PARK ACCESS IN SACRAMENTO COUNTY

DATA ANALYSIS REPORT





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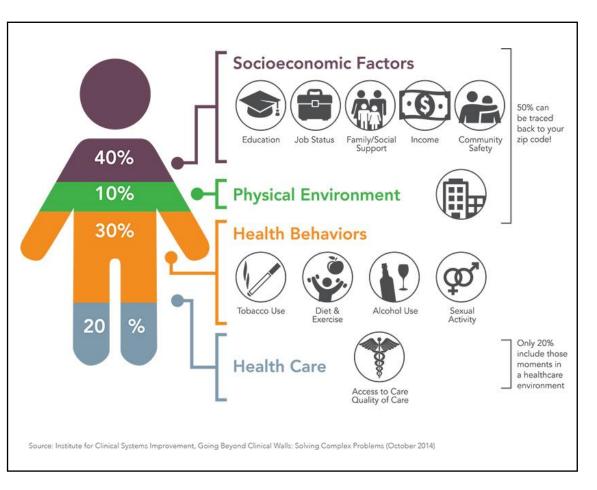
INTRODUCTION

Sacramento County Public Health has identified two priority areas within Sacramento County as part of the Obesity Prevention Program for targeted interventions to improve public health. Physical exercise and a healthy diet are two important interventions that have been proven to have a positive impact on health. Specifically, this report focuses on parks as an opportunity for physical activity and assesses potential barriers to accessing parks. Parks provide a natural gathering space for people of all ages to walk, run, play, and socialize. Parks that are located within a 10-minute walk of neighborhoods also increase the likelihood of people walking or biking to that park, which increases physical activity. Improving walkability to parks is therefore linked to improve health outcomes.

SOCIAL AND PHYSICAL DETERMINANTS OF HEALTH

Health is more than just the quality of care received. A variety of personal, biological, social, economic, and environmental factors also influence health outcomes. Health is often attributed to personal choice, including substance use, diet, and exercise. However, half of an individual's health outcomes are based on socioeconomic factors and built environment conditions that are directly impacted by policies and social structures, also known as the **social and physical determinants of health**.

Understanding and addressing the social and physical determinants of health can have positive impacts on public health outcomes. From a park access perspective, improving routes to parks so that they are safe and convenient encourages more people to use that park, which increases physical activity that results in reduced risk of chronic diseases. Rather than focusing solely on behavior change campaigns, policies and investments that target the social and physical determinants of health have the opportunity to significantly influence community health.



SAFE ROUTES TO PARKS OBJECTIVES

Traditionally, access to parks has been viewed in terms of park proximity (homes located within half a mile of a park). While proximity is an important factor, it is not the end-all-be-all of accessibility. Many communities in Sacramento County are located within half a mile of a park, but residents may not be able to directly access that park due to soundwalls, high-speed streets, unsafe crossings, nonexistent sidewalks or bike facilities, and other barriers that make walking and biking unsafe, inconvenient, or uncomfortable. Social factors such as presence of crime or park programs that do not meet community needs also limit access and discourage park use.

In light of the various barriers to park access, a Safe Routes to Parks approach should aim to accomplish the following objectives¹:

- Accessible via multiple modes of transportation for people of all ages and abilities
- Conveniently located within approximately a half mile (10-minute walk) from where people live
- Safe from traffic and personal danger
- Comfortable and appealing places to walk or bicycle
- End at parks that are well-maintained and programmed

HOW TO USE THIS REPORT

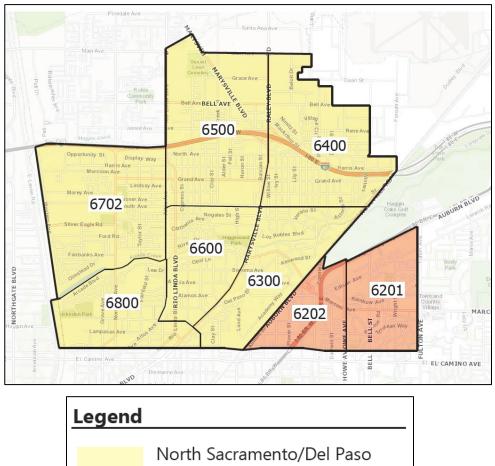
Using the social and physical determinants of health framework, this report looks at several socioeconomic and physical environment characteristics in the North Sacramento and South Sacramento priority census tracts to justify why park access is important and to identify opportunities for improving access to parks. The report begins with an assessment of the health outcomes that we see in these communities, followed by an understanding of the socioeconomic and environmental factors that influence these outcomes. Additionally, this report provides a high-level assessment of built environment conditions pertaining to the Safe Routes to Parks Objectives.

While this report focuses only on data for the North Sacramento and South Sacramento priority census tracts, the data indicators identified throughout the report can serve as a model for justifying park access improvements in other communities throughout Sacramento County. This report is intended for local agencies, decision-makers, health and transportation professionals, and community advocates to better understand the connections between health, socioeconomic factors, and the built environment, and to provide data that can be used to justify investments and pursue funding for improving park access in these communities.

¹ Source: Safe Routes National Partnership. <u>https://www.saferoutespartnership.org/healthy-communities/saferoutestoparks</u>

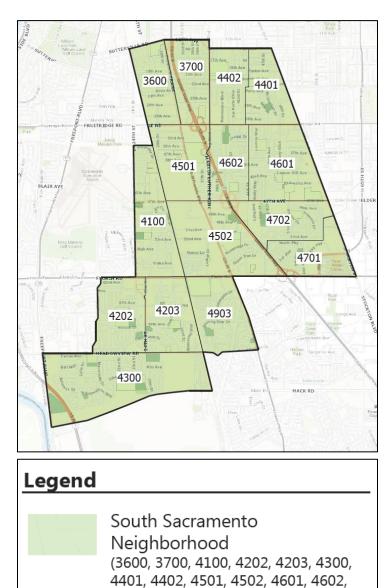
North Sacramento Priority Census Tracts





North Sacramento/Del Paso Heights Neighborhood (6702, 6500, 6400, 6600, 6300, & 6800)

Arden Neighborhood (6202 & 6201)



4701, 4702 & 4903)

3

Table 1: Comparison of Selected Socioeconomic, Health, and Environmental Conditions Between Sacramento County and the North Sacramento and South Sacramento Priority Census Tracts

The following table summarizes the findings from this report by comparing health outcomes, socioeconomic demographics, and physical environment conditions to Sacramento County averages. Overall, the North Sacramento and South Sacramento priority census tracts experience lower healthier community conditions than Sacramento County, demonstrating a high need for improved park access.

	North Sacramento Priority Census Tracts	South Sacramento Priority Census Tracts				
Health Outcomes						
Health Outcomes						
Healthy Places Index Score	Lower	Lower				
Asthma Diagnosis	Higher	Higher				
Asthma ER Admissions	Higher	Higher				
Diabetes Diagnosis	Higher	Higher				
Heart Disease Diagnosis	Higher	Higher				
Obesity	Higher	Higher				
Socioeconomic Demograph	ics					
Population Demographics						
Population Density	Higher	Higher				
Children Ages 0-17	Higher	Higher				
Adults Ages 65+	Lower	Lower				
Population with Disability	Higher	Higher				
Population Hispanic/Latino	Higher	Higher				
Population Over 5 Years Old with Limited English Proficiency	Higher	Higher				
Income and Economic Demogra	phics					
Median Household Income	Lower	Lower				
Poverty	Higher	Higher				
Unemployment	Higher	Higher				
Housing Cost Burden	Higher	Higher				
Homeownership	Lower	Lower				
No Motor Vehicle	Higher	Higher				
Commute by Walk, Bike, Transit	Higher	Higher				
Physical Environment Cond	itions					
Air Quality and Natural Environr	nent					
CalEnviroScreen 3.0 Percentile	Higher	Higher				
Ozone	Same	Same				
Particulate Matter 2.5	Higher Higher					
Diesel Particulate Matter	Higher Higher					
Tree Canopy Coverage	Lower	Lower				
Urban Heat	Higher	Lower				

JURISDICTIONAL BOUNDARIES

North Sacramento

The North Sacramento priority area encompasses the Del Paso Heights and Hagginwood neighborhoods in the City of Sacramento and the Arden-Arcade neighborhood in the unincorporated County, as shown in the map to the right. The area falls within the jurisdictions of City of Sacramento Council District 2 and Sacramento County Board of Supervisors Districts 1 and 3.

Two park districts operate in this area: the City of Sacramento Department of Youth, Parks, and Community Enrichment and the Fulton - El Camino Recreation and Park District. The Twin Rivers Unified School District, San Juan Unified School District, and Robla Elementary School District boundaries are located within this area as well.

North Sacramento Jurisdictional Boundaries

Robin City Neighborhoods Robin County Neighborhoods Robin Study Area City Council Districts Robin Robin

✓ J District 1

District 3

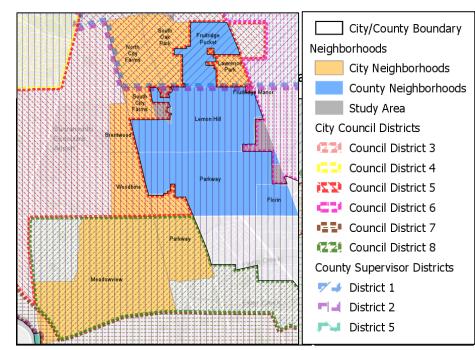
n-Arcade Park neighborhoods in the City of Sacramento as well as the Fruitridge Pocket he right. and other neighborhoods in the unincorporated County. As shown in the map

South Sacramento

and other neighborhoods in the unincorporated County. As shown in the map to the right, this area falls primarily within the City of Sacramento Council Districts 5 and 8 with small portions of Districts 6 and 7. The area is located within the Sacramento County Board of Supervisor Districts 1 and 2.

The South Sacramento priority area contains the Meadowview and South Oak

Two park districts operate in this area: The City of Sacramento Department of Youth, Parks, and Community Enrichment and the Southgate Recreation and Park District. The Sacramento City Unified School District is the primary school district of this area.



South Sacramento Jurisdictional Boundaries

HEALTH OUTCOMES

One of the goals of improving park access is to provide more opportunities for physical activity and better long-term health. Identifying areas with higher rates of chronic diseases and poor health outcomes can help prioritize where investments are made. The following health data were collected:

Healthy Places Index

The Healthy Places Index (HPI) identifies community conditions that predict life expectancy, including economic, social, and environmental factors. The HPI scores communities down to the census tract level based on a scale of more or less healthy conditions and highlights existing community assets and opportunities for improvement. Higher scores indicate healthier community conditions whereas lower scores indicate less healthy community conditions.

Asthma

Asthma is a chronic health condition that is a combination of genetic and environmental factors. People with asthma are more vulnerable to air pollution and other illnesses such as pneumonia and the flu. Asthma is measured by prevalence (number of people diagnosed with asthma) and severity (rate of emergency department visits for asthma symptoms).

Diabetes

Diabetes is a chronic disease that is a combination of genetic, environmental, and behavioral factors. Physical activity and a healthy diet are some behaviors that can help lower the risk of developing diabetes. Improving pedestrian and bicycle access to parks can provide more opportunities for physical activity by encouraging use of parks as well as active travel to and from parks. Areas with high rates of diabetes diagnoses are vulnerable to the impacts of diabetes on health and life expectancy and should be prioritized for interventions that focus on improving opportunities for physical activity.

Heart Disease

Heart disease is a chronic disease that involves blocked or narrowed blood vessels that can lead to a heart attack or other heart problems. Risk of heart disease is influenced by a number of factors including hereditary predisposition, behavior, and the environment. Physical activity can lower the risk of heart disease and improve health for individuals diagnosed with heart disease. Areas with high rates of heart disease diagnoses are vulnerable to the impacts of heart disease on health and life expectancy and should be prioritized for interventions that focus on improving opportunities for physical activity.

Obesity

Obesity increases the risk of developing chronic diseases such as type 2 diabetes and heart disease, and can trigger other health conditions such as high blood pressure, high cholesterol, and strokes that impact quality of life and life expectancy. Obesity is caused by a number of factors including genetics, the environment, and behavior. Physical activity and a healthy diet are among the behaviors that can reduce obesity and improve health. Areas with high obesity rates are vulnerable to developing chronic health diseases and should be prioritized for interventions that focus on improving opportunities for physical activity.

Health Outcomes in the North Sacramento and South Sacramento Priority Census Tracts

The Healthy Places Index uses a percentile system that scores and compares communities based on a variety of socioeconomic and environmental indicators. According to the Healthy Places Index, the North Sacramento and South Sacramento priority census tracts have significantly less healthy conditions than Sacramento County's aggregated score. Additionally, both areas have higher rates of chronic health conditions and obesity, indicating greater existing health vulnerabilities and opportunities to target investments in the built environment that will improve physical health.

Table 2: Health Outcomes

	North Sacramento	South Sacramento	Sacramento County	
HPI Score ²	5.4	9.9	57.1	
Asthma Diagnosis ³	11.31%	10.92%	9.16%	
Asthma ER Admissions⁴	115.4 per 10,000 visits	100.09 per 10,000 visits	68.92 per 10,000 visits	
Diabetes Diagnosis ³	13.33%	13.53%	9.84%	
Heart Disease Diagnosis ³	6.74%	6.43%	4.3%	
Obesity ³	33.81%	32.33%	26.01%	

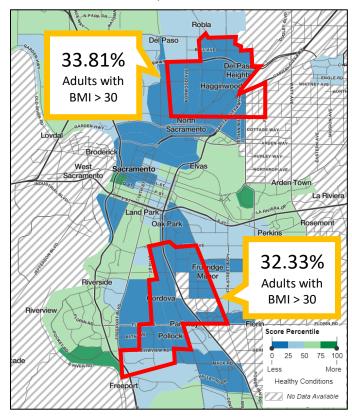
KEY VULNERABILITIES

- Greater risk of developing chronic diseases.
- Shortened life expectancy from chronic diseases.

OPPORTUNITIES

- Develop and implement policies that address the social and physical determinants of health.
- Invest in safe active transportation infrastructure to create more opportunities for physical activity.

Adult Obesity Rates in Sacramento County Healthy Places Index



² Source: Healthy Places Index. Accessed July 2018. <u>http://healthyplacesindex.org/</u>

³ Source: Centers for Disease Control and Prevention, 500 Cities Dataset. Via Healthy Places Index. 2016. Accessed July 2018. <u>http://healthyplacesindex.org/</u>

⁴ Source: California Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0. Via Healthy Places Index. 2011-2013. Accessed July 2018. http://healthyplacesindex.org/

POPULATION AND SOCIOECONOMIC DEMOGRAPHICS

Understanding population and socioeconomic characteristics can help prioritize efforts in vulnerable communities and guide the types of policies and programs that would be most effective.

POPULATION DEMOGRAPHICS

The following population demographics were collected:

Population Density

Population density indicates the number of people per square mile. Areas with higher population densities may have a greater demand for parks and are opportunities for new park siting, improving existing park access, and programming to encourage more people to come out and play.

Age (under 18 and over 65)

Children and older adults are particularly vulnerable to being killed or seriously injured in traffic crashes while walking and biking, yet tend to rely on these alternative modes of transportation due to limited access to motor vehicles and varying ability or willingness to drive. Areas that have higher proportions of children and/or older adults may have a greater need for safe transportation options to parks. Additionally, understanding the age demographics of an area can inform the type of park amenities and programming that would be most engaging for different age groups.

Disability

People with disabilities tend to rely on active travel and transit as primary methods of transportation. Areas that have higher proportions of people with disabilities may have a greater need for safe transportation options to parks and should be assessed for infrastructure and amenities that provide accessibility.

Race and Ethnicity

Understanding racial and ethnic demographics are important for ensuring equitable access to parks. Historic disinvestment in communities of color has often led to health disparities and unequal access to opportunities. Racial diversity should be considered when prioritizing park investments in order to improve racial and health equity.

Limited English Proficiency

Limited English proficiency is often a barrier for accessing services. Understanding whether there is a high proportion of individuals with limited English proficiency in an area, and what languages are most commonly spoken, can help remove language barriers that may be limiting knowledge of park locations and programs.

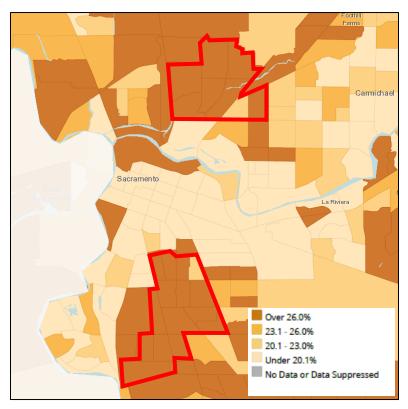
Population Demographics in the North Sacramento and South Sacramento Priority Census Tracts

The North Sacramento and South Sacramento priority census tracts have higher proportions of children under 18, people with disabilities, and people with limited English proficiency than the County as a whole. Children and people with disabilities are more vulnerable to being killed or seriously injured in traffic crashes while using active transportation, yet tend to rely on these modes the most. These communities also have a greater proportion of people of color than the Countywide average, with approximately 40% of the population in both areas identifying as Hispanic or Latino and over 15% identifying as Black or African American. These demographics highlight a greater need for safe, accessible active transportation to parks in these areas, as well as programming focused on youth, families and multi-lingual groups.

Table 3: Selected Population Demographics⁵

	North South Sacramento Sacramento		Sacramento County
Population Density (people/sq mi)	5658.88	7447.91	1533.05
Children 0-17	31% 31.8%		24.4%
Adults 65+	8.85%	9.16%	12.79%
Population with Disability	13.43%	14.64%	12.7%
Population Hispanic/Latino	40%	39.5%	22.5%
Population Over 5 Years Old with Limited English Proficiency	17.55%	28.43%	13.55%

Percent Population Age 0-17 ACS 2012-2016



⁵ Source: US Census Bureau, American Community Survey. Via Community Commons. 2012-16. Accessed July 2018. https://www.communitycommons.org/

Table 4: Percent Population by Race

Percent Population Black or African American ACS 2012-2016

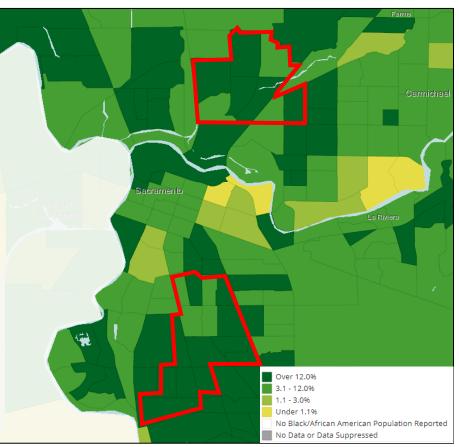
	North Sacramento	South Sacramento	Sacramento County
White	43.49%	37.1%	59.25%
Black or African American	15.14%	16.82%	9.9%
Asian	11.08%	21.07%	15.16%
Native American / Alaska Native	1.32%	0.81%	0.75%
Native Hawaiian / Pacific Islander	2%	3.22%	1.05%
Some Other Race	21.09%	13.5%	7.06%
Multiple Races	5.88%	7.47%	6.83%

KEY VULNERABILITIES

- Youth and people with disabilities are disproportionately more vulnerable to traffic injuries and fatalities.
- Communities of color tend to have lower access to opportunities due to historic disinvestment, leading to health disparities and inequities.

OPPORTUNITIES

- "Eight to eighty" infrastructure approach to create safer environments for children and young adults.
- ADA accessible infrastructure on routes to parks and at park sites.
- Programming geared towards youth, families, and multilingual groups.



SOCIOECONOMIC DEMOGRAPHICS

The following socioeconomic demographics were collected:

Median Household Income and Poverty

Economic opportunity is one of the most powerful predictors of health, and research has shown that individuals living in or near poverty are more highly impacted by chronic health outcomes. Areas that have a lower Median Household Income and higher poverty levels may have a greater need for safe, affordable access to parks in order to improve health equity. Due to high costs of living in California, the statewide best practice for measuring poverty levels is the percentage of the population living in households with a total income at or below 200% of the Federal Poverty Level.

Unemployment

Unemployment rates are another indicator of economic prosperity and health equity. Individuals who do not have stable incomes through employment are more vulnerable to chronic health outcomes, and therefore areas with higher unemployment rates may have a greater need for safe, affordable access to parks.

Housing Cost Burden

High housing costs restrict the ability of households to afford other necessities such as transportation, healthy food, and medical care. Households with housing costs that exceed 30% of total household income are more vulnerable to poor health outcomes and have a greater need for affordable access to parks.

Homeownership Rate

Homeownership is another indicator of economic prosperity. Owning a home builds household wealth over time and can protect against rising rents and improve neighborhood stability. Lower homeownership rates can indicate lower economic opportunity and greater vulnerability to health impacts.

Households with No Motor Vehicles

Households that do not have motor vehicles must rely on alternative modes of transportation such as walking, biking, and transit. Areas that have higher proportions of households without motor vehicles should be assessed for built environment conditions that accommodate safe travel for modes other than cars, because parks should be safely and conveniently accessible by a variety of transportation modes.

Commute by Public Transportation, Walking, or Biking

People who commute by walking, biking, or public transportation are more likely to use alternative transportation modes for other trips, whether by necessity or by choice. Areas with higher percentages of commuting by alternative transportation may indicate a greater opportunity for investing in alternative transportation to parks.

Socioeconomic Demographics in the North Sacramento and South Sacramento Priority Census Tracts

The North Sacramento and South Sacramento priority census tracts have higher proportions of low-income households than the County, with significantly lower Median Household Income, higher poverty rates, and greater housing cost burdens. Limited economic opportunity indicates that these areas are particularly vulnerable to poor health outcomes. Additionally, lower vehicle ownership rates indicate that affordable transportation alternatives are necessary in order to improve access to parks for greater health equity.

	North Sacramento	South Sacramento	Sacramento County	
Median Household Income ⁶	\$29,154	\$31,114	\$67,305	
Poverty ⁷	68.23%	67.8% 37.05%		
Unemployment ⁸	5.7%	5.7%	3.9%	
Housing Cost Burden ⁷	56.66%	51.9%	39.76%	
Homeownership ⁶	39.06%	38.1%	56.9%	
No Motor Vehicle ⁷	17.24%	13.76%	7.47%	
Commute by Walk, Bike, Transit ⁷	6.5%	7.9%	5.92%	

Table 5: Socioeconomic Demographics

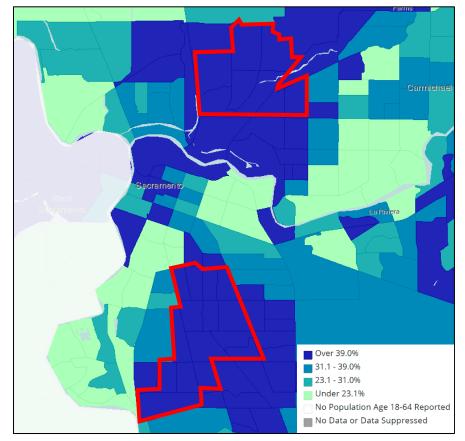
KEY VULNERABILITIES

- Low-income individuals are less able to afford health care services and healthy lifestyles, leading to greater risk of chronic diseases.
- Low vehicle ownership means greater reliance on public transit and active travel.

OPPORTUNITIES

• Investment in active transportation infrastructure improves health through physical activity.

Percent Population Below 200% of Poverty Level ACS 2012-2016



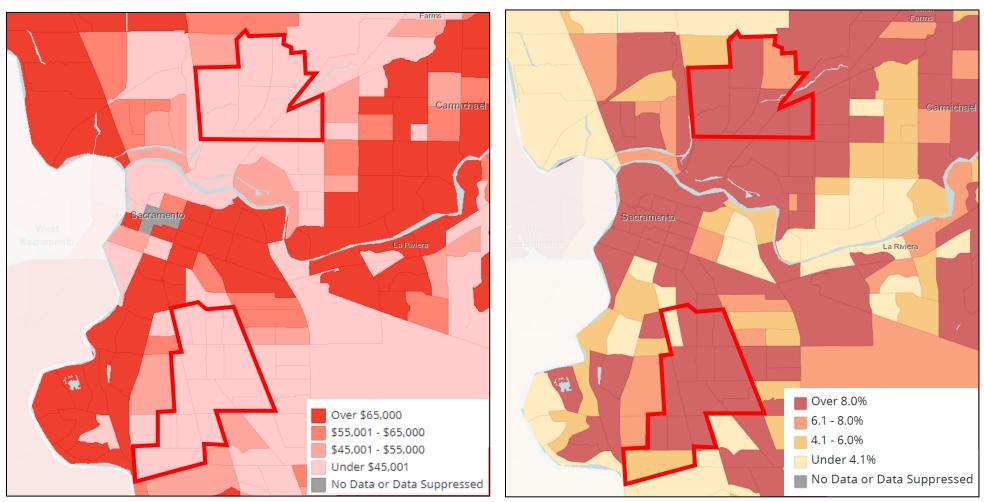
⁶ Source: US Census Bureau, American Community Survey. Via Healthy Places Index. 2011-15. Accessed July 2018. <u>http://healthyplacesindex.org/</u>

⁷ Source: US Census Bureau, American Community Survey. Via Community Commons. 2012-16. Accessed July 2018. https://www.communitycommons.org/

⁸ Source: US Department of Labor, Bureau of Labor Statistics. Via Community Commons. 2018 – March. Accessed July 2018. https://www.communitycommons.org/

Median Family Income, ACS 2012-2016

Percent Households with No Vehicle, ACS 2012-2016



Median family income is inversely correlated to vehicle ownership, as demonstrated in the above maps. Households with lower incomes are less likely to own cars and are thus more reliant on public transit and active transportation to access parks, healthy and affordable foods, jobs, and other services. However, communities with a higher proportion of low-income households also tend to be more auto-oriented and less conducive to walking and biking, further restricting the ability of individuals to be physically active and access health services and opportunities.

PHYSICAL ENVIRONMENT CONDITIONS

Natural environment conditions, such as air quality, pollution, and extreme heat, directly impact health in communities. Land use, transportation, and other characteristics of the built environment contribute to these environmental conditions and also impact whether or not parks are conveniently and safely accessible.

AIR QUALITY AND NATURAL ENVIRONMENT

The following natural environment conditions data were collected:

CalEnviroScreen

CalEnviroScreen identifies California communities that are disproportionately burdened by and vulnerable to pollution by calculating scores for each census tract based on a combination of environmental exposures, health outcomes, and population characteristics. Higher scores indicate higher vulnerabilities and disproportionate pollution burdens in communities.

Air Quality

Ozone, particulate matter, and diesel particulate matter are among the EPA's six criteria pollutants and can cause heart and lung disease as well as exacerbate asthma and other chronic health conditions. Communities located along highways and major transportation corridors are particularly burdened by vehicle air pollution.

Parks provide valuable air quality benefits that improve health and prevent chronic illnesses caused by air pollution. Areas that have higher concentrations of air pollutants are vulnerable to poor health outcomes and may have a greater need for urban greening through parks, trees, or green infrastructure.

Tree Canopy

Trees provide a multitude of benefits for both physical and mental health by improving air quality, providing shade, and reducing stress. In particular, trees along street corridors are important for improving comfort while walking or biking by protecting street users from direct sunlight and heat. Tree canopy coverage is measured by the amount of land with tree cover, weighted by number of people per acre. Areas with lower percentages of tree cover are vulnerable to air quality and heat impacts and should be assessed for urban greening opportunities.

Urban Heat Island Index (UHII)

The Urban Heat Island effect is a phenomenon that occurs when areas with a high surface area of pavement and dark building material feels hotter than the surrounding areas. In Sacramento, urban heat tends to be generated in the downtown core but the effects are felt in suburban and rural communities to the northeast, creating health inequities through heat stroke and other heat-related illnesses. Areas with higher UHII are more vulnerable to the impacts of heat and are opportunities for cooling strategies such as urban greening through tree canopy and parks.

Natural Environment Conditions in the North Sacramento and South Sacramento Priority Census Tracts

According to CalEnviroScreen, on average the North Sacramento and South Sacramento priority census tracts fall within the percentile range of 76-80%, indicating higher pollution burden and vulnerability. Overall, air quality is comparable to the County as a whole, however ozone concentrations throughout the County are on the higher end of the statewide range of 0.026-0.068 ppm. The two priority areas also have slightly higher diesel particulate matter emissions than the County, which may be due to major highways and trucking routes passing through these areas. Lower tree canopy coverage makes the North Sacramento and South Sacramento communities more vulnerable to the impacts of heat. Urban greening through parks and tree canopy may be an opportunity to improve local air quality and encourage walking and biking by improving comfort and aesthetics.

Table 6: Environmental Conditions

	North Sacramento	South Sacramento	Sacramento County
Ozone (ppm) ⁹	0.05	0.05	0.05
Particulate Matter 2.5 (μg/m3) ⁹	9.54	9.49	9.22
Diesel Particulate Matter (kg/day) ⁹	15.71	15.02	13.06
Tree Canopy Coverage ¹⁰	12.5%	10.95%	13.3%
Urban Heat (degree- hr) ¹¹	8873.79	3880.26	6220.34

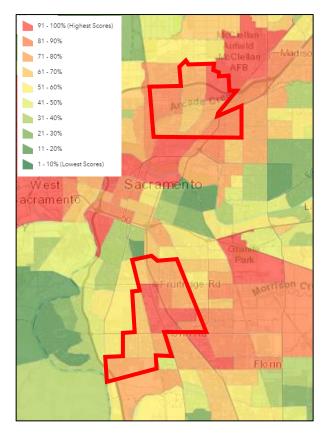
KEY VULNERABILITIES

- Poor air quality increases risk of asthma and other chronic diseases.
- Children, the elderly, and low-income households are particularly vulnerable to heat.

OPPORTUNITIES

• Urban greening along streets can help mitigate the impacts of air quality and heat.

Sacramento County CalEnviroScreen 3.0 Results



⁹ Source: California Office of Environmental Health Hazard Assessment, CalEnviroScreen 3.0. Via Healthy Places Index. Accessed July, 2018. <u>https://healthyplacesindex.org/</u>

¹⁰ Source: Sacramento Tree Foundation, Tree Cover Map. Accessed July, 2018. <u>https://www.sactree.com/greenrx</u>

¹¹ Source: California Environmental Protection Agency, Urban Heat Island Index. Via Healthy Places Index. Accessed July, 2018. <u>https://healthyplacesindex.org/</u>

BUILT ENVIRONMENT AND LAND USE

Communities with a mix of land uses and common destinations that are located nearby – such as schools, job centers, shopping, and parks – are more conveniently accessible by walking and biking. In particular, research has shown that people who live within half a mile, or a 10-minute walk, of a park are more likely to use that park, thereby getting multiple physical activity benefits from the trip to the park and while being at the park. Streetscape conditions along the route to parks is also an important factor in whether or not parks are safely and conveniently accessible.

The following built environment and land use conditions were collected:

General Land Uses

The types of land uses around parks affect whether the park is convenient and well-used. Parks located in residential neighborhoods are more convenient than parks that are located in commercial or industrial areas, thereby encouraging greater and more frequent use of the park. Land uses can inform siting of new parks and infrastructure investments or programming for existing parks that increases park use.

Zoning categorizations from both the City of Sacramento and Sacramento County were used to determine the general land use characteristics in the North and South Sacramento priority areas.

Schools

Schools located near parks are an opportunity for improving physical health in children and young adults. The presence of schools within a half mile of parks can inform potential safety improvements and programming to encourage use by children, youth, and families.

Park Locations

Ideally, all residents should be able to access a park within a 10-minute walk. The number and distribution of parks can highlight park system gaps and areas that may have a greater need for park siting.

Active Transportation Modes

Access to parks by active transportation such as transit, walking, and biking is important from both a health and equity perspective. Walking and biking increases physical activity levels, which improves overall health and reduces risk of developing chronic health conditions. People who take transit are also more likely to walk to and from transit stops, thereby gaining the benefits of physical activity. Walking, biking, and transit are also more affordable travel options that can be used by anyone, regardless of ability or desire to drive. Assessing proximity of parks to transit and the conditions of pedestrian and bicycle infrastructure around parks are important factors influencing whether or not people can access parks by alternative modes and if it feels safe, comfortable, and convenient to do so.

Transportation and Land Use in the North Sacramento and South Sacramento Priority Census Tracts

Land uses in the North Sacramento and South Sacramento priority census tracts are primarily low-density single family residential, with some commercial and heavy industrial. Most of the land area in both North Sacramento and South Sacramento falls within a half-mile radius of a park, with 15 parks located in North Sacramento and 26 parks located in South Sacramento. While proximity to a park is relatively good in these areas, access may be limited due to streetscape conditions.

Streets in these areas are generally characterized by high speed arterials that funnel traffic to major highways such as I-80, Business 80 (also known as the Capital City Freeway), and Highway 99. Arterial streets are not safe or comfortable for pedestrians due to long crossing distances at wide intersections, narrow sidewalks, and sparse safe crossing opportunities. Additionally, many of the arterial streets in these communities are City or County trucking routes.

Sidewalks are primarily a minimum width of 4-5 feet both within neighborhoods and along collector and arterial streets. In the North Sacramento census tracts, sidewalks are often not present in lower density residential neighborhoods such as Arden-Arcade. Bike infrastructure along arterial streets tends to include a narrow, unbuffered Class II bike lane, which does not provide adequate separation from high speed traffic.

The City of Sacramento has identified five corridors with the highest numbers of fatal and serious crashes involving pedestrians, bicyclists, and motorists, four of which are located with the priority census tracts. Several parks are located along these high injury corridors and arterial roadways, making walking and biking to these parks unsafe and uncomfortable in spite of their proximity to residential areas.

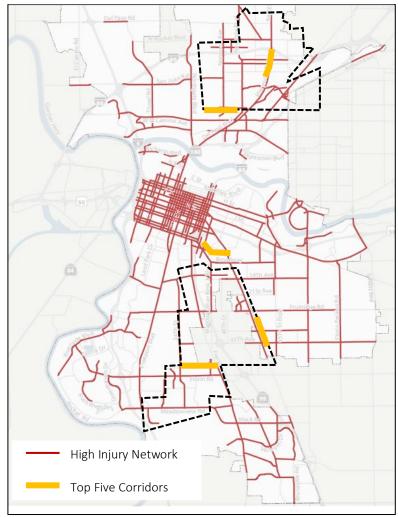
KEY VULNERABILITIES

- High speed streets located along routes to parks make walking and biking unsafe.
- Poor connectivity makes walking and biking to parks inconvenient.

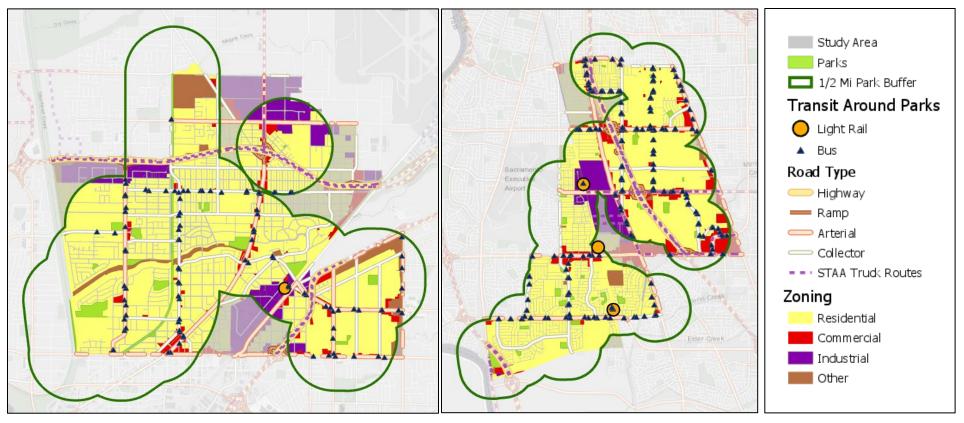
OPPORTUNITIES

- Improve connectivity between parks and neighborhoods to encourage park use and physical activity.
- Invest in pedestrian and bicycle safety improvements on high speed arterials near parks.
- Improve connections between transit and parks.
- Youth programming for parks located near schools.

City of Sacramento High Injury Network and Top Five Corridors



Land Uses and Transportation Within ½ Mile of Parks in North Sacramento Land Uses and Transportation Within ½ Mile of Parks in South Sacramento



A high proportion of land area in the North and South Sacramento priority census tracts is within half a mile of a park. Similarly, most of the land uses around parks are zoned for residential uses, indicating a high potential for people to access a nearby park. However, there are also a high proportion of highways, arterial streets, and truck routes along routes to parks, making accessing these locations unsafe and uncomfortable. Dangerous streets are one deterrent against safe park access.

There are a number of transit stops within half a mile of parks, however since most parks in these communities are neighborhood parks, walking and biking may be the preferred travel modes. Transit stops are mainly located along arterial and collector streets rather than neighborhood streets, meaning that walking from transit to parks will require traveling along or crossing high volume, high speed streets. It should also be noted that transit stops and routes are subject to change according to the 2019 Sacramento Regional Transit Forward Plan¹², which may result in discontinued routes, new routes, and higher frequency of service. Discontinued routes may limit park access by transit in some areas, whereas higher frequency routes may improve park access in other areas.

¹² Source: SacRT Forward: <u>sacrtforward.com</u>

SAFETY

Safety at and along routes to parks is often a key concern that impacts whether or not people will visit a park or if they will choose to use active travel modes. Perception of safety is as important as real safety, so even where crime rates are not high, perception and threat of crime can impact decisions to walk or bike. Crime rates and traffic injuries can help determine if safety might be a concern among community members and where investments or programming should be applied to improve safety.

PERSONAL SAFETY

The following data on personal safety were collected:

Crime¹³

Prevalence and perceptions of crime in communities is a key factor that influences whether people feel safe going to and being at parks. Crime data helps indicate relative safety of an area. Similarly, the type of criminal activity that occurs can help inform street and park design, programming, and enforcement efforts to improve personal safety.

Vacancy Rates¹⁴

Vacant housing, particularly when left vacant for long periods of time, can contribute to perceived lack of personal safety for active travel modes. Occupied homes provide a sense of security that there are "eyes on the street" to deter criminal activity. Conversely, vacant homes do not provide safety through "eyes on the street" and may serve as hiding places for criminal activity. Additionally, vacant homes or poorly maintained properties send a message that no one notices or cares what happens to the property, which spurs vandalism, dumping, and other crimes that communities may identify as barriers to accessing parks.

TRAFFIC SAFETY

The following traffic safety data were collected:

Pedestrian and Bicycle Injuries¹⁵

Pedestrians and bicyclists are the most vulnerable road users and are disproportionately impacted in collisions. Collision data can highlight dangerous streets and intersections and indicate a need for traffic safety improvements.

¹³ Source: Community Crime Map. Accessed July 2018. <u>https://communitycrimemap.com/</u>

¹⁴ Source: US Census Bureau, American Community Survey. Via Community Commons. 2012-16. Accessed July 2018. <u>https://www.communitycommons.org/</u>

¹⁵ Source: UC Berkeley SafeTREC, Transportation Injury Mapping System. Accessed July 2018. <u>https://tims.berkeley.edu/</u>

Personal Safety in the North Sacramento and South Sacramento Priority Census Tracts

Between May 1, 2018 and June 1, 2018, approximately 350 crimes were reported in North Sacramento and approximately 405 in South Sacramento.

Aggravated assault, theft, and vandalism consisted of the majority of crime types. These types of criminal activity are perceived to occur when people are walking outside, which may deter walking and biking for fear of becoming a victim of crime. Most crimes were nonviolent offenses, including theft, vandalism, burglary, drug violations, robbery, prostitution, and disorderly conduct. Violent crimes tended to include assault, sexual assault, arson, and homicide.

In North Sacramento, crimes primarily occurred around the intersection of El Camino Avenue and Del Paso Boulevard and along the Del Paso Boulevard corridor. In South Sacramento, crimes primarily occurred along Stockton Boulevard with hotspots near the intersections with Florin Road and Fruitridge Road. The time of day that crimes typically occurred were in the afternoon through late evening on weekdays, which is after work hours when families, students, and others may wish to visit parks as a leisure activity.

Vacancy rates in the North Sacramento (11.11%) and South Sacramento (7.29%) priority census tracts are higher than the County vacancy rate of 6.17%. Higher vacancy rates, combined with higher occurrences of criminal activity that targets individuals who are walking outside, may contribute to an overall lack of personal safety and discourage use of parks.

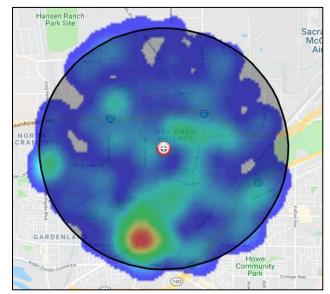
KEY VULNERABILITIES

• Threat of crime while walking and biking to parks may reduce physical activity.

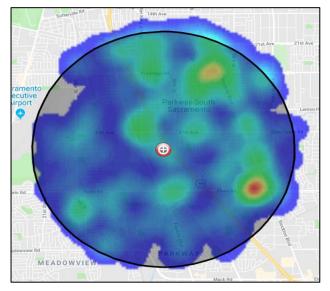
OPPORTUNITIES

- Implement Crime Prevention Through Environmental Design strategies such as improved lighting and maintenance along routes to parks.
- Activate streets and parks during afternoon and evening hours through programming.

Density of Crime Occurrences in North Sacramento May 1 - June 1, 2018



Density of Crime Occurrences in South Sacramento May 1 - June 1, 2018



Traffic Safety in the North Sacramento and South Sacramento Priority Census Tracts

Over a five-year span from January 2012 to December 2016, there were 212 reported collisions involving motorists and non-motorists in the North Sacramento priority census tracts and 150 collisions in the South Sacramento priority census tracts. Collisions occurred most frequently along El Camino Avenue, Rio Linda Boulevard, Del Paso Boulevard, Fruitridge Road, Florin Road, and Meadowview Road, which are all high speed corridors. These streets tend to have four wide travel lanes that facilitate fast moving traffic and create large intersections that increase crossing distances for pedestrians. While there are bike facilities in most places along these streets, the facilities are primarily Class II lanes or Class III shared routes which do not provide adequate separation from high speed traffic.

Children ages 14 or younger consisted of the highest percentage of collision victims, followed by adults between ages 50-54. The majority of pedestrian collisions occurred due to crossing while not in a crosswalk, followed by crossing in a crosswalk at an intersection and walking in the road or shoulder. Far distances between crosswalks, wide intersections, noncontiguous sidewalks, and prevalence of unmarked crossings may be some of the contributing factors to these collisions.

Collision Hotspots in North Sacramento, 2012-2016

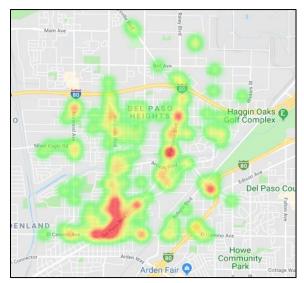


Table 7: Total Injuries from 2012-2016

	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Total
North Sacramento	12	39	76	85	212
South Sacramento	6	20	63	61	150

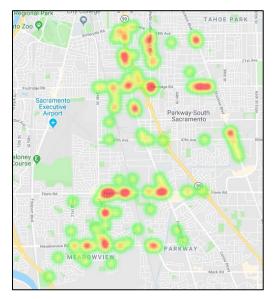
KEY VULNERABILITIES

- Youth and older adults are more vulnerable to traffic injuries and fatalities.
- Prevalence of high speed arterials and limited crossing opportunities increase risk of pedestrian collisions.

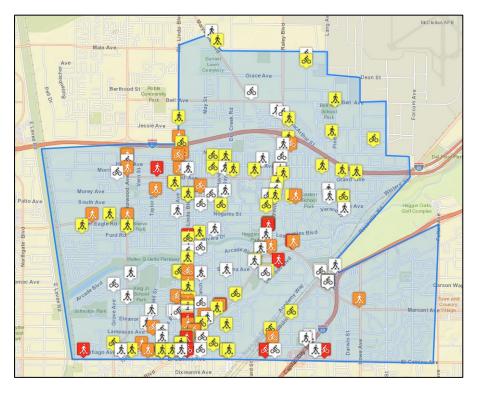
OPPORTUNITIES

- "Eight to eighty" infrastructure approach to create safer environments for children and young adults.
- Traffic calming and safe crossings along routes to parks.

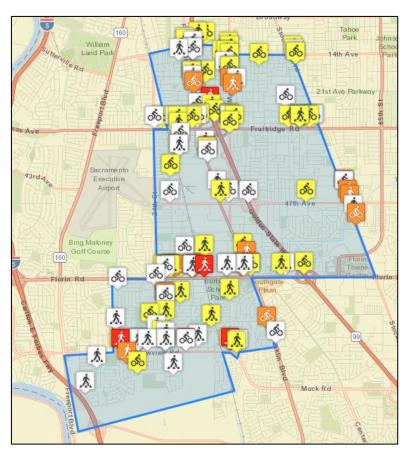
Collision Hotspots in South Sacramento, 2012-2016



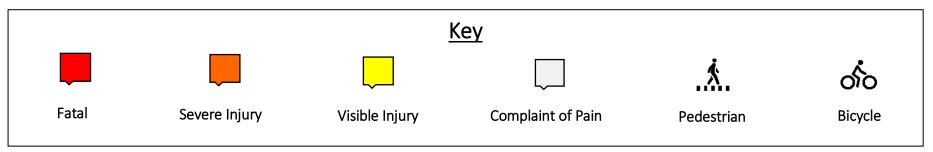
Collisions Involving Pedestrians and Bicyclists 2012-2016 Transportation Injury Mapping System



North Sacramento Priority Census Tracts



South Sacramento Priority Census Tracts



CONCLUSION

Independent of park access, the North Sacramento and South Sacramento priority census tracts are already vulnerable to poor health outcomes due to a variety of socioeconomic factors and physical environment characteristics. Low income households are less able to afford healthcare and healthy lifestyles. Low-income households also tend to have lower car ownership and rely on public transit and active transportation more often, yet these communities are built for auto-oriented development and low-density land uses. Limited park access only exacerbates poor health outcomes in these communities by restricting opportunities for physical activity.

When looking at park access through the lens of physical proximity, it appears at first glance that park access in these communities is good because most neighborhoods are located within half a mile of a park. However, a more comprehensive understanding of accessibility reveals that the routes to these parks are not necessarily safe, comfortable, or conveniently accessible by foot or bike. Traffic collisions, poor connectivity, and real and perceived personal safety concerns pose significant barriers to access. Addressing these barriers has potential to improve equitable park access and health through increased park use, increased physical activity on the way to and from parks, and other mental and environmental health benefits.