



City of San Fernando

Environmental Justice Technical Report

Public Draft | December 2021

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1 Introduction

Environmental degradation and pollution impact the health and well-being of communities across the globe. Historically, low-income and minority communities experience this impact at a higher rate than the broader population, as these communities tend to be located closer in proximity to hazardous or degraded environments. These disproportionate environmental impacts are referred to as an unequal environmental burden. Environmental justice is a concept focused on addressing the systemic causes of the unequal environmental burden placed on certain communities. Efforts to address environmental justice involves mitigating the causes of environmental burden and the associated health and economic impacts on minority communities, particularly communities of color and low-income communities.

The State of California has developed regulation focused on improving the status of disproportionate environmental burden through Senate Bill 1000 (SB 1000), “The Planning for Healthy Communities Act” of 2016 which amended Section 65302 of the Government Code. Government Code Section 65040.12 defines environmental justice as “the fair treatment and meaningful involvement of people of all races, cultures and incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.” State efforts towards environmental justice are primarily aimed at improving the status of disadvantaged communities through effective planning and policy decisions.

Government Code Section 65302 requires jurisdictions to identify environmental justice communities (called “disadvantaged communities”) within their planning area and incorporate an environmental justice element into their general plans, or related environmental justice goals, policies and objectives integrated into other elements of the General Plan. The term disadvantaged communities refers to “an area identified by the California Environmental Protection Agency 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 the context of environmental justice, disadvantaged communities are those areas throughout California which most suffer from a combination of economic, health, and environmental burdens. These burdens can include air and water pollution, exposure to hazardous chemicals, lack of public resources, and high rates of asthma and heart disease.

For the purposes of environmental justice policy development, disadvantaged communities have been pre-identified by the State and made available through the CalEnviroScreen data tool. CalEnviroScreen is a science-based tool that depicts the layout of environmental impacts in California communities by census tract. The tool utilizes existing environmental, health, and socioeconomic data to rank census tracts based on 20 distinct environmental indicators. The higher the score, the more impacted a community is by pollution burdens and population vulnerabilities. Designated disadvantaged communities are those communities that scored within the highest 25 percent of census tracts across California (CalEnviroScreen percentile scores of 75 or higher).

2 San Fernando

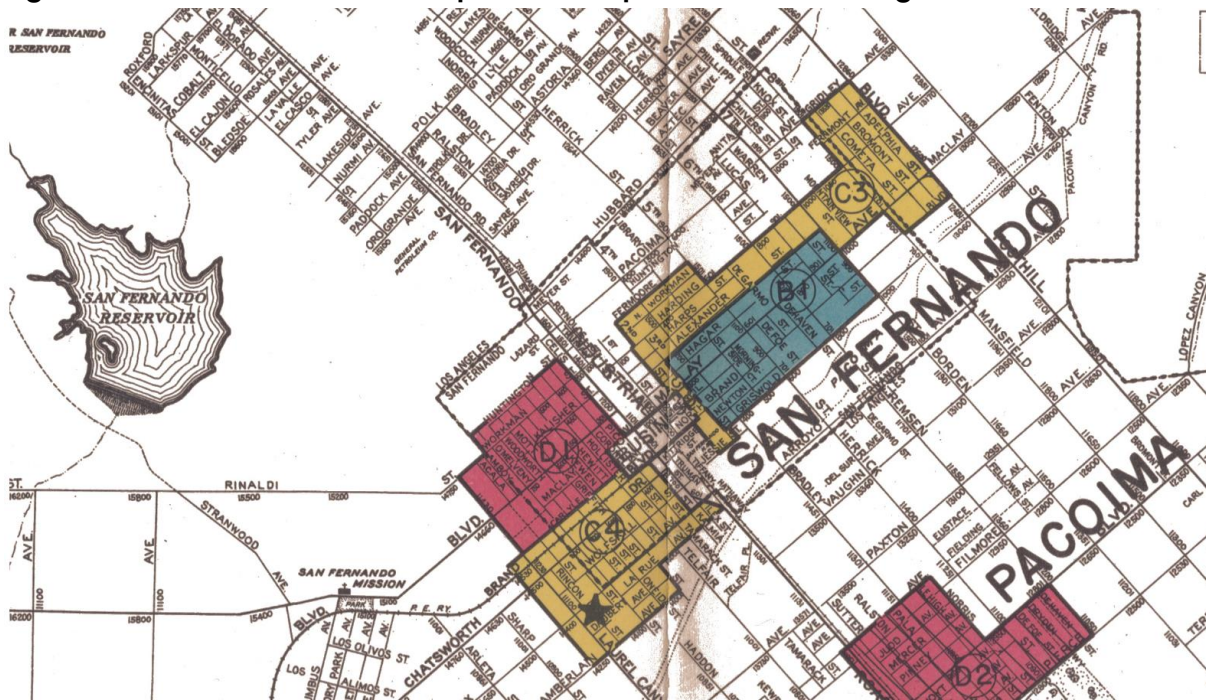
2.1 Brief History and Cultural Heritage

San Fernando was founded in 1874 and has a rich cultural past. In the early 1800s, while California was still Mexican territory, a mix of Spanish, Indian, and Mexican residents arrived and settled in the area. Residents traded farm crops, olives, wine, and other goods. Today with a population of just over 24,000 people, San Fernando is one of the San Fernando Valley's smallest incorporated cities. Over 90 percent of the population of San Fernando identifies as Hispanic or Latino. The community maintains its identity with its rich cultural past, with celebrations such as Fiesta and the preservation of architecture from its Mexican Heritage.

San Fernando has a proud history of community building and cultural heritage. However, there have been federally sponsored barriers and discriminatory practices that have impacted the community, including housing discrimination in the form of redlining. A federal agency called the Home Owners' Loan Corporation created residential security maps in the 1930s throughout American cities to support the Federal Housing Administration and its new mortgage program. These maps designated certain neighborhoods as desirable or not worth investment based on several factors. These included housing age, condition, and value, as well as proximity to services, amenities, and transportation

"Security" levels were color-coded from green (least risk), blue, yellow, and red (highest level of risk). Problematically, the key factors in determining risk were race and ethnicity. Neighborhoods with a multicultural community, recent immigrants, or families of color were severely downgraded or redlined. Areas that saw majority populations of white residents were either left unmarked or were given a high-desirability rating. These maps documented the perceived risk of lending and determined the lending practices of banks and other mortgage lenders administering the federal loans. This led to disinvestment in cities and a loss of wealth building for generations of American families. This practice of racial exclusion from homeownership allowed white Americans to accumulate wealth through government backed homeownership while minority communities were excluded and marginalized.

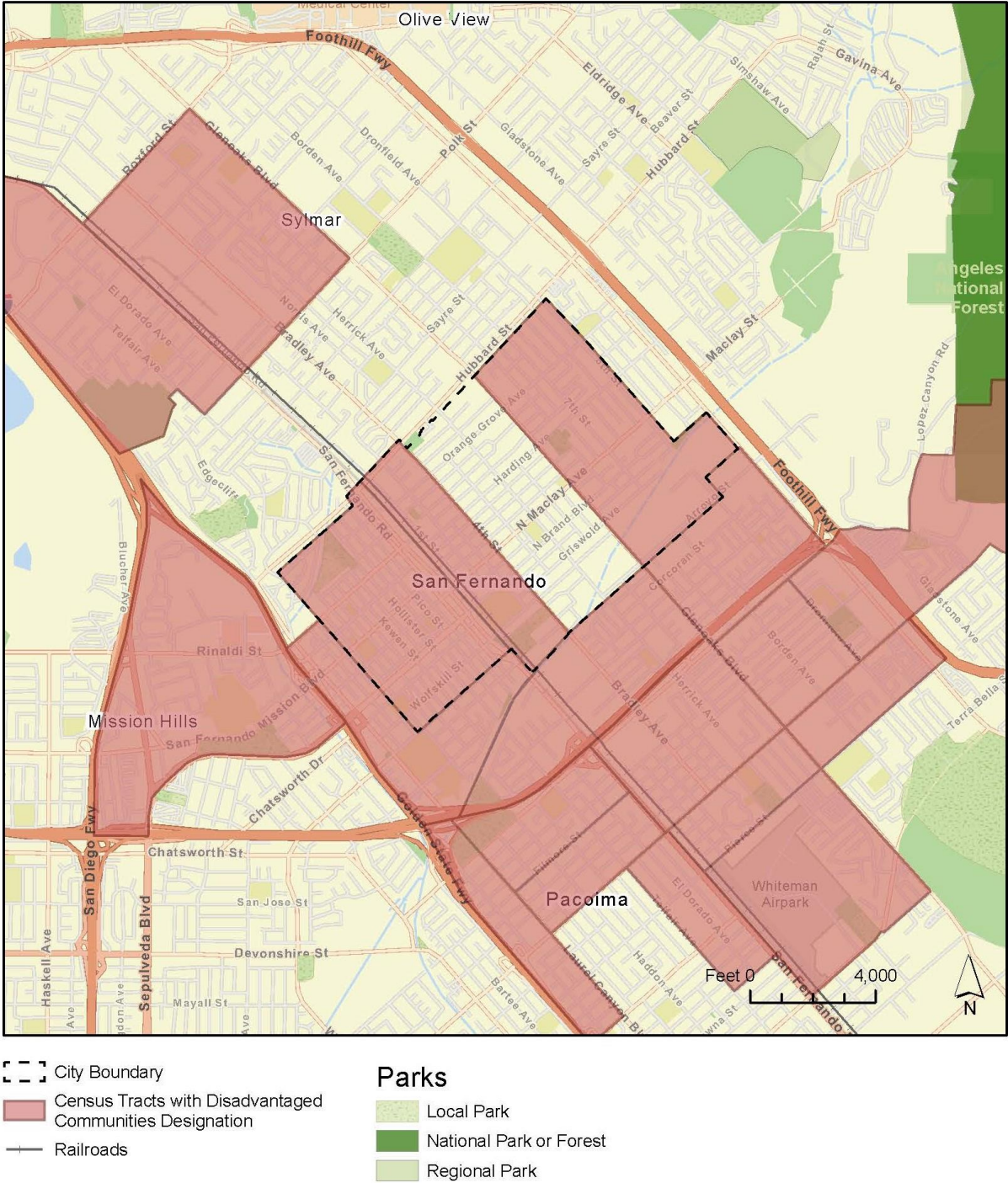
The Home Owners' Loan Corporation maps of Northern Los Angeles show that areas in and around San Fernando were impacted by redlining (see Figure 1). Areas colored blue were designated as desirable or worth investment. The areas that are marked in yellow and red represented areas of high-risk or undesirable for investment. This meant that residents in the yellow or red parts of this map would not qualify to receive federally backed loans.

Figure 1 Home Owners Loan Corporation Map of Northern Los Angeles

2.2 Census Tracts with the Disadvantaged Communities Designation

The City of San Fernando geographic area is made up of four census tracts. According to the CalEnviroScreen tool, three of the four census tracts within the city are currently designated as disadvantaged communities. Figure 2 on the preceding page identifies the disadvantaged communities within San Fernando. As previously mentioned, disadvantaged communities may be disproportionately exposed to environmental pollution and degradation. When assessing environmental justice at the local context, it is pertinent that any disparities that exist within identified disadvantaged communities are highlighted and addressed.

Figure 2 Census Tract Designated Disadvantaged Communities



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Disadvantaged Communities from OEHA, 2021.

3 Environmental Justice Community Context

The negative impact of environmental hazards and pollution on communities in California can be measured across five key focus areas. These focus areas encompass the range of environmental factors that may influence a person's health status. They are commonly referred to as the environmental determinants of health. Government Code Section 65302 requires goals, policies, and objectives in the General Plan to address these environmental determinants. The determinants include the following:

1. Pollution Exposure and Air Quality,
2. Public Facilities,
3. Safe and Sanitary Homes,
4. Physical Activity, Food Access, and Public Health, and
5. Civic and Community Engagement.

3.1 Pollutant Exposure and Air Quality

Exposure to polluting substance in the air, water, and soil can have a significant impact on health outcomes. Certain diseases have been directly associated with pollutant exposure including heart disease, cancer, birth defects, asthma, reproductive disorders, and neurological disorders. Pollutant exposure is an environmental determinant of health that may disproportionately impact disadvantaged communities.

When it comes to air pollution, San Fernando experiences some of the worst air quality in the state. The city is part of the highly polluted South Coast Air Basin, which encompasses a majority of Los Angeles County. Key contributors to degraded air quality within the city include the city's proximity to high traffic freeways and roadways (Interstate-5, Interstate-210, and State Highway 118). These air quality issues are expected to be exacerbated by the future impacts of climate change.

Particulate matter and ozone are two forms of air pollution that may impact the health of a community. Particulate matter is a type of air pollution that consists of a mixture of solid particles and liquid droplets found in the air. Ozone is a gaseous air pollutant that is exacerbated by cars, refineries, and other polluting industries. The city is in the 90th percentile for ozone exposure across California, which means that San Fernando experiences a higher ozone burden than 90 percent of other California cities (see Figure 3). These local ozone levels can be exacerbated by increased temperatures. With climate change expected to increase temperatures across the state, local ozone level will likely increase beyond the current measured rates in the future. In addition to Ozone, the southernmost census tract in San Fernando measured at the 80th percentile for diesel PM, likely due to proximity to the Interstate-5 freeway (see Figure 4). The remaining three census tracts measured below the 60th percentile for diesel PM. San Fernando does not have a significant concentration of particulate matter 2.5 (PM_{2.5}) relative to other California census tracts in California. All census tracts in the city measured within the 50th to 60th percentile for PM_{2.5}.

Figure 3 CalEnviroScreen Indicator Map – Ozone

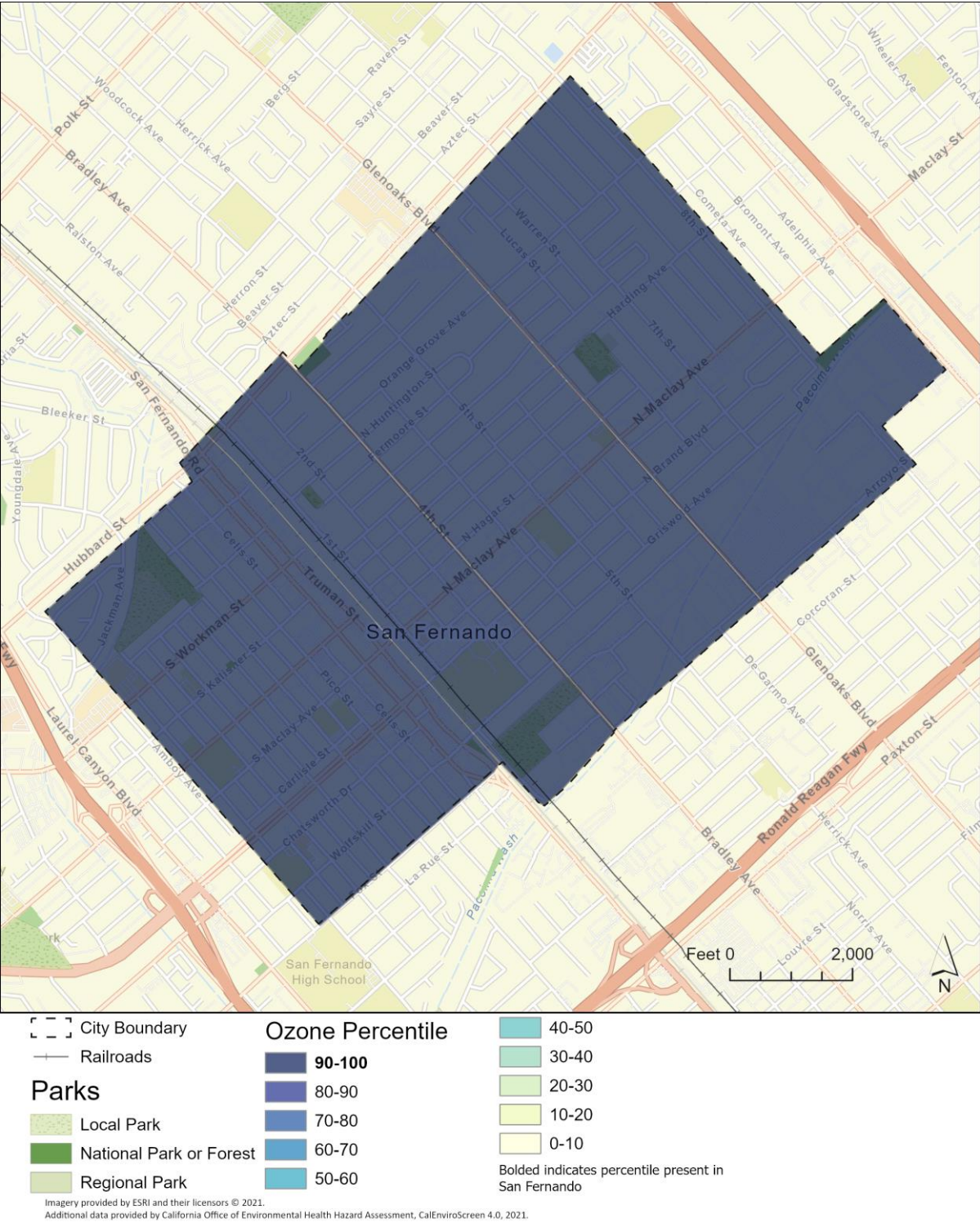
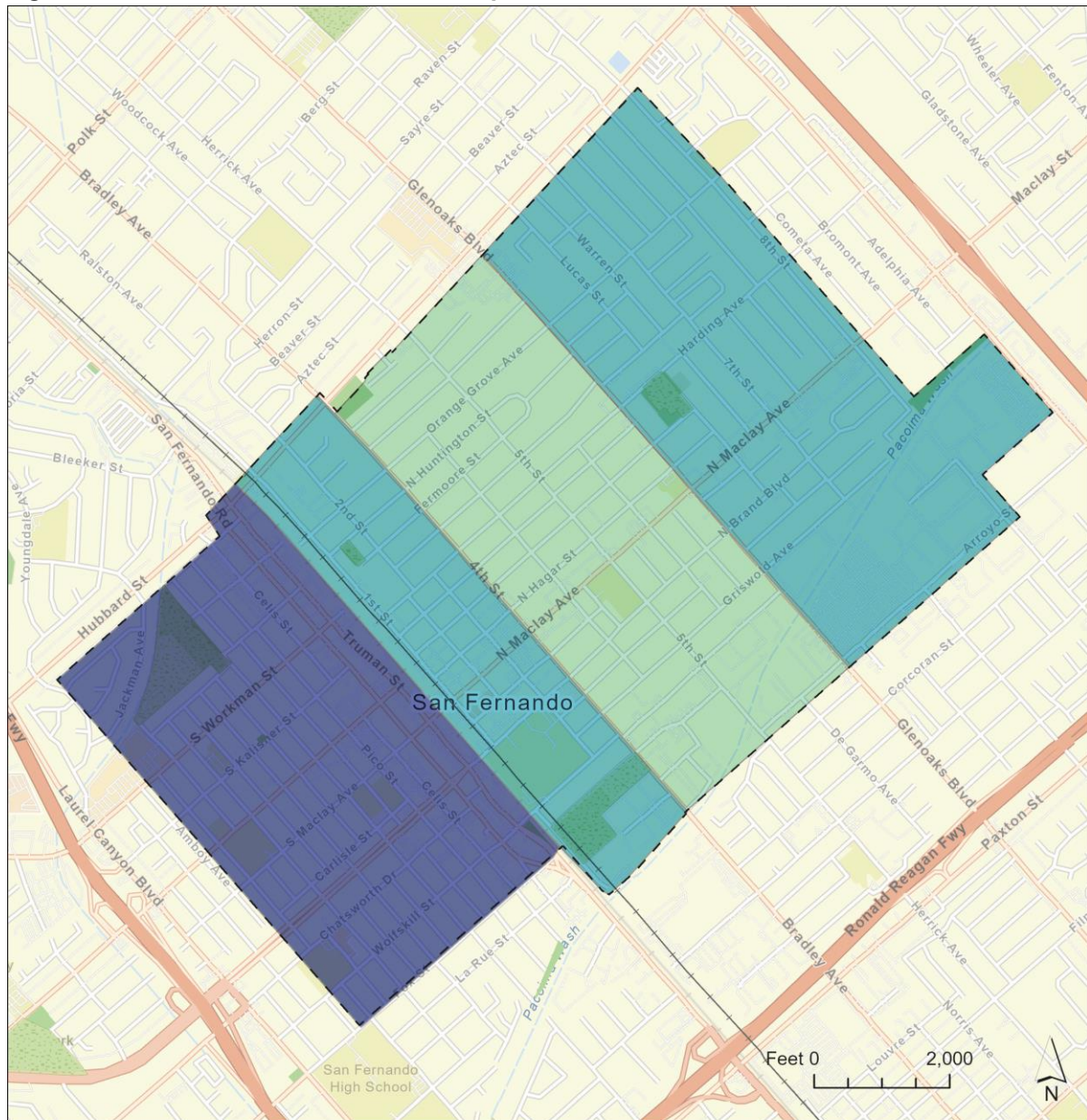


Figure 4 CalEnviroScreen Indicator Map – Diesel PM



[- -] City Boundary

— Railroads

Parks

Local Park

National Park or Forest

Regional Park

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Additional data provided by California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0, 2021.

Diesel Particulate Matter Percentile

90-100

80-90

70-80

60-70

50-60

40-50

30-40

20-30

10-20

0-10

Bolded indicates percentile present in San Fernando

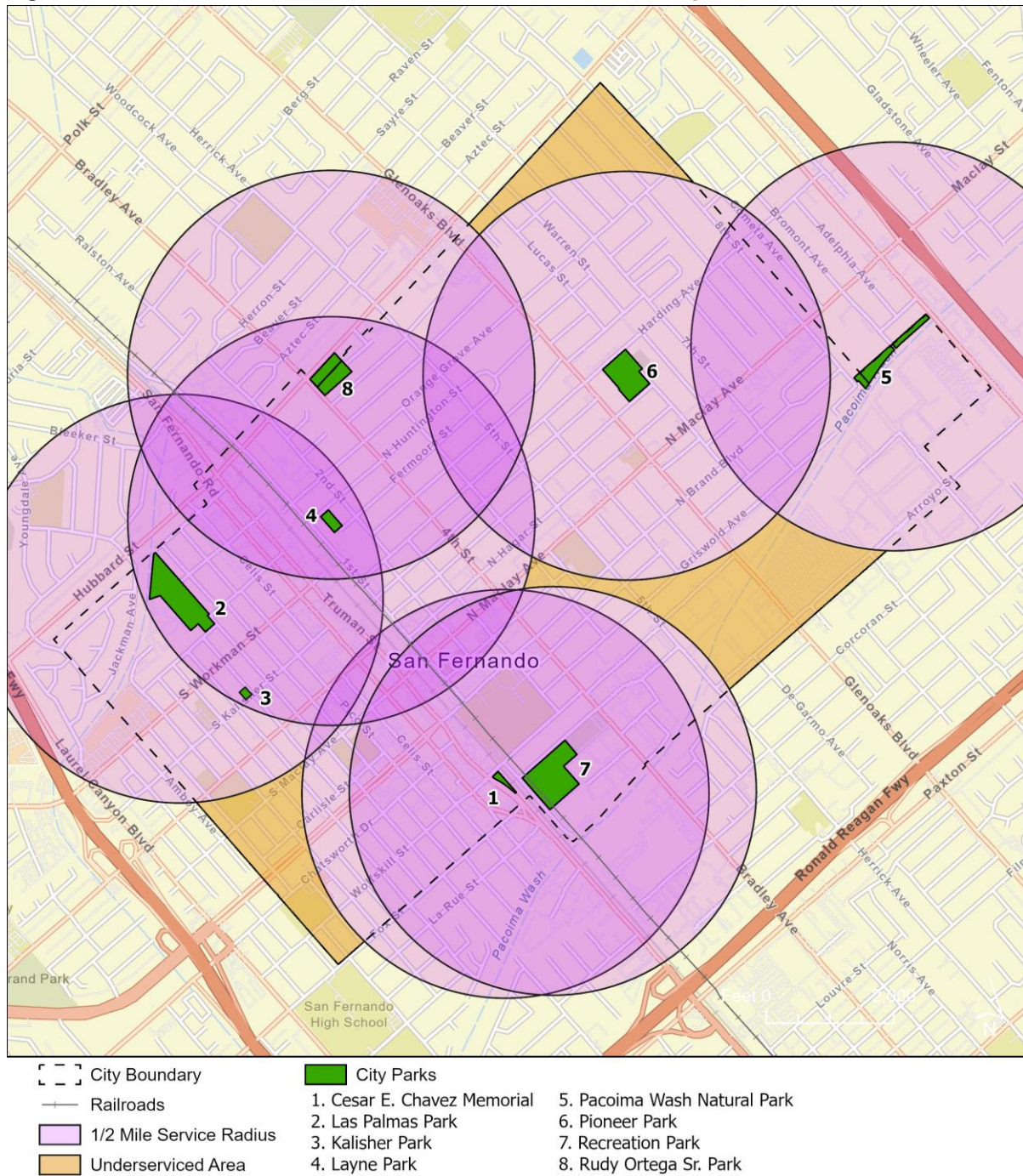
Water pollution is also a present source of pollution within the census tracts in San Fernando. For two of the four census tracts within the city, the drinking water pollution exposure indicator was measured to be higher than 75 percent of all census tracts in California. The drinking water exposure indicator is an index score combining information about 13 water contaminants and two types of water quality violations that are sometimes found when taking drinking water samples.

San Fernando contains hazardous material sites such as LUST sites, contaminated groundwater sites under the jurisdiction of the State Water Resources Control Board (SWRCB) Site Cleanup Program, and hazardous sites under the California Department of Toxic Substances Control (DTSC) Site Cleanup Program. There are 19 open or active cleanup sites in the city that have not been remediated or closed and 15 closed sites. A map of the hazardous material sites is provided in the Safety Element Update, Existing Conditions Report as Figure 7.

3.2 Public Facilities

Adequate access to public facilities is a factor that may impact the general wellbeing and health of a community. Parks and open spaces are critical public facilities that enable communities to participate in physical exercise and social engagement. According to the CalEnviroScreen, in San Fernando approximately 96 percent of the population live within walking distance (half-mile) of a park, beach, or open space greater than one acre. This is more than 89 percent of other California cities. The City's adopted Parks and Recreation Master Plan mapped a 0.5-mile service area radius around each park and recreation facility to identify areas of the city that may be underserved (Figure 5). The spatial distribution of parks and recreation in the city is even across the community, with the exception of residential areas located in the northwestern and southeastern corners. The City's Parks and Recreation Master Plan also calculated that the city's current ratio of parkland per 1,000 residents is 0.75 acres. This is significantly lower than the typical park and recreation ratio of 9.5 acres/1,000 residents found nationally, according to agencies surveyed by the National Recreation and Park Association Agency. These measures indicate that the spatial distribution of parks within the city is mostly adequate for community needs, however the number of parks available in relation to the population is below the typical nationwide average.

Figure 5 Park and Recreation Master Plan Service Area Map



Imagery provided by ESRI and their licensors © 2021.
 Additional data provided by City of San Fernando Park and Recreation Master Plan, 2017.

Safe roads, bicycle, transit, and pedestrian facilities are also critical in promoting the health of a community and serve to prevent injury or fatalities associated with collisions. The design and maintenance of streets, sidewalks, and intersections can help to reduce the severity of collisions that could occur. According to the Healthy Places Index Tool, in San Fernando, one out of four census tracts has a higher average rate of severe and fatal injuries than 74 percent of other California census tracts. The San Fernando Safe and Active Streets Plan (2017) evaluates the conditions and locations of various collisions throughout the city. According to most recent data available at the time the plan was prepared, 41 pedestrian-vehicle collisions and 29 bicycle-vehicle collisions occurred from 2009 to 2013.

Tree canopy is a natural public amenity that can serve to promote walkability, improve heat protection, and mitigate pollution within an area. The City recently launched the Calles Verdes tree planting program in partnership with TreePeople and the California State Coastal Conservancy, which aims to significantly expand the tree canopy in San Fernando to improve public health and climate resiliency. Currently, San Fernando neighborhoods have less than 17 percent tree cover, which is less than half the average of higher-income communities in the Los Angeles region. The Calles Verdes initiative aims to grow the city tree inventory by more than 10 percent. Improving the tree canopy within the city would allow for increased physical activity better overall health, and less type 2 diabetes, high blood pressure, asthma¹ and reduced pollution burden across the city.

Broadband internet is a public facility that improves economic outcomes for both individuals and communities by allowing for expanded information and educational access. Individuals without access to the internet may be limited by the inability to access critical information that is published in online platforms. According to the U.S. Census, 2015-2019 American Community Survey, approximately 21 percent of households in San Fernando do not have access to a broadband internet superscription. This is slightly higher percentage of households than in the City of Los Angeles which had approximately 17 percent of households without broadband internet superscription. Approximately 13 percent of San Fernando households lack a computer in the home, while 8 percent of Los Angeles households lacked a computer. In response to gaps in broadband internet access, the California Broadband Council has developed a “Broadband for All” plan in 2020 which focuses on achieving high-performance broadband at home, schools, libraries, and businesses in order to provide access to all Californians.

Public Wi-Fi hotspots are internet access points which allow public users to connect to broadband internet using a digital device outside of the home. According to the County of Los Angeles, there are six Wi-Fi hotspot access points within San Fernando. These access points include public facilities that offer internet accessibility and commercial facilities that offer public hotspots. Sufficient availability of Wi-Fi hotspots within a community enables residents without personal home broadband to access the internet at key locations outside of the home. Improving internet accessibility for residents of San Fernando may contribute to increased educational attainment and improved economic outcomes.

3.3 Safe and Sanitary Homes

Access to safe and sanitary homes is critical to the general health of a community. Poor quality housing, resulting from structural aging, overcrowding, or landlord neglect, may expose community members to contaminants and health hazards that can impact life expectancy. Communities with a

¹ https://www.fs.fed.us/pnw/pubs/journals/pnw_2016_ulmer001.pdf

high housing burden are more likely to be impacted by the effects of unsafe homes. This is a result of multiple factors associated with financial burden, including inability to afford necessary upgrades, increased likelihood of overcrowding, and lack of tenant agency associated with income. The housing burden in San Fernando is relatively high, with over 60 percent of renters spending more than 30 percent of their income on housing. Additionally, San Fernando has a higher rate of overcrowding and severe overcrowding than the general Southern California Association Governments region, with 24 percent of rental units occupied by more than one person per room and 11 percent of rental units occupied by more than 1.5 persons per room. The extent of the overcrowding and housing burden within San Fernando may indicate an issue regarding the safety and sanitation of homes within the city. Promoting safe and sanitary home environments within San Fernando can significantly improve the wellbeing and health outcomes of community members.

3.4 Physical Activity, Food Access, and Public Health

Communities with higher pollution exposure and a lack of access to resources (public facilities, safe and sanitary homes, tree canopy) may have poorer health outcomes as a result of these issues. Improving the environmental context of these communities can serve to bolster health outcomes and longevity. Asthma and low birth weight are both negative health outcomes associated with pollution and access. Asthma is also associated with lack of neighborhood tree cover. Within San Fernando, the asthma rate across all census tracts is within the 80th to 90th percentile. This means that the San Fernando community has a higher rate of asthma than over 80 percent of all census tracts in California. In addition, low birth weight is also significantly high across most of the census tracts in the city, with three out of four census tracts ranking in the 77 percentile or higher for low birthweight. Addressing pollution concerns in San Fernando can improve the measured disparity in health outcomes in the city relative to state levels.

Having access to a nearby supermarket can encourage a healthier diet and eating behaviors, lower the costs of obtaining food, reduce chronic diseases, and lower the risk of food insecurity. Hundreds of studies have documented that people who live close to a supermarket have healthier diets and better health outcomes.² Supermarkets provide fresh produce and other healthy food options for residents that may contribute to a person's nutritional wellbeing. Within San Fernando, a significant number (73 percent) of people reside less than half mile from a grocery store. This is a higher accessibility percentage than 94 percent of other California cities. Therefore, access to supermarkets does not appear to be a pertinent issue for San Fernando residents.

Although there is sufficient access to supermarkets within San Fernando, the access to fast food restaurants within the city is also notable. Prevalence and access of fast food within an area has been linked to poorer health outcomes associated with diabetes, sugar spikes, and weight gain. There are 15 fast food restaurants from the U.S. top 10 fast food chain list within the City of San Fernando. These top 10 fast food chains are those fast-food retailers with the most stores in the United States, including chains such as McDonalds, KFC, and Wendy's. This indicates that there were over 0.62 fast food restaurants in the city per 1,000 people.

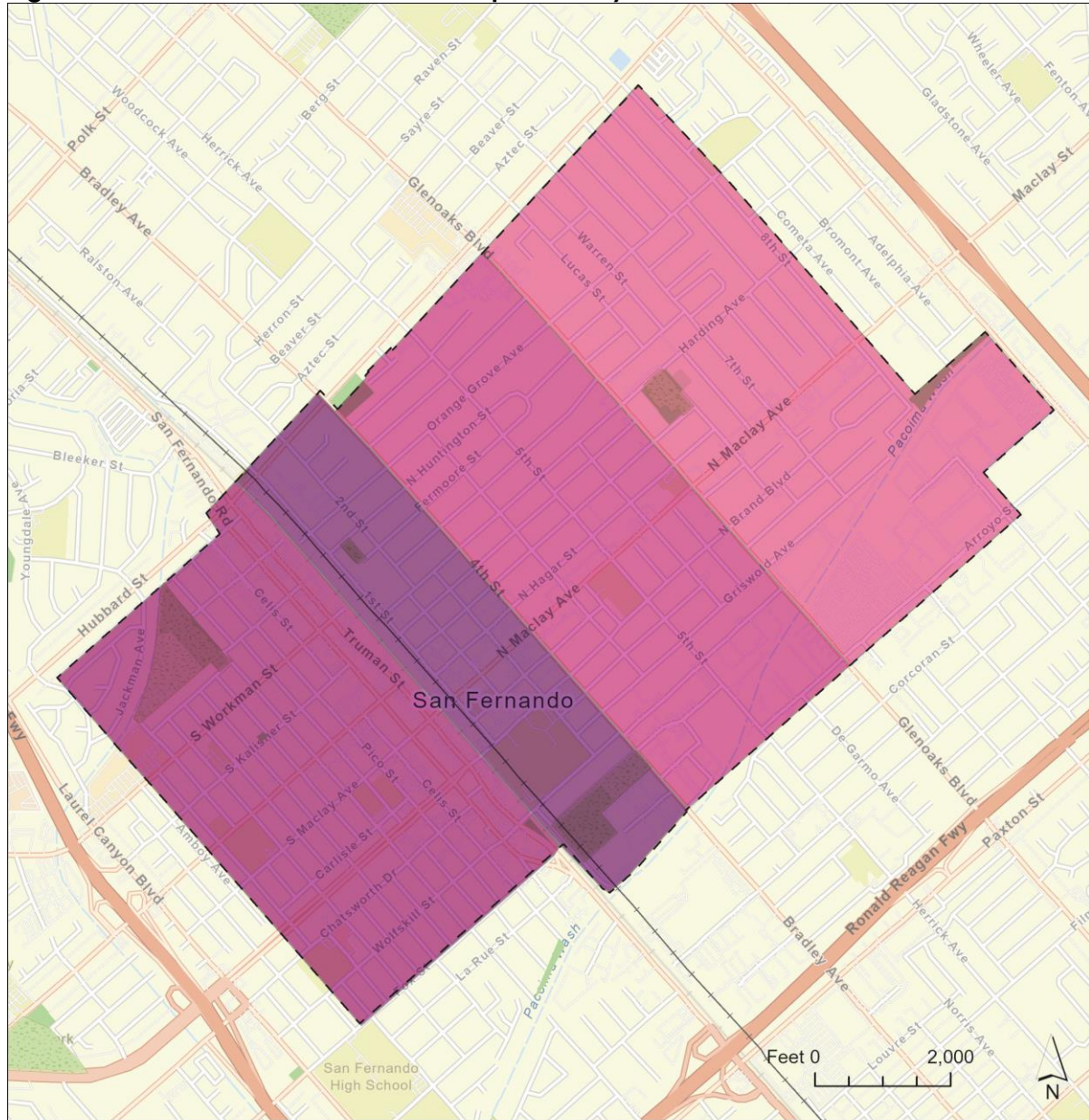
² <https://healthyplacesindex.org/policy-actions/supermarket-access/>

3.5 Civic and Community Engagement

The demographic context within a geographic area can contribute to reduced levels of civic and community engagement. Areas with lower educational attainment, high poverty rates, and prevalent language barriers may have disproportionately less civic engagement than their counterparts. Reduced opportunities for community engagement associated with these factors can lead to a reduced community agency and lack of community prioritization within public programs. Within San Fernando, barriers to civic engagement include low rates of educational attainment, high poverty rates, and language barriers.

To measure poverty levels, CalEnviroScreen utilizes an indicator that represents the percent of the population with incomes less than two times the federal poverty level. For two of the four census tracts in the city, the poverty indicator was within the 80th to 90th percentile (Figure 6). This means that the percent of people living below twice the poverty level in these census tracts is higher than 80 to 90 percent of all census tracts in California. Similarly, the CalEnviroScreen indicator for educational attainment was in the 80th to 90th percentile across all census tracts (Figure 7), while the indicator for linguistic isolation was above the 80th percentile for three out of the four census tracts (Figure 8). These two indicators suggest that the City of San Fernando has low educational attainment and high linguistic isolation relative to the state of California. Addressing these key community characteristics within the City's engagement programs is critical to ensuring that barriers to civic engagement are minimized.

Figure 6 CalEnviroScreen Indicator Map – Poverty



[] City Boundary

— Railroads

Parks

Local Park

National Park or Forest

Regional Park

Poverty Percentile

90-100

80-90

70-80

60-70

50-60

40-50

30-40

20-30

10-20

0-10

Bolded indicates percentile present in San Fernando

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Additional data provided by California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0, 2021.

Figure 7 CalEnviroScreen Indicator Map – Education

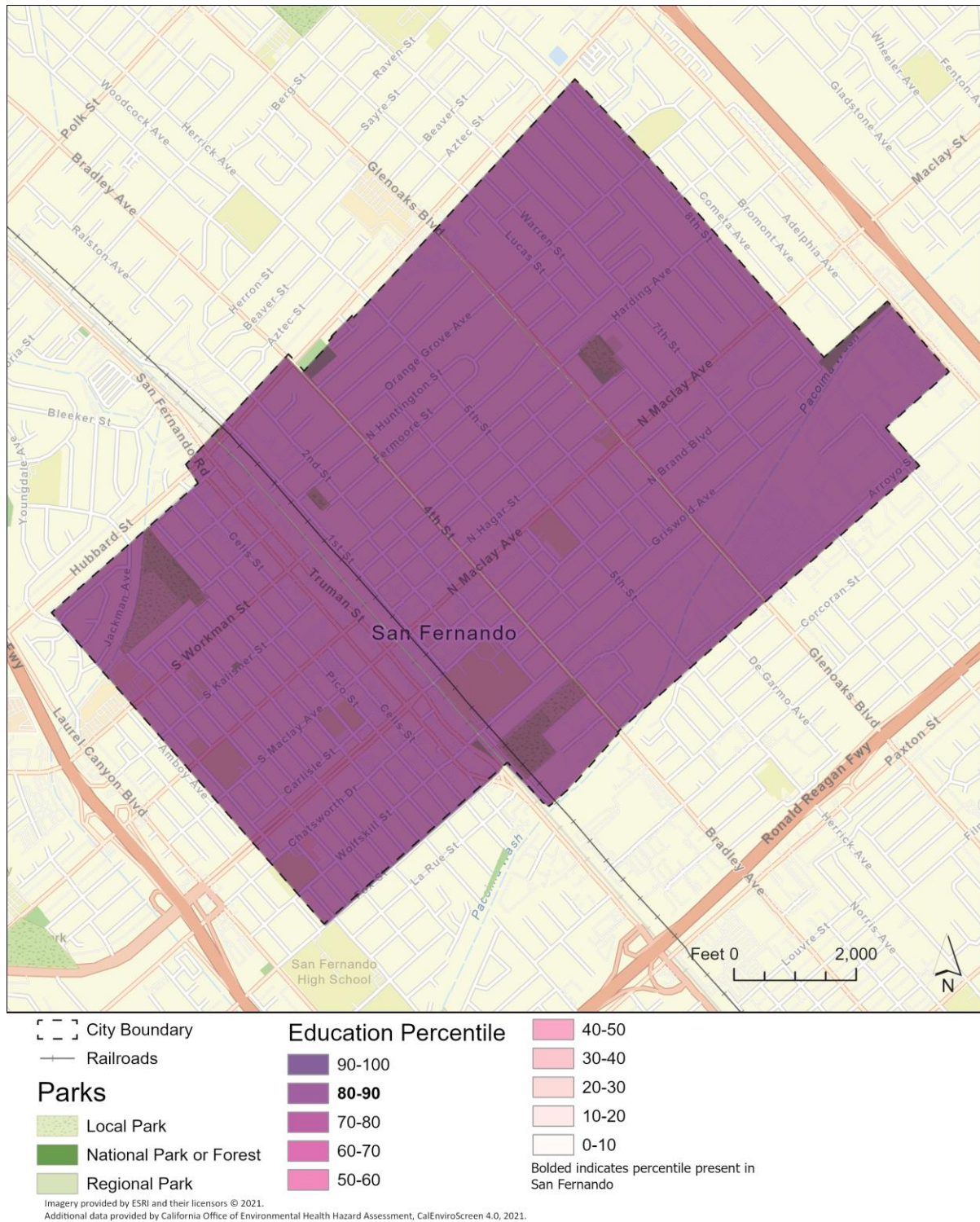


Figure 8 CalEnviroScreen Indicator Map – Linguistic Isolation

