

Transit Strategies

MOBILITY HUBS

Mobility Hubs are centers of multi-modal transportation, linking transit, active transportation, and car commutes and increasing the appeal of using shared modes.

Located around transit stations and key neighborhood locations, Mobility Hubs offer a density of transportation options at specific locations, often combined with public, commercial, or residential amenities. Hubs can be large or small depending on the needs of the surrounding communities and transit networks. The goals of Mobility Hubs are to:

- Create **convenient, safe, and accessible connections** between different modes of transportation at one location.
- Showcase the **appeal of using public transit, biking, or other shared modes** over driving private vehicles and increase the ability of residents to not own a personal car.
- Provide a **neighborhood gathering space** for commercial and residential life.

Many cities around the United States have developed mobility hubs, either from scratch or through gradual improvements to existing stations and park and ride lots. The concept of Mobility Hubs has evolved over the years due to changing technology trends: from a connection point between transit and cars with good wayfinding signage to a nexus of many modes, including new emerging mobility and connectivity through Wi-Fi and smartphones.



Mobility Hub Elements

The design and offerings of each Mobility Hub depends on location, need, existing infrastructure, and other variables. Mobility Hubs typically contain some combination of the following elements:

| | |
|---------------------|---|
| Public Transit | Buses, bus rapid transit, light rail, subway, commuter rail |
| | Real-time signage for wait times and delay alerts |
| | Transit store, kiosk, fare machines |
| Private Vehicles | Parking lot or garage |
| | Pick-up/drop-off area |
| | Electric vehicle charging |
| Bike Infrastructure | Bike racks, covered storage |
| | Bike repair stands |
| | Lockers, showers |
| Shared Mobility | Bike-share, scooter-share |
| | Car-share (one-way or traditional) |
| | Ride-hail (TNCs and taxis) pick-up/drop-off area |
| Other Amenities | Restrooms, pick-up waiting area |
| | Wi-Fi, cell phone charging stations |
| | Commercial services (retail, dry-cleaning, café) |
| | Nearby residential, commercial, and mixed-use developments |



Electronic sign in Boston, MA displays wait times and other announcements.



Bike hubs at some Los Angeles Metro stations provide secured parking, bike repairs, and rentals.

Image source: <https://thesource.metro.net>

Mobility Hub Connections

In addition to the physical amenities available, the connections between these amenities must be considered to create an effective Mobility Hub.

Fixed-Route Transit

Mobility Hubs with more than one transit line are transfer sites for riders. When possible, schedules should be coordinated so that the transfer is as convenient as possible. People should not have to wait long for their next train or bus, but also should not have to run from one to another with the risk of missing the connection.

Service to Other Areas

Mobility Hubs can act as gateways to surrounding areas with density too low or demand too infrequent for fixed-route transit. One major way is through providing a parking lot or garage so people can easily transfer from private vehicles to transit. These park-and-rides can also act as the meeting place for carpools.

Another potential use of Mobility Hubs is to connect to shuttle and microtransit services, and cities can work with providers to put in place pick-up/drop-off locations and wayfinding. Shuttles can be publicly-run, connecting small communities to transit, or privately-run through a Transportation Management Association (TMA), connecting transit to farther areas of employment and recreation. Microtransit services can bring riders into the fixed-route transit system at these hubs.

Transit Oriented Development

Mobility Hubs are prime sites for transit oriented development (TOD), anchoring mixed-use, high density communities located around public transit. Updating zoning codes and offering public incentives can encourage development around these hubs. More people living, working, and/or shopping near Mobility Hubs means that less private cars are needed to get around.

Mobility Hub Examples

Mobil Punkt, Bremen, Germany

The City of Bremen reduced demand for on-street parking and expanded car-sharing through mobility hubs called “Mobil Punkt.”

In 1998, Bremen started offering a smart-card fare system that integrated all area transit services and the City’s car-share program. The City later expanded this strategy into its mobility hub program, with goals to reduce congestion and emissions to targets in line with its 2025 sustainable mobility plan. For transit, these mobility hubs digitally display waiting times for buses and trams. Trams also receive priority at signalized intersections.



Mobil Punkt information kiosk

Source: www.carsharing.de



Car-share at Bremen Mobility Hub

Source: www.caresharing.de

The main train station has a full service bike station with rentals, supplies, repairs, storage, and washing. Other hubs have bike parking and protected two-way bike lanes, even on one-way streets.

Car-sharing memberships are available as fully integrated add-ons to transit passes, incentivizing car-sharers to use transit when not driving.

Library Lane, Ann Arbor, MI

Library Lane in Ann Arbor acts as a mobility and services hub, with different modes and public amenities.

In 2012, the City of Ann Arbor built the Library Lane parking structure adjacent to the main library, with four levels of underground parking and 700 spaces. Though not initially planned as a mobility hub, this parking garage is across the street from the regional transit service's main bus center. Other mobility services include a bike-share station, bike parking, and three car-share spaces. There is also an on-street bus stop for the express bus to the Detroit Metro Airport. Public amenities contributing to this mobility hub include public restrooms, drinking fountains, seating, and the library, and the usage of these amenities leads to more visibility of the transit options for the area.



Bike-share above parking and across from a transit center.

Source: Google Maps

Mobility Hubs | Los Angeles, CA

As an extension of the LA Mobility Plan 2035, the Mobility Hubs Program expands transportation options for a diverse range of users.



Metro Bike Hubs contain full repair services
<https://thesource.metro.net>



Wilshire/Vermont Metro Station as a Central Source: Mobility Hub.

Source: Google Maps

LA's planned mobility hubs are categorized into three typologies, listed below in increasing scale, each with its own requirements of services. The City has received \$8.4 million in federal JARC (Job Access Reverse Commute) funding to create 13 new hubs citywide.

- **Neighborhood Mobility Hubs** are for lower density neighborhoods and have the basics: transit, wayfinding, bike share, and bike parking.

- **Central Mobility Hubs** are for higher density areas, and may include car-share, ride-hail drop-off, bus shelter, real-time bus information, EV stations, and public space, beyond the basics in the Neighborhood Mobility Hubs.
- **Regional Mobility Hubs** can be found at the end of transit lines or in very dense areas. In addition to the amenities at Central Mobility Hubs, these tend to also have larger bike facilities, a bus layover zone, and retail.

40th Street Trolley Portal, Philadelphia, PA

The transformed 40th Street Trolley Portal acts as a crossroads of institutions and neighborhoods in West Philadelphia.

SEPTA, the City of Philadelphia, and neighborhood stakeholders partnered together to transform the busiest at-grade rail station in Philadelphia into a mobility hub. The Trolley Portal Gardens features a vibrant and social public space with landscaping, movable seating, and a restaurant to welcome trolley passengers in West Philadelphia.

The redesigned station opened in 2018 after extensive community input and is heavily traversed by residents, Penn students, and nearby medical workers.



40th Street Trolley Portal Gardens

Potential Mobility Hubs in Rhode Island

Rhode Island has the opportunity to develop mobility hubs to facilitate the use of transit and other alternative modes. These hubs could act as neighborhood-based focal points for transportation and placemaking, since providing better facilities surrounding transit will make transit more attractive

and convenient. Potential mobility hub locations that have been identified to date, and which are also shown on the map on the next page, include:

Regional Mobility Hubs, which would be large mobility hubs that serve regional centers:

- Kennedy Plaza
- Providence Station
- Jewelry District
- Pawtucket/Central Falls Station
- Woonsocket
- TF Green Airport
- Warwick
- University of Rhode Island
- Newport
- Wickford Junction

Community Mobility Hubs, which would be smaller and focused on providing mobility options for the immediate surrounding neighborhoods. Candidates for this type of hub includes village centers and other activity centers in suburban and outlying areas:

- Cranston
- Quonset Gateway
- Lincoln
- Olneyville
- Community College of Rhode Island
- South Kingstown
- Westerly
- Bryant University
- North Smithfield
- North Providence
- East Providence

Each potential mobility hub site would have specific needs depending on the surrounding communities and existing infrastructure. Like Los Angeles and other cities, RIPTA and RIDOT can classify these new hubs into different tiers. The following table shows a potential classification:

| Size | Location | Potential Amenities |
|--------|--|--|
| Small | Neighborhoods | Bus stop, bike parking, bike-share, real-time signage |
| Medium | Higher density areas | Above, plus car-share, parking, scooter-share, commercial services |
| Large | Downtown or end of major transit lines | Above, plus bike repair facilities, public space, restrooms, information kiosk |

Mobility hubs ideally will be created through collaborations between municipalities, RIPTA, and RIDOT. The following table shows a potential breakdown of the implementation responsibilities of each entity:

| Municipal Governments | RIPTA and RIDOT |
|--|---|
| <ul style="list-style-type: none"> ▪ Street conditions surrounding mobility hub ▪ Facilities and infrastructure for bikes, shared mobility, and private vehicles ▪ Amenities for public services ▪ Economic development surrounding mobility hub | <ul style="list-style-type: none"> ▪ Frequent transit services to mobility hubs ▪ Improvements to transit stops and stations ▪ Fare kiosks and machines ▪ Incentives and funding assistance |

Potential Mobility Hub Locations

