

# WEST SACRAMENTO

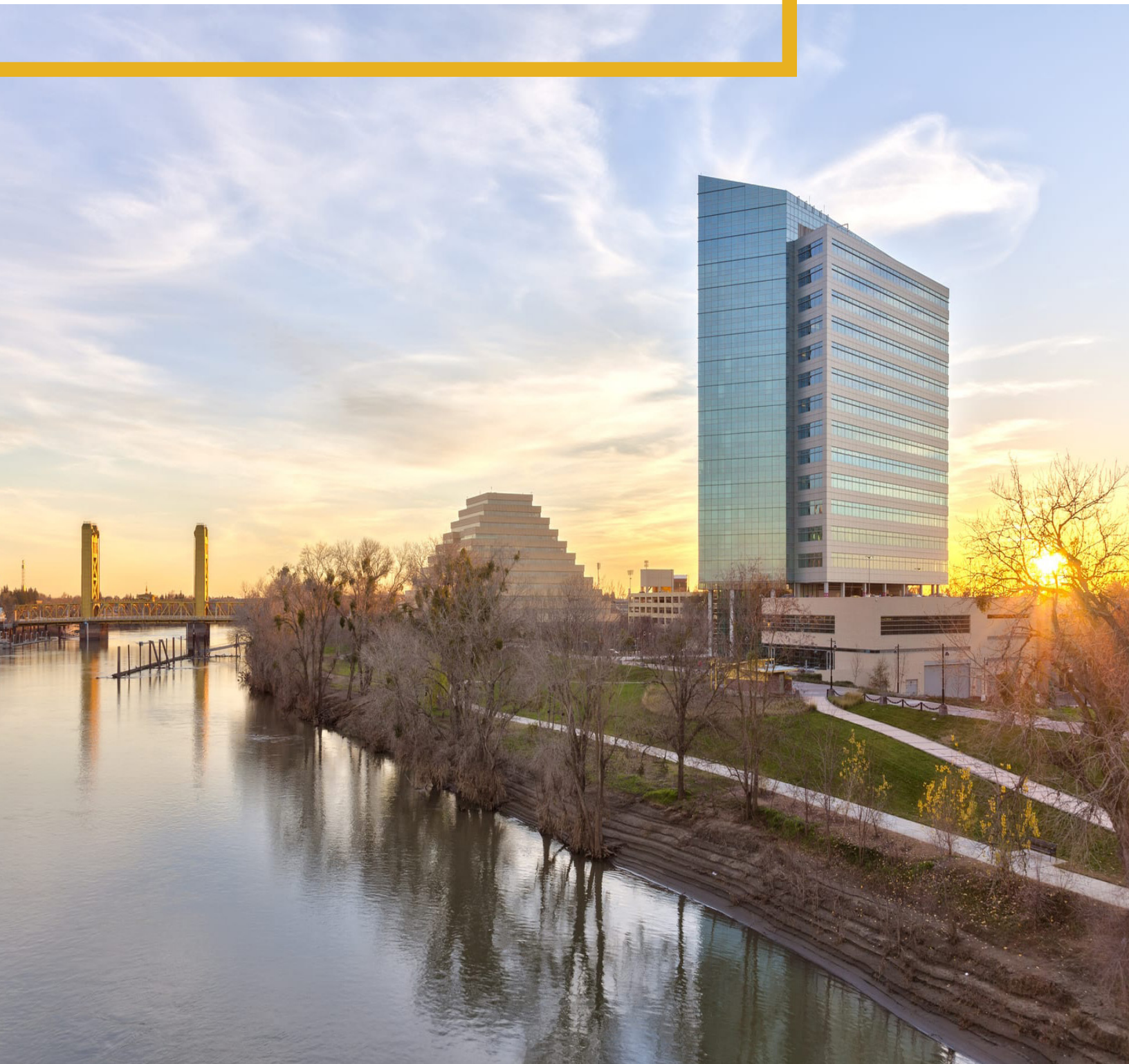
# MOBILITY ACTION PLAN



May 2021



# EXECUTIVE SUMMARY



*The Mobility Action Plan, or “MAP”, reflects the City of West Sacramento’s continual efforts to expand access to sustainable transportation choices for all community members and offers key tools and recommendations to support the City’s implementation of its ambitious mobility and climate goals, both today and into the future. The MAP defines six strategies to achieve these goals and prepare for the incorporation of new technologies and mobility options into the city’s transportation landscape.*

## OVERVIEW

The MAP has been developed with a clear understanding of the rapidly evolving transportation industry, due primarily to new mobility options and technologies becoming readily available for community members. These changes hold the potential to positively or negatively impact neighborhoods and require the City to strategically navigate the changing transportation industry to ensure that these changes are leveraged to the benefit of community members, are provided equitably, and contribute to enhancing the quality of life for all West Sacramentans. Similarly, **the pace of change in transportation technologies requires the MAP to be a “living document”** which should be revisited periodically to ensure that the City’s mobility strategies keep pace with changing developments, both on the ground and within the transportation and technology industries.

At its core, the MAP is all about growing choices in how community members travel for daily needs and recreation. The MAP focuses on moving beyond the historic overdependence on the personal automobile by exploring how the City can support a broad menu of sustainable transportation modes that can be used to meet the daily needs of residents and visitors, while making it easier and more enjoyable to travel within the City. Since the early 2000s, West Sacramento began updating its vision and policies to create a more livable, human-centered city where auto ownership and reliance is a choice— not a requirement. The City has continued supporting a range of development and transportation initiatives focused on denser, transit-oriented neighborhoods, safe and low-stress active transportation networks, and adopting new technologies to make existing options more convenient and affordable to use. Alongside the proliferation of new mobility options and technologies such as shared vehicles (bikes, scooters, cars), on-demand rideshare and ridehailing services, vehicle electrification and automation, and trip planning and fare payment technologies, there are now more opportunities for the City to harness than ever.



The purpose of the MAP is to help guide the City in identifying actions that can be taken to advance the development of an equitable mobility system that strategically leverages these new modes and technologies, while also ensuring consistency with existing goals to address climate change. The MAP was developed through

# OVERVIEW

a public outreach process where community members had multiple opportunities to provide inputs through an online survey, community workshops, focus groups and/or online comments with input, alongside review and policy guidance provided by community partners, cross-departmental staff, the Transportation, Mobility and Infrastructure (TMI) Commission, and the West Sacramento City Council.

Social equity, or ensuring access to daily needs and services for all community members, is a primary tenant at the center of the MAP. As the City continues to grow, the MAP will help ensure that historically-underserved communities receive targeted transportation investments and resources to provide safe, convenient and reliable access to opportunities throughout the region.

## Key Outcomes of the MAP



**Six Actionable Strategies** to implement the City's goals and guide transportation projects and investments.



**A Mobility Hub Toolbox** that identifies key components of a mobility hub and typologies to best address various neighborhood needs and land use contexts.



**Technology and Smart Mobility Considerations** that identify opportunities and constraints linked to new technologies and emerging mobility option, and how to leverage them in West Sacramento.

## GOALS



## MOBILITY ENVIRONMENT

Integral to the MAP's success is maintaining consistency with the established vision, goals and adopted plans of the City. As such, the goals of the MAP are organized around larger themes of equity, environment, economic vitality, safety, and quality of life, and build upon the policies and recommendations set forth by the West Sacramento **General Plan 2035**, the forthcoming **Climate Action Plan** and the joint **Mayors' Commission on Climate Change**.

The MAP acknowledges that transportation solutions are not a one-size-fits-all, and analyzes the existing mobility environment that is specific to West Sacramento. The analysis of existing mobility conditions in West Sacramento includes an exploration of **traditional transportation modes and infrastructure, specific land use and neighborhood conditions, as well as equity and environmental justice considerations**. It also includes an assessment of **new technologies and smart mobility** how the City may best position itself to leverage them for the greatest community benefit. This framework also highlights the City's current strengths and challenges, acknowledging where the City already has significant successes to build from, and where additional collaboration may be needed.

# OVERVIEW

DESIRED  
OUTCOMES

STRATEGIES

ACTIONS

The MAP also develops a **Mobility Hub Toolbox** to help the City site, plan and design strategically located “mobility hubs” throughout West Sacramento. By creating mobility hubs, or key activity centers that offer residents a menu of easily accessed transportation options, the City can bring together various modes and technologies to serve community needs. The Mobility Hub Toolbox includes a suitability analysis offering best practices in selecting hub locations; a typology matrix to adapt hubs to various city contexts; and a proposed hub network, offering recommendations to provide a interconnected system that balances coverage and equity. The MAP also identifies **key technologies and smart mobility considerations** that pertain to each of the emerging mobility options, and what roles the City can take in integrating them into the local transportation network.

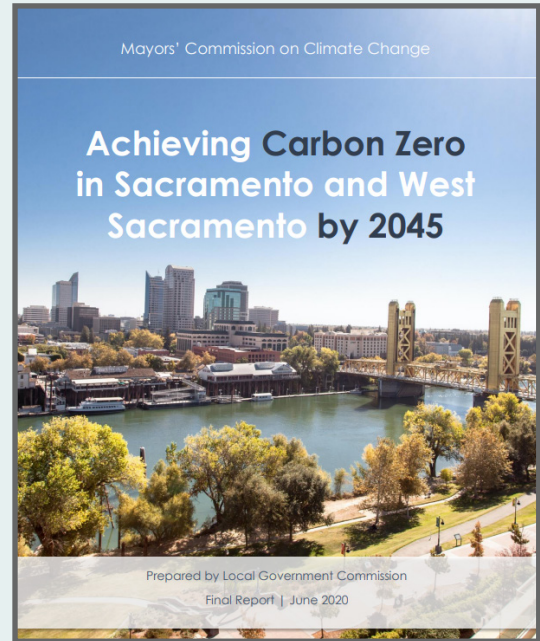
The MAP identifies **six actionable strategies** to achieve the City's goals, to respond to the city's existing mobility environment, and to implement the desired outcomes. Social equity considerations are woven across all of these strategies, offering the City insights on how transportation investments can be advanced in a way that supports those who rely on alternative mobility options most and/or are most severely impacted by the mobility environment today.

For each strategy, the MAP identifies priority actions the City can take to advance the development of a smart and sustainable mobility system. As part of the MAP implementation strategy, these recommended actions are also linked to potential funding sources and partnership opportunities across both the private and public sectors.



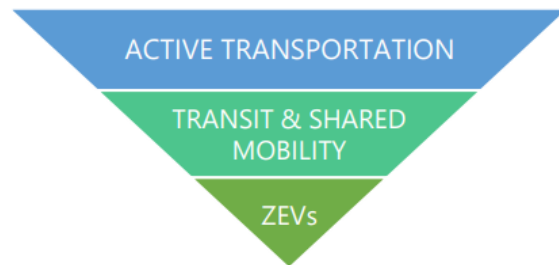
## MAP's Framework

The Mayors' Commission on Climate Changes is the framework for the MAP and guides the actions identified in the MAP. Through the lens of equity, the Commission recommended key mobility strategies to achieve carbon zero by 2045 while simultaneously advancing social equity and economic prosperity. The mobility strategies and objectives set forward in the report (below) directly drive the recommendations of the MAP and address one of the larger contributors of greenhouse gas emissions which is the transportation sector.



### Mobility

Investments to reduce emissions stemming from the Mobility sector, the largest source of emissions for both Sacramento and West Sacramento, should follow a hierarchy that first prioritizes active transportation, followed by transit and shared mobility, and finally ZEVs. Following this hierarchy will enable the cities to achieve equitable outcomes and deliver multiple benefits to communities.



#### 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.
- 40% by active transportation by 2045.



#### Transit & 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.
- 50% by transit and pooled shared mobility by 2045.



#### 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.
- All public, private and shared fleets fully electrified by 2045.

# STRATEGIES



**Create an integrated network of “Mobility Hubs” at key locations connecting residents to transit stops and activity centers, while prioritizing historically under-resourced and transit-dependent communities:**

The City of West Sacramento has well defined activity centers along major corridors. Recent developments in the city promote denser and mixed-used development that are well suited to support alternative transportation modes and a car-free lifestyle. By providing a menu of transportation options at strategically located “hubs”, residents and visitors will be enabled to choose the best mode for their trip, and can more easily access services such as transit, bikeshare or EV charging stations.



**Prioritize projects that enhance safety for non-vehicular road users and create more space for walking and rolling in the public right-of-way:**

Providing safe, walkable and bikeable neighborhoods has been a priority for the City for many years. However, safety remains a primary concern for those who bike and walk, especially at high-risk locations such as highway interchanges or heavily trafficked roadways. In addition to creating safer walking and biking connections through infrastructure, there are also opportunities to leverage new technologies to can improve safety and to think creatively about repurposing streets to better accommodate active transportation users.



**Provide convenient and accessible transit and shared mobility options that connect to local and regional destinations:**

Many major corridors have land uses that can support transit operations, especially those that offer nearby activity centers and walkable connections. However, transit services have been historically underutilized in many parts of West Sacramento where homes and businesses are spread out, often causing travel to take longer or be more difficult to access on foot or bike. The current fixed route bus system has struggled balance frequency of service with coverage, while seeking to provide a reliable and convenient option for both local and regional trips. This offers an opportunity for the City to work with regional partners to improve the current transit, and ensure that local shared mobility options, such as Via Rideshare, support and align with other transit options to make travel more seamless.



**Encourage adoption of, and ensure equitable access to, zero-emission vehicles and alternative transportation options:**

Adoption of EVs has been slow in West Sacramento, mainly due to the low coverage of existing charging infrastructure. In recent years, the City has advanced work on the “Plug-in Partnership” program, which will enable EV charging installations throughout West Sacramento and will explore ways that the City can demonstrate EV and/or fuel cell vehicles on rideshare platforms, or support private businesses, such as freight and distribution operators, to begin electrifying their fleets. Engagement with communities to understand their needs, partnerships with private and public partners and utilities, and expanding the availability of public charging infrastructure are key components to increasing EV adoption.

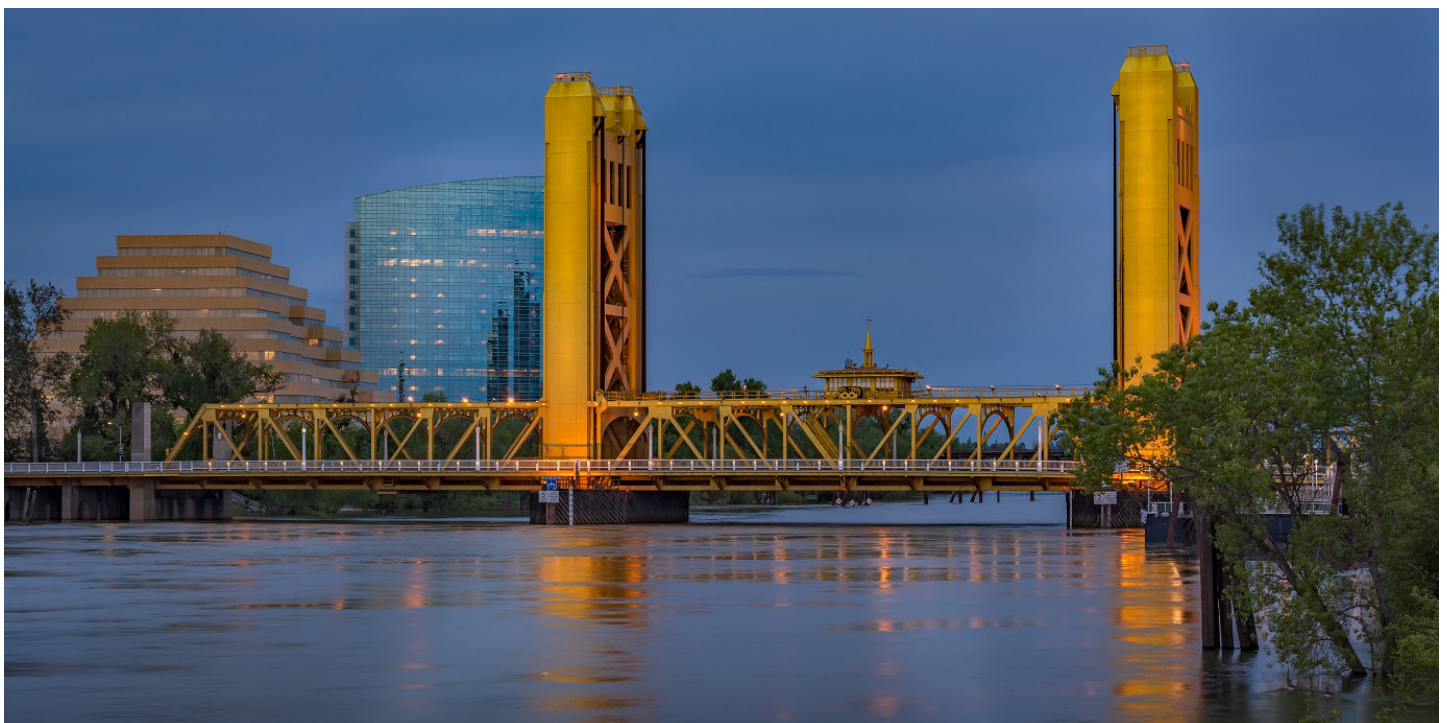
# STRATEGIES



**Plan for supportive infrastructure and develop tools to prepare for emerging technologies and ensure successful and equitable implementation of transportation strategies:** The City has been developing multiple frameworks and strategies to implement new transportation options, whether it be on-demand rideshare and EV Chargers, or in beginning to consider potential applications for automation or sensors that can enhance safety along roadways. As new technologies become more accessible, the City will need to ensure that the underlying infrastructure needed to support such advancements, such as communications infrastructure and electrical capacity, are available to enable them. However, non-physical infrastructure and tools, such as data analysis and regulatory frameworks, will also be needed to monitor the performance and/or compliance of new modes and technologies and ensure they are helping to meet the City's goals.



**Advance supportive policy frameworks that will reinforce the City's goals and values, and guide future transportation investments with a focus on social equity:** Pivotal to the success of the MAP strategies are policies and processes that will guide the selection, prioritization and implementation of projects and programs serving the community. Ensuring that key policies and processes, such as the General Plan 2035 or the development of a Capital Improvement Projects (CIP) prioritization framework, are aligned with the City's overarching climate and equity goals can ensure that limited resources are targeted in areas with the greatest need and hold the potential for the most positive community impacts.





# MOBILITY HUB TOOLBOX



## What is a Mobility Hub?

Mobility hubs are places that offer people a variety of options to get around, along with the services, technology, and information they need to do so. Mobility hubs reduce dependency on privately-owned vehicles by linking walking and biking infrastructure, transit stops, Carshare or EV charging stations all in one location. They also equitably provide access to convenient and sustainable transportation options.

Mobility hubs are not a one-size-fits-all solution. They are tailored to meet the needs of each neighborhood or district they serve. Availability of diverse transportation options, supportive infrastructure, and land use considerations determine the design and programming at each mobility hub to ensure compatibility with the neighborhoods where they are located in.

The Mobility Hub Toolbox defines **locations** developed through a suitability analysis, **components** for an effective hub, **amenities** to respond to transportation needs, and **typologies** for various levels of service offered at a hub. It provides the tools, the flexibility, and the processes necessary to the City to implement hubs in various contexts and at different scales.

## Hub Locations

The identification of proposed mobility hub locations in West Sacramento involved conducting a suitability analysis at three levels:

- 1. Citywide:** At the citywide scale, the suitability analysis looked at a number of metrics to determine where the greatest need is and where the greatest impacts will be. Metrics assessed fall under four broad categories: connectivity, land use characteristics, demographics/equity, and infrastructure resiliency.
- 2. Neighborhood:** Areas deemed highly suitable at a citywide scale were further assessed at the neighborhood level to consider investments in infrastructure for active transportation, service coverage for transit, and current and proposed land use development.
- 3. Site:** The final stage included proposing potential sites that would create a cohesive and robust mobility hub network across West Sacramento. Forty-four (44) sites were identified as potential mobility hubs, based on the suitability analysis completed across scales. The site selection process involved a great deal of deliberation taking into account various factors that range from existing conditions to future plans.

## Hub Components

The basic structure of a mobility hub in West Sacramento includes three key components, irrespective of the location of the hub. These components are not predefined requirements, but are key ingredients that can make a hub most effective in serving the community.

- » **Core Transportation Infrastructure:** Such as public transit, bicycle infrastructure, bikeshare, electric scooters, carshare, EV charging, flexible curbspace, automated vehicles (AV), waterborne transit, microtransit, and sidewalks.

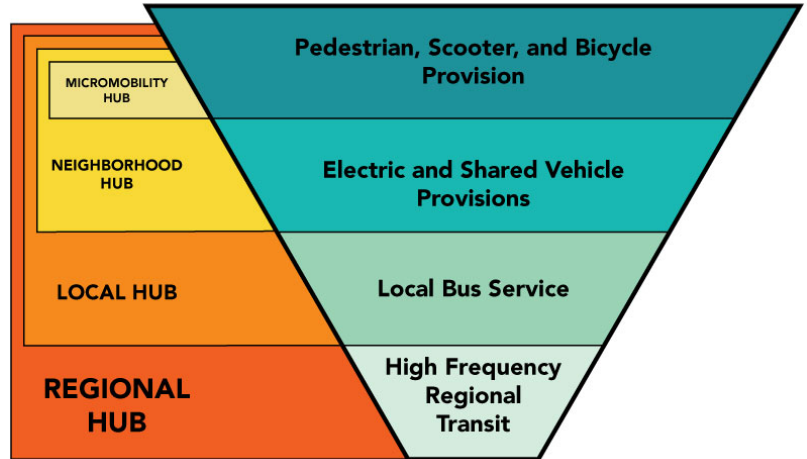
# MOBILITY HUB TOOLBOX



- » **Activating and Supporting Land Uses:** Such as mobile and/or brick and mortar retail, libraries, employment and educational facilities, healthy food options, small open spaces/parklets, senior residences, childcare, restaurants, health clinics, or co-working spaces.
- » **Cultural Context:** Such as language/wayfinding, design considerations for seniors, place-making opportunities, smartphone usage, or public art installations.

## Hub Typology

The MAP differentiates mobility hubs by four typologies based on scale, location, the function they serve, and transportation infrastructure they support, as shown on the graphic.



The Mobility Hub Amenity Matrix provides guidance on transportation amenities to be provided at each hub type. Activating uses and cultural components will respond to site-specific needs and are not included in the matrix.

Regional hubs require the most amount of transportation investment, with varying degrees of investment provided for the other typologies. Amenities are described as vital, recommended, optional and not applicable, based on their relevance at each hub type. While the matrix serves as an overall checklist, each site will present different opportunities or constraints depending on their context, and not all amenities from the checklist may be relevant.

## Mobility Hub Amenity Matrix

Hub Amenities	Existing
Vital	●
Recommended	●
Optional	■
Not Applicable	◇

Hub Type	Pedestrian Connections			Bicycle & Scooter Connections			Vehicle Connections			Bus Infrastructure			Information/Signage			
	Sidewalks to the Hub	Connections within the Hub	ADA Ramps	Low-Stress Bicycle Facilities	Bike share/Scooter share	Bike Parking	Ride Share/Pick Up-Drop off	Car Share	EV Charging Stations	Bus Shelters	Bus Stop/Transit Connection	Fare Kiosk	Wayfinding	Real-time information	Wi-fi/Smart Phone Connectivity	Device Charging Station
Regional	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Local	●	●	●	●	●	●	●	●	●	●	■	●	●	●	●	●
Neighborhood	●	●	●	●	●	●	●	■	■	◇	◇	◇	●	■	●	●
Micromobility	●	◇	●	●	●	●	■	◇	◇	◇	◇	◇	●	◇	◇	◇

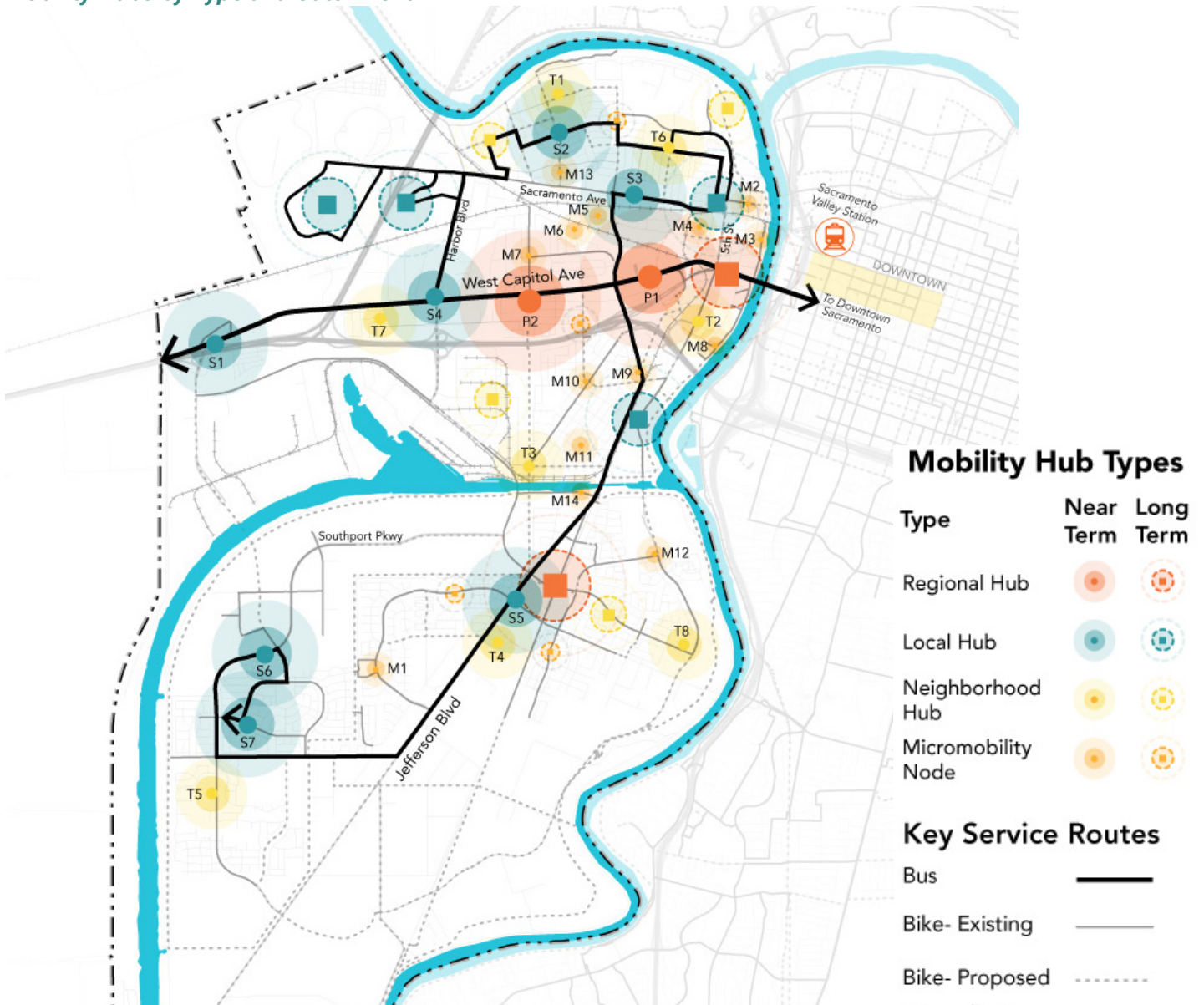
# MOBILITY HUB TOOLBOX



## Recommendations

The recommended mobility hubs consider two phases of implementation (near-term and long-term), based on the presence or absence of existing amenities at each location, as well as future transportation and development projects planned for the area. In each phase, mobility hubs are categorized as one of the four typologies. Each mobility hub type has a different catchment area, due to the transportation options offered at each. While “Regional hubs” have the largest catchment, with high frequency transit connecting to other cities and the most mobility options and amenities, “Micromobility hubs” are intended to primarily serve the neighborhood that is in its immediate vicinity and can support the first or last mile connection to transit, or to a larger hub location. While the location of neighborhood and micromobility scale hubs are generally indicated on the map, these two categories may also be subject to change based on community input, as the City will rely on additional feedback from residents to help inform the best placement and design of these hubs.

### Mobility Hubs by Type and Catchment





## What is the City's Role in Managing a Shifting Paradigm?

While many emerging mobility options and technologies are reminiscent of existing transportation modes long used in cities, the ways in which every day users interact with and make use of them have been quite different. For example, bikes and scooters have long been used for personal mobility by individual owners, but sharing and motorization of vehicles and devices has opened up access to new users, and also given greater flexibility to existing users. On-demand transportation services, which previously existed in the form of traditional taxi or dial-a-ride services, have become more broadly accessible through digitally networked ridehail and microtransit services, such as Uber, Lyft, and Via. Technologies and service models continue to evolve and are anticipated to further transform the mobility options we recognize today.

In the face of this shifting paradigm, the role of the City will evolve. Fundamental to the City's role is the responsibility of **ensuring that emerging mobility options and transportation technologies are leveraged in ways that help to improve the overall quality of life in the city**, and that any benefits and impacts are felt equitably by all. Some of this work has already begun with mobility options that have recently emerged in the city, but work remains to ensure that the City is prepared for the future, and poised to make best use of the opportunities presented. This will require consideration across many different facets, including the underlying infrastructure required to support new technologies (e.g. roads, energy grid, and communications network); organizational capabilities -- processes and protocols needed to engage with emerging actors in the transportation space (e.g. approach to innovation in contracting policies, data management systems and capabilities, and staff resources); and policy and legal frameworks required to shape desirable outcomes, while mitigating and managing unintended consequences.



**Micromobility:** The 2021 updated Micromobility Operations Permitting program sets a strong foundation for regulating micromobility in West Sacramento. The various business plans and operational requirements provide the framework for managing micromobility devices in the city, and the basis for ensuring equitable access to micromobility.

- » Opportunity for regional alignment of policies to provide a more seamless regional experience.
- » Opportunity to work with partners in the region to leverage available data.
- » Opportunity to establish mobility hubs.
- » A need to overcome challenges related to access to program information. Opportunity to simplify terminology and make information more broadly accessible on the City's webpage.
- » A need to prepare for different micromobility form factors ahead of their arrival.



**Microtransit:** As the On-Demand Rideshare service expands and becomes a larger component of the local public transport system, the City may consider additional ways to enable its growth, while also managing potential impacts.

- » Potential traffic impacts from curb access at high demand locations.
- » Charging network could be a limiting or enabling factor to EV microtransit expansion.
- » Opportunity to use combined fare pricing to promote improved microtransit-transit integration.
- » Opportunity to collaborate with neighboring municipalities to enhance regional connectivity.
- » Opportunity to work with community organizations, employers, and retail partners to offer rides to targeted groups.



**Ridehailing:** Ridehailing plays a role in supporting access in the City of West Sacramento, particularly for individuals who need to travel outside of the city limits. However, little is known about how ridehail is currently being used in the city, and what impacts this type of service currently has.

- » Challenges with access to data.
- » Opportunity to supplement the mobility system.
- » Potential for growing competition for space at the curb.



**Carshare:** Carshare services in West Sacramento remain nascent, and the availability of carshare vehicles within the city boundaries is limited, as GIG has only recently initiated pilot HomeZones in the city. While there is currently little in terms of policy framework governing the management of carshare services, the GIG Car Share pilot program is expected to yield learnings that will help to guide future developments.

- » Access limited by parking.
- » Opportunity to further expand access to underserved communities.
- » Enhance regional access.
- » Expanded electric charging could provide opportunity for expansion.



**Electrified and Alternative Fuel Vehicles:** Transitioning towards electric and alternative fuel vehicles is one way that West Sacramento can contribute to the decarbonization of the transportation system. However, the rate that this occurs will depend on a number of different factors that influence the willingness of households and businesses to adopt these new vehicle technologies.

- » A need to understand existing limitations and challenges to electric and alternative fuel adoption.
- » A need for better understanding of the upstream and downstream implications.
- » Opportunity to leverage legacy infrastructure as well as other planned future infrastructure
- » Opportunity to leverage legacy infrastructure as well as other planned future infrastructure upgrades to enable electrification.



**Automated Vehicles (AVs):** AVs continue to be developed and tested, and although the technology is not ready for immediate deployment as part of the mobility network, there may be value in local testing and demonstrations.

- » Potential opportunity to enhance existing mobility services.
- » Potential safety benefits from enhanced automated safety features, but also potential risks that must be managed in the transition towards higher levels of automation.
- » Opportunities to leverage partners to explore small-scale testing and deployments.
- » Opportunity to familiarize the City and its residents with the technology.
- » A need to manage potential impacts from increased VMT and GHG emissions.



**Connected Vehicles (CVs):** CV technologies have broad applications that can support other mobility options and more effectively manage the transportation system.

- » Opportunity for enhancement of pre-emption technologies.
- » Opportunity to enhance safety at key conflict points through sensing and communication of other road users.
- » Opportunity to generate and collect data about the city's transportation system.
- » Need to enable the transmission of data at high speeds, improvements to the underlying communications infrastructure—including increased speed, capacity, and redundancy.



**Mobility as a Service (MaaS):** Although MaaS remains a developing concept, it provides some elements that could be beneficial in improving and encouraging multi-modal transportation access for travelers.

- » Opportunity to test policies and incentives through existing partnerships.
- » Potential challenges from industry competition.