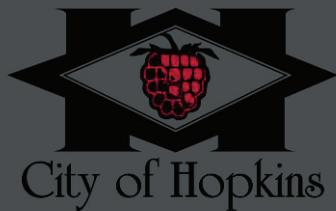




END-OF-TRIP FACILITIES PLAN

2024

HENNEPIN COUNTY
MINNESOTA



End-of-Trip Facility Definitions

The following definitions related to end-of-trip facilities are provided for the purpose of this plan; therefore, terms may vary when reviewing other sources.

Micromobility – A small, low-speed, human- or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles, electric scooters, and other small, lightweight, wheeled conveyances.

End-of-Trip Facilities (EOTF) – Spaces that provide support amenities for active transportation use. They are often located in commercial buildings, offices, public transit hubs, and other public areas.



End-of-Trip Facility Definitions

Active Transportation – Any self-propelled, human-powered mode of transportation, such as walking, running, skateboarding, scootering or bicycling.

Bicycle Facilities – A general term denoting provision to accommodate or encourage bicycling, including bikeways, bicycle boulevards, bicycle detection, in addition to parking and storage facilities.

First- and Last-Mile Connections – A general term for facilities designed to help people access transit stops and stations, particularly to and from their residence.

Introduction

Micromobility as a commuting option is increasing in popularity, especially as the number of trails and bike paths in Hopkins and the surrounding region increases. Non-car transportation modes help lower greenhouse gas impacts from the transportation sector, contribute to a more sustainable community, and facilitate integrating physical activity in daily routines. However, commuters may find it difficult to store their bikes, fix a flat tire, or freshen up once they get where they are going. The Hopkins End-of-Trip Facilities Plan was completed thanks to funding from Hennepin County's 2023 Active Living Technical Assistance Program, provided through the Minnesota Department of Health's Statewide Health Improvement Partnership (SHIP).

By providing comprehensive facilities that address these needs, the City of Hopkins can make micromobility a more comfortable and convenient transportation option. These facilities should be provided at private and publicly accessible buildings, parks, and other destinations, as well as wherever vehicle parking is required. They should also be considered in roadway, streetscape, and transit projects. Planning micromobility parking for new and existing retrofit scenarios can make it possible to provide well-designed, convenient, secure, and accessible parking in a cost-effective manner.

This end-of-trip facilities plan identifies the types of facilities that encourage micromobility travel in the community. The plan will further address considerations for accommodating a wide range of micromobility devices – which differ in physical dimensions and operating characteristics.



What's in this plan?

1.0 Introduction

Summary of the purpose and need of planning & designing for end-of-trip facilities.

2.0 Existing Conditions

Overview of the existing parking environment in Downtown Hopkins, including inventory of existing parking assets, and major trip generator destinations

3.0 Engagement

Overview and summaries of online / in-person community engagement efforts.

4.0 End-of-Trip Facility Best Practice Design Considerations

Types of end-of-trip facilities, along with differentiating characteristics, appropriate use cases, and how to best implement them.

5.0 Branding and Wayfinding

Review existing active transportation branding & wayfinding and best practice recommendations for branding and wayfinding of end-of-trip facilities.

6.0 Recommendations

Facility, policy, and program recommendations tailored to Downtown Hopkins identified during the review of the existing parking environment, best practices, community engagement, and deploying the guidelines.



Introduction

Forms and Benefits

What are some forms of micromobility devices?

Micromobility devices can vary considerably depending on their size, type, and the needs of people who use them. This in turns allow a wide range of users – regardless of age or ability – to travel without a vehicle. By providing parking for all micromobility devices, active transportation can be possible for citizens in Hopkins and visitors alike.



INCLUSIVE PARKING

A successful end-of-trip facility plan will need to go beyond providing parking for standard bicycles. This guide provides parking solutions for all types of micromobility devices to serve a variety of users.

Introduction

Forms and Benefits

Why invest in end-of-trip facilities?

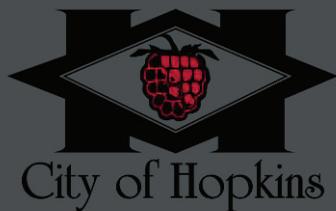
The development of end-of-trip facilities also encourages and supports active transportation uses for multiple purposes. This leads to benefits for employers, schools, businesses, and other organizations.

- **Improve public health.** Commuting with active transportation to work potentially improves employee mental and physical health, leading to lowered healthcare costs for employers.
- **Reduce parking costs.** Parking for micromobility devices accommodates more commuters using less space, leading to lower costs per vehicle.
- **Increase productivity.** Reducing time lost to traffic congestion increases productivity for employers.
- **Advance sustainability and reduce greenhouse gas emissions.** By increasing access to active transportation opportunities, Hopkins can demonstrate a commitment to creating a healthier environment for the community and employees alike.
- **Support local infrastructure.** Promotes the use of active transportation to Downtown Hopkins businesses and services, and to transit, such as the future Green Line LRT stations.





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END-OF-TRIP FACILITIES PLAN EXISTING CONDITIONS

Introduction

Existing Conditions

Method

The project team produced a baseline micromobility parking inventory in Downtown Hopkins.

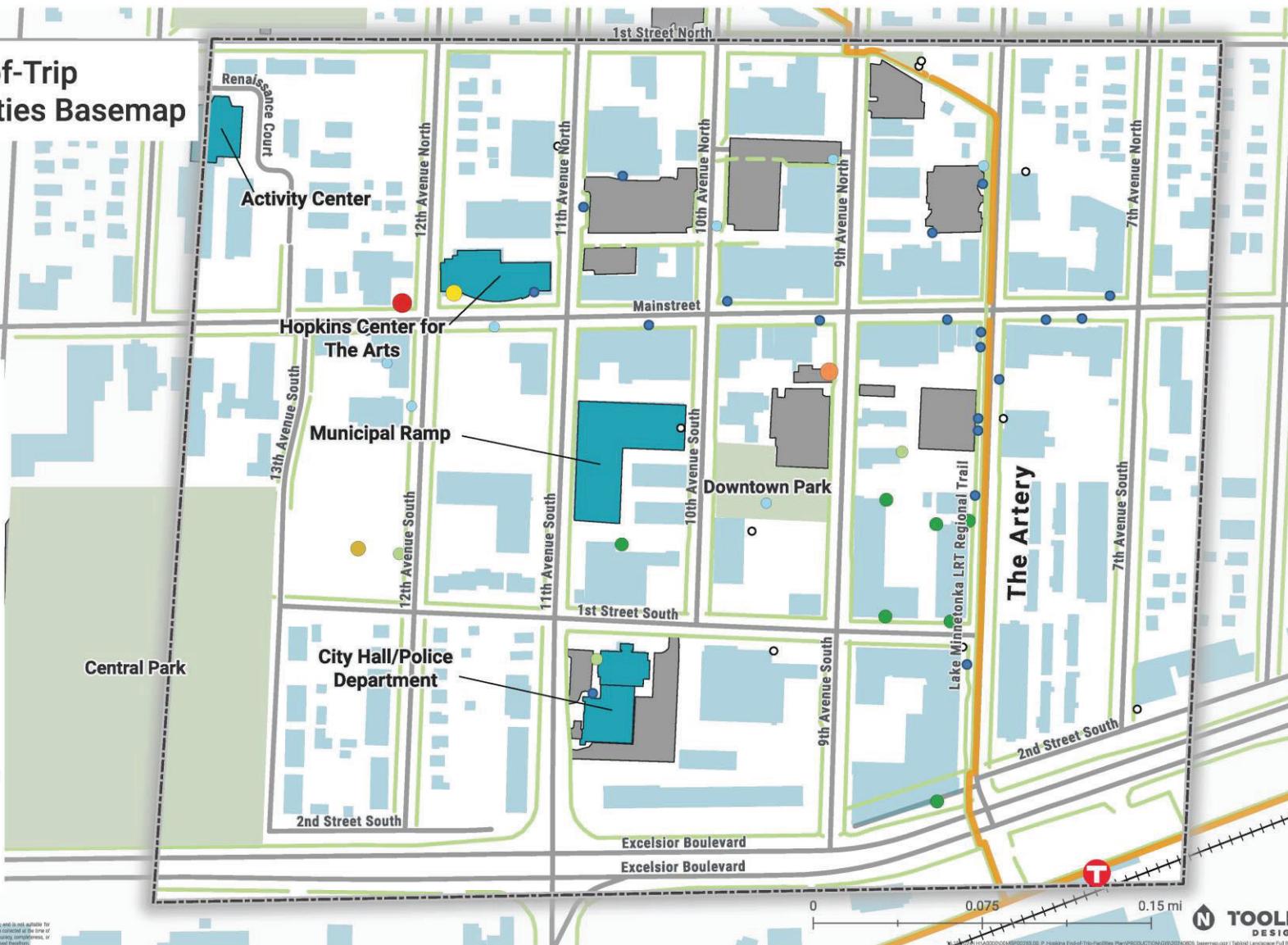
The baseline inventory used fieldwork to identify the location of micromobility parking to document geospatial locations and the number of micromobility parking spaces available at each location.





End-of-Trip Facilities Basemap

- Legend**
- Study Boundary
 - Rack Counts**
 - 0
 - 1
 - 2
 - 3
 - 4
 - 5
 - 10
 - 12
 - 14
 - Municipal Facilities
 - Park Areas
 - City-Owned Parking Lots
 - Buildings in Study Area
 - Downtown Hopkins LRT Station
 - Regional Trails in Study Area
 - Walkways
 - Roads
 - LRT Route



Total Parking Spaces Available

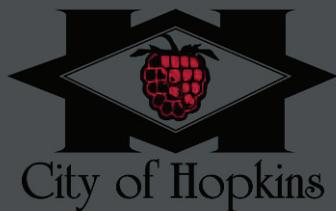
There are approximately 110 micromobility parking racks within the public right-of-way or within parking structures in the Downtown Hopkins area surveyed. Including the capacity of each rack type, this equates to 220 micromobility parking spaces available.

Geographic and mapping information presented in this document for informational purposes only and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of production. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, recommendations and conclusions derived herefrom.





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END-OF-TRIP FACILITIES PLAN ENGAGEMENT

Introduction Community Engagement

Method

To ensure the success of the plan meeting the needs of the City of Hopkins, the project team engaged community members.

To reach community members, the project team used a mix of in-person and online engagement during the summer and fall of 2024. In-person engagement consisted of two (2) pop-up events in the City of Hopkins. The project team summarized key takeaways from these events in an engagement summary memo.



Hopkins Farmers Market Pop-Up Event Summary

Event Date: Saturday, August 31, 2024 (8 AM – 12 PM)

How many people attended: 100+ visitors to the Farmers Market. Our table had at least 20 interactions

Summary of common themes:

- Consider bike corrals (in-street micromobility parking facilities)
- Shady Oaks LRT Station- blank slate so good to hear EOTF is being considered
- Bear Cave Brewing has good bike parking and storage
- Add more bike parking to Mainstreet
- High-quality secure bike parking is requested at LRT stations
- Consider adding a high-capacity, access-controlled micromobility parking facility at Tonka Cycle & Ski
- Consider app-based access to link transit and secure micromobility parking
- Consider retroreflective markings to assist with navigation on micromobility devices
- Account for access, functionality, and proper space to park a micromobility device



11 St S Railroad Bridge Pop-Up Event Summary

Event Date: Friday, September 20, 2024 (3 PM – 5 PM)

How many people attended: Lots of pedestrian, bike, and vehicle traffic. Our table had at least 10 interactions.

Summary of common themes:

- In general, add more micromobility parking and support for end-of-trip facilities
- Consider using decorative rack elements for branding/wayfinding component. Minnehaha Ave cited as a good example
- Add more bike rack elements
- Pair EOTF with e-bike charging stations
- Consider EOTF with proposed new development and retro fit development scenarios
- Access-controlled facilities would be a great idea, especially for ebikes



Online Survey Summary

Event Date: Online survey open from August to October 2024

Summary of common themes:

- **A moderate variety of micromobility devices are used in Downtown Hopkins.** Respondents are mostly using conventional bikes and e-bikes, with a few cargo bikes and e-scooters in the mix.
- **There seems to be a wide variety of end-of-trip facility users.** The frequency of visits that respondents indicated is evenly distributed between multiple times a week and just once a month.
- More often than not, respondents indicated **there are challenges that prevent greater use of micromobility** to get downtown.

Those related to EOTF include:

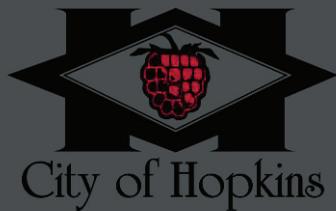
- Inadequate supply of facilities
- Inadequate distribution of facilities
- A couple instances where the facilities supplied don't meet the needs of the micro-mobility device being used



- Most **people are willing to park farther away for high-quality facilities.** In particular, respondents are willing to travel for:
 - Enhanced security
 - Bike room/shelters
 - Security/surveillance
 - Restrooms
 - Water supply
- **Reasons for coming downtown are primarily commercial** in nature
- **Maintaining line of sight to micro-mobility device** is a common driver for the end-of-trip facilities that respondents choose to use.
- The most common locations where respondents said more end-of-trip facilities are needed are **Driskill's grocery store, 8th & Mainstreet, and LRT stations.**
- Only 12% of respondents said they never have to lock their micro-mobility device to something other than a bike rack, and over half said they need to do so frequently
- **Increasing the overall supply of bike racks and providing bike parking for special events** are the most common things identified as not currently working well.



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END-OF-TRIP FACILITIES PLAN BEST PRACTICES



End-of-Trip Best Practice Guidance

The following identifies different end-of-trip facilities, along with characteristics, appropriate use cases, and how to best implement them.

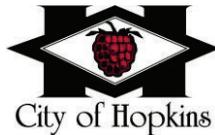
- Lock-up // Parking Facilities
- Clean-up // Showering and Changing Facilities
- Tune-up // Repair Facilities





Lock Up /// Parking Facilities

Provide secure micromobility parking at convenient locations



Introduction



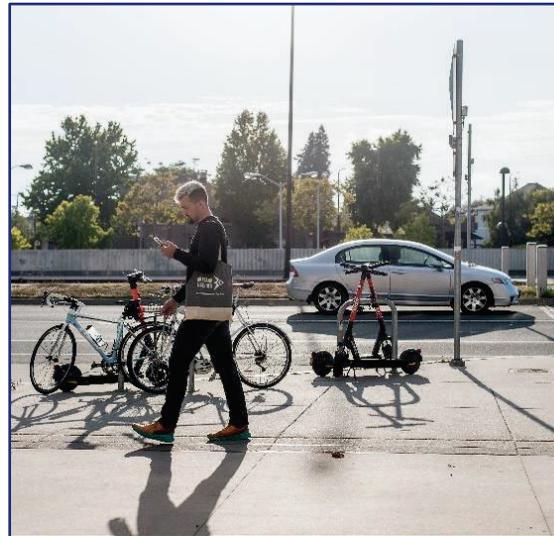
Dedicated parking facilities for active transportation modes are essential to end-of-trip facilities design. This section will explain various features and types of parking facilities, along with important considerations for implementing the right type of parking elements. Refer to Appendix A.2 Micromobility Parking Guidelines for additional information.

Benefits of Micromobility Parking

Parking plays an important role in supporting active transportation programs. Commuters must have convenient places to park or store their devices during or after commutes. Developing parking strategies for a micromobility program that effectively and efficiently meets all commuter needs can further encourage micromobility commuting. Such programs will think about locations, racks, and storage needs, use cases, cost specifications, and ordinances, all of which should ultimately benefit the Hopkins community.

Types of Facilities

There are two main types of parking facilities prominent in existing end-of-trip facilities: short-term and long-term parking. This section will offer design guidance, appropriate use cases, and implementation considerations for both forms of parking.



Example short term parking (left) and access-controlled, long-term parking (right)

Short-Term Parking



Example of a in-street corral

Short term parking should be designed to meet the needs of people visiting but not staying. This is typically for commuters and visitors who will be at their destination for 2-6 hours. These facilities should also be visible and easy to use, enhancing the user experience even for a short period of time.



Example of inverted-U style rack

Short-Term Parking

Design Considerations

The following are elements to consider when designing short-term parking facilities:

Element	Considerations
Location	<ul style="list-style-type: none"> Place facility near the entrance it is serving. 50' or less is a good benchmark Survey commuters for desired parking locations
Security	<ul style="list-style-type: none"> All racks must be sturdy and well-anchored Placing facility in areas with visibility and public lighting improves security by deterring theft and vandalism Consider designs with protection against weather elements to encourage year-round use
Quantity	<ul style="list-style-type: none"> There may be ordinances governing bike parking quantity APBP's full Bicycle Parking Guidelines is a resource for determining needed capacity Parking demand will develop as quality parking appears

Implementation Guidance

On-street parking facilities can be a solution if space is limited or to increase the availability of short-term parking spaces. Place corrals along high-volume travel corridors, ideally at street corners for increased visibility and access or corridors with existing or planned bikeways. Corrals commonly replace an auto parking stall and should be 18-20 feet long by 8-10 feet wide, with a minimum 2.5-foot buffer from the curb. Coordinate with local businesses to determine the most convenient and beneficial placement. On-street parking should include the following elements:

Element	Considerations
Racks	Racks mounted on rails are preferred to surface-mounted racks on asphalt which can be more easily removed and are at higher risk for theft. Angle racks where possible to increase the buffer between bicycles and vehicular traffic. Racks can be oriented parallel to the curb to accommodate cargo bicycles and attachments.
Delineation	Include a visual and/or physical separation around the parking area to be easily identified by bicyclists and motorists. Use a combination of bright paint, flex or delineator posts, rubber curbs, bollards, or other visual solutions
Signage	Place signs along the travel route and at the parking area to indicate available bicycle parking.

Long-Term Parking



Example of a long-term parking facility

Long-Term parking facilities are typically designed for commuters, residents, and other users who need parking for more than 2 hours. By providing additional security and protection against weather elements, these facilities make parking for longer hours more feasible and attractive. They are ideal for addressing micromobility needs at workplaces, residences, transit facilities, amongst other locations.



Example of a bicycle cage

Long-Term Parking

Design Considerations

The following are elements to consider when designing long-term parking facilities:

Element	Considerations	Element	Considerations
Location	<ul style="list-style-type: none"> • Appropriate placement varies with context. • Physical security is more important than public visibility. • Coordinate with destinations served by the facility to establish signage for guiding users. 	Variety in devices	<ul style="list-style-type: none"> • Long-term parking facilities should anticipate the presence of a variety of bicycles and accessories, including—depending on context—recumbents, trailers, children’s bikes, long-tails, e-bikes, cargo bikes, adaptive bikes, scooters, skateboards, and others. • Consider outlets for e-bike battery charging.
Security	<ul style="list-style-type: none"> • Placing facility in a well-lit area improves security by deterring theft and vandalism • Control access to the facility with locks, keys, smart cards, and other technologies. • Long-term bike parking facilities can be used by an individual locking up their device by itself or by groups that agree to share a given facility to lock multiple devices. 	Access	<ul style="list-style-type: none"> • Facility should be placed no lower than the first level below grade. • If the facility must be installed upstairs, consider providing ramps, elevators or stairways with a bicycle channel. Age and ability of commuters should also be considered.
Density	<ul style="list-style-type: none"> • Demand for parking density may be at odds with designs that prioritize security. • APBP Essentials of Bike provides guidance for choosing high-density racks. 		

Additional Considerations

E-Bikes, Adaptive Bikes, Cargo Bikes, and Scooters

Providing parking for non-standard bikes is becoming more common as the types of bikes evolve and modernize to meet different demands. This will look like adding charging ports in spaces for e-bikes, and inclusive parking for adaptive bikes and bicyclists with disabilities, as well as cargo bikes.

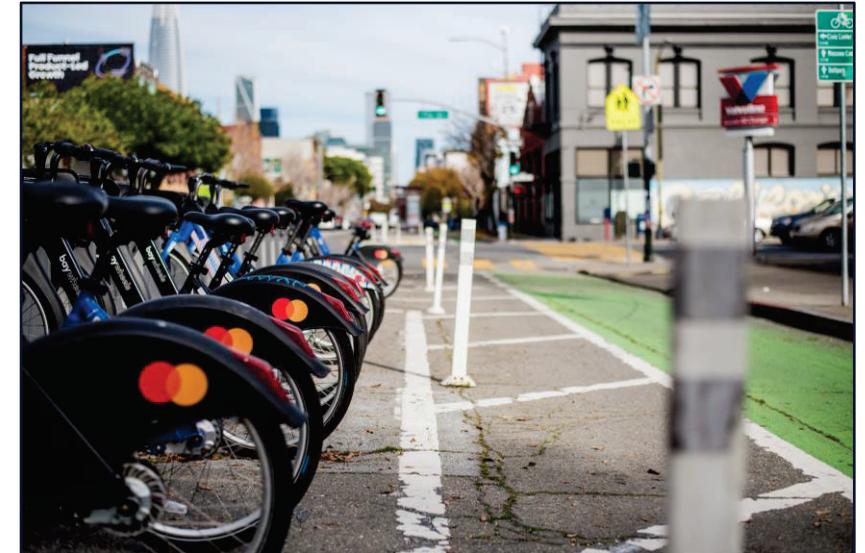
When designing for non-standard bikes, account for accessibility concerns such as step-free access, non-slip surfaces, accessible signages and doors, amongst other factors.

When designing for e-bikes, consider the weight of the bike, compounded security risks, and access to charging stations.

Accommodating Shared Micromobility

Shared micromobility refers to a network of shared vehicles that are spread across a community to be accessed by all people. The following are considerations for integrating shared micromobility networks into the parking system:

- Coordinate with the network operator on a parking management plan.
- Deter users from parking outside of parking facilities or permitted areas.
- Designate parking locations so users properly park micromobility devices.



Parking at Special Events

At festivals, concerts, fairs, and other large events, the City should partner with organizers to provide temporary micromobility parking. This can ease traffic congestion and parking issues traditionally associated with commuting to these events.

Some important considerations:

- Locate parking at highly visible, easy to access points while also avoiding walking traffic or crowded areas.
- Place parking within barriers with a controlled entrance and exit to deter excessive traffic, theft, and vandalism.



Clean Up /// Shower & Changing Facilities

Offer showers and changing facilities for micromobility users

Introduction



For micromobility users, changing and shower facilities can make commuting by active transportation a more realistic and attractive option. These facilities can be adapted to work in conjunction with parking facilities and provide an appropriate level of service for various use cases. This section details different components of these end-of-trip facilities and provides some design considerations.

Benefits of Clean Up Facilities

Providing changing rooms and shower facilities can encourage people to ride longer distances to work, businesses, and other locations. These facilities may also have the potential to serve non-commuters, such as people who walk, roll, or use trails.

Types of Facilities

This section will mainly expand on two types of facilities: personal lockers, and changing and showering facilities.



Personal Lockers

Personal lockers provide commuters with a secure space to store riding gears, a change of clothes, and other supplies. These facilities can exist alongside changing and showering facilities but can also be located near parking facilities to encourage use.

Design Guidelines

Element	Considerations
Location	<ul style="list-style-type: none">Place facility near parking facilities, or in a dedicated building nearby.Facility can potentially be used by recreational users such as joggers and walkers.
Security	<ul style="list-style-type: none">Regularly monitor lockers to maintain cleanliness.Include strong locking mechanisms to ensure safety.
Size	<ul style="list-style-type: none">Consider a variety of locker sizes to accommodate different user needs.Provide at least one locker per long-term parking space.



Changing & Showering Facilities

Shower facilities can be integral to accommodate employees who commute or recreational facility users such as cyclists and joggers. While more resource-intensive and costly when compared to standalone locker facilities, they can be helpful for employers and other professional institutions to support active transportation.

Implementation Considerations

The City can require or encourage these facilities through regulations and partnerships. This can also be done as part of a Transportation Demand Management (TDM) program.

Design Guidelines

Element	Considerations
Location	<ul style="list-style-type: none"> Place facility near parking facilities or in proximity to the destinations they serve.
Security	<ul style="list-style-type: none"> Regularly monitor changing and shower facilities to maintain cleanliness. Include strong locking mechanisms to ensure facilities are secure and lockable.
Availability	<ul style="list-style-type: none"> Provide at least one shower for the first five long-term parking spaces on-site and an additional shower per 10 subsequent spaces.





Tune Up /// Repair Facilities

Provide basic maintenance tools for micromobility users



Introduction and Considerations



Tire punctures or loose bolts make it challenging or impossible to operate a micromobility device safely. Repair stations, tools, or even vending machines can allow users to do minor maintenance or repairs to continue their travel with minimal interruptions.

Features available at repair facilities include, but are not limited to:

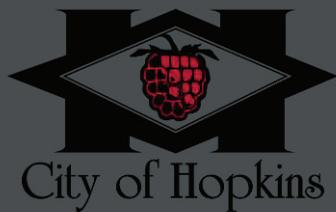
Category	Feature
Bicycle maintenance	Bicycle pumps
	Tire repair kits
	Hanger arms to lift bicycles off the ground
	Additional bicycle repair tools

Design Guidelines	
Element	Considerations
Location	<ul style="list-style-type: none"> Place repair station near parking facilities in highly visible and well-lit location.
Security	<ul style="list-style-type: none"> Use durable materials, such as galvanized or stainless steel to help repair stations withstand wear and tear. Include strong mechanism to ensure safety.
Size	<ul style="list-style-type: none"> Provide cover so users can work on their equipment during inclement weather.





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END-OF-TRIP FACILITIES PLAN BRANDING AND WAYFINDING

Background

Purpose of branding and wayfinding for end-of-trip facilities

- Provide confidence in navigating routes and finding destinations
- Promotes safety and comfort of using bicycle and pedestrian infrastructure and facilities
- Gives users the confidence to extend their trip distance
- Reduces confusion at junctions
- Makes end-of-trip facilities and destinations more accessible for all members of the community



Existing Conditions

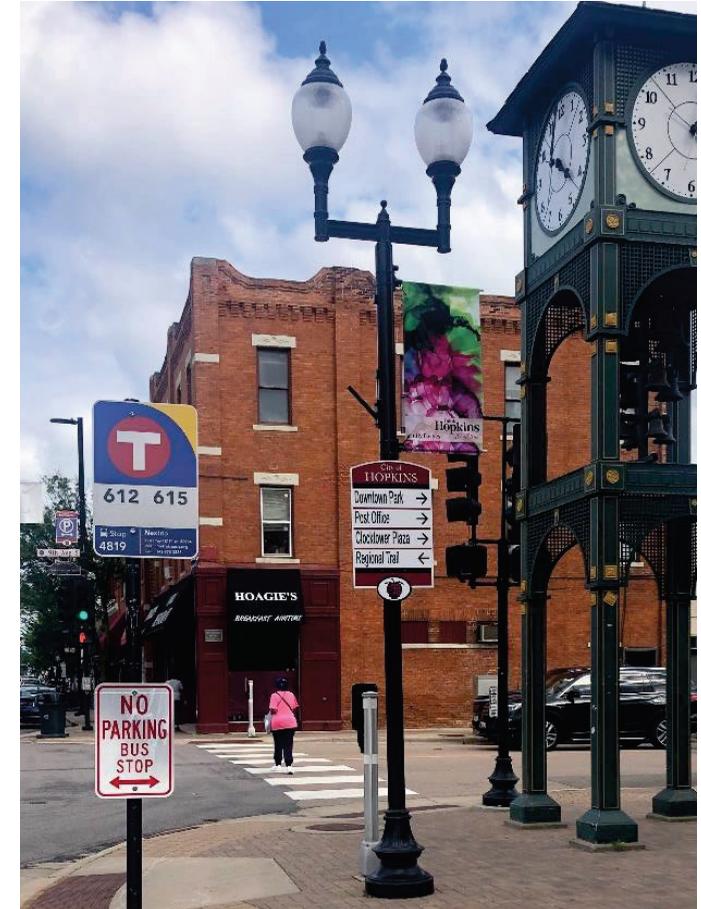
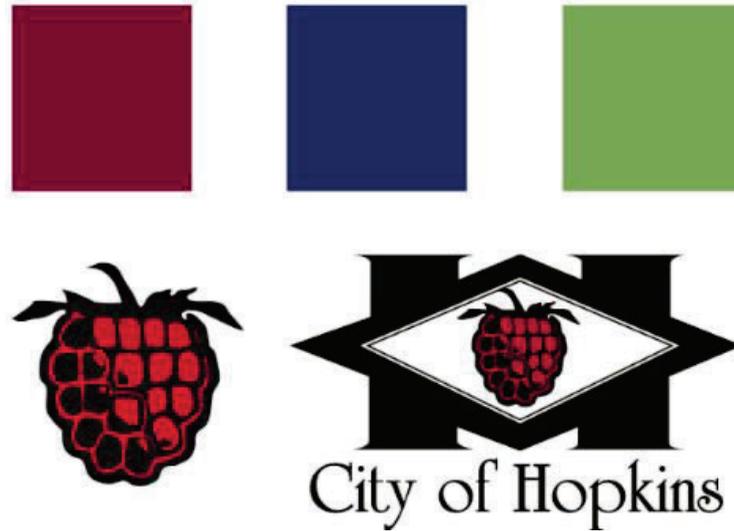
Existing Conditions

General branding and wayfinding

- Hopkins has an existing sign family for vehicular scale wayfinding downtown that incorporates city logo and colors
- Existing wayfinding and other streetscape features embody the historic design elements

Wayfinding should connect:

- EOTF
- SW LRT stations
- Local and regional trails
- Important Hopkins destinations (downtown, The Artery, Shady Oak Lake Beach)



Wayfinding Principles

Refer to Appendix A.3 Branding and Wayfinding Guidelines for additional information.

Keep it Simple

Information should be clear, legible, and simple enough to be understood by a wide audience.

Be Consistent

Signs and markings should have common styles, fonts, colors, icons, materials, and placement.

Design for Inexperience

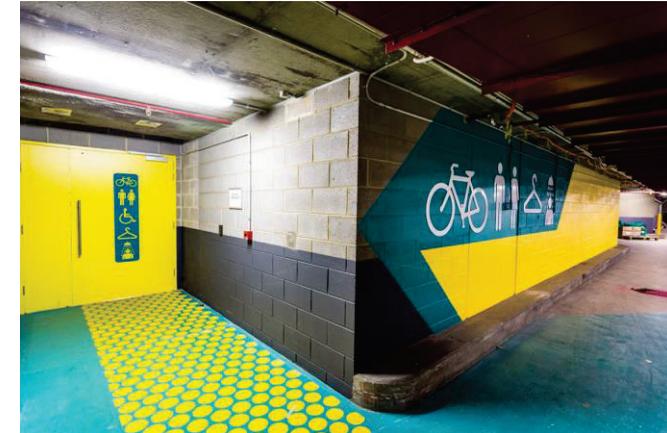
Wayfinding systems should be designed for new or infrequent users.

Be Inclusive

Signs that consider the needs of people with vision disabilities, or people with limited English proficiency.

Consider End of Trip

The branding and wayfinding system should be designed to guide users through the end of their trip.



Goals/Objectives

Objectives

- Enhance trail connections and points of entry along paths
- Guide people to end-of-trip facilities and destinations
- Clearly define and identify end-of-trip facility locations
- Design for all users and various modes of travel
- Employ diverse wayfinding strategies
- Create coordinated and consistent sign family

The goal of the EOTF Wayfinding Guidelines is to establish a wayfinding system that guides users through the end of their trip and enhances the experience of people traveling to and through Hopkins.

Recommended Wayfinding

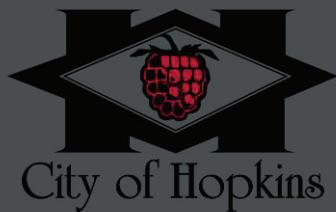
Sign Types

- **Route ID:** trail or street name identification signage
- **End of Trip Facility ID:** landmark and/or signage that communicates the type of facility and location
- **Gateway:** signage, marking, or feature that indicates the entry point to Hopkins, neighborhoods (such as downtown), or other area of significance
- **Symbols:** Cyclist/Pedestrian symbols to indicate target users and facility type symbols
- **Decision Signs:** points users in the direction of nearby destinations and end of trip facilities.
- **System or Area Map:** at trailheads, complex intersections, stations, and areas of co-located end of trip facilities
- **Mile Marker:** can be integrated into other signs, such as Route ID, along routes/trails.
- **Instructional:** signage that communicates how to use a facility, contact information, the benefits of bicycling, or other signage that encourages use by being highly noticeable, appealing, or approachable, etc.
- **Regulatory:** behavioral instructions, restrictions for use, hours of operations, etc.





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END-OF-TRIP FACILITIES PLAN RECOMMENDATIONS

Recommendations Objective

- To assist City of Hopkins staff with steps to implement and prepare cost estimates for implementation of recommendations from the end-of-trip facilities plan.
- Identify micromobility parking facility types and corresponding cost opinions for parking facilities at recommended locations, informed by the standards presented in the Plan.
- Present policy and program recommendations for improving the active transportation approach.



Recommendations Overview

Recommendations

When planning for end-of-trip facilities, consider the following recommendations to support active transportation. This section provides a broad range of recommendations to improve access, ease of use, safety, and support for active transportation users. These micromobility end-of-trip facility recommendations have been prepared to help the City of Hopkins apply a consistent approach to accommodating existing and growing micromobility needs in Downtown Hopkins.

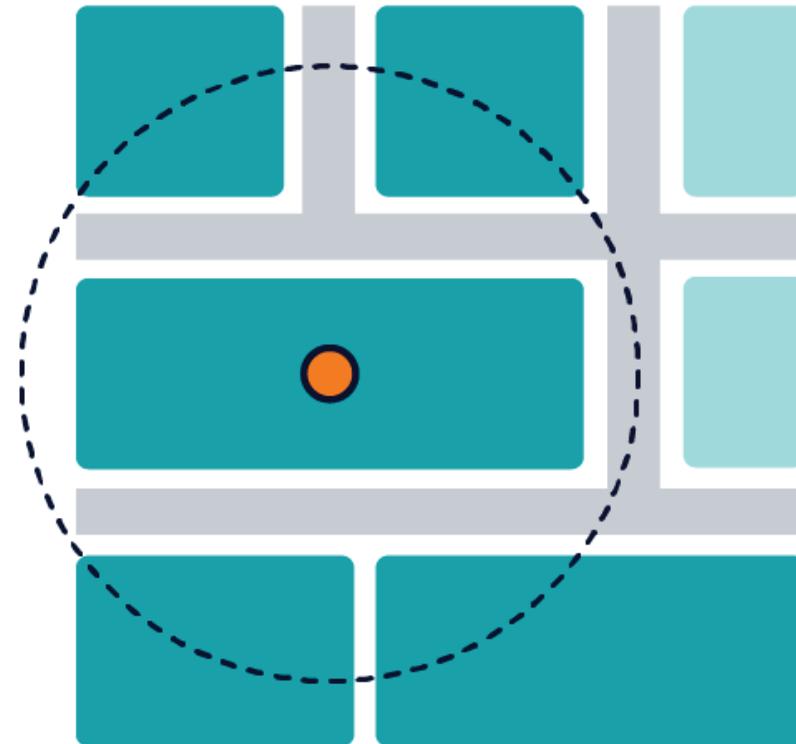
Facility Types

With a wide range of active transportation users traveling to and from Downtown Hopkins each day, the proposed micromobility facility types and locations are according to site's characteristics. Four key micromobility facility types were developed for Downtown Hopkins to meet the range of needs of active transportation users.

Recommendation: Active Commuter Hub

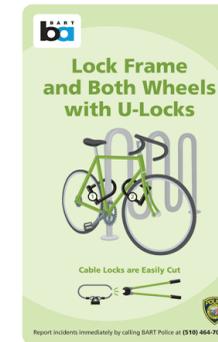
Active Commuter Hubs provide a one-stop shop for long-term micromobility commuters. Active Commuter Hubs are distributed to provide convenient, secure, and well-appointed facilities for people who will be on-site for several hours or more. Active Commuter Hubs may be located within parking structures, free-standing structures, or in buildings that have exterior access.

Recommended Location: Municipal Parking Ramp



Active Commuter Hub Facility Details/Checklist

Intended Users	<ul style="list-style-type: none"> • Active transportation commuters
Length of Stay	<ul style="list-style-type: none"> • Short-Term (2-6 hours) • Long-Term (6+ hours) • Overnight
Priority Amenities:	<ul style="list-style-type: none"> • Personal lockers to accommodate at least 25% of total parking supply (unless located within building with additional shower/locker facilities) • At least 5% of total parking supply spaced extra wide (to accommodate bikes at least 8.5 feet long) • Bike repair station • Intermittent and signed outlets for e-bike charging • High-visibility, exterior branded signage • Clear on-site wayfinding to/from enclosure, especially when shared with motor vehicles • On-site educational signage and resources
Security Features:	<ul style="list-style-type: none"> • Secure rack styles • Access-controlled • Conspicuous closed-circuit video signage • Extra bright lighting • Enclosed within durable, tamper-proof exterior materials



Intended Users	<ul style="list-style-type: none"> • Active transportation commuters
Optional Amenities:	<ul style="list-style-type: none"> • Bench • Parts vending machine • On-site showers
Location Features	<ul style="list-style-type: none"> • Exterior access provided • Located on the ground floor

Active Commuter Hub Cost Opinion

- Assumes an approximate 20' x 24' facility
- Accommodates 50 parking spaces

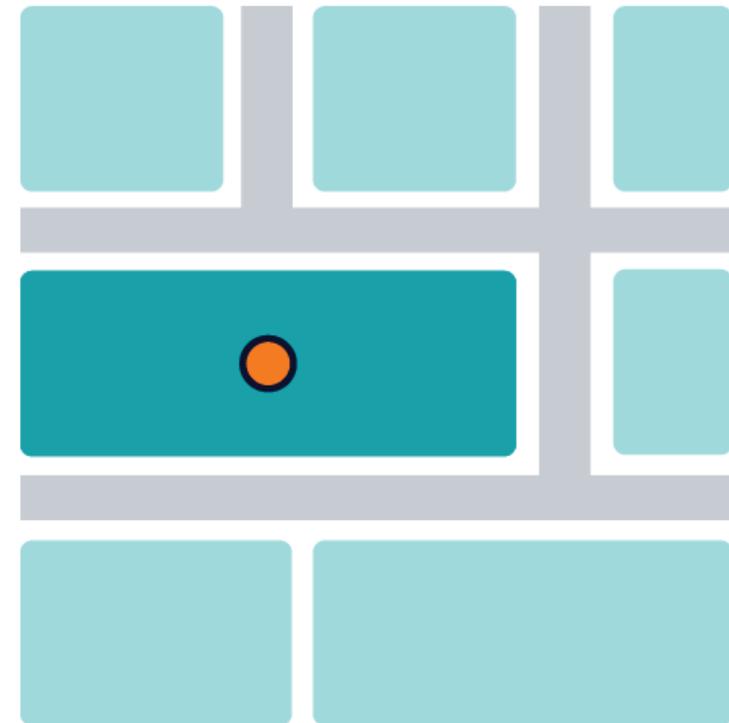
DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Locker	2	EA	\$460	\$920	1 unit accommodates 3 lockers.
Inverted U-Rack	1	EA	\$500	\$500	1 unit accommodates 2 spaces.
Two-Tier with Assist	12	EA	\$3,000	\$36,000	1 unit accommodates 4 spaces.
Repair / Pump Station	1	EA	\$2,000	\$2,000	
Bench	1	EA	\$600	\$600	
Prefabricated Facility	1	EA	\$86,780	\$86,780	Approx. 20' x 24'. Includes door lock hardware and card reader
Security Camera	2	EA	\$250	\$500	
SUBTOTAL =				\$127,300	
5% MOBILIZATION =				\$ 6,365	
20% DESIGN & CONSTRUCTION ENGINEERING =				\$ 25,460	
30% CONTINGENCY =				\$ 38,190	
TOTAL =				\$197,315	<i>(2024 dollars)</i>



Recommendation: Mobility Rooms

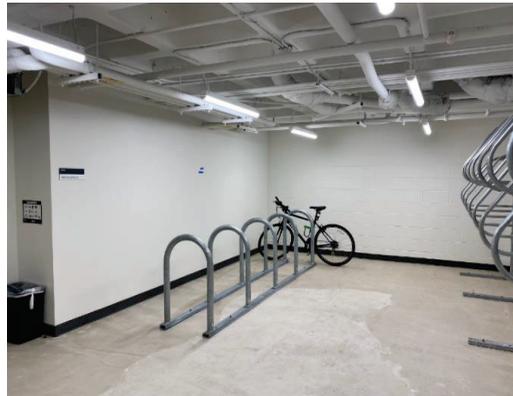
Mobility Rooms provide secure, long-term micromobility parking for specific building populations. These locations can be access-restricted to people who use a specific building on a regular, long-term basis. These locations may be co-located with end-of-trip amenities.

Recommended Locations: Center for the Arts, City Hall/Police Department, Residential Developments



Mobility Rooms

Facility Details/Checklist

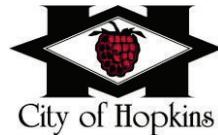


Intended Users	<ul style="list-style-type: none"> Active transportation users within specific buildings
Length of Stay	<ul style="list-style-type: none"> Short-Term (2-6 hours) Long-Term (6+ hours) Overnight
Location Features	<ul style="list-style-type: none"> Located on ground floor; If ground floor is not possible, locate wheel channels along the side of the stairway, wayfinding to elevators and bike room must be provided.
Security Features:	<ul style="list-style-type: none"> Secure rack styles Pre-approved and location-restricted badge access Conspicuous closed-circuit video
Priority Amenities:	<ul style="list-style-type: none"> Personal lockers to accommodate at least 10% of total parking supply (unless located within building with additional locker facilities or a housing building) Bike repair station Intermittent and signed outlets for e-bike charging On-site educational signage and resources Access to showers/lockers within building
Optional Amenities:	<ul style="list-style-type: none"> Bench Bike parts vending machine

Mobility Rooms Cost Opinion

- Assumes an approximate 8' x 14' facility
- Accommodates 12 parking spaces

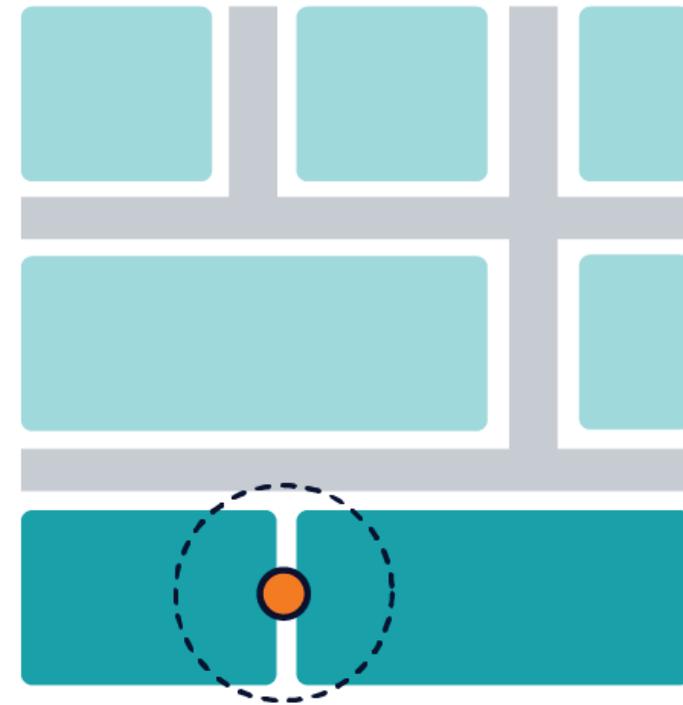
DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Locker	1	EA	\$460	\$460	1 unit accommodates 3 lockers
Two-Tier with Assist	3	EA	\$3,000	\$9,000	1 unit accommodates 4 spaces.
Repair / Pump Station	1	EA	\$2,000	\$2,000	
Security Camera	1	EA	\$250	\$250	
SUBTOTAL =				\$11,710	
5% MOBILIZATION =				\$ 586	
20% DESIGN & CONSTRUCTION ENGINEERING =				\$ 2,342	
30% CONTINGENCY =				\$ 3,513	
TOTAL =				\$18,151	<i>(2024 dollars)</i>



Recommendation: Mobility Nodes

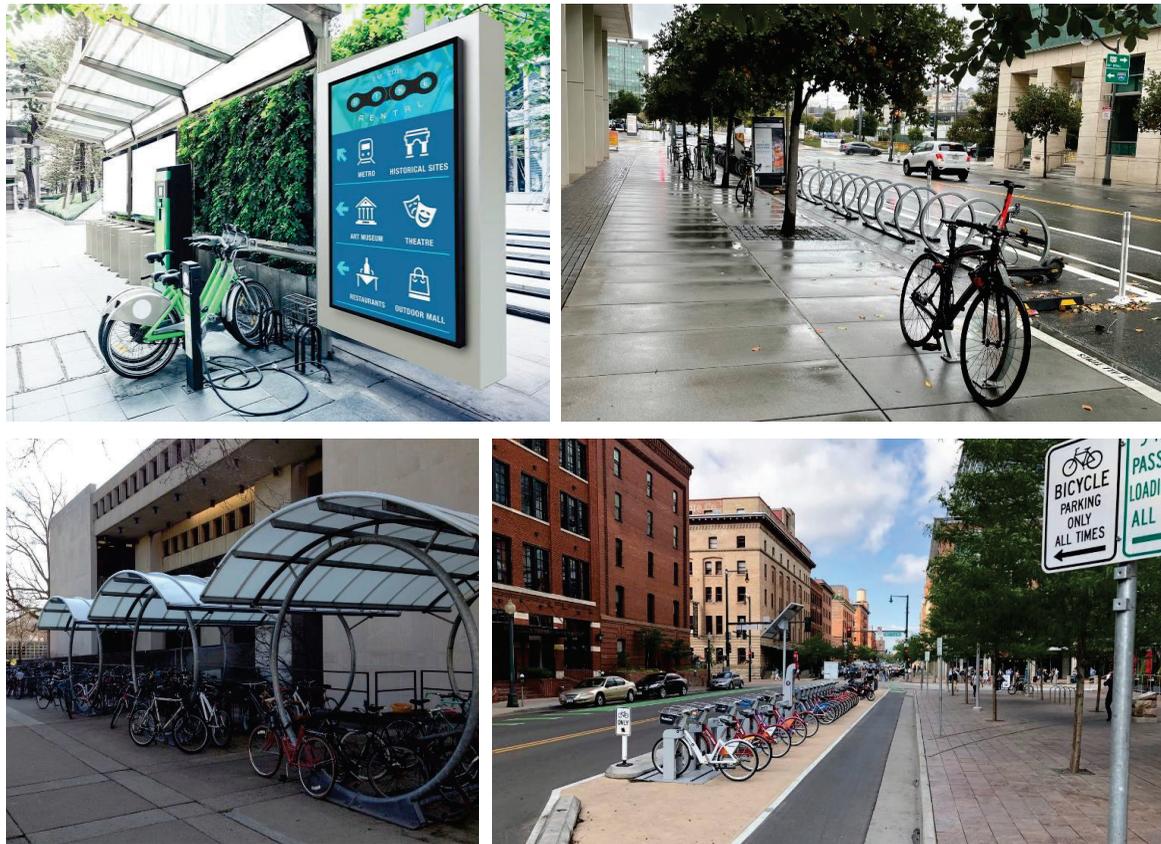
Mobility Nodes provide a concentrated supply of bike/micromobility parking within high-foot traffic areas and close to Downtown Hopkins activity centers. These locations are highly convenient for a large range of users, mostly rely on foot traffic to self-enforce security, and may be co-located with weather-resistant end-of-trip amenities. These locations are well-suited within close proximity of other transportation facilities, such as shuttle/transit stops and designed shared micromobility parking areas. Mobility nodes may serve just one building or a cluster of buildings if primary entrances to the buildings are proximate.

Recommended Locations: Activity Center, METRO Green Line LRT Stations (3), Transit Stations, the Artery Corridor, Downtown Park



Mobility Nodes

Facility Details/Checklist



Intended Users	<ul style="list-style-type: none"> All
Length of Stay	<ul style="list-style-type: none"> Short-Term (2-6 hours)
Location Features	<ul style="list-style-type: none"> Located within high foot traffic areas Located within 200 feet of major activity/destination centers Ideally co-located with other mobility amenities, such as shuttle/transit stops and bikeshare stations
Security Features:	<ul style="list-style-type: none"> Secure rack styles Lockers (Smart) Natural surveillance within high-foot traffic areas
Priority Amenities:	<ul style="list-style-type: none"> Weather protection via shelter or building overhang for 25% of total parking supply (for Nodes with greater than 40 spaces) Bike repair station Free-standing or shelter-mounted educational resources
Optional Amenities:	<ul style="list-style-type: none"> Weather protection via shelter or building overhang (for Nodes with less than 40 spaces)

Mobility Nodes Cost Opinion

①

- Assumes an approximate 7' x 13' facility
- Accommodates 8 parking spaces

②

- Assumes an approximate 5' x 7' facility
- Accommodates 1 parking spaces



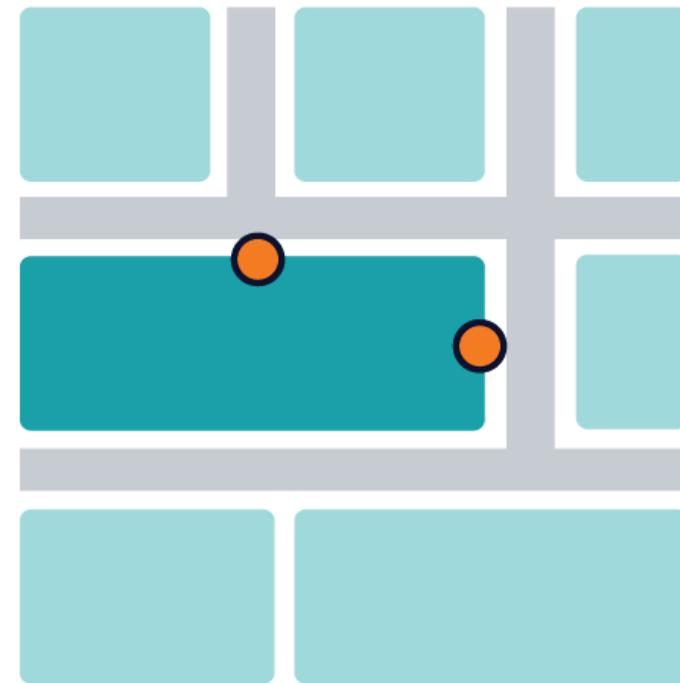
DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Shelter	1	EA	\$9,000	\$9,000	Approx. 7' x 13' prefab structure. 1 unit accommodates 8 spaces
Inverted U-Rack	8	EA	\$250	\$2,000	1 unit accommodates 2 spaces.
Repair / Pump Station	1	EA	\$2,000	\$2,000	
SUBTOTAL =				\$13,000	
5% MOBILIZATION =				\$ 650	
20% DESIGN & CONSTRUCTION ENGINEERING =				\$ 2,600	
30% CONTINGENCY =				\$ 3,900	
TOTAL =				\$20,150	(2024 dollars)

DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Locker (Smart)	1	EA	\$8,000	\$8,000	Approx. 5' x 7' locker assembly 1 unit accommodates 1 space.
Repair / Pump Station	1	EA	\$2,000	\$2,000	
SUBTOTAL =				\$10,000	
5% MOBILIZATION =				\$ 500	
20% DESIGN & CONSTRUCTION ENGINEERING =				\$ 2,000	
30% CONTINGENCY =				\$ 3,000	
TOTAL =				\$15,500	(2024 dollars)

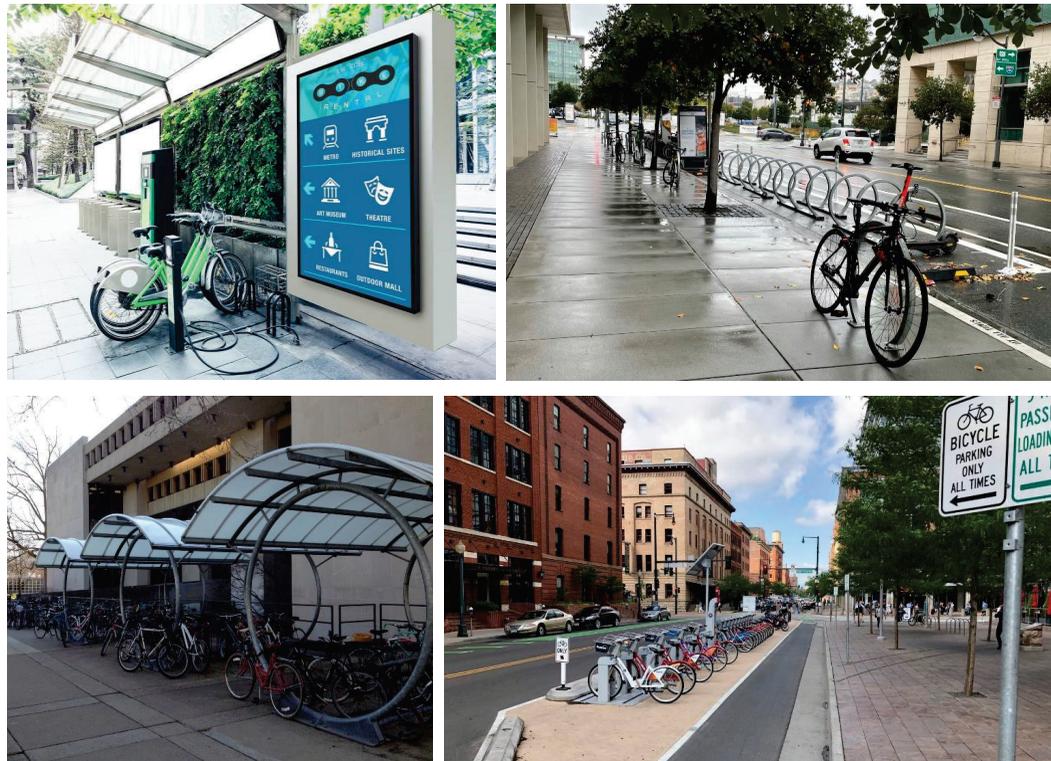
Recommendation: Visitor Spaces

Visitor Spaces provide a place within 50 feet of all major building entrances for a person to secure their personal micromobility device. Visitor spaces include parking locations within the public right-of-way. Partner with local businesses to repurpose on-street parking with a bike corral. If multiple public entrances serve the same building, visitor spaces should be distributed and provided across entrances.

Recommended Locations: Downtown Core, Downtown Park, Mainstreet



Visitor Spaces Facility Details/Checklist



Intended Users	<ul style="list-style-type: none"> All
Length of Stay	<ul style="list-style-type: none"> Short-Term (2-6 hours)
Location Features	<ul style="list-style-type: none"> Located within 50 feet of all major building entrances
Security Features:	<ul style="list-style-type: none"> Secure rack styles

Visitor Spaces Cost Opinion

①

- Assumes minimum 72” x 24” footprint
- Accommodates 2 parking spaces

DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Inverted U-Rack	1	EA	\$250	\$250	1 unit accommodates 2 spaces.
				SUBTOTAL =	\$250
				5% MOBILIZATION =	\$13
				20% DESIGN & CONSTRUCTION ENGINEERING =	\$50
				30% CONTINGENCY =	\$75
				TOTAL =	\$388 (2024 dollars)

②

- Assumes minimum 18’ x 8’ footprint
- Accommodates 14 parking spaces

DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT	NOTES
Corral	1	EA	\$3,000	\$3,000	1 unit accommodates 14 spaces.
				SUBTOTAL =	\$3,000
				5% MOBILIZATION =	\$150
				20% DESIGN & CONSTRUCTION ENGINEERING =	\$600
				30% CONTINGENCY =	\$900
				TOTAL =	\$4,650 (2024 dollars)



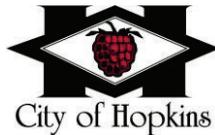
Standard Items and Unit Costs

DESCRIPTION	UNIT	UNIT PRICE	ASSUMPTIONS/NOTES
Locker	EA	\$460	1 unit = 3 lockers.
Inverted U-Rack	EA	\$250	1 unit accommodates 2 spaces.
Corral	EA	\$3,000	1 unit accommodates 14 spaces.
Locker (Smart)	EA	\$8,000	1 unit accommodates 1 spaces.
Two-tier with Assist	EA	\$3,000	1 unit accommodates 4 spaces.
Repair / Pump Station	EA	\$2,000	
Bench	EA	\$600	
Shelter	EA	\$9,000	
Security Camera	EA	\$200	

General Assumptions and Exclusions:

1. Unit prices are based on 2024 vendor unit costs, using the most recent available data from this time period.
2. Unit prices are not assumed to include shipping, site preparation, assembly, or installation. It is recommended to reference manufacturers specifications for all site preparation, assembly, and installation techniques.
3. The opinion does not include environmental permitting, easement, or property acquisition.
4. The opinion does not include construction administration and inspection services.
5. The opinion does not include public outreach, funding planning, or client management services.
6. It is recommended that products are galvanized finish to protect from the elements.

The opinions of probable construction cost presented in this document were developed by identifying pay items and establishing quantities based on assumptions for facility size. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Preliminary cost opinions include a 30% contingency to cover items that are undefined or are typically unknown prior to final design. Unit costs are based on 2024 dollars and were assigned based on historical cost data from common vendors. This cost opinion does not include permitting, inspection, or construction management; escalation; or the cost for ongoing maintenance. This cost opinion is provided for the Client’s information, and is based on the design professional’s recent experience, adjusted for factors known at the time of preparation. Toole Design Group, LLC has no control over the cost of labor and material, competitive bidding, or market conditions; and makes no warranties, expressed or implied, concerning the accuracy of the opinion as compared to actual bids or cost to the Client.



Policy and Program Recommendations

Recommendations

The recommendations draw upon the needs identified during the review of existing conditions, best practice review, and public engagement. They are designed to work together to make using active transportation a comfortable, enjoyable, and safe experience. Recommendations aim to:

- Encourage or require new construction and redevelopment to include micromobility parking.
- Require proportionate micromobility parking to vehicle parking present in new developments.
- To “jump start” the availability of parking at existing destinations, many cities have allocated funds to purchase bulk quantities of micromobility racks and then sell them at cost to existing businesses and property owners.



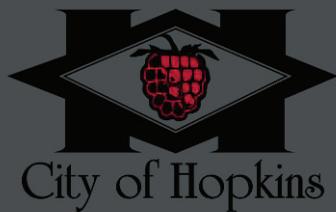
Policy and Program Recommendations

- Update zoning to offer parking credits for employers who have or proposed to have changing, showers, or locker facilities.
- Develop incentives for existing businesses. Area businesses that pro-actively install changing facilities can be given recognition by each community or even supported through a city grant program that provides small matching grants to businesses that are considering adding changing facilities.
- Collaborate with Access Hopkins to implement future end-of-trip facilities.
- Update the micromobility parking inventory every two years.
- Adopting a policy that requires events which draw over 100 participants to provide micromobility parking.





HENNEPIN COUNTY
MINNESOTA



END-OF-TRIP FACILITIES PLAN APPENDIX

Appendix

This section provides additional resources and information related to the work of this end-of-trip facilities plan.

A.1 – Community Engagement Survey Results

A.2 – Micromobility Parking Guidelines

A.3 – Branding and Wayfinding Guidelines

