Preliminary Recommendations to the Mayors' Commission on Climate Change

Mobility Technical Advisory Committee (Mobility TAC)

Draft 2045 Vision for Mobility

We envision a fully electrified, innovative, and seamless transportation system that offers a wide range of accessible, affordable, and efficient mobility choices coupled with supportive land uses. Public transit services, shared mobility services, and active transportation infrastructure will be prioritized and vastly improved and expanded to reduce vehicle miles traveled and minimize single occupancy vehicle trips. Sacramento and West Sacramento will be a hub for leadership, innovation, and advanced clean mobility solutions.

All community members, particularly from marginalized communities, will have access to sustainable and affordable mobility options that facilitate positive community outcomes for public health and safety, livability, and the economy.

Draft Strategy Recommendations

1. Transit & Shared Mobility

Expand and improve transit and shared mobility services to be more competitive with single occupancy vehicle use so that 30% of all trips are by transit and pooled shared mobility by 2030 and 50% by 2045.

2. Active Transportation

Expand and enhance accessibility to low-stress connected infrastructure for walking and rolling so that 30% of all trips are by active transportation by 2030 and 40% by 2045.

3. Vehicle Electrification

Electrify 80% of the transportation sector including all personal and shared vehicles, and public and private fleets, by 2030 and 100% by 2045.

Background

Key Principles & Considerations

The Mobility TAC was provided with the following key principles and considerations to inform their deliberations:

1. <u>Prioritize underserved and under-resourced communities</u> including low-income households, marginalized populations, and areas that suffer from a combination of

- economic, health, and environmental burdens to ensure that our transition to a carbon zero future is equitable and delivers more immediate benefits to communities.
- 2. <u>Consider the co-benefits and positive economic impacts of decarbonization</u> and prioritize workforce development to generate local economic benefits.
- 3. <u>Plan for infrastructure turnover</u> to pursue cost-effective solutions by anticipating the long-term "replacement rate" of transportation facilities, parking structures, vehicles, roadways, and other forms of public and private infrastructure.
- 4. <u>Plan across a longer time horizon</u> to prepare community members and stakeholders for some of the more difficult strategies and actions that may lie further down the road while prioritizing outreach, education, and incentives to support cost-effective solutions.
- 5. <u>Leverage existing programs, initiatives, and investments</u> to find additional opportunities to drive deeper carbon reductions, foster innovation, and develop new partnerships.
- 6. Make carbon reduction everyone's responsibility in government and beyond.

Additional questions and considerations:

- The design of transportation systems directly affects outcomes related to public health, equity, and resiliency. <u>Positive health, equity, and resiliency outcomes</u> should be prioritized and integrated into the final strategies established by the TAC.
- The <u>interconnected relationship between transportation and land use</u> is important to recognize. Land use patterns impact transportation facilities, modes of travel, and services and vice versa.
- What would be the <u>ideal modal split that would foster equity and improve access</u> for Sacramento and West Sacramento? Additionally, are there other aspects that should be considered when establishing targets for different modes of travel, such as prioritizing walking and biking for short trips and transit for long trips?

Framing of Strategies

The Mobility TAC's overarching goal is to reduce single-occupancy vehicle trips, personal vehicle ownership and vehicle miles traveled by making sustainable modes of transportation more accessible, affordable, convenient, efficient and appealing. Key questions that the Mobility TAC considered include "what would be needed for a person to be able to walk or roll out of their homes and get to their destination through multiple sustainable modes?" and "how can we make Sacramento and West Sacramento a test bed for innovation?" This is reflected in the order of strategies recommended, focusing first on expanding and improving transit, shared mobility services, and active transportation infrastructure to create a seamless, multi-modal transportation network. Vehicle electrification is also a core strategy that must be pursued as a way to bridge this transition and to address other forms of travel that may require vehicles. The Mobility TAC envisions a future in 2045 where only 10% of trips are by single occupancy vehicles.

The Mobility TAC recognizes the need for robust outreach, education and incentives in order to shift behavior and cultural norms, as well as for early and ongoing engagement with underserved communities, state and regional agencies, businesses, and other key stakeholders in order to achieve the targets identified in the recommended strategies. Social equity must be prioritized in order to ensure that *all* communities can take part in the clean mobility movement and access advanced clean mobility opportunities. Furthermore, limited funding and financing remain the most significant barrier to implementing mobility solutions.

Definitions

<u>Transit and Shared Mobility</u> includes transportation services that are shared among users, including public transit, microtransit, carsharing, ridesharing, ridesourcing, shuttle services, and bike/scootersharing. This follows the Federal Transit Administration's definition for shared mobility, which includes transit.

<u>Active Transportation</u> includes self-propelled, human-powered modes of transportation including walking, rolling, biking, scootering, and other forms of physical activity to transport people and goods.

<u>Vehicle Electrification</u> entails the electrification of all personal and shared vehicles and public and private fleets, including cars, buses, trucks, and other heavy-duty vehicles. However, the Mobility TAC recognizes that technological advancements are still needed to fully electrify heavy-duty vehicles and that other zero-emission fuels, such as hydrogen, could be promoted as a clean mobility solution in the interim.

Baseline Data

Due to the dynamic nature of the mobility sector and the lack of data available for new and emerging mobility services, the baseline data below is imperfect and incomplete. The Mobility TAC will continue to collect data to inform its final recommendations to the Commission.

- 1. Transit: 4% of trips by transit (no data available for shared mobility)
- 2. Active Transportation: 14% of trips
- 3. Vehicle Electrification: 0.8% of total light duty vehicles

Reasoning Behind 2030 and 2045 Targets

The targets reflected in the strategy recommendations have been determined based on available data and research, targets established in other cities, existing initiatives and emerging trends. Throughout its deliberations, the Mobility TAC considered the strategies and targets that are needed in order to achieve the ultimate goal of carbon zero by 2045 in an equitable manner while lifting up innovative solutions. Several cities, including Santa Monica, Washington, D.C., Portland, and Vancouver, have established similar targets for transit and shared mobility, active transportation and vehicle electrification.

<u>Transit and Shared Mobility</u>: mode share targets of 30% by 2030 and 50% by 2045.

- The current mode share for transit and shared mobility is unclear due to the lack of data available from private mobility service providers, but with the ongoing expansion of both public and private shared mobility services (e.g. smaRT and VIA on-demand microtransit, JUMP, GIG, Envoy, etc.), the Mobility TAC is confident that 30% by 2030 is an achievable and ambitious target.
- In order to achieve carbon zero by 2045, transit and shared mobility services need to be at the center of a robust multi-modal transportation network. By leveraging existing initiatives such as the California Mobility Center, Sacramento and West Sacramento can become a test bed for innovation and clean mobility solutions including autonomous vehicles. Incentives and support for those who face barriers to accessing transit and shared mobility services will need to be provided, such as free transit passes, alternative methods of accessing shared mobility platforms, and other incentives that reduce cost and increase accessibility.

Active Transportation: mode share targets of 30% by 2030 and 40% by 2045.

- First and foremost, the Mobility TAC envisions walkable and rollable neighborhoods where residents can easily walk or roll to their daily needs. As such, this strategy is primarily focused on active transportation infrastructure to recognize how community design serves as the foundation for encouraging active transportation.
- The Mobility TAC sees the 2030 and 2045 target as both achievable and ambitious if the cities accelerate and expand their efforts to establish robust networks of active transportation corridors and prioritize community design and neighborhood improvements. Robust outreach efforts will be needed to promote active transportation for shorter trips and to bridge first/last mile connections, in addition to safety improvements and creative incentives.

<u>Vehicle Electrification</u>: total vehicle electrification targets of 80% by 2030 and 100% by 2045.

- These targets coincide with the Mobility TAC's goal of reducing single occupancy vehicle trips to 40% by 2030 and 10% by 2045, recognizing the significant shift in mode share that will be needed in order to achieve carbon zero and reduce vehicle miles traveled. The rate of car ownership in the future is uncertain, and while the Mobility TAC envisions lower car ownership rates, population growth may lead to a net increase in ownership. Additionally, significant efforts will be needed to ensure that low-income populations can participate in the vehicle electrification movement, such as through rebates.
- The Mobility TAC is still deliberating whether the 80% vehicle electrification by 2030 target achieves an appropriate balance between ambition and feasibility. How these targets translate into the number of electrified vehicles on the road is still being discussed. At minimum, the Mobility TAC aims to set targets that achieve Sacramento and West Sacramento's portion of California's statewide target of 1.5 million zero-emission vehicles by 2025 and 5 million by 2030.