

# Implementation Memo



## **I. ENABLING MOBILITY HUB IMPLEMENTATION**

In a perfect world, mobility hubs would be fully operational everywhere they are needed, offering people numerous alternatives to driving alone. Some mobility hub services and amenities can be provided in the near-term with a limited amount of investment, agency approval, and oversight. Others take longer to implement, requiring more substantial investment, planning, policy changes, and complex partnerships. What's more, some of the technology necessary for realizing a community's vision for a new mobility hub is still not ready for prime time. It may be several years before this technology is available commercially and proved to be effective in the real world.

However, agencies and organizations involved in establishing mobility hubs can take steps to phase them in over time. Planning in innovative ways and developing progressive policies are good places to start. For example, as people increasingly use on-demand mobility services, the need for safe and efficient passenger pick-up and drop-off areas also will increase. Successful mobility hubs have space allocated to support shared mobility services, and local jurisdictions can start planning for this now. Cities will need to analyze current management policies and practices for curb lanes as they plan for more flexible curb spaces – spaces that can be used safely by a growing number of ridesharing services, mobile retail, bike riders, and pedestrians.

### **A. The Importance of Public–Private Partnerships**

It is becoming more and more difficult for public transportation agencies to entirely finance and build infrastructure, programs, and services. Agencies are increasingly collaborating with private partners including developers, property managers, employers, and transportation and technology service providers. Mobility hubs can benefit from these collaborations, partly because they incorporate a variety of emerging privately-operated transportation services such as carshare, bikeshare, shuttles, and on-demand rideshare services. Mobility hubs also vary according to the circumstances of the local community they serve and location-specific opportunities for development – both of these factors also make public-private partnerships useful. Public agencies should begin exploring opportunities to partner with the private sector and collaborate on pilot projects that aim to solve real-world mobility challenges. These types of partnerships will require public agencies to assess their traditional procurement practices and to identify innovative ways to pilot new mobility services that enhance access to transit and give people attractive alternatives to driving alone.

### **B. Using Big Data**

We live in a world increasingly informed by “Big Data,” and the success of a mobility hub will hinge on integrating public and private transportation services by collecting, aggregating, managing, and acting on data from a wide variety of sources. Agencies should develop open data policies to enhance government efficiency and transparency. Likewise, data from transportation service providers in the private sector will be greatly needed to integrate trip planning, scheduling, and payment. Both partners should proactively establish partnerships and data-sharing agreements that support the success of mobility hubs.

### **C. Our Autonomous Future**

Many shared mobility services will soon become fully automated. Uber and Lyft are heavily invested in autonomous vehicle technologies, and autonomous microtransit already is being piloted in the State of California. Local agencies need to determine if their infrastructure is prepared to accommodate shared services that are connected and autonomous. Traffic signals and other infrastructure, for example, may need to be updated to support wireless connectivity. Wireless connectivity networks will allow vehicles to communicate with infrastructure and transportation management systems in real time, which will optimize routing and improve the reliability of services. Agencies also should consider planning for a network of wireless charging infrastructure to support shared autonomous vehicles, and the mobility hub concept overall.

### **D. Memo Organization**

**Table 1** on the following page highlights data-sharing and other important considerations for the San Diego Association of Governments (SANDAG), the Imperial County Transportation Commission (ICTC), and other agencies that are involved in establishing mobility hubs. It is intended to be an overview and does not constitute an exhaustive list.

**Section II** offers guidance on establishing mobility hubs in existing developments.

**Section III** offers guidance on establishing mobility hubs in new developments.

**Section IV** reviews examples of how public-private partnerships can help launch mobility hub services and amenities.

**Section V** briefly describes how local plans can support establishing a mobility hub.

**Section VI** highlights the importance of equity in establishing a new mobility hub.

**Section VII** identifies more specific early actions that lay the groundwork for establishing a mobility hub.

**Table 1: Mobility Hub Implementation Considerations**

	SANDAG and ICTC	Transit Operators	Local Governments
<b>Planning</b>			
Evaluate and amend existing planning documents and programs to better incorporate the mobility hub concept and to provide flexibility for change in response to technological innovations. Identify opportunities for new plans and programs.	<p>Regional Transportation Plans and supporting Sustainable Communities Strategies</p> <p>Corridor studies and transit plans</p> <p>Develop toolboxes and other resources for local jurisdictions, and provide them with technical support:</p> <ul style="list-style-type: none"> <li>• Help local jurisdictions develop shared mobility strategic plans.</li> <li>• Help local jurisdictions integrate shared mobility and parking management strategies into the development process.</li> </ul>	<p>Transit planning documents</p> <p>Transit design manuals</p>	<p>Land use and transportation plans:</p> <ul style="list-style-type: none"> <li>• General plans, community plans, specific plans</li> <li>• Mobility and corridor studies</li> <li>• Street design manuals</li> <li>• Climate action plans</li> <li>• Parking management studies and plans</li> <li>• Neighborhood electric vehicle (NEV) plans</li> </ul>
<b>Policy</b>			
Develop new policies and/or amend existing policies and ordinances to ensure that they support the mobility hub concept.	<p>Seek countywide legislation for neighborhood electric vehicles (NEVs) so that local jurisdictions can develop NEV transportation plans.</p> <p>Develop policies to support open data sharing.</p> <p>Identify opportunities in the procurement process to streamline the implementation of mobility hub features.</p>	<p>Evaluate ordinances related to fare pricing.</p> <p>Evaluate policies related to transit parking regulations to identify ways to support shared mobility services.</p> <p>Review ordinances that license and regulate other transportation services to ensure they are aligned with the goals of the mobility hub concept.</p>	<p>Evaluate local regulations and municipal codes to ensure that they enable the mobility hub concept.</p> <p>Develop complete streets policies that consider shared and autonomous mobility options.</p> <p>Integrate mobility hub planning into the entitlement process (e.g., land development codes and building codes).</p> <ul style="list-style-type: none"> <li>• Require and/or incentivize developers to incorporate mobility hub features as part of their proposed projects.</li> </ul>
<b>Funding</b>			
Seek competitive funding opportunities to support establishing a mobility hub. Better integrate the effort into existing funding streams and grant programs.	<p>Pursue federal and state grant programs such as the Pilot Program for Transit-Oriented Development Planning.</p> <p>Revise existing criteria for the regional grant program to consider mobility hub elements for funding.</p> <p>Account for mobility hub improvements within Capital Improvement Programs (CIPs).</p>	<p>Pursue federal and state grant programs such as the Mobility on Demand Sandbox Demonstration Program in partnership with local agencies.</p> <p>Explore and pilot operational models that leverage public-private partnerships that help reduce costs.</p>	<p>Pursue state and regional grant programs such as the Smart Growth Incentive Grant Program.</p> <p>Account for mobility hub improvements within CIPs.</p> <p>Incorporate mobility hubs as an eligible expenditure under existing funding streams such as parking district revenues and development impact fees.</p>
<b>Allocation of Space</b>			
Consider how the current allocation of space within the public right-of-way can incorporate mobility hub elements and design projects and infrastructure with mobility hubs in mind.	<p>Identify potential showcase projects based on existing and planned high-frequency transit services, supporting land uses, population and employment density, and other features that support mobility hubs.</p> <p>Incorporate mobility hub features as part of the design or rehabilitation of transit stations and Park &amp; Ride facilities (e.g., secure bike parking, electric vehicle (EV) charging infrastructure).</p> <p>Design and build regional bikeways that connect to transit while supporting the local bike network.</p>	<p>Dedicate parking space at transit stations for carpools, vanpools, and carshare.</p> <p>Allocate transit station curb space for loading and unloading passengers of on-demand shuttles, rideshare companies, and other shared services.</p> <p>Dedicate transit station space for bike services and amenities such as bikeshare and secure group bike parking.</p> <p>Allocate transit station space for EV charging infrastructure.</p>	<p>Encourage and incentivize developers and landowners near transit hubs to dedicate right-of-way for mobility hub features and services.</p> <p>Encourage and incentivize developers and landowners near transit hubs to build and/or contribute toward the operation of mobility hub services and amenities such as on-demand shuttle services, EV charging infrastructure, wayfinding signage, and bike and pedestrian improvements.</p> <p>Allocate street lane space for mobility hub features such as dedicated transit lanes, shared transit lanes, and cycle tracks.</p> <p>Allocate curb space for mobility hub features such as dedicated carshare parking and passenger loading zones.</p>
<b>Data Sharing and Technology</b>			
Share and aggregate data so that mobility services, trip planning, and payment options can be integrated. The goal: a seamless transportation experience.	<p>Collaborate with the private sector to develop shared data agreements, and aggregate data on transportation modes and related travel to facilitate real-time trip planning across modes.</p> <p>Develop a fully integrated payment platform, also known as a Universal Transportation Account.</p> <p>Leverage the San Diego Regional Proving Ground designation to test technologies that support innovative on-demand mobility solutions.</p>		
<b>Public-Private Partnerships</b>			
Review procurement practices and foster innovative ways for the public and private sectors to collaborate to improve mobility hubs. Develop public-private partnerships to offer services and amenities historically provided by public agencies alone.	<p>Create a "Mobility Sandbox" to allow the private sector to develop proposals for demonstrating technology and services that solve mobility challenges, and implement the mobility hub concept on an ongoing basis.</p> <p>Partner with private vendors to pilot different technologies and products that integrate mobility hub services. Explore partnership opportunities that facilitate the integration of mobility service payments.</p> <p>Encourage and incentivize shared mobility service providers to fill gaps in the transit network, or to enhance access to mobility hub sites.</p>		

## II. IMPLEMENTING MOBILITY HUBS IN EXISTING DEVELOPMENTS

Mobility hubs make sense in existing communities where public transit is already most active. But planning and implementing mobility hub features requires significant outreach to property owners, managers, and other stakeholders who will be impacted by mobility hub development. It is important to inform these parties that a minimal contribution of right-of-way, through an easement or through a minor infrastructure improvement, could be needed to support the success of a new mobility hub. It is worth noting that the community improvements a mobility hub brings can increase the value of properties in the immediate and surrounding areas. Below are just a few examples of how mobility hub planners, property owners, property managers, and other stakeholders can realize joint benefits from the establishment of a new mobility hub:

- An apartment building could provide an easement for a bikeshare station or enhanced features for transit waiting areas, and in exchange the apartment building could receive minor landscaping enhancements adjacent to the easement or elsewhere on the property.
- A shopping center near a transit station could designate parking spaces for carshare vehicles and/or install EV charging stations. In return, the shopping center could experience more customer activity.
- A business park or community college could operate a shuttle service to a mobility hub, and in return it could be permitted to redesignate on-street parking in front of their property for shuttle or passenger loading only.

## III. IMPLEMENTING MOBILITY HUBS IN NEW DEVELOPMENTS

Local governments often require developers to provide public amenities in new projects or offer incentives for them to do so. This is an effective strategy for establishing mobility hubs, primarily because the majority of new development in the San Diego region is expected to occur in areas already served by high-frequency transit. This makes the mobility hub concept a natural feature of new developments. Another reason mobility hubs are natural fits for new developments is that one can be designed from the earliest stages with the other in mind.

The SANDAG [Regional Transit Oriented Development Strategy](#) describes several ways that local governments can work with developers to create compact, walkable communities near transit. Several of these strategies can apply to establishing mobility hubs, including:

- Requiring new and infill developments to complete connections for active transportation and public transit along the front of their properties, as well as off-site where appropriate.
- Integrating mobility hub elements into new and infill development projects, and requiring Transportation Demand Management measures that mitigate transportation impacts.
- Creating a checklist of potential mobility hub elements that a project can contribute to, based on the Mobility Hub Features Catalog, as part of the development review process.

- Providing developers with a variety of benefits such as density bonuses, reduced parking requirements, and project fast-tracking as incentives for installing and maintaining mobility hub features in their projects.
- Requiring all large-scale developments to provide phasing strategies related to density and mode-share targets, as well as requiring that monitoring of these strategies be connected to the establishment of infrastructure for public transit and other transportation.
- Creating a seamless process for private development projects to contribute to transit station improvements via the governing jurisdiction.
- Negotiating funding for or construction of mobility hub features and services as part of a development agreement.

Traffic mitigation measures will need to better support multimodal investments to expand opportunities for implementing mobility hubs through the development process. Agencies may need to modify policies as well as Transportation Impact Analysis guidelines in order to focus on measures that reduce transportation demand and prioritize improvements that support mobility hubs in lieu of increasing roadway capacity.

#### IV. LEVERAGING PARTNERSHIPS TO IMPLEMENT MOBILITY HUB FEATURES

The success of mobility hubs depends on a wide variety of organizations coordinating their efforts. Mobility hubs provide new opportunities for partnerships between transportation service providers and vendors that develop technologies and products to support mobility hubs. They also could involve special assessment districts such as business improvement districts and Parking Management Districts (PMDs) as well as corporate sponsors.

##### A. Mobility Service Providers

###### *The Idea*

Companies that provide mobility hub services and supporting amenities such as shuttle and microtransit services, on-demand rideshare options, bikeshare and carshare programs, and EV charging technologies may present different partnership opportunities to enhance mobility in San Diego and Imperial counties.

###### *Where it has been done*



MICROTRANSIT

The Santa Clara Valley Transportation Authority’s [FLEX pilot](#), which ended on July 1, 2016, provided an on-demand dynamically routed shuttle service to increase ridership in underserved markets. The software partner, RideCell, generated routes between predefined stops based on pick-up and drop-off requests. A single ride during off-peak hours cost \$2, while a ride during peak hours cost \$3.

In the greater Toronto area, the one-year [GO Connect Pilot Program](#), which ended in April 2016, provided Metrolinx transit riders with shuttle service to and from transit stops to alleviate congestion at the Milton GO Station. Using the RideCo application (app), passengers selected their destination and requested a ride, and the app customized the route based on requests. The GO Connect service also allowed users without smartphones to reserve trips using Short Message Service text messaging. As opposed to traditional flat fare payments for shuttle service, GO Connect's dynamic pricing was demand-based and had a maximum fare of \$1.95 per trip. According to the app developer, more than 105 riders switched from driving alone to ridesharing with RideCo during the pilot program.



Between August 2016 and February 2017 in Centennial, Colorado, the [Go Centennial Pilot](#) provided people who lived within the existing Regional Transportation District Call-n-Ride service area with free Lyft Line rides to and from the Dry Creek Light Rail Station. For users with limited mobility, Via Mobility Services provided accessible transportation services to Lyft passengers. The City of Centennial and the Denver South Transportation Management Association each contributed \$200,000 to fund the six-month pilot.

In Pinellas County, Florida, the Pinellas Suncoast Transit Authority's [Direct Connect](#) program pays the first \$5 of passengers' Uber and taxi bills for trips to and from bus stops in eight designated zones. Trips must begin or end at the designated stop and be within the zone. The service is available seven days a week from 6 a.m. to 11 p.m.

In 2016, Alamonte Springs, Florida began subsidizing 25 percent of the cost to use Uber between the city's commuter train station on Ronald Reagan Boulevard and any destination within the city. The pilot expanded to [an inter-city partnership](#) whereby Altamonte Springs, Lake Mary, Longwood, Maitland, and Sanford offered discounted Uber travel between the five cities. As part of this pilot expansion, each city pays 20 percent of Uber fares for trips that begin in another city but end in their city, 20 percent of Uber fares that end within their respective city limits, and 25 percent of the cost of rides that begin or end at the SunRail station inside of their city.

The [City of Summit in New Jersey](#) partnered with Uber to create a commuter ride-hail pilot program to ease parking and traffic congestion at the New Jersey Transit Summit Station. The program provided up to 100 existing parking permit holders with free Uber rides to and from the station. Non-permit holders were provided with discounted uberX rides costing the user \$2 per trip or \$4 daily – equal to the \$4 daily rate for Transit Summit Station parking. The pilot program took place from October 3, 2016, to March 31, 2017.



Washington Metropolitan Area Transit Authority partnered with Enterprise Carshare in 2015 to allocate space for 125 carshare parking spaces at 45 Metrorail stations in Washington, District of Columbia.

The City and County of Denver now allow carshare operators to purchase parking permits to park in the right-of-way or at metered spots. Permit revenue pays for the loss of meter revenue, the value of on-street parking spaces, and administration costs.

In Seattle, the free-floating carshare service ReachNow offers two drop zones citywide for carshare vehicles in busy neighborhoods. As a result, shared mobility has become a more competitive alternative to driving alone for many people, and the demand for parking personal vehicles on the street has been reduced. As in Seattle, transit agencies could consider providing full-time or part-time drop zones as part of establishing a mobility hub.

Metro Transit in the Minneapolis–St. Paul area aimed to provide users with one transportation account to pay for bus and light rail and to access HOURCAR’s carshare fleet. The transit agency partnered with the carshare service HOURCAR to enable users to use their Metro Transit Go-To Cards to unlock reserved vehicles by swiping the Go-To card on the reader. The companies used a United States Department of Transportation (U.S. DOT) grant to upgrade the technology in HOURCAR’s vehicles to read Metro’s Go-To Cards.

## **B. Special Assessment Districts**

### ***The idea***

A Business Improvement District (BID) is an area in which a group of businesses elects to pay additional fees to fund services or improvements that will benefit all businesses equally. These can include public amenities such as street cleaning, pedestrian infrastructure, security, or lighting. They also can include private benefits such as advertising or events. There are many BIDs in the San Diego region, including 18 active districts within the City of San Diego. Similarly, PMDs are areas in which the revenues collected from parking fees (e.g., at meters and garages) are used to help manage demand for parking within the district. PMDs historically have served to increase parking for private automobiles, but are increasingly managing parking demand with multimodal and sustainable transportation solutions. Special assessment districts typically are used to fund low-cost mobility hub features that contribute to a district’s overall identity, such as wayfinding. However, they also can fund mobility hub initiatives that are designed to help increase business patronage. These initiatives include microtransit service, bikeshare, and partnering with on-demand rideshare service providers to give people greater access to commercial retail.

### ***Where it has been done***

The City of San Diego recently partnered with The Free Ride to introduce a complimentary microtransit service known as [Free Ride Everywhere Downtown, or FRED](#). The service provides complimentary rides within the Downtown Community Parking District boundaries using all-electric six-passenger vehicles. The service helps to promote “park once” behavior while also providing connections to and from major transit stations. Parking meter revenues and corporate sponsorships pay for the program.

## **C. General Sponsors**

### ***The idea***

Corporate sponsorship of bikeshare and other transportation programs also is growing. Sponsors pay for large parts of the program and in exchange they can advertise their company on nearly every element of the system. In the case of bikeshare programs, sponsored components might include bikes, bikeshare stations, program materials, the program’s website, and more.

### ***Where it has been done***

Launched in 2016, Portland's bikeshare system, Biketown, is operated by Motivate. Nike, Inc. entered into a partnership agreement with the City of Portland [to sponsor](#) Portland’s bikeshare program for \$10 million over five years.

[Citigroup and MasterCard sponsor](#) the New York City Citi Bike program with combined payments of \$47.5 million over five years in exchange for having their brand names on bikeshare system infrastructure including bikes and stations.

## **D. Technology Companies**

### ***The idea***

Public agencies have begun to partner with developers of various mobile apps and websites to support mobility through online payment systems, trip planning, and other services.

### ***Where it has been done***

In recent years, multiple partnerships have emerged to produce mobile payment apps, including partnerships between:

- [Dallas Area Rapid Transit \(DART\) and Unwire](#)
- [New Jersey Transit and Xerox](#)
- [Nassau Inter-County Express and Masabi](#)
- Central Midlands Regional Transit Authority and Passbort

- [Chicago Transit Authority and GlobeSherpa](#)
- In the San Diego region, the [Metropolitan Transit System \(MTS\)](#) partnered with [moovel North America](#) to produce Compass Cloud, an app that allows people to purchase trolley passes with their mobile phones. Compass Cash, a stored-value transit fare program, launched in June 2017.

Partnerships also have formed to help people plan their trips, for example:

- The [Go-LA wayfinding app](#) aggregates all available transportation modes and allows travelers to calculate the time, cost, and carbon footprint of each option for a particular route. The app was produced through a [partnership between the City of Los Angeles and Xerox](#).
- A trip planning app called GoPass, created by DART, offers users the ability to access [services](#) such as Uber, Lyft, and Zipcar. Users can reserve and manage these trips to get to and from DART transit stations.
- The Central Texas Regional Mobility Authority [created a Mobility Authority](#) that partners with technology companies to address overburdened transportation networks and to apply new, multimodal solutions to transportation problems. Partners include [Carma Carpooling](#), a carpooling app, and [Metropia](#), a traffic-management system that helps motorists navigate construction closures and delays.

## E. WiFi Hotspot Investments

### ***The idea***

Providing WiFi at a mobility hub can help travelers pass the time as they're waiting for their ride and give them increased access to important transit information. Across the United States, the demand for WiFi on public transit is high, and research suggests that [providing WiFi may help increase ridership](#). There are a variety of [ways to fund WiFi service](#) on mass transit and at busy transit hubs, including through direct sponsorship by technology and advertising companies, advertisements that appear when accessing WiFi, and/or charging travelers for the service. Local [communications companies](#) and major cellular service providers are potential partners for offering WiFi service at mobility hubs in the SANDAG and ICTC regions.

### ***Where it has been done***

The Anaheim Regional Transportation Intermodal Center (ARTIC) serves as a regional transportation hub for a variety of transportation services including commuter rail, buses, shuttles, taxis, and bikes. [ARTIC](#) also provides retail and dining services, WiFi, charging ports, secure bike parking, lockers, and parking to make commuting more convenient and comfortable.

Chicago's Metra rail system contracted with Xentrans to [provide free WiFi](#) service at all of its downtown stations as well as on multiple rail lines. Metra hopes to expand this service and [is currently seeking partners](#) to reduce costs.

## V. ESTABLISHING A FRAMEWORK FOR SUPPORTING MOBILITY HUBS THROUGH LOCAL PLANS, POLICIES, AND PROGRAMS

Local plans can guide the development of mobility hubs within cities and neighborhoods, outlining everything from broad policy goals for a city to specific design standards for a particular street. These documents can support mobility hub implementation in several ways, which are summarized in Table 2.

**Table 2: Ways in which local plans and policies can support mobility hubs**

Type of support	Definition	Examples
General support	High-level policies that define mobility hubs and encourage the development of mobility hubs at key locations.	Active support of Long Beach Transit’s efforts to establish mini-transit hubs throughout the city. ( <a href="#">City of Long Beach Circulation Element</a> , Movement of People Implementation Measure 41)
Support for specific mobility hub features	Policies that generally encourage features such as improved waiting areas, bike parking and lockers, EV chargers, or first- and last-mile shuttle services at transit stations.	Provision of bike racks, lockers, and showers at city parks and at the future transit center downtown. ( <a href="#">El Centro Bicycle Master Plan</a> )  Identification of how specific mobility hub features such as comfort stations, EV chargers, bikeshare, and parking management measures could be implemented over time. ( <a href="#">Carlsbad Coastal Mobility Readiness Plan</a> )
Improving connections to mobility hubs	Plans or policies that specify the location of new bike/pedestrian facilities and connecting transit services, making it safer and more convenient to travel to transit stations.	Encouraging and promoting quality pedestrian access to the COASTER and SPRINTER stations; working with North County Transit District (NCTD) to provide accessible pedestrian facilities at transit stops. ( <a href="#">Oceanside Pedestrian Master Plan</a> , Objective 5–Alternative Transportation)
Indirect support for mobility hubs	Land use policies that support transit and citywide measures to manage transportation demand.	Exercising flexibility in applying parking standards to support transit-oriented development. ( <a href="#">Vista Circulation Element</a> , CE Policy 8.5)

There is no “one size fits all” approach to supporting mobility hubs through local plans and policies. This is because there are overlapping opportunities to include policies that support mobility hubs in generalized planning documents that guide citywide development, as well as in specialized planning documents that focus on specific transportation modes or areas in a city. Local governments should take advantage of these opportunities as they update their plans and policies.

## **VI. EQUITABLE IMPLEMENTATION**

When establishing mobility hubs, SANDAG, ICTC, and their partners must take special care to ensure that mobility hubs benefit low-income, minority, and senior residents of the region. These groups are more likely to rely on transit and other alternatives to driving alone and often are underrepresented in transportation decision-making. The Equity Considerations Memo provides a summary of key considerations for achieving social equity at mobility hubs that can be acted upon as mobility hubs are planned and established. Some best practices for considering social equity include:

### **A. Outreach and education**

San Mateo County Transit District runs a [Mobility Ambassador](#) program that trains volunteers to help seniors and people with disabilities plan trips. The [Mobility Ambassador Program](#) in Centennial, Colorado, trains seniors to give seminars to their peers about using modern transportation tools and services. Portland, Chicago, and other cities include shared mobility options in their individualized marketing programs. These programs offer targeted populations personalized information on transportation options.

### **B. Serving low-income populations**

A growing number of transportation stakeholders are experimenting with extending the benefits of shared mobility services to low-income communities and other disadvantaged populations. For example, the City of Los Angeles is now running a three-year [EV carsharing pilot](#) program focused on low-income communities. The program is funded by the California Greenhouse Gas Reduction Fund. To help people who do not have a bank account or credit card but want to use shared mobility services, agencies can work with shared-mode operators to ensure that payment options that do not require a bank card are accepted. More comprehensive approaches also can be taken, such as developing partnerships with local banks, credit unions, or nonprofit organizations to establish a system for prepaid cards or other payment options that don’t require ATM or credit cards. An organization in Washington, District of Columbia created an escrow account to offer debit cards for users without bank accounts.

Public agencies and other organizations also can cover upfront costs to help low-income people access transit options at mobility hubs. For example, the bikeshare program in Chicago, managed by the Chicago Department of Transportation, subsidizes enrollment fees for low-income people through its [Divvy for Everyone](#) program. Qualified participants can go to a Local Initiatives Support Corporation Financial Opportunity Center and pay \$5 for a one-year membership – a significant discount from the normal cost of \$75 per year. Participants can pay use fees in cash at participating 7-Eleven and Family Dollar Stores.

### **C. Serving seniors**

Some ride-sourcing partnerships are specifically aimed at improving mobility for seniors. [Freedom in Motion](#), a subsidized on-demand program for seniors, is the product of collaboration among the City of Gainesville, Uber, ElderCare, and the Gainesville Area Chamber of Commerce. Riders receive a copay of up to \$5 along with smartphones donated by Wells Fargo.

In the future, autonomous vehicle technology could enhance personal mobility for disadvantaged groups. Shared fleets of autonomous vehicles could be deployed to provide on-demand mobility options for seniors, the disabled, low-income people, and other populations that are dependent on transit.

## **VII. EARLY ACTIONS**

This section presents a short list of early actions that can serve as catalysts for the full implementation of mobility hubs.

### **A. SANDAG and ICTC**

- Identify potential showcase projects based on the density of transit service, compatible land uses, and existing mobility hub amenities.
- Provide guidance and technical support for establishing mobility hubs at the local level.
- Evaluate the criteria of current grant programs to support mobility hubs.
- Evaluate and amend procurement processes to reduce barriers to testing innovative partnerships while continuing to meet the regulatory needs of public agencies.
- Develop a “Mobility Sandbox” Request for Information to solicit innovative proposals for implementing mobility hub features.
- Partner with public and private entities to pursue sources of federal and state funding that are compatible with implementing mobility hubs.
- Leverage the U.S. DOT Autonomous Vehicle Proving Ground designation to carry out innovative mobility hub pilot projects. Help local cities plan for a connected and autonomous future.

### **B. MTS, NCTD, and Imperial Valley Transit**

- Amend transit station design guidelines to support mobility hub implementation and provide flexibility for change as technology and travel behavior and patterns evolve over time.
- Allocate space for shared services such as on-demand shuttles and rideshare companies, and consider the flexible use of that space where necessary.

- Incorporate mobility hub elements in future joint development projects.
- Partner with shared mobility service providers to integrate shared mobility services into a platform for trip planning and payment.
- Conduct pilot projects that showcase the integration of shared mobility services with transit or that provide viable on-demand replacements for underperforming routes.

**C. Local Government**

- Amend the development review process to encourage developers to incorporate mobility hub features into their projects.
- Adapt off-street parking requirements to better align with mobility hub investments.
- Implement flexible curb space to meet the needs of shared mobility services and the changing demands of users.
- Educate developers, employers, BIDs, and other transportation stakeholders on the mobility hub concept and garner support.
- Account for a connected and autonomous future in local planning documents and policies.

**D. Private Service Providers**

- Communicate the value of prioritizing drop-off space over parking.
- Seek pilot projects that enhance transit and bring mobility options to commuters.
- Partner with government to test technologies and service concepts in real-world environments.

**E. Special Assessment Districts**

- Support mobility hub features that will directly benefit local business.
- Partner with private service providers to subsidize on-demand shared mobility where an unassisted market may not be able to sustain the service on its own.