest domestic hunger-relief organization, has released a report entitled *Map the Meal Gap* for the past ten consecutive years to offer insights on how food insecurity and food costs vary at the county and congressional district level. The latest *Map the Meal Gap* report, which uses the most recent data from the United States Department of Agriculture (USDA) and Census Bureau, was released in 2020 and is based on data from 2018.

In response to COVID-19, Feeding America also released a companion study entitled *The Impact of the Coronavirus on Local Food Insecurity*, and an interactive map that used the *Map the Meal Gap* model to predict changes to food insecurity rates for the overall population and children in response to projected changes to poverty and unemployment in the wake of the pandemic. To better assess the current and future state of local food insecurity and develop effective strategies to reach people at risk of hunger, it is critical to understand historical variations prior to the pandemic.

All census tracts in Hawthorne are within the 43<sup>rd</sup> Congressional District. Below is a summary of key findings from this congressional district, as well as for Los Angeles County, the State of California, and the entire country for comparison.

- 43<sup>rd</sup> Congressional District food insecurity rate: 11.6%
- Los Angeles County food insecurity rate: 11.4%
- State of California food insecurity rate: 10.8%
- National food insecurity rate: 11.5%

The *Map the Meal Gap* report shows that after nearly ten years, food insecurity levels for most communities across the country had reached their lowest levels in 2018. However, due to the impacts associated with the COVID-19 pandemic, Feeding America projects that progress made to food insecurity in the U.S. this past decade will likely be wiped out and food insecurity rates will climb higher than the peak of the Great Recession of 50 million people, potentially

going from more than 37 million people facing hunger in 2018 up to more than 54 million in 2020.

Data on the total number of food insecure people, the food insecurity rate, and the estimated nutrition program eligibility among food insecure people is displayed in Table 4. Additionally, information about the average meal cost and annual food budget shortfall is shown for the County, State, and nation.

**TABLE 4: FOOD INSECURITY**

LOCATION	FOOD INSECURE PEOPLE <sup>1</sup>	FOOD INSECURITY RATE <sup>2</sup>	ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE PEOPLE			AVERAGE MEAL COST <sup>3</sup>	ANNUAL FOOD BUDGET SHORTFALL <sup>4</sup>
			ABOVE OTHER NUTRITION PROGRAM THRESHOLD OF 185% POVERTY	BETWEEN 130%-185% POVERTY	BELOW SNAP THRESHOLD 130% POVERTY		
United States	37,227,000	11.5%	32%	19%	49%	\$3.09	\$19.5B
California	4,291,830	10.8%	24%	0%	76%	\$3.28	\$2.4B
Los Angeles County	1,146,290	11.4%	13%	0%	87%	\$3.46	\$672M
43 <sup>rd</sup> Congressional District	87,200	11.6%	15%	0%	85%	Data not available	Data not available

Source: Feeding America - Map the Meal Gap report, 2020.

<sup>1</sup> Nutrition program eligibility is defined as the percentage of the estimated food-insecure population by income category, according to the eligibility thresholds of the major federal nutrition assistance programs, including SNAP (at or below 130% of the federal poverty line or the state-specific threshold, when it is a higher multiple) and other programs such as WIC (185% of poverty or the state-specific threshold).

<sup>2</sup> Nutrition program eligibility is defined as the percentage of the estimated food-insecure population by income category, according to the eligibility thresholds of the major federal nutrition assistance programs, including SNAP (at or below 130% of the federal poverty line or the state-specific threshold, when it is a higher multiple) and other programs such as WIC (185% of poverty or the state-specific threshold).

<sup>3</sup> The average weekly dollar amount food-secure individuals report spending on food, as estimated in the Current Population Survey, divided by 21 (assuming three meals a day, seven days a week). This amount has been adjusted to reflect local food prices and relevant taxes.

<sup>4</sup> The total annualized additional dollar amount that food-insecure individuals report needing, on average, to purchase just enough food to meet their food needs. This amount is based on responses in the Current Population Survey and the USDA assumption that individuals in households that are food insecure experience food insecurity, on average, seven months out of the year. This amount has been adjusted to reflect local food prices and relevant taxes.

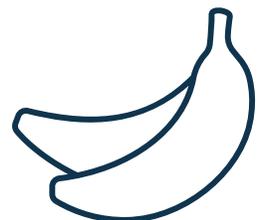
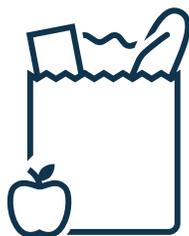
## ACCESS TO FOOD RETAILERS

---

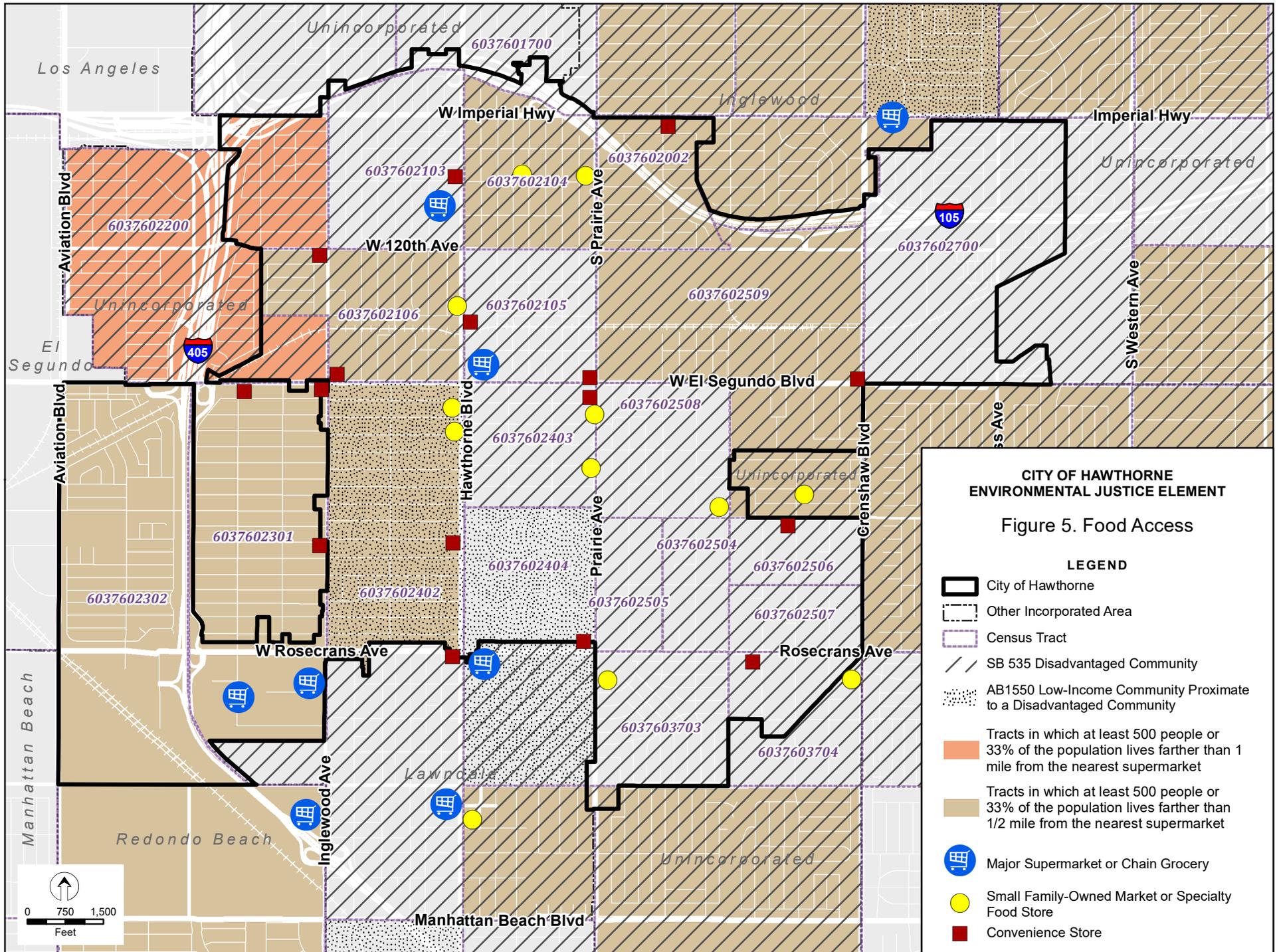
The location of supermarkets, food stores and convenience stores as well as census tracts that qualify as food deserts within the City are illustrated in Figure 5. Major supermarkets are defined as larger food retailers that serve the community, small family-owned markets or specialty food stores as the range of smaller food retailers that serve individual neighborhoods or cater to specific groups, and convenience stores as small neighborhood stores that sell some food and produce. Food deserts are defined as census tracts in which at least 500 people or 33% of the population live farther than ½ mile from the nearest supermarket.

Four supermarkets, nine specialty food stores, and twelve convenience stores lie within City boundaries. There are no supermarkets within City boundaries east of S. Prairie Ave. The specialty food stores and convenience stores are fairly well distributed throughout the City, however, there are more in the central portion.

The lack of proximate grocery stores has the greatest affect in locations where residences do not own vehicles or have sufficient access to transit. As shown in Table 5, all census tracts have some households without access to a vehicle. Nine census tracts (outlined in bold) have a higher rate of no vehicle access than the citywide rate of 7.5%. DAC tract 6025.05 (located in the southeastern portion of the City) has more than double the rate of no vehicle access as the City overall, with DAC tracts 6025.04 and 6025.06 (also located in the southeastern portion of the City) exhibiting similar patterns of limited vehicle access.



*This page is intentionally left blank.*



Sources: Los Angeles County, Cal OEHHA; USDA Food Access Research Atlas; Google Maps. Map date:

*This page is intentionally left blank.*

**TABLE 5: CAR OWNERSHIP**

<b>LOCATION</b>	<b>TOTAL OCCUPIED HOUSING UNITS</b>	<b># OF HOUSEHOLDS WITHOUT VEHICLES</b>	<b>% OF HOUSEHOLDS WITHOUT VEHICLES</b>
United States	120,756,048	10,395,713	8.6%
California	13,044,266	927,957	7.1%
Los Angeles County	3,316,795	292,463	8.8%
City of Hawthorne	29,033	2,172	7.5%
<b>6017</b>	1,303	47	3.6%
<b>6020.02</b>	809	66	8.2%
<b>6021.03</b>	2,090	175	8.4%
<b>6021.04</b>	1,739	69	4.0%
<b>6021.05</b>	1,248	66	5.3%
<b>6021.06</b>	2,001	187	9.3%
<b>6022</b>	2,577	104	4.0%
6023.01	1,886	78	4.1%
6023.02	1,844	28	1.5%
<b>6024.02</b>	2,085	120	5.8%
<b>6024.03</b>	1,666	92	5.5%
<b>6024.04</b>	1,818	148	8.1%
<b>6025.04</b>	1,748	198	11.3%
<b>6025.05</b>	1,660	290	17.5%
<b>6025.06</b>	1,721	197	11.4%
<b>6025.07</b>	1,835	176	9.6%
<b>6025.08</b>	2,383	176	7.4%
<b>6025.09</b>	1,141	83	7.3%
<b>6027</b>	1,276	34	2.7%
<b>6037.03</b>	806	5	0.6%
<b>6037.04</b>	2,112	174	8.2%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

Note: DACs are in bold text.

## 4. SAFE AND SANITARY HOMES

The condition of the housing stock in a DAC may have negative impacts on the well-being of its residents. These health impacts stem from issues such as poor indoor air quality, toxic building materials, exposure to climate variation such as excess heat or cold, improper ventilation, and structural insecurity. Unsafe housing conditions can be a result of the age of the dwelling structure, which increases the likelihood of incorporation of dangerous materials like lead and asbestos that have significant negative health impacts. DACs often have a larger number of older units within their housing stock and therefore residents of these communities are more likely to be exposed to the harmful health impacts that are associated with older housing. Other factors that can contribute to unsafe housing conditions include improper regulation and overcrowding. Prioritizing the safety and sanitation of housing stock within a community helps create proper living conditions for all residents, including those living in DACs.

This section summarizes the existing housing conditions and cost of housing throughout the City. While the conditions apply on a citywide level, they can reasonably be extrapolated to understand housing conditions in the DACs, given that nearly the entire City is considered a disadvantaged community.

### HOUSING STOCK CONDITIONS

---

Housing conditions are considered “substandard” when conditions are found to be below the minimum standard of living conditions defined in the California Health and Safety Code. Households living in substandard conditions are more likely to be in need of housing assistance, even if they are not seeking alternative housing arrangements, due to the threat to health and safety.

In addition to structural deficiencies and standards, the lack of infrastructure and utilities often serves as an indicator for substandard conditions. According to the 2019 American Community Survey<sup>5</sup>, 145 (0.5%) of the 29,033 occupied housing units in Hawthorne lack complete plumbing facilities, and 840 (2.9%) lack complete kitchen facilities. About 768 (2.6%) of the units have no telephone service available.

### OVERCROWDING

---

Overcrowding within a housing unit is a primary cause of unsafe housing conditions. The World Health Organization notes that overcrowding is a potential health risk as it contributes to the transmission of disease by creating unsanitary conditions.<sup>6</sup> A housing unit is considered overcrowded if there is more than one person per room and severely overcrowded if there

---

<sup>5</sup> Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

<sup>6</sup> World Health Organization (WHO). Accessed on March 8, 2021. Water Sanitation and Hygiene. What are the health risks related to overcrowding?. Available at: [http://www.who.int/water\\_sanitation\\_health/emergencies/qa/emergencies\\_qa9/en/](http://www.who.int/water_sanitation_health/emergencies/qa/emergencies_qa9/en/)

are more than 1.5 persons per room. Overcrowding conditions in the City based upon data obtained from the U.S. Census 2019 American Community Survey are depicted in Table 6.

The City has a higher overcrowding rate (17.7%) than the County (11.3%). Eleven DAC census tracts (outlined in bold) experienced overcrowding at a higher rate than at the citywide rate. DAC tract 6017 (in the City’s northwest area) has the highest rate of overcrowding in the City at 32.0%, followed closely by DAC tract 6037.04 (in the southeast area) at 31.6%.

**TABLE 6: OVERCROWDING BY TENURE**

LOCATION	PERSONS PER ROOM						TOTAL OCCUPIED UNITS	OVERCROWDING CONDITION	
	1.00 OR LESS		1.01 TO 1.50		1.51 OR MORE			#	%
	#	%	#	%	#	%			
Los Angeles County	2,940,883	88.7%	218,863	6.6%	157,049	4.7%	3,316,795	375,912	11.3%
City of Hawthorne	23,900	68.4%	2,733	9.4%	2,400	8.3%	29,033	5,133	17.7%
<b>6017</b>	886	68.0%	259	19.9%	158	12.1%	1,303	417	32.0%
<b>6020.02</b>	592	73.2%	106	13.1%	111	13.7%	809	217	26.8%
<b>6021.03</b>	1,632	78.1%	262	12.5%	196	9.4%	2,090	458	21.9%
<b>6021.04</b>	1,410	81.1%	168	9.7%	161	9.3%	1,739	329	19.0%
<b>6021.05</b>	982	78.7%	182	14.6%	84	6.7%	1,248	266	21.3%
<b>6021.06</b>	1,484	74.2%	124	6.2%	393	19.6%	2,001	517	25.8%
<b>6022</b>	2,396	93.0%	118	4.6%	63	2.4%	2,577	181	7.0%
6023.01	1,687	89.4%	147	7.8%	52	2.8%	1,886	199	10.6%
6023.02	1,803	97.8%	41	2.2%	0	0.0%	1,844	41	2.2%
<b>6024.02</b>	1,882	90.3%	164	7.9%	39	1.9%	2,085	203	9.8%
<b>6024.03</b>	1,296	77.8%	218	13.1%	152	9.1%	1,666	370	22.2%
<b>6024.04</b>	1,560	85.8%	139	7.6%	119	6.5%	1,818	258	14.1%
<b>6025.04</b>	1,305	74.7%	260	14.9%	183	10.5%	1,748	443	25.4%
<b>6025.05</b>	1,187	71.5%	208	12.5%	265	16.0%	1,660	473	28.5%
<b>6025.06</b>	1,466	85.2%	120	7.0%	135	7.8%	1,721	255	14.8%
<b>6025.07</b>	1,522	82.9%	144	7.8%	169	9.2%	1,835	313	17.0%
<b>6025.08</b>	1,928	80.9%	222	9.3%	233	9.8%	2,383	455	19.1%
<b>6025.09</b>	949	83.2%	127	11.1%	65	5.7%	1,141	192	16.8%
<b>6027</b>	1,233	96.6%	43	3.4%	0	0.0%	1,276	43	3.4%
<b>6037.03</b>	775	96.2%	23	2.9%	8	1.0%	806	31	3.9%
<b>6037.04</b>	1,444	68.4%	258	12.2%	410	19.4%	2,112	668	31.6%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

Note: DACs are in bold text.

## HOUSING AFFORDABILITY

As what is typically the most expensive component of a household’s budget, housing cost (rent or mortgage, utilities, homeowner or renter insurance, and property taxes for homeowners only) is a preeminent factor in determining if the household is “cost burdened” or negatively impacted by its expenses. This consideration takes on even greater importance in Southern California where housing costs far exceed the national average.

As shown in Table 7, the City has a much higher rate of renter-occupied housing units (72.7%) than the County (54.2%). This is significant because renters tend to have lower income than homeowners and spend a higher percentage of their income on housing. Renters do not have control over rent increases, which have markedly accelerated over the past decade. The upfront costs of purchasing a home, including down payments and closing costs, are commonly cited by renters as a primary obstacle to homeownership. Additionally, home prices have rebounded strongly since the depths of the Great Recession, thereby increasing the wealth of homeowners while making it more difficult for renters to make the transition into ownership.

**TABLE 7: OWNER OCCUPIED VS. RENTER OCCUPIED HOUSEHOLDS**

LOCATION	TOTAL OCCUPIED HOUSING UNITS	# OF OWNER-OCCUPIED HOUSEHOLDS	% OF OWNER-OCCUPIED HOUSEHOLDS	# OF RENTER-OCCUPIED HOUSEHOLDS	% OF RENTER-OCCUPIED HOUSEHOLDS
Los Angeles County	3,316,795	1,519,516	45.8%	1,797,279	54.2%
City of Hawthorne	29,033	7,934	27.3%	21,099	72.7%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

Traditionally, housing affordability has been assessed by the “maximum rent standard.” According to this standard, households that spend more than 30% of income on housing costs may be “cost burdened”. Gross rent as a percentage of household income is shown in Table 8 and monthly owner costs as a percentage of household income are shown in Table 9. Taken together, these tables demonstrate the total percentage of cost burdened households in the City of Hawthorne.

The City has about the same percentage of renter-occupied cost burdened households (57.7%) as the County (57.6%). As shown in Table 8, 11 DAC census tracts (outlined in bold) experienced rental cost burden at a higher rate than at the citywide rate. DAC tract 6021.03 (in the northwest area) has the highest rental cost burden in the City at 69.4%, followed closely by DAC tracts 6017 (in the northwest area) at 69.3% and 6020.02 (in the northcentral area) at 68.7%.

**TABLE 8: GROSS RENT AS PERCENTAGE OF HOUSEHOLD INCOME**

LOCATION	30.0 TO 34.9 %		35.0 % OR MORE		TOTAL OCCUPIED UNITS PAYING RENT	COST BURDENED	
	#	%	#	%		#	%
Los Angeles County	163,104	9.5%	822,780	48.1%	1,711,020	985,884	57.6%
City of Hawthorne	2,269	11.1%	9,525	46.6%	20,446	11,794	57.7%
<b>6017</b>	41	4.2%	635	65.1%	976	676	<b>69.3%</b>
<b>6020.02</b>	56	11.1%	291	57.6%	505	347	<b>68.7%</b>
<b>6021.03</b>	154	9.7%	952	59.7%	1,594	1,106	<b>69.4%</b>
<b>6021.04</b>	226	17.1%	582	43.9%	1,325	808	<b>61.0%</b>
<b>6021.05</b>	105	10.8%	419	43.0%	974	524	53.8%
<b>6021.06</b>	92	5.9%	790	50.5%	1,563	882	56.4%
<b>6022</b>	273	19.0%	557	38.8%	1,435	830	<b>57.8%</b>
6023.01	22	3.9%	235	41.2%	570	257	45.1%
6023.02	24	8.7%	106	38.5%	275	130	47.2%
<b>6024.02</b>	179	18.2%	400	40.7%	983	579	<b>58.9%</b>
<b>6024.03</b>	197	14.0%	434	30.8%	1,407	631	44.8%
<b>6024.04</b>	184	12.5%	757	51.5%	1,469	941	<b>64.0%</b>
<b>6025.04</b>	197	12.6%	767	48.9%	1,568	964	<b>61.5%</b>
<b>6025.05</b>	132	8.5%	841	53.9%	1,559	973	<b>62.4%</b>
<b>6025.06</b>	180	11.9%	829	54.8%	1,512	1,009	<b>66.7%</b>
<b>6025.07</b>	179	11.3%	625	39.3%	1,589	804	50.6%
<b>6025.08</b>	98	4.9%	972	48.4%	2,010	1,070	53.3%
<b>6025.09</b>	69	9.2%	233	31.1%	750	302	40.3%
<b>6027</b>	18	6.6%	65	23.8%	273	83	30.4%
<b>6037.03</b>	24	28.9%	27	32.5%	83	51	<b>61.4%</b>
<b>6037.04</b>	301	17.4%	681	39.4%	1,728	982	56.8%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

Note: DACs are in bold text.

The City has a slightly higher percentage of owner-occupied cost burdened households (44.5%) than the County (43.5%). As shown in Table 9, 15 DAC census tracts (outlined in bold) experienced ownership cost burden at a higher rate than at the citywide rate. DAC tract 6025.08 has the highest ownership cost burden in the City at 69%, followed closely by DAC tract 6025.05 at 68.9%.

**TABLE 9: MONTHLY OWNER COSTS AS PERCENTAGE OF HOUSEHOLD INCOME**

LOCATION	30.0 TO 34.9 %		35.0 % OR MORE		TOTAL HOUSING UNITS WITH MORTGAGE	COST BURDENED	
	#	%	#	%		#	%
Los Angeles County	98,346	9.1%	371,735	34.4%	1,081,179	470,081	43.5%
City of Hawthorne	521	8.8%	2,113	35.7%	5,924	2,634	44.5%
<b>6017</b>	0	0.0%	111	56.1%	198	111	<b>56.1%</b>
<b>6020.02</b>	41	19.7%	82	39.4%	208	123	<b>59.1%</b>
<b>6021.03</b>	22	8.6%	118	45.9%	257	140	<b>54.5%</b>
<b>6021.04</b>	31	10.3%	123	40.7%	302	154	<b>51.0%</b>
<b>6021.05</b>	0	0.0%	91	47.6%	191	91	<b>47.6%</b>
<b>6021.06</b>	22	9.0%	43	17.6%	244	65	<b>26.6%</b>
<b>6022</b>	42	4.7%	370	41.8%	885	412	<b>46.5%</b>
6023.01	8	0.9%	218	25.1%	870	226	26%
6023.02	122	10.4%	278	23.7%	1,175	400	34.1%
<b>6024.02</b>	83	11.4%	250	34.3%	729	333	<b>45.7%</b>
<b>6024.03</b>	1	0.6%	76	46.3%	164	77	<b>46.9%</b>
<b>6024.04</b>	16	9.1%	63	36.0%	175	79	<b>45.1%</b>
<b>6025.04</b>	0	0.0%	34	34.7%	98	34	34.7%
<b>6025.05</b>	17	23.0%	34	45.9%	74	51	<b>68.9%</b>
<b>6025.06</b>	0	0.0%	80	50.6%	158	80	<b>50.6%</b>
<b>6025.07</b>	28	21.5%	43	33.1%	130	71	<b>54.6%</b>
<b>6025.08</b>	32	14.8%	117	54.2%	216	149	<b>69.0%</b>
<b>6025.09</b>	70	25.6%	61	22.3%	273	131	<b>47.9%</b>
<b>6027</b>	28	3.4%	285	34.2%	833	313	37.6%
<b>6037.03</b>	47	8.2%	212	36.8%	576	259	<b>45.0%</b>
<b>6037.04</b>	29	10.5%	54	19.6%	276	83	30.1%

Source: U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP04

Note: DACs are in bold text.

Another way to look at the cost burden for the City’s low- to moderate-income residents is to analyze data taken from the most recent U.S. Department of Housing and Urban Development (HUD) Comprehensive Housing Affordability Strategy (CHAS), which is an aggregation of ACS data. The income levels of owner-occupied units to renter-occupied units are compared in Table 10. A higher percentage of renter-occupied units are in the low to extremely low-income levels (75.4% combined, outlined in bold) compared to owner-occupied units (35.6% combined, outlined in bold), demonstrating a higher housing cost burden for renters.

**TABLE 10: HOUSING AFFORDABILITY**

INCOME LEVEL	OWNER-OCCUPIED		RENTER-OCCUPIED		TOTAL OCCUPIED HOUSING UNITS	
	UNITS	%	UNITS	%	UNITS	%
Extremely Low (30% or less AMI)	695	8.9%	5,340	24.7%	6,035	20.5%
Very Low (30-50% AMI)	925	11.8%	5,290	24.4%	6,215	21.1%
Low (50-80% AMI)	1,165	14.9%	5,700	26.3%	6,865	23.3%
Moderate (80-100% AMI)	720	9.2%	2,350	10.8%	3,070	10.4%
High (100% or more AMI)	4,325	55.3%	2,985	13.8%	7,310	24.8%
<b>Total</b>	<b>7,825</b>	<b>100.0%</b>	<b>21,660</b>	<b>100.0%</b>	<b>29,490</b>	<b>100.0%</b>

Source: HUD CHAS data, 2013-2017

## 5. PHYSICAL ACTIVITY

Residents of DACs are often more likely to experience negative health outcomes. Increased physical activity levels are associated with a decreased risk for numerous health conditions and chronic illnesses. The built environment in DACs can often be limited by land use planning and lack of investment, leaving less opportunities for formal and informal physical activity. Increasing the opportunity for physical activity within a community can work to positively impact the physical health of residents living in DACs.

This section summarizes the use of active transportation modes and the state and distribution of pedestrian and bicycle facilities and facilities conducive to physical activity in the City’s DACs.

### ACTIVE TRANSPORTATION USE

Data from the 2019 American Community Survey (ACS) about commuting transportation modes for each of Hawthorne’s census tracts compared to the City and County overall is provided in Table 11. Active transportation modes include walking and biking, while powered transportation modes include driving alone, carpooling, public transit, and taxicab, motorcycle, or other means. Data about active transportation use during daily commutes is one indicator of physical activity levels. Increasing opportunities for active transportation within a city can yield several positive health benefits, including mortality risk reduction, disease prevention, cardiorespiratory fitness, and metabolic health, and can also help improve the overall health outcomes of DACs.



*This page is intentionally left blank.*

**TABLE 11: COMMUTING TRANSPORTATION MODES**

	Los Angeles County	City of Hawthorne	6017	6020.02	6021.03	6021.04	6021.05	6021.06	6022	6023.01	6023.02	6024.02	6024.03	6024.04	6025.04	6025.05	6025.06	6025.07	6025.08	6025.09	6027	6037.03	6037.04
<b>Active Transportation Modes</b>																							
Walked	2.7%	1.7%	1.5%	2.6%	5.3%	2.6%	0.3%	2.1%	1.4%	0.5%	1.7%	0.0%	1.3%	2.3%	2.4%	2.0%	2.2%	2.4%	0.7%	0.0%	0.0%	1.1%	5.2%
Bicycled	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.8%	1.7%	0.0%	1.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	2.1%	0.3%	0.4%	0.3%	0.0%	1.7%	7.8%
<b>Total</b>	<b>3.5%</b>	<b>2.2%</b>	<b>1.5%</b>	<b>2.6%</b>	<b>5.3%</b>	<b>2.6%</b>	<b>1.1%</b>	<b>3.8%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.7%</b>	<b>0.0%</b>	<b>2.5%</b>	<b>2.3%</b>	<b>2.4%</b>	<b>2.0%</b>	<b>4.3%</b>	<b>2.7%</b>	<b>1.1%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>2.8%</b>	<b>13.0%</b>
<b>Powered Transportation Modes</b>																							
Drove Alone	74.0%	75.1%	68.9%	63.4%	67.5%	80.0%	71.9%	66.0%	80.8%	82.0%	80.2%	71.0%	74.3%	75.1%	71.0%	62.3%	72.4%	83.3%	79.3%	74.1%	85.4%	84.8%	67.9%
Carpooled	9.5%	10.9%	17.6%	21.7%	15.1%	5.5%	15.5%	15.7%	6.8%	7.6%	7.9%	14.1%	9.5%	11.6%	14.6%	18.3%	9.0%	4.5%	3.6%	17.0%	7.2%	7.7%	6.0%
Public Transit	5.8%	5.6%	3.6%	7.5%	4.2%	6.6%	6.8%	7.2%	1.4%	3.9%	0.5%	4.1%	9.0%	4.4%	4.8%	10.1%	10.8%	7.5%	6.5%	2.5%	1.9%	0.9%	6.8%
Taxicab, Motorcycle, or Other Means	1.6%	3.9%	8.4%	2.6%	8.0%	4.1%	4.0%	4.1%	2.2%	1.6%	3.5%	7.5%	3.1%	4.4%	4.6%	4.3%	2.4%	0.4%	5.5%	1.7%	0.0%	0.3%	4.4%
<b>Total</b>	<b>90.9%</b>	<b>95.5%</b>	<b>98.5%</b>	<b>95.2%</b>	<b>94.8%</b>	<b>96.2%</b>	<b>98.2%</b>	<b>93.0%</b>	<b>91.2%</b>	<b>95.1%</b>	<b>92.1%</b>	<b>96.7%</b>	<b>95.9%</b>	<b>95.5%</b>	<b>95.0%</b>	<b>95.0%</b>	<b>94.6%</b>	<b>95.7%</b>	<b>94.9%</b>	<b>95.3%</b>	<b>94.5%</b>	<b>93.7%</b>	<b>85.1%</b>

Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: S0801  
 Note: Statistics on residents who work from home are not included. DAC census tracts are outlined in bold.

*This page is intentionally left blank.*

Overall, the City of Hawthorne uses active transportation modes less (2.2%) than the County (3.5%). Only 1.7% of Hawthorne commuters reported walking to work and 0.5% reported riding a bike to work. Most Hawthorne commuters drove to work alone (75.1%).

Three DAC tracts have higher rates of commuters who walk and/or bike to work than both the City and County overall. DAC tract 6037.04, located in the southeastern area of the City, has the highest percentage of commuters who walk and/or bike to work (13%). DAC tract 6021.03, located in the northwestern area, has the second highest percentage at 5.3%. DAC tract 6025.06, located in the southeastern area, has the third highest percentage at 4.3%. While these tracts do not have the highest overall rate of no vehicle access, they do have a higher rate of no vehicle access than the City.

As mentioned in the Background and Regulatory Framework section, the City of Hawthorne received funding through the Southern California Association of Governments' (SCAG) Sustainability Grant program to prepare the *Crenshaw Station Active Transportation Plan, Neighborhood Electric and Electric Vehicle Strategies, and Overlay Zone* in June 2015. The document is an outcome of regional and local policy aimed at reducing greenhouse gas emissions and increasing connectivity to transit and is included within the Circulation Element of the Hawthorne's General Plan.

The document aims to facilitate and enhance non-carbon emitting modes of travel in an area that currently lacks the appropriate infrastructure. The plan area encompasses a 3-mile radius extending from the Crenshaw Light Rail Transit Station on Metro's Green Line, located at 11901 S Crenshaw Boulevard. The document serves as the preliminary step in a process that can lead to physical improvements at the station area and policy modifications that can enhance active transportation and neighborhood connectivity to transit.

## FACILITIES CONDUCIVE TO PHYSICAL ACTIVITY

---

The City is home to 14 parks and recreation facilities. A list of the parks and their amenities, including facilities for physical activity, and whether the parks are in a DAC is included in Table 12. As previously mentioned, twelve out of the City's 14 parks and recreation facilities are evenly distributed in DACs throughout the community, though there are 10 DACs notably void of parks, including tracts 6021.03, 6021.04, 6021.05, 6024.03, 6024.04, 6025.04, 6025.06, 6025.07, 6037.03, and 6037.04.

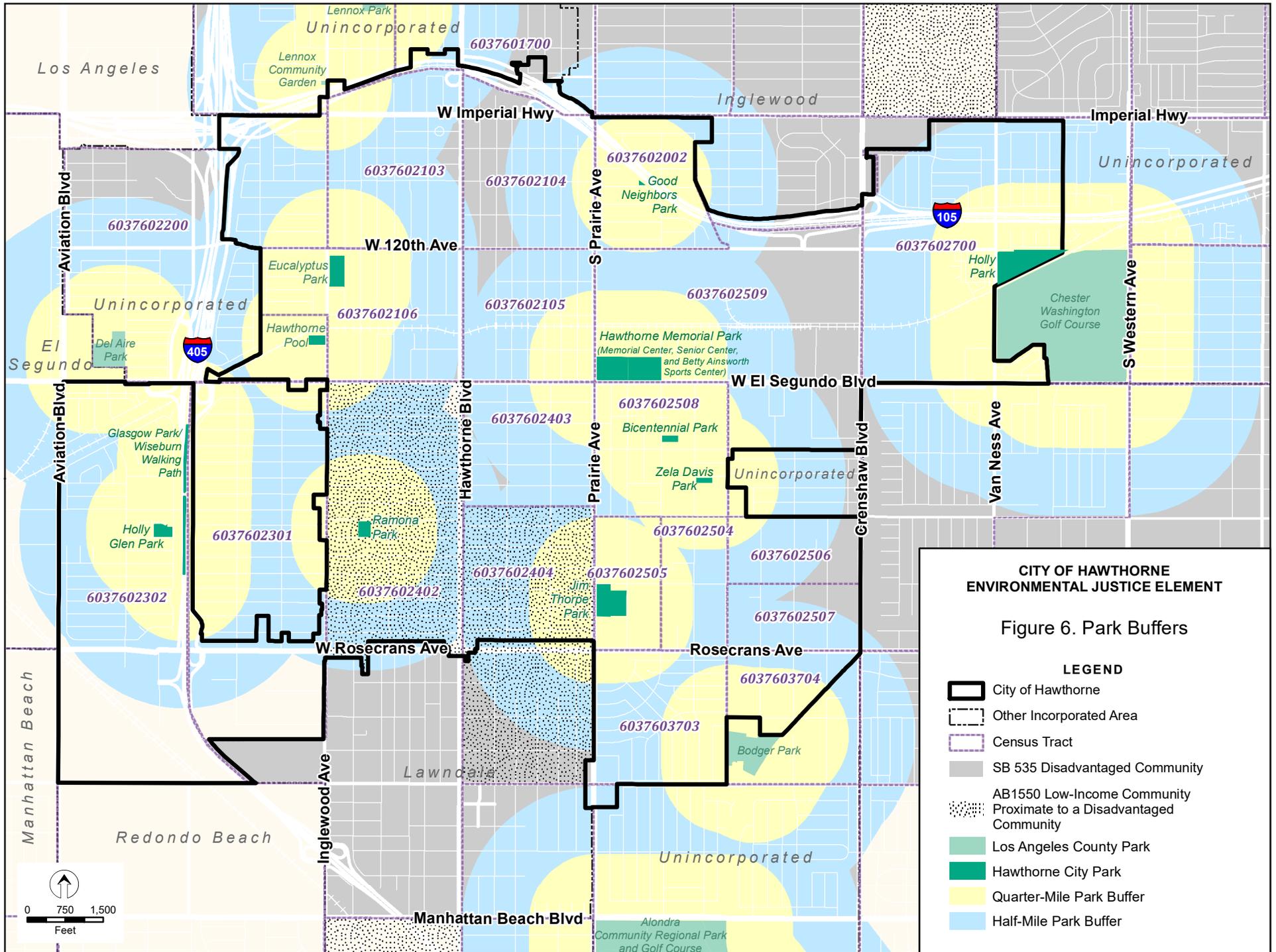
The parks' locations and buffer distances of ¼-mile or ½-mile walking distance to the facilities are illustrated on Figure 6. Twelve out of 19 DACs are within the ¼-mile or ½-mile buffer areas of multiple parks located either within or adjacent to the City, although seven DACs are not, including the eastern portion of 6025.09, northern portion of DAC tract 6022, as well as portions of DAC tracts 6021.03, 6021.04, 6025.06, 6025.07, and a small sliver of 6024.03.

**TABLE 12: CITY OF HAWTHORNE PARKS AND RECREATION FACILITIES**

<b>PARK</b>	<b>ADDRESS</b>	<b>AMENITIES</b>	<b>CENSUS TRACT</b>
Betty Ainsworth Sports Center	3851 W. El Segundo Blvd.	Full size basketball court, volleyball court, (2) racquetball courts, fitness room, dance room	<b>6025.09</b>
Bicentennial Park	13110 S. Doty Ave.	Tot Lot, Splash Pad, Par Course Equipment	<b>6025.08</b>
Eucalyptus Park	12100 S. Inglewood Ave.	3 Formal Picnic Shelters, Picnic Tables, BBQ Grills, Tot Lot, Wading Pool, Basketball Courts, Skatepark. The walking path is a quarter of a mile long.	<b>6021.06</b>
Glasgow Place	13500 Glasgow Place.	Picnic Tables, Par Course Equipment. The walking path is over 3/4 of a mile long.	6023.02
Good Neighbors Park	3839 W. 118th St.	Tot lot equipment	<b>6020.02</b>
Hawthorne Pool	12501 Inglewood Ave.	The Hawthorne Pool is equipped with both men and women's locker rooms, heated showers, and private changing rooms. There are 2 pools located inside the facility: lap pool, and a baby pool.	<b>6021.03</b>
Holly Park	2058 W. 120th St.	Formal Picnic Shelter, BBQ Grills, Picnic Tables, Tot Lot, Wading Pool, Lighted Tennis Courts, 2 Baseball Fields, Horseshoes, Shuffleboard, Basketball Courts, Croquet.	<b>6027</b>
Holly Glen Park	5255 W. 137th St. Hawthorne	BBQ Grills, Picnic Tables, Tot Lot, Wading Pool, Lighted Tennis Courts, Basketball Court.	6023.02
Jim Thorpe Park	14100 S. Prairie Ave.	Picnic Tables, Tot Lot, Wading Pool, Basketball Courts, 2 Baseball Fields, Historical Society.	<b>6025.05</b>
Memorial Center	3901 W. El Segundo Blvd.	Full size basketball court, volleyball court, (2) racquetball courts, fitness room, dance room.	<b>6025.09</b>
Memorial Park	3943 El Segundo Blvd.	BBQ Grills, Formal Picnic Area, Indoor Facilities, Tot Lot, Wading Pool, Lighted Futsal Courts, Basketball Courts, Boccie Courts, Par Course Equipment.	<b>6025.09</b>
Ramona Park	4662 W. 136th St.	Picnic Tables, Tot Lot, Wading Pools, Horseshoes, Shuffleboard, Basketball Courts, Croquet.	<b>6024.02</b>
Senior Center	3901 W. El Segundo Blvd.	Billiard Room with (3) Pool Tables and (1) Snooker Table, a Sewing Room With (5) New Sewing Machines, (2) Multipurpose Rooms, Large Community Room, Large Kitchen, And an Enclosed Patio.	<b>6025.09</b>
Zela Davis Park	3650 W. 133rd St.	Picnic Tables and Tot Lot	<b>6025.08</b>

Source: <https://www.cityofhawthorne.org/parks-locations>

Note: DACs are in bold text.



Sources: Los Angeles County, Cal OEHHA. Map date: March 24, 2021.

*This page is intentionally left blank.*

## 6. COMMUNITY ENGAGEMENT

An important aspect of planning for environmental justice is the development of effective policies and programs that enable all residents to participate in local decision making. DACs can often be excluded from decision-making when officials and policies do not focus on involving these communities in a strategic manner. SB 1000 emphasizes that community engagement must be promoted in a local jurisdiction through the development of objectives and policies that seek to specifically involve residents of DACs. By engaging DACs in decision-making processes, policymakers can effectively meet the needs of these community members. DACs often have culturally specific needs, distinct from those of the general population, that must be made a priority within local policy to achieve community success. The US EPA Environmental Justice Policy requires the "... meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." The establishment of appropriate opportunities for those who are low-income, minorities, and linguistically isolated to engage in local decision making will help identify and resolve environmental justice issues. In addition, community programs that address the needs of DACs are critical to achieving environmental justice for these communities within a city.

The following section outlines the recommended approach to community engagement in development of the Environmental Justice Element.

### RECOMMENDED COMMUNITY ENGAGEMENT APPROACH

---

#### STAKEHOLDER OUTREACH

- Identify and reach out to key stakeholders such as community groups and leaders who are focused on environmental justice issues within DACs to see how they would like to participate.

#### INFORMATION SHARING

- Share project information on the City's existing Planning Department webpage.
- Post project milestones on existing social media platforms, including the City's Instagram and Facebook pages.

#### OPPORTUNITIES FOR INPUT

- **Environmental Justice Focus Group**
  - Form a focus group specifically related to environmental justice will allow the project team and the City to engage in more specific discussions than could occur at public workshops and open houses. The group will discuss key environmental justice and community health and wellness issues facing Hawthorne. Members can include key stakeholders identified above as well as regional agencies and nonprofit representatives, representative from the City, school district, and other local and regional stakeholders. Group meetings can take place in-person or digitally.
- **Virtual Community Workshop**
  - Host a virtual workshop to gather community feedback on environmental justice priorities (Note: at this time, it is expected that this workshop will need to take place in an on-line format in response to prolonged social distancing

- requirements and/or recommendations. This can be switched to in-person if needed/desired).
- The virtual workshop will include a recorded video overview of the project and a series of engaging activities such as mapping exercises, visual preference surveys, and probing questions.
- To maximize participation, make the virtual workshop available on-line for one month.
- Summarize the results in a brief report and policy documents as appropriate.
- **Online Survey**
  - Host an online survey for one month to gather community feedback on environmental justice priorities.
- **In-Person Community Open House**
  - After stakeholder input from the Environmental Justice Focus Group, virtual workshop, and online survey have been incorporated into a Draft Environmental Justice Element, make it available online for public review.
  - As pandemic conditions allow, supplement the virtual community workshop with an in-person open house where attendees can learn about the Draft Environmental Justice Element.
  - The public can provide comments on the draft document which will be summarized and shared with the Planning Commission and City Council.

The following sections summarize the levels of civic engagement as measured by voter registration and turnout, and demographics that may influence community and civic engagement in Hawthorne’s DACs. This information may help inform the community engagement process described above.

## LEVELS OF CIVIC ENGAGEMENT

---

It is important to start with a baseline analysis of a community’s existing level of civic engagement to estimate how likely residents are to participate. The primary means of measuring a community’s level of civic engagement is the assessment of voter participation. This includes the percentage of voting age residents registered to vote and the percentage of registered voters who cast ballots. A summary of both metrics for Hawthorne and Los Angeles County is included below. The voter registration rate for Hawthorne is lower than the County, but the voter turnout rate is slightly higher.

### VOTER REGISTRATION AND TURNOUT FOR 2020 PRESIDENTIAL ELECTION

#### Los Angeles County<sup>7</sup>

- Eligible to vote: 6.1 million
- Registered: 5.8 million
- Voter registration rate: **95.1%**
- Votes cast in 2020 presidential election: 4.3 million
- Voter turnout rate: **74.1%**

---

<sup>7</sup> Source: <http://www.laalmanac.com/election/el02.php>

## **City of Hawthorne**

- Eligible to vote<sup>8</sup>: 49,213
- Registered<sup>9</sup>: 43,405
- Voter registration rate: **88.2%**
- Votes cast in 2020 presidential election<sup>10</sup>: 32,678
- Voter turnout rate<sup>11</sup>: **75.3%**

## DEMOGRAPHICS THAT MAY INFLUENCE CIVIC ENGAGEMENT

---

Certain demographic categories can help predict a community's likely level of civic engagement. This section assesses four demographic categories: resident age, language spoken at home, educational attainment, and race/ethnicity. The assessments are based upon tables that compare the demographic categories at the county, city, and DAC tract levels.

### RESIDENT AGE

Age distribution can help predict the likelihood of a community participating in civic activities and identify constraints associated with engaging different members of the community. A disproportionately high percentage of residents under the age of 18 suggests the significant presence of families. Parents of minors are generally busy raising their children, making them less likely to participate in civic activities. Encouraging the use of virtual outreach tools, such as social media and online surveying, and outreach approaches at other community events, such as farmers markets, fairs, and sporting events, can help increase participation among this group. Conversely, a disproportionately high percentage of seniors, a group that generally has fewer commitments and less time constraints, suggests that the community may participate in conventional civic activities at a higher rate. Because seniors are less familiar with technology than their younger counterparts, the group is less likely to utilize virtual outreach tools. However, patterns of civic participation are changing significantly as a result of the COVID-19 pandemic. Populations previously reluctant to use online methods of communication are now more aware and comfortable with these tools, presenting new opportunities to engage all members of the community.

As reflected by Table 13, Hawthorne's residents are younger than the County as a whole. Only DAC tracts 6037.03 and 6027 are older than the County as a whole, while the remaining DAC tracts are younger than the County as a whole. The City's two tracts that do not qualify as a DAC are both younger compared to the County.

---

<sup>8</sup> Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP05

<sup>9,10,11</sup> Source: [https://lavote.net/docs/rccc/svc/4193\\_Community.pdf?v=5](https://lavote.net/docs/rccc/svc/4193_Community.pdf?v=5)

**TABLE 13: RESIDENT AGE**

LOCATION	TOTAL POPULATION	AGE					
		UNDER 18 YEARS		18 TO 64 YEAR		65 YEARS AND OVER	
		NUMBER	%	NUMBER	%	NUMBER	%
Los Angeles County	10,081,570	2,217,945	22.0%	1,435,011	64.70%	1,340,849	13.3%
City of Hawthorne	87,107	22,340	25.6%	56,993	65.5%	7,774	8.9%
<b>6017</b>	5,126	1,412	27.5%	3,472	67.8%	242	4.7%
<b>6020.02</b>	3,057	752	24.6%	2,013	65.8%	292	9.6%
<b>6021.03</b>	6,650	1,780	26.8%	4,257	64.0%	613	9.2%
<b>6021.04</b>	6,091	1,762	28.9%	3,995	65.6%	334	5.5%
<b>6021.05</b>	4,116	940	22.8%	2,847	69.2%	329	8.0%
<b>6021.06</b>	5,403	1,152	21.3%	3,671	68.0%	580	10.7%
<b>6022</b>	7,200	1,731	24.0%	4,717	65.6%	752	10.4%
6023.01	6,311	1,498	23.7%	4,059	64.4%	754	11.9%
6023.02	4,819	1,196	24.8%	3,091	64.2%	532	11.0%
<b>6024.02</b>	6,869	1,723	25.1%	4,402	64.1%	744	10.8%
<b>6024.03</b>	5,199	1,123	21.6%	3,525	67.8%	551	10.6%
<b>6024.04</b>	5,457	1,412	25.9%	3,552	65.1%	493	9.0%
<b>6025.04</b>	4,961	1,181	23.8%	3,552	71.6%	228	4.6%
<b>6025.05</b>	4,590	1,617	35.2%	2,756	60.1%	217	4.7%
<b>6025.06</b>	4,297	1,232	28.7%	2,850	66.3%	215	5.0%
<b>6025.07</b>	5,122	1,378	26.9%	3,358	65.6%	386	7.5%
<b>6025.08</b>	6,922	2,056	29.7%	4,360	63.0%	506	7.3%
<b>6025.09</b>	4,457	1,133	25.4%	2,861	64.2%	463	10.4%
<b>6027</b>	3,770	742	19.7%	2,428	64.4%	600	15.9%
<b>6037.03</b>	2,491	530	21.3%	1,560	62.6%	401	16.1%
<b>6037.04</b>	6,609	1,787	27.0%	4,382	66.3%	440	6.7%

Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: S0101  
 Note: DACs are in bold text.

**LANGUAGE ACCESS**

Language is a critical signifier of a population’s likely participation in civic activities. Non-native English speakers, and especially those individuals with limited English fluency, are less likely to participate in civic activities. Translation services are critical to reaching and actively communicating with these individuals. In addition, the metric of households who speak languages other than English can help identify the cultural diversity of a community. Civic activities, and the venues where they take place, can be tailored to accommodate the cultural preferences of individual racial, ethnic, and religious groups.

As identified by Table 14, the majority of households in Hawthorne (60.8%) speak a language other than English, an even higher percentage than households in the County (56.6%). More than half of households in 15 census tracts speak a language other than English (outlined in bold), and the most common language spoken is Spanish.

**TABLE 14: LANGUAGES SPOKEN AT HOME**

LOCATION	POPULATION 5 YEARS AND OVER	ENGLISH ONLY HOUSEHOLD	OTHER LANGUAGE SPOKEN AT HOME	LANGUAGES SPOKEN OTHER THAN ENGLISH			
				SPANISH	OTHER INDO- EUROPEAN	ASIAN AND PACIFIC ISLANDER	OTHER
		NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
%	%	%	%	%	%		
Los Angeles County	9,470,085	4,111,587	5,358,498	3,716,660	503,528	1,032,901	105,409
		43.4%	56.6%	39.2%	5.3%	10.9%	1.1%
City of Hawthorne	79,738	31,254	48,484	38,809	2,163	3,983	3,529
		39.2%	60.8%	48.7%	2.7%	5.0%	4.4%
<b>6017</b>	4,803	752	4,051	3,884	110	57	0
		15.7%	84.3%	80.9%	2.3%	1.2%	0.0%
<b>6020.02</b>	2,842	573	2,269	2,036	106	29	98
		20.2%	79.8%	71.6%	3.7%	1.0%	3.4%
<b>6021.03</b>	6,144	1,529	4,615	4,189	47	202	177
		24.9%	75.1%	68.2%	0.8%	3.3%	2.9%
<b>6021.04</b>	5,416	1,591	3,825	3,361	169	93	202
		29.4%	70.6%	62.1%	3.1%	1.7%	3.7%
<b>6021.05</b>	3,812	1,007	2,805	2,436	37	142	190
		26.4%	73.6%	63.9%	1.0%	3.7%	5.0%
<b>6021.06</b>	4,889	1,866	3,023	2,336	23	474	190
		38.2%	61.8%	47.8%	0.5%	9.7%	3.9%
<b>6022</b>	6,954	3,609	3,345	2,525	127	507	186
		51.9%	48.1%	36.3%	1.8%	7.3%	2.7%
6023.01	6,029	2,645	3,384	3,037	91	233	23
		43.9%	56.1%	50.4%	1.5%	3.9%	0.4%
6023.02	4,347	3,385	962	361	170	431	0
		77.9%	22.1%	8.3%	3.9%	9.9%	0.0%
<b>6024.02</b>	6,194	1,932	4,262	3,430	284	320	228
		31.2%	68.8%	55.4%	4.6%	5.2%	3.7%
<b>6024.03</b>	4,765	1,452	3,313	2,670	182	192	269
		30.5%	69.5%	56.0%	3.8%	4.0%	5.6%
<b>6024.04</b>	4,989	1,723	3,266	2,755	68	304	139
		34.5%	65.5%	55.2%	1.4%	6.1%	2.8%
<b>6025.04</b>	4,554	1,758	2,796	1,825	266	301	404
		38.6%	61.4%	40.1%	5.8%	6.6%	8.9%
<b>6025.05</b>	4,138	1,727	2,411	2,195	18	23	175
		41.7%	58.3%	53.0%	0.4%	0.6%	4.2%
<b>6025.06</b>	3,869	1,974	1,895	1,602	98	158	37
		51.0%	49.0%	41.4%	2.5%	4.1%	1.0%
<b>6025.07</b>	4,659	2,389	2,270	1,276	131	236	627

LOCATION	POPULATION 5 YEARS AND OVER	ENGLISH ONLY HOUSEHOLD	OTHER LANGUAGE SPOKEN AT HOME	LANGUAGES SPOKEN OTHER THAN ENGLISH			
				SPANISH	OTHER INDO- EUROPEAN	ASIAN AND PACIFIC ISLANDER	OTHER
		NUMBER	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER
		%	%	%	%	%	%
		51.3%	48.7%	27.4%	2.8%	5.1%	13.5%
<b>6025.08</b>	6,403	2,237	4,166	3,125	318	431	292
		34.9%	<b>65.1%</b>	48.8%	5.0%	6.7%	4.6%
<b>6025.09</b>	4,197	1,177	3,020	2,455	88	415	62
		28.0%	<b>72.0%</b>	58.8%	2.1%	9.9%	1.5%
<b>6027</b>	3,643	2,674	969	808	41	42	78
		73.4%	26.6%	22.2%	1.1%	1.2%	2.1%
<b>6037.03</b>	2,317	1,228	1,089	715	15	359	0
		53.0%	47.0%	30.9%	0.6%	15.5%	0.0%
<b>6037.04</b>	5,782	2,149	3,633	3,146	76	174	237
		37.2%	<b>62.8%</b>	54.4%	1.3%	3.0%	4.1%

Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: S1601  
Note: DACs are in bold text.

### EDUCATIONAL ATTAINMENT

Educational attainment is a strong signifier of a population’s likely participation in civic activities. Higher educational attainment generally correlates with increased civic participation. This is reflective of individuals with less educational attainment experiencing underemployment circumstances, such as working for less than a living wage and/or on a part-time basis. This may require individuals to seek out additional employment, reducing the time that they can commit to civic activities. In addition, individuals with lower educational attainment generally make less money. Those individuals who cannot afford to own or otherwise have limited access to an automobile, may be unable to attend civic events. This may also be reflective of individuals with less educational attainment lacking the sufficient literacy level and/or a formal education in civics and government to feel comfortable participating in civic matters.

As seen in Table 15, more of Hawthorne’s residents and the census tracts’ populations have a high school diploma or equivalent and at least some college or an Associate’s degree than on the countywide level. Only two census tracts have a higher percentage of residents with a Bachelor’s degree or higher than the County, however (outlined in bold). Within DACs, residents who did not complete high school or only obtained a high school degree are of greatest concern. DAC tract 6017 is the census tract where the highest percentage of residents (38%) have less than a high school education.

**TABLE 15: EDUCATIONAL ATTAINMENT**

LOCATION	LESS THAN A HIGH SCHOOL GRADUATE	HIGH SCHOOL GRADUATE (OR EQUIVALENT)	SOME COLLEGE OR ASSOCIATE'S DEGREE	BACHELOR'S DEGREE OR HIGHER
	%	%	%	%
Los Angeles County	20.9%	20.6%	26.0%	32.5%
City of Hawthorne	22.4%	24.5%	30.8%	22.3%
<b>6017</b>	<b>38.0%</b>	26.0%	26.1%	9.9%
<b>6020.02</b>	28.5%	34.5%	24.1%	12.9%
<b>6021.03</b>	34.5%	22.3%	28.5%	14.6%
<b>6021.04</b>	31.0%	31.9%	29.8%	7.3%
<b>6021.05</b>	30.0%	27.9%	24.1%	18.0%
<b>6021.06</b>	19.5%	22.0%	32.2%	26.3%
<b>6022</b>	18.4%	17.5%	27.1%	<b>36.9%</b>
6023.01	16.7%	23.8%	27.5%	32.0%
6023.02	4.2%	9.4%	22.1%	<b>64.2%</b>
<b>6024.02</b>	25.2%	20.7%	29.4%	24.7%
<b>6024.03</b>	20.8%	27.7%	28.4%	23.1%
<b>6024.04</b>	26.4%	26.0%	27.2%	20.4%
<b>6025.04</b>	19.3%	23.4%	35.8%	21.5%
<b>6025.05</b>	26.2%	23.2%	30.4%	20.2%
<b>6025.06</b>	19.6%	27.0%	37.4%	16.1%
<b>6025.07</b>	16.2%	30.8%	36.1%	16.8%
<b>6025.08</b>	22.6%	27.5%	36.6%	8.7%
<b>6025.09</b>	32.7%	21.6%	34.5%	11.3%
<b>6027</b>	8.6%	26.9%	40.1%	24.4%
<b>6037.03</b>	13.1%	20.6%	37.8%	28.5%
<b>6037.04</b>	34.1%	16.6%	28.3%	20.9%

Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: S1501  
 Note: Data is for residents aged 25 years and over. DACs are in bold text.

## RACE/ETHNICITY

Numerous studies have shown that race and ethnicity are important predictors of civic engagement, and that whites are more likely to be civically engaged than other groups.<sup>12</sup> Additionally, it is essential to consider the racial make-up of a community when evaluating environmental justice because race is known to correlate with disproportionate environmental burdens. In studies exploring the roles of both race and income, race was determined to be the stronger predictor of exposure to environmental hazards.<sup>13</sup>

The majority race in the County, City, and each census tract, as well as where Hispanic or Latino residents are more than 50% of the population is outlined in bold in Table 16. Similar to the County, the City of Hawthorne is majority White, although by a smaller percentage. There is a larger Black or African American population as well as a Hispanic or Latino population in the City than in the County. Fourteen census tracts are more than 50% Hispanic or Latino, and all but one of these are DACs. Six census tracts are majority Black or African American (all DACs), and three census tracts are majority some other race (also all DACs).



---

<sup>12</sup> For example, see Foster-Bey, J. (2008, December). *CIRCLE Working Paper #62: Do Race, Ethnicity, Citizenship and Socio-economic Status Determine Civic-Engagement?* Retrieved from <https://files.eric.ed.gov/fulltext/ED505266.pdf>

<sup>13</sup> Luke Cole, director, California Rural Legal Assistance Foundation, Testimony, February Hearing Transcript, p. 16; Luke W. Cole and Shelia R. Foster, *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement* (New York University Press, 2001), pp. 54-55, 167-83.

**TABLE 16: RACE/ETHNICITY**

LOCATION	WHITE	BLACK OR AFRICAN AMERICAN	AMERICAN INDIAN AND ALASKAN NATIVE	ASIAN	NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER	SOME OTHER RACE	TWO OR MORE RACES	HISPANIC OR LATINO (OF ANY RACE)
	%	%	%	%	%	%	%	%
Los Angeles County	51.3%	8.1%	0.7%	14.6%	0.3%	21.0%	4.0%	48.5%
City of Hawthorne	36.2%	24.9%	0.6%	7.7%	0.4%	26.3%	3.9%	54.8%
<b>6017</b>	35.5%	7.9%	2.6%	1.7%	0.0%	<b>51.1%</b>	1.2%	87.0%
<b>6020.02</b>	41.1%	13.9%	0.0%	4.4%	0.0%	38.5%	2.1%	76.3%
<b>6021.03</b>	43.0%	19.4%	4.3%	4.5%	0.0%	26.3%	2.6%	70.8%
<b>6021.04</b>	38.0%	19.9%	0.0%	3.9%	0.0%	35.7%	2.4%	72.9%
<b>6021.05</b>	41.5%	16.3%	0.5%	4.8%	1.0%	32.1%	3.8%	67.4%
<b>6021.06</b>	44.6%	15.6%	0.7%	13.4%	0.4%	20.9%	4.4%	56.7%
<b>6022</b>	49.5%	15.8%	0.0%	9.0%	1.6%	15.7%	8.4%	46.2%
6023.01	56.4%	4.8%	1.1%	5.1%	0.5%	28.6%	3.5%	60.5%
6023.02	63.9%	2.0%	0.0%	21.4%	0.0%	1.7%	11.1%	17.1%
<b>6024.02</b>	38.2%	12.5%	0.3%	11.8%	0.4%	32.0%	4.9%	60.0%
<b>6024.03</b>	40.4%	17.4%	0.0%	8.6%	1.9%	31.0%	0.6%	65.2%
<b>6024.04</b>	40.5%	14.3%	0.3%	8.6%	0.0%	29.1%	7.2%	65.1%
<b>6025.04</b>	34.9%	<b>36.6%</b>	0.0%	8.2%	0.6%	15.4%	4.3%	45.3%
<b>6025.05</b>	30.4%	<b>34.7%</b>	0.0%	0.8%	0.5%	29.6%	4.0%	56.9%
<b>6025.06</b>	14.8%	<b>38.0%</b>	0.0%	4.1%	0.2%	35.4%	7.4%	47.6%
<b>6025.07</b>	17.4%	<b>56.8%</b>	0.0%	5.3%	0.0%	20.0%	0.6%	33.1%
<b>6025.08</b>	28.9%	<b>31.6%</b>	0.4%	7.2%	0.0%	30.7%	1.2%	51.6%
<b>6025.09</b>	30.4%	17.5%	0.1%	12.7%	3.5%	<b>34.5%</b>	1.3%	62.5%
<b>6027</b>	9.8%	<b>66.7%</b>	0.0%	2.1%	1.7%	18.0%	1.7%	25.1%
<b>6037.03</b>	52.6%	1.8%	5.8%	19.6%	0.0%	13.4%	6.7%	41.4%
<b>6037.04</b>	22.9%	26.5%	7.8%	4.3%	0.0%	<b>33.1%</b>	5.5%	62.5%

Source: United States Census Bureau, 2019 American Community Survey 5-Year Estimates, Table ID: DP05

Note: DACs are in bold text.

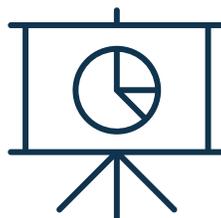
## 7. IMPROVEMENTS AND PROGRAMS ADDRESSING THE NEEDS OF DACS

An integral component of Environmental Justice planning is proactively prioritizing projects and investments that directly benefit DACs. These communities may have specific needs that are distinct from those of the greater community, which may require taking special actions to help improve existing conditions in DACs, such as placing limits on new developments to compensate for already high pollution burdens. These kinds of actions may not be applicable across the entire City but may be needed due to the special circumstances DACs face.

DACs are often overlooked regarding public investments and development of new amenities, and delayed investments and programs can significantly prolong inequalities. Prioritizing DACs for future investment would help community benefits and programs get implemented in timely fashion. Additionally, identifying and prioritizing improvements and programs for DACs may also help the City obtain grants and/or other public funding that is targeted for DACs.

The UC Davis Center for Regional Change and Rabobank, N.A. partnered to develop the Regional Opportunity Index (ROI) intended to help understand social and economic opportunity in California's communities. The goal of the ROI is to help target resources and policies toward people and places with the greatest need to foster thriving communities. The ROI integrates six topics, including civic life, health/environment, mobility/transportation, housing, economy, and education, and maps areas of potential investment by identifying specific areas of urgent need and opportunity. The ROI relies on many of the same data sources already analyzed in this report, such as the American Community Survey (ACS), but also includes additional data sources such as the Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) data, the California Department of Education, and the California Department of Public Health. All data points used in the ROI are from 2014.

The tool analyzes different indicators for each of the six topics, as summarized in Table 17 below. There are two types of indicators: **people-based** indicators illustrate the relative measure of **people's** assets in the six topics, while the **place-based** indicators illustrate the relative measure of a **place's** assets in those same topics, minus mobility/transportation.



**TABLE 17: REGIONAL OPPORTUNITY INDEX (ROI) TOPICS AND INDICATORS**

TOPICS	PEOPLE-BASED INDICATORS	PLACE-BASED INDICATORS
Civic Life	<ul style="list-style-type: none"> <li>English Speakers</li> <li>Voting Rates</li> </ul>	<ul style="list-style-type: none"> <li>Neighborhood Stability</li> <li>US Citizenship</li> </ul>
Health/Environment	<ul style="list-style-type: none"> <li>Years of Life Lost</li> <li>Births to Teens</li> <li>Infant Health</li> </ul>	<ul style="list-style-type: none"> <li>Air Quality</li> <li>Health Care Availability</li> <li>Access to Supermarket</li> <li>Prenatal Care</li> </ul>
Mobility/Transportation	<ul style="list-style-type: none"> <li>Internet Access</li> <li>Commute Time</li> <li>Vehicle Availability</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
Housing	<ul style="list-style-type: none"> <li>Housing Cost Burden</li> <li>Homeownership</li> </ul>	<ul style="list-style-type: none"> <li>Housing Affordability</li> <li>Housing Adequacy</li> </ul>
Economy	<ul style="list-style-type: none"> <li>Minimum Basic Income</li> <li>Employment Rate</li> </ul>	<ul style="list-style-type: none"> <li>Bank Accessibility</li> <li>Job Quality</li> <li>Job Growth</li> <li>Job Availability</li> </ul>
Education	<ul style="list-style-type: none"> <li>Elementary School Truancy</li> <li>English Proficiency</li> <li>Math Proficiency</li> <li>College Educated Adults</li> </ul>	<ul style="list-style-type: none"> <li>High School Discipline rate</li> <li>Teacher Experience</li> <li>UC/CSU Eligible</li> <li>High School Graduation Rate</li> </ul>

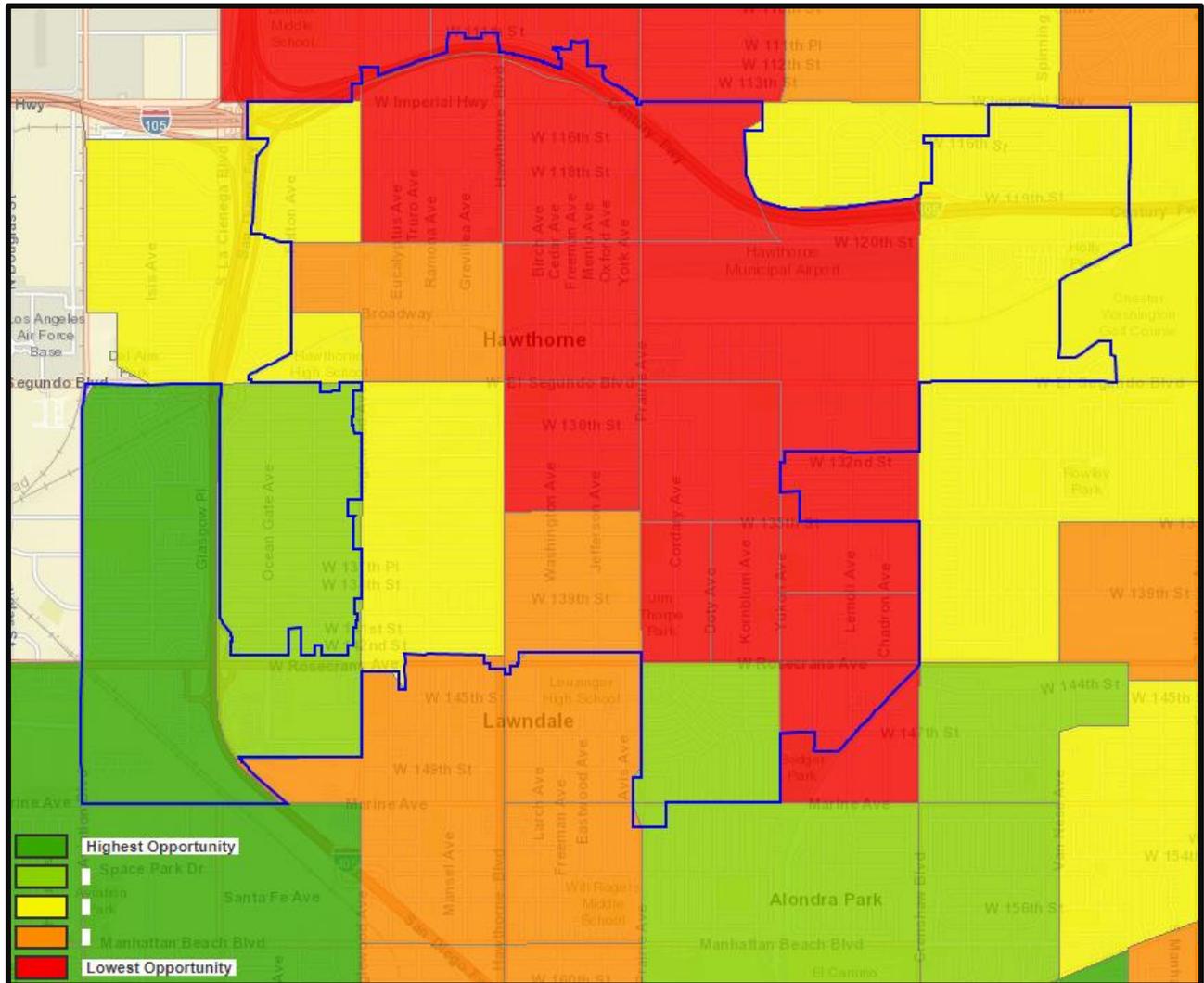
Source: UC Davis Center for Regional Change, 2020

The tool ranks each census tract in terms of highest opportunity to lowest opportunity levels. Highest opportunity tracts, represented by green in the maps, indicate that conditions are good across the indicators; while lowest opportunity tracts, represented by red in the maps, indicate that improvements need to be made. Hawthorne has mostly lower-opportunity census tracts throughout the City, with place-based opportunities generally scoring better than people-based opportunities. The ROI topics and indicators with low levels of opportunity which make them ripe for focused public investments are discussed in further detail below.

In terms of **people-based** assets presented in Figure 7 and Table 18, there are 14 DAC census tracts, mostly located in areas east of Hawthorne Blvd., with low levels of opportunity (shown in red and orange). The results of this analysis reveal that only one of these tracts (6021.06) has an average or higher opportunity (economy). The remaining red and orange tracts only have lower opportunities across all six ROI topics. It will be important for the City to consider these topics and specific indicators within these DAC census tracts when reviewing and establishing policies and programs and directing investments.

*This page is intentionally left blank.*

**FIGURE 7: PEOPLE-BASED OPPORTUNITIES**



Source: UC Davis Center for Regional Change, 2020 (using 2014 data points)

*This page is intentionally left blank.*

**TABLE 18: PEOPLE-BASED REGIONAL OPPORTUNITY INDEX (ROI) DAC CENSUS TRACTS**

DAC CENSUS TRACT	OPPORTUNITY LEVEL	AVERAGE OR HIGHER OPPORTUNITIES	LOWER OPPORTUNITIES
<b>6017</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6020.02</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6021.03</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6021.04</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6021.05</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6021.06</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6022</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Economy</li> </ul>
<b>6024.02</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6024.03</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>

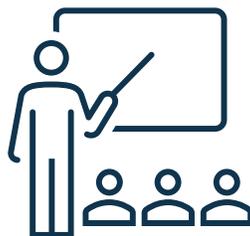
<b>DAC CENSUS TRACT</b>	<b>OPPORTUNITY LEVEL</b>	<b>AVERAGE OR HIGHER OPPORTUNITIES</b>	<b>LOWER OPPORTUNITIES</b>
<b>6024.04</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.04</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.05</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.06</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.07</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.08</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6025.09</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6027</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Mobility/Transportation</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6037.03</b>	<b>(light green)</b>	<ul style="list-style-type: none"> <li>• Mobility/Transportation</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>•</li> </ul>

DAC CENSUS TRACT	OPPORTUNITY LEVEL	AVERAGE OR HIGHER OPPORTUNITIES	LOWER OPPORTUNITIES
6037.04	Lowest Opportunity (red)	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Civic Life</li> <li>Health/Environment</li> <li>Mobility/Transportation</li> <li>Housing</li> <li>Economy</li> <li>Education</li> </ul>

Source: UC Davis Center for Regional Change, 2020 (using 2014 data points)

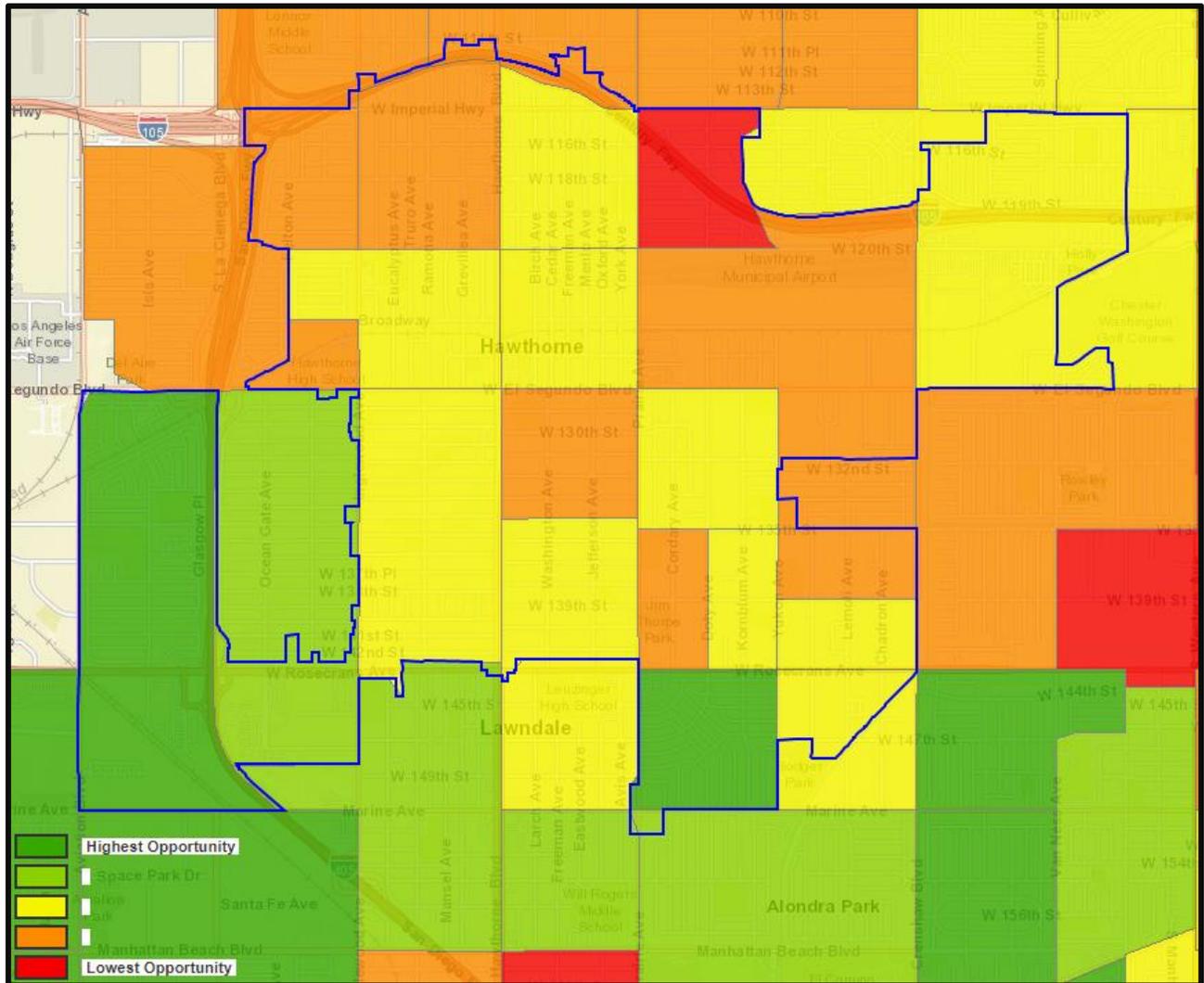
Note: Non-DAC census tracts are not included

In terms of **place-based** assets presented in Figure 8 and Table 19, there are eight DAC census tracts, fairly evenly distributed throughout the City, with low levels of opportunity (shown in red and orange). DAC census tract 6020.02 has the lowest level of opportunity with challenges across all five applicable ROI topics (mobility/transportation is not considered in the place-based analysis). Civic life (comprised of neighborhood stability and US citizenship) and housing (comprised of affordability and adequacy) are two recurring low-opportunity topics across all orange-colored census tracts. Though US citizenship is an issue largely outside the City’s ability to influence, it is still worth being aware of.



*This page is intentionally left blank.*

**FIGURE 8: PLACE-BASED OPPORTUNITIES**



Source: UC Davis Center for Regional Change, 2020 (using 2014 data points)

*This page is intentionally left blank.*

**TABLE 19: PLACE-BASED REGIONAL OPPORTUNITY INDEX (ROI) DAC CENSUS TRACTS**

<b>DAC CENSUS TRACT</b>	<b>OPPORTUNITY LEVEL</b>	<b>AVERAGE OR HIGHER OPPORTUNITIES</b>	<b>LOWER OPPORTUNITIES</b>
<b>6017</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6020.02</b>	<b>Lowest Opportunity (red)</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>
<b>6021.03</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6021.04</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6021.05</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6021.06</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6022</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Housing</li> </ul>
<b>6024.02</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Housing</li> </ul>
<b>6024.03</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6024.04</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>
<b>6025.04</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6025.05</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6025.06</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6025.07</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6025.08</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Education</li> </ul>

<b>DAC CENSUS TRACT</b>	<b>OPPORTUNITY LEVEL</b>	<b>AVERAGE OR HIGHER OPPORTUNITIES</b>	<b>LOWER OPPORTUNITIES</b>
<b>6025.09</b>	<b>(orange)</b>	<ul style="list-style-type: none"> <li>• Economy</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Housing</li> <li>• Education</li> </ul>
<b>6027</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> </ul>
<b>6037.03</b>	<b>Highest Opportunity (dark green)</b>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Health/Environment</li> <li>• Housing</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>6037.04</b>	<b>(yellow)</b>	<ul style="list-style-type: none"> <li>• Health/Environment</li> <li>• Economy</li> <li>• Education</li> </ul>	<ul style="list-style-type: none"> <li>• Civic Life</li> <li>• Housing</li> </ul>

Source: UC Davis Center for Regional Change, 2020 (using 2014 data points)

Note: Non-DAC census tracts are not included

## REFERENCES

California Department of Toxic Substances Control, Envirostor Database, 2021. Available at: <https://www.envirostor.dtsc.ca.gov/public/>.

California Environmental Justice Alliance, SB 1000 Toolkit, 2017. Available at: <https://caleja.org/2017/09/sb-1000-toolkit-release/>.

California Office of Environmental Health Hazard Assessment, California Communities Environmental Health Screening Tool (CalEnviroScreen) Version 3.0. Available at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>

California Water Resources Control Board Geotracker Database, 2021. Available at: <https://geotracker.waterboards.ca.gov/>.

City of Hawthorne General Plan. Available at: <https://www.cityofhawthorne.org/general-plan>

City of Hawthorne Park Locations. Available at: <https://www.cityofhawthorne.org/parks-locations>

Feeding America, *Map the Meal Gap* interactive map. Available at: <https://map.feedingamerica.org/>

Foster-Bey, J., *CIRCLE Working Paper #62: Do Race, Ethnicity, Citizenship and Socio-economic Status Determine Civic-Engagement?*, 2008. Available at: <https://files.eric.ed.gov/fulltext/ED505266.pdf>

Los Angeles Almanac, Election Turnout, Los Angeles County, 2020. Available at: <http://www.laalmanac.com/election/el02.php>

Los Angeles County Registrar-Recorder/County Clerk, General Election Report, 2020. Available at: [https://lavote.net/docs/rrcc/svc/4193\\_Community.pdf?v=5](https://lavote.net/docs/rrcc/svc/4193_Community.pdf?v=5)

Luke Cole, director, California Rural Legal Assistance Foundation, Testimony, February Hearing Transcript, p. 16; Luke W. Cole and Shelia R. Foster, *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement* (New York University Press, 2001), pp. 54-55, 167-83.

UC Davis Center for Regional Change, Regional Opportunity Index, 2020. Available at: <https://interact.regionalchange.ucdavis.edu/roi/>

United States Census Bureau, American Community Survey, 5-year Estimates, 2019, Tables DP04, DP05, S1501, S1601, S0101. Available at: <https://data.census.gov/cedsci/>

United States Department of Housing and Urban Development, Office of Policy Development and Research, HUD User Consolidated Planning/CHAS Data, 2013-2017 Estimates. Available at: <https://www.huduser.gov/portal/datasets/cp.html>.

World Health Organization (WHO). Accessed on March 8, 2021. Water Sanitation and Hygiene. What are the health risks related to overcrowding? Available at: [http://www.who.int/water\\_sanitation\\_health/emergencies/qa/emergencies\\_qa9/en/](http://www.who.int/water_sanitation_health/emergencies/qa/emergencies_qa9/en/)

*This page is intentionally left blank.*