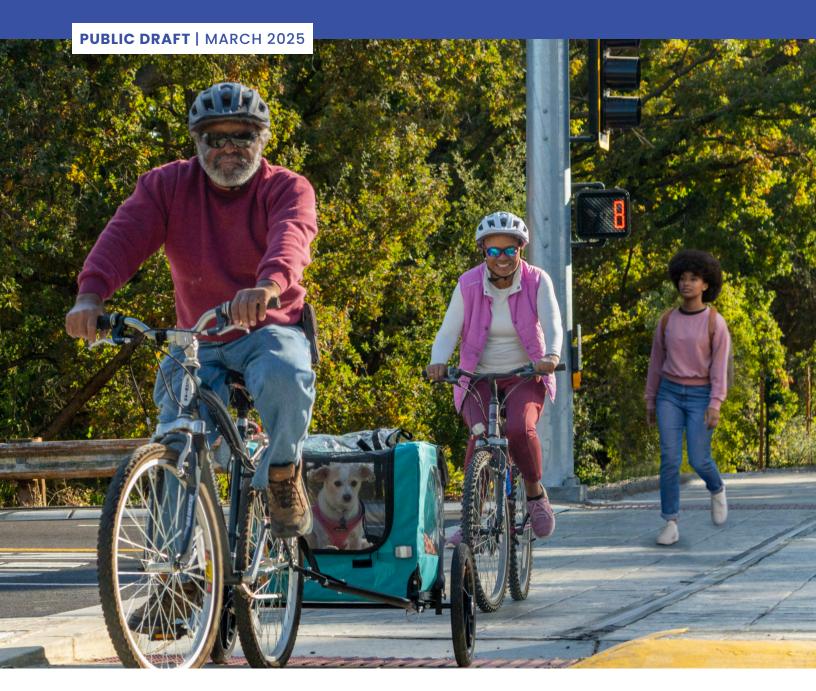
# **Streets for People:**

Sacramento's Active Transportation Plan













# Acknowledgments

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### **Abbreviations**

- AHSC: Affordable Housing and Sustainable Communities
- ATIIP: Active Transportation Infrastructure Improvement Program
- **ATP:** Active Transportation Program
- BIPOC: Black, Indigenous, and People of Color
- BLTS: Bike level of traffic stress
- **BUILD:** Better Utilizing Investments to Leverage Development
- CAAP: Climate Action and Adaptation Plan
- **Caltrans**: California Department of Transportation
- CHAT: California Heat Assessment Tool
- **CPT**: Community Planning Team
- HIN: High injury network
- HSIP: Highway Safety Improvement Program
- I: Interstate
- KSI: Killed or seriously injured
- LTS: Level of traffic stress
- PLTS: Pedestrian level of traffic stress
- **RIA**: Regional Infrastructure Accelerator
- SR: State route
- SS4A: Safe Streets and Roads for All
- **TPP**: Transportation Priorities Plan

### **Glossary of Terms**

Active Transportation: A term for using human physical activity to get people and goods from one place to another as opposed to motorized vehicles like cars and trucks. Active transportation includes walking or jogging, biking (including by electric bikes), and rolling with a scooter, skateboard, or assisted mobility device like a wheelchair. This plan uses the terms *active transportation* and *walking, biking,* and *rolling* interchangeably.

Arterial Streets: Provide mobility and regional connectivity.

**Collectors:** Major and minor streets that connect local streets and arterial streets.

**Complete Streets:** Complete streets are streets for everyone. They are designed and operated to enable safer access for all users, including people walking, biking, driving, and taking transit. Complete streets make it easy to cross the street, walk to shops, and bike to work. They allow buses to run on time and make it safer for people to walk to and from train stations.

**First- and Last-Mile:** Transit systems usually involve some multimodal connection from one destination to another. This is referred to as the "first- and last-mile" problem. To encourage more ridership, transit needs to provide convenient options that enable point-to-point connections. Biking or walking connections may encourage access to transit because active transportation can be more convenient than other modes.<sup>1</sup> **Killed or Seriously Injured (KSI):** This metric is used to focus on areas with a history of crashes causing serious injury and death. Areas with a history of KSI crashes typically represent the areas with greater safety challenges rather than areas with a high level of mostly non-injury or minor injury crashes.

**Level of Traffic Stress:** The level of traffic stress (LTS) analysis measures the ability of people using active transportation to travel between their origin and destination using routes that feel safe to them and without the need for excessive detours. There are four levels of traffic stress. LTS 1 is suitable for children; LTS 2 represents stress that most adults will tolerate; and LTS 3 and 4 represent greater levels of stress.<sup>2</sup>

**Quick Build:** A low-cost and semi-permanent street improvement which helps to test design concepts and get safety improvements on the ground more quickly than a large scale construction project.<sup>3</sup>

- 2 Mekuria et al., Low-Stress Bicycling and Network Connectivity
- **3 NACTO Quick Builds for Better Streets**

Maaza C. Mekuria, Peter G. Furth, and Hilary Nixon, Low-Stress Bicycling and Network Connectivity, MTI Report 11-19, May 2012.

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# What Is Streets for People?

Streets for People: Sacramento's Active Transportation Plan equips the City with a vision for a safer, more connected, and more comfortable active transportation network to serve our communities.



This plan offers strategies and recommendations for how we can get there. Throughout the process of creating this plan, we worked in partnership with communities, community groups, City departments, and other interested parties to develop implementable solutions that best meet the needs of each of the focus areas.

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#### In this plan, "we" represents...

city residents, businesses, employees, agencies, community based organizations, and the City organization.

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#### "Active Transportation" is....

a term for using human physical activity to get people and goods from one place to another as opposed to motorized vehicles like cars and trucks. Active transportation includes walking, biking, jogging, scooting, skateboarding, or using assisted mobility devices like wheelchairs.

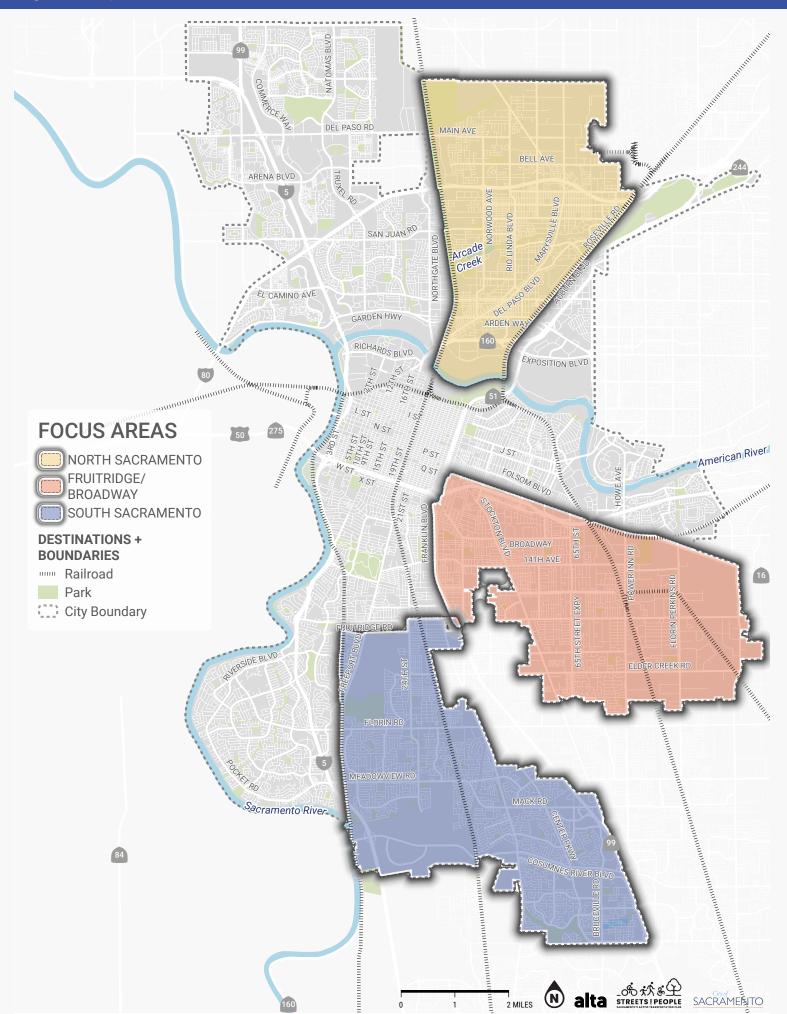
# **Need for a Focused Approach**

The Streets for People Plan identifies improvements to the active transportation network across the entire City of Sacramento. While developing these recommendations, we focused additional engagement efforts within three areas. These areas have some of Sacramento's most <u>disadvantaged</u> <u>communities</u> and experience some of the highest numbers of fatal and serious roadway collisions in the city. Compared to the rest of the city, communities in these areas also have the lowest median household income, and higher housing and pollution burdens, among other disadvantages. In an effort to address the unique needs within these areas of Sacramento, we conducted additional research and spent more time engaging with people in these communities. The three focus areas are shown in **Figure 1**:

- North Sacramento
- Fruitridge/Broadway
- South Sacramento

#### Community members on Del Paso Boulevard





# What's in the Plan?

We've designed this plan to provide a roadmap to improving conditions for people walking, biking, and rolling. The plan contains the following elements:

<u>Chapter 1: About This Plan</u> defines the scope of the *Streets for People Plan*. This chapter captures the goals for the future of our transportation system and identifies recent achievements by the City in furthering those goals.

Chapter 2: Walking, Biking, and Rolling in Sacramento Today provides an overview of the present-day conditions, including the state of walking, biking, and rolling; community health; economic conditions; and environmental burdens.

#### Chapter 3: Community Engagement

chronicles our extensive community engagement efforts and strategies used, and summarizes what we heard from our communities during engagement events.

<u>Chapter 4: Recommendations</u> offers the proposed infrastructure recommendations and complementary policy and programmatic recommendations to improve walking, biking, and rolling in the city.

<u>Chapter 5: Implementation</u> outlines how we can get started. It identifies planning level costs for recommended improvements and strategies on how they could be implemented. This chapter also considers ongoing maintenance and monitoring approaches as the network expands.





Bike Lanes on Lemon Hill Avenue



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# Plan Goals

The plan's goals align with the criteria and metrics developed as part of the <u>City's</u> <u>General Plan</u>, <u>Transportation Priorities Plan</u> (TPP) and the <u>Climate Action and Adaptation</u> <u>Plan</u> (CAAP):

#### Access Providing Access to Destinations

\_ \_ \_ \_ \_ \_ \_ \_

Mobility opens doors to education, economic opportunity, health, and personal growth. Connections to institutions and places that provide economic, educational, and health benefits should be prioritized.



#### **Equity** Providing Equitable Investment to Address Historical Inequities

We acknowledge historical racial inequities and are committed to transparent, deliberate, and actionable solutions that will remedy those inequities, including the impact air quality and climate have on these neighborhoods.



#### Maintenance Fixing and Maintaining the System

Sacramento's transportation infrastructure is in "fair" condition but is predicted to rapidly deteriorate by the end of the decade. Fixing potholes, repaving streets, and maintaining traffic signals supports communities' health and the city's economic health.



#### Safety Improving Transportation Safety

Sacramento continues to rank as one of the worst cites in California for transportation safety based on data from the Office of Traffic Safety. Transportation safety is a primary driver for future investments with the intent to address the highest need areas first.

#### Sustainability Improving Air Quality, Climate, and Health

We face an existential climate emergency that threatens our city, region, state, nation, humanity, and the natural world. Over 50% of Sacramento's greenhouse gases come from transportation. Air quality, health, and climate change should be drivers for our mobility investments.

## **Recent Achievements**

### The City has already started its transformation with a host of walking, biking, and rolling friendly projects and initiatives, including:

#### <u>South Sacramento Parkway West</u> (Completed)

The City completed this shared-use path connecting South Sacramento communities including Meadowview to the Sacramento River shared-use path and Del Rio Trail.

#### Del Rio Trail (Construction in Progress)

The City is constructing a 4.8-mile shareduse path that connects Land Park, South Land Park, Freeport Manor, Z'berg, Pocket, and Meadowview communities.

#### **Central City Mobility Project** (Completed)

The Central City Mobility Project implemented traffic calming, lane reductions, buffered and separated bikeways, new marked crosswalks, and other safety and mobility improvements.

#### Dixieanne Neighborhood Clean and Green Alleys Project (Construction in Progress)

This project is cleaning and beautifying some of the 23 residential alleys in the community of Old North Sacramento. Improvements provide comfortable corridors for people walking and biking to connect to destinations.



Del Rio Trail at Fruitridge



Dixieanne Alleys

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# Walking, Biking, and Rolling in Sacramento Today

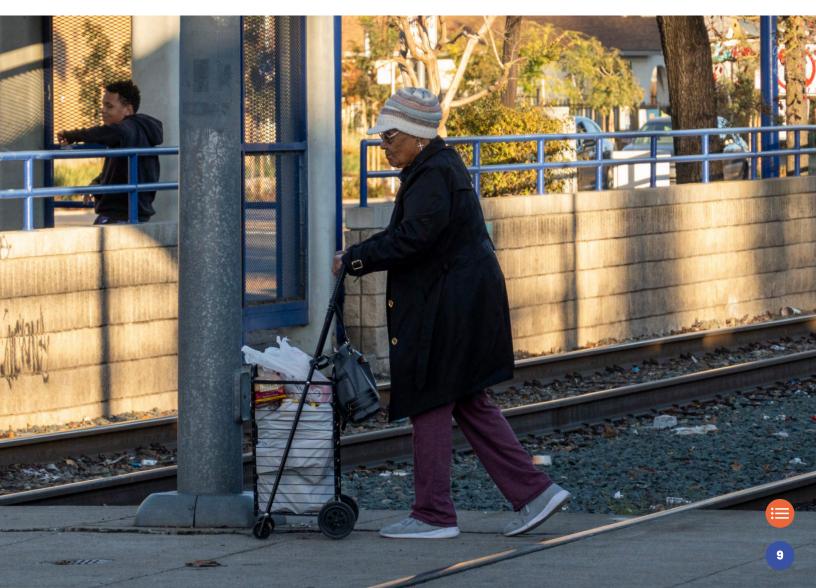
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To better understand the future active transportation potential in our city, we needed to take stock of what the transportation system offers today.



In creating the *Streets for People Plan,* we considered previously identified needs and issues and evaluated the present state of the transportation system to improve safety and comfort for people walking, biking, or rolling. We looked at the transportation system from different perspectives including demographics, community health, economic conditions, environmental burdens, and street systems. This helped us better understand what motivates or deters people in how they choose to travel.

Community member accessing Arden/Del Paso Light Rail Station



# Building on the Past

We reviewed 11 citywide and 17 focus areaspecific plans from the past 17 years to make sure the *Streets for People Plan* builds on and furthers the transportation goals and actions identified by prior and ongoing planning efforts. A complete summary of plans and policies can be found in <u>Appendix 1 – Plan and</u> <u>Policy Review</u>.

The City's focus on improving active transportation has been years in the making through community engagement, seeking competitive funding, and finally implementation of projects like the central city separated bikeways, the Del Rio Trail, and more. The City has also developed policies to enhance active transportation networks. These include the **Complete Streets** Policy, Pedestrian Crossing Guidelines, and Guidance for Creative Crosswalks, which were developed and passed between 2019 and 2021. The recently approved Transportation Priorities Plan (TPP) and Climate Action and Adaptation Plan (CAAP) further advance implementation of active transportation projects in a way that equitably addresses transportation safety, sustainability, public health, and air quality.

Top: Sacramento Bikeways Master Plan (1977) Bottom: Sacramento's Pedestrian Crossing Guidelines (2021)



#### 2021 PEDESTRIAN CROSSING GUIDELINES



April 2021



Sacramento's Vision Zero Action Plan (2018)

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The <u>Vision Zero Action Plan</u>, adopted in 2018, identifies strategies for the City to eliminate traffic fatalities and serious injuries by 2027. The plan identified streets with the highest number of injuries and fatalities, known as the high injury network (HIN), and included actions to address transportation safety. Since its adoption, the City has made significant progress toward addressing existing safety and connectivity issues.

The Streets for People Plan builds off these plans and policies and works to align recommendations with other state, regional, and local plans while supporting communitywide goals by acting as the guide for implementing active transportation facilities.



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# What the Data Shows

The highlights of our analysis are included below. For more detailed methodology and analysis citywide and in the focus areas, please refer to <u>Appendix 2 – Existing Conditions</u>.





Sacramento is a diverse community: Sacramento communities come from diverse racial and ethnic backgrounds and include people who identify as Asian (19%), Black (13%), Hispanic (29%), and white (31%).



#### Many of our communities rely on active transportation to travel: Almost one in ten (11.3%) of all trips in the Greater Sacramento Region are active transportation trips.<sup>4</sup> Black communities use public transit at nearly twice the rate compared to all other races.

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A higher percentage of our communities live in poverty compared to the rest of the county and the state: In particular, the project focus areas have the lowest median household income in the city. Moreover, most households in the focus areas experience higher housing burdens, meaning that the households are low income and pay greater than 50% of their income for housing costs.



Some of our communities are more burdened by pollution and are more vulnerable to climate impacts than others: Some of the highly pollution burdened and vulnerable communities in the city are in the focus areas. In particular, large portions of the North Sacramento focus area are disproportionately affected.

<sup>4</sup> National Household Travel Survey. 2020 National Passenger OD Data, U.S. Department of Transportation, Washington, DC. Available online: <a href="https://nhts.ornl.gov/od">https://nhts.ornl.gov/od</a>





Safety analyses reveal trends where people walking and biking are particularly vulnerable: People walking along the street (without a sidewalk), people crossing the street (not using a crosswalk), and people improperly turning their vehicles into people biking, account for a significant proportion of fatal and serious injury collisions for people walking and biking.



Our walking and biking infrastructure are not created as low-stress environments: While most corridors include continuous sidewalks and major roadways have conventional or buffered bike lanes, several of them are high-stress environments for people walking and biking.

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Improving comfort and reducing stress can go a long way in improving access: We can increase access to destinations like parks, schools, and transit for more people walking and biking, particularly in focus areas, by creating low-stress networks.





Equity was a driving force throughout the development of the *Streets for People Plan*. We considered equity in setting our goals, understanding the local context and the state of transportation, identifying the types and strategies for community engagement efforts, and prioritizing the recommendations in this plan. One way to achieve a more equitable transportation system is to identify vulnerable populations who are more susceptible to transportation impacts. We used data from CalEnviroScreen to understand this. CalEnviroScreen is a data aggregate that helps identify California communities that are most affected by many sources of pollution. Overall findings are shown in **Figure 2**.

Some of the most vulnerable communities in the city, shown in red and yellow on the map, are found in the focus areas. In particular, a large portion of the **North Sacramento** focus area south of Main Avenue and the northern half of the **Fruitridge/Broadway** focus area experience the highest levels of inequities in terms of pollution and population vulnerabilities. In addition to the overall findings, we reviewed key individual metrics derived from census data and identified the following issues:





**People with disabilities may require specialized services or infrastructure to get around, like longer time to cross the street.** These individuals may be less likely to own a vehicle. Areas with the highest concentrations of people with disabilities include South Sacramento, Fruitridge/Broadway, and Midtown.

**People without access to a vehicle are likely to walk, bike, roll, or ride transit by necessity to get to various destinations.** These communities may also benefit the most from investments focusing on improving the safety and comfort along city streets. Areas with the highest concentration of communities without access to a vehicle include Central City, Midtown, and Oak Park.

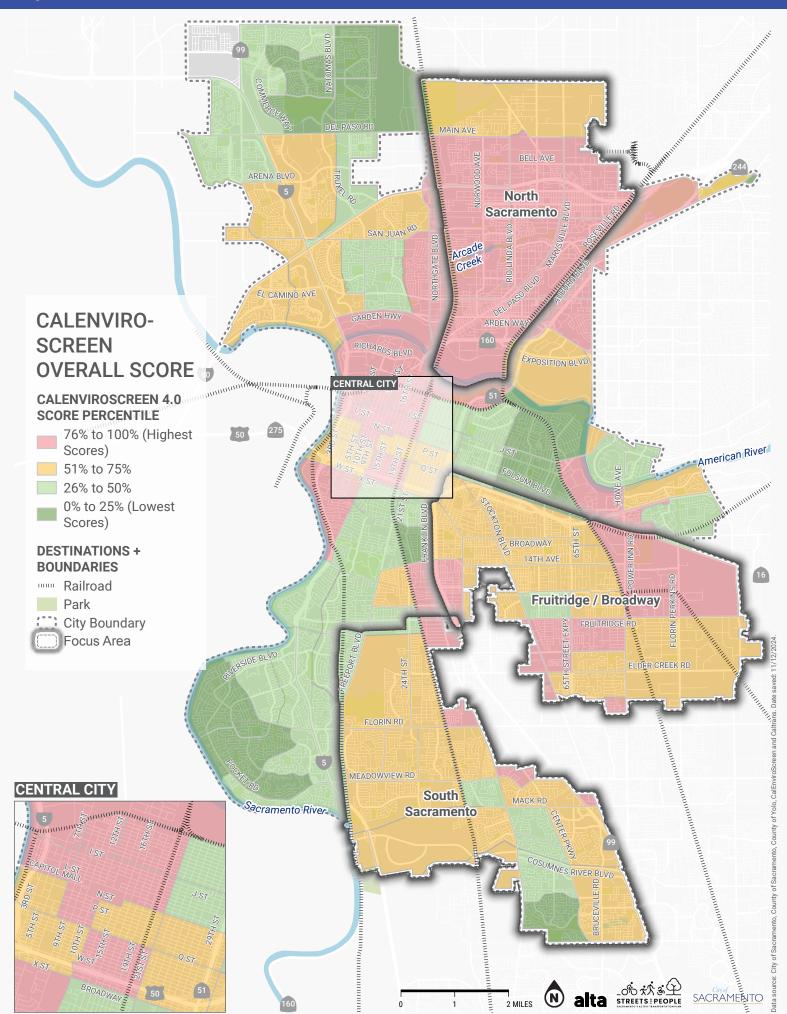


**People over 65 may walk slower and require more time to cross the street.** They may also be less likely to own a vehicle or travel during traditional commute times (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.), creating different street needs at different times of the day. The areas with the highest concentration of people over 65 include Pocket-Greenhaven, South Sacramento, and East Sacramento.



**Disadvantaged populations are also likely to walk, bike, roll, or ride transit and have historically faced transportation inequities.** Areas with higher concentrations of disadvantaged populations may be eligible for funding opportunities to address transportation inequities. The areas with the highest concentrations of disadvantaged populations include North Sacramento, Fruitridge/Broadway, and South Sacramento.

A complete account of findings related to socioeconomic conditions can be found in <u>Appendix 2 – Existing Conditions</u> (Citywide and Focus Areas).



# Walking and Rolling

Walking and rolling facilities in the city include sidewalks, shared-use paths (Class I), freeway overpasses, bridges, and intersection or midblock crossing facilities. Sidewalks are present on most streets. However, in northern and southeastern parts of the city, streets lack sidewalks. Outside the central city, marked crosswalks and pedestrian signals are largely concentrated on major arterial streets (like Marysville Boulevard, Stockton Boulevard, and

Throughout the city, there are almost 80 miles of shared-use paths, the majority of which are located along the old Sacramento Northern Railway, **Ueda Parkway, and the Sacramento River Parkway, among others.** 

Florin Road) and near elementary and middle schools. Although expansive, the shared-use path network is disjointed, presenting difficulty for people connecting to various destinations. Figure 3 shows the existing walking and rolling network. Streets highlighted in red lack sidewalks while streets shown in dark gray lack data on the presence of sidewalks. Some key findings from our analysis are:

### Proximity and directness are critical to access



Less than half (44%) of communities have access to essential needs (grocery stores, health care, and shopping centers) by walking and rolling. People in the central city, Midtown, and East Sacramento areas have significant access to schools and major institutions to meet their essential, civic, and social needs. The further from the core of Sacramento, the less dense and less accessible destinations become to walking and rolling.



#### Not all people travel at the same pace

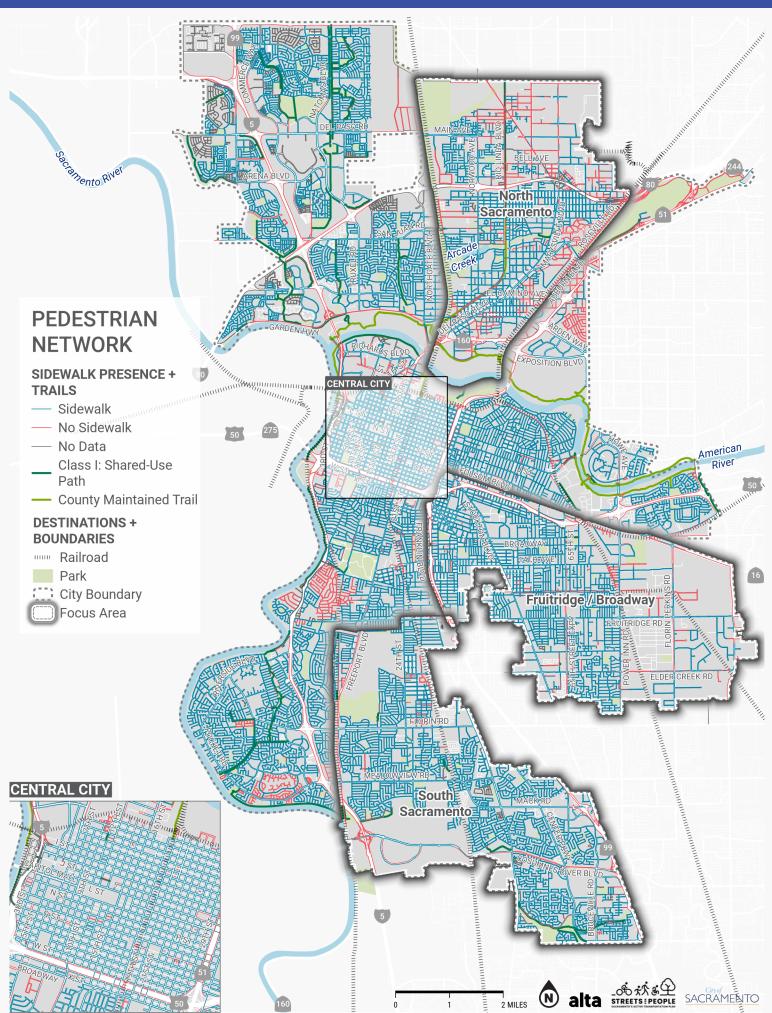
Seniors and those who use a mobility device may walk at slower speeds, and walking or rolling itself may be more of a challenge to these groups.<sup>5</sup> Therefore, walking and rolling access for these groups may be more limited.



#### Places to cross barriers like highways, rivers, and major streets are limited

This makes it less convenient to access some destinations. The infrequency of these crossings leads to increases in the distance people must walk to get to their destination, thus rendering some destinations less accessible. While Interstate 80 (I-80) has several crossings into and out of the central city from surrounding neighborhoods, there are few low-stress pedestrian crossings across I-5 north or south of Sacramento, no low-stress crossings across I-80 within city limits, and limited crossings over State Routes (SR) 99, 50, and 160.

<sup>5</sup> Effects of Walking Speed, Strength and Range of Motion on Gait Stability in Healthy Older Adults. Hyun Gu Kang a,b,c,d, Jonathan B Dingwell. National Center for Biotechnology Information. Accessed from https://pmc.ncbi.nlm.nih.gov/ articles/PMC9135052/.



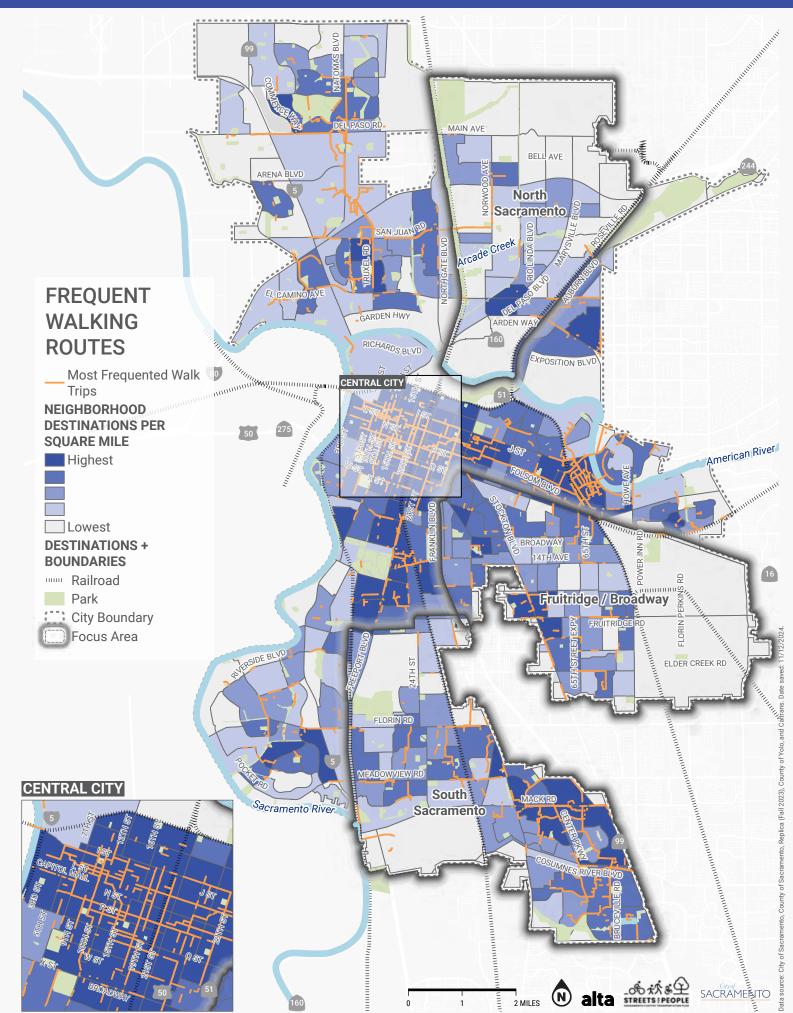


#### WHERE ARE PEOPLE WALKING?

We used Replica Places data to identify walking trends in the city.<sup>6</sup> This data combines a variety of sources including anonymized cell phone data to create a simulated model that highlights where people are going. Figure 4 shows the frequency of walking trips compared to concentrations of neighborhood destinations. As there are a lot of people walking within the central city, it has the densest neighborhood destinations per square mile. Outside the central city, commercial corridors like Stockton Boulevard and Folsom Boulevard tend to experience the highest number of walking trips.

6 Replica Places is an activity-based model that uses a combination of mobile, land use, census, and transaction data to generate census-block group level origin and destination estimates that can be used to estimate trip distances and understand common origins-destinations. This data also provides estimates of mode split and trip purpose based on synthetic populations that are created as part of the estimation process.

#### Figure 4 – Frequent Walking Routes in Sacramento



# Biking

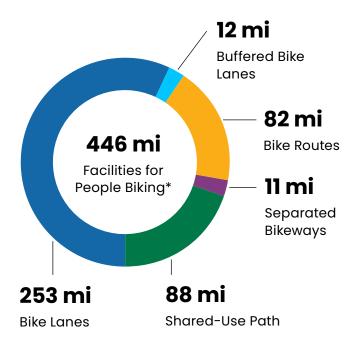


A complete, connected biking network that is comfortable for people of all ages and abilities is critical to make biking a viable transportation option for travel in Sacramento. The city has over 446 miles of existing facilities for people biking. They consist of bike lanes, buffered bike lanes, bike routes, shared-use paths, and separated bikeways as shown in **Figure 5** and **Figure 6.** For more information on each facility type, please see the **Bike Facility Toolbox on page 60**.

While the city has several existing facilities for people biking, there are bikeways that are disconnected, gaps in the network, and bikeways that do not provide the level of comfort to be usable for the general population. The **Fruitridge/Broadway**, **North Sacramento**, and **South Sacramento** focus areas have the least coverage of bike facilities in the city.

Key observations from our assessment can be found on **page 22.** 

Figure 5 – Existing Biking Network

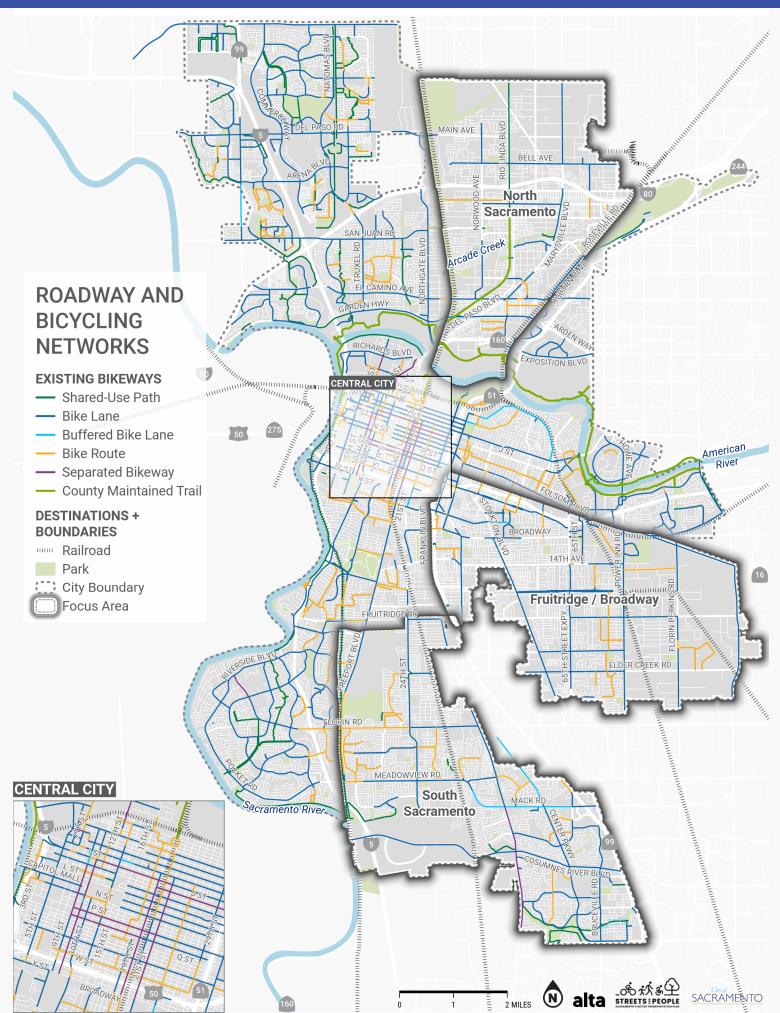


\*Rounded to the nearest whole number



#### Local bike group members

#### Figure 6 – Existing Biking Facilities



### The following key issues about people biking in Sacramento were highlighted from our assessment:



#### Less access by bikes

Less than half (47%) of communities have access to essential needs by bike.



#### People travel at different paces

The distance a rider can travel in 15 minutes varies; people using e-bikes might travel faster, and families riding with children might travel slower.



#### **Barriers limit access**

Places to cross barriers like highways, rivers, and major streets are limited, which makes it less convenient to access some destinations.



#### Majority of Sacramentans are disconnected

The majority of Sacramento residents live in lower density, single use development built after World War II. These communities lack a gridded street network, requiring travel on higher speed and volume streets. This land use pattern leaves these communities disconnected from daily needs. A notable inaccessible destination is the State Office of Civil Defense, located in the South Sacramento focus area. John F. Kennedy High School has access points only on Gloria Drive and Florin Road, which are high-stress streets, making it inaccessible to communities even though it is surrounded by a residential neighborhood.

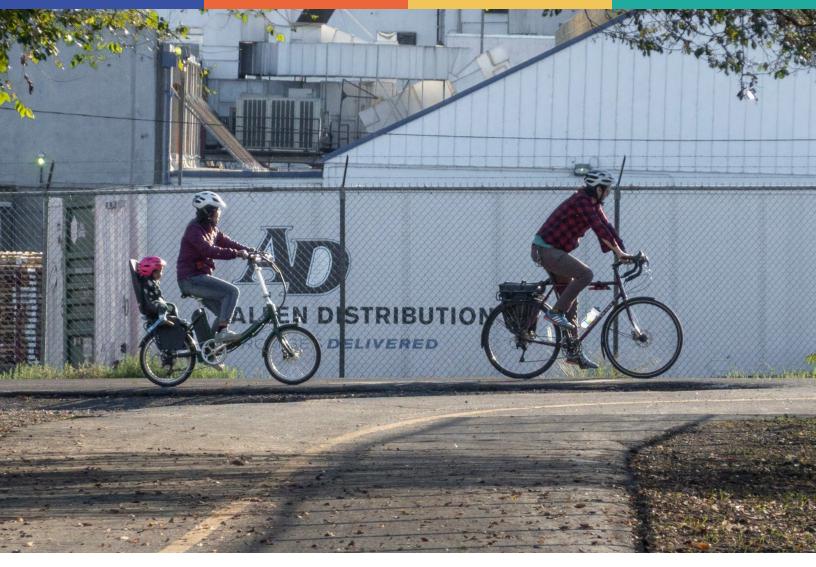


The absence of bicycle facilities is a barrier for our communities accessing transit along Del Paso Boulevard.





Walking, Biking, and Rolling in Sacramento Today



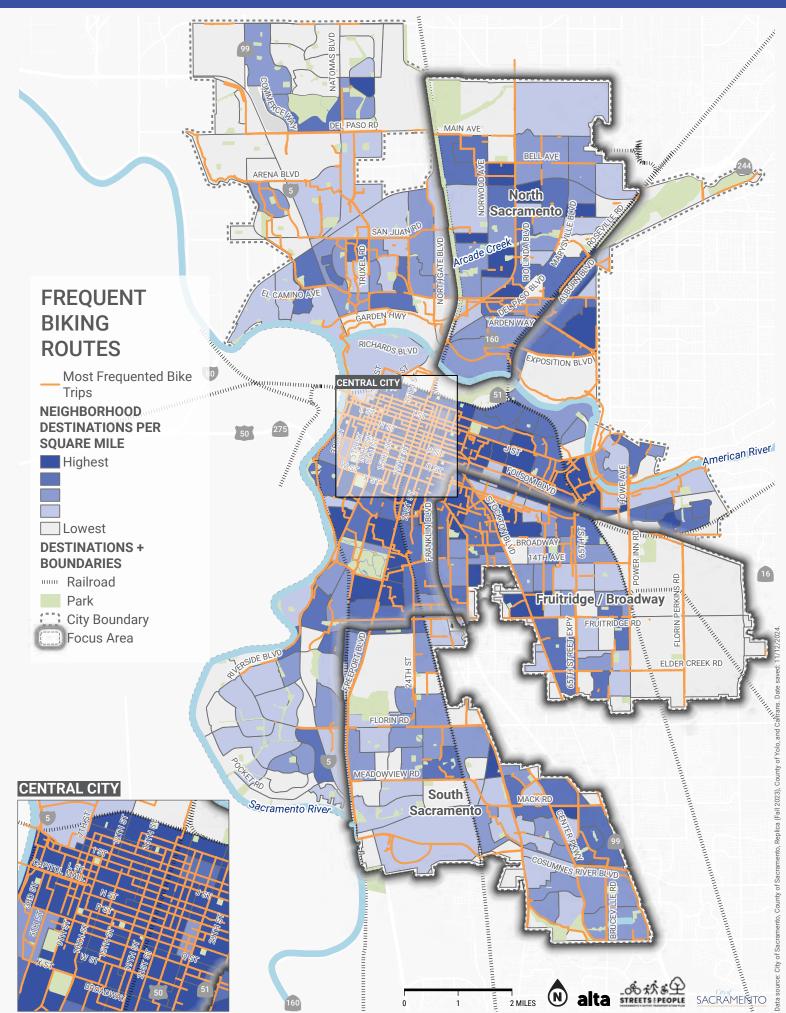
People biking on the Sacramento Northern Bikeway Trail

#### WHERE ARE PEOPLE BIKING?

We also used Replica Places data to identify trends for people biking around the city. **Figure 7** shows the frequency of biking trips compared to concentrations of neighborhood destinations. As there are a lot of people biking within the central city, it has the densest neighborhood destinations per square mile. This is in part because of the grid street network and the commercial opportunities that the central business district provides. The further away from the central city, the less dense neighborhood destinations become, which follows similar patterns to the frequency of bike trips that occur in and throughout those neighborhoods.

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#### Figure 7 – Frequent Biking Trips in Sacramento



# Safety

Safety was also an important aspect to the development of the *Streets for People Plan* as people walking, biking, and rolling are particularly vulnerable and more likely to be killed or seriously injured (KSI) in a collision with a vehicle. Based on our analysis, we found that:



**Street segments** (the portions of the street between intersections) accounted for **78% of KSI collisions involving a person walking** and **58% of KSI collisions involving a person biking**.



without a sidewalk account for 27% of KSI collisions involving pedestrians, while people crossing outside the designated crosswalk, or not using a crosswalk, account for 31% of KSI collisions.

People walking along the street

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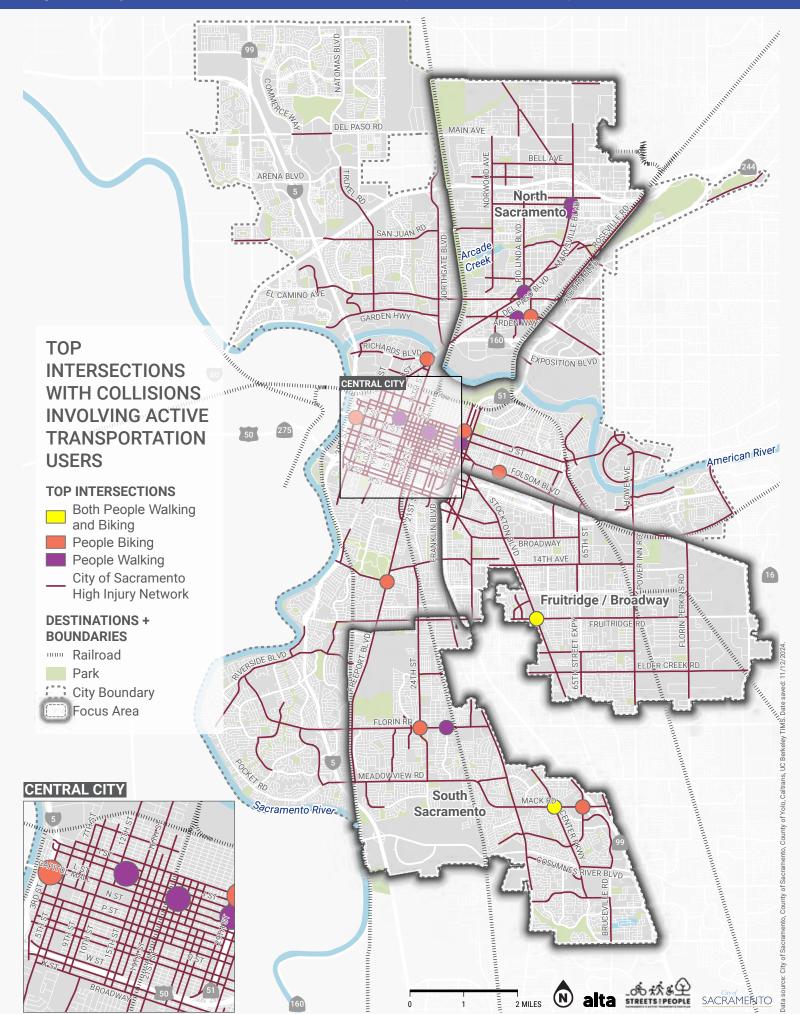
Wrong-way biking along 35 to 40 mile per hour streets and people improperly turning their vehicles into people biking account for 10% and 16% of KSI collisions involving a person biking, respectively.

#### TOP LOCATIONS FOR COLLISIONS INVOLVING PEOPLE WALKING AND BIKING

In addition to the characteristics of streets with more frequent and severe collisions, we identified the top 10 intersections with the highest number of collisions involving people walking and biking. This was determined using available collision data from 2016 to 2020, as shown in **Figure 8**. Our analysis revealed several trends:

- The Fruitridge Road/Stockton Boulevard and Mack Road/ Center Parkway intersections were identified to be top 10 intersections for people walking and top 10 intersections for people biking.
- North Sacramento and South Sacramento focus areas, and Central City, have multiple top 10 intersections.
- All the top collision intersections were in corridors identified in the city's HIN streets.

Figure 8 – High-Collision Intersections for Active Transportation Users and City of Sacramento's HIN



# Comfort

We also analyzed how comfortable our street network is for the average person walking, biking, or rolling. To do this, we used pedestrian level of traffic stress (PLTS) and bike level of traffic stress (BLTS) analyses, which helped us identify the streets that are least comfortable for people walking, biking, and rolling. A full methodology of this analysis can be found in <u>Appendix 3 – Gap Analysis</u>.

### PEDESTRIAN LEVEL OF TRAFFIC STRESS

Our analysis showed that several major streets outside the central city represent highstress environments for people walking, even as most of these corridors include continuous sidewalks on both sides of the street. This is largely due to a lack of separation between people walking and people driving along multilane and high-speed streets. Some notable high-stress streets include **Fruitridge Road, Freeport Boulevard, Northgate Boulevard, Meadowview Road,** and **Norwood Avenue**. The results of this analysis are shown in **Figure 10**.

#### Figure 9 – PLTS Illustrated

#### PEDESTRIAN LEVEL OF TRAFFIC STRESS

#### **LOWER COMFORT**



Streets with posted speed limits at or greater than 30 mph and four or more vehicle lanes, or any street at or above 35 mph. May include streets with no sidewalks, minimal separation from traffic, sidewalk may be less than 4 ft wide in some locations, and may include some gaps.





Streets with posted speed limits at 30 mph and 2-3 vehicle lanes or at 25 mph and 4-5 vehicle lanes. May include on-street parking, minimal or no buffer along sidewalk, and sidewalk may include some gaps.





Streets with posted speed limits at 25 mph and 2-3 vehicle lanes or at 30 mph on residential streets with 2 or fewer vehicle lanes. May include on-street parking, and buffer (<3 ft.) separation from motorists.



#### **HIGHER COMFORT**



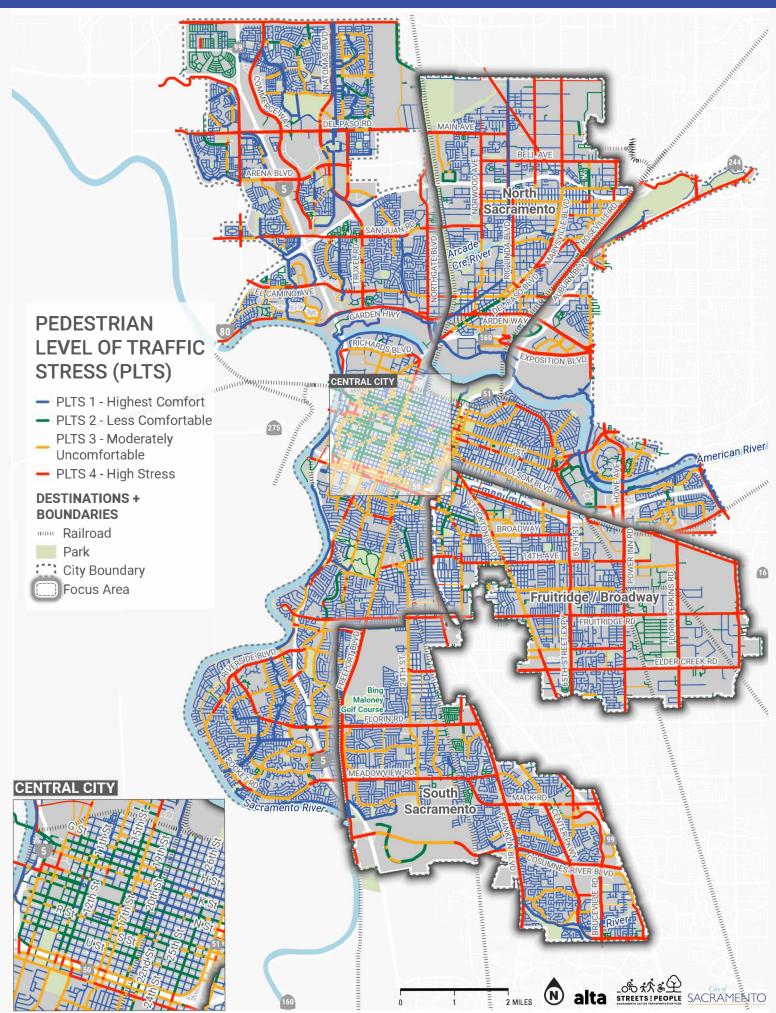
Streets with posted speed limits at 25 mph or less and 2 vehicle lanes, with sidewalks separated by buffer from street. May include on-street parking, wide (5+ ft.) sidewalks with a wide buffer (>3 ft.), and separated facilities including shared-use paths.



These descriptions are simplified; additional criteria may impact the results. See <u>Appendix 3 - Gap Analysis</u> for a detailed description of how Level of Traffic Stress is calculated.

Streets for People: Sacramento's Active Transportation Plan

# Figure 10 - PLTS Analysis in the City of Sacramento





The results from our BLTS analysis are shown in Figure 12. Most major streets in Sacramento represent high-stress (BLTS 3 and 4) environments for people biking, despite the presence of conventional or buffered bike lanes in some locations. These include northsouth connections like Stockton Boulevard and Truxel Road, as well as east-west connections including San Juan Road, Del Paso Road, and El Camino Avenue.

Lower comfort levels for people biking on these streets are associated with high-speed, multilane conditions with little to no buffer or vertical separation between people driving and people biking. Alternatively, residential streets and shared-use paths in the city are low-stress environments suitable for a broad segment of our community members.

### Figure 11 – BLTS Illustrated

### **BIKE LEVEL OF TRAFFIC STRESS**

### LOWER COMFORT

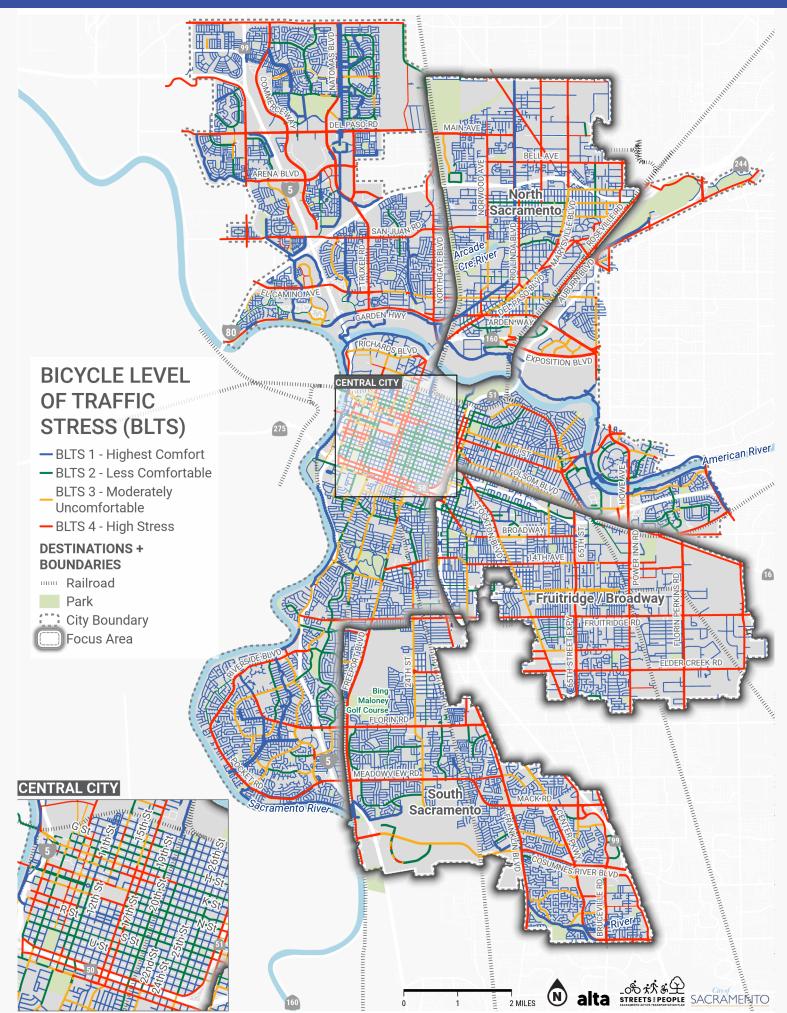


These descriptions are simplified; additional criteria may impact the results. See Appendix 3 - Gap Analysis

### **HIGHER COMFORT**

for a detailed description of how Level of Traffic Stress is calculated.

# Figure 12 – BLTS Analysis in the City of Sacramento



# Access

We analyzed how the existing street network impacts an average adult's ability to reach key destinations like parks, schools, and high-ridership transit locations while walking, biking, and rolling.<sup>7</sup> While the presence and quality of facilities for walking, biking, and rolling, as well as distance to destinations, are key elements to improve access, they do not tell the whole story. To this end, our analysis accounted for how traffic stress impacts the level of access to these key destinations. Areas that could be accessed in a short trip under low-stress conditions but are out of reach under stressful facilities are areas that would benefit most from specific improvements in the network. This section describes the results of the analysis with existing levels of stress (based on the PLTS and BLTS) on the street network. For more information on both analyses, please refer to Appendix 3 - Gap Analysis.

We used the results from our access analysis to inform the development of recommendations as we focused on providing the easiest and most comfortable access to local destinations including parks, schools, and transit.



# How does stress affect how our communities move around the city?

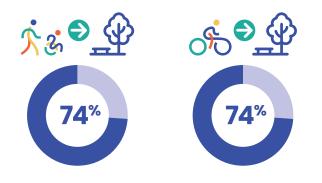
Streets with high vehicle speeds and little or no physical separation from motor vehicles tend to feel more stressful for people walking, biking, and rolling. This limits transportation options for our communities who become dependent on motor vehicles, even for relatively short trips that could be accommodated by walking, biking, or rolling.

<sup>7</sup> We defined high-ridership transit locations as those light rail stations and bus stops used most frequently across Sacramento. See <u>Appendix 3 – Gap Analysis</u> section for more information.

### WHAT WE FOUND

### **Access to Parks**

74% of Sacramento communities live within a 15-minute walk of a park. Similarly, 74% of communities live within a 5-minute bike ride of a park.

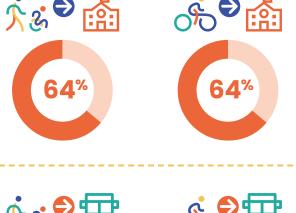


### **Access to Schools**

64% of communities live within a 15-minute walk or 5-minute bike ride of a school. However, open enrollment in Sacramento's school districts results in many families having longer distances to travel to school.

# Access to Transit<sup>8</sup>

15% of communities live within a
15-minute walk of a light rail station or high-ridership bus stop. However, only 12% live within a 5-minute bike ride of a light rail station or high-ridership bus stop.





8 For this analysis, we considered ridership from 2019 to determine the highest ridership locations (bus or light rail) in the city. We used data from before the COVID-19 pandemic disrupted the ridership levels in public transit. We also defined two generalized areas along J Street at 19th Street and Alhambra Boulevard to represent the most popular bus routes through the central city. Similarly, the Florin Towne Center bus stop just outside the city limits was included to account for the high number of trips at this location.





# **Sustainability**

We developed pollution burden, urban heat island effect, and tree canopy density analyses to understand the effects of climate change on active transportation users. Understanding where the greatest need is will help the City focus its investments so we can achieve our climate and sustainability goals set forth in the City's <u>Climate Action &</u> <u>Adaptation Plan</u> (CAAP).

# **Pollution Burden**

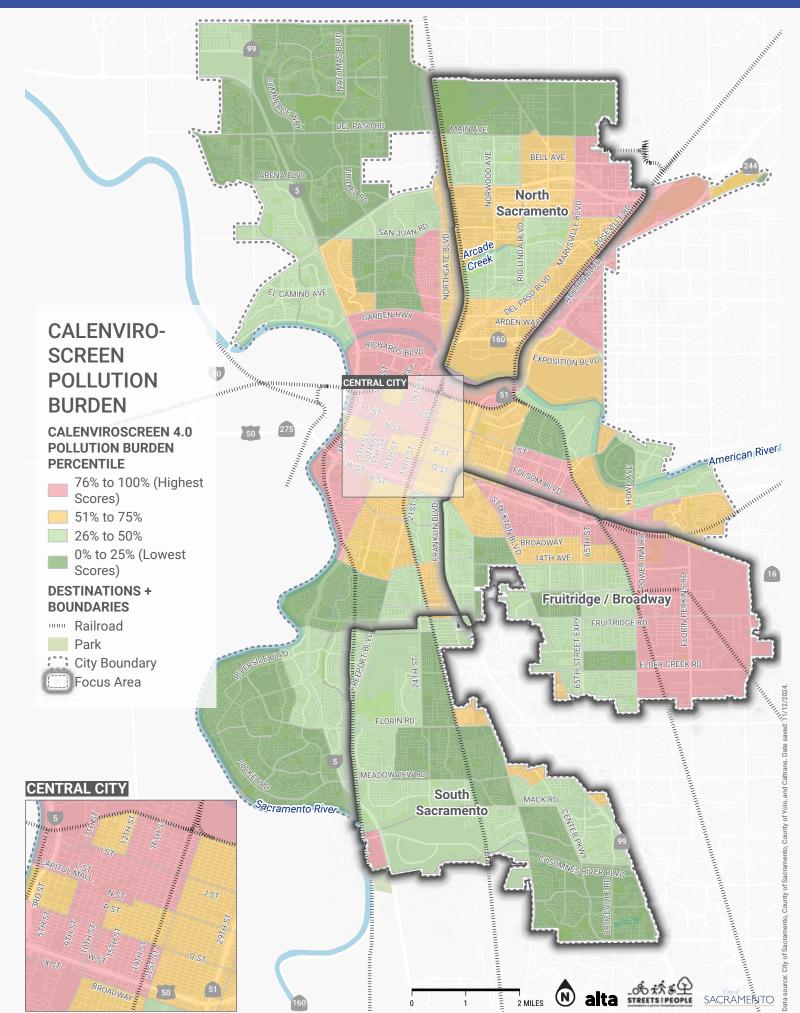
In Sacramento, **more than half (57%)** of the greenhouse gases come from transportation-related sources.<sup>9</sup> In addition to contributing to climate change, high levels of greenhouse gas emissions can lead to higher daytime temperatures, reduced nighttime cooling, and higher air-pollution levels. We conducted an analysis using data from CalEnviroScreen to identify areas most impacted by pollution. The results from the analysis showed us that areas of the city experiencing the highest pollution burden include:

- The neighborhoods in the Fruitridge/ Broadway focus area located east of Power Inn Road and the Union Pacific railroad tracks. This includes Elder Creek, Depot Park, Florin Fruitridge Industrial Park, Elmhurst, and Fairgrounds.
- Neighborhoods near I-80 such as Ben Ali, Del Paso Park, and East Del Paso Heights in the North Sacramento focus area.
- Almost the entire Central City west of 19th Street, southwest of Central City along the Sacramento River, and north of Central City below the American River.

Results from the analysis are mapped in **Figure 13**.

<sup>9</sup> Transportation Prioritization Criteria, Metrics and Points for Transportation Investments and Funding Opportunities, Resolution No. 2022-0079, Adopted by the Sacramento City Council (March 15, 2022), <u>https://www.cityofsacramento.gov/content/dam/portal/pw/Transportation/Transportation-Planning/TransportationPrioritiesPlan/R20220079-Transportation-Prioritization-Criteria-Metrics-and-Points-for-Transportation-Investments-a.pdf.</u>

### Figure 13 - CalEnviroScreen 4.0 Analysis Showing Pollution Burden in Sacramento





The urban heat island effect can have serious effects on our communities' health, especially children and seniors.

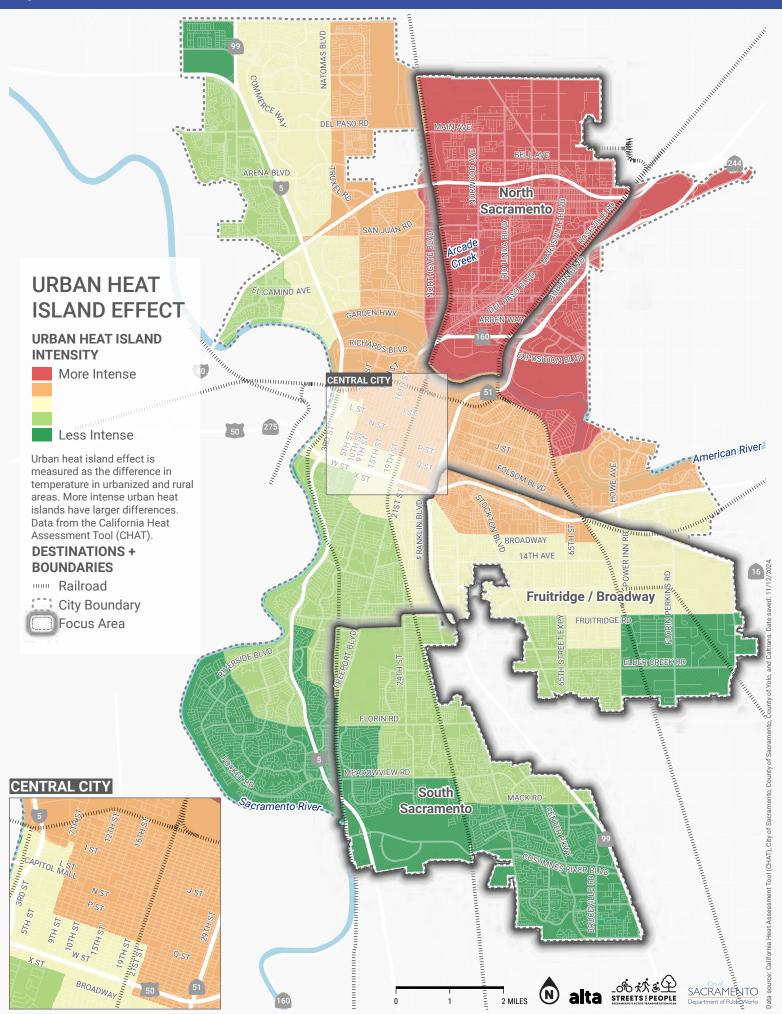
### **Urban Heat Island Effect**

Urban heat islands occur when impervious surfaces such as pavement absorb heat during the day and then radiate that heat at night, warming up the environment. This has various impacts on public health including excess heat concerns and increase in cooling energy demand and emissions. Our analysis showed that:

- On average, Sacramento is about
   1.2°C (2.1°F) warmer than the baseline surrounding rural areas. But the hottest areas in the northeastern portions of the city are as much as 2.4°C (4.3°F) warmer. In general, the urban heat island effect decreases to the south and west.
- In Fruitridge/Broadway, the urban heat island effect decreases when moving from the north to the south. The greatest temperature differences of about 1.5°C (2.7°F) occur north of Broadway and decrease to about 1°C (1.8°F) south of Fruitridge Road.

- North Sacramento has some of the most intense urban heat island effect in the city, marked by the greatest difference in temperature compared to nearby rural areas. The maximum temperature difference within the focus area is about 2.2°C (3.9°F).
- South Sacramento has among the least intense heat island effect in the city, particularly south of Meadowview Road and Mack Road.

Figure 14 shows the census tract-level California Heat Assessment Tool (CHAT) data on urban heat island intensity in the city.





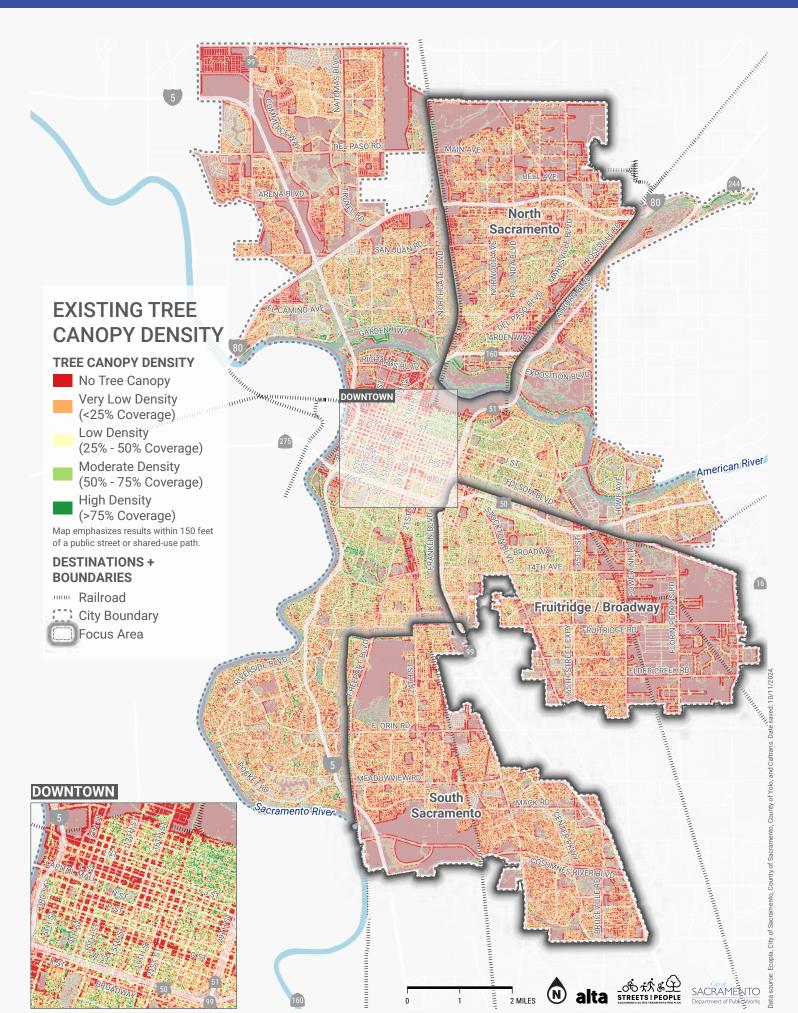
Tree coverage keeps our streets cooler and our communities can walk more comfortably.

### **Tree Canopy Density**

People who walk, bike, roll, or take transit tend to be more vulnerable to high temperatures because they do not have much protection from the heat. Therefore, the availability or lack of shade can significantly affect their comfort and can be a major factor in their transportation choices. We used existing tree canopy density metrics to identify areas of the city that could benefit from additional tree canopy coverage along with active transportation improvements like separated bike lanes and shared-use paths. Our results, shown in **Figure 15**, revealed several trends:<sup>10</sup>

- Generally, neighborhoods located farther away from the central city tend to have lower tree canopy density, especially in areas north of I-80 and most of the southern portions of the city.
- Residential neighborhoods like Land Park, East Sacramento, Curtis Park, and Boulevard Park have some of the highest tree canopy densities in the city, along with natural areas like the American River Parkway.
- Within the focus areas, tree canopy density is generally low with the lowest coverage on the northern parts of North Sacramento, eastern portions of Fruitridge/Broadway, and southwestern areas of South Sacramento.

<sup>10</sup> It is important to note that many parks across the city are shown as having low tree canopy density due to their typically large areas of open grass.



# Community Engagement

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# Input from community members, advocates, community-based organizations, local businesses, and City committees was crucial in developing the Streets for People Plan every step of the way.

Through the Streets for People Plan, we received input from a broad range of community members to help us identify and better understand transportation needs, challenges, and community priorities about our transportation network. We conducted a three-phased effort with a range of in-person and virtual activities to meet people where they are as well as provide a variety of convenient opportunities to be involved in the project. For a more detailed breakdown of engagement activities, events, dates, locations visited, and findings, please refer to <u>Appendix 5 – Public Engagement Feedback</u>.

# **Leading with Equity**

We conducted engagement activities across the city with special attention to activities in the plan's focus areas: North Sacramento, South Sacramento, and Fruitridge/Broadway. We also sought out priority audiences for engagement including Black, Indigenous, and People of Color (BIPOC) communities; households with no/limited access to motor vehicles; and people with disabilities. The experiences of these individuals were crucial in understanding existing issues and concerns across a range of perspectives, and their feedback informed recommendations to create a transportation system that works for everyone. To reach broader and often underrepresented audiences, our communication materials were made available in English, Hmong, simplified

Chinese, Spanish, and Vietnamese with targeted engagement activities conducted in Spanish, Hmong, Mandarin, and Vietnamese.

We recognize that even while we visited many neighborhoods and made efforts to disseminate information widely, not all communities had the time, capacity, or internet access to go out of their way to engage with us. While we made some organic connections with the help of our community leaders and trusted voices, we acknowledge that just because certain voices were not able to join the conversation, we should not assume they have no lived experiences or visions for the future of the city's active transportation network.

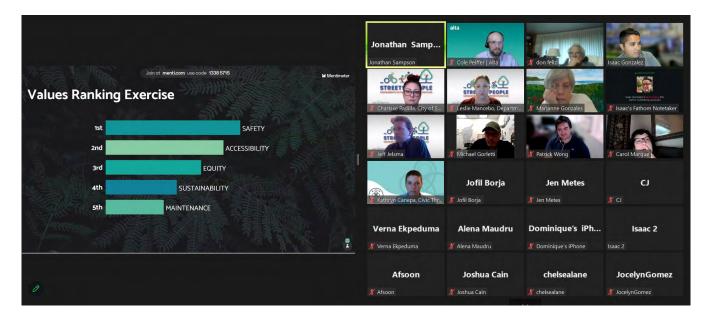


# **Community Planning Team**

We created a volunteer Community Planning Team (CPT) composed of a diverse group of community members primarily from the focus areas but also representing different city neighborhoods. CPT members were compensated for their time and valuable insights. CPT members advised us throughout the process to make sure community voices and priorities were centered. CPT members attended meetings, suggested opportunities for community engagement events like farmers' markets and school resource fairs, provided feedback on recommended improvements, and helped us spread the word about project engagement activities for the larger community.

# A big thank you...

to each and every one of our neighbors who gave their time, energy, and commitment to share their transportation needs and priorities with us. That input made the Streets for People Plan a plan created by the community and for everyone in Sacramento.



Community Planning Team meeting

# **Engagement Events**

To see both the neighborhood-scale and citywide picture, we employed several strategies designed to provide people options for how they wished to share their input (see **Figure 16** on page 45).

# Pop-up events and neighborhood meetings

We held pop-up events and presented at neighborhood meetings to engage with communities in place and reduce travel barriers to participation. These events provided project information to communities and requested their input on the local context to inform the plan such as important destinations within the neighborhood and streets or intersections that pose a barrier to accessing those destinations by walking or biking.

### **Online interactive engagement**

Our project website (streetsforpeople.org) served as a space to share information about the project and other related initiatives. Our online interactive maps enabled users to provide feedback about the existing transportation network and current deficiencies. These tools also allowed users to share their thoughts about the proposed network improvements.

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Pop-up event at Rio Velo

# Walking workshops and related case studies

We held in-person walking workshops in various neighborhoods throughout the city with an emphasis on neighborhoods within the three focus areas. These were selected based on feedback from our CPT to be representative of the active transportation challenges that exist in Sacramento today. These events provided communities with the opportunity to express their concerns about their perceptions of safety, accessibility, and comfort in real time and brainstorm their vision for what the corridor could look like in the future.

# **Engagement by the Numbers**

# **IN-PERSON ENGAGEMENT**









### **ONLINE ENGAGEMENT**







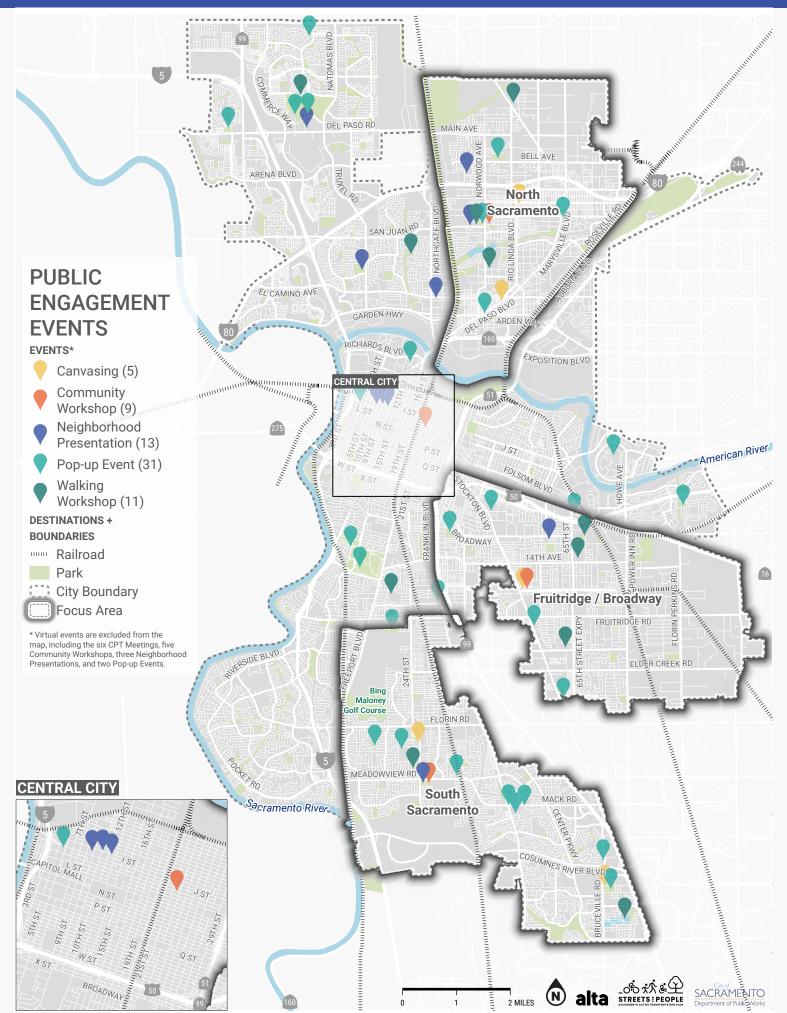


Project website and online interactive map





# Figure 16 - Community Engagement Events



# **What We Heard**

The following four themes represent what we heard throughout the engagement process related to walking, biking, and rolling in Sacramento:

# MAKE IT SAFER AND MORE CONNECTED

# Address safety concerns related to traffic conditions, user behavior, and network gaps.

Safety was often identified as the most important project goal. Our communities are concerned about the way drivers seem to travel at unsafe speeds at specific locations and noted general problematic behavior such as not looking during turns or veering into bike lanes. They also noted feeling unsafe while crossing because of traffic conditions and because crossings are too infrequent.

# Establish more comfortable east-west connections.

Our communities noted feeling unsafe walking, biking, and rolling on various eastwest streets because of the fast traffic and lack of separation from oncoming traffic. They also see existing highways as barriers to local destinations. They would like to see more comfortable facilities for people walking, biking, and rolling, particularly in the **Fruitridge/Broadway** and **North Sacramento** focus areas.

# Create safer, more frequent connections to transit, neighborhood destinations, and jobs.

Our residents confirmed a need for a greater network of high-frequency transit, and that it is difficult to access the limited existing highfrequency transit because of the lack of low stress infrastructure outside the urban core. They would like to see better connections to transit and neighborhood destinations including parks and schools. Existing highways also limit our communities' ability to go to different destinations within their neighborhoods.





Some of our communities don't have comfortable facilities to walk or bike on, leading to people biking on sidewalks which creates conflicts with people walking.





Community Engagement





# Provide wider sidewalks and bikeways along major streets.

Our communities feel the sidewalks and bike facilities are too narrow to use comfortably. They are frequently cracked or in poor condition, and sidewalks are sometimes blocked by utility poles or boxes. Community members also felt that some walking facilities are too steep for mobility device users. Additionally, residents highlighted existing rolled curbs allow drivers to park on the sidewalk, acting as barriers for people walking.

# Include more shade along sidewalks, bike facilities, and at bus stops.

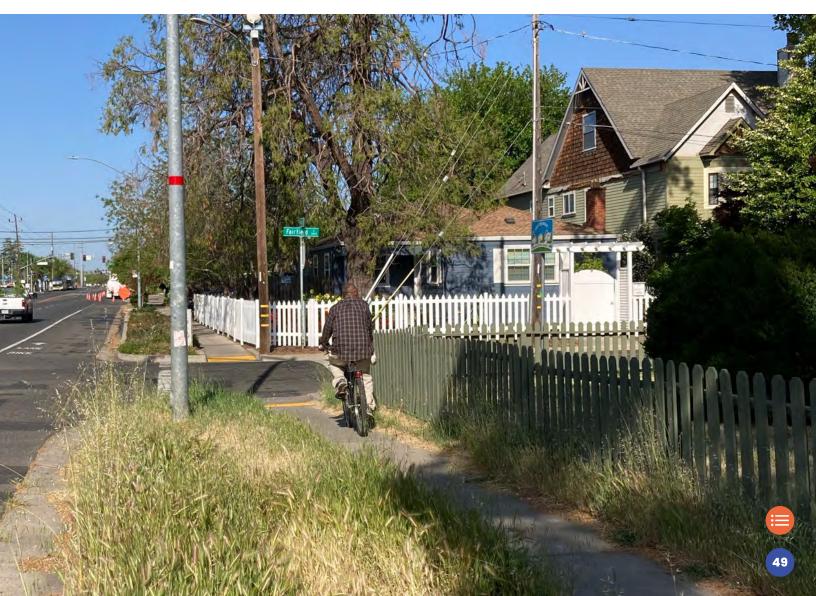
Our communities said that shade was an important aspect along sidewalks and bike facilities and at bus stops to improve comfort for walking, biking, and rolling. Also, shaded rest stops or benches are needed to make walking more accessible and comfortable along shared-use paths during heat and for those traveling longer distances or with physical disabilities. This need is supported by the results from <u>Appendix 2 – Existing Conditions</u>, particularly the heat vulnerability analysis.



# Focus on maintenance of existing infrastructure.

Increased maintenance on existing streets to delineate space for all users often came up as an important project goal. Our communities highlighted a desire for better maintenance of street elements including pavement quality, lane striping, and using reflective delineators.

Sidewalks in Uptown Sacramento with overgrown vegetation



# PROVIDE SUPPORTIVE AMENITIES AND PROGRAMS

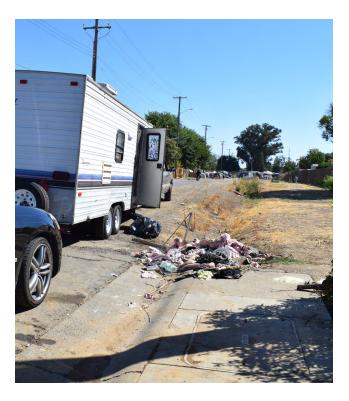
# Supporting infrastructure should be included.

Our communities requested additional pedestrian scale lighting throughout neighborhood streets and shared-use paths to better see and be seen during evening and darker hours of the day. Additional bike parking was also highlighted for various locations throughout the city. More connections to regional shared-use paths would support people walking, biking, and rolling across neighborhoods.



# Interdepartmental collaborations are needed to support people experiencing homelessness.

We often heard about conditions and issues surrounding people experiencing homelessness and the active transportation network. In some places our communities noted being hindered from walking or biking by existing encampments of people experiencing homelessness. While outside the scope of this specific plan, this input helped inform interdepartmental collaborations to leverage available support and resources for these individuals.

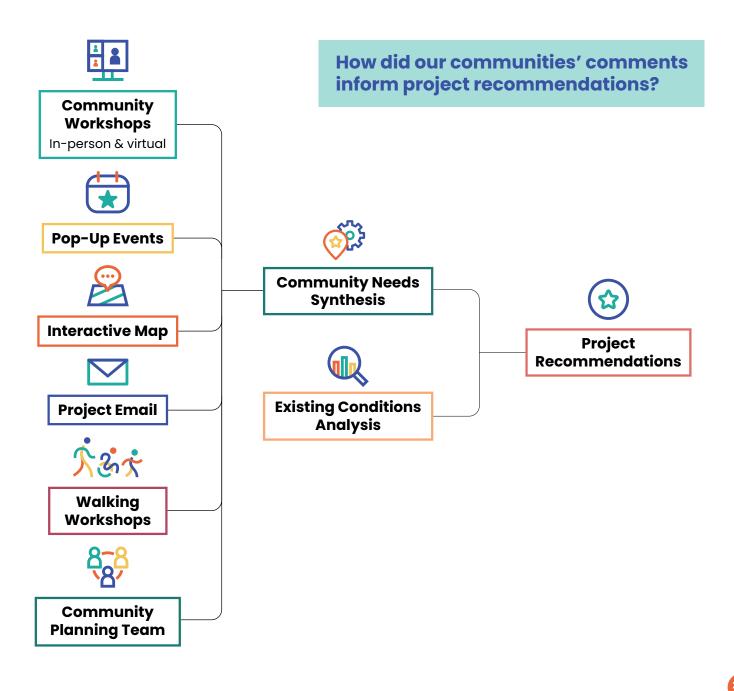


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# **Our Communities' Input Matters!**

The feedback our communities provided through various engagement events was combined with our analyses to inform the development of infrastructure and programmatic/policy recommendations as shown below:

Figure 17 - Incorporation of Community Comments into Recommendations



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# Recommendations

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The Streets for People Plan focuses on expanding the existing network of sidewalks, bikeways, and general infrastructure to enhance and promote people walking, biking, and rolling in Sacramento. This plan also includes supportive policies and programs to enhance the infrastructure improvements.

The recommendations included in this chapter build on the findings from our analysis and the key themes we heard from our communities during our public engagement events:



Make it safer and more connected



Make it more comfortable

Maintain what we already have

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Provide supportive amenities and programs



This chapter presents infrastructure, policy, and programmatic recommendations, as well as maintenance considerations. Infrastructure recommendations have been divided to show proposed network improvements for people walking, biking, and improvements at intersections. Policy and programmatic recommendations have been organized thematically into those focusing on equity, education, engagement, engineering, evaluation, and encouragement. Finally, the maintenance considerations provide solutions to challenges expressed by our communities.





# What we heard



Make it safer and more connected



# What we are proposing

- Providing greater separation between people driving and people walking, biking, and rolling.
- **Closing gaps** for people walking, biking, and rolling to transit.
- Identifying key intersections for safety improvements.
- Enhancing multiple east-west connections on major streets that work together with the <u>Neighborhood Connections Plan</u>.

<u>?</u>:

# What we heard



Make it more comfortable

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# What we are proposing

- Emphasizing **increased separation** between people driving and people walking, biking, and rolling.
- Identifying sidewalk widening and sidewalk buffering opportunities.
- Providing tools to identify opportunities for greater shade cover along street improvements.



# What we heard



Maintain what we already have



# What we are proposing

- Talking plainly about the **existing and ongoing need for maintenance** of our network.
- Focusing improvements in historically underinvested areas of the city.
- Finding overlap between upgrades to infrastructure for people walking, biking, and rolling to more easily implement it.

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# What we heard



Provide supportive amenities and programs

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# What we are proposing

- Expanding City policies that support people walking, biking, and rolling.
- Enhancing existing programs to **increase education around walking and biking** and encourage people to walk and bike more frequently.
- Identifying opportunities for more supportive amenities like bike parking, shade trees, systemic safety improvements, and citywide Safe Routes to Schools programming.

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Recommendations



# Network Recommendations

The recommendations included in this section are based on our communities' feedback. The recommendations build off the existing walking and biking networks, incorporate previous plans (see <u>Appendix 1 – Plan and Policy Review</u>), and complement the improvements identified in the <u>Neighborhood Connections Plan</u>.

# Recommendations Toolbox

Different facilities are better suited for different streets, based on characteristics such as how fast and how frequently vehicles use the street, the street width, and other types of transportation using the space. The following facilities and amenities are part of the city's bikeway and pedestrian "toolbox."

See Sacramento's <u>Neighborhood Connections Plan</u> for additional information on traffic calming facilities.

### Recommendations

# **SIDEWALKS**

• Provide an area for people walking to travel separated from vehicle traffic.

**Toolbox for** 

**People Walking** 

 Typically constructed out of concrete and raised at least four inches above the adjacent roadway. Includes a curb, gutter, and sometimes a landscaped buffer.

**CURB EXTENSIONS\*** 

- Minimize exposure for people crossing the street by shortening crossing distance and giving them a better chance to see and be seen before committing to crossing.
- Particularly helpful at mid-block crossing locations.
- Should not impede bike travel in the absence of a bike lane.

**HIGH-VISIBILITY CROSSWALKS\*** 

- High-visibility crosswalks are marked with thick bars, drawing additional attention and awareness to the crossing.
- In school zones, these crossings are yellow instead of the standard white color.

\* Intersection or crossing improvement

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# **Toolbox for People Walking (continued)**



# MEDIAN REFUGE ISLANDS\*

- Help improve access for people walking by increasing visibility and allowing pedestrians to cross one direction of traffic at a time.
- Minimize pedestrian exposure at mid-block crossings by shortening the crossing distance and increasing the number of available gaps for crossing.



### PEDESTRIAN SIGNAL\*

- Used at mid-block crossings where there are 3 or more travel lanes, traffic volumes greater than 9,000, and posted speed limits 35 mph or greater.
- Used at shared-use path crossings, both at intersections and midblock.
- Flashing amber warning beacons may be utilized at unsignalized intersection crossings.



# **RECTANGULAR RAPID FLASHING BEACON\***

- Type of active warning beacon used at unsignalized crossings.
- Designed to increase driver yielding compliance on multi-lane or high-volume roadways.
- Typically activated by people walking manually with a push button, or can be actuated automatically with passive detection systems.

\* Intersection or crossing improvement





# SHADE TREES

- Can increase comfort for people walking and biking by lowering temperatures, filtering air and water, and improving the quality of both.
- The presence of trees can make walking and biking facilities feel more comfortable and appealing, contributing to mode shift and reducing greenhouse gas emissions.

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# PLANTING STRIPS

- Create expanded space for roots so trees can grow faster; share nutrients; better resist disease, pests, and drought; and live longer.
- Reduce risk of pavement damage by root systems.
- Can serve to capture stormwater recharge, and potential storage opportunity.



### WAYFINDING

- Directional signage for people walking to orient themselves within the network and navigate to typical destinations.
- Helps make the active transportation network more approachable to people walking or rolling in an unfamiliar area.
- Can help people discover new destinations and services.



# **Toolbox for People Biking**



### SHARED-USE PATHS

- Paths shared by people walking and biking completely separated from motor vehicle traffic.
- Comfortable for people of all ages and abilities.
- Typically located within or along parks, rail corridors, rivers, or other bodies of water.



- On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier.
- One- or two-way facility.
- More comfortable for people of all ages and abilities.



### BUFFERED BIKE LANES

- Dedicated lane for bike travel adjacent to traffic.
- Separated from traffic or parking by painted lane line or buffer.
- Buffer provides additional comfort and space from motor vehicles and/ or parking.



# **BIKE LANES**

- Dedicated lane for bike travel adjacent to traffic.
- Enable people biking to ride at their preferred speed without interference from cars or traffic conditions.
- Separated from traffic or parking by painted lane line or buffer.





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# **BIKE ROUTES\***

- Signed and/or marked streets where drivers share the travel lane with people biking.
- May include additional traffic calming elements to improve user comfort (sometimes referred to as bike boulevards).
- Generally not considered comfortable for most users on higher speed and volume streets.
- Typically appropriate with speeds under
   25 mph and vehicle volumes of 3,000 per day or less.

# BIKE-FRIENDLY INTERSECTIONS

- Intersections designed to provide additional separation, comfort, and safety for people biking and walking.
- May include bike boxes, signal priority, curb extensions, or fully protected intersection.
- Ideal for locations with conflicts between people driving, walking, and biking.

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### **BIKE PARKING**

- Includes curbside racks, corrals, bike lockers, or bike stations.
- Racks provide shortterm dedicated parking outdoors or in garages.
- Lockers provide longterm secure parking at specific locations.
- Stations provide long-term indoor parking typically near transit and can be staffed or self-serve.

### WAYFINDING

- Directional signage for people biking to orient themselves within the network and navigate to typical destinations.
- Helps make the biking network more approachable to new riders and people riding in an unfamiliar area.
- Can help people discover new destinations and services.

\* As of January 1, 2025, cities and agencies are prohibited from installing sharrows on any street with a speed limit above 30 mph following the signing into law of SB 1216. Some exceptions are allowed when used at or near intersections for connecting to other bikeways. The bill also requires that any project funded through the CA Active Transportation Program (ATP) not install a Class III facility or sharrows on a street with a speed limit above 25 mph (into effect on January 1, 2026). Jurisdictions may still implement Class III facilities/sharrows on roadways with speeds over 25 mph if it can be demonstrated that the project will reduce the speed to 25 mph or lower, or if the Class III designation/ marking is appropriate and context sensitive.



### Recommendations



Students walking to school along Del Paso Road. Credit: North Natomas Jibe

# Recommendations for People Walking and Rolling

The Streets for People Plan identifies **2,189 miles of new or improved sidewalks throughout the city**. Recommendations for people walking are shown in **Figure 18–Figure 24** on the following pages.

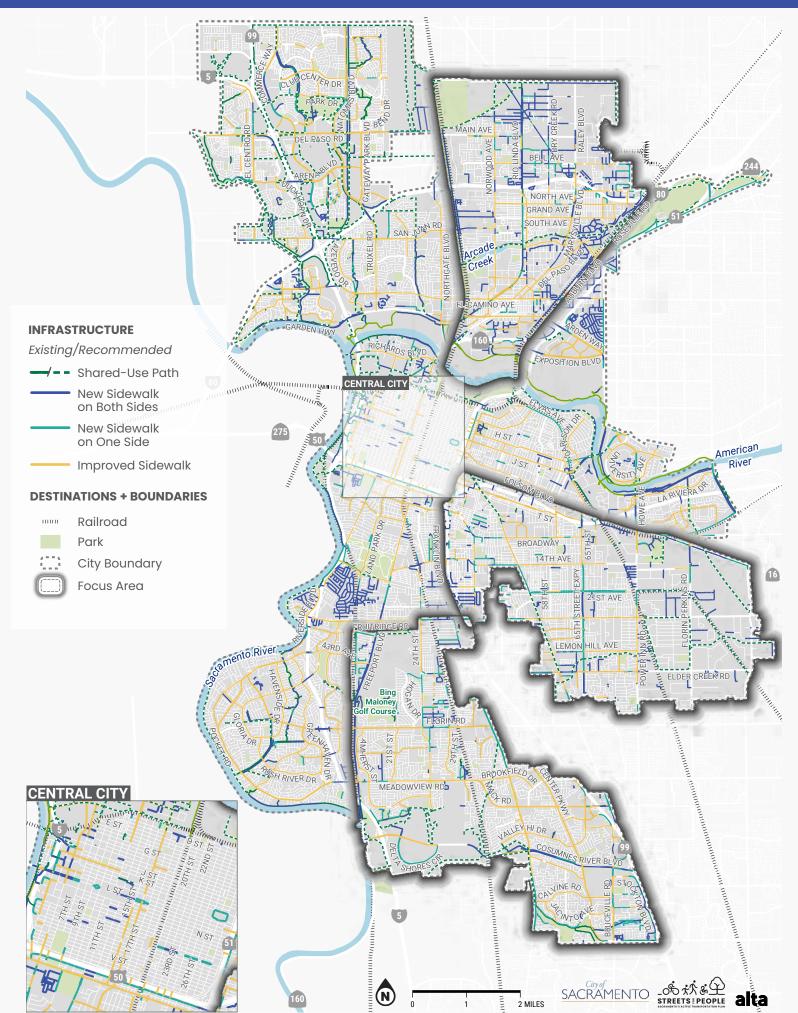


### WHAT WE ARE PROPOSING

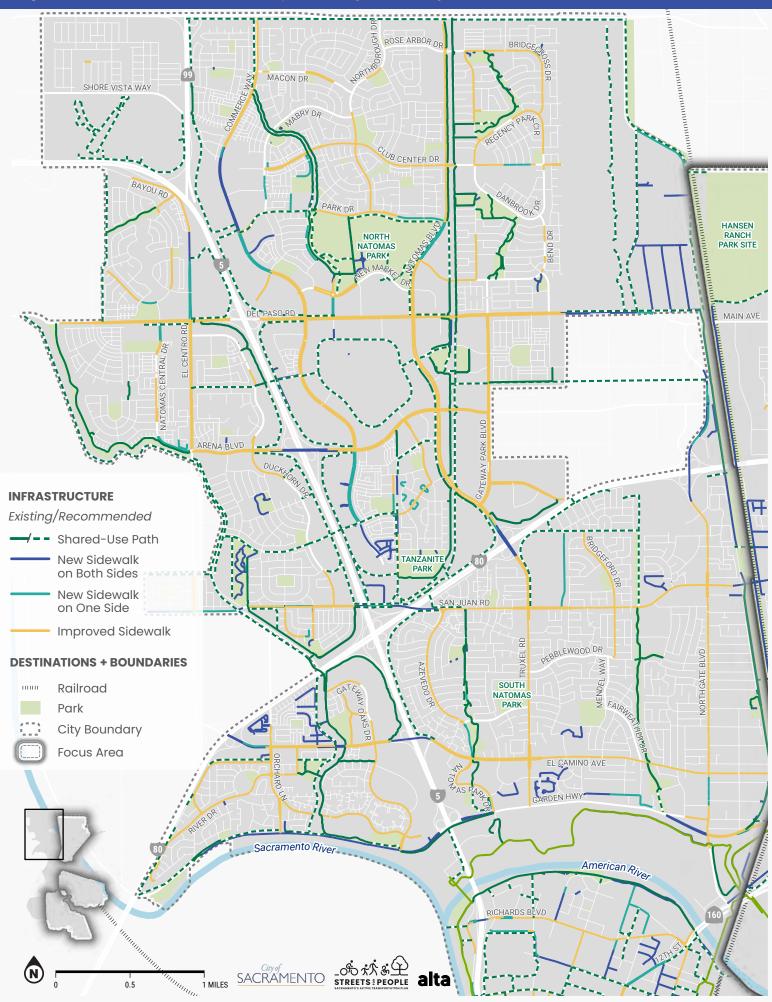


\*Sidewalk widening, leveling out sidewalks with cracks, and filling gaps.

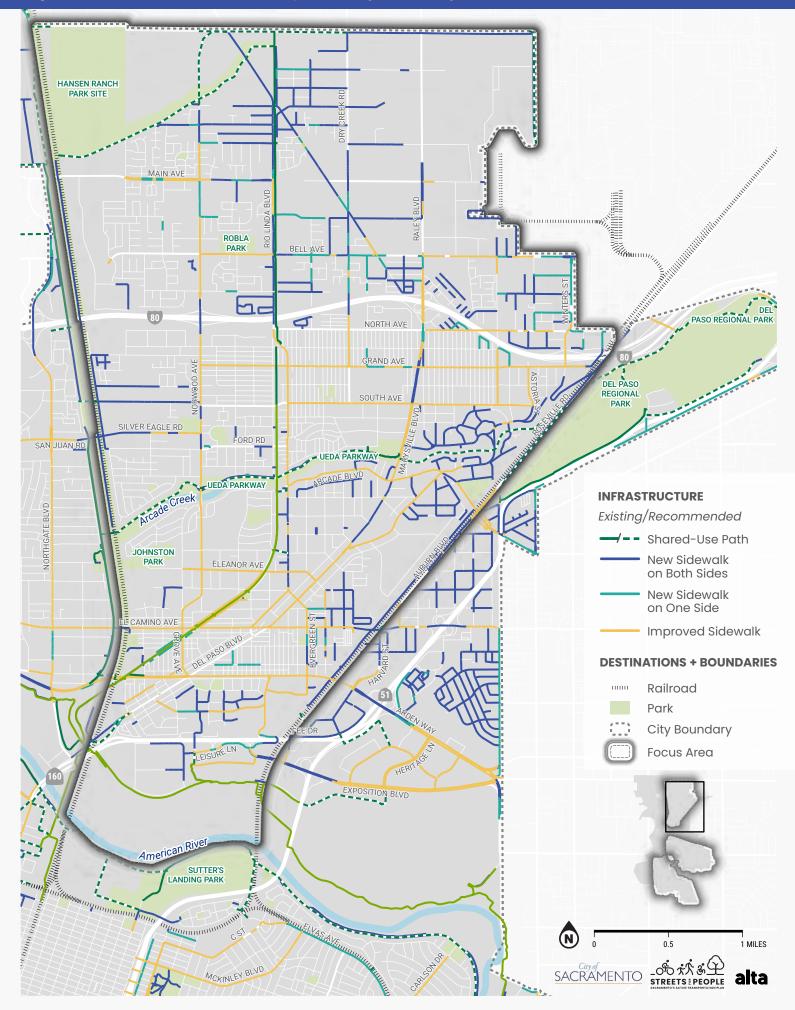
# Figure 18 - Recommendations for People Walking and Rolling in Sacramento



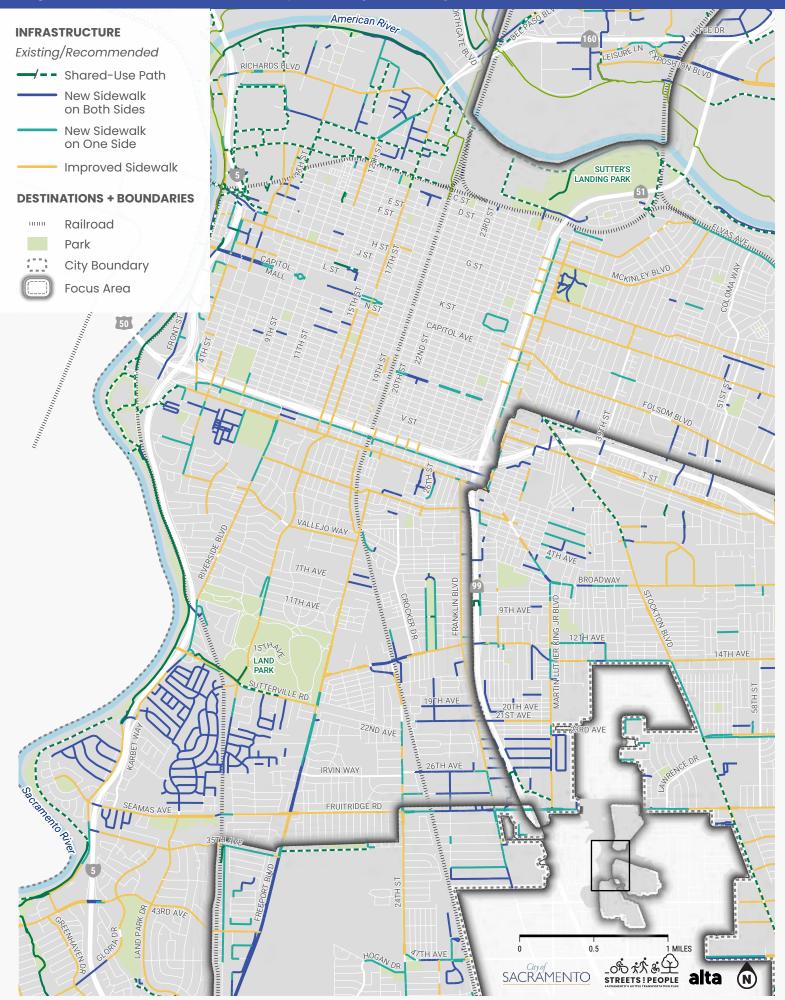




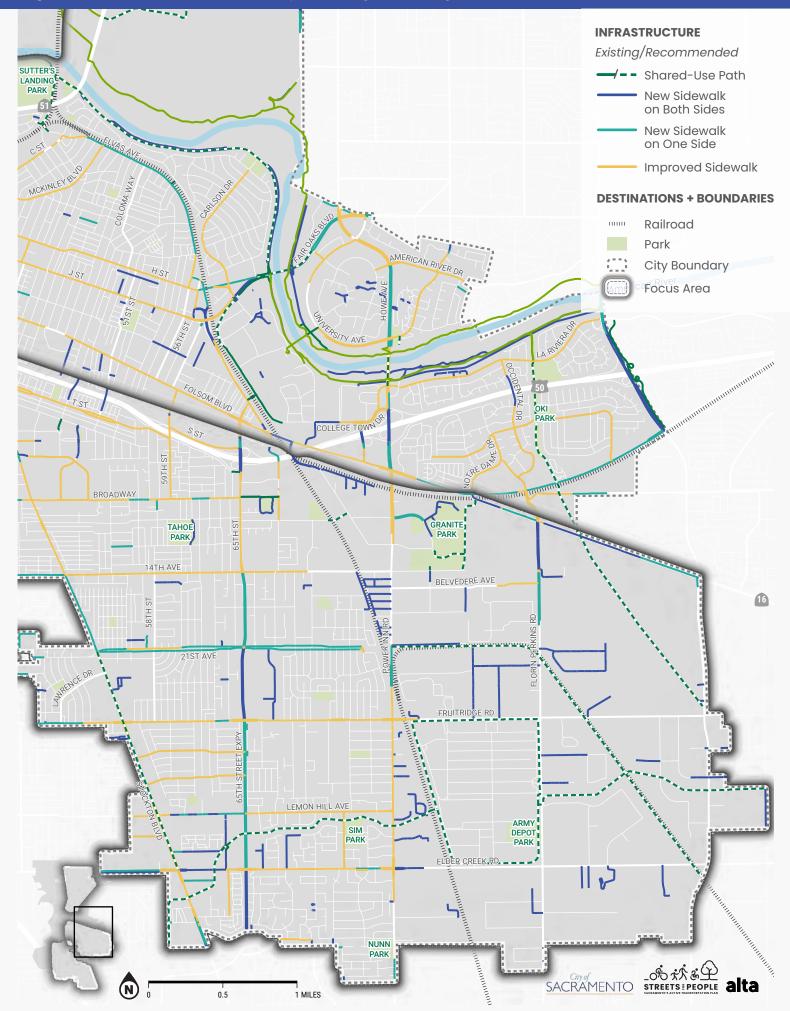
### Figure 20 - Recommendations for People Walking and Rolling in Northeast Sacramento



#### Figure 21 - Recommendations for People Walking and Rolling in Central West Sacramento







## Figure 23 - Recommendations for People Walking and Rolling in Southwest Sacramento

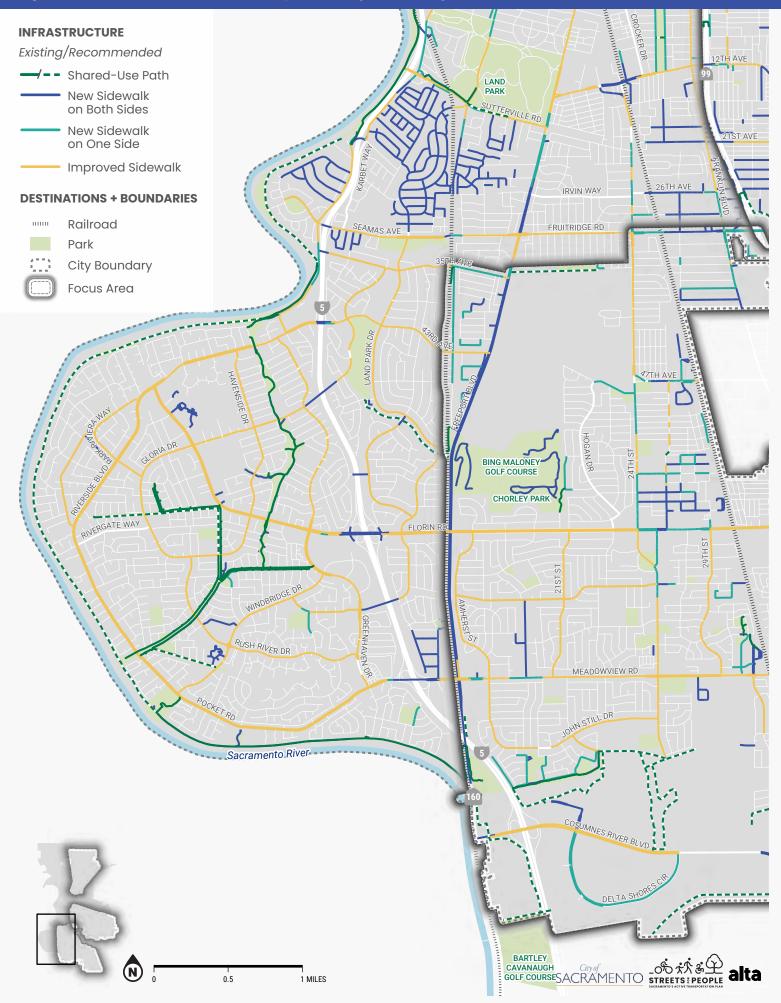
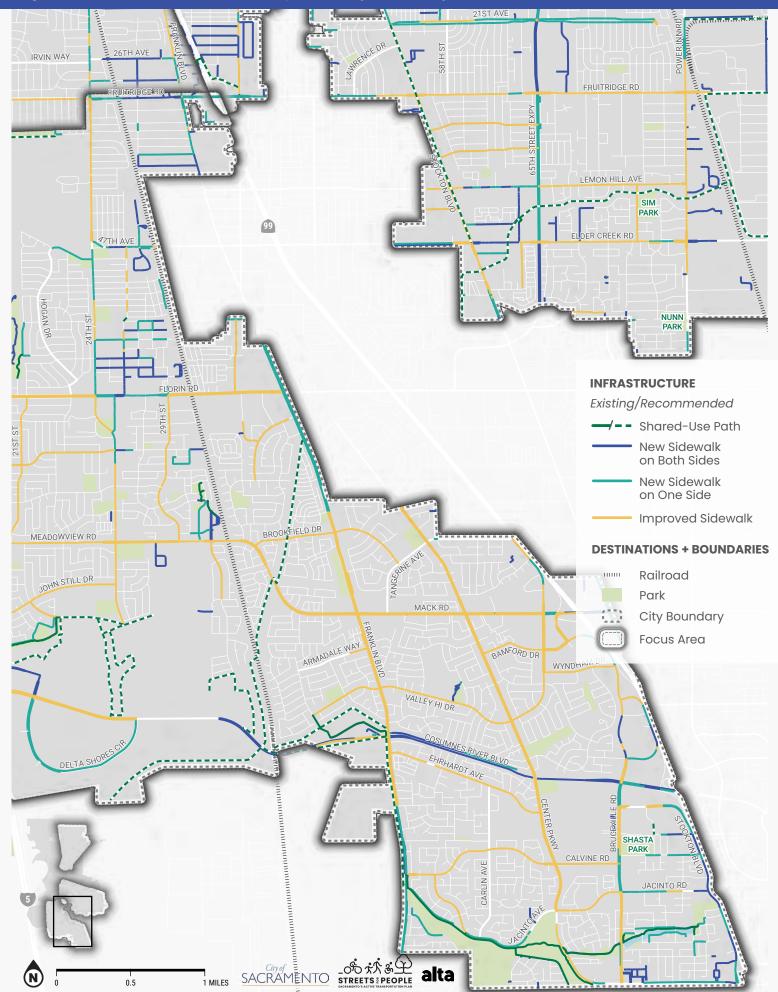


Figure 24 - Recommendations for People Walking and Rolling in Southeast Sacramento







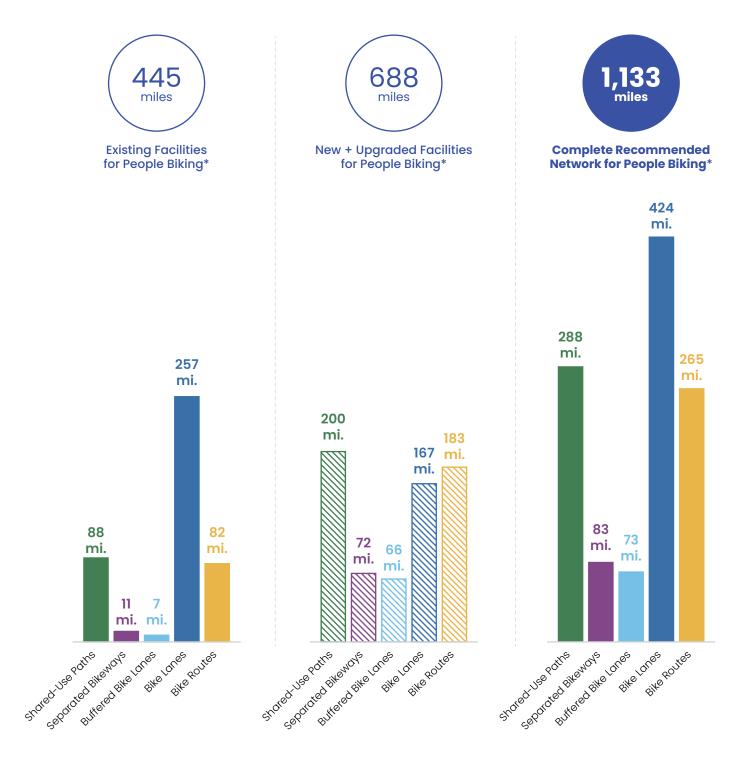
# Recommendations for People Biking

The recommendations included here are intended to create a more extensive network of facilities for people biking, that provides easy and comfortable connections to neighborhood and regional destinations. Recommended improvements for people biking are shown in **Figure 25–Figure 31**.

The recommendations have also been developed to build on the <u>Neighborhood</u> <u>Connections Plan</u> which includes both *Primary* (i.e., routes that provide access to everyday destinations with traffic calming features) and *Secondary* (i.e., signed routes that serve as "feeder routes," linking additional users to their desired destinations) routes. Primary Routes for Neighborhood Connections are identified with an outline on **Figure 25–Figure 31.** For the complete Neighborhood Connections network, see **Figure 32**.

Additional information on how we developed the recommended improvements can be found in <u>Appendix 7 – Development of</u> <u>Recommendations and Segmentation</u> (Methods).

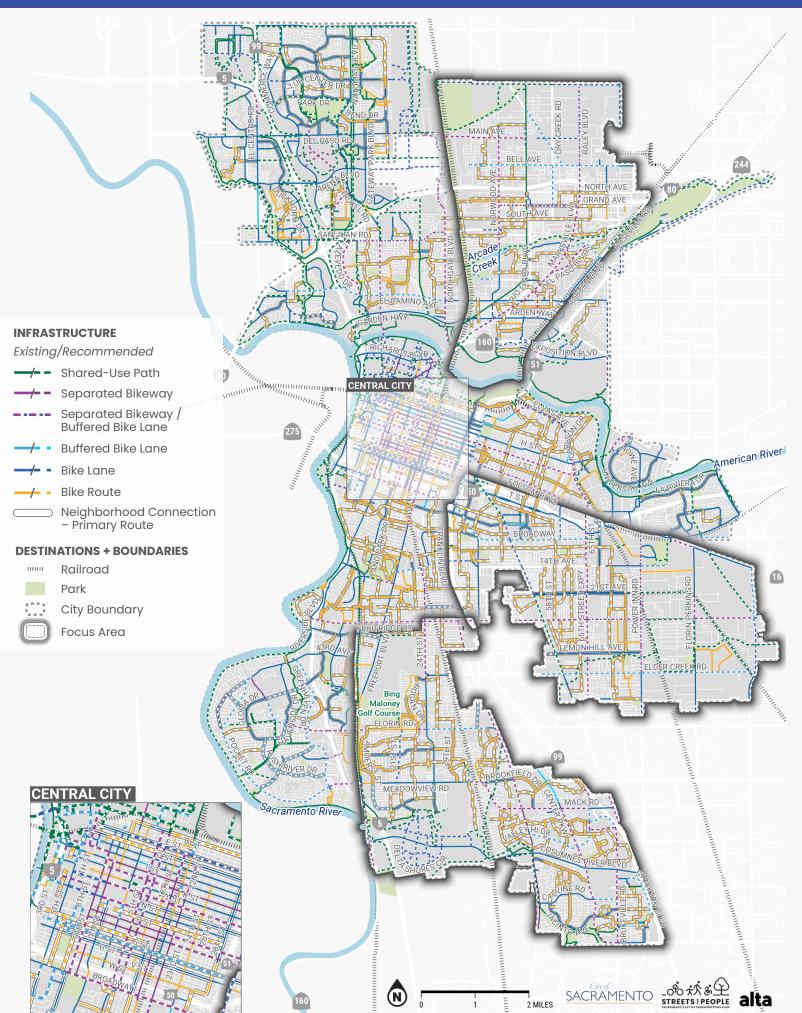
#### WHAT WE ARE PROPOSING

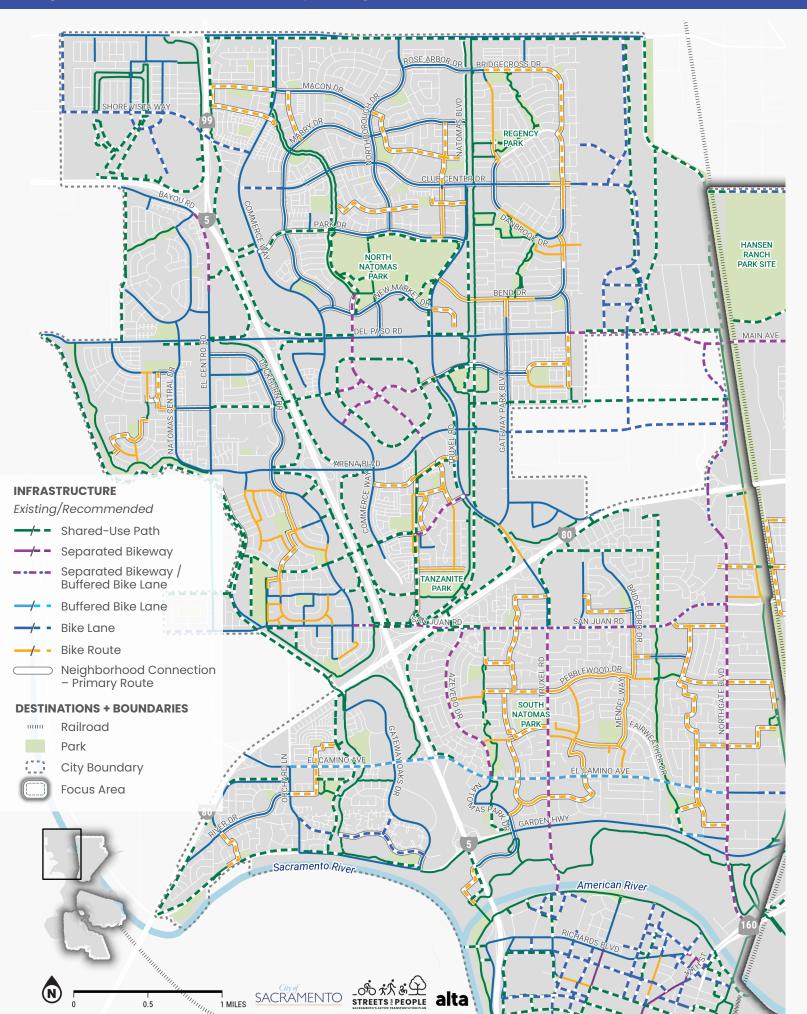


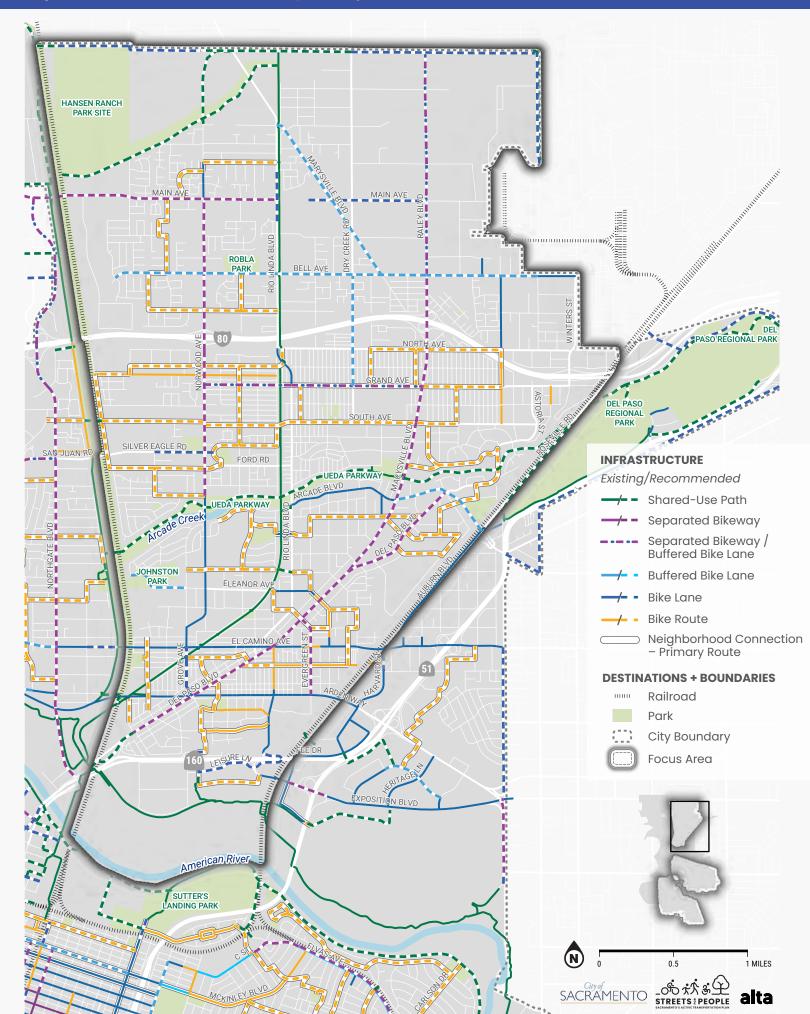
\*Rounded to the nearest whole number. More information on facilities for people biking can be found in the **Neighborhood Connections Plan**.

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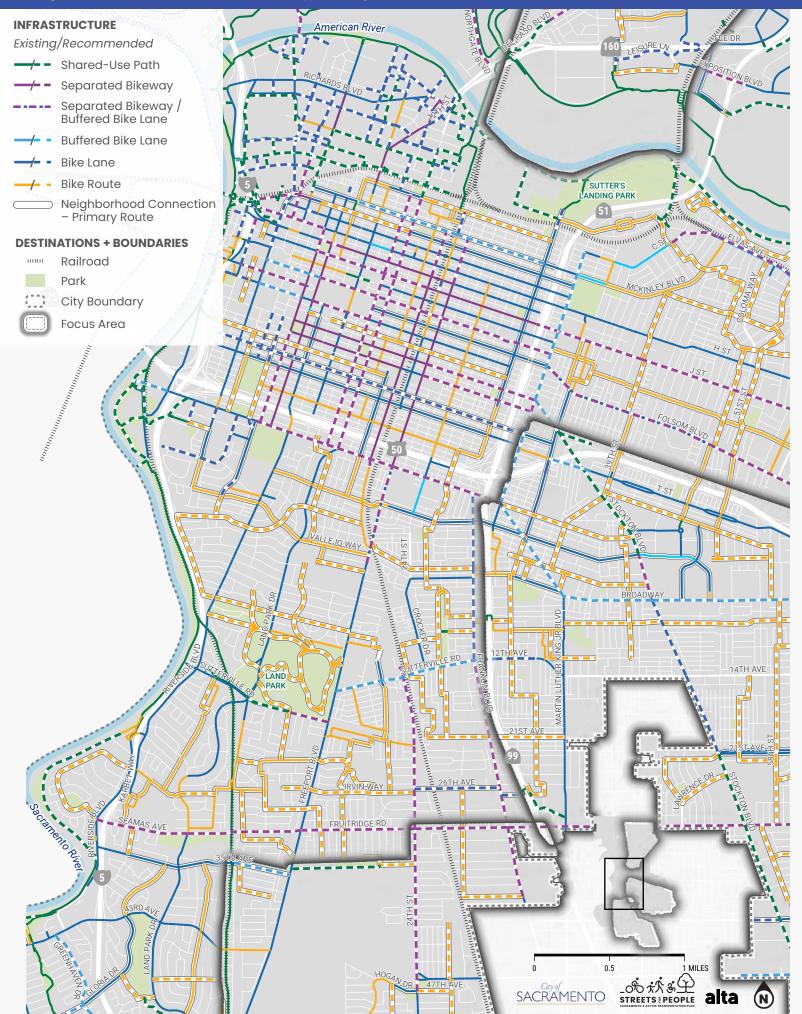




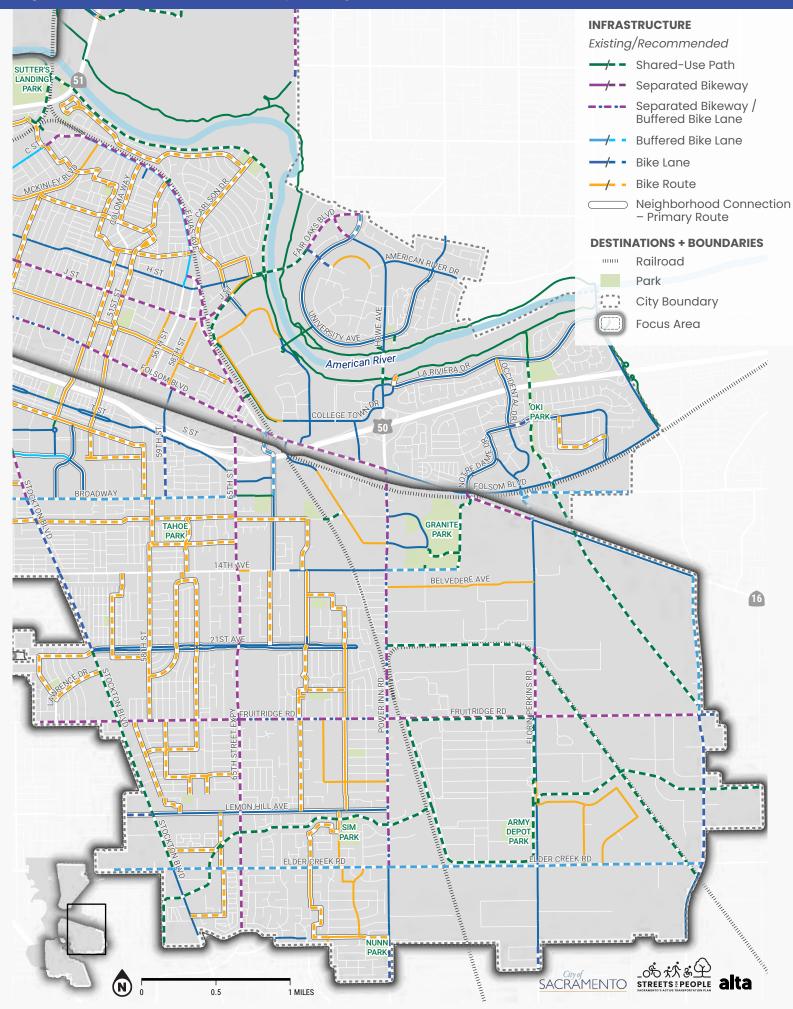




#### Figure 28 - Recommendations for People Biking in Central West Sacramento



#### Figure 29 - Recommendations for People Biking in Central East Sacramento



## Figure 30 - Recommendations for People Biking in Southwest Sacramento

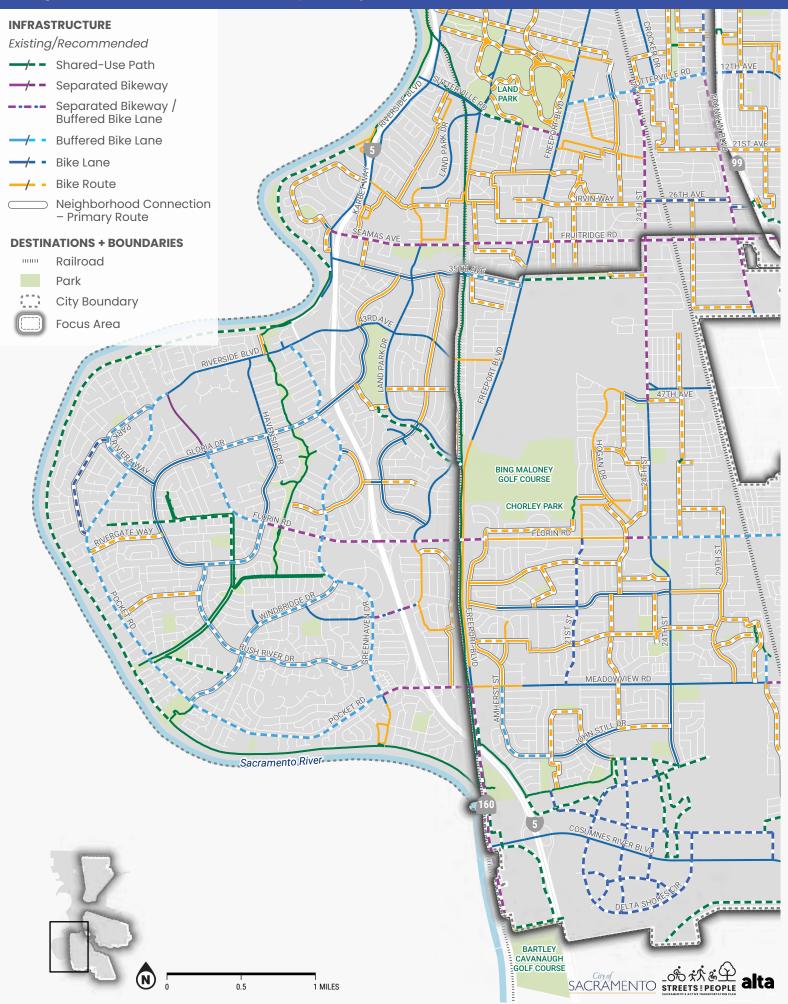
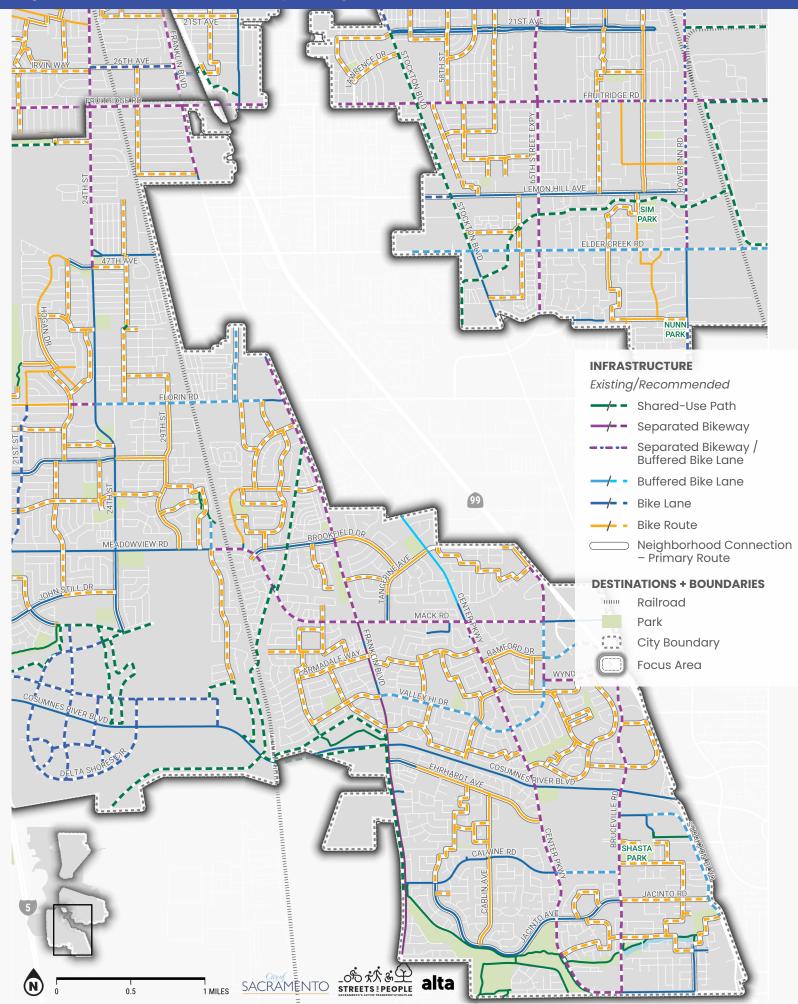
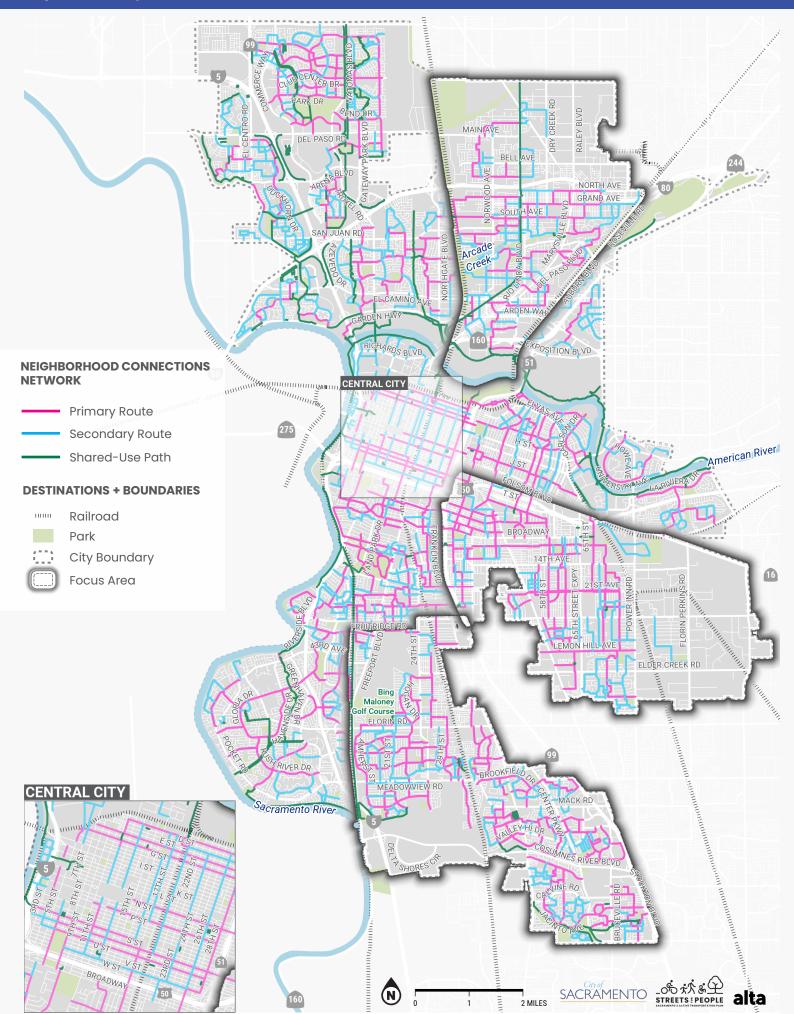


Figure 31 – Recommendations for People Biking in Southeast Sacramento



## Figure 32 - Neighborhood Connections Network



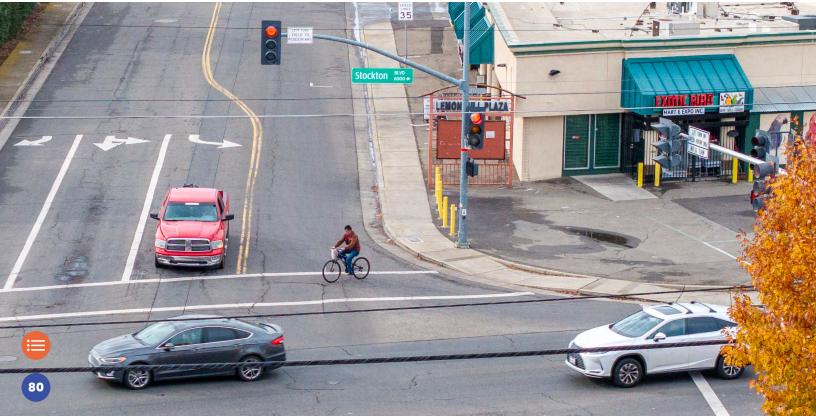
# **Intersection Recommendations**

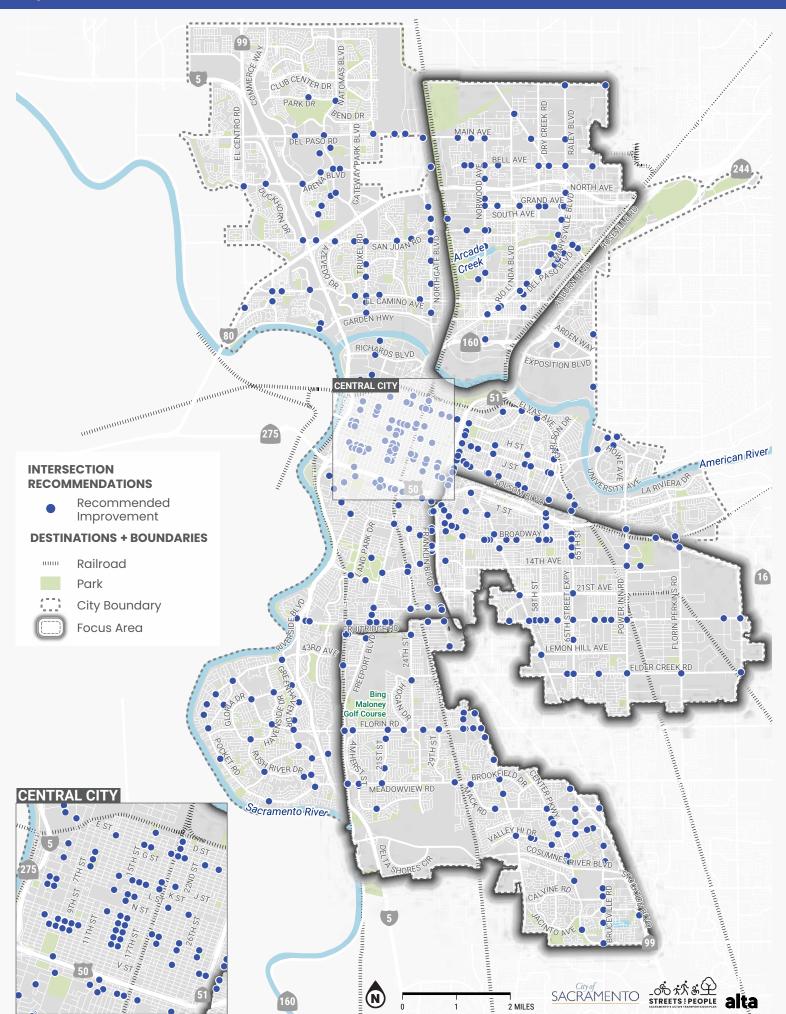
In addition to the network recommendations, we identified key intersections for improving safety and connectivity across the city. We identified **598 intersections** where existing and proposed biking routes intersect or where safety concerns like motor vehicles turning at high-speeds, lack of crossing facilities, turning vehicles encroaching onto bike lanes, among others were identified through public engagement and data analysis. Specific improvements at each intersection will require future assessment of their conditions like speeds, volumes, number of vehicle lanes, exisitng facilities, and even context of the street.

A decision matrix to help City staff identify the most appropriate intersection improvements is available in <u>Appendix 7 – Development</u> of <u>Recommendations and Segmentation</u> (<u>Methods</u>). Intersection recommendation locations are shown in **Figure 33–Figure 39**.

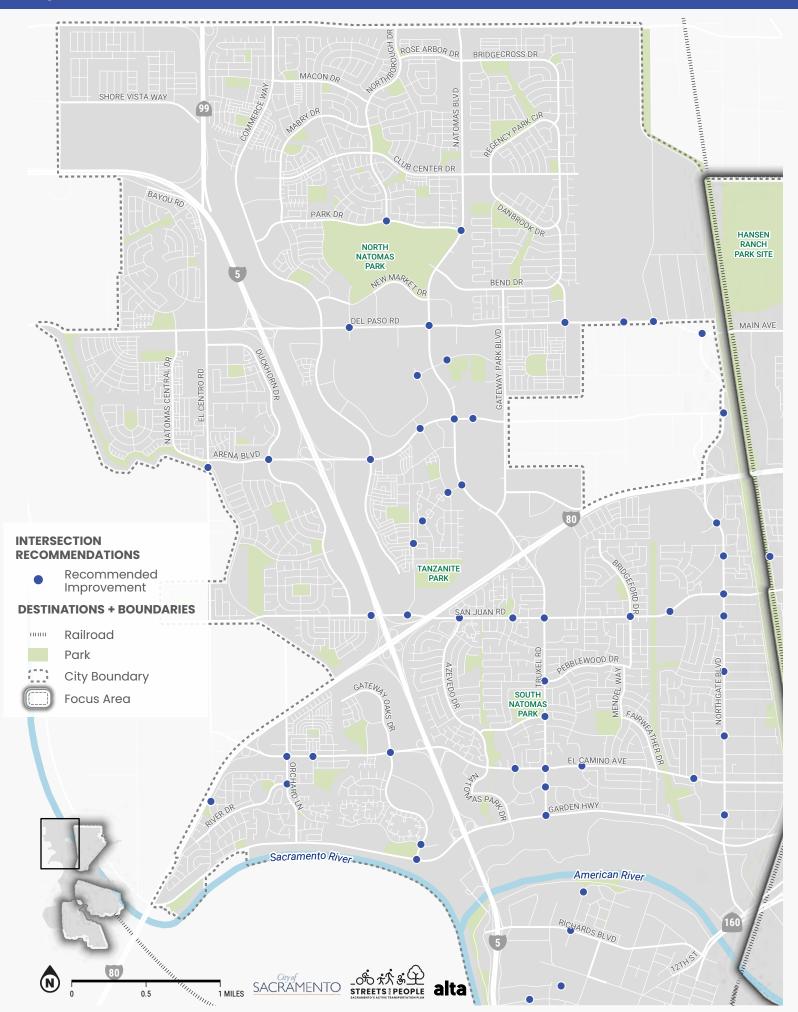


The intersection of Stockton Blvd and Lemon Hill Ave experiences high numbers of people walking or biking to access Lemon Hill Plaza.

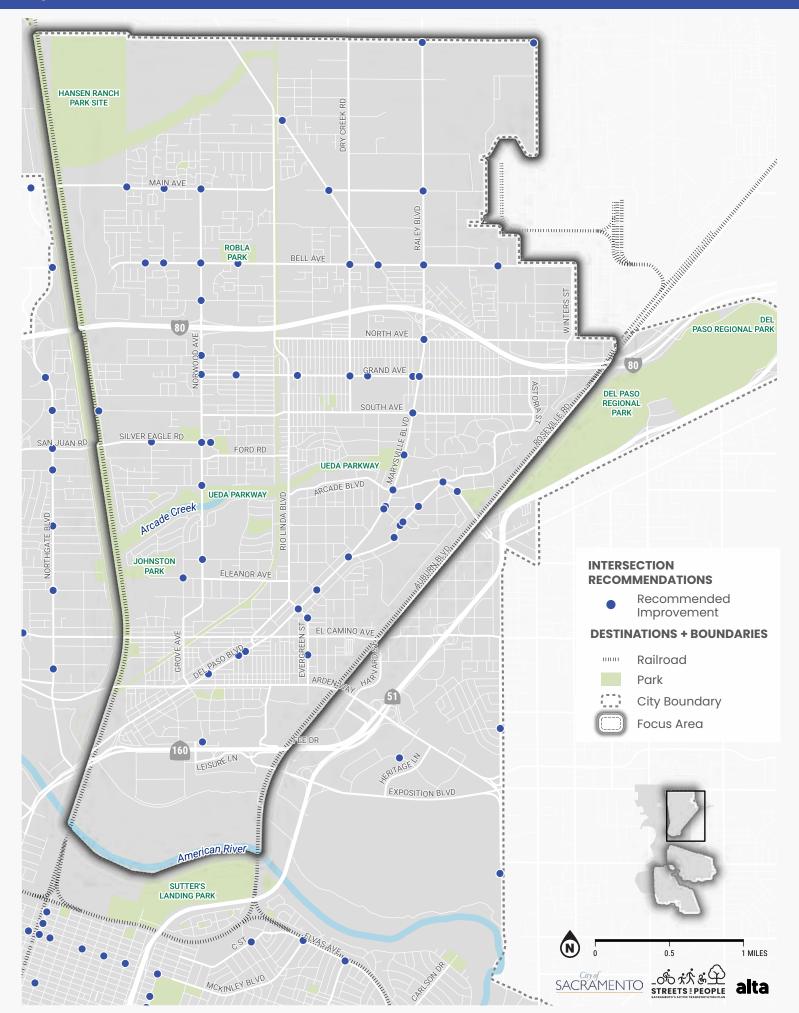




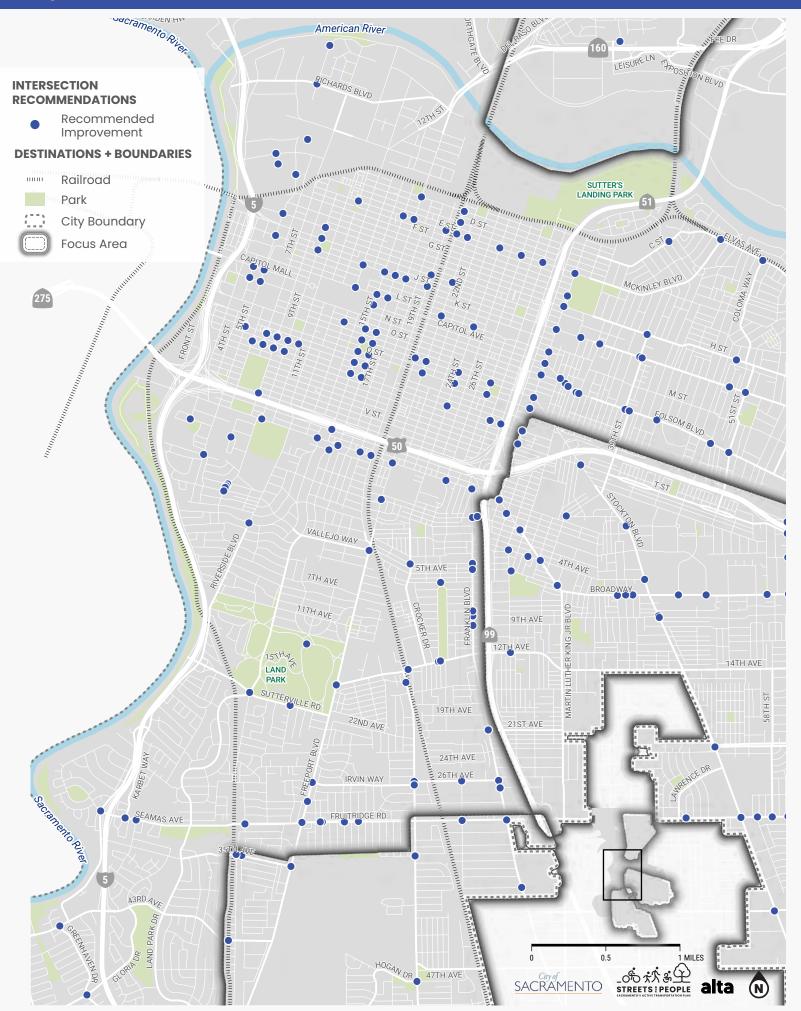
#### Figure 34 - Intersection Recommendations in Northwest Sacramento



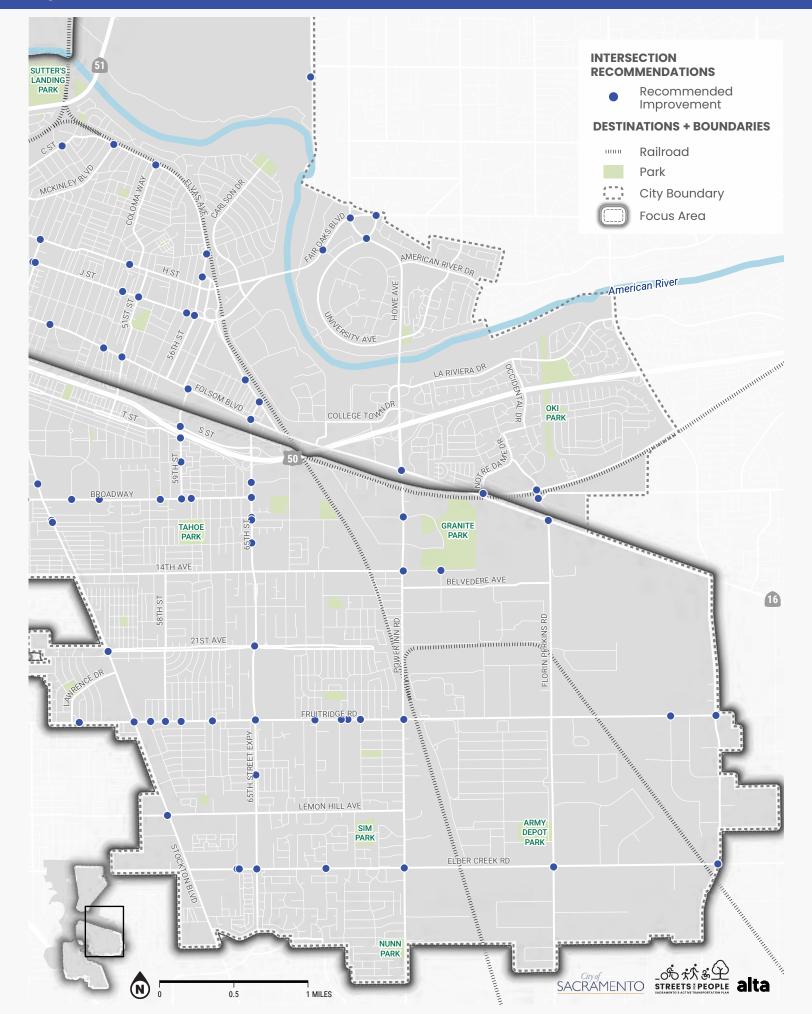
#### Figure 35 - Intersection Recommendations in Northeast Sacramento



#### Figure 36 - Intersection Recommendations in Central West Sacramento



#### Figure 37 - Intersection Recommendations in Central East Sacramento



#### Figure 38 - Intersection Recommendations in Southwest Sacramento

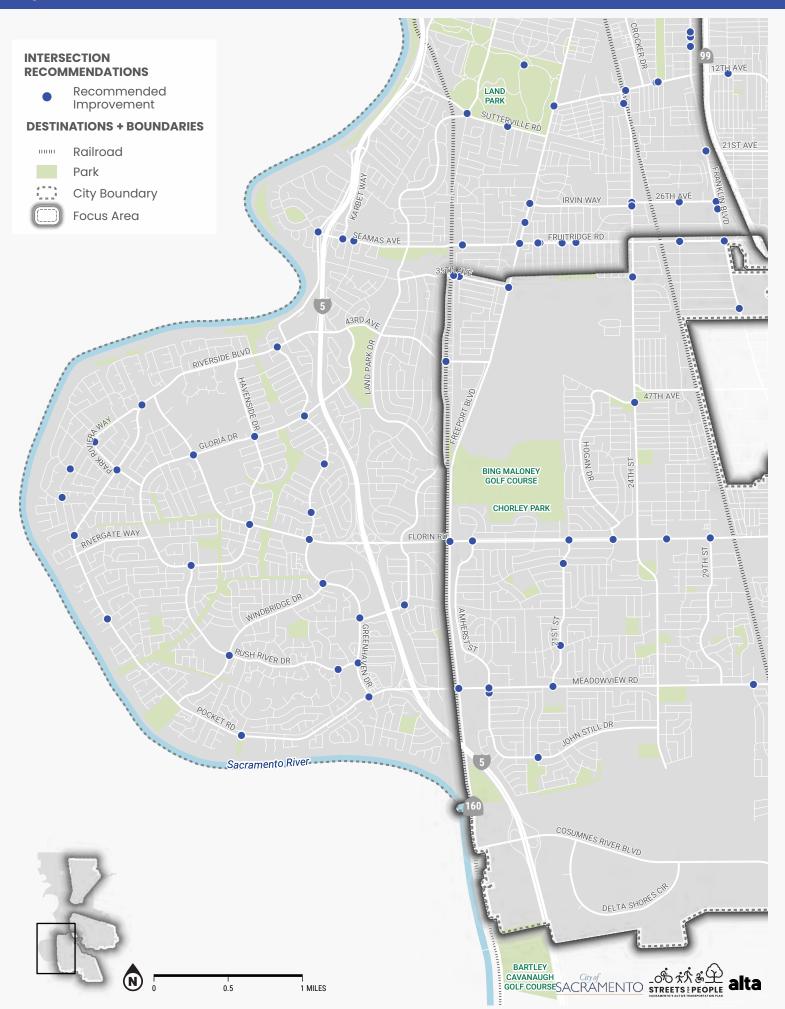
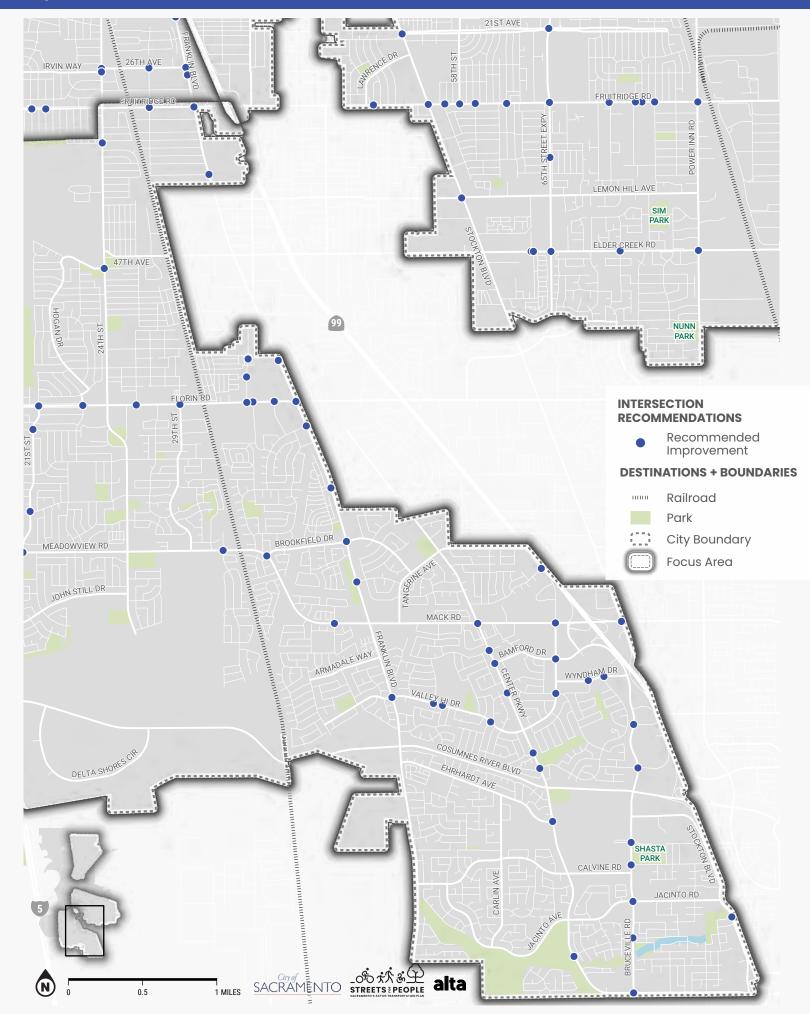


Figure 39 - Intersection Recommendations in Southeast Sacramento



# **Recommended Policies** and Programs

Making Sacramento more walkable and bikeable requires not only new infrastructure investments but also ongoing policies and programs that support and encourage those who rely on active travel and those who choose it for convenience. This section outlines the recommended policies and programs designed to help achieve the goals set forth in this plan. The recommendations are organized under the following themes:

## EQUITY

Equity is a major component throughout these proposed policies and programs to prioritize recommendations within Equity Priority Communities that are heavily dependent on public transit or active transportation.

## **EDUCATION**

Bike and pedestrian education policies and programs help those who are interested in active transportation to feel safer, more comfortable, and more confident navigating streets and shared-use paths.

## **ENGAGEMENT**

Engagement policies and programs can institutionalize safer biking and walking transportation systems. By prioritizing people who walk, bike, and roll, these policies and programs help create safer environments for all users.

### **ENGINEERING**

Support facilities that provide increased comfort and ease for people who walk, bike, and roll. These engineering policies and programs are intended to work with existing bike and pedestrian infrastructure to improve the experience for people walking, biking, and rolling.

## **EVALUATION**

Policies and programs to evaluate and track progress toward reaching the plan's goals are important for long-term success.

## **ENCOURAGEMENT**

Encouragement policies and programs help to create a lasting active transportation culture and can encourage overall mode share shifts.

## **Active Transportation Commission Recommendations**

In September 2024, the Active Transportation Commission provided the City Council with various recommendations for policies and programs to improve active transportation in Sacramento through the Sacramento Active Transportation **Commission Annual Report.** These recommendations are currently under consideration by the City Council.







# Equity

RECOMMENDED POLICY	DESCRIPTION
Prioritize People Walking, Biking, and Taking Transit	The City shall prioritize mobility, comfort, health, safety, and convenience for those walking, followed by those biking and riding transit, ahead of design and operations for those driving.
	Sacramento 2040 General Plan (M-1.2)
Invest Equitably	The City shall ensure that the transportation system is planned and implemented with an equitable process to achieve equitable outcomes and investments so that all neighborhoods one day will have similar levels of transportation infrastructure such as sidewalks, marked low- stress crossings, and bikeways.
	Sacramento 2040 General Plan (M-1.9)
Reduce or Eliminate Barriers to Walking	The City shall remove barriers to walking, where feasible, and work with utility companies to remove barriers to allow people of all abilities to move with comfort and convenience throughout the city, including through the following:
	<ul> <li>Provision of curb ramps, crosswalks, and overpasses;</li> </ul>
	<ul> <li>Relocation of infrastructure or street furniture that impedes travel pathways;</li> </ul>
	<ul> <li>Reducing or consolidating driveways and curb cuts;</li> </ul>
	<ul> <li>Providing long and short-term bike and scooter parking to minimize sidewalk obstructions; and</li> </ul>
	<ul> <li>Creation of additional walking entrances to important destinations like schools, parks, and commercial areas.</li> </ul>
	Sacramento 2040 General Plan (M-1.16)
Support Community Efforts to Expand Access to Bikes	The City shall continue to support community efforts to offer, promote, and expand access to bikes, bike skills, and bike repair.
	Sacramento 2040 General Plan (NS-M-2)

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# Education

Education	
RECOMMENDED POLICY	DESCRIPTION
Promote Greater Use of TDM Strategies by Employers	The City should promote the greater use of Transportation Demand Management strategies by employers and residents to reduce dependence on single-occupancy vehicles with the target that 17 percent of all trips are made by transit and active transportation modes by 2030 and 23 percent of all trips are made by transit and active transportation modes by 2045. Sacramento 2040 General Plan (M-2.1)

# Engagement

Engagement RECOMMENDED POLICY	
Continue Sidewalk Bike Riding Ticket Diversion Program	The City should continue to implement its Urban Biking and Scooting class. The class also serves as the City's Sidewalk Bike Riding Ticket Diversion program to allow people to avoid paying a fine for illegally biking on the sidewalk if they take the course. This program helps to provide important education, encouragement, and information on the rules of the road.

# Engineering

Engineering		
RECOMMENDED POLICY	DESCRIPTION	4 🛯 🖧 🌢 🔍 茨
Support Existing Complete Streets Policy	of Sacramento Con	ntinue to implement the existing City nplete Streets Policy by incorporating ements and designs across all street

# Engineering (cont.)

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Engineering (cont.)	
RECOMMENDED POLICY	DESCRIPTION
Develop a Policy for Leading Pedestrian Intervals	The City should develop and implement a policy for leading pedestrian intervals at signalized intersections.
Implement Bikeway Project Design Based on DIB-94	The City should incorporate guidance from California Department of Transportation (Caltrans) Design Information Bulletin – 94 which encourages increased separation between people biking and people driving. Going forward, the City will incorporate this guidance on bikeway design projects to provide increased separation wherever possible.
<i>Implement</i> Streets For People <i>Projects</i>	The City should implement projects recommended in this plan based on the Transportation Priorities Plan process and in combination with any City projects as well as with private development projects.
Incorporate Tree Canopy Strategies in Active Transportation Infrastructure Projects	The City should include street trees as a part of transportation projects infrastructure to support achievement of 50 percent shading over streets and sidewalks. Street trees have been proven to have traffic calming, urban heat, and air quality benefits and should be employed as part of strategies to create more bikeable and walkable streets and paths.
	The Streets for People Plan has identified high-opportunity areas for tree planting, particularly in areas with substantial urban heat exposure and limited existing tree canopy coverage, which creates a barrier to accessing and using active transportation facilities, such as sidewalks and bikeways.
	This policy recommends including street trees as a part of active transportation projects infrastructure to support achievement of 50 percent shading over streets and sidewalks. The additional canopy should prioritize shading of active transportation facilities, such as sidewalks, bikeways, and shared use paths.

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# **Evaluation**

Evaluation		
<b>RECOMMENDED POLICY</b>	DESCRIPTION	4 🔲 🖧 📥 🙀 🕅
Evaluate Infrastructure and Programs Regularly	engagement with t	ar update of this plan, conduct in-depth he community to gauge how the ne success of recent active transportation and policies.

# Encouragement

Encouragement		
RECOMMENDED POLICY	DESCRIPTION	₫ 🛛 🖧 🗟 🔍 🕅
Implement Forthcoming TDM Policies	regulations incluc Demand Manage increase support General Plan and share goals incluc	nplement the policies, programs, and led in the forthcoming Transportation ment Implementation Plan/Report to for travel by walking, biking, and transit. The Climate Action & Adaptation Plan mode de increasing active transportation to 6% by 045; and transit to 11% by 2030.



Residents at the Sacramento Northern Bikeway



# PROGRAMS

# Education

Education		
RECOMMENDED PROGRAM	DESCRIPTION	
Continue the Urban Biking and Scooting Class	Scooting 101 Course. This pro	olement the Urban Biking and gram educates people biking sipate and respond to drivers

Engineering		
RECOMMENDED PROGRAM	DESCRIPTION	立 🖉 🔍 💢
Create a Wayfinding Program	The City should implement a city wayfinding program to highlight abilities routes for walking, rolling destinations and transit.	low-stress all ages and



# PROGRAMS

# **Evaluation**

EVAIUATION RECOMMENDED PROGRAM	DESCRIPTION	🔲 실 🔍 🔅
Monitor Crash Data	Regularly review crash data walking, biking, and rolling.	for collisions involving people
Identify an Active Transportation Count Data Technology	Identify a cost-effective and walking and biking activity o citywide.	efficient method to assess n streets, in neighborhoods and

# Encouragement

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Encouragement		
RECOMMENDED PROGRAM	DESCRIPTION	
Develop Bikeway Maps	The City should continue to deve maps. The development of map throughout the City of Sacrame include an interactive map, broo maps would serve as recomme take throughout the City as an e the City and/or commute to wor	nto. Types of public bike maps chures, handouts, etc. Bike ndations of which routes to encouraging mode to explore
Host May Is Bike Month and Walktober Events	Continue to host public events t such as public bike rides or walk	

Recommendations

# Maintenance Considerations

Maintenance of the existing and proposed network includes multi-level challenges that may reduce the ability of the City to keep up with proactive maintenance. To address these issues, we propose the following:

# Shared-use path maintenance

#### ISSUE

As the City continues to expand its shareduse path network, the maintenance funding for paths has not increased. Path construction comes from competitive grants but grants do not fund recurring maintenance.

## SOLUTION

Identify additional funding source for ongoing maintenance costs.

#### Sacramento Northern Bike Trail entrance



## Sidewalk maintenance

#### ISSUE

This is currently the responsibility of the adjacent property owner and not the City. While this reduces the overall maintenance burden on the City, it can result in a patchwork of sidewalk conditions including overgrown vegetation blocking the sidewalk, piles of leaves in the sidewalk path, and other issues.



# Identify a program that will identify ways to address sidewalk maintenance, focusing on

**Deferred maintenance** 

#### ISSUE

Like many cities, the City of Sacramento has a significant level of deferred maintenance across the transportation network, which has only grown in the last decade. The current total backlog of \$1.4 billion means that new maintenance issues may be deferred to later years to address other needs that were deferred previously.



## SOLUTION

SOLUTION

equity.

Identify additional funding source for ongoing deferred maintenance needs.

# **Areas of historical underinvestment**

#### ISSUE



Areas that have lacked historical investment from the City such as our focus areas have also typically received a lower level of maintenance funding on the transportation network.

#### SOLUTION

Prioritize maintenance in historically underinvested areas.



Recommendations



# Implementation

# Costs

The Streets for People Plan recommends over \$6 billion in projects for people walking across the city and up to \$1.6 billion in projects for people biking.<sup>n</sup>

Table 1 – Generalized Costs for People Walking and Rolling<sup>12</sup>

Proposed Improvement	Cost
Curb Extensions	\$\$\$\$
Hardened Centerlines and Turn Wedges	\$\$\$\$
Median Refuge Island	\$\$\$\$
Pedestrian Hybrid Beacon	\$\$\$\$
Planting Strips	\$\$\$\$
Rectangular Rapid Flashing Beacon	\$\$\$\$
Shade Trees	\$\$\$\$
Sidewalk*	\$\$\$\$

#### Table 2 - Generalized Costs for People Biking

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Classification Cost (per mile)
Shared-Use Path \$\$\$-\$\$\$
Bike Lane \$-\$\$\$
Bike Routes \$
Separated Bikeway \$\$\$-\$\$\$\$

11 Cost estimates are provided in 2024 dollars. The generalized costs identified above include planning, design, engineering, and typical costs for rights of way.

12 Only sidewalks are included in the estimated total for people walking as specific intersection improvements will be identified on a case-by-case basis. Estimates for those improvements are included in Table 1 for reference.

# Funding

The City's Capital Improvement Plan is the primary method for allocating funding for street projects; however, the City does not have a dedicated funding source specifically for transportation improvements and often leverages grant funding for larger projects. A variety of funding opportunities are available to support project design and construction. The following represent a few of the potential grant funds the City may pursue for project implementation:



#### Federal

- <u>Better Utilizing</u>
   <u>Investments to Leverage</u>
   Development (BUILD)
- Safe Streets and Roads for All (SS4A)
- <u>Reconnecting</u>
   <u>Communities Pilot</u>
- <u>Active Transportation</u>
   <u>Infrastructure</u>
   <u>Improvement Program</u>
   (ATIIP)
- <u>Regional Infrastructure</u> Accelerator (RIA) Grant



#### State

- <u>Caltrans Active</u>
   <u>Transportation Program</u>
   <u>(ATP)</u>
- <u>Caltrans Sustainable</u>
   <u>Transportation Planning</u>
   <u>Grant</u>
- <u>Caltrans Highway Safety</u>
   <u>Improvement Program</u>
   (HSIP) Grant
- <u>California Strategic</u>
   <u>Growth Fund</u>
   <u>Transformative Climate</u>
   <u>Communities Grant</u>
- <u>Affordable Housing and</u>
   <u>Sustainable Communities</u>
   (AHSC) Program

# Regional / Local

- <u>SACOG Active</u>
   Transportation Program
- Sacramento <u>Transportation Authority</u> <u>- Tax Measure A</u>

# Monitoring and Review

It will be important for us to measure how well-used these proposed improvements are and how they benefit the community's well-being once they're constructed. While we have not historically tracked the total levels of activity for people walking, biking, and rolling, it may be possible to evaluate the level of use through:

- Conducting surveys for people walking, biking, and rolling throughout the city with each plan update to assess how people are using new facilities.
- Leveraging data resources such as StravaMetro or Replica Places to estimate total levels of walking, biking, and rolling over time.

These strategies will help to review which projects have been most beneficial and assess the benefits to different areas of the city following projects. Reviewing the success of projects once they are completed is an important step to guiding thoughtful implementation of future projects.







# **Next Steps**

The Streets for People Plan envisions a significant level of improvement across the city guided by our communities' input and the needs they've helped identify. Implementation of these improvements will rely on the TPP's process, available funding, and our communities' continued engagement.

# **Prioritizing Implementation**

The TPP identified a clear process for identifying which transportation projects are the highest priority based on the following community values:

- · Improving air quality, climate, and health
- Providing equitable investment
- Providing access to destinations
- Improving transportation safety
- Fixing and maintaining the system<sup>13</sup>

The City of Sacramento will include the projects in the *Streets for People Plan* as part of the next TPP process. Once completed, this process will identify which projects are the highest priority and which will receive funding first. More information about this plan and the prioritization process is available on the <u>City website</u>.

13 City of Sacramento, <u>Transportation</u>
 <u>Priorities Plan</u>, November 2022, page 42.

### **STAY ENGAGED**

The Streets for People Plan is a major step forward toward creating a more walkable and bikeable Sacramento with streets that work for everyone, but it is one step in a long process toward making real change. Our communities can continue to help shape that process along each step of the way by staying connected and engaged with City staff and elected leaders on transportation issues important to them.

We encourage our communities to reach out and engage with us as we work through this process together using any of the resources below:



Contact the <u>Mayor and Council</u> <u>District Offices</u>.



Attend a <u>City Council meeting</u> or an <u>Active Transportation</u> <u>Commission meeting</u>.



Sign up for the <u>City's newsletters</u> and report concerns to <u>311</u>.



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# Appendices

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# Appendices

Appendix 1 – Plan and Policy Review

**Appendix 2** – Existing Conditions (Citywide and Focus Areas)

Appendix 3 - Gap Analysis

Appendix 4 – Tree Opportunity Analysis

Appendix 5 – Public Engagement Feedback and Summaries

Appendix 6 – Case Studies and Recommendations

Appendix 7 – Development of Recommendations and Segmentation (Methods)

Appendix 8 - Project Costs

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