APPENDIX B

MOBILITY ELEMENT SUPPORTIVE DOCUMENTATION

General Plan 2045 Culver CITY

Appendix B: Mobility Element Supportive Documentation

Transit Network

Existing Services

Sub Regional Public Transportation Services (CityBus and Access Services)

Culver CityBus is the primary fixed route transit service in Culver City. It operates seven fixed-route local bus routes and one Bus Rapid Transit (BRT) line. Culver CityBus's service area encompasses a 43-square mile area that includes Culver City and the Los Angeles communities of Century City, Marina del Rey, Mar Vista, Palms, Playa Vista, Rancho Park, Venice, West Los Angeles, Westchester, and Westwood. Service runs from the University of California at Los Angeles (UCLA) to the north, to the Metro C (Green) Line Station to the south, and from Fairfax Avenue to the east, to Venice Beach to the west. Culver CityBus service also connects with the Los Angeles County Metropolitan Transportation Authority's (Metro) Exposition Light Rail Line (E Line) and will connect with Metro's D Line (when D Line Extension to West Los Angeles is completed).

The appropriate span of service and route operating parameters will be informed by findings and recommendations of subsidiary plans and studies such as, but not limited to:

- Comprehensive Service Analysis (CSA)
- Short Range Mobility Plan (SRMP)

In addition to rail stations, Culver CityBus also services several major transit hubs, such as the Los Angeles International Airport (LAX) CityBus Transit Center, the Westfield-Culver City Transit Center, the West Los Angeles Transit Center, UCLA/Ackerman Union, and the Robertson Transit Hub. These hubs provide connections to other mobility services in the region, further improving the regionwide transportation network.

CityBus Line 1 – Washington Boulevard

Line 1 runs east to west along Washington Boulevard from Fairfax Avenue to Venice Beach, connecting Downtown and Venice Beach to the E Line at the Culver City Station. Operating seven days a week, this line is the oldest and second most heavily used route in the Culver CityBus system. It serves commercial, office, residential, and recreational land uses along Washington Boulevard. Over the course of its 16-mile round trip travel, Line 1 intersections with four Metro lines, three Santa Monica Big Blue Bus (BBB) lines, and one LADOT commuter express line and terminates at the West Los Angeles Transit Center, a key transfer point to Metro bus service.

CityBus Line 2 – Inglewood Boulevard

Line 2 is a weekday circulator that connects Washington Boulevard and Lincoln Boulevard with Corporate Pointe and the Fox Hills Mall. This 9.8-mile round trip route links with other Culver CityBus, Metro, and BBB lines on Inglewood, Venice, Sepulveda, Washington, and Jefferson Boulevards. During most periods of the day, the highest boarding and alighting activity occurs at the Culver City Transit Center and Venice High School. Given its proximity to schools along Inglewood Boulevard, Line 2 also serves many student riders.

CityBus Line 3 – Overland Avenue

Line 3 is a 20.6-mile round-trip route traveling along Overland Avenue. In addition to serving nearby Century City, Palms, and West Los Angeles College, Line 3 also connects to several major regional shopping and employment centers, including Westfield-Culver City Mall and Corporate Pointe. Line 3 provides connections to regional transit service, and intersects with the Westwood E Line Station, seven Metro bus lines, six BBB lines, and five other Culver CityBus lines. Many riders use Line 3 to commute to work and school.

CityBus Line 4 – Jefferson Boulevard

Line 4 is a 16.4-mile round-trip route providing connections to several transit hubs including the Westfield-Culver City Transit Center, the West Los Angeles Transit Center, and the Expo Line Light Rail La Cienega Station. It travels along Jefferson Boulevard and serves key destinations, including West Los Angeles College and Culver City Park.

CityBus Line 5 – Braddock Drive

Line 5 is a weekday circulator route that travels along Braddock Drive and connects Inglewood Boulevard and Washington Boulevard. This 9.7-mile round-trip route serves Culver City Middle and High Schools, Downtown, the Hayden Industrial Tract, and La Cienega Boulevard. Service reflects school schedules to allow students to take the bus before and after school.

CityBus Line 6 – Sepulveda Boulevard

Line 6 is a major north-south route that connects Westwood and UCLA to the Metro Green Line Station via Sepulveda Boulevard. Traveling 26.4 miles round-trip, Line 6 is the most heavily used route in the Culver CityBus system that serves major regional destinations like UCLA, the Culver City Transit Center, and the LAX Transit Center.

CityBus Line 6R – Sepulveda Boulevard (Rapid)

Implemented in 2010, the Rapid 6 route alignment is like Line 6 in that it travels along the Sepulveda corridor from UCLA to the Metro Green Line Aviation Station. However, it does not directly enter the Howard Hughes Center and the Culver City Transit Center. Stops are limited to major intersections and service operates during weekday morning and evening peak hours. Spanning 23.6 miles round-trip, the Rapid 6 has experienced high ridership and future enhancements to this route are being considered pending funding availability.

CityBus Line 7 – Culver Boulevard

Line 7 primarily travels along Culver Boulevard. This 14.3-mile round-trip route terminates at the Robertson Transit Hub and provides several transfer opportunities with other bus lines that operate along Sepulveda Boulevard, Lincoln Boulevard, and Overland Avenue.

Complementary Paratransit Service

Culver CityBus, in partnership with other Los Angeles County transit operators, executed an agreement with Access Services, Inc. to provide complementary paratransit service for people who are unable to use fixed-route service due to age, disability, or socioeconomic circumstances.

Dial-a-Ride service must be scheduled at least one day in advance, and Dial-a-Ride participants can travel within Culver City's boundaries as well as the Kaiser-Permanente medical facilities located at 6041 Cadillac Avenue and 5620 Mesmer Avenue. Common destinations include doctors' offices, grocery stores, recreational facilities, and beauty salons, with priority given to trips for medical appointments. Door-to-door service is also available upon request.

Local Public Transportation Services (CityRide)

Culver City provides various mobility services through the Local Public Transportation Services that connect residential and business areas within or near City limits.

Service operations and deployment will be developed and implemented equitably and while considering mobility market dynamics to evolve based on future needs.

Demand Response Service

In addition to fixed-route and Access partnership for paratransit service, Culver CityBus also offers multiple demand-response options for eligible seniors and residents living with disabilities. Culver CityBus provides shared curb-to-curb rides using accessible vans Monday through Friday between 8:30 AM and 4:15 PM. Passengers must schedule rides at least one day in advance. Qualified participants living in Culver City and nearby Ladera Heights, View Park, and Windsor Hills, can also buy discounted taxi coupon booklets that may be used for taxi services.

Downtown Circulator (Line 1C1)

The City launched the Culver City Downtown Circulator, the nation's first electric, low-floor minibus pilot CityRide program that connects Downtown with the Arts District and the Veteran's Memorial Park and the Culver City Senior Center. Running every 15 minutes at peak times, this pilot also served other major destinations, including City Hall and the Expo E Line Culver City Station. Rides were free for all passengers through June 31, 2023. The City used the first six months of the pilot to observe service performance and vehicle operations to identify future improvements to the service.

Jefferson Circulator (Line 4C1)

The City is considering implementing an additional circulator on Jefferson Boulevard, a designated Transit Priority Corridor. Similar to Culver CityBus Line 4 alignment, the Jefferson Circulator will connect the Westfield-Culver City Transit Center to the E Line La Cienega Station, servicing multiple residential, commercial, office centers and the West Los Angeles College and connecting the community to regional transit. Implementing this Circulator service will make the Jefferson Boulevard a High-Quality Transit Corridor, leveraging mass transit to support the city's growth and developments along this corridor. This service will also support the need for future BRT and bus lanes on this corridor, help attract transit use, and support the City's sustainability and mobility goals.

School Services (Line 5C1 and 5C2)

The City, in collaboration with the Culver City Unified School District, launched two new school pilot services that take students from various areas of the City with high concentration of student population to and from the Culver City Middle School and High School. The Transportation Department is monitoring and evaluating these services for future improvements.

Microtransit Service

Transit agencies are using the technology of ride-hailing platforms to provide on-demand transit services, known as microtransit. Microtransit, like other emerging mobility options, has the potential to fill gaps in existing transit networks by creating dynamic and flexible on-demand service to accommodate passengers taking short trips (less than five miles). Transit agencies often integrate microtransit services with the existing fixed-route network where rail or traditional fixed-route services may not be efficient to allow passengers to seamlessly transfer between various mobility services. Riders can use a mobile app or website to schedule and pay for trips.

A subsidiary service of CityRide, the Microtransit service will use a fleet of smaller vehicles with trained operators to pick up and drop off riders at designated and conveniently located stops within a designated zone. Riders will have the option for mobile payment (using the regional TAP payment system) and reliable real-time pick-ups and drop-offs (mobile ride tracking). This service will be safe, affordable, and flexible, and may be a viable first- and last-mile option to enhance mobility and shift single occupancy vehicle trips to shared rides.

Mobility Management

This section identifies and recommends future strategies and improvements for mobility management that can support the success of the mobility networks outlined above. By better managing and reducing demand for parking and single-occupant vehicle trips, the considerations below can help lighten demands on roadway right-of-way, freeing up space for multimodal improvements identified in the Mobility Element and create incentives for shifting travel to non-motorized and shared modes.

Off-Street Parking

The City operates and manages various off- and on-street parking options, including four garages, more than 2,000 single-space parking meters, multi-space pay stations, and residential permit districts. Real-time parking availability signage has been installed at four locations along Culver Boulevard and Washington Boulevard. Parking rates and hours of enforcement vary throughout the city. Roughly 39% of all meters have a rate of $1 per hour for a maximum of 2 hours from 8 AM to 6 PM, Monday to Saturday. These meters are primarily concentrated along Washington Boulevard, Culver Boulevard, and other arterial streets. About 35% of all meters have a rate of $0.25 per hour with a maximum of 10 hours from 8 AM to 6 PM, Monday to Saturday. These meters are mostly located on primary and secondary arteries, including Washington Boulevard, Jefferson Boulevard, and National Boulevard. A community valet service Downtown conveniently allows visitors to drop off their vehicle at one of three stations located along Culver Boulevard, which can then be retrieved at any of the locations on departure.

Minimum parking requirements define the amount of off-street parking that must be provided for new construction or site adaptation based on the type and scale of land uses proposed. These requirements are often designed to ensure future development provides enough off-street parking to accommodate the highest peak demand from that associated land use(s). This is regardless of whether that peak demand only occurs a few hours a week or infrequently and does not consider access by other modes. Thus, minimum parking requirements often result in parking surplus in most times and incentivize people to access the site by private automobiles, especially when parking is free or low-cost. Building parking is expensive and the costs of parking are often passed on to the public through rents, commercial leases, and consumer prices. Requiring superfluous accessory parking also makes the mobility network less accessible to non-driving modes. Vast areas of surface parking near destinations, make walking, biking, and accessing transit less comfortable.

On August 24, 2022, City Council approved a Zoning Code Amendment to amend parts of the Municipal Code to eliminate minimum parking requirements and revise standards for automated parking technology. The amendment does not prohibit the provision of off-street parking nor does eliminate any development standards for when parking is provided.

The Mobility Elements includes policies and actions to manage existing supply that more closely align with the objectives set in the GPU. Common mechanisms for updating municipal parking codes that the City may consider in the future include the following:

Limit Accessory Parking Supply (Parking Maximums)

Parking maximums set a cap on the number of parking spaces that developers can provide as part of a proposed project. This practice reverses the practice of minimum requirements, by defining limits to off-street parking based on the land uses proposed for a development project. Parking maximums can be implemented in addition to, or instead of, minimum parking requirements. Parking minimums can also simply be converted directly into maximums.

Maximums ensure that parking is not oversupplied and incentivizes developers to plan and design for use of other mobility choices. Parking maximums can also increase development densities, improving walkability and multimodal functionality. One option is to establish fixed maximums, which limit on-site parking supplies with minimal or no exceptions. Another option is to provide a "soft" or "flexible" maximum that is paired with one or more conditions to be met to allow for more parking. The most common options include the following:

- Providing publicly shared parking, with these spaces simply not counted toward the project's maximum
- Paying a fee for each space provided above the stated maximum
- Providing alternative mobility improvements and/or implementing TDM measures

Whether using a fixed or flexible approach, establishing maximum parking limits can achieve several key benefits, not limited to the following:

- Facilitating and encouraging higher development densities
- Incentivizing investments in alternative transportation modes
- Preventing oversupply of parking
- Reducing traffic congestion and VMT by reducing parking activity
- Reducing housing costs by reducing the cost of constructing parking and increasing the potential number of units that can be developed

Reducing Parking Needs by Unbundling Parking Costs

A less direct, but highly effective, approach to revised parking requirements is to require developers and all subsequent property owners to offer parking only as an optional, fee-based amenity. In Southern California, the cost of constructing and maintaining the parking provided at new developments is rarely directly paid for by its end users. Rather, its contribution to a project's overall development cost typically gets "bundled" into the cost of renting, leasing, or buying the project's dwelling units and commercial spaces. This cost remains hidden when the parking is offered as a "free" amenity to building residents and tenants. All residents pay for parking, whether they need or use it. Commercial space occupants all pay for parking, affecting their operating costs and the wages they can pay, and/or the prices they must charge to stay in business.

Bundled parking also puts transit and active modes at a competitive disadvantage in vying for a share of local travel if most travelers are provided free parking at each end of their trip. Making parking an optional, fee-based amenity, is a simple means of avoiding this, by ensuring that the cost of parking is paid for by those who use it and based on how much of it they use. Parking can be unbundled from housing by offering residents the

option to lease or purchase units and parking spaces separately. Parking that is similarly unbundled from commercial leases allows businesses to purchase only the number of parking spaces they deem necessary for employees and customers.

Curb Management and Access Management

Traditionally, curb management focused on ensuring easy on-street parking for private automobiles and supporting truck loading and deliveries. However, cities are increasingly adopting innovative curb management approaches to guide use, decrease congestion, and capture value at the curbside. Traditional curb management physically delineates curb space through static signage and road markings. Implementing digital tools to collect usage data in real-time can help better respond to demand and deliver information to travelers.

Effectively managed curbs should minimize conflicts between operators of Transportation Network Companies (TNC)s, urban freight, and e-commerce companies without compromising the safety of people walking and biking. More efficient curb management can also relieve congestion and reduce VMT by making it easier for motorists and commercial drivers to locate available pick-up/drop-off (PUDOs) locations, loading zones, and on-street parking.

Since the last General Plan was adopted, increased understanding of transportation's impact on the economy, built environments, health, equity, and quality of life has resulted in shifts to the core considerations of effective curb management. The Mobility Element and the Emerging Mobility Network recognizes these changes listed below within the policies and actions:

- A change in focus from optimizing ease and efficiency of private automobiles, to a focus on optimizing ease and efficiency of moving people. This has led many cities to deprioritize on-street parking to increase curbside access for transit and bicycles.
- The emergence of technology-aided mobility services—from ride-hailing services like Uber and Lyft that need access to the curb for passenger pick-up and drop-off to car share, bike share, and scooter share services that require prominent curb space for vehicle pick-up and drop-off.
- Intense and diverse urban freight operations and on-demand delivery services (accelerated by changes in consumer patterns during the COVID-19 pandemic), amplifying related demands for curb access, dining, and open space.

As a result, the curb has become a more prominent place for intervention and policy setting in urban mobility and freight delivery. Given ever increasing curb space demands, innovative best practice curb management interventions are needed to achieve Mobility Element outcomes and targets of reduced GHG emissions, shifting mode shares, and eliminating traffic fatalities and injuries. Enhanced curb management may include incentivizing or discouraging certain types of trips, mode choices, and behaviors in favor of broader mobility goals.

Future curb management policies can be further enhanced through comprehensive asset management systems, as well as ongoing performance monitoring and evaluation (M&E) systems. M&E systems assess what is and is not working and what changes might be necessary. An M&E system can also accommodate a more experimental and proactive approach to curb management, allowing planners to pilot new ideas to achieve desired outcomes. An effective M&E system should be compatible with any citywide asset management systems the City uses and be supported with consistent input data. As the mobility ecosystem becomes more complex,

the need for data sharing and data processing expands. To address this complexity, mobility data sharing standards can set requirements for service providers and ensure outputs for open-source data sharing and processing. Innovative approaches in various stages of development within neighboring and peer Southern California communities include:

- Mobility Data Specification (MDS): Require private operators of shared mobility devices to provide real-time information about their vehicles, including their availability and the location of where they are parked. This information allows real-time communication between service providers and customers.
- "Code the Curb": Recreate the elements of the public right-of-way, including curbs, signage, and other physical assets, in digital format. By coding the curb, a city can create a comprehensive system for describing the dimensions, locations, allowed uses, and regulations of the curb that can be understood and actively managed by the city, service providers, and property owners.
- Dynamic Curb Management: Many cities have already implemented dynamic price parking schemes in high demand areas, such as charging different rates based on demand and peak times. This can evolve to incentivize different mode choices and use cases throughout the day or in response to fluctuating traffic and shifting demands for curb access and priorities.

The benefits offered by these approaches can be further optimized through intuitive, straightforward, and easily accessible regulations and signage as well as digital signs and sensors that communicate current operating restrictions and pricing in real-time.

Transportation Demand Management

Transportation Demand Management (TDM) encompasses a variety of strategic actions that seek to mitigate specific consequences of travel demand, typically focusing on the volume of trips taken, their timing, spatial concentration, and/or the dominant modes of travel used. TDM initiatives can be as simple as a marketing campaign and incentive programs and as complex as implementing infrastructure improvements to shift mode share for projects, or pricing travel lanes to manage congestion. TDM can effectively reduce the intensity and duration of peak-hour congestion at a local level while serving as a powerful tool for addressing climate change by reducing collective VMT levels. TDM can also improve outcomes for broader objectives that the GPU aims to address citywide, such as:

- Affordability: Existing commute subsidy programs tend to favor drivers over people who travel by other modes, which can undermine both equity and climate goals. One of the most enduring and effective TDM strategies, therefore, is to ensure that driver-related benefits—such as free or cost-subsidized parking—are paired with benefits of equal or greater value to those who do not or cannot use driver-related benefits. Offering transit-cost subsidies, giving cash reimbursements to those who do not use parking benefits, or simply charging for parking and using the resulting revenue to reduce housing or commercial-lease costs are the most common TDM measures that advance cost parity. Cost parity seeks to reduce targeted subsidies to drivers and balance them with fairer subsidies for all travelers.
- Sustainable Growth: TDM can reshape development patterns away from sprawl and toward denser growth patterns that bring more people and destinations closer to high-capacity travel networks. This improves affordable transportation access by enabling people to live and work closer to the things they care most about. It also reduces the amount of land consumed by

parking facilities, creating more capacity for growth, reducing upfront development costs, reducing the burden of new development on existing transportation infrastructure, and thereby (in the medium-to-long-run) reducing housing costs and even the tax burdens required for infrastructure maintenance.

- Health and Safety: By reducing the number of automobiles on the road, reducing the stress and frustration of travel, and promoting active travel modes, effective TDM policies and programs can complement citywide road-safety initiatives seeking to eliminate travel-related fatalities and serious injuries. When paired with investments in safe street design, less driving means fewer traffic injuries and deaths for all travelers. Effective TDM programs reliably result in greater use of active travel modes and thus more active populations. More importantly, fewer vehicle emissions lessen exposure to pollutants that cause sickness and disease, particularly for those living in and around traffic-intensive areas.
- Environmental: Reducing the number of automobiles on the road reduces the amount of vehicle emissions that can also negatively harm the environment, animals, and their habitats.

Cities can establish ordinances and regulations that require developers, property owners, and/or employers to implement TDM plans and programs for development approvals and/or property/employment regulations. Common approaches to municipally mandated TDM include:

- Zoning Ordinance: Changes to development/zoning codes to establish requirements for some or all development proposals to include required TDM measures—or an approved TDM Plan—as a condition of approval.
- Traffic Impact Analysis (TIA) and Related Mitigation: When a proposed new development undergoes analysis of its potential impacts on traffic, mitigation actions typically focus on adding features such as turn lanes, traffic signals, or on-site queueing space. In support of trip reduction goals, TIA guidance should consider travel by all modes and recognize that TDM measures can help mitigate or reduce the impacts of private vehicle travel. Transportation Study Criteria and Guidelines were last updated by the City in 2020 and require identifying TDM and multimodal measures to mitigate a project's VMT impact.
- Commuter Benefits Ordinance (CBO) - A municipal, county, or state ordinance can be used to apply a set of TDM requirements to existing properties and/or employers. These laws can be applied broadly or within specific areas, typically where there is rapid growth and/or traffic-congestion concerns.

The City's existing TDM ordinance was established more than 20 years ago. Since then, best practices in travel demand reduction have evolved exponentially, while increasing the burden on the transportation network to accommodate increasing growth with more modes and uses vying for the use of finite space. The Mobility Element responds to these issues by including policies and actions to update the TDM ordinance and increase the deployment of TDM strategies as a means of mitigation to effectively reduce the number of trips generated by new development while promoting and incentivizing the use on non-drive alone mobility options. In step with updated guidelines for development, the City shall continue to implement the TOD Visioning Study and Recommendations (2017), which provides a selection of possible TDM strategies that may be implemented by both employers and developers. As outlined in that Plan, the City is committed to updating the TDM Ordinance. The City is currently conducting a study to create a TDM plan which will provide recommended update to the TDM Ordinance as well as recommendations on prioritizing, funding, and implementing TDM investments and

structuring a TDM program that outlines applicability and requirements for employers and/or future development.

TDM requirements can be set citywide or at a district level basis, such as with a specific plan for the TOD District, to set development standards aimed at increasing multimodal access and decreasing parking demand. Critical to setting effective municipal guidelines for TDM is to set regulations that are clear and easy to understand. Requirements should provide flexibility for developers while ensuring that measures with the greatest proven trip reduction potential are emphasized. Key elements to include are:

- Determining Applicability: For reasons of practicality, smaller projects, such as residential developments with fewer than 10 units or non-residential projects with less than 10,000 occupied square feet, are typically exempt. Projects at these scales may lack space to accommodate physical TDM improvements and limited resources to implement programmatic measures and monitoring. Requiring full-scale TDM measures for these sites may also discourage development of smaller sites, placing artificial barriers to the provision of additional housing supply.
- Mandatory Measures: The City may choose to identify a small set of highly effective strategies that are set as core requirements applied to all mandated developments. TDM strategies that are most effective involve either incentives or pricing ("carrot vs. stick"). These may include unbundling parking from the cost of rents/leases, transit benefits, and carpool subsidies. Applicants should also be required to designate a coordinator responsible for ensuring the implementation and marketing of TDM options on-site while acting as a liaison to City staff for reviewing and monitoring process.
- Defined Targets: To encourage a broad selection of potential TDM options available, minimum targets must be set to ensure TDM Plans provide enough measures to effectively reduce travel demand. Targets may be set based on several factors, including zoning districts or special overlay zones, amount of proposed parking, proximity to high-capacity transit, and percentage of proposed affordable housing units.
- Menu of Options: A points-based menu of options allows developers to create a TDM plan to best suit project context. Weighted points values may be assigned to TDM measures based on their relative effectiveness in reducing demand. Development proposals should then be assigned a target threshold for minimum number of points, based on the likelihood of a measure to reduce travel/parking demand. The points associated with the selected set of TDM commitments must then equal or surpass the target applicable to the project.
- Provide Guidance: Clear descriptions for how each measure is implemented before occupancy and maintained after occupancy should be provided. This may also include how additional points can be achieved for implementing a measure at a higher level of intensity after initial occupancy.
- Enforcement and Monitoring: TDM plan ordinances typically include monitoring and reporting components to ensure compliance with implementation commitments. A combination of self-reporting and/or City staff monitoring should ensure commitments are maintained for the lifetime of a project. Prior to occupancy, a site inspection may be performed to confirm all physical measures of the project's TDM plan have been implemented. Ongoing monitoring may be conducted through requiring performance documentation on an annual or multi-year basis. This reporting can identify if a site is falling short of TDM plan objectives and if strategies need to be adjusted.

Mobility as a Service (MaaS)

Mobility as a Service (MaaS) includes digital platforms that support end-to-end trip planning, electronic ticketing, and payment services across all modes of public and private transportation. A MaaS user-centric app integrates the process of locating, booking, and paying for all the necessary transportation elements of a trip. It determines the best way to transport individuals based on real-time conditions. MaaS platforms consider all transportation options and user preferences, such as preferred mode of transportation, distance, cost, time, comfort, and convenience to improve and optimize the overall user experience.

The City's interdepartmental Mobility Team collaboratively updated the City's SRMP, introducing the premise for developing a MaaS application which will encompass and integrate all public mobility services, giving customers a one stop shop for accessing all their mobility options. Transportation Department is currently drafting a Transportation Technology Roadmap, which will outline the path to achieve the agency's technology goals and guide the way the organization implements technology solutions. This project includes the assessment and recommendation on the MaaS.

Supportive Technologies and Infrastructure

The successful, long-term deployment of a comprehensive Emerging Mobility Network should accommodate the variety of services identified within this GPU, while maintaining flexibility to adapt to future changes in vehicle technology, service operations, and customer interface tools. Refer to the Climate Protection and Sustainability, Infrastructure, and Governance and Leadership Elements of this GPU for more information. Critical considerations may include, but are not limited to:

- Fleet electrification and charging infrastructure
    - In accordance with the California Air Resources Board (CARB) Innovative Clean Transit Regulations (adopted in 2018), all public transit agencies will gradually transition to a 100% zero-emission bus (ZEB) fleet by 2040. Although the regulation only affects CityBus vehicles - standard, articulated, over-the-road, double-decker, and cutaway buses - additional climate resiliency measures may be instituted at the local or state level affecting the use of electric vehicles for CityRide services as well, requiring changes to the City's municipal fleet management plan and improvements needed at maintenance and storage facilities.
    - Increased commercial availability and affordability of electric vehicle (EV) and car-sharing services may be considered when designing specific site improvements and potential EV charging accommodations for relevant mobility stop typologies.
    - In addition to data network access, electric autonomous and connected vehicles may require inline charging infrastructure to allow vehicles to operate continuously during daily span of service without having to leave the service area for recharging.
- Data network accessibility
    - Prepare for potential pilot service opportunities that support autonomous and connected vehicles requiring consistently reliable network connections to continuously manage operations
    - Implementing BRT service is typically accompanied by real-time arrival displays and, where warranted, fare collection and ticketing equipment that require connection to the electrical grid as well as data networks.

- Asset Management, Data Standards, and MaaS consolidation
    - To improve the convenience and overall user experience, Culver City Transportation Department is considering migrating to a MaaS model that consolidates existing and emerging transportation services using standardized data formats and integrated payment systems for end-to-end trip planning, and ticketing across all modes.
    - Trip planning programs and algorithms deployed through the MaaS system would require a common database of designated transit stops and services, with up-to-date information related to mobility resources and service connections available for various capital infrastructure components, and vehicle types for potential users to manage a 'virtual wallet' of services at their fingertips. Establishing standardized mobility service data feeds and inputs from private vendors and providers is crucial to successful MaaS deployment and operations.
    - A MaaS application may consider drawing from data points in a comprehensive citywide infrastructure asset management tool that includes the conditions and amenities at all bus stops and mobility stops consistently across all services.