West Sacramento Mobility Action Plan

Existing Mobility Conditions

April 2020

Introduction

The City of West Sacramento seeks to create a Mobility Action Plan (MAP) that aligns the various projects and programs touched by mobility, promotes the values of the community and region, and progresses the community toward its overarching goals. The City serves as a significant residential and economic engine in the region. The MAP will promote inclusionary engagement, consideration of diverse needs and constraints, and understanding of necessary trade-offs. The final MAP will focus on policies, projects, and programs that create the greatest benefit and alignment with the City's mobility vision.

Integral to the MAP's success is maintaining consistency between the project vision and established values of the City. The central goals of the MAP project center around larger themes of equity, environment, economic vitality, safety, and quality of life, and are drawn from values adopted as part of existing City efforts like the Strategic Plan, the General Plan, the Climate Action Plan, and specific plans for various communities.

In 2019, City of West Sacramento Mayor Cabaldon and City of Sacramento Mayor Steinberg convened the Mayors' Commission on Climate Change to "develop a common vision and set of strategies for both cities to achieve Carbon Zero by 2045" through a focus on three key areas: the built environment, community health and resiliency, and mobility.

Figure 1 - Mayor's Commission on Climate Change Vision

The Commission released a set of strategies for Sacramento and West Sacramento in April 2020. The overall mobility strategy consists of several recommendations, and included implementation tactics were developed to guide program and project development. These strategies and tactics, which will serve as the framework for the MAP Study, are outlined below:

Active Transportation

Expand and enhance accessibility to low-stress connected infrastructure for walking and rolling, prioritizing improvements that address specific community and neighborhood needs so that:

- *30% of all trips are by active transportation by 2030, and*
- *40% of all trips are by active transportation by 2045.*

- **1.1:** Adopt a policy to prioritize pedestrian travel at the top of the modal hierarchy.
- **1.2:** Conduct a comprehensive neighborhood-level audit to identify deficient active transportation infrastructure and develop and implelent a staged plan that prioritizes high-injury portion fo the network by 2027.
- **1.3:** Adopt a policy to accept traffic congestion for passenger vehicles to prioritize other modes and develop a TDM policy/program.
- **1.4:** Update design guidelines and street design standards for new development and prepare plans for commercial corridors to prioritize pedestrian-centric design and infrastructure improvements that enable all residents to easily and safely walk or roll to meet their daily needs.
- **1.5:** In coordination with community leaders and residents, identify neighborhood needs that would encourage active transportation.
- **1.6:** Develop and implement a green connections strategy to create a seamless network of low-stress, multi-use paths and trails and increase access to parks and open spaces. Implement pilots that promote greater use of active transportation modes and incentivize behavior change.
- **1.7:** Establish car-free districts on weekend nights in areas that offer local commerce, recreation, and arts and culture.
- **1.8:** Implement carbon zero cargo zones in hot spots for air pollution and congestion by creating consolidation spots for delivery companies and requiring the final let of delivery to be completed by walking, rolling, or ZEV.

Transit and Shared Mobility

Expand and improve transit and shared mobility services to be more accessible, affordable, timely, and attractive than single occupancy vehicle use so that:

- *30% of all trips are by transit and pooled shared mobility by 2030, and*
- *50% of all trips are by transit and pooled shared mobility by 2045.*

- **2.1:** Adopt a transit-first policy in arterial corridors and any new highway expansions to direct funding and capacity to expand and electrify mass transit.
- **2.2:** Create integrated mobility hubs near transit stops, prioritizing under-resourced communities, to address first/last mile connections.
- **2.3:** Encourage the use of transit among low-income and underserved populations by working with communities to identify new transit stops, increasing route frequency, providing discounts to low-income riders, seniors, and people with disabilities, and partnering with community organizations to highlight alternative mobility choices.

- **2.4:** Establish requirements for city-regulated private shared-mobility service providers to ensure access for people with disabilities, expand service to underserved communities, establish more affordable options for low-income users, provide alternative methods of access and payment, and electrify shared mobility operations. Encourage bike-share providers to add cargo e-bikes and options for people with disabilities.
- **2.5:** Develop a comprehensive package of incentives, disincentives and policies to reduce inbound/outbound VMT between neighboring jurisdictions. The savings from these programs should be reinvested in transit and shared mobility.
- **2.6:** Recognizing the reality of transit patterns, develop a strategic plan to invest in a Northern California mega-regional, innovative rail and transit network in partnership with Capitol Corridor, Caltrans, San Joaquin Rail, ACE Rail, SACOG and SF Bay Area MTC with a goal of electrifying corridors and reducing travel time to one hour from Sacramento to the Bay Area.
- **2.7:** Eliminate parking requirements where appropriate and feasible based on community needs and incentivize developers to offer options in lieu of vehicle parking spaces.
- **2.8:** Rapidly accelerate shared, electric, and pooled rides through parking pricing incentives, a range of public and private mobility options, and coordination with commuter programs and ride-matching, with the inclusion of accessible vehicles and autonomous vehicles.
- **2.9:** Ensure that mobility strategies for suburban communities account for inequitable access to transit and safe active transportation networks, and identify targeted, community-based solutions for shared and/or zero-emission vehicle services to address mobility barriers.

Zero-Emission Vehicles

Develop a comprehensive package of incentives, disincentives, and policies to encourage the adoption of zero-emission vehicles (ZEVs) so that:

- *70% of new vehicle registrations will be for ZEVs by 2030, and*
- *100% of all public, private, and shared fleets will be electrified by 2045.*

- **3.1:** Develop public-private partnerships and accelerate public deployments to expand the cities' network of affordable public charging and hydrogen fueling stations.
- **3.2:** Adopt CALGreen Tier 2 standards that establish minimum requirements for EV capable parking spaces based on building type, and advance EV charging together with building electrification strategies to reduce housing costs and accelerate affordable, clean, and equitable housing and mobility options holistically.
- **3.3:** Work with major employers including the State of California to encourage ZEV adoption and sustainable commute habits through TDM programs, management of parking privileges, and by providing workplace charging options where possible.
- **3.4:** Expand "electric first" guidelines that direct city departments to purchase ZEVs and develop a plan to convert 100% of all light-duty vehicles in the cities' fleets to ZEVs by

2030 while forging partnerships to pilot medium/heavy-dity ZEVs upon availability of technology and promoting the electrification of school buses.

- **3.5:** Through a phased approach, establish low-emission zones and implement congestion pricing to deter the use of polluting vehicles.
- **3.6:** Partner with the California Mobility Center, Plug-In Partnership, and similar initatives to incentivize innovation to deploy ZEV pilots for medium/heavy duty, goods movement, and autonomous vehicles.
- **3.7:** Leverage electrification opportunities to create employment opportunities through workforce development and transition programs and to achieve equitable access to ZEV technologies and benefits for low-income populations and underserved communities.
- **3.8:** Provide residents of all low-income communities with access to a free or affordable ZEV carshare programs, such as working with SMAQMD to expand the Our Community CarShare program, and createh pathways for ZEV ownership by providing rebates rebates and assistance with financing and insurance.
- **3.9:** Forge partnerships to conduct a robust outreach campaign to encourage ZEV adoption and help resdients and businesses navigate the decision-making process for using ZEVs for shared mobility programs and buying or leasing new or used ZEVs where appropriate.

These tactics will support the assessment of gaps and opportunities for mobility throughout the city, as well as guide the development of projects, programs, and policies. Through this shared vision with the Mayors' Commission, the MAP will serve as a vehicle for implementation of key strategies rooted in innovation for the region. This planning effort will develop strategies to guide local transportation investments by leveraging technology and new mobility options to expand sustainable transportation choices for the community.

Existing Community Profile

Existing Mobility Network

There are a variety of mobility resources currently available to City of West Sacramento residents and visitors, including fixed route bus transit (YoloBus, operated by the Yolo County Transportation District), on-demand ridesharing (Via Rideshare), transportation network companies (Uber and Lyft), and dockless micromobility services (Jump bicycles and scooters). These are supported by a well-developed network of pedestrian connections, and a growing bicycle network. Figure 2 shows the existing transportation network in the City of West Sacramento.

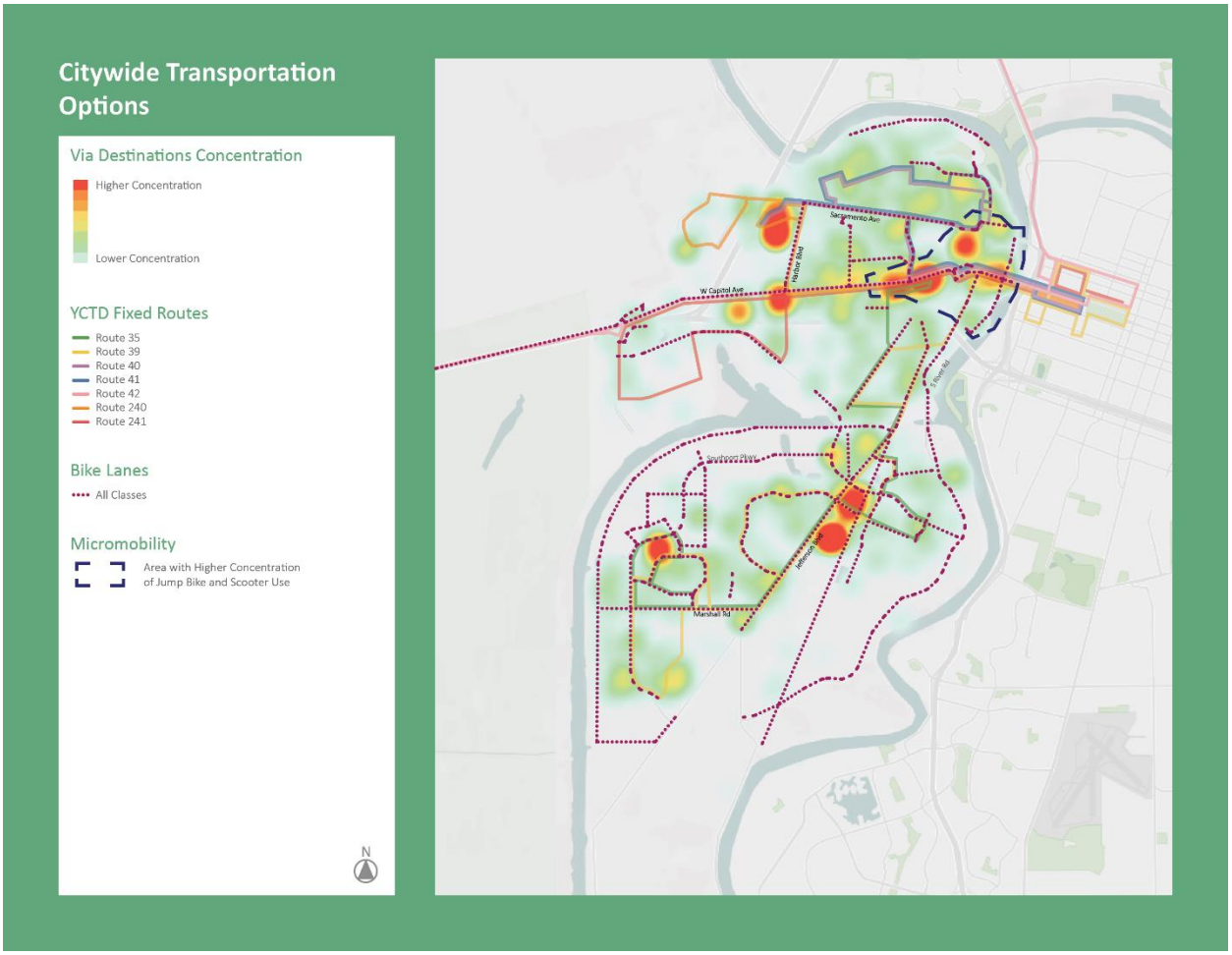


Figure 2 - Citywide Transportation Options

Transit Network

YoloBus service provides a link with Downtown Sacramento and the concentration of regional transit connections there, including SacRT's light rail lines and bus routes. YoloBus provides

service throughout the City of West Sacramento, though as a result of infrequent service (typically 60-minute headways during the most frequent periods) ridership is generally low. Key findings on the transit network include:

- In 2019, approximately 28 percent of total YoloBus ridership was generated by routes serving West Sacramento; of these routes, nearly one-third of boardings occurred at stops within the City of West Sacramento.
- Overall, ridership within the City of West Sacramento accounts for just over 18 percent of all YoloBus system ridership.
- The greatest activity occurs on YoloBus Route 42A and 42B, which provides 30-minute circulator service connecting West Sacramento with Downtown Sacramento and Davis, likely due to the destinations served and the frequency at which it operates. Route 42 serves nearly 1,000 passengers per weekday, nearly ten times more than the other routes serving West Sacramento.

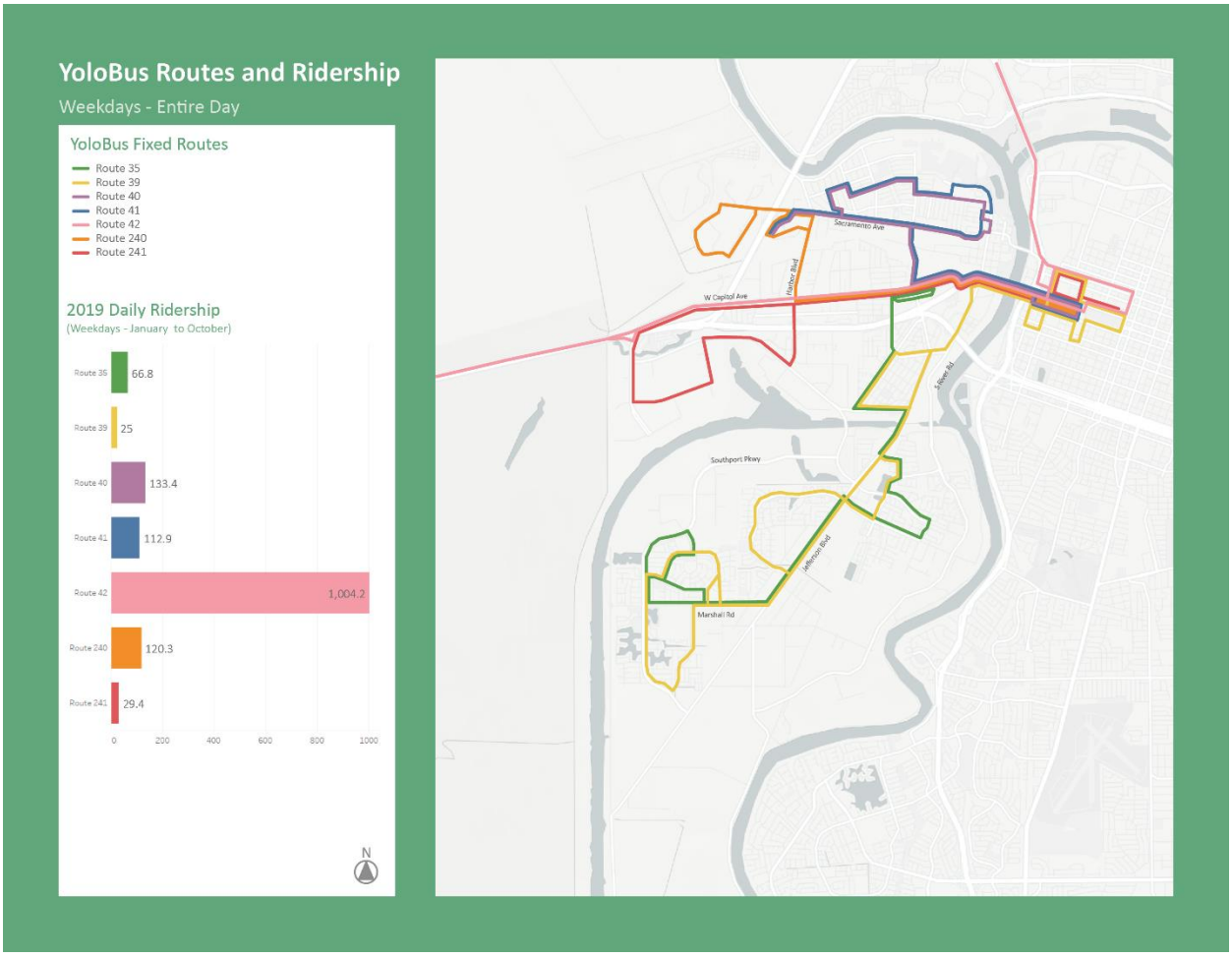


Figure 3 - YoloBus Routes and Ridership

- The most frequent YoloBus service occurs along the West Capitol Avenue corridor, which has a variety of connecting transportation options in West Sacramento and Downtown Sacramento including all SacRT light-rail lines, SacRT bus routes, YoloBus routes, Amtrak, and other regional bus providers.
- YoloBus provides service at 187 bus stops throughout West Sacramento. Despite somewhat low levels of fixed-route transit usage citywide, nearly 70 percent of residents live within a 5-minute walk of a bus stop (Figure 4).
- Given the levels of access to the system, low system ridership may be the result of a number of factors – service frequency, destinations served, travel time, etc – and generally depends on the trip purpose and destinations of residents. For example, some residents may live within proximity to a transit stop, but the route may not provide direct service to their destination and driving, use of Via, or even biking may be a quicker option.

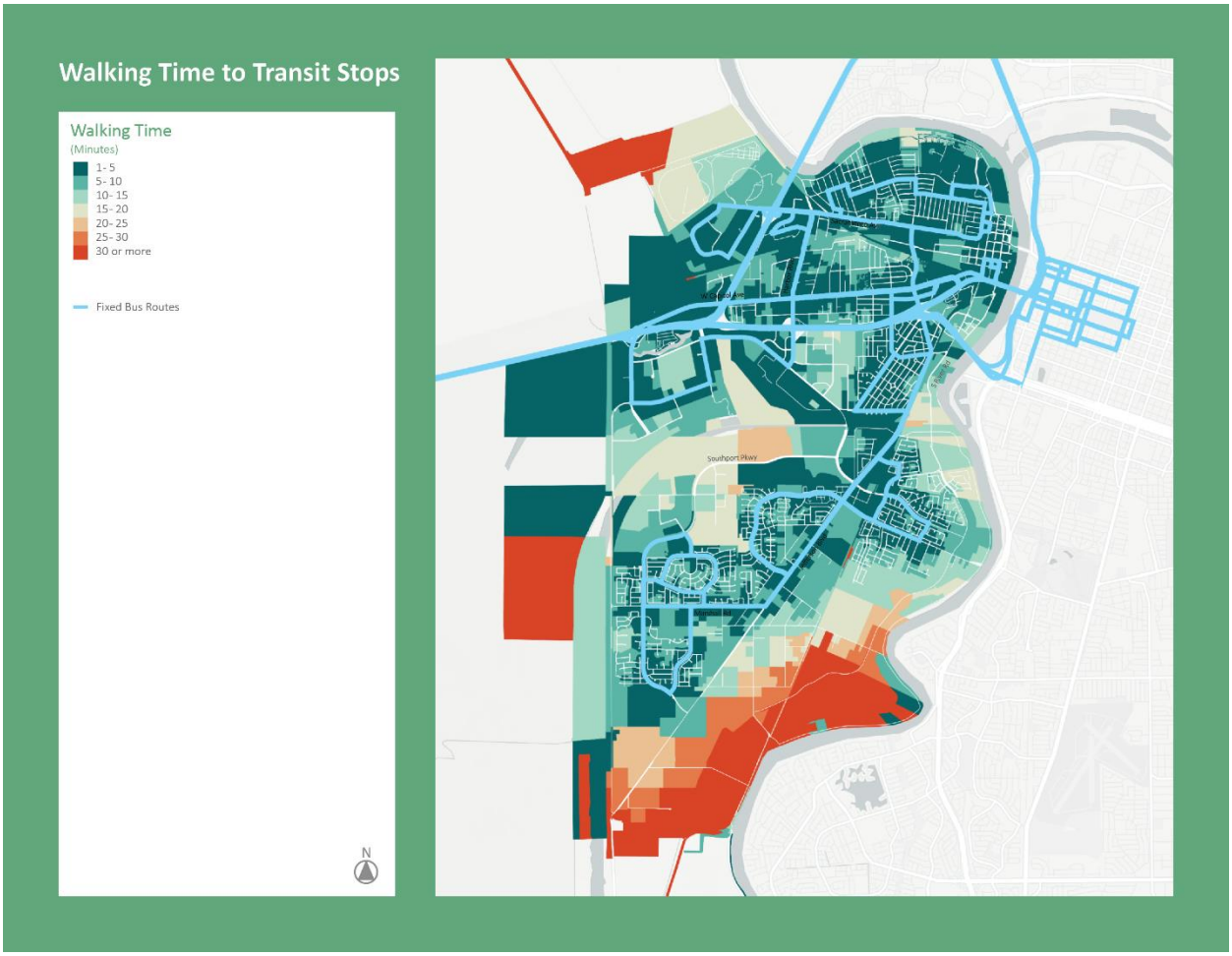


Figure 4 - Walking Time to Transit Stops

Via Rideshare Network

Via Rideshare provides on-demand service within the City of West Sacramento, and began operation in May 2018. The service is available to all areas of the city and does not operate on set schedules or routes, offering greater flexibility to residents compared to traditional fixed route service. To encourage the use of Via service in concert with YoloBus services, the City of West Sacramento offered free transfers to passengers between the services. Key findings include:

- Most transfers occur between Via rides and YCTD Routes 40, 41, 42A and B, and 35, most of which occur in the mid-day and evening peak periods.
- The number of passengers per ride request can go up to 6 passengers, but most of the trips are requested for one passenger only.
- Most Via rides are completed by senior residents, indicating that the services provides a viable alternative to other services like demand response or paratransit, which can be more costly to both the operator and the the passenger.
- Residents have utilized the service to complete short trips within the city limits as well as a first/last mile access to transit. The usage concentrations suggest that a significant proportion of passengers are using Via to access routes that cross the Tower Bridge into Sacramento (Figure 2).

Micromobility Network

The City of West Sacramento has also been a regional leader in providing Jump bicycles and scooters throughout the community, which have proven to be well-utilized particularly in the northern portion of the city. Key findings include:

- When comparing activity data for Jump and Via, as shown in Figures 2 and 5, micromobility usage is heaviest in areas where Via activity is most concentrated, and consequently, where the highest ridership YoloBus routes are located.
- Usage data shows that the average trip length is roughly 2.1 miles and the average trip duration is 24 minutes. While challenging to develop concrete conclusions on this data alone, this information combined with the geographic distribution data suggests that Jump services are utilized for more than just first/last miles access, and are an alternative to bus service for trips from the eastern area of the city into Downtown Sacramento.
- Usage is more frequent on weekends that during the weekdays, although overall usage is fairly evenly distributed across the board. Many residents or visitors may be using Jump for recreational and social trips on weekends in addition to weekday commute based or first/last mile trips.

Active Transportation

Increased investments have been made in the City of West Sacramento which have promoted bicycle and pedestrian travel throughout the city. Projects to increase access to the Sacramento River trail system, expanding the bicycle network on roadways, and closing gaps in sidewalks

have all been completed, programmed or planned; many of these projects are guided by the 2018 Bicycle, Pedestrian, and Trails Master Plan. As a result of city efforts, the pedestrian network is well-developed, with well-marked street crossings and a connected network of sidewalks. Key findings include:

- Most pedestrian activity is found in the northern portion of the city, concentrated along Sacramento Avenue and West Capitol Avenue, both of which connect to Downtown Sacramento via the I Street Bridge and Tower Bridge.
- Conditions along the I Street Bridge are less favorable to pedestrians and bicyclists than the Tower Bridge, as the current configuration is very tight with little room for active transportation. Plans for a new I Street Bridge would shift vehicular traffic off the existing bridge, allowing for a dedicated bicycle and pedestrian crossing between West Sacramento and Sacramento, as well as a key linkage between the River Walk Trail in West Sacramento and the Sacramento River Bike Trail and Two Rivers Trails in Sacramento.

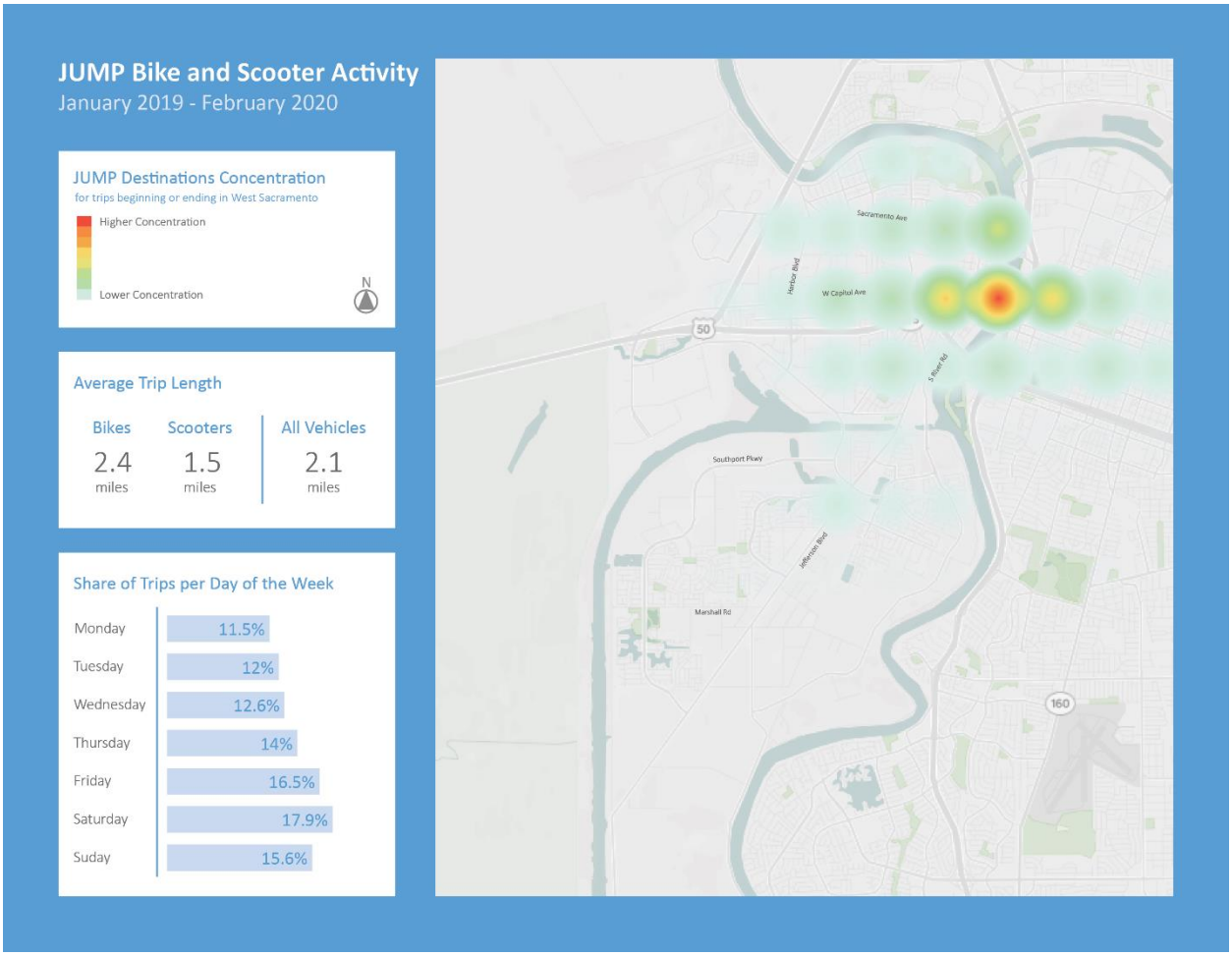


Figure 5 - JUMP Bike and Scooter Activity

- The bicycle infrastructure in the southern portion of the city is robust (primarily with Class II bike lanes), though most of the city's bicycle activity occurs north of the Deep Water Ship Channel in residential neighborhoods and along West Capitol Avenue, Sacramento Avenue, Harbor Boulevard, and Jefferson Boulevard (where fewer bicycle network connections exist).
- The evening peak period shows the highest volumes of biking throughout the day, with significant volumes of cyclists along the city's major roadways and crossings – Sacramento Avenue, West Capitol Avenue, the Tower Bridge and I Street Bridge, River Road, 15th Street, and Jefferson Boulevard. Morning peak, mid-day, and evening peak trips mostly occur in commercial corridors and near schools.
- High volumes of bicycle use are located along bus routes, with a few segments connecting perpendicular to bus routes. For example, the commercial area near the intersection of the Harbor Boulevard with Reed Avenue shows significant bicycle usage and is consistent with a major stop for three bus routes.

- Waterways that nearly surround the city still restrict more broad connectivity, as crossings are limited to existing bridges (or other structures). As a result, the southern portion of the city continues to remain isolated with few options to expand access through active transportation means.
- In 2018, about 3 percent of conflicts involved pedestrians and another 5 percent involved bicyclists. The recently completed West Sacramento Systemic Safety Analysis Report (SSAR) noted that pedestrian-vehicular collisions were the most significant safety concern throughout the city, followed by bicycle-vehicular collisions.
- The majority of collisions occurred at intersections, however the severity of the collisions were heightened for those that occurred on general roadway segments due to higher travel speeds. West Capitol Avenue and Jefferson Blvd are of particular concern, and may be lacking sufficient protections for active transportation users.

Roadway Network and Connectivity

The city's roadway network design, traffic volumes, connectivity, and interactions with other modes all influence how efficiently people are able to move within and through West Sacramento. As is the case with most cities of the same period, development patterns have resulted in roadway networks that favor the automobile, often times presenting conflicts between vehicular travel and active transportation, as well as disincentivizing transit use. For West Sacramento, key roadway network and connectivity findings include:

- The northern portion of the city includes both grid street networks typical of the period when the city was first developed, as well as more modern suburban-style streets (for example, wider travel lanes or less connectivity to adjacent roadways). Conversely, the southern area is more recently developed and is characterized by a street network that is less compatible with transit service or active transportation trips, as a result of development patterns that have favored circuitous street common in suburban areas that limit connectivity and create heavier dependence on private automobiles.
- The limited number of connection points to Downtown Sacramento outside of I-80 – West Capitol Avenue (Tower Bridge) and Sacramento Avenue / C Street (I Street Bridge) – force concentrations of vehicles on key roadways and create conflicts between modes. Additionally, the lack of any crossings in the southern portion of the city further increases vehicular volumes on the northern portion's roadways.
- Jefferson Boulevard, in the southern portion of the city, is the major north-south connector and serves as a trunk segment for vehicle trips, as well as transit and active transportation. The local street patterns in this area concentrate these trips onto few collector roadways that could be exacerbated with increased development.
- The most heavily trafficked corridor in the study area is I-80, but several collector streets also carry significant volumes throughout all of the time periods of a typical weekday. A typical traffic pattern for a city of this size would show two peaks (at the morning and evening peak periods, coinciding with typical commuting hours), but West Sacramento's traffic volumes are consistent even through the mid-day (10 AM to 3 PM) period. The volume of trips in the evening off-peak (7 PM to 12 AM) is higher than the morning off-peak period (12 AM to 6 AM).

- The highest trip volumes occur on roadways connected to commercial and industrial land uses, including Jefferson Boulevard, Harbor Boulevard, Sacramento Avenue, and I-80. Given the concentration of industrial uses and the presence of a major shipping port that are accessed from these roadways, freight traffic is a large contributor to these volumes.

Travel Patterns

Modal Activity

Figure 6, below, presents an overview of the cumulative transportation activity throughout the city. YoloBus boardings/alighting, Jump bike and scooter usage, and Via trip data are all included. Key findings include:

- The greatest mobility movements are occurring along major corridors. There is a clear correlation between usage of all modes and key activity centers or trip generators in the city, such as the West Capitol Avenue / Tower Bridge corridor and along Jefferson Blvd near shopping centers and schools, as well as the major shopping center at Harbor Blvd and Sacramento Avenue.
- The activity sets a strong baseline for what areas of the city have the greatest need from an access perspective. Each of these heavily utilized areas could be classified as destinations given the land uses; developing a strong sense of origin points in the city at the neighborhood level, which will be obtained through public outreach efforts, will strengthen the understanding of how people move about the city and where connections need to serve the community

Commute Patterns

Within the city, the travel patterns in the northern portion of the city differ from those in the southern areas. Specific commute-related findings include:

- Data reflects that there are greater trip volumes for all travel modes in the northern area, which is not surprising given the land uses, well connected roadway network, and greater prevalence of mobility resources to residents. East-west travel patterns are heavier than north-south movements, reflecting the strong connection between West Sacramento and the City of Sacramento.
- A surprisingly high two-thirds (66 percent) of city residents commute 15 miles or less for their job; digging a bit deeper, 38 percent travel 5 miles or less. About 6 percent of residents also work in West Sacramento.
- The majority of commutes (over one-half of residents) have destinations in Downtown Sacramento, midtown Sacramento, East Sacramento, North Sacramento, and Rancho Cordova, while another 20 percent travel to areas like Curtis Park, Med Center, and Valley Hi; all of these locations are within 15 miles of West Sacramento. This pattern suggests that a significantly large portion of the commuting population could be served by modes other than single-occupancy vehicles.
- Longer range commute destinations include Davis, UC Davis, Vacaville and Fairfield, each of which are located along I-80 and the existing Capitol Corridor Amtrak rail line.

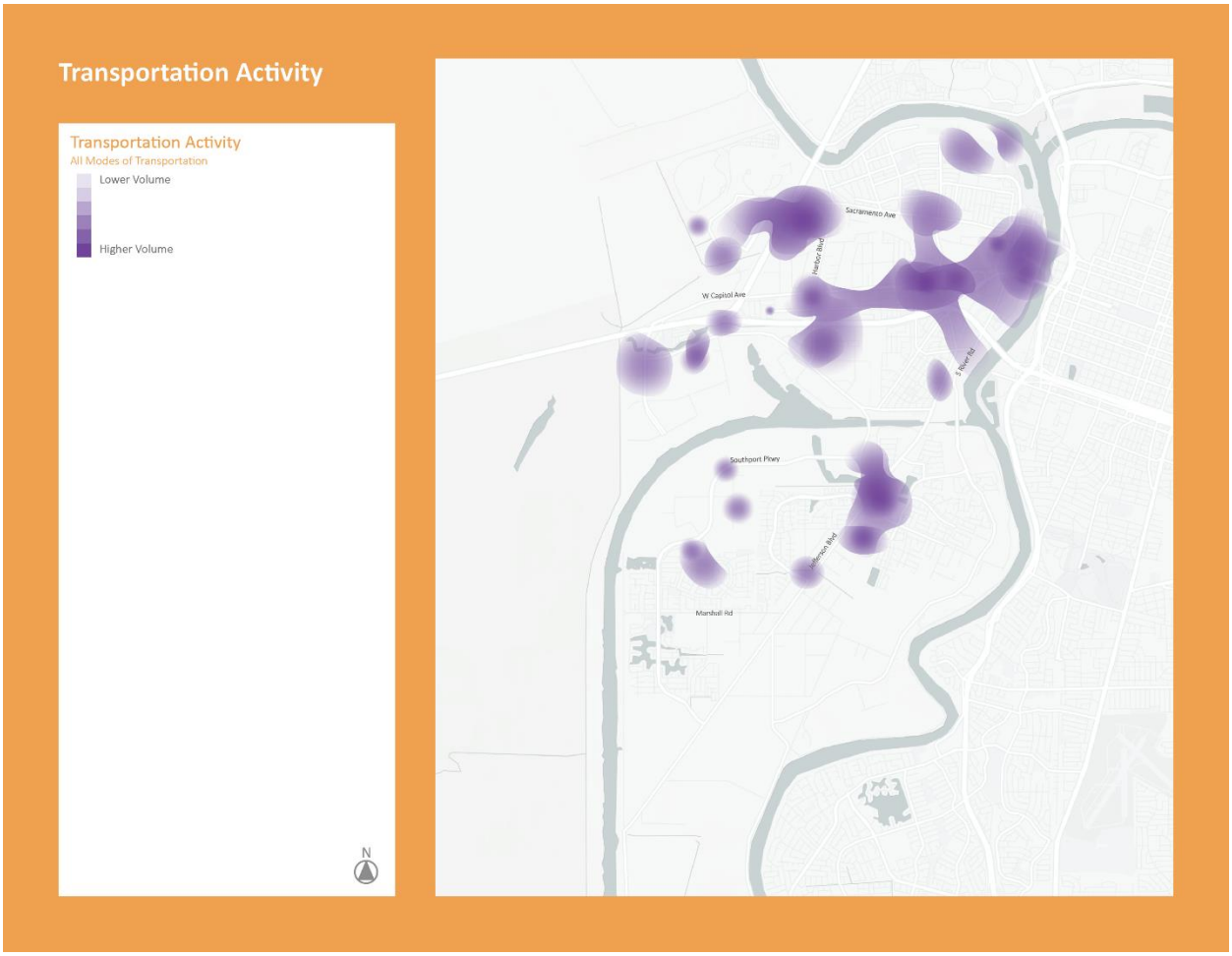


Figure 6 - Transportation Activity (All Modes)

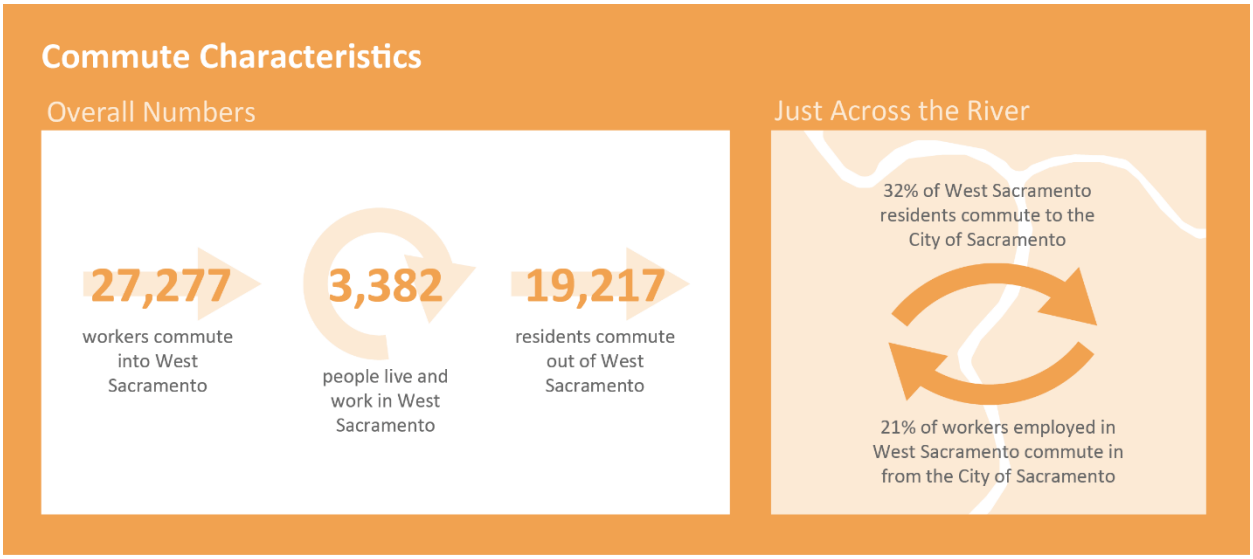


Figure 7 - Commute Characteristics

MAP West Sacramento

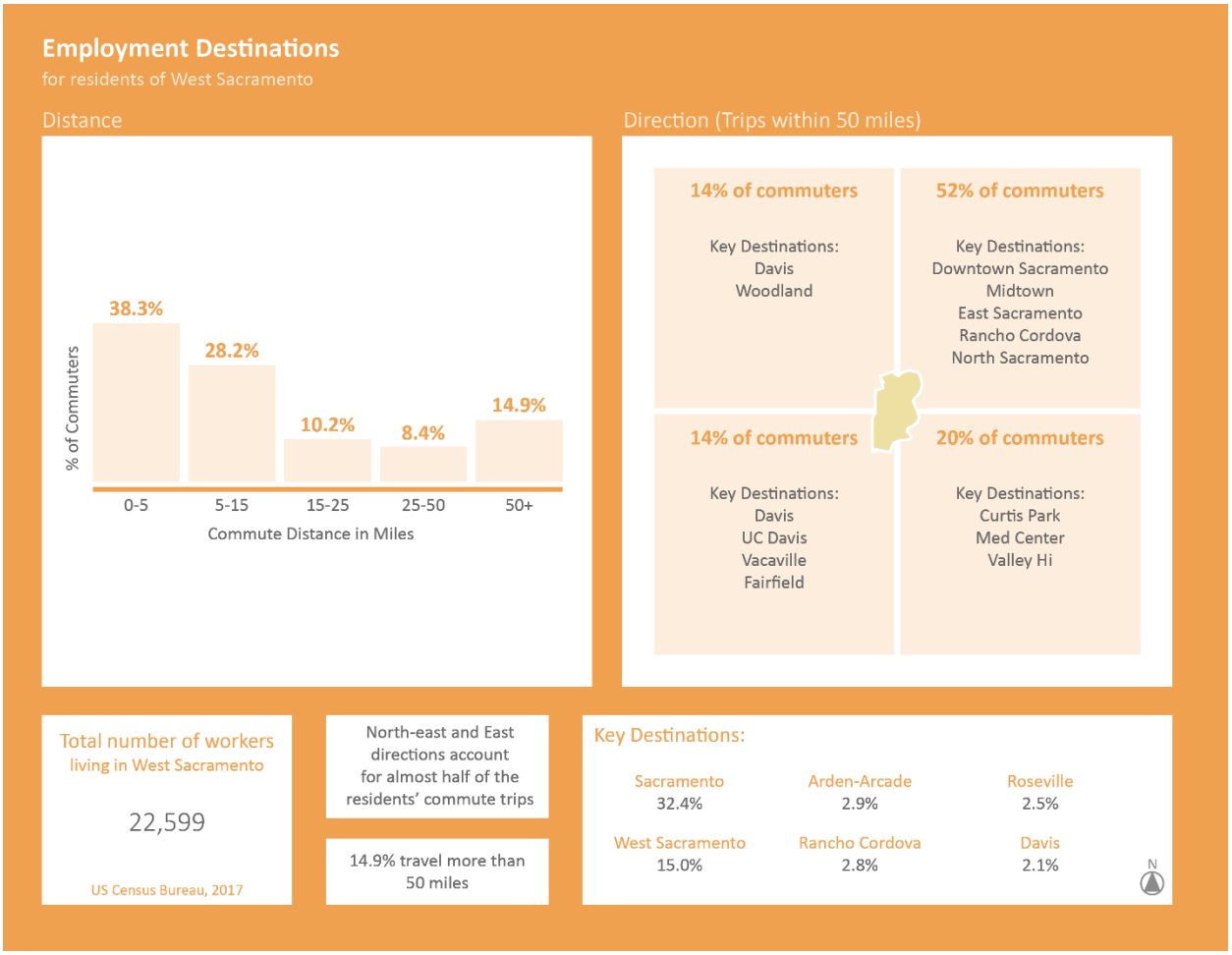


Figure 8 - Employment Destinations for Residents of West Sacramento

In order to identify solutions for commute-based travel, transit access to employment is analyzed. This measures the number of jobs each parcel is able to reach using public transit within a certain trip duration while taking into consideration the walking time to the transit stop and the time inside a transit vehicle. Figure 9 measures access to opportunities, rather than what people are doing now, by highlighting the areas of the city where residents have access to a greater number of jobs and thus more choices of employment. Moreover, it also provides a glimpse at the connectivity of the transit system, as areas with more connection options have higher chances of reaching different employment centers within the same trip. Key considerations include:

- The northeast section of West Sacramento provides more robust opportunity for transit as a viable option to residents within the immediate area. The neighborhoods' more abundant transit options (relative to other areas of the City) as well as its proximity to the major employment center in downtown Sacramento lend to this result.

- While nearly the whole of the city has access to jobs, commute times via transit would be less favorable to the automobile; only the north-east has strong employment connections that would yield in commute times of 30 minutes or less.

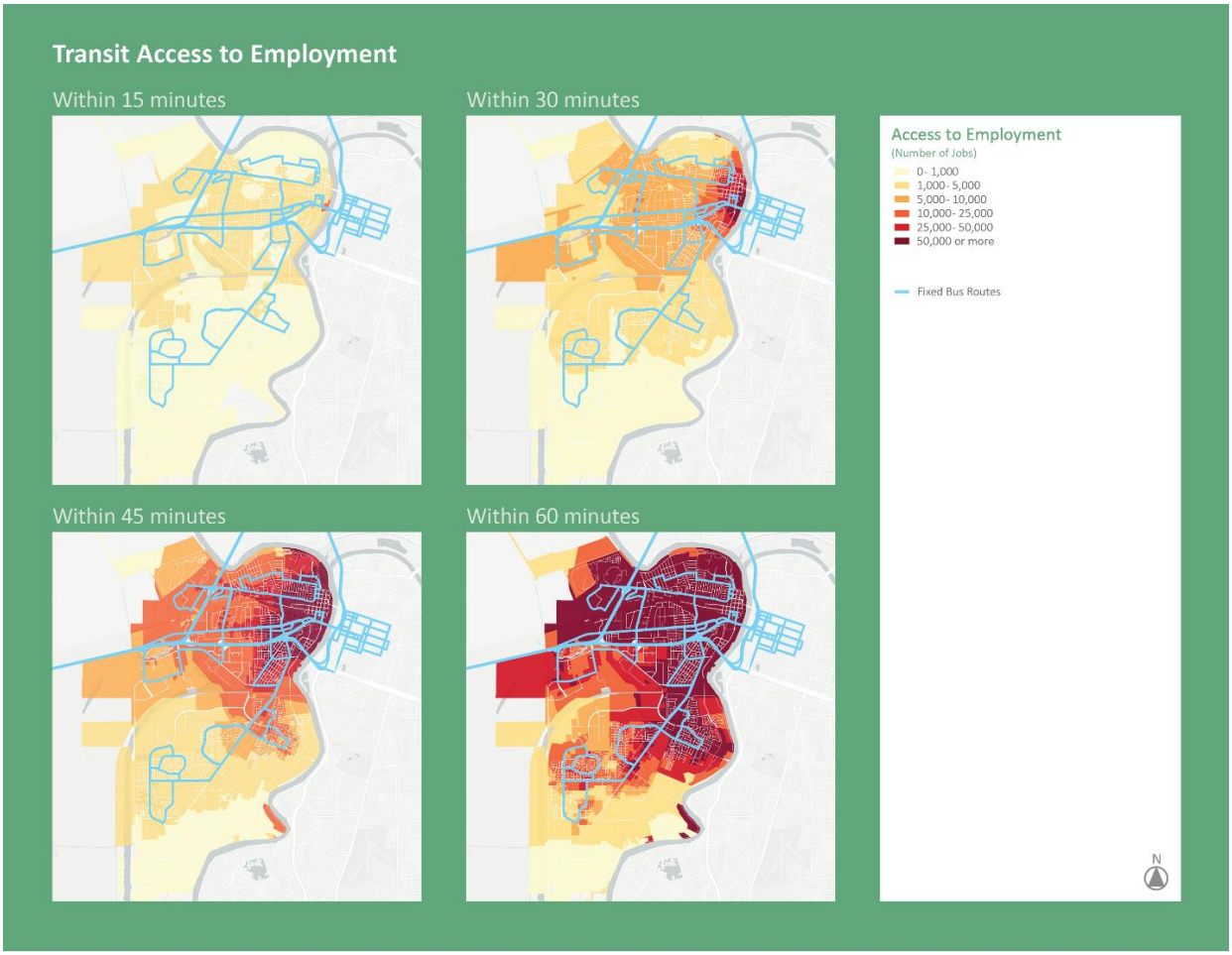


Figure 9 - Transit Access to Employment

Mobility and Equity Considerations

The ways in which people mobilize through a city are functions of the built environment and circumstance. Analysis and development of the current network should be guided by aggregate needs of the diverse communities that make up West Sacramento, so that future solutions are designed around those needs. Below, Figure 10 identifies transit dependent communities, defined by race, poverty-level household income, car ownership, households with 1 or more persons with disabilities, and populations aged 0-17 and 65+, from US Census Bureau.

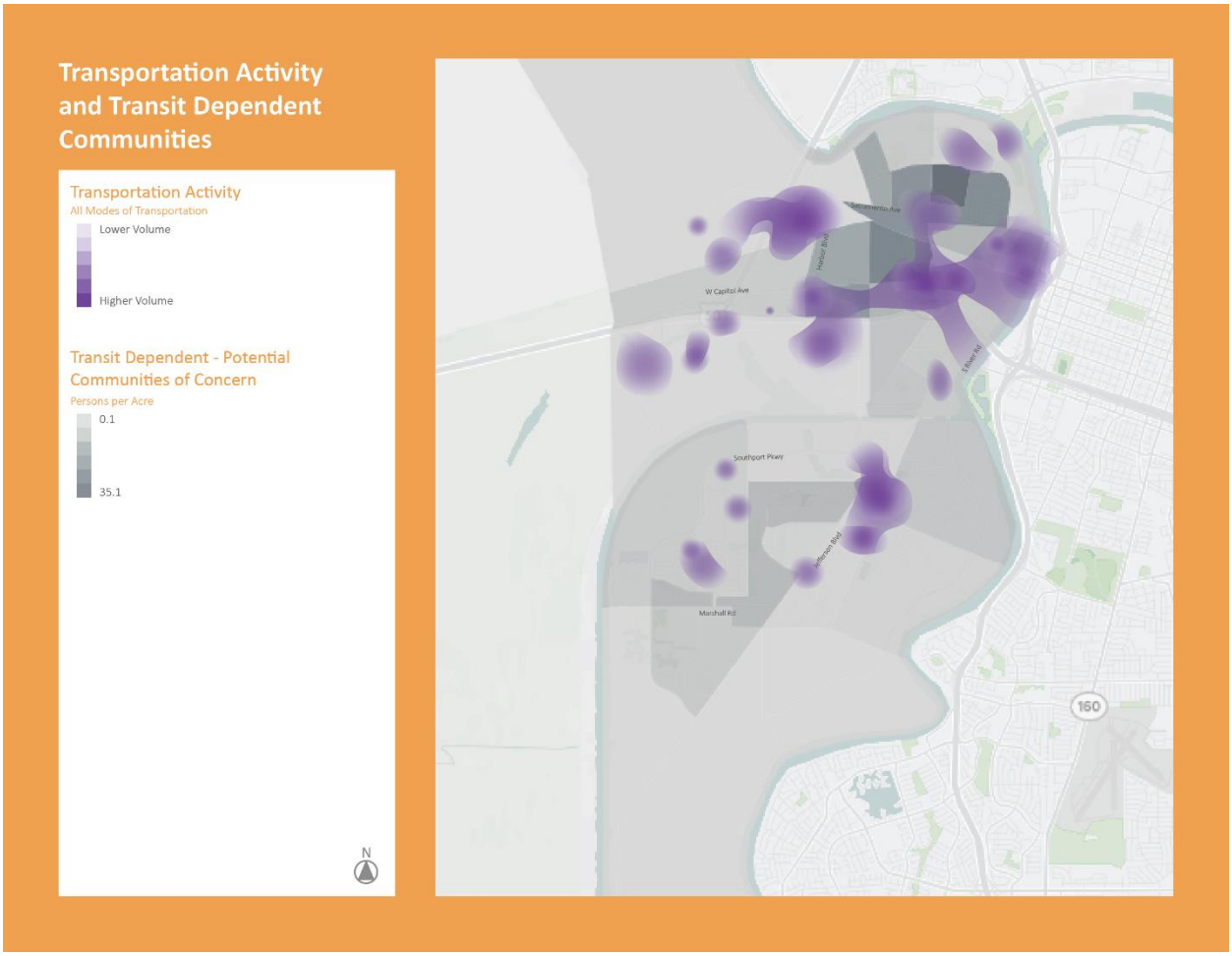


Figure 10 - Transportation Activity and Transit Dependent Communities

Existing transportation activity is considered with the demographics described above to highlight potential gaps in service for or lack of use by these communities. As shown, populations that can be considered transit dependent are concentrated in the northern portion of the city, and mostly in the northest section. Based on the modal activity (as shown in the purple overlay), these important community groups generally appear to be well served by existing mobility options, as both communities are more prevalent along or within close proximity to major corridors that have multiple transit routes and other mobility services. However, since many of these groups may not have other means of transportation, barriers to use or impacts to convenience may still be present as they relate to travel time, frequency of service, and cost, among other factors.

Existing Land Use and Development Patterns

Land uses and development patterns heavily influence how people move and how services are provided to neighborhoods. The City of West Sacramento's northern and southern areas (as bisected by the Deep Water Ship Channel) are characterized by very different land uses and

development patterns. The following presents key land use specific findings that will help to guide mobility hub siting and ensuring proper modes are considered:

- North of the Deep Water Ship Channel, medium density residential neighborhoods are bordered by higher-volume commercial and retail corridors. Multiple collector streets create a network of transportation options with higher street connectivity, and transit service connects this part of the city with the broader region through service providers like YoloBus and SacRT.
- There is a mix of land uses throughout the northern section of the city, with even more mixed use development planned to occur along the Sacramento River and along West Capitol Avenue, as well as Sutter Health Park which draws visitors from spring to late summer/early fall. Major employment centers are also located in this area, including Raley's headquarters, State government offices, and the California Highway Patrol, for example.
- South of the Deep Water Ship Channel, lower density residential neighborhoods have been designed around convenient auto access, and the development pattern with cul de sacs and winding roadways provides a limited transportation network that is less conducive to transit or active transportation trips.
- Similar to the rest of the city, most of the future residential density is planned to occur along the Sacramento River, though the Southport neighborhood and Jefferson Boulevard corridor will see growth in jobs by 2035.
- The vast majority of land uses are designated as retail/commercial, multi-family residential, and office (Figure 11). This activity pattern is likely the result of a combination of factors – access to commercial centers and the existing mobility services being concentrated / available along major corridors within the city.
- Transit supportive land uses that generate mobility needs are already present along key corridors in the city, and is a strong foundation for new strategies. These areas are also consistent with where future growth is projected.

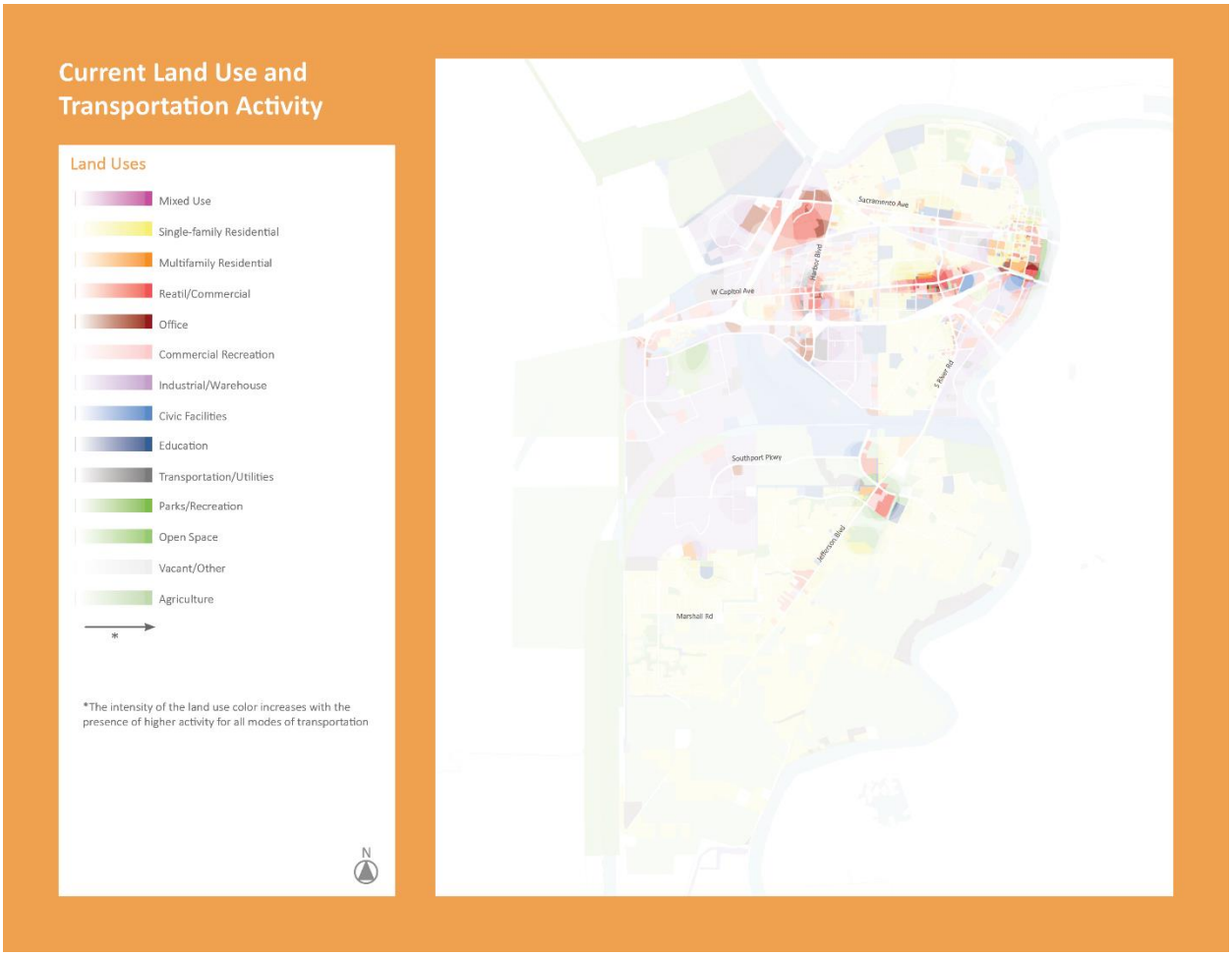


Figure 11 - Current Land Use and Transportation Activity

Projected Growth and Development

In 2016 the City of West Sacramento approved the City of West Sacramento General Plan 2035. The proposed land uses in the plan encourage higher density development in select areas of the city (Figures 12 and 13). Key findings include:

- The area along the waterfront from the Tower Bridge to Stonegate Drive is slated for increased densities of jobs and residents, which would stress an already weak mobility network.
- There is also an expected residential density increase along West Sacramento Avenue, which already carries a high volume of trips for all modes of transportation and acts as a major east-west connector for the city.
- As for employment, Jefferson Boulevard and West Capitol Avenue are expected to have a significant increase in density, but other areas of the city are also expected to receive business parks and neighborhood commercial centers.

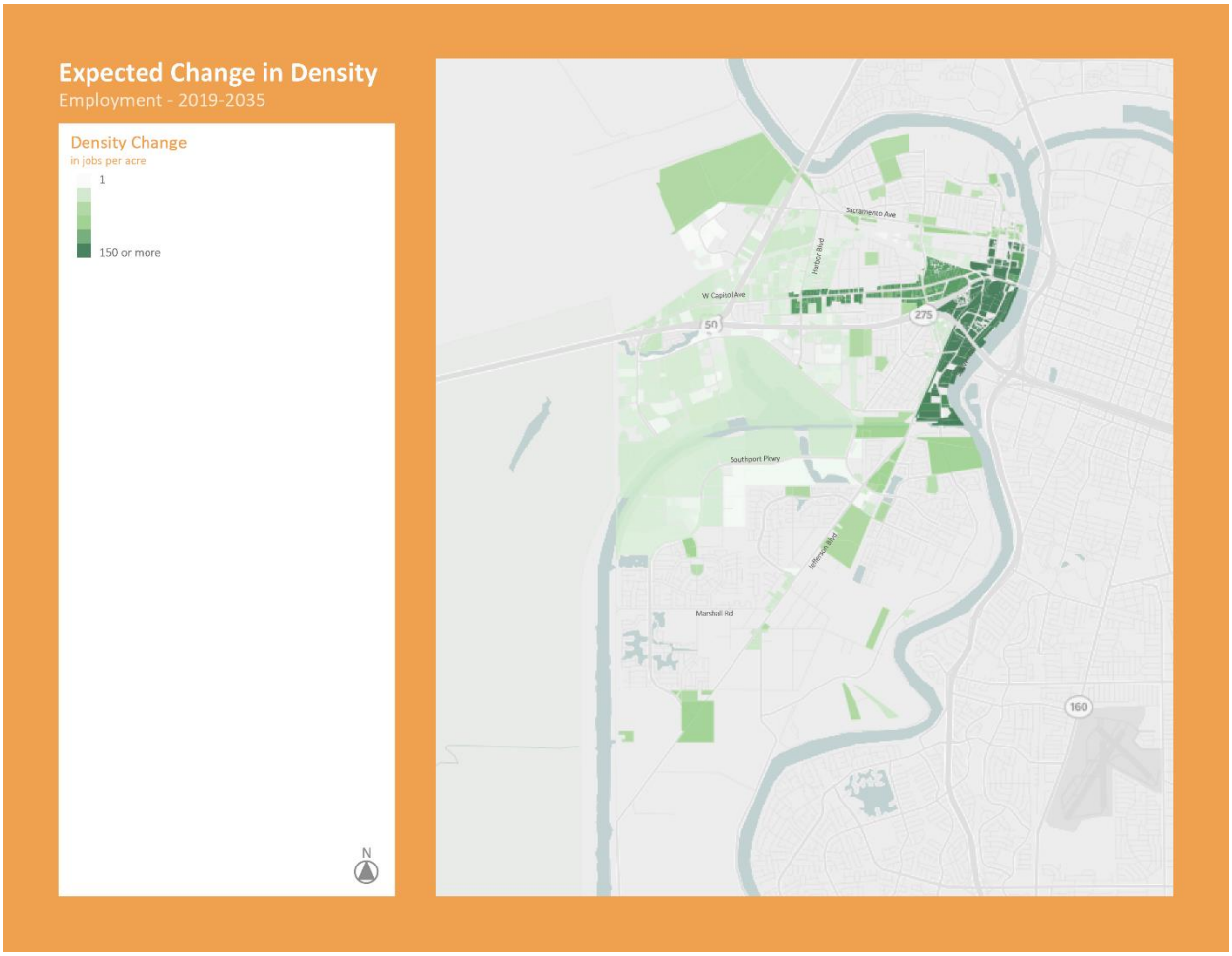


Figure 12 - Expected Change in Density (Employment)

- Density increases along major corridors like Jefferson Boulevard and West Sacramento Avenue can impact traffic, but also give more opportunities for a balanced mode share. Future capital projects are planned that may alter the types of travel that occurs on roadways, such as limiting freight truck movements.
- Development occurring in areas with less robust infrastructure will require increased connectivity to the existing transportation network in a way that deprioritizes single-occupancy vehicles, so as not to tax already stressed or at-capacity roadways.

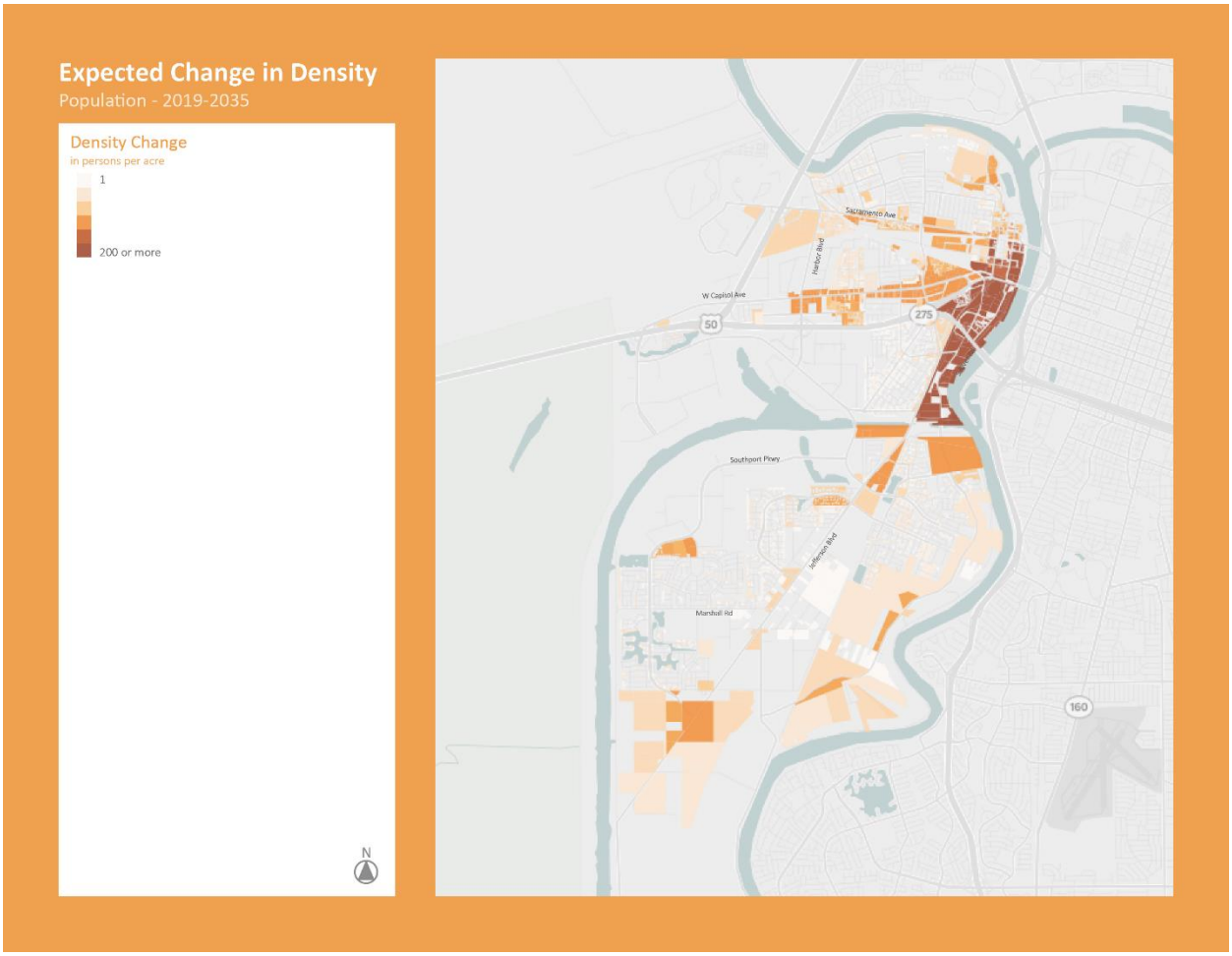


Figure 13 - Expected Change in Density (Population)

West Sacramento Neighborhood Groups

In order to better understand mobility issues and gaps at a more granular level, the project team developed eight neighborhood groups, based off the boundaries used in the City's General Plan and revised slightly to ensure clear representation of data outputs. Naming conventions used are simply to assist in identifying these neighborhoods geographically for the purposes of this study. These neighborhood groups are as follows:

1. Central Neighborhoods: This area includes the central business district of West Sacramento and the residential neighborhoods north of West Capitol Avenue. This area is characterized by predominately residential land use, with commercial corridors along Harbor Boulevard and West Capitol Avenue. West Capitol Avenue is a heavily-trafficked corridor for all modes, with some of the heaviest vehicle volumes through the city as well as well as well-utilized transit, bicycle, and pedestrian routes.

2. East Neighborhoods: This area lies along the Sacramento River, and is mostly residential in nature, with some industrial development related to the shipping industry along the Deep Water Ship Channel. The streets in this area are well connected, with the Tower Bridge providing a critical connection with Downtown Sacramento for bicycles, pedestrians, and vehicles.

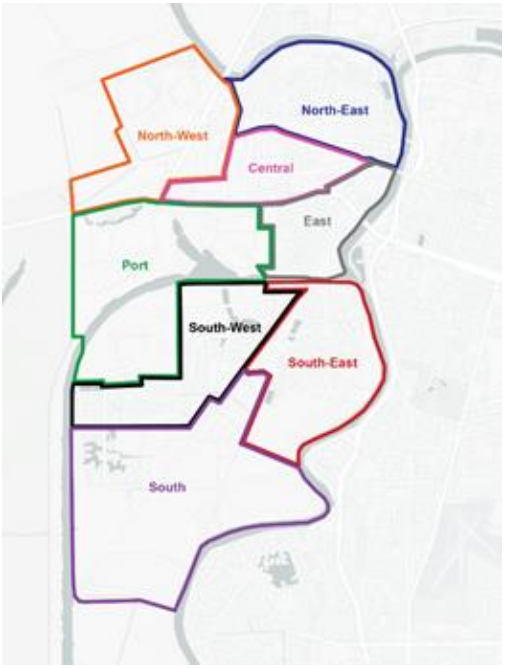


Figure 14 - Neighborhood Groups

3. Northeast Neighborhoods: This area contains medium- to high-density residential development, with a connected street network and community points of interest like parks and schools. These neighborhoods follow a grid street pattern with a highly connected network of streets, and a particularly well-connected network of transit stops. This area connects to Downtown Sacramento through the I Street Bridge.

4. Northwest Neighborhoods: The California Highway Patrol Academy, big-box retail developments like Ikea, and smaller established residential pockets make up this part of the city. There are poor street connections in this area due to the large parcels and physical barriers like the I-80 freeway. The existing land uses in this part of the city are oriented around vehicles (personal automobiles, TNC trips, and Via Rideshare).

5. Port Neighborhoods: The area along the Deep Water Ship Channel is primarily industrial in nature, with few connected networks. This area is home to the largest concentration of jobs in West Sacramento and virtually no residential development. The Deep Water Ship Channel creates the most significant barrier to all modes of transportation in this area, though a future planned connection across the channel would drastically mobility between the northern and southern sections of the city.

6. South Neighborhoods: This area is primarily low-medium density residential development and agricultural land, with higher density residential uses at the Port Towne at Bridgeway Lakes development. The very low volumes of trips do not stress the existing infrastructure, though this area is likely the most dependent on private vehicles for mobility in the city.

7. Southeast Neighborhoods: The Northeast Village residential development and nearby agricultural uses make up this neighborhood south of the Deep Water Ship Channel. While excellent bike infrastructure connects within and outside the development, it is poorly utilized due to the isolated auto-oriented land use in the area.

8. Southwest Neighborhoods: This area has the highest concentration of residents living in West Sacramento, in the single-family development of Southport. The street network has few direct connections to the rest of the city, and while transit stops and bicycle infrastructure exist in Southport both are poorly utilized.

Mobility Gap Analysis

As a basis for development of mobility service strategies, as well as how and where mobility hubs can be successful in the city, mobility gaps were assessed at both the community-wide and neighborhood levels. Gaps and constraints may include lack of transit services, but may also be more nuanced and related to lack of transit supportive land uses, while opportunities seek to address these gaps or leverage existing strengths. Discussing these at the citywide level provides an understanding of how the city functions on its own and what patterns may existing a higher level (such as the need for corridor continuity, or solutions that serve more than one area of the city). Neighborhood level discussions help to understand mobility challenges between geographic areas of the city, and how different needs can inform what components should be included within mobility hubs, for example.

The tactics developed through the Mayors' Commission on Climate Change (MCCC) will serve as the basis for the MAP strategies and recommendations, all of which will be closely tied to the constraints and opportunities identified below. Tactics have been tied, where feasible, to opportunities to provide a baseline and better understand how the city can be positioned to achieve these goals, as well as to assist with project prioritization in future tasks. Table 1 summarizes the community-wide and neighborhood level applicablity of each tactic to the identified opportunities.

Community-Wide Analysis

Mobility Constraints

Without an understanding of the constraints or limitations that exist within the current transportation network, successful strategies to improve access or overall mobility cannot be developed. The following are the primary constraints have been identified through the existing conditions analysis which may impact how transportation services are delivered:

- **Development patterns:** Disjointed development patterns and varying density make consistent community-wide mobility solutions or service availability a challenge.
- **Lack of commute options:** For commuters traveling outside the immediate vicinity of the city, minimal mobility options currently exist. With dispersed employment destinations, serving longer distance commuters may not be feasible. Instead, solutions may focus on non-commute trips for these community members.
- **Physical constraints:** Extensive physical constraints – waterways and highways, most notably – limit access points and how people can move internal to the city as well as outside citylimits. There are no direct crossings in either the east or west direction for resdents in the southern portion of the city. The additional travel time already required to leave the city, combined with the low transit frequency and minimal mode options in the south, put the area at a disadvantage for encouraging non-auto use for many residents.
- **Underutilized transit system:** The transit system, in general, is underutilized throughout the city outside of the routes that directly serve Downtown Sacramento or Davis. In its current design, the system appears to not serve the city's residents in a effective manner

for trips wholly within the city, likely the result of low frequency and inconsistent service spans as opposed to lack of geographic coverage.

- **Lack of high capacity transit:** Low frequency on existing transit services are a disincentive for transit use for many members of the community. Longer travel times can dissuade non-transit dependent residents from making the switch from auto travel to transit.
- **Safety concerns:** Safety concerns are present along the major thoroughfares in the city, which also correlate to the areas with the greatest mobility activity and major trip generators, thereby limiting the potential for increased bicycle and pedestrian usage.
- **Communities of concern:** There are potential limitations to access and use of existing transportation networks, drawn from common circumstances special community populations (Figure 10) face:
    - Safety and comfort conditions in walking network and at bus stops, particularly accomodations for the ADA community.
    - Particularly in low-income and/or single-parent households with more than one child, there is an increased likelihood that older children may be responsible for caretaking younger children; complicated by disconnected active mode routes and inefficiencies of public transit.
    - Unlike other riders, youth are less likely to have credit or debit cards needed to use app-based new mobility. The cost is likely to be incurred by the parent, which may present a limitation in the child's use.
    - Parents' perceptions of public transit reliability and safety can limit students' ability to participate in after-school enrichment.
    - Areas with significant density of these groups are in close proximity to areas of projected increased density of employers and residents. Living costs are likely to increase in response to development and demand, challenging low-income non-whites to seek housing further away, extending travel times and possibly limiting mode options.

Mobility Opportunities

West Sacramento has made significant strides at leading the region in mobility, and has put an emphasis on ensuring its residents have the resources available to access and utilize a multimodal transportation network. As a result, there are a number of opportunities identified at the community-wide level that can be built upon:

- **CW-1: Innovation-supportive city leadership:** The city's Mayor, City Council, various commissions, and staff have all expressed a desire to think innovatively about how mobility services are delivered. The support for creative and forward-thinking improvements puts the city at an advantage in the region to meet sustainability goals, and provides momentum to actual program and project implementation.
- **CW-2: Strong linkages between modes and clear activity centers:** Current activity between modes overlaps at many key locations, indicating potential clear locations for mobility hubs. Areas are consistent with growth in employment and population in the General Plan – putting mobility hub in a place where development will happen, rather

than relying on the hub to generate development, can increase the success of the hub and its influence on mobility / movement.

- **CW-3: Transit-supportive land uses:** Major corridors throughout the city – West Capitol Avenue and Jefferson Blvd, for example – house transit supportive land uses now and in future scenarios. There is an opportunity to leverage the strong foundation and completely rethink corridors and how mobility is delivered. Auto use could be de-prioritized and emphasis could be placed on shuttles to connect major nodes within the city, or develop a critical high capacity transit. Addtionally, as more mixed-use and higher density is developed, mobility can be brought to a pedestrian scale, with a more expansive sidewalk (and bicycle) focused network.
- **CW-4: Existing transit infrastructure:** Transfer points and the city's transit centers on West Capitol Avenue are important pieces of transit infrastructure that can be built upon. These locations are familiar to members of the community and help define the city's overall fabric. Leveraging these for mobility hub locations can reduce confusion with changes to the transit network and the introduction of new services, and build upon areas with higher levels of existing activity and connection points.
- **CW-5: Existing redevelopment and revitalization plans:** The Riverfront area along the eastern edge of the city presents signficant opportunities for greenway network development, as well as new connections across the Sacramento River into Sacramento. Additionally, continuing with revitalization efforts in areas like the Bridge District or along West Capitol Avenue, for example, should prioritize modal investments with developments related to pedestrian and bicycle infrastructure in addition to mobility hub concepts.
- **CW-6: Short distance commutes:** A significant proportion of the population works within 5 miles of the city. Short distance commutes are easier to address with public transit or non-auto modes. Complete bicycle networks that prioritize safety can encourage bike commutes, while public transit operating costs can be minimized with focused, shorter distance trips that have supporting ridership levels/demand.
- **CW-7: Burgeoning partnerships:** Leverage burgeoning partnerships with regional entities, like Plug in Partnership, to pave way for shift to EV use. Charging infrastructure locations and plans can be closely coordinated with the mobility hub locations to ensure access, but also create continuity between parallel efforts.
- **CW-8: Communities of concern:** There are potential opportunities to meet unique needs common with special community populations (Figure 10):
    - Leverage concentration of transportation activity near schools to continue developing safe routes to school and after-school programs, and create a desirable experience with public art, lighting, signage, and other distinctions.
    - Existing communities of concern are primarily located in the northern portion of the city within close proximity to existing modal activity nodes; building upon this connection will be critical in ensuring equity among services and the communities they serve.
    - Concentrated multi-modal activity invites right of way infastructure, which can further normalize sutainable modes and, for low-income earners and/or non-

whites, can create an enviornment where non-car modes are desirable rather than necessitated due to circumstance.

Neighborhood Level Analysis

Central Neighborhoods

Mobility Constraints

- **Conflicts between modes along West Capitol Avenue:** West Capitol Avenue is the City's major east-west connector, serving all modes of transportation. It is a Class II bicycle facility with some of the heaviest volumes of cyclists in the city, as well as the largest concentration of through transit routes. Because of these heavy uses as a transit thoroughfare and bicycle corridor, frequent access conflicts can arise between through-traveling bicycles and the twenty curbside transit stops along the corridor. Additionally, West Capitol Avenue has a high number of vehicle-pedestrian and vehicle-cyclist collisions. The planned Class IV bike lanes along West Capitol Avenue could significantly improve safety for active transportation users in the future.
- **Curb access points along West Capitol Avenue:** West Capitol Avenue's retail and commercial uses are auto oriented, with frequent curb cuts along West Capitol Avenue providing access to surface parking lots. These vehicular access points create frequent conflict points between turning vehicles and pedestrians on sidewalks or bicyclists in the Class II bike lane. Limiting further auto access along West Capitol Avenue (while prioritizing auto access on perpendicular streets) could help create safer passages for bicyclists and pedestrians. Lowering posted speed limits, implementing curb extensions that limit crossing distance for pedestrians and create visual friction for vehicles, and improved pedestrian-scale wayfinding signage could further make West Capitol Avenue more pedestrian- and bicycle-friendly.
- **Poor transit transfers along West Capitol Avenue:** As the major transit corridor through the city, West Capitol Avenue serves five of the seven YoloBus fixed routes, including the heavily utilized Route 42 that connects West Sacramento with Sacramento, Davis, and the airport. However, these routes provide 60-minute headways during their most frequent service, and transfers between routes are poorly timed. Bus stop consolidation, timed transit transfers, and more frequent headways for Route 42 could improve transit access and ridership along West Capitol Avenue.

Mobility Opportunities

- **C-1: Build on strong multimodal connections:** As the spine of West Sacramento's transportation infrastructure, West Capitol Avenue provides transit, bicycle, and vehicle access within a mixed use area. This street already shows some existing intermodal connections (Jump bicycles and scooters used as a first- or last-mile connection to transit, walking access across the Tower Bridge to Sacramento) on which future mobility hubs can be built.
- **C-2: Accommodating future growth:** The General Plan for 2035 projects significant growth in the density of development along West Capitol Avenue, though the corridor is already experiencing traffic congestion and modal conflicts under existing traffic

volumes. Future development should maintain active storefronts along West Capitol Avenue and prioritize perpendicular streets for vehicular access to minimize conflicts and improve safety for the pedestrians, cyclists, and transit users using West Capitol Avenue.

East Neighborhoods

Mobility Constraints

- **Disconnected active transportation network:** While there are bicycle and pedestrian facilities throughout these neighborhoods, there is a lack of a cohesive active transportation network that provides access to the riverfront. For example, bicycle lanes on Park Boulevard and Jefferson Boulevard do not connect with bicycle lanes on West Capitol Avenue, even though a high number of bicycles (both personally owned and Jump micromobility bikes) frequently use these streets.

Mobility Opportunities

- **E-1: High volume of first-mile access trips:** The East neighborhoods are the starting point for a large concentration of home-based Via trips and Jump micromobility trips. Much of the flow of traffic from this neighborhood is headed towards Downtown Sacramento, providing a clear travel pattern to the east. Because of this existing concentration of non-private-auto travel, mobility hubs in this neighborhood providing multimodal transfers could be well-utilized.
- **E-2: Linking parks for active transportation:** This area of West Sacramento is home to many established neighborhood parks, including Memorial Park, Fred and Leila Holmes Park, and Sam Combs Park, in addition to the Sutter Health Park field. These parks and recreation facilities create a mini greenway when connected with the riverfront, and prioritizing active transportation connections (signed bike boulevards and high-visibility pedestrian crossings) could build on the recreation-focused land use here.
- **E-3: Proximity to activity**: While this neighborhood group has a mix of residential and industrial uses, it is ideally situated between two higher-density mixed-use districts (Central West Sacramento and Downtown Sacramento) and is easy walking distance to both. The Tower Bridge provides well-connected pedestrian access to Downtown Sacramento while acting as a gateway to arrival in West Sacramento, and a mobility hub in this location could serve those traveling to, from, or through West Sacramento. designed for a particular user group in mind.

Northeast Neighborhoods

Mobility Constraints

- **No clear concentrations of mobility options:** The medium-density residential land use in these neighborhoods support a variety of transportation services (transit access, high bicycle activity, walking destinations, etc) but there's no clear concentration of mobility services like Jump bikes, Jump scooters, or Via pickups or drop-offs. Because these services provide door-to-door mobility, the dispersed nature of the land use means that there are no clear hubs to concentrate mobility options. Additional work with the community will be needed to appropriately site mobility hubs.

- **Limited connectivity for active transportation trips:** While the Broderick-Bryte neighborhoods generate significant bicycle activity, both around the Riverbend Nature Area and along the I Street Bridge connection with Downtown Sacramento, there's no clear path for bicycles to travel through the neighborhoods. By linking these two high-volume bicycle corridors, the area's overall bicycle connectivity could drastically increase.

Mobility Opportunities

- **NE-1: Too many bus stops for too infrequent bus service:** There are 39 bus stops along a 5.3-mile corridor in this neighborhood group, but the most high-frequency buses serving the Northeast neighborhoods operate only twice an hour. By consolidating bus stops at key locations, transit stops could become community gathering points or mobility hubs. With fewer bus stops to maintain, limited budgets could concentrate amenities for transit passengers at remaining bus stops. This could also facilitate bus transfers and collect first- and last-mile modes like bikes, scooters, and Via.
- **NE-2: Highlight the Sacramento River:** This neighborhood group has 3.5 miles of riverfront access, by far the largest share of any neighborhood group in the city. However, there's limited visibility of the river along the riverfront, and the nearby lower-volume streets present safety and visibility concerns. By building connections between the neighborhood's existing green spaces along the river, the area can capitalize on this natural resource.

Northwest Neighborhoods

Mobility Constraints

- **Auto-oriented large parcels mean limited connectivity for other modes:** The large-scale nature of the parcels and big-box stores in the Northwest neighborhoods mean fewer internal connections for those walking, biking, or taking transit. These commercial districts are well-performing, so there's little incentive to redevelop the auto-oriented land use. There may be few ways to make this corner of the city part of a connected bicycle or pedestrian network due to the presence of the I-5 freeway, but internal bicycle and pedestrian connections between and within the parcels could encourage on-site active transportation.
- **California Highway Patrol Academy is self-enclosed:** The California Highway Patrol facility in the northwest corner of the city is a daytime activity generator, with a large share of the neighborhood's 6,000+ jobs. However, this facility is disconnected from the rest of the city for all modes, and its auto-oriented function encourages low-density land use and less incentive for use of other services. While this is a job-rich area of the city, it's difficult to capitalize on the density of jobs due to the sprawling land use.

Mobility Opportunities

- **NW-1: Capitalize on Via access and transit access at IKEA Shopping Center:** Via Rideshare is a frequent mode of access to or from the IKEA Shopping Center off Reed Avenue. There is also excellent transit access in this commercial area, with 3 transit routes and 5 stops. While Via Rideshare is more likely a replacement for a transit trip

rather than a first- or last-mile access mode for transit, the concentration of non-private-auto trips here can be built upon. As this commercial center is already an activity generator in the city, with significant auto access but also significant rideshare and micromobility, it could be an excellent location for a commercial-based mobility hub.

- **NW-2: Timed transfers along West Capitol Avenue:** The city's western terminus of West Capitol Avenue has a notable concentration of multimodal facilities, including three well-utilized bus lines and existing and proposed Class I bicycle facilities. This location could serve as a mobility hub with timed transfers between YoloBus routes with first- and last-mile transportation options. This part of West Capitol Avenue is less congested than the eastern end, so planning for timed transfers at this location would encourage bus reliability and on-time performance, and potentially improved headway frequency.

Port Neighborhoods

Mobility Constraints

- **Channel as major barrier to all modes:** The Deep Water Ship Channel presents a major geographic barrier to all modes of transportation, as there is no way to cross the channel in this neighborhood. All north-south traffic for all modes must go east to cross the channel, requiring additional detours for every mode of transportation. Future plans for a crossing would dramatically improve access for all modes.
- **Minimal non-car transportation options:** Most of the access to, from, or through the Port neighborhoods is by private automobile. No Via Rideshare pickups or drop-offs have been identified in these neighborhoods, and there's little to no Jump bike or Jump scooter in the area. While some walking trips have been recorded mid-day (likely port workers traveling within the port), and there is a network of existing interior bicycle lanes, this it the most auto-oriented part of West Sacramento.
- **Freight impacts on surrounding neighborhoods:** The Port neighborhoods require trucking access and egress to function effectively. Heavy truck traffic has major modal conflicts: poor visibility for bicyclists and pedestrians, queuing concerns for transit access, and sound/traffic impacts on surrounding neighborhoods that affect residents' quality of life. Future freight connections between I-80, I-5, and the Port would dramatically decrease these negative impacts on the surrounding neighborhoods.

Mobility Opportunities

- **P-1: Flexibility required in accommodating daily fluctuations:** The industrial nature of the Port neighborhoods leads to an imbalance of jobs and housing, with the existing infrastructure stressed during business hours on weekdays and virtually empty during evenings and weekends. These fluctuations require flexibility in infrastructure—spaces that can be used for passenger unloading during the morning peak, goods loading/unloading during working hours, and passenger loading during the evening peak. Addtionally, given that the area is lacking, in general, in many resources that employees may need to access during the day, mobility options for short-distance travel for shopping, food, or other services may encourage employees to reduce the use of private autos.

South Neighborhoods

Mobility Constraints

- **Auto-oriented land uses:** The land uses in this neighborhood group are primarily residential and agricultural, with larger lot sizes and auto-oriented design. Much of the existing development in this area is spread out, with larger blocks and longer distances between points of interest.
- **Lack of density to support mobility options:** As a residential-dominated area with agricultural and low-density development, the South Neighborhoods may not support the mobility options that require more density. Transit is poorly utilized, few people are biking or walking on the area's streets, and virtually no on-demand mobility services are being used like Via Rideshare or Jump micromobility.

Mobility Opportunities

- **S-1: Build connectivity between north and south:** The existing auto-dominated neighborhoods in the south could benefit from stronger north-south connections, particularly with high capacity services that are faster than traditional fixed route transit, which are are currently underutilized. Moreover, improving bicycle and pedestrian connections along this corridor would further encourage alternative modes for shorter trips.
- **S-2: Build east-west connectivity between West Sacramento and Sacramento:** Currently, residents in the southern areas of the city are relatively isolated from Sacramento as a result of no existing crossings below the Tower Bridge. With a need to travel north before crossing the river into the Sacramento, transit usage is likely a non-starter for many residents. As the Riverfront area becomes revitalized in both Sacramento and West Sacramento, there may be an opportunity to create new waterborne transit connections and linkages that further expand travel to the east more directly. With connections to a potential greenbelt system along the shoreline, a more regional draw may also result.
- **S-3: Low-stress active transportation network:** The low volumes of vehicles on the neighborhood group's streets, and the presence of unpaved bike trails throughout the area, combine to make this area a low-stress network for walking, biking, and other forms of active transportation. For less-experienced cyclists or those with young children, the South neighborhoods may be the perfect place for a recreational active transportation trip.

Southeast Neighborhood

Mobility Constraints

- **Islands of active transportation:** While there are mixed uses within this neighborhood group, most of the land uses are segregated, like with the residential Northeast Village development and the commercial-oriented Southport Town Center. Some trips from residential to commercial districts in this neighborhood group are short (less than a 10-minute walk or 5-minute bike ride), but this development is disconnected from the rest of the city. Therefore, while there are shorter walking, biking, and other non-auto trips within the neighborhood group, trips outside of this area almost always require a car.

- **Auto-oriented development:** While this area has mixed uses in close proximity to one another, the infrastructure prioritizes vehicles (even parked vehicles) at the expense of more sustainable trips. The Southport Town Center is a good example of this: big-box retail development surrounded by extensive vehicle parking, with minimal safe walking or biking infrastructure. Even within this development there are pockets of wide sidewalks and pedestrian amenities, but access to this site is heavily skewed towards private vehicles.

Mobility Opportunities

- **SE-1: Non-vehicle trip concentrations at Southport Town Center:** The mixed-use Southport Town Center development is a concentration of existing Via pickups and drop-offs. This, combined with the active transportation connections to and from River City High School, represent a higher share of non-vehicle trips than elsewhere in the neighborhood group. The area between the Southport Town Center and the River City High School could be a well-sited location for a future mobility hub.
- **SE-2: Build connectivity between north and south:** Improved connections between the north and south through reduced or minimized freight traffic along Jefferson Blvd would allow for greater focus on non-auto travel and enhance safety along this key corridor. Expanded transit, particularly high capacity transit, could serve residents of the southern neighborhoods for both commute trips and those to heavily used commercial areas in the city and Sacramento.
- **SE-3: Build east-west connectivity between West Sacramento and Sacramento:** The lack of any crossing in the southern portion of the city forces residents to travel north to cross into Sacramento, increasing travel times significantly and making transit use less desirable. New crossings that leverage the revitalization of the Riverfront area in this neighborhood would residents on both sides of the river. Moreover, the potential for a greenbelt system along the Riverfront would serve as a regional draw, and would provide safe active transportation connections from other areas of the city.
- **SE-4: Build on active transportation infrastructure:** This area already has a built-out network of bicycle lanes and sidewalks, and much of the Northeast Village of Southport's roads have sidewalks and crosswalks in good condition. While this infrastructure is not as well-utilized as the active transportation infrastructure elsewhere in West Sacramento (such as north of the channel), the building blocks of a connected bicycle network and pedestrian network are present.

Southwest Neighborhoods

Mobility Constraints

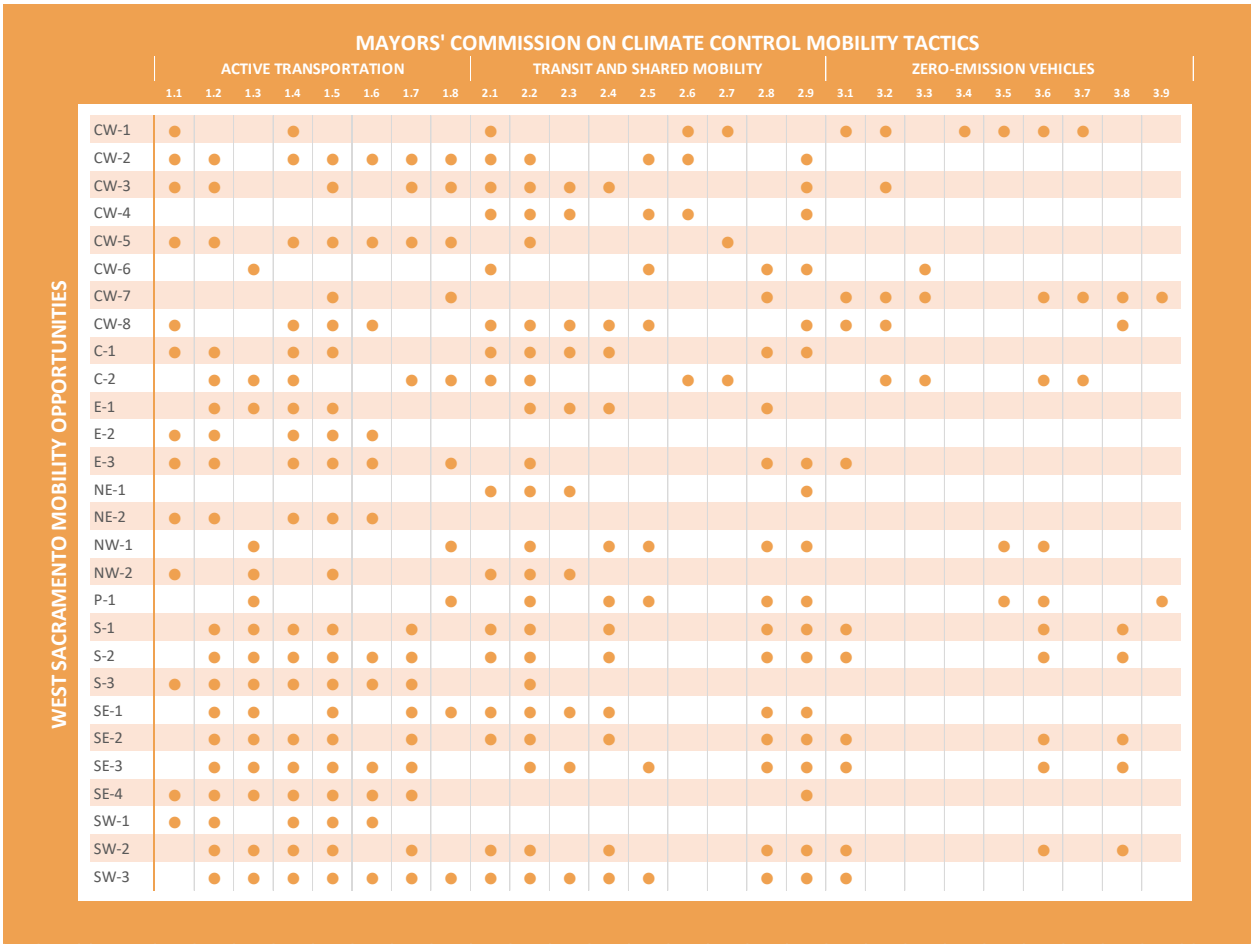
- **Poor street connectivity:** Many of the neighborhoods in this area have some well-connected streets internally, but poor connections to and from the rest of West Sacramento and the larger region. This limited street access solidifies the dependence on private automobiles for trips outside of the neighborhood group.
- **Minimal transit access:** Due to the limited street connectivity, auto-oriented development, and the realities of transit service, there's almost no transit use in this corner of West Sacramento. Bus routes do exist, but ridership is so low, and service so

infrequent, that it is not competitive with other modes. There's limited Via use as well, and only pockets of walking and biking—making this one of the more car-dependent areas of West Sacramento.

Mobility Opportunities

- **SW-1: Parks along Linden Road encourage active transportation:** There's already a high number of walking and biking trips along Linden Road, possibly due to the presence of neighborhood parks along the road (Linden Park and Summerfield Park). Because there is already active transportation activity here, it's easier to introduce other non-auto modes of transportation in the neighborhood. The two parks could be two nodes in a connected greenbelt of parks and open space in the southern reaches of West Sacramento.
- **SW-2: Build connectivity between north and south:** Stronger connections between north and south, accompanied by improved first/last-mile access for the neighborhoods that may be removed from major corridors, could significantly improve mobility for residents of this area. High capacity transit services alongside complementary services like micromobility providers, EV services and infrastructure, and enhanced bicycle and pedestrian networks may attract more "choice" riders in an auto-oriented area.
- **SW-3: Robust existing transit and bike infrastructure:** This neighborhood group has 32 bus stops and 10 miles of bicycle routes, and while they are currently poorly utilized, the infrastructure is already there. While other parts of the city have limited, or unsafe, connections for active transportation, this neighborhood has a connected network of bicycle routes, strong internal pedestrian connections, and many transit stops that can be emphasized (such as through outreach efforts, incentive programs, and improved wayfinding, for example) to increase utilization.

Table 1 - West Sacramento Opportunities and Relevant Mayors' Commission on Climate Change Mobility Tactics



MAP West Sacramento