

Technical Memo

Date: September 10, 2026

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Subject: Mobility Infrastructure and Community Needs Assessment Summary

This memo presents amenities for the City of Boulder's five proposed downtown mobility hubs, explains how those amenities were identified, and describes what it will take to implement and sustain them over time. Mobility hubs bring together multiple ways of getting around alongside supporting amenities such as seating, shelter, wayfinding, and retail, allowing people to shift comfortably and safely between transportation modes. The goal is to transform each of the five garages evaluated in this memo (11th & Spruce, 10th & Walnut, 11th & Walnut, 14th & Walnut, and 15th & Pearl) from a parking facility into a multimodal gateway to Boulder.

The recommendations herein draw on two main inputs: A review of each garage's existing conditions and surrounding mobility infrastructure, and community engagement with residents, businesses, and disability advocates. The memo first summarizes the goals of the mobility hubs, the inventory of existing amenities, and key community engagement findings. It then evaluates which amenities are best suited to each garage based on its surrounding context, ownership structure, and site constraints, and closes with detailed specifications and space requirements to guide implementation.

Mobility Hub Goals and Inventory

This section outlines a toolbox of mobility hub amenities that can be tailored to the context and opportunities of each site. This toolbox is informed by national case studies, best practices, and community input. Amenities are in service of the following key elements of mobility hubs:

- **Seamless travel experience:** Mobility hub amenities that emphasize seamless travel experiences for first/last mile access and coordination of pedestrians, bicycles, micromobility devices, transit, ride hailing services, and people parking personal automobiles at the garages.
- **Innovative:** Guidance on user needs and hub elements such as dynamic wayfinding, real-time mobility service updates, integrated payments, curb access, and retail and convenience amenities, all of which will enhance and support future mobility-as-a-service innovations.
- **Co-benefits and function:** Identify Boulder-specific design features, such as integration with outdoor spaces and neighborhood character, that give mobility hubs broader value beyond mode transfer, and design each hub's orientation and offerings to reflect its mobility context.

- **Flexible:** Openness to emerging community-generated ideas not previously identified in the scope. Identification of flexible space or amenities that could be phased into the mobility hubs or easily adjusted to accommodate flexible use of space.

Table 1 identifies the potential mobility hub amenities that have these qualities. The amenities have been split into four categories: Comfort & Safety, Multimodal, Information & Wayfinding, and Social & Commercial. Examples of each of these categories of amenities can be seen in **Figure 1**, **Figure 2**, **Figure 3**, and **Figure 4**. The following sections detail how each of these apply to the future mobility hubs.

Table 1 – Mobility Hub Amenities

Comfort & Safety	Multimodal Infrastructure	Information & Wayfinding	Social & Commercial
Seating	Secure Bike Parking	Wayfinding Signage	Art
Lighting	Shared E-Scooters/E-Bikes	Real-Time Travel Info	Commercial & Mixed-Use Space
Emergency Phone	Transportation Network Company (TNC) Pick-Up/Drop-Off Space	Staff Members	Gathering Space
Shelter	Carshare		
Restrooms	EV Chargers		
Drinking Fountain			
Storage Lockers			
Device Chargers			

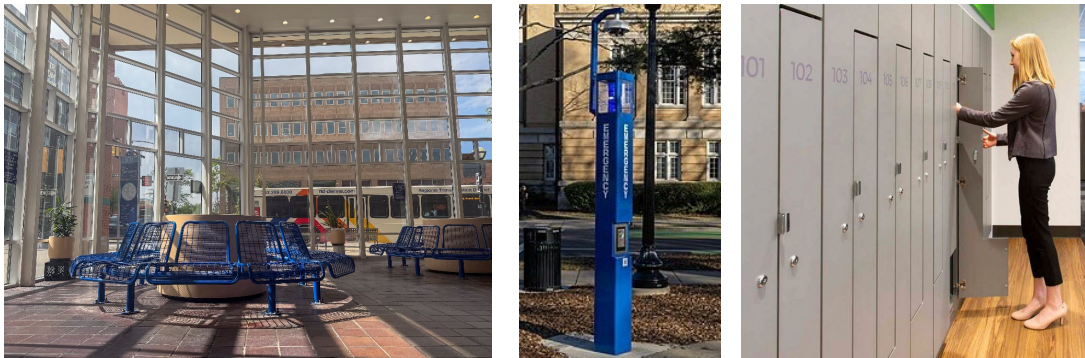


Figure 1 – Examples of comfort and safety amenities (left to right: indoor waiting area, emergency phone, storage lockers).

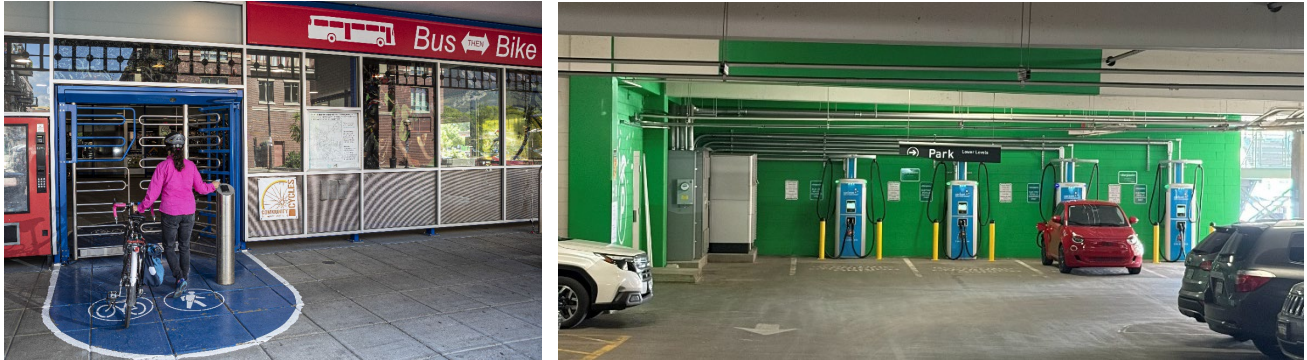


Figure 2 – Examples of multimodal amenities (left to right: secure bike parking, EV charging)

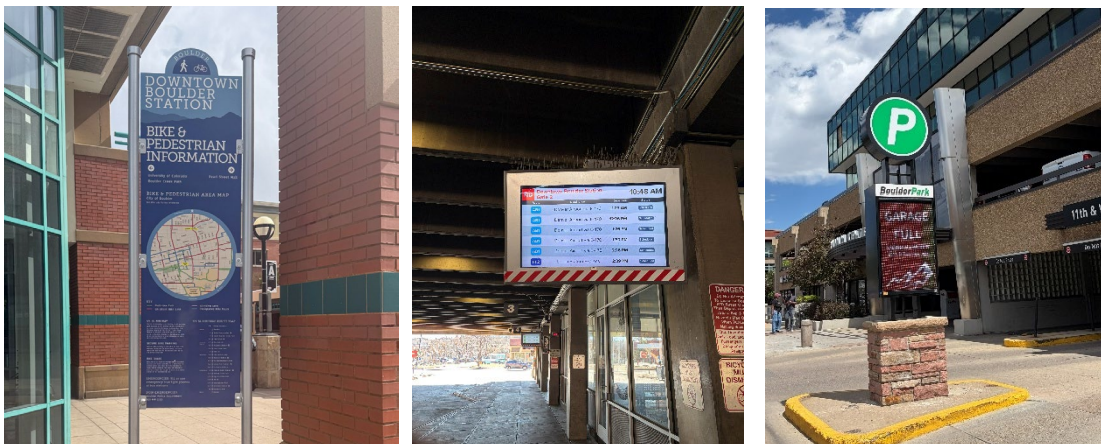


Figure 3 – Examples of information and wayfinding amenities (left to right: wayfinding, real time transit and parking information)

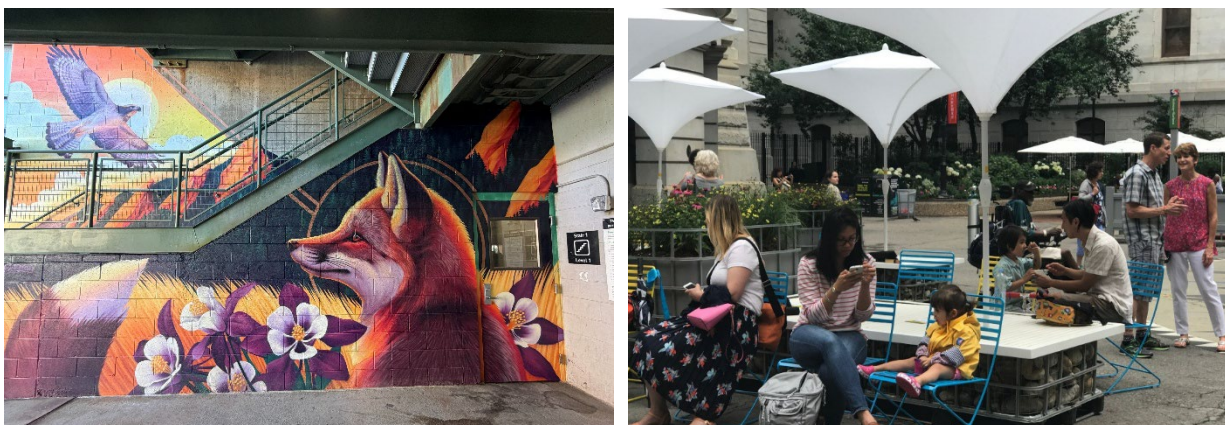


Figure 4 – Examples of social and commercial amenities (left to right: art, gathering space)

Existing Inventory

To understand the scope of work needed to bring each mobility hub up to a consistent standard of amenities, we reviewed all five garages to catalog which amenities are already in place. This inventory establishes a baseline for each location and highlights where investment is most needed. The results of this review are presented in **Table 2** through **Table 5** below, organized by amenity category. In each table, a checkmark (✓) indicates that the amenity is present at that garage, while an **X** indicates that the amenity is absent.

Table 2 – Comfort & Safety Amenity Inventory

Amenity	11 th & Spruce	10 th & Walnut	11 th & Walnut	14 th & Walnut	15 th & Pearl
Seating	✓	✓	✓	✓	✓
Lighting	✓	✓	✓	✓	✓
Emergency phone	X	X	X	X	X
Shelter	X	X	X	✓	✓
Restrooms	X	X	X	✓	X*
Drinking fountain	X	X	X	X	X
Storage Lockers	X	X	X	X	X
Device Chargers	X	X	X	X	X

* The restroom at 15th & Pearl is keycode access only, and is not considered a public amenity.

Table 3 – Multimodal Infrastructure Amenity Inventory

Amenity	11 th & Spruce	10 th & Walnut	11 th & Walnut	14 th & Walnut	15 th & Pearl
Secure bike parking	✓	✓	✓	✓**	✓
Shared scooters/bikes	✓	X	✓	✓	✓
Car share	X	X	X	X	X
EV chargers	✓	✓	✓	✓	✓
TNC drop-off space	X	X	X	✓	X
Transit stop	X	X	✓	✓	✓

** The bike parking room at 14th & Walnut is currently managed by Boulder County.

Table 4 – Information & Wayfinding Amenity Inventory

Amenity	11 th & Spruce	10 th & Walnut	11 th & Walnut	14 th & Walnut	15 th & Pearl
Wayfinding signage	X	X	✓	✓	X
Real-time transit info	N/A	N/A	X	✓	X
Staff	X	X	X	✓	X

Table 5 – Social & Commercial Amenity Inventory

Amenity	11 th & Spruce	10 th & Walnut	11 th & Walnut	14 th & Walnut	15 th & Pearl
Art	✓	✗	✗	✗	✓
Commercial & mixed-use space***	✓	✗	✓	✓	✓
Gathering space	✗	✗	✗	✓	✗

***Commercial & mixed-use space is only considered to be a garage amenity if there is a business within the same structure as the garage.

Inventory Summary

Across all four categories, 14th & Walnut is the garage with the most existing amenities, offering amenities that none of the other garages currently provide. However, community input indicates that even at this relatively well-equipped location, the existing facilities would benefit from better maintenance and security to make them more comfortable and inviting to use.

The remaining four garages are underserved in several categories. All five locations lack an emergency phone and a drinking fountain, and only 14th & Walnut and 15th & Pearl offer shelter. Information and wayfinding amenities are similarly limited, with wayfinding signage present at only two of the five garages. Social and commercial amenities are also sparse system-wide: art is present at only two locations, gathering space is only present at one, and not all commercial & mixed-use spaces cater to garage users.

Multimodal infrastructure is the strongest category overall. All five garages already provide bike parking and EV chargers, and four of the five offer nearby access to shared e-scooter corrals and shared e-bike stations. The two notable gaps in this category are car share, which is absent at every garage, and TNC drop-off space, which is provided only across the street from 14th & Walnut.

Community Outreach

Overview

To inform the mobility hub concept plans, the project team gathered input through multiple engagement channels, including focus groups with downtown business and community organizations, two Community Partners meetings, pop-up intercept events at each of the garage locations, a targeted session with disability advocacy groups, and a public questionnaire distributed to downtown users.

These efforts captured perspectives from residents, employees, visitors, and people with varying mobility needs, identifying shared priorities and location-specific concerns to shape amenity recommendations tailored to each of the five garages. Each engagement channel was designed to reach a different audience and gather distinct types of input.

Focus groups brought together representatives from downtown business and community organizations to discuss mobility hub concepts from an operational and business-community perspective. These included the Boulder Chamber, Community Cycles, Visit Boulder, and the Downtown Boulder Partnership.

Community Partners meetings consisted of two sessions open to a broader group of relevant community members. The first meeting explored overarching mobility challenges and opportunities across the garage network, while the second focused on specific amenity preferences and design direction, supported by a ranking activity comparing priorities across all five garages.

A targeted disability advocacy session brought together representatives from Mobility for All, the Center for People with Disabilities, and After Sight to identify accessibility barriers and priorities that may not have surfaced through general public engagement, ensuring the concept plans reflect the needs of people with varying mobility and sensory needs.

An online public questionnaire gathered input directly from downtown users to capture broader community perspectives on current garage use and desired improvements. This effort was promoted through intercept events (as seen in **Figure 5**).

The sections below summarize the key findings from each engagement effort.

4 focus groups

5 pop-up events

71 questionnaire responses



Figure 5 – The 14th & Walnut intercept event, gathering input on the garages.

Challenges

Wayfinding, Accessibility, and Safety

Across all engagement efforts, wayfinding and communication emerged as the most consistent concern, with comments about garages looking alike (and indistinguishable from each other), signage and payment systems (including the ParkMobile app) being confusing, and visual cues being inconsistent within and across sites. Community members also described confusion upon exiting garages on foot, often unsure which side of the building they had emerged on or which street they were facing. It should be noted that wayfinding improvements are already underway in the garages as part of a separate project and are likely to address much of this confusion.

For people with disabilities, wayfinding for low-vision and blind users, clear indication of accessible parking availability, and van-accessible spaces with ramp clearance were top priorities, and participants emphasized that ADA compliance alone does not guarantee a space feels truly accessible. Many attendees at the disability-focused session noted they had never used Boulder's garages at all, largely due to concerns about inaccessibility, and suggested rebranding the facilities away from "parking garage" to reflect their broader role in serving people.

Cleanliness and safety were recurring concerns, particularly at the 14th & Walnut garage, where the presence of unhoused individuals during off-hours was repeatedly flagged. Participants also emphasized clear, unobstructed pathways free of blind spots near parked or backing vehicles as important to feeling safe moving through the garages.

Bicycle Infrastructure

Bike security and storage were dominant themes across every group. Participants criticized 14th & Walnut's secure bike parking as poorly monitored, managed, and maintained, describing existing bike rooms as having few secure racks, weak access control, and an uninviting feel that sometimes discourages people from entering alone. Participants also noted frustration with having to request a key to access the bike room rather than being able to enter immediately. Storage lockers were a popular alternative, and participants called for better access control, more "eyes on the street" self-policing, e-bike charging, a repair bench, and clear wayfinding for any bike room or bike parking area. It should be noted that the City does not have the resources to manage off-street secure bike parking on its own, and currently partners with Boulder County to manage the 14th & Walnut bike storage.



Figure 6 – Bicycle parking outside of Trident Booksellers (Boulder, CO). Source: Google Maps.

The ranking activity conducted during the second Community Partners meeting confirmed this priority, with secure bike parking scoring consistently high across all five garages. Participants pointed to Trident Booksellers (as seen in **Figure 6**) and Ozo Coffee East Pearl as examples of converting parking spaces into bike parking.

Rideshare

Rideshare and paratransit pick-up/drop-off were consistent challenges, especially on one-way streets where vehicles often stop in the wrong place or on the wrong side of the street and are difficult to locate. Participants also raised concerns that rideshare vehicles sometimes park temporarily near curb cuts, blocking access for people using mobility devices to exit the sidewalk. Community members pointed to the St. Julien's dedicated valet area as a good model and suggested clearly numbered pick-up spots, better coordination with rideshare companies, and improved wayfinding during event-related closures as ways to address this.

Opportunities

On amenities and design, participants wanted the hubs to feel "activated" rather than purely functional, citing ideas such as flexible, non-permanent spaces like pop-up food trucks and rotating vendors, community-made or tactile art, playgrounds, quiet low-sensory space, and rooftop activations. Other desired amenities included charging stations, trash cans, changing tables, accessible seating, and larger bike or cargo bike parking, along with trained staff to help visitors navigate the space.

Finally, participants saw real opportunity in the mobility hub concept itself: several suggested it could promote a "park once" mentality, serve as a regional collection point for downtown access, support visitors headed to Rocky Mountain National Park and other regional points of interest, and reposition the existing garages as mobility information hubs rather than purely parking facilities. Residents were described as generally hesitant to use garages, preferring free or lower-cost parking that felt more obviously available, while visitors were more focused on amenities like luggage storage, reflecting the differing needs these two groups bring to the hubs.

Questionnaire Results

The project team received feedback from the public through an online questionnaire asking how people use the garages today, the quality of their experiences, and what they think needs improvement. The questionnaire received 71 responses, with the largest share of respondents identifying as people who live near, work in, or regularly visit downtown. As shown in **Figure 7**, most reported using the five city-owned garages a few times a week or less. Respondents skewed toward white (86%) and ages 25–54 (57%), a demographic profile that should be kept in mind when weighing the results.

Frequency of Use of Downtown Boulder Garages

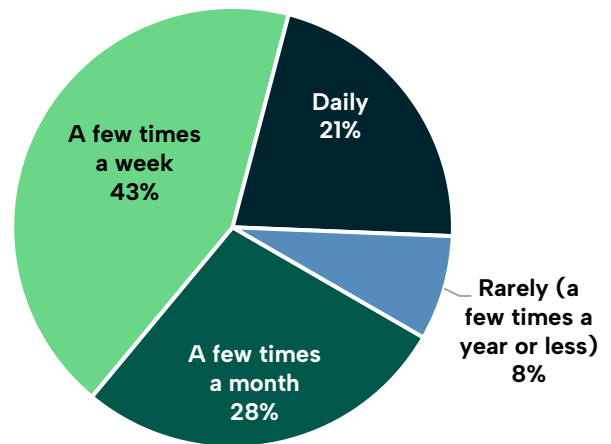


Figure 7 – Survey responses to how often respondents use the Downtown Boulder garages.

Respondents also skewed toward cyclists, with 41% biking downtown, likely reflecting how the questionnaire was distributed. The questionnaire was spread primarily by focus group participants and Community Partner group members sending it out to their networks, and Community Cycles appears to be disproportionately represented among responses. In part and likely because of the number of cyclists responding, the lack of secure bike parking and not driving were the two most common reasons given for not using the garages. Among respondents who do drive, the main concerns cited were parking costs and personal safety. The responses of all survey respondents compared to drivers are shown in **Figure 8**. Given this skew in the respondent pool, it will be

Barriers to Using Garages for Drivers vs All Respondents

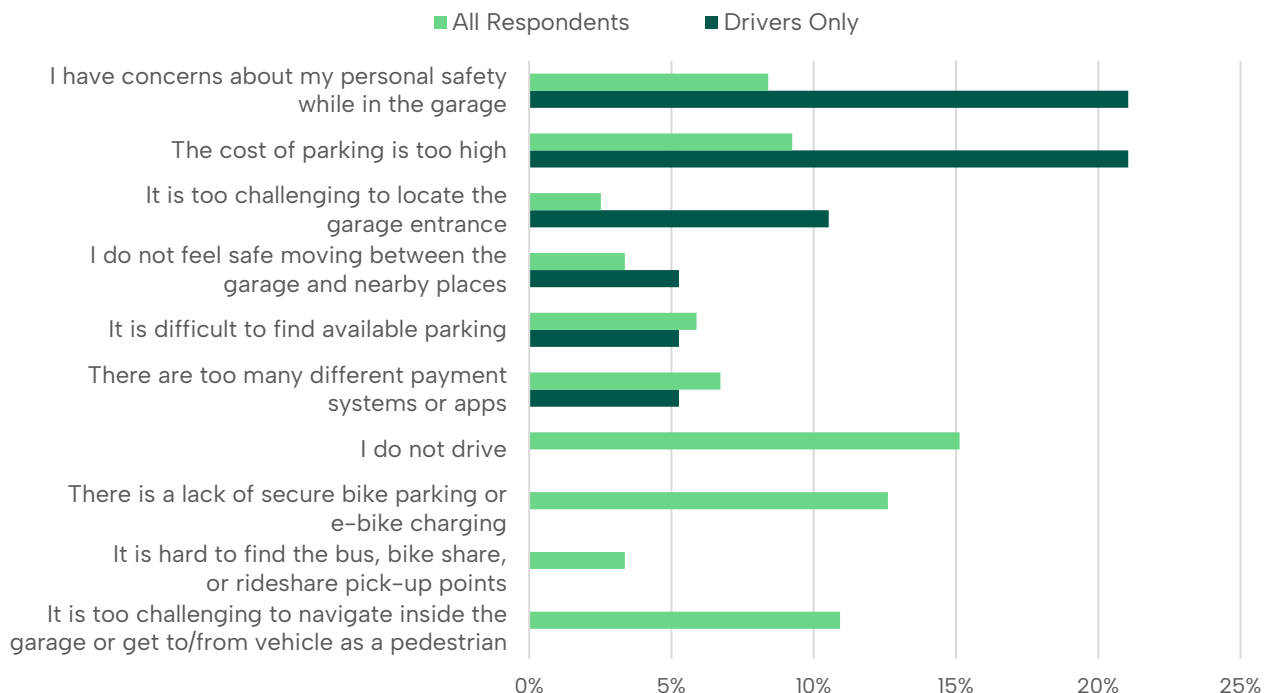


Figure 8 – Questionnaire responses to what barriers prevent garage use for all respondents vs. drivers.

important to ensure recommendations address the needs of all users across all travel modes, not just those most represented in the questionnaire.

In the open comment section, the strongest recurring theme was unmet demand for secure, enclosed, well-lit, and monitored bicycle parking. Several respondents said theft concerns kept them from biking at all or from riding more expensive bikes and e-bikes. The existing RTD bike room and bike parking area were seen as inadequate. Those who did bike often credited protected paths, direct routes, and nearby bike lanes for making it a viable option. Proximity to downtown mattered too, with nearby residents saying walking or biking was simply the easy choice.

Across all modes, convenience and travel time were the deciding factors in how people got downtown. Many avoided driving altogether in favor of biking, walking, transit, or carpooling, often citing parking costs or the hassle of finding a spot. Transit was praised when frequent and direct, and some respondents combined modes, pairing transit with biking, or using BCycle for the last mile. Driving still made sense for some: respondents cited children, older adults, purchases, multiple stops, or longer distances, with the appeal rooted in necessity rather than a preference for driving.

Frustration with app-based payment systems was widespread, with respondents concerned about account creation, banking information requirements, and fear of large fines.

The comments also pointed to varied experiences by garage: 11th & Spruce was described as convenient; 14th & Walnut as dirty, unsafe, and poorly maintained; and 10th & Walnut as difficult to maneuver. Several respondents with larger vehicles said they could not use the garages due to low clearance.

A selection of quotes from the open comments section can be seen below:

I work at the Randolph Center but never drive to work. I very rarely drive within Boulder City, preferring bus or bike. I would support less infrastructure space dedicated to cars and more dedicated to bikes, people, and public transit.

... the entire downtown area is hostile to Lime scooters, it is far harder to park a Lime scooter than it is to park a car, and the designated parking area closest to the bus station is across two streets from the actual bus station...

The garage at 1100 Spruce is convenient and easy to navigate, and the garage on Walnut at the St. Julien also feels easy and safe. The garage above the downtown bus station is a very different experience – often dirty, smelly, difficult to navigate and unsafe feeling.

Mobility Hub Opportunities

Transportation Amenity Compatibility with Mobility Hubs

Not every mobility hub requires the same set of amenities. Differences in available space, demand, and surrounding land use mean that each hub location is best suited to a different combination of uses. Rather than applying a uniform amenity package across all five garages, the recommendations below are grounded in community engagement and the surrounding conditions at each site, including bicycle infrastructure, micromobility parking, transit access, car share proximity, TNC pick-up/drop-off (PUDO) patterns, and garage ownership. Together, these factors help identify which amenities are likely to perform well at each location and where constraints may limit what can realistically be developed. A summary of the priority mobility hubs for each type of mobility amenity can be seen in **Table 6**. A checkmark (✓) indicates that the amenity type should be prioritized at that hub, and an **X** indicates that the amenity should be a lower priority at the hub.

Table 6 – Transportation Amenity Prioritization by Mobility Hub

Amenity	11 th & Spruce	10 th & Walnut	11 th & Walnut	14 th & Walnut	15 th & Pearl
Bicycle Infrastructure	✓	✓	✓	✓	✓
Shared Scooters/Bikes	✓	✓	X	X	X
Transit Infrastructure	X	X	✓	✓	✓
Carshare	✓	✓	X	✓	✓
TNC Pick-Up/Drop-Off	✓	✓	✓	X	✓

Bicycle Infrastructure

Priority Mobility Hubs: 11th & Spruce, 10th & Walnut, 11th & Walnut, 14th & Walnut, and 15th & Pearl

As seen in **Figure 9**, 11th & Spruce, 10th & Walnut, 11th & Walnut, and 14th & Walnut are the best connected to the surrounding bike network, making them the strongest candidates for amenities such as bike parking, repair stations, or other bicycle infrastructure. By contrast, 15th & Pearl is not directly adjacent to a bike lane or bike route, though it remains close to bike facilities and a bike share station. The site should still be prioritized for bicycle-related amenities, paired with improved connections to the broader bike network through other planned work and the forthcoming downtown study. Bicycle amenities could be located inside the garages at each site, except at 10th & Walnut – since that garage is underground, the amenities would need to be placed in an alternate, exterior location.

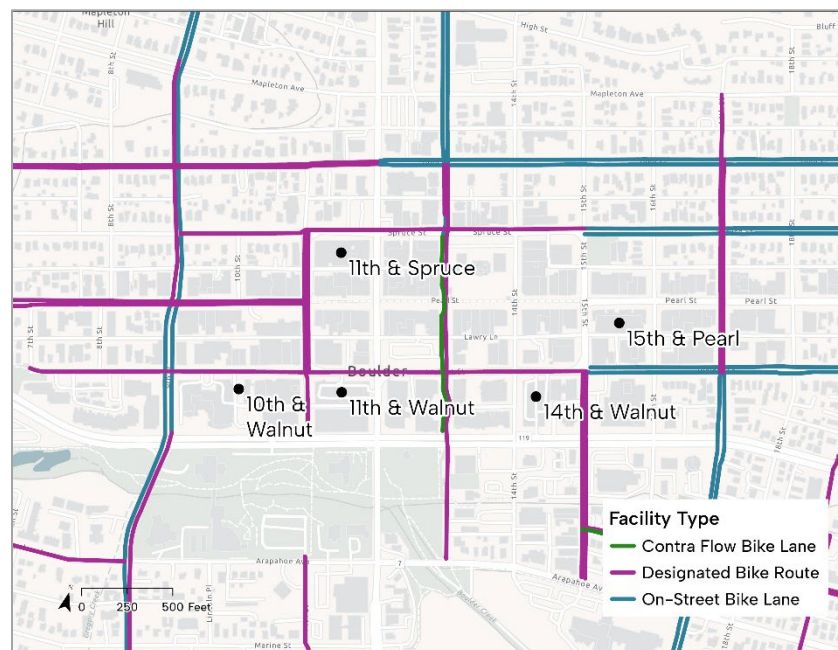


Figure 9 – Bicycle facilities surrounding the proposed mobility hubs. Source: City of Boulder.

Shared Scooters/Bikes

Priority Mobility Hubs: 11th & Spruce, 10th & Walnut

Shared scooter/bike (micromobility) access varies notably across the five hubs. As seen in **Figure 10**, 15th & Pearl is the closest garage to a BCycle station, while 11th & Walnut sits near multiple Lime Groves, making them a lower priority for additional micromobility infrastructure. Both would still benefit from bringing bikeshare and scooter share closer to the garages, and from expanding capacity to strengthen multimodal connections. 10th & Walnut and 11th & Spruce are the most isolated from micromobility infrastructure, which may present an opportunity to introduce new bikeshare or scooter parking at these hubs to fill a gap in current coverage.

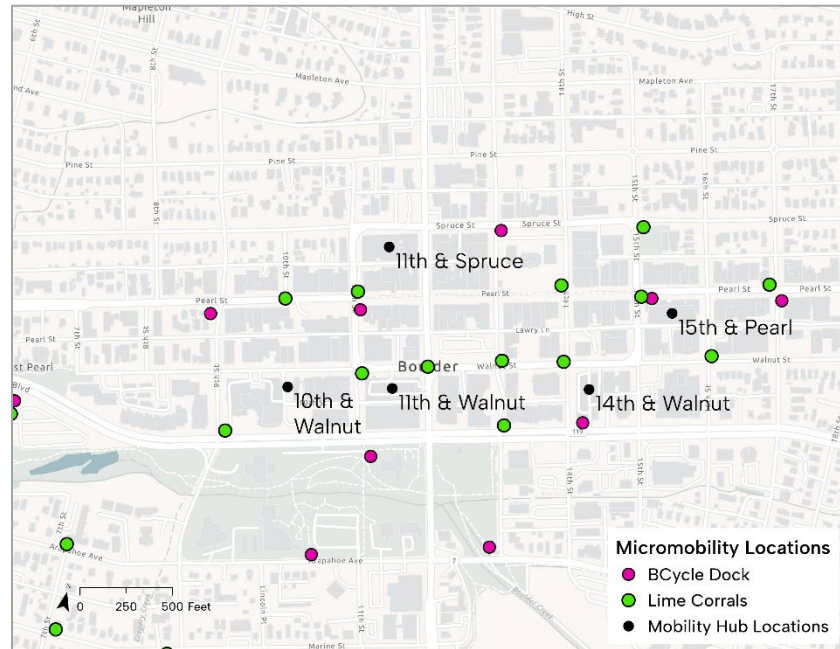


Figure 10 – Micromobility infrastructure surrounding the proposed mobility hubs. Source: City of Boulder.

Transit Infrastructure

Priority Mobility Hubs: 11th & Walnut, 14th & Walnut, and 15th & Pearl

As shown in **Figure 11**, transit connectivity is strongest at 14th & Walnut since the garage is on top of the Downtown Boulder Station. 15th & Pearl and 11th & Walnut are located adjacent to transit stops, making them well-suited for transit-supportive infrastructure such as shelters, wayfinding to the nearest stop, and real-time arrival displays. The remaining mobility hubs do not have transit stops, so transit-related amenities would not be applicable unless new transit service is introduced there in the future.

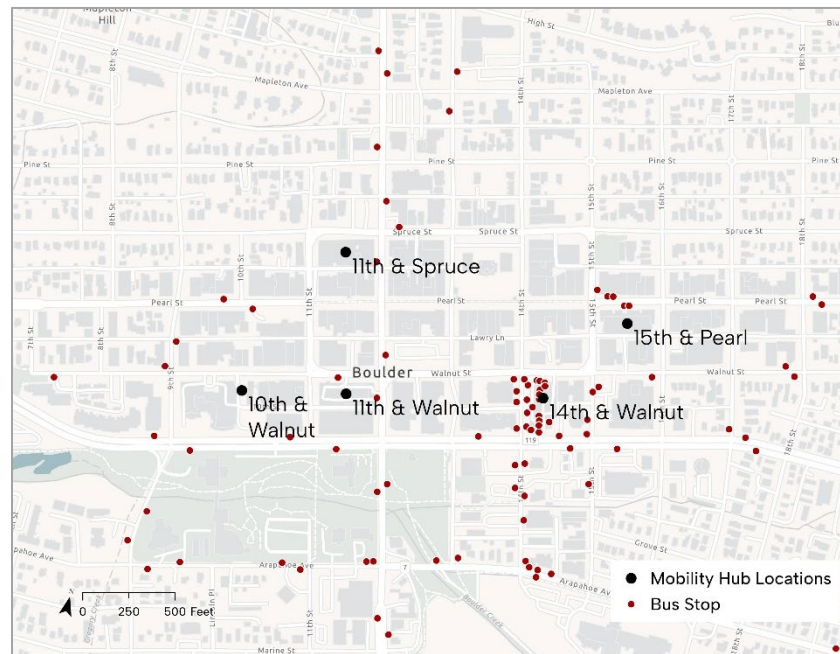


Figure 11 – Transit routes and stops surrounding the proposed mobility hubs. Source: RTD.

Carshare

Priority Mobility Hubs: 11th & Spruce, 10th & Walnut, 14th & Walnut, and 15th & Pearl

As shown in **Figure 12**, 11th & Walnut is the only garage located close to a Colorado CarShare location, although having the car share location moved closer to that garage could be beneficial for access. All other garages are relatively distant from existing Colorado CarShare locations, which points to these sites as the better opportunities for introducing new car share amenities and expanding coverage into areas the car share network does not currently reach.

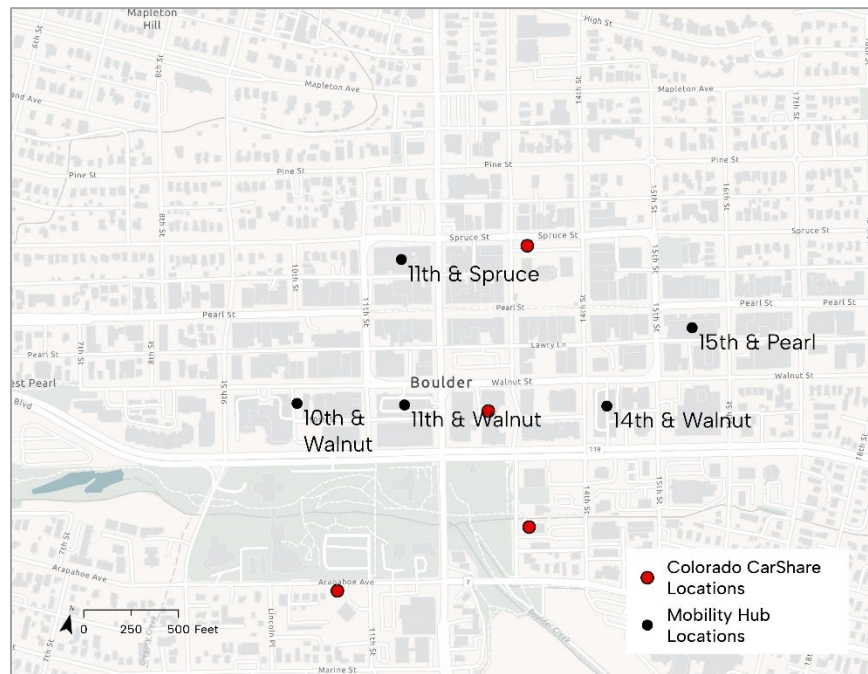


Figure 12 – Car share infrastructure surrounding the proposed mobility hubs. Source: Colorado CarShare.

TNC Pick-Up/Drop-Off

Priority Mobility Hubs: 11th & Spruce, 10th & Walnut, 11th & Walnut, and 15th & Pearl

As seen in **Figure 13** and **Figure 14**, consistent pick-up and drop-off (PUDO) activity is observed at or near all mobility hub locations. Given this, 10th & Walnut, 11th & Walnut, 11th & Spruce, and 15th & Pearl should be prioritized for new PUDO infrastructure to accommodate existing demand. At 14th & Walnut, a dedicated PUDO spot is already in place across the street, helping to accommodate the demand observed at that location. However, this spot is signed as “Taxi Only”, which may cause confusion for rideshare users or lead to underutilization of the space. PUDO activity is occurring on the streets surrounding 11th & Spruce, particularly along Pearl and 10th Street, suggesting that a dedicated PUDO spot at this hub could still be worthwhile to redirect TNC activity off of surrounding streets and reduce congestion in the immediate area.

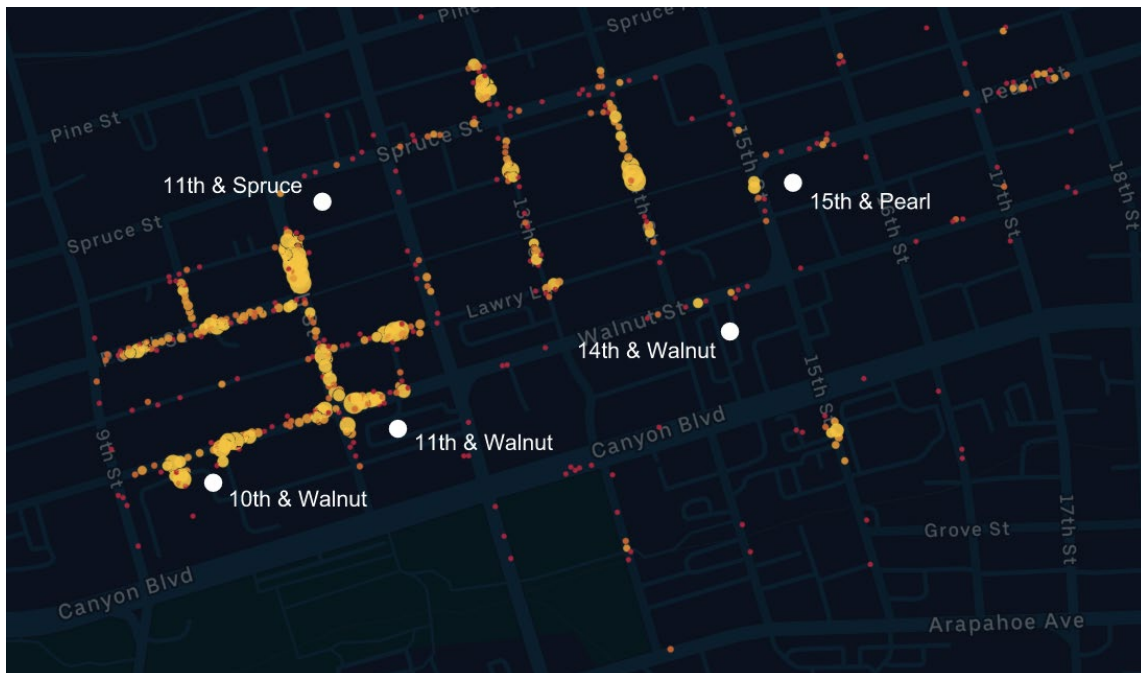


Figure 13 – Peak Uber drop-off activity surrounding the proposed mobility hubs (typical Saturday evening 5PM–11:59PM). Source: Uber.



Figure 14 – Peak Uber pick-up activity surround the proposed mobility hubs (typical Saturday midday 12PM–4:59PM). Source: Uber.

Ownership Structure

Ownership structure differs across the five garages and plays a direct role in shaping what can realistically be developed at each site.

- **10th & Walnut:** The property is held in a condo ownership structure, with CAGID fully owning the public garage and part of the hotel garage, while the St. Julien owns the hotel itself along with the associated Civil Use Site. As a result, the southern portion of the site is off-limits for CAGID-led development, since it is owned by, and slated for development by, the St. Julien.
- **11th & Walnut:** The property is structured as a condo, with CAGID owning the parking property and Broadway-Walnut Company, LLP owning the commercial property. Development here is generally feasible, though care should be taken around the Randolph Center to avoid conflicts with that use.
- **11th & Spruce:** The property is owned in fee simple with CAGID owning the garage outright and leasing out commercial and retail space within it. This straightforward ownership structure means there are no significant constraints on development at this site.
- **14th & Walnut:** CAGID's ownership is limited to air rights beginning 12 feet above ground level, with the RTD station occupying the ground-level portion of the structure. This arrangement means that coordination with RTD will be necessary to improve ground-level amenities, and that mobility hub amenities are likely to impact RTD's property rather than CAGID's property.
- **15th & Pearl:** The property is owned in fee simple, with CAGID owning the garage and leasing commercial and retail space. This location similarly presents no significant ownership constraints on development.

Proposed Amenities Specifications

Table 7 through **Table 10** outline the proposed amenities for the mobility hub network across the four amenity categories. For each amenity, the tables identify its location (inside/outside the garage), estimated minimum space required, infrastructure investments, safety considerations, and operations/maintenance needs, giving planning teams a practical reference for prioritizing improvements at each site.

Most in-garage amenities require converting existing stalls into dedicated space, ranging from as few as 0.25 parking spaces for an emergency phone or drinking fountain to multiple parking spaces for a shelter or restroom. Because of this, these requirements should be weighed against each garage's available capacity and demand before an amenity is prioritized for that site.

Mobility hub amenities should also be designed with flexibility and ease of use in mind, both to accommodate special events, such as Bolder Boulder or the Sundance Film Festival, and to ensure that switching between modes is simple and intuitive. Portable or relocatable elements, such as bike parking, wayfinding signage, and scooter corrals, are essential for special event functionality, allowing the city and its partners to temporarily reconfigure a hub's footprint without permanently disrupting its use. Collocation and layout are central to the everyday functionality: factors such as sight lines, clear wayfinding, and the proximity of different modes to one another should be prioritized when designing the mobility hubs.

Table 7 – Comfort & Safety Amenity Specifications

Amenity	Inside/Outside Garage	# of Parking Spaces Required	Infrastructure Investments	Safety Considerations	Operations/ Maintenance
Seating	Inside & outside	0.5 to 1	Benches, chairs	Placement in well-lit, visible areas away from blind corners; secure/anchor to prevent tipping	Regular cleaning; inspection for damage or wear; replacement of worn seating
Lighting	Inside & outside	N/A	Lighting, electrical service	Consistent, even coverage to eliminate dark corners; higher lumens at entrances, stairwells, and elevators; motion-sensor or dusk-to-dawn controls	Routine bulb/fixture cleaning and replacement; inspection for outages
Emergency phone	Inside	0.25	Emergency phone, electrical service	Placement at regular intervals with clear sightlines and signage; direct connection to emergency services/security; high-visibility marking	Regular testing to confirm functionality; repair of outages; battery/backup power checks
Shelter	Outside	1 to 3	Shelter	Open/transparent design to maintain visibility; well-lit; positioned away from isolated or low-traffic areas	Regular cleaning; inspection for structural damage or graffiti; snow/debris removal
Restrooms	Inside	4 to 8	Plumbing	Adequate lighting; camera coverage; secure locking mechanisms	Regular cleaning and restocking of supplies; plumbing maintenance; pest control
Drinking fountain	Outside	0.25	Drinking fountain, plumbing	Placement in visible, well-lit areas; ADA-compliant height/access	Regular cleaning and sanitation; plumbing maintenance; filter replacement
Storage lockers	Inside & outside	1 to 3	Lockers, electrical service	Placement in well-lit, visible areas; secure locking mechanisms; camera coverage	Regular inspection for damage or tampering; lock/mechanism testing; cleaning
Device chargers	Inside & outside	0.5 to 1	Charging stations, electrical service	Weatherproof enclosures; placement in well-lit, visible areas away from blind corners	Routine testing for functionality; repair of outages

Table 8 – Multimodal Infrastructure Amenity Specifications

Amenity	Inside/Outside Garage	Number of Parking Spaces Required	Infrastructure Investments	Safety Considerations	Operations/ Maintenance
Secure bike parking	Inside & outside	1 to 2	Bike racks, bike lockers	Well-lit, visible, high traffic location; secure anchoring to prevent theft; positioned away from vehicle drive aisles	Regular inspection for damage/vandalism; lock/locker maintenance; occasional relocation of abandoned bikes
Shared scooters/bikes	Outside	1 to 2	Signage, striping, BCycle docks/bikes, Lime Scooter	Clear delineation from vehicle and pedestrian paths; well-lit staging area; corral design to prevent bikes/scooters from blocking ADA access	Coordination with vendors for rebalancing and upkeep; regular check for improperly parked units; striping refresh
Car share	Inside	2 to 4	Signage, striping	Well-lit, clearly marked space near garage entrance/exit for visibility and ease of access; keep clear of blind spots	Coordination with car share provider on space enforcement/reservation system; signage/striping upkeep
EV chargers	Inside	2 to 4	EV chargers, electrical service	Adequate lighting; clear signage; cable management to prevent trip hazards; fire/electrical code compliance	Regular equipment testing and repair; coordination with vendor for maintenance; enforcement of charger-only parking
TNC drop-off space	Outside	2 to 3	Signage, striping	Located away from active traffic lanes; well-lit; clear pedestrian pathway to garage entrance	Signage/striping refresh; enforcement to keep space clear for intended use

Table 9 – Information & Wayfinding Amenity Specifications

Amenity	Inside/Outside Garage	Number of Parking Spaces Required	Infrastructure Investments	Safety Considerations	Operations/ Maintenance
Wayfinding signage/kiosk	Inside & outside	0.25	Signage	Placed in well-lit, visible locations; reflective/illuminated materials for nighttime visibility	Periodic cleaning; inspection for damage or fading; updates as routes/services change
Real-time transit info	Outside	0.25	Signage, electrical service	Well-lit display location; weatherproof, tamper-resistant enclosure; positioned for visibility	Regular software/data feed maintenance; equipment inspection and repair; screen/display cleaning
Staff	Inside	2 to 4	Staff booth/desk, electrical service, communication equipment	Well-lit, visible location near main entrance or high-traffic point; clear sightlines for staff to monitor the space; direct line to security/emergency services	Staffing schedule and coverage management; training; booth/equipment upkeep

Table 10 – Social & Commercial Amenity Specifications

Amenity	Inside/Outside of Garage	Number of Parking Spaces Required	Infrastructure Investments	Safety Considerations	Operations/ Maintenance
Art	Inside & outside	NA	Murals, sculptures, lighting	Tamper-resistant materials and installation; avoid placement that creates blind spots or obstructs sightlines	Periodic cleaning and graffiti removal; inspection for structural integrity; coordination with local artists or arts council for rotating installations
Commercial & mixed-use space	Inside	4 to 10	Electrical service, plumbing, storefront/signage infrastructure, internet access, HVAC, ventilation/exhaust, grease trap	Adequate lighting; clear sightlines to and from the space; secure storefront for after-hours; fire suppression/code compliance	Health inspections; regular cleaning; waste and grease disposal; lease/vendor management; trash removal; coordination on operating hours aligned with garage hours
Gathering space	Inside & outside	3 to 5	Seating, shade/shelter structures, lighting, electrical service	Lighting and visibility to discourage loitering/unsafe activity; unobstructed sightlines and emergency access	Regular cleaning and furniture upkeep; scheduling/coordination if used for programmed events

Initial Mobility Hub Opportunity Diagrams

Drawing on existing amenities, community feedback, and the surrounding context of each garage, the project team has developed general concepts and visions for each of the garages. Each of these concepts are shown and described in the following section.

11th & Spruce Mobility Hub

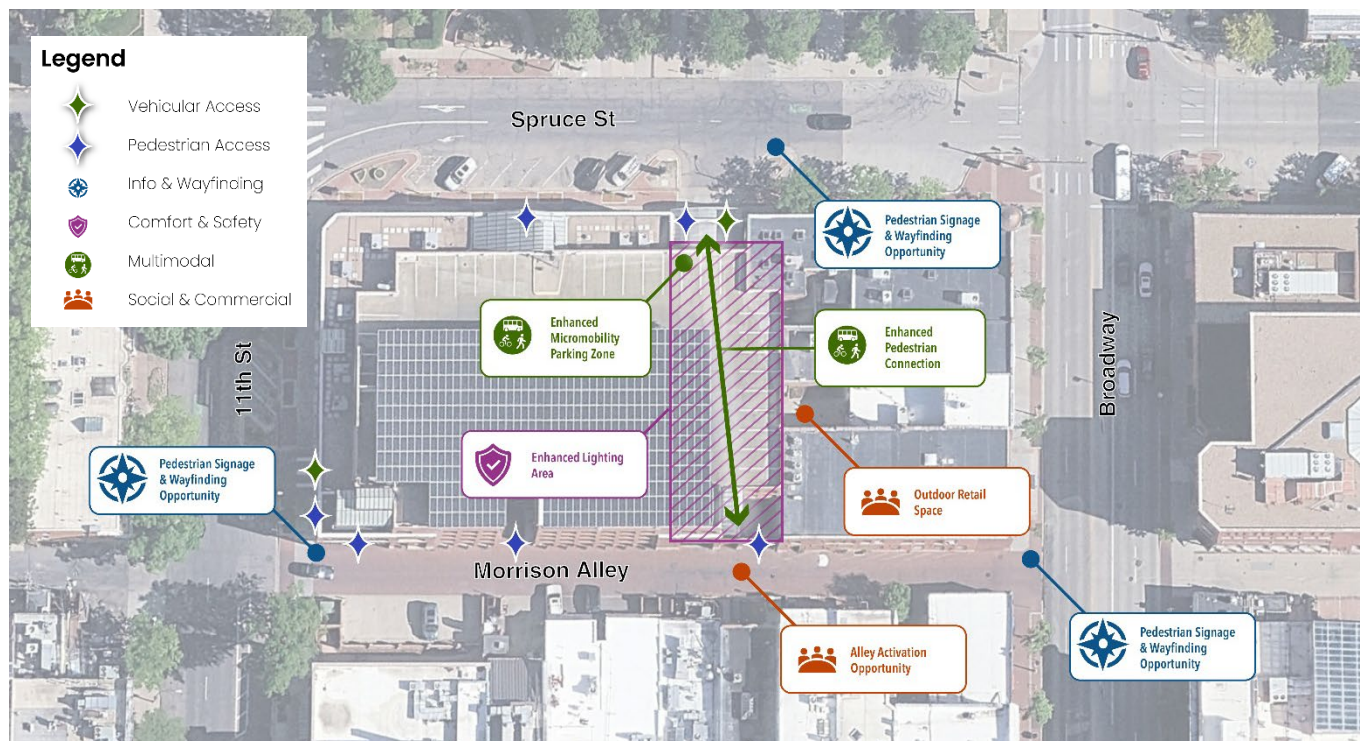


Figure 15 – Opportunity diagram for the 11th & Spruce mobility hub. All notes refer to the ground floor. Source: MIG.

The concept for the 11th & Spruce garage, shown in **Figure 15**, centers on strengthening its role as a downtown arrival point by enhancing wayfinding, supporting multimodal connections, and activating adjacent pedestrian corridors such as Morrison Alley. Given that this garage has the highest parking utilization of the group, the approach favors preserving parking capacity over introducing amenities that would consume significant space. Instead, the concept focuses on making better use of existing amenity space already on site, while improving access to Morrison Alley and strengthening pedestrian connections to nearby retail.

10th & Walnut Mobility Hub

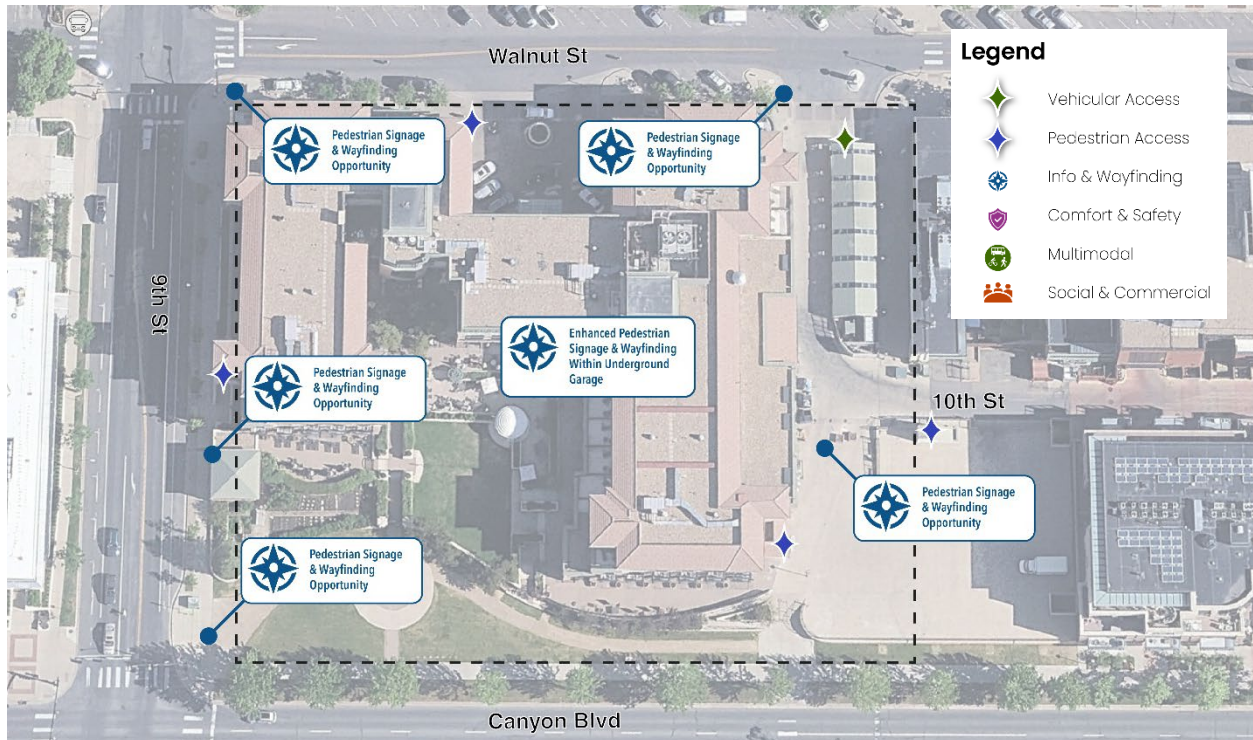


Figure 16 – Opportunity diagram for the 10th & Walnut mobility hub. All notes refer to the ground floor. Source: MIG.

The concept for the 10th & Walnut garage, shown in **Figure 16**, focuses on enhancing visibility, providing real-time information, and improving pedestrian navigation to increase awareness and use of this underutilized, high-capacity garage. As the only underground garage in the group, it faces limitations in pedestrian access and visibility, making it easy for potential users to overlook the garage. While the garage has available space, that space has lower utility for multimodal infrastructure or commercial and gathering space because of the lack of visibility and safe access, especially for people using mobility devices, bicycles, or scooters. The concept instead prioritizes improved wayfinding around the garage to make it easier to find and to navigate to nearby multimodal transportation amenities. This concept also builds on its direct connection to the St. Julien Hotel as a key access point.

11th & Walnut Mobility Hub

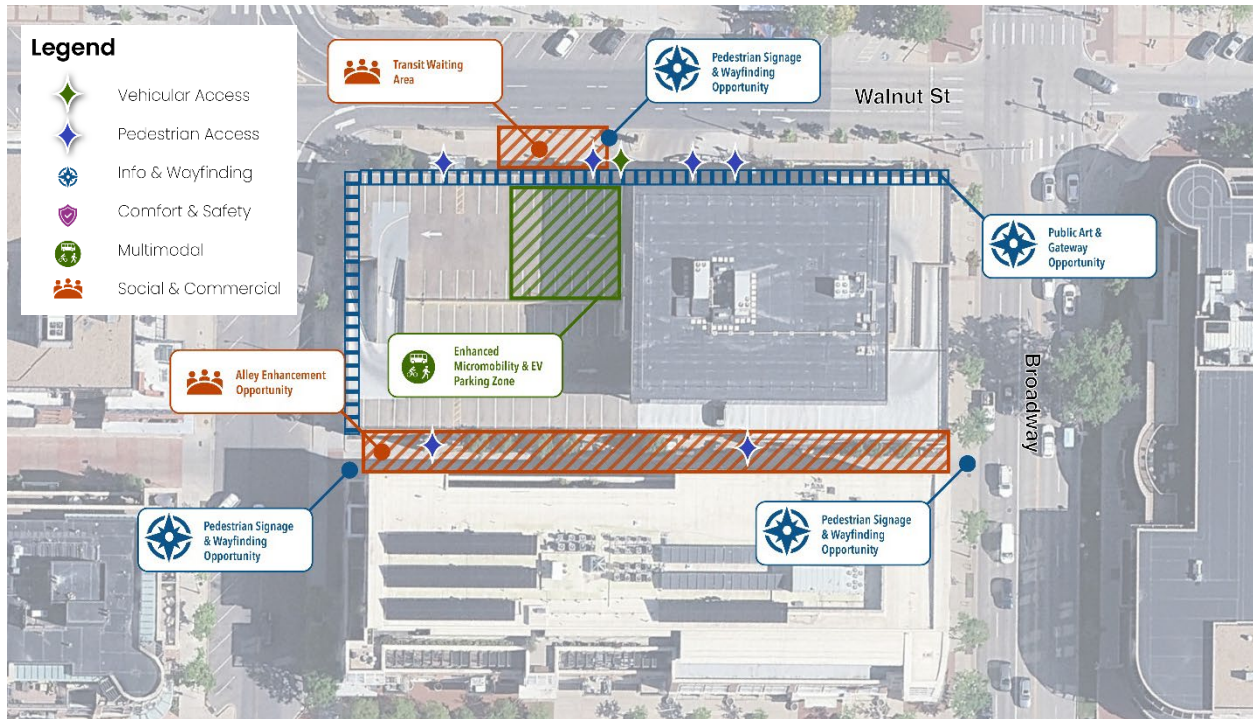


Figure 17 – Opportunity diagram for the 11th & Walnut mobility hub. All notes refer to the ground floor. Source: MIG.

The concept for the 11th & Walnut garage, shown in **Figure 17**, leverages its prominent Walnut Street frontage to improve mobility information, strengthen multimodal connections, incorporate new amenities, and create a more welcoming pedestrian experience. With strong street frontage close to commercial space, direct bus stop access, and high pedestrian visibility, the garage is well-positioned to serve as a visible, active connection point along Walnut Street. Because the garage typically operates with 25% of spaces available during the peak season, some spaces can be repurposed for more permanent amenities without significantly impacting parking availability. The concept also takes advantage of the garage's large blank wall areas, presenting opportunities for wayfinding, public art, or other enhancements that reinforce its role as a welcoming destination.

14th & Walnut Mobility Hub

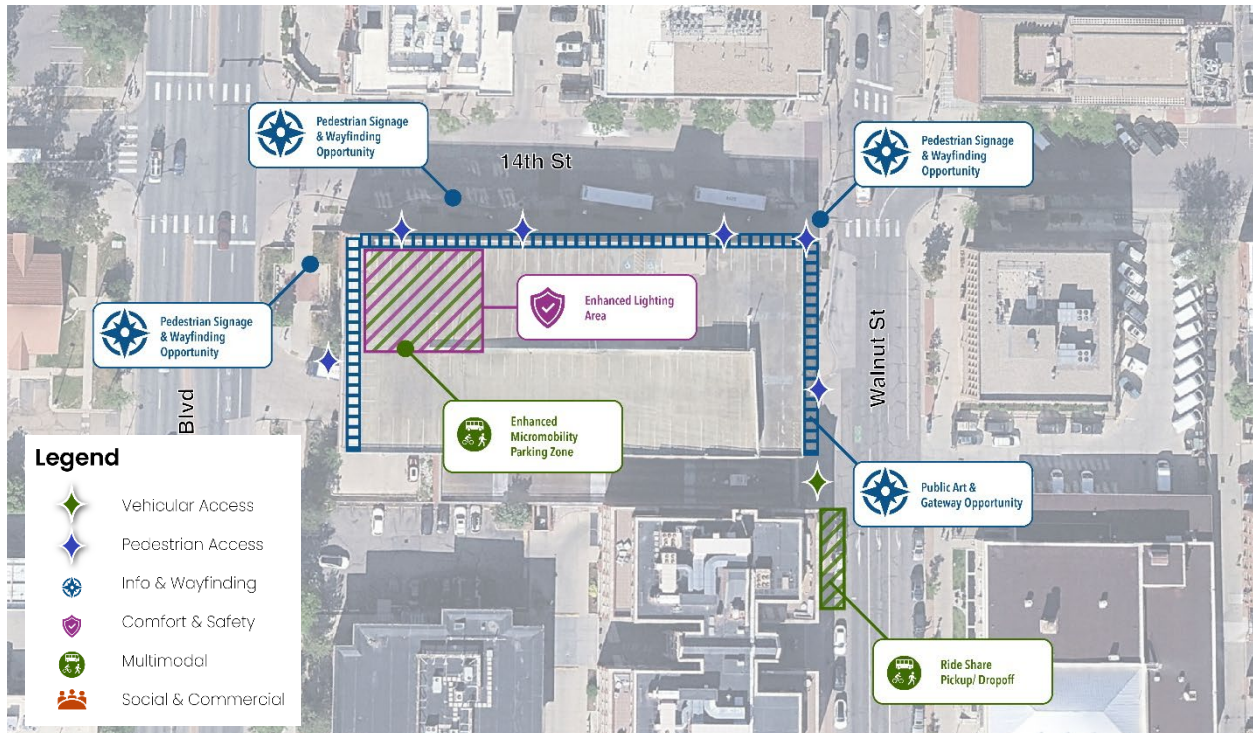


Figure 18 – Opportunity diagram for the 14th & Walnut mobility hub. All notes refer to the ground floor. Source: MIG.

The concept for the 14th & Walnut garage, shown in **Figure 18**, builds on its co-location at Downtown Boulder Station by improving multimodal amenities, transit information, and first- and last-mile mobility connections. The garage already benefits from strong transit connections, existing public amenities, and a large bike parking area, giving it a solid foundation to build upon. Many of these amenities are already in place but would benefit from maintenance and improvement rather than new construction. With roughly 50% of spaces available on average during peak season, the garage has capacity, though that availability is concentrated on levels above ground. Therefore, the concept focuses improvements on the existing ground-level amenities where visibility and pedestrian access are strongest.

15th & Pearl Mobility Hub

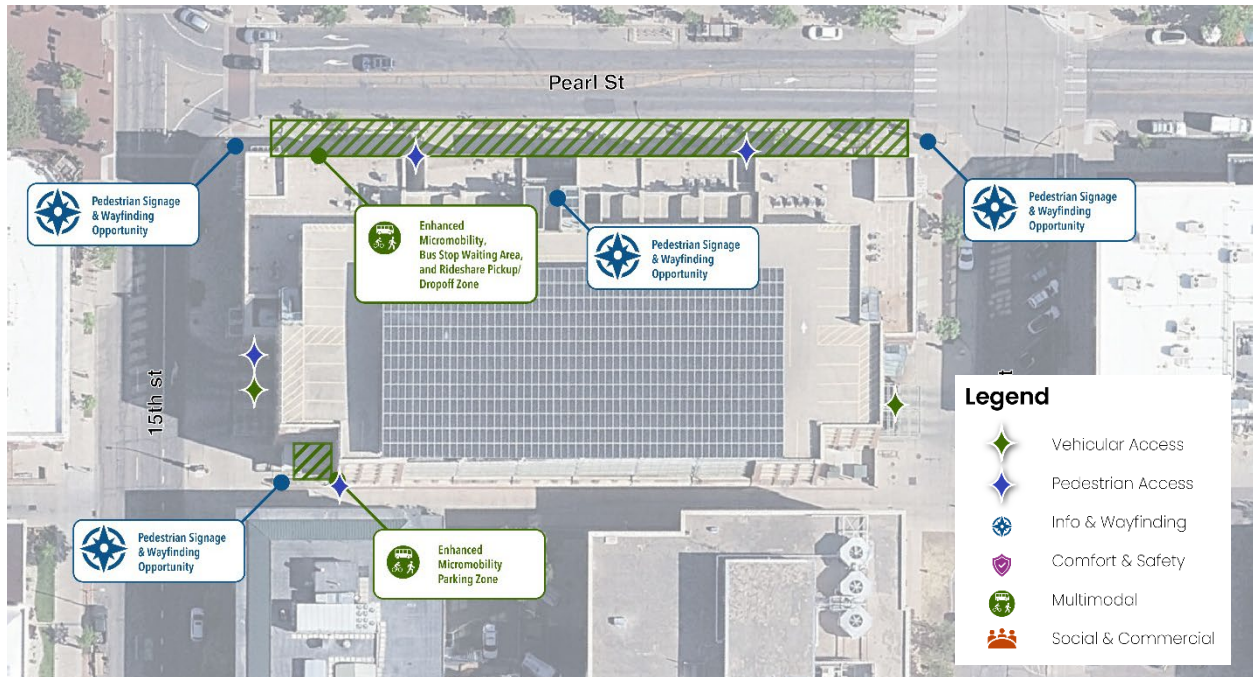


Figure 19 – Opportunity diagram for the 15th & Pearl mobility hub. All notes refer to the ground floor. Source: MIG.

The concept for the 15th & Pearl garage, shown in **Figure 19**, capitalizes on its direct connection to Pearl Street Mall by enhancing visitor orientation, supporting flexible public activity, enhancing existing multimodal elements, and improving access to downtown destinations. The garage benefits from direct access to Pearl Street, clear pedestrian access points, an existing bike share hub and transit stop, and a large, continuous pedestrian frontage – all of which position it well to support active, visitor-oriented improvements. However, with only about 25% of spaces available during peak season, the garage has limited capacity to spare, meaning any new amenities should be planned carefully to avoid significantly reducing parking availability.

Implementation and Management

Clear operations and maintenance responsibilities are essential to the long-term success of mobility hubs and their amenities. The City of Boulder should define specific internal roles and responsibilities to support effective hub management, while also building on partnerships with public and private entities to share ongoing maintenance and operational responsibilities. Potential partners include RTD, Boulder County, the Colorado Department of Transportation, Visit Boulder, and the Downtown Boulder Partnership, among others. These partnerships can help the city pool resources and share expertise across agencies, helping ensure mobility hubs function as a well-integrated part of Boulder's transportation network and deliver real value to residents and visitors.

These roles and partnerships should be guided by a shared commitment to a higher standard of maintenance. Because mobility hubs represent a key touchpoint in a traveler's experience, they require more upkeep than typical transportation infrastructure. Mobility hubs should consistently be:

Exceptionally Clean: Mobility hubs should be cleaned on a more frequent schedule than other transportation infrastructure, helping build positive user perceptions and encouraging regular use.

Well Organized: Hub elements should stay in their intended locations, for instance, actively managing scooter parking so devices remain within designated zones.

Fully Functional: All hub components must remain in perfect working order, with any issues resolved quickly. Users should have a clear and easy way to know who to contact to report maintenance issues.

Clear and Understandable: Signage and information must stay accurate and operational at all times.

Accessible to Everyone: Accessibility should be a top priority, including removing barriers to accessible movement to, from, and within the hub; prioritizing snow removal; maintaining accessible signage; and regularly gathering feedback from users with mobility challenges to understand and improve their experience.

Staffing and Management

As the mobility hub network expands, the City of Boulder should evaluate whether a management contract makes sense, either for full program oversight or for specific components. In the early stages, hub development, management, maintenance, and operations will likely be manageable within existing City roles and responsibilities. However, as mobility hubs evolve, these demands may outpace staff capacity. At that point, Boulder could consider hiring a dedicated staff position, expanding existing staff roles to take on new responsibilities, or contracting with an outside operator for operations and maintenance.

Costs

Preventive maintenance extends the service life of mobility hubs, reduces safety risks, and lowers long-term repair and replacement costs. Maintenance responsibilities and funding sources should be defined during the planning phase and built into project budgets from the outset. As a general benchmark, annual maintenance costs for transportation assets typically fall between 3 and 5 percent of the asset's replacement value. Given that mobility hubs warrant a higher standard of maintenance than typical infrastructure, budgets should generally be on the upper end of that range. Those

responsible for day-to-day maintenance should be consulted directly when developing these budgets. Project teams should also consider a life-cycle cost analysis to determine whether investing in higher-quality, more durable materials upfront would reduce future maintenance needs and bring long-term value.

Funding

A range of funding strategies can support mobility hub implementation across Boulder. Some funding sources are better suited to system-wide investments while others are more appropriate for site-specific elements. Partnerships can also help meet local match requirements for future grant applications.

Potential funding sources include:

- **Federal grants (DOT, FTA, DOE, EDA):** These programs offer formula, competitive, or discretionary funding opportunities that can support mobility hub development.
- **State grants:** Programs such as Colorado's Multimodal Options Fund and other community-focused grant programs may align well with mobility hub development.
- **Regional coordination through DRCOG (Denver Regional Council of Governments):** DRCOG can help align funding opportunities and support larger mobility hub investments across the region.
- **Philanthropic funding:** Local foundations or businesses may support hub components tied to access, mobility, and environmental sustainability.
- **Private-sector partnerships:** Transportation companies such as Colorado CarShare, Lyft/BCycle, and EV charging providers may help fund and manage components in exchange for user fees, advertising, or sponsorship opportunities.
- **Local funding sources:** Tax revenue supporting transportation infrastructure, as well as the fee revenue from parking operations, could support both construction and ongoing maintenance and operations.

Performance Metrics

Establishing clear, consistent metrics from the outset will allow the City of Boulder and its partners to assess hub performance over time and compare results across locations. Metrics should address, at minimum, the following areas:

Transit, Micromobility, and Vehicle Utilization

This category measures how people are using each hub to access and connect between modes, including:

- Boardings and alightings at transit stops
- Bike share, scooter share, and car share trip counts
- Average micromobility trip distance and duration for trips starting or ending at the hub
- Utilization of bike parking facilities
- Utilization of car parking facilities
- Rideshare pick-up and drop-off (PU DO) activity
- Arrival mode share to the hub
- Pedestrian and bicycle counts

Climate and Sustainability

These metrics track each hub's contribution to reducing vehicle trips and supporting cleaner transportation options, including vehicle trip reduction attributable to hub use and EV charger utilization rates.

Comfort and User Experience

This category focuses on user satisfaction, gathered through periodic surveys or intercept feedback at hub locations. It can capture perceptions of safety, cleanliness, ease of use, and overall satisfaction with the hub experience.