Transportation Authority of Marin

Marin County

Mobility Hub Plan

Draft Final Report - May 2026

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Mobility Hub Plan Overview

In 2022, the Metropolitan Transportation Commission (MTC) adopted the Transit-Oriented Communities (TOC) Policy, which identified nine rail and ferry terminals within Marin County as Tier 4 transit service areas. These locations—three in Novato, two in San Rafael, two in Larkspur, one in Tiburon, and one in Sausalito—are subject to the TOC Policy requirements related to station access, circulation, and identifying opportunities for mobility hub planning and implementation. Mobility hubs are defined in the MTC Mobility Hub Implementation Playbook (MTC, April 2021) as safe, comfortable, convenient, and accessible places where people can seamlessly transfer between travel modes.

To support implementation of the TOC Policy in Marin County, the Transportation Authority of Marin (TAM) secured an MTC Mobility Hubs Grant in 2023 to prepare the Marin County Mobility Hub Plan (Plan). The Plan focuses on improving access to Marin's nine rail and ferry terminals by identifying gaps in walking, biking, transit connections, and passenger amenities, and by defining projects that can be implemented by TAM, transit operators, and local jurisdictions. Six of the nine locations were selected for more detailed, advanced concept designs to help illustrate how improvements could function together to create a mobility hub.

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This Plan coalesces a gaps analysis and community input into a set of actionable projects for the six mobility hub locations that were advanced to concept design. For each recommended project, the Plan identifies a lead agency and stakeholder partners; provides a rough-order-of-magnitude (ROM) capital cost; and outlines key implementation considerations, next steps, and operational considerations. The implementation of the recommended improvements will support the vision of a well-connected network of mobility hubs that enhance mobility both within Marin County and to regional destinations via sustainable transportation modes.

Projects in this Plan are organized to support coordinated delivery across agencies and to position Marin jurisdictions and transit operators for future competitive funding opportunities. In particular, future One Bay Area Grant (OBAG) cycles are expected to prioritize investments in communities that are subject to, and compliant with, the TOC Policy. The completion of this Plan and its subsequent adoption and inclusion of recommendations in City-adopted Capital Improvement Programs (CIPs) is intended to achieve alignment and compliance with those MTC requirements.

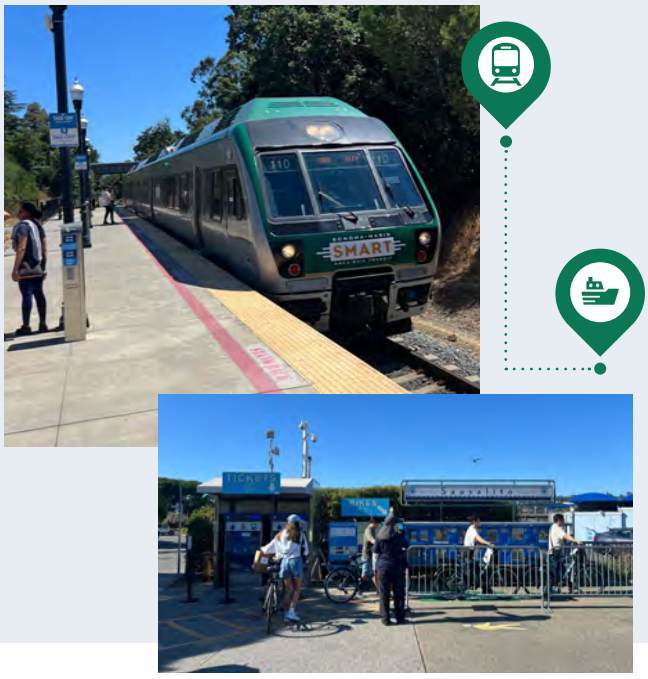
In addition to capital improvements at the mobility hub locations, this report also includes best practices and implementation approaches for integrating privately operated shared mobility services, such as carshare, bikeshare, e-bikes, scooters, and other micromobility, into mobility hubs and other areas within the public right-of-way. This guidance is intended to support consistent, scalable approaches for permitting, operations, and maintenance across Marin jurisdictions.

Next steps include continued coordination between lead and partner agencies to confirm project scope and phasing, refine cost estimates as needed, and identify near-term funding pathways to advance priority improvements. One such funding pathway is a tranche of Regional Measure 3 (RM3) funds allocated specifically for North Bay transit access improvements that is anticipated to support implementation of some of the identified improvements in this plan.

Introduction

Project Overview

The Marin County Mobility Hub Plan (Plan) was developed to support improved access, connectivity, and user experience at Marin County's nine rail and ferry terminal locations identified under the Metropolitan Transportation Commission's (MTC) Transit-Oriented Communities (TOC) Policy. Six of the sites are Sonoma-Marin Area Rail Transit (SMART) stations, with the remaining three being ferry terminals served by the Golden Gate Bridge Highway & Transportation District (GGBHTD). All sites are served, either directly or in close vicinity, by bus routes operated by one or both of Marin Transit and GGBHTD.



These sites represent the County's most significant regional transit gateways and play a critical role in supporting ridership, advancing climate goals, and improving multimodal access. By creating mobility hubs at these key transportation nodes, the countywide mobility network will become better connected through improved access and seamless connectivity between modes. These enhancements will help the region achieve goals identified in the Countywide Transportation Plan (CTP), including improving safety for all users, improving multimodal travel options, enhancing connections between communities and job centers, and encouraging mode shift to transit, biking, and walking.

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The nine mobility hub locations are listed below and shown in **Figure 1**. Six of the sites, indicated on **Figure 1**, were advanced to concept design.

Novato

San Marin SMART Station

Downtown SMART Station

Hamilton SMART Station

San Rafael

Marin Civic Center SMART Station

San Rafael SMART Station

Tiburon

Tiburon Ferry Terminal

Larkspur

Larkspur SMART Station

Larkspur Ferry Terminal

Sausalito

Sausalito Ferry Terminal

Most of the sites currently include surface vehicle parking lots. However, all of the sites are lacking in at least some critical amenities necessary to fully support access via walking, biking, or bus. By enhancing access to the sites and the seamless integration of modes at the sites, use of the sites is expected to increase, thereby improving mobility for nearby residents and workers and enhancing economic activity for nearby businesses.

Figure 1: Plan Sites and Focus Areas

Burdell Mountain

Novato San Marin SMART

Novato

Novato Downtown SMART

Novato Hamilton SMART

Big Rock Ridge

101

St. Vincent

Marin Civic Center SMART

China Camp State Park

San Rafael SMART

San Rafael

Larkspur SMART

Larkspur Ferry Terminal

Richmond

Larkspur

Mt. Tamalpais

Mill Valley

Mt. Tamalpais State Park

El Campo

Tamalpais-Homestead Valley

Sausalito Ferry Terminal

Tiburon Ferry Terminal

Marin Penninsula

Legend

- Mobility Hub Site
- Advanced to Concept Design

Plan Development Process and Prior Deliverables

This Plan builds on four prior technical and outreach-focused deliverables, each of which is included as an appendix to this report.

Existing Conditions Report

The Existing Conditions Report, included in **Appendix A: Existing Conditions Report**, documented the current state of access and amenities at each of the nine sites based on existing data, operator interviews, and site visits. The report includes a review of land use context, existing and proposed pedestrian and bicycle networks, transit service, and relevant planned projects.

Mobility Hub Amenities Toolkit (Toolkit)

The Toolkit, included in **Appendix B: Mobility Hub Amenities Toolkit**, identified a menu of potential mobility hub amenities that could be implemented to enhance accessibility and community value at each site. The Toolkit provided a description, qualitative cost magnitude, features, implementation considerations, and examples for each amenity. The amenities were organized around four categories from the MTC Mobility Hub Implementation Playbook:

Round 1 Outreach Summary

The Outreach Summary, included in **Appendix C: Round 1 Outreach Summary**, documented feedback received through in-person engagement and an online survey in Fall 2024. It identified community priorities, access challenges, and desired improvements at each of the nine mobility hub sites. Outreach findings helped refine project recommendations and prioritize improvements.

Station Access Gap Analysis

The Station Access Gap Analysis, included in **Appendix D: Station Access Gap Analysis**, synthesized findings from the Existing Conditions Report and Round 1 Outreach to identify key access gaps and opportunities for improvements at each site. It translated high-level needs into recommended improvements informed by the Toolkit.

Purpose of this Plan

This Plan translates previously identified needs and conceptual improvements into discrete, implementable projects. For each of the nine mobility hub locations, this report documents recommended strategies to create mobility hubs and identifies key next steps to bring the recommended strategies to fruition.

Six of the nine sites include concept designs that illustrate how recommended improvements could function together to create a cohesive mobility hub environment. For these six sites, the following additional elements are included in the Plan:

- Description of discrete capital projects that can be included in jurisdictional Capital Improvement Plans (CIPs);
- Definition of a lead agency and stakeholder partners;
- Implementation and operational considerations; and
- Rough-order-of-magnitude (ROM) capital cost estimates.

This report is intended to serve as:

- A reference document to support TOC Policy compliance;
- A coordination tool among TAM, Marin jurisdictions, and transit operators;
- A strategic framework to guide refinement, phasing, and advancement of mobility hub improvements; and
- A funding strategy resource to position projects for competitive grant programs.

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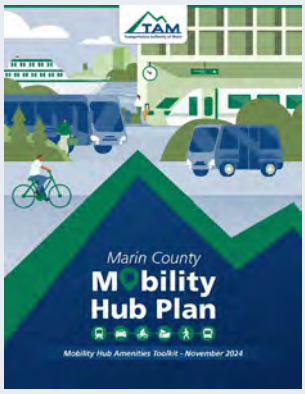
Improvement Definition

How Improvement Priorities Were Identified

Improvement priorities for the Plan were developed through a structured process that included:

Assessing existing pedestrian, bicycle, transit, and passenger amenity conditions

Appendix A:
Existing Conditions Report

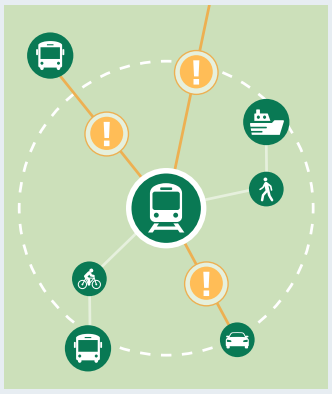


Developing a Mobility Hub Amenities Toolkit to define potential mobility hub features

Appendix B:
Mobility Hub Amenities Toolkit

Defining needs and priorities based on community feedback

Appendix C:
Round 1 Outreach Summary



Identifying first- and last-mile access gaps within a ½-mile walkshed

Appendix D:
Station Access Gap Analysis

This process ensured that recommendations are grounded in site conditions, community input, operational realities, and regional policy alignment.

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Improvement Priorities

Technical analysis and community input across the nine mobility hub locations revealed the following consistent themes for improvement needs.

Pedestrian and Bicycle Access

Improve Pedestrian and Bicycle Safety

Many sites lack continuous, well-lit sidewalks, all ages and abilities bicycle facilities, and comfortable pedestrian crossings. Improving safety and comfort for people walking and biking is foundational to increasing transit ridership and meeting TOC Policy objectives.

Improvements include:

- Sidewalk gap closures
- Enhanced lighting
- High-visibility crosswalks
- Rectangular Rapid Flashing Beacons (RRFBs)
- Protected bicycle facilities

Strengthen Walking and Biking Connections

Several sites are separated from surrounding neighborhoods by major barriers such as US-101, rail corridors, or high-speed arterials. Closing network gaps and strengthening connections between stations and nearby land uses is a priority.

Improvements include:

- New or improved pathways
- Crossing enhancements at freeway interchanges
- Connections to SMART Pathway and regional bikeways

Transit Access and Operations

Enhance Transit Access and Integration

Improving transfers between SMART, bus, and ferry services is critical to creating cohesive mobility hubs. Several sites require more convenient, more comfortable, and more intuitive paths of travel between modes.

Improvements include:

- Bus stop consolidation or relocation
- Improved passenger loading areas
- Shorter and more comfortable paths of travel between modes

Optimize Transit Performance and Reliability

In certain locations, transit delays and inefficient bus circulation limit operational efficiency. Transit priority treatments and circulation refinements can improve reliability and reduce transfer times.

Improvements include:

- Dedicated bus or right-turn lanes
- Transit signal priority
- Bus loop reconfiguration

Station Access and Circulation

Expand Hub Access Options, Improve User Experience, and Increase Ridership

Many sites lack essential passenger amenities that influence rider comfort and the perception of safety.

Improvements include:

- Shelters and seating
- Lighting
- Real-time arrival information for bus services
- Secure bike parking, e-bike charging, and bike repair stations
- Drinking fountains
- WiFi and device charging

Create Cohesive and Intuitive Wayfinding

Wayfinding upgrades consistent with MTC's Regional Mapping and Wayfinding Project will help create a unified regional identity and simplify navigation.

Improvements include new wayfinding to support intuitive site circulation and connectivity to nearby destinations.

Increase Vibrancy of Station Areas and Improve Sustainability

Mobility hubs are not only transfer points but public spaces. Enhancements that strengthen connections to surrounding land uses and incorporate sustainability features can increase ridership and community value.

Improvements include:

- Solar canopies
- Landscaping enhancements
- Integration with planned transit-oriented development (TOD)
- Public realm activation

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Project Development

For each of the six sites advanced to concept design, individual improvements were grouped into up to three projects. Typically, one project related to mobility hub amenities, another related to site circulation and motorized access, and a third related to bicycle and pedestrian access/improvements.

Mobility hub amenities

Site circulation and motorized access

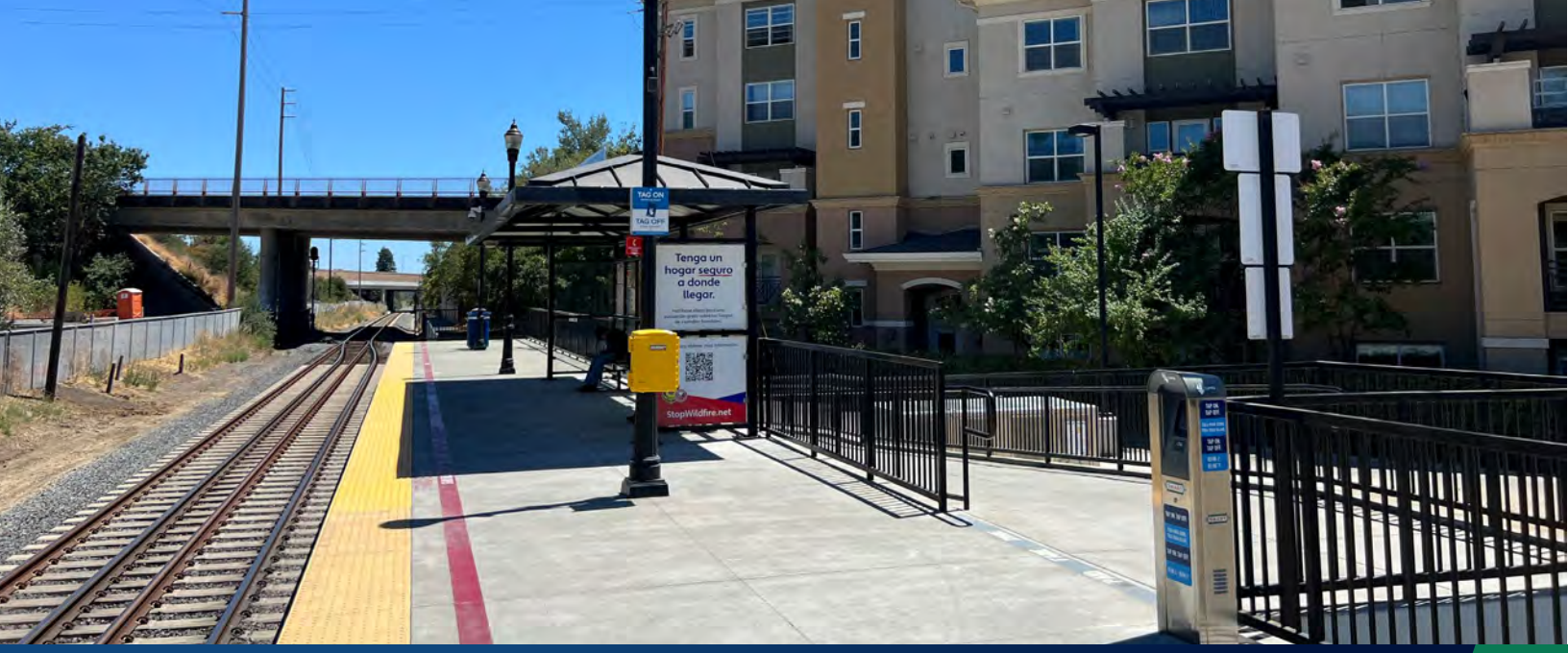
Bicycle and pedestrian access

Implementation of mobility hub improvements will require coordination among multiple agencies, including:

- Transportation Authority of Marin (TAM)
- SMART
- Marin Transit
- GGBHTD
- Local jurisdictions
- Caltrans (where applicable)
- Private property owners (where applicable)

For each project, a lead agency is identified; however, successful implementation will require early coordination to define ownership, cost-sharing arrangements, and operations and maintenance responsibilities.

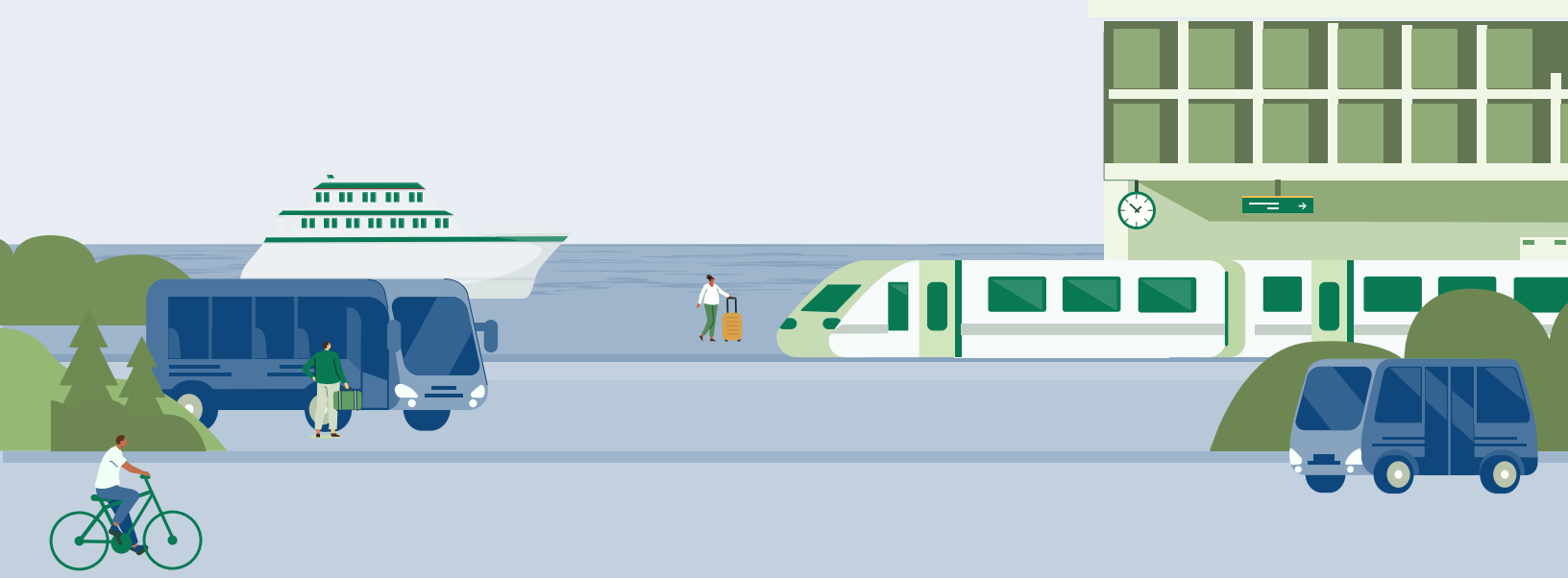
A rough-order-of-magnitude (ROM) capital cost, implementation considerations, operational considerations, and next steps are also provided for each project.



Mobility Hub Gap Assessment and Improvement Opportunities

This chapter provides an overview of gaps and improvement opportunities within the walkshed of all nine mobility hub sites. Each site is discussed in terms of its context within the transportation network and priority improvements are identified within a 0.5-mile area of the hub. Improvements are categorized according to the MTC Mobility Hub Implementation Playbook classification.

Note that Public Realm and Customer Experience improvement categories were considered at the mobility hub sites themselves and thus are not depicted at the walkshed level, but are considered in the subsequent chapter with detailed hub concepts.



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Novato San Marin SMART Station

At a Glance

Role

Northernmost rail station in the county, serving residential and employment areas in northern Novato and capturing trips from the US-101 corridor; primary connection to Sonoma County via transit; proximate to major redevelopment and growth opportunities

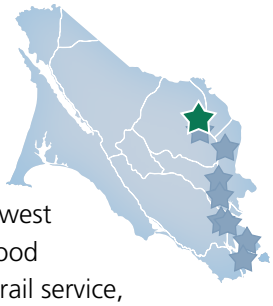
Primary Challenges

Limited site amenities and aesthetic treatments for users; gaps in pedestrian and bicycle connectivity across Redwood Boulevard and the US-101 interchange

Focus of Improvements

Strengthen first-/last-mile access and enhance passenger comfort

Site Context



The **Novato San Marin SMART Station** is located north of downtown Novato, just west of US-101 and adjacent to Redwood Boulevard. In addition to SMART rail service, the station is served by Marin Transit bus routes. The surrounding area includes residential neighborhoods and the former Fireman's Fund office campus, which is planned for redevelopment into a master planned residential community. The station also functions as a key transfer point between Marin Transit and SMART, supporting regional connections to Sonoma County.

The station currently functions primarily as a park-and-ride facility. While rail access is convenient for drivers, walking and biking connections to nearby neighborhoods and bus stops are constrained by wide roadways, limited crossings, and the physical barrier created by the US-101 interchange. The site currently offers very limited shade and no landscaping.

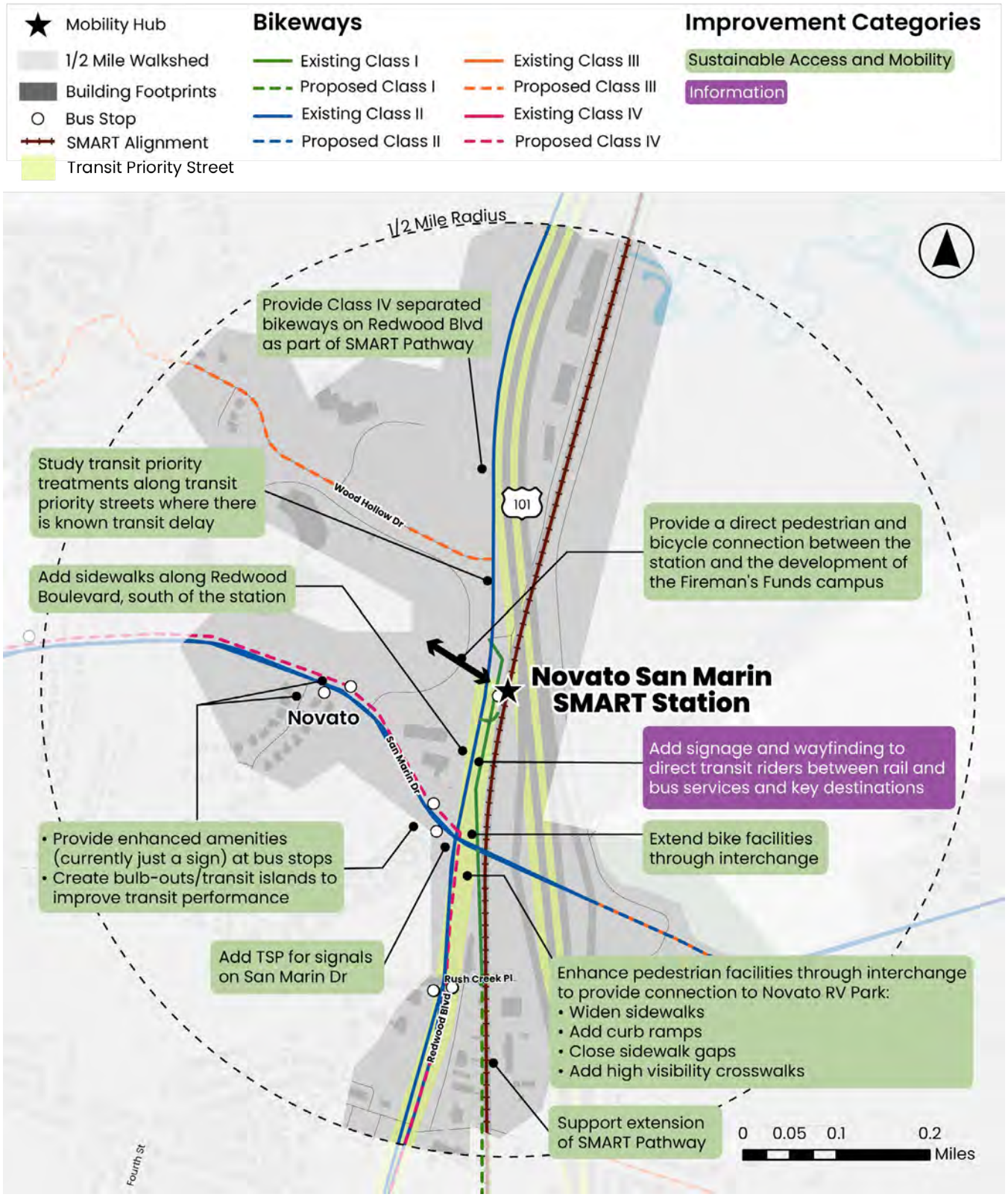
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Improving pedestrian and bicycle safety and comfort**, including sidewalk gap closures, enhanced lighting, and high-visibility crosswalks
- **Strengthening pedestrian and bicycle connections** across Redwood Boulevard and the US-101 interchange to better link the station with nearby neighborhoods and planned redevelopment
- **Enhancing passenger amenities** at bus stops to support user comfort and ridership growth
- **Improving transit reliability and performance** for bus connections to the station, including transit priority treatments and intersection modifications

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 2**.

Figure 2: Novato San Marin SMART Station Access Gaps and Improvement Opportunities



Novato Downtown SMART Station

At a Glance

Role

Rail station serving Downtown Novato with easy access to US-101

Primary Challenges

Lack of wayfinding for pedestrian connections to Downtown and nearby transit stops; existing gap in SMART Pathway

Focus of Improvements

Strengthen connections to Downtown and activate station site

Site Context

The **Novato Downtown SMART Station** is located on the eastern edge of Downtown Novato between Grant Avenue to the north and De Long Avenue to the south. While the station is within walking distance of commercial and civic destinations, it is not directly served by any bus routes, with the nearest bus stops being 0.2 miles away.

Although the station benefits from its proximity to Downtown, pedestrian and bicycle connections between the station, nearby bus stops, and surrounding streets lack clarity and cohesion. The currently unpaved station parking lot presents opportunities to improve accessibility and create a stronger sense of place. The historic Novato railroad depot building sits on the site but is currently unused.

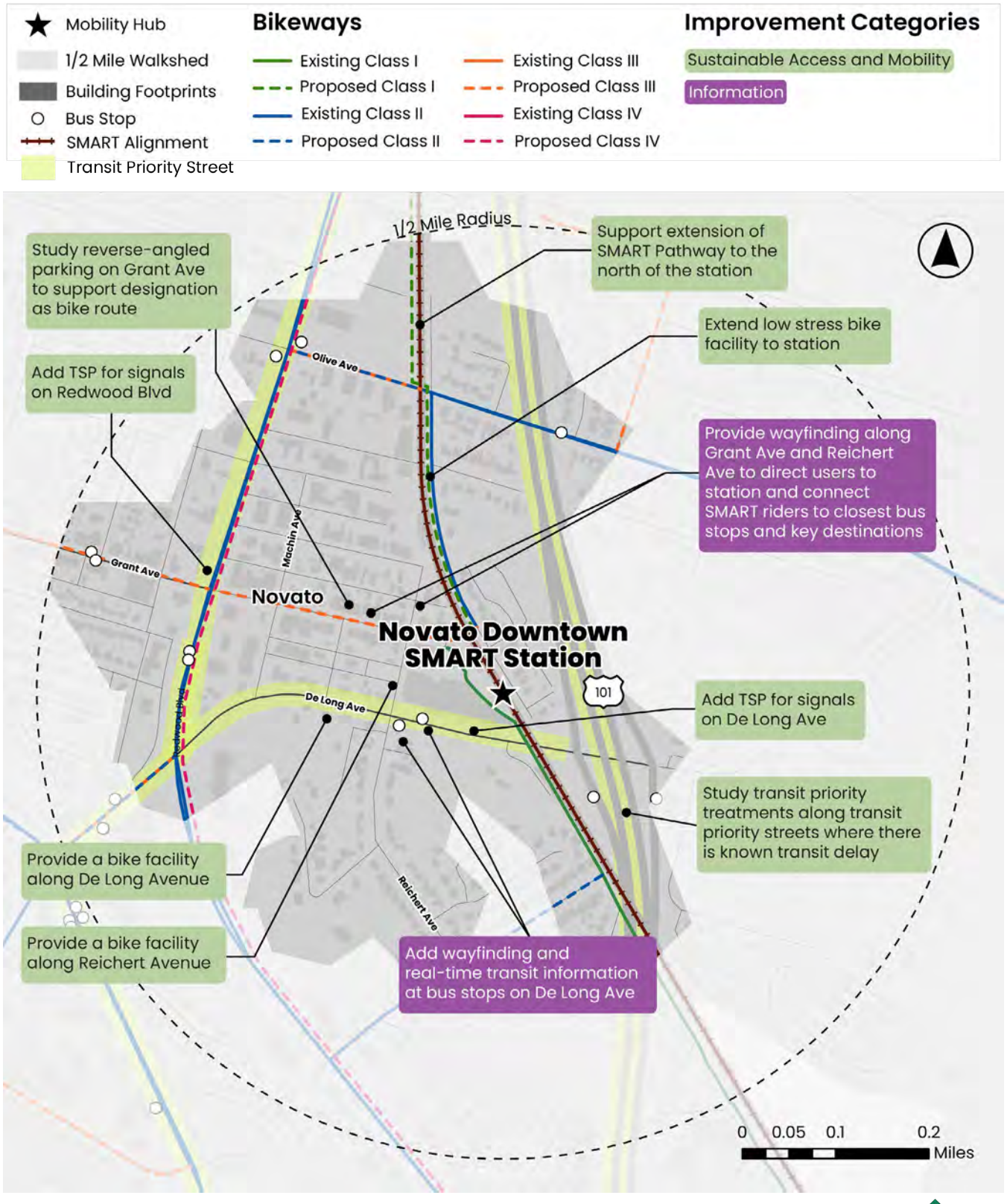
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Strengthening pedestrian and bicycle connections** between the station, Downtown Novato, the Redwood and Grant Transit Center, and nearby bus stops on De Long Avenue
- **Improving transit reliability and performance for bus connections** in the station vicinity, including transit priority treatments and intersection modifications
- **Strengthening bicycle connections** by providing bicycle facilities to key destinations and closing gaps in the bicycle network

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 3**.

Figure 3: Novato Downtown SMART Station Access Gaps and Improvement Opportunities



Novato Hamilton SMART Station

At a Glance

Role

Neighborhood rail station serving the Hamilton community; currently the southern terminus of a segment of the SMART Pathway and thus heavily used by cyclists

Primary Challenges

Limited bus integration and underutilized parking lot

Focus of Improvements

Improve bus transfers, enhance walking and biking connections, and enhance site comfort

Site Context

The **Novato Hamilton SMART Station** is located approximately four miles southeast of the Novato Downtown SMART Station along Main Gate Road. The station primarily serves the surrounding residential neighborhood but is not directly integrated with bus service, with the closest bus stops located 0.3 miles away. The current parking lot configuration does not permit bus circulation. One segment of the SMART Pathway currently ends at the station, although design is ongoing to extend it further south. The site provides very limited shade and landscaping.

While the station includes parking and rail access, opportunities exist to support bus transfers, enhance connectivity to the SMART Pathway, and create a more comfortable and desirable user experience.

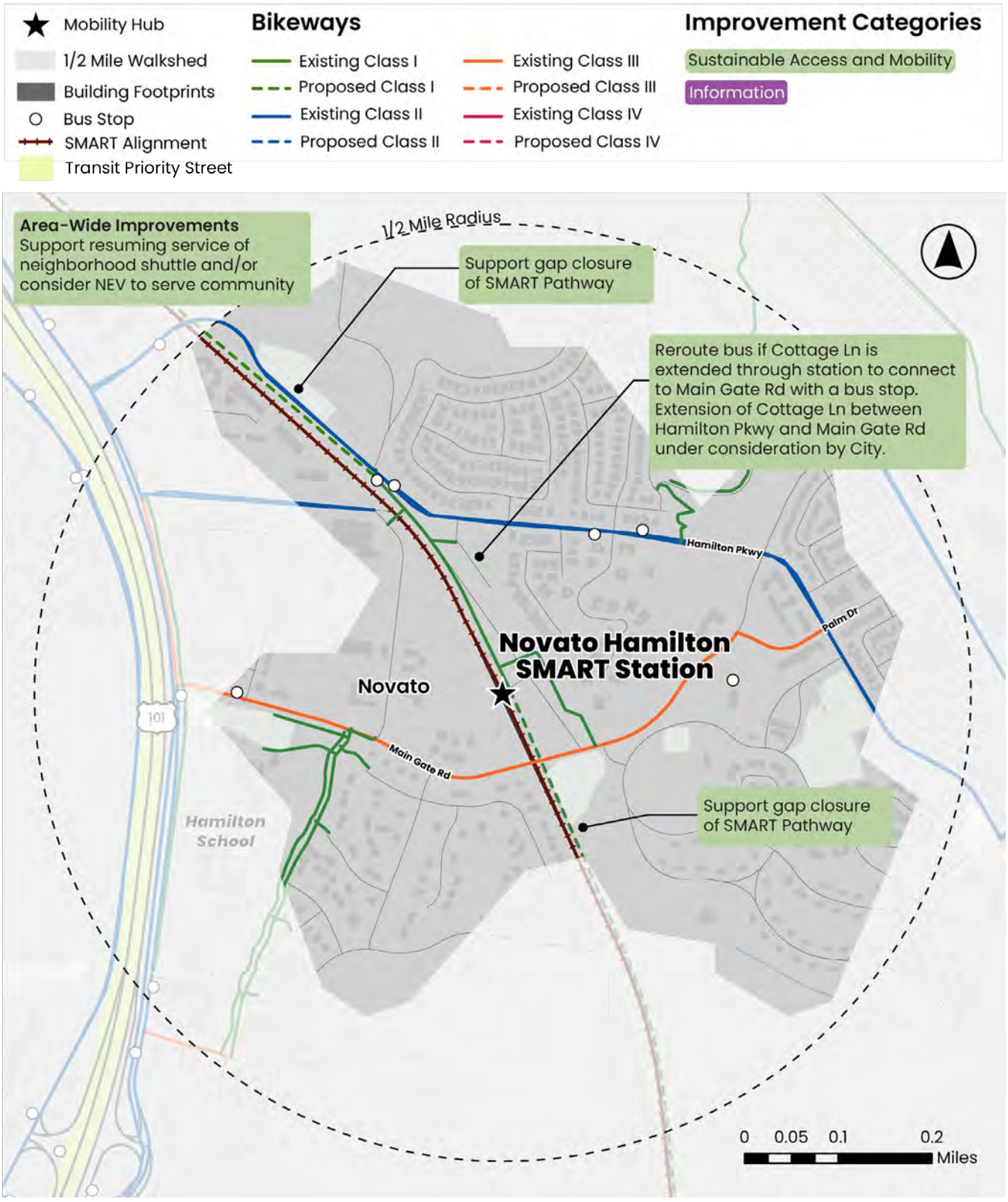
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Providing convenient bus/Neighborhood Electric Vehicle (NEV) transfers** by accommodating bus stops
- **Strengthening pedestrian and bicycle connections**, particularly between the station, Main Gate Road, and the SMART Pathway

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 4**.

Figure 4: Novato Hamilton SMART Station Access Gaps and Improvement Opportunities



Marin Civic Center SMART Station

At a Glance

Role

Rail station serving regional entertainment, civic, and employment destinations

Primary Challenges

A portion of the station is beneath a US-101 viaduct, with gaps in connections to surrounding land uses

Focus of Improvements

Improve station environment and support planned projects to create new connections to and through the station area

Site Context

The **Marin Civic Center SMART Station** is located underneath a US-101 viaduct, approximately 0.5 miles northwest of the Marin County Civic Center. In addition to SMART rail service, this station is also served by Marin Transit bus routes on Civic Center Drive. A project is currently advancing to provide pick-up/drop-off (PUDO) space and bike facilities on Civic Center Drive, just north of the station. The City of San Rafael also has walking and biking projects planned along Merrydale Road (Multi-Use Path Civic Center SMART Station to Northgate) and a new path south of and parallel to the SMART tracks (South Merrydale Road – Civic Center Connector [Rafael Meadows] Project).

Proposed Improvements

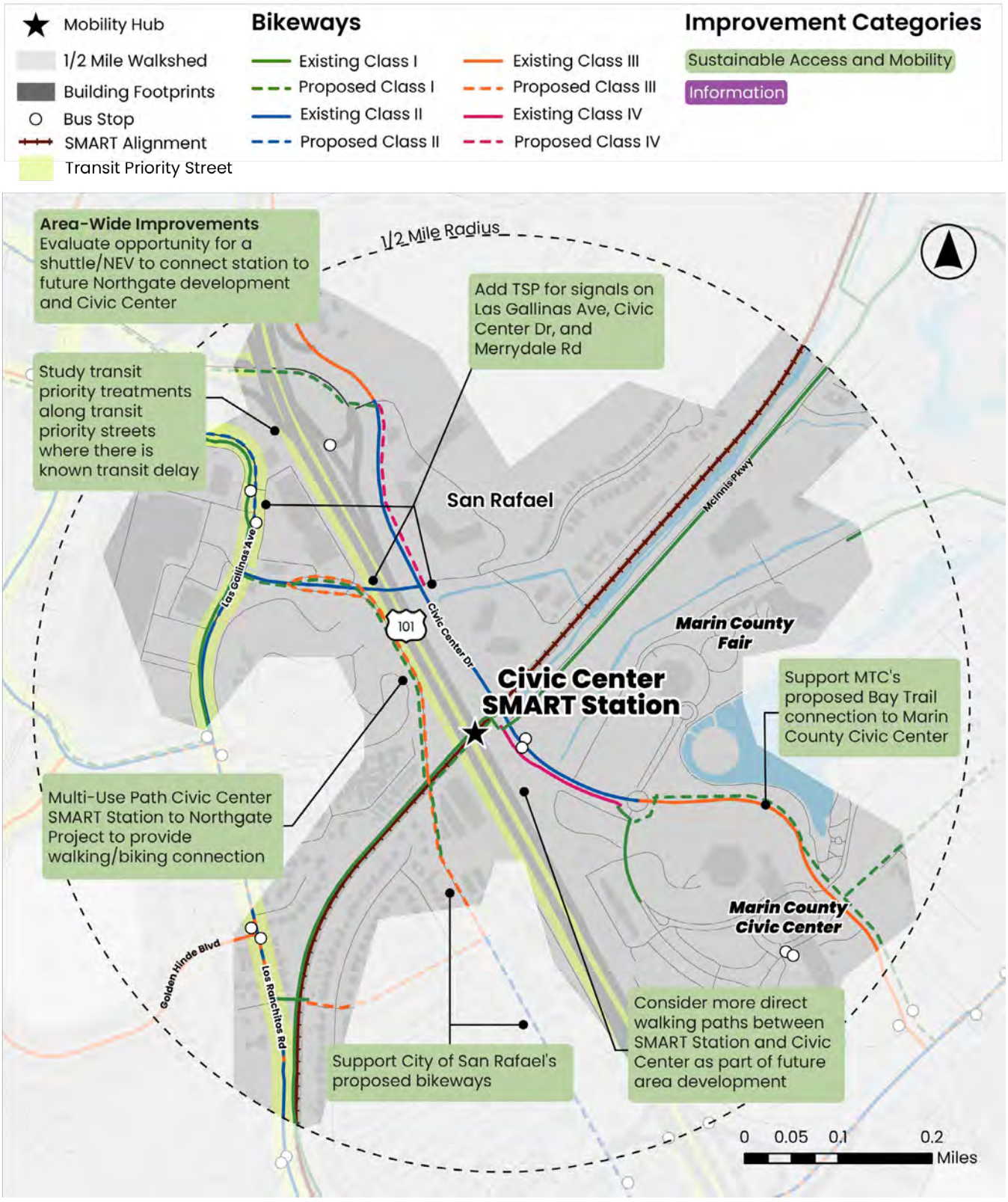
Improvements within the walkshed of this site focus on:

- **Integrating planned projects to support multi-modal connectivity** within the vicinity of the station
- **Improving transit reliability and performance** for bus connections to the station, including transit priority treatments and intersection modifications

Planned improvements should be reviewed to ensure they support transit access, circulation, and reliability.

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 5**.

Figure 5: Marin Civic Center SMART Station Access Gaps and Improvement Opportunities



San Rafael SMART Station

At a Glance

Role

Downtown rail hub, serving as a major transfer point between SMART, local and regional bus service, and adjacent employment, civic, and residential destinations

Primary Challenges

Congested auto-oriented street network with significant modal conflicts creates pedestrian crossing barriers and affects bus-rail connections and transit operations; opportunity to better integrate surrounding redevelopment and transit priority corridors

Focus of Improvements

Improve multimodal circulation and safety in the downtown core, prioritize reliable bus operations and seamless bus–rail transfers, and enhance wayfinding and public realm amenities

Site Context

The **San Rafael SMART Station** is located in downtown San Rafael, across 3rd Street from the San Rafael Transit Center. This connection is challenging for riders given heavy traffic volumes on 3rd Street and a history of severe fatal injuries for pedestrians in this area.

The San Rafael Transit Center Relocation Project will relocate bus bays, the customer service building, and other supporting uses one block to the north, immediately adjacent to the SMART station. The station is a key transfer point between SMART, GGBHTD, and Marin Transit services.

The North-South Greenway is planned to pass through the station area, although currently there is a several block gap in Downtown San Rafael between the Mahon Creek Path and the Lincoln Path at Mission Avenue. The gap is planned to be closed through the San Rafael Transit Center Relocation Project and future City-led improvements on Tamalpais Avenue. Transportation projects in Downtown San Rafael should include coordination with transit agencies to improve station access for all modes, facilitate bus maneuvers, and optimize transit travel time and reliability to support connectivity to the San Rafael Transit Center and SMART Station.

Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Improving transit reliability and performance for bus connections** to the station, including transit priority treatments and intersection modifications
- **Closing gaps in the existing bicycle network** to improve connections to nearby trails and destinations

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 6**.

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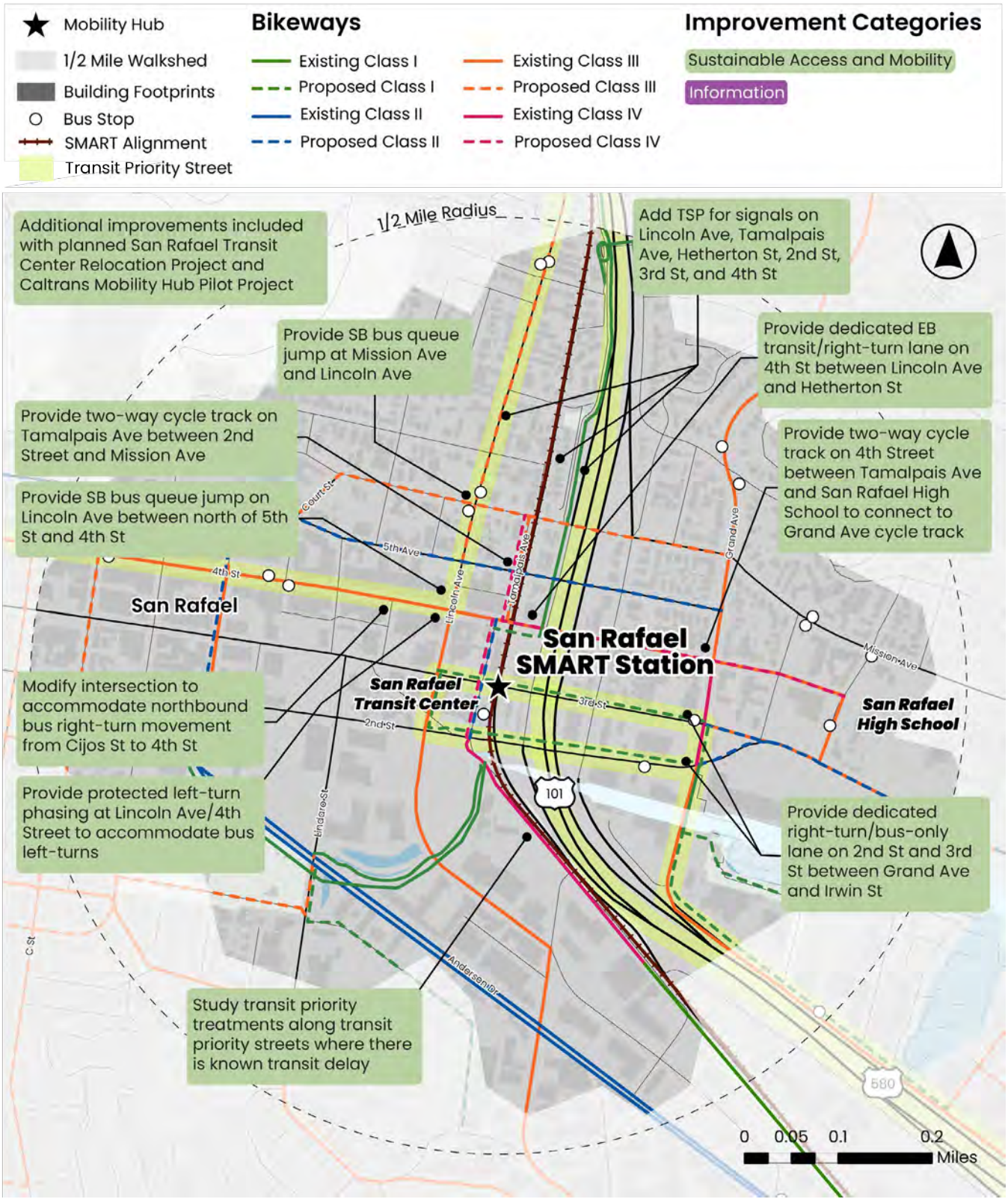
Figure 6: San Rafael SMART Station Access Gaps and Improvement Opportunities



Larkspur SMART Station

At a Glance

Role

Southern terminus of SMART and connection to ferry service to San Francisco; connections to adjacent regional retail center and other nearby employment areas

Primary Challenges

Indirect and long-distance connection between SMART and ferry; lack of convenient bus connections; incomplete pedestrian network to nearby land uses

Focus of Improvements

Improve rail-ferry connectivity

Site Context

The **Larkspur SMART Station** is the southern terminus of SMART and is located approximately 0.3 miles northwest of the Larkspur Ferry Terminal. It is adjacent to the Marin Country Mart regional shopping center, but there is no direct pedestrian connection between the station and Larkspur Landing Circle. Marin Transit buses operate on nearby streets, including Larkspur Landing Circle and Sir Francis Drake Boulevard. The Larkspur SMART Station is a pilot site for the MTC Regional Mapping and Wayfinding Project, which aims to make it easier for travelers to navigate and explore the Bay Area using public transit.

The bicycle connection between the SMART Station and Ferry Terminal was improved through the Central Marin Ferry Connection (CMFC) project. While that project greatly improved the comfort of the bicycle connection, it is not the most direct path, resulting in pedestrians choosing between a very long connection or a shorter, but much less comfortable street-level connection across major streets without wayfinding guidance. A shuttle is currently used to overcome the long transfer distance and challenging pedestrian connection between the SMART Station and Ferry Terminal.

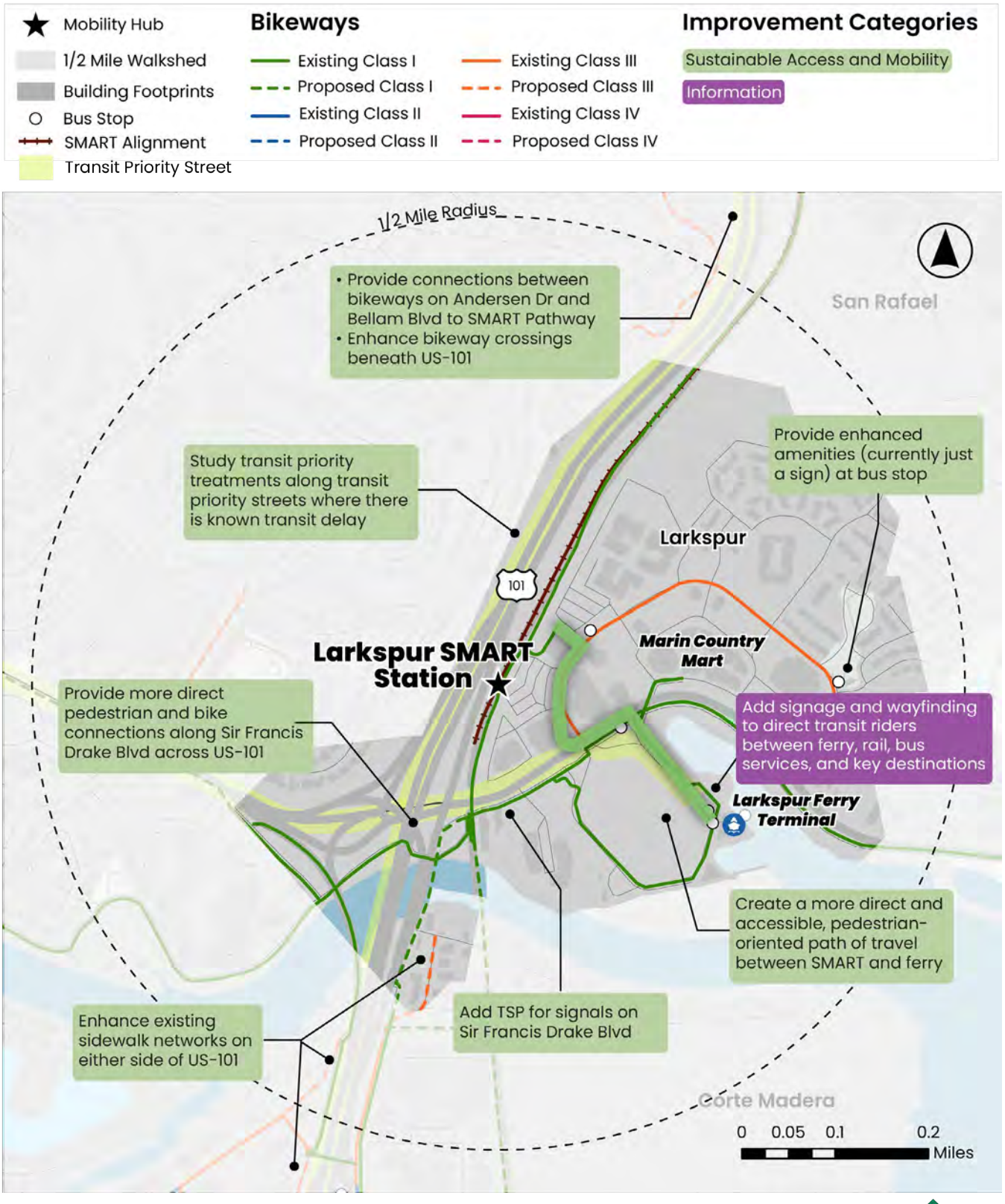
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Strengthening pedestrian connectivity** between the Larkspur SMART Station and Larkspur Ferry Terminal, including safer and more direct pedestrian routes
- **Enhancing crossings and bikeway connections** across major barriers
- **Improving transit reliability and performance for bus connections** to the station, including transit priority treatments and intersection modifications

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 7**.

Figure 7: Larkspur SMART Station Access Gaps and Improvement Opportunities



Larkspur Ferry Terminal

At a Glance

Role

Regional gateway connecting GGBHTD ferry, SMART, and US-101 corridor transit, serving commuters traveling between Marin and San Francisco

Primary Challenges

Fragmented pedestrian connections between ferry, rail, and bus facilities; constrained curb space and circulation; limited amenities to serve high passenger volumes during peak periods

Focus of Improvements

Strengthen seamless transfers between ferry, rail, and bus services; formalize transit operations; and enhance passenger comfort, wayfinding, and active transportation connectivity

Site Context

The **Larkspur Ferry Terminal** is located approximately 0.3 miles southeast of the Larkspur SMART Station. The terminal is served by GGBHTD and Marin Transit bus routes. The Larkspur Service Expansion and Parking Study is currently underway to identify and evaluate improvements to the terminal, including expanding ferry service and parking. Along with the Larkspur SMART Station, the Larkspur Ferry Terminal is also a pilot site for the MTC Regional Mapping and Wayfinding Project.

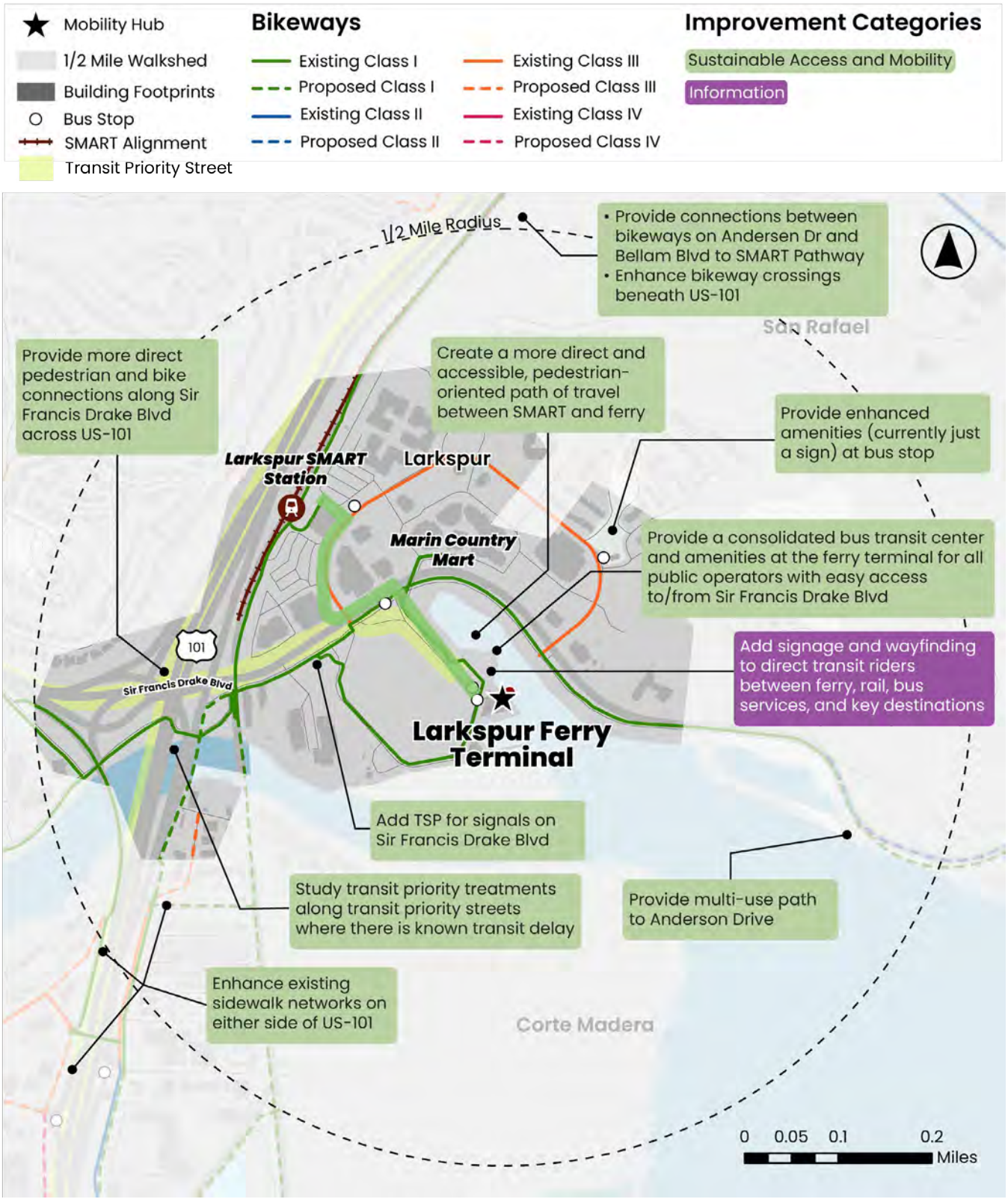
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Strengthening connectivity between the Larkspur SMART Station and Larkspur Ferry Terminal**, including safer and more direct pedestrian routes
- **Enhancing crossings and bikeway connections** across major barriers
- **Improving transit reliability and performance for bus connections** to the terminal, including transit priority treatments and intersection modifications

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 8**.

Figure 8: Larkspur Ferry Terminal Access Gaps and Improvement Opportunities



Tiburon Ferry Terminal

At a Glance

Role

Ferry terminal serving regional commute trips and visitor travel, supporting access between Tiburon, Angel Island, and San Francisco

Primary Challenges

Constrained street network and limited curb space; privately owned ferry dock with limited space for improvements; need for clearer wayfinding and organized pick-up/drop-off activity

Focus of Improvements

Improve curb management and pedestrian circulation, enhance safety and comfort in the terminal area, and strengthen first-/last-mile connections to local destinations

Site Context

The **Tiburon Ferry Terminal** is located near the intersection of the southern terminus of Tiburon Boulevard/SR 131 and Main Street. Both GGBHTD and Marin Transit bus routes use an on-street bus stop on Tiburon Boulevard to serve the terminal. Caltrans currently has an ongoing project for improvements along Tiburon Boulevard, including enhanced pedestrian crossings. The ferry terminal, used by GGBHTD service, is privately owned, which limits opportunities for improvements at the terminal.

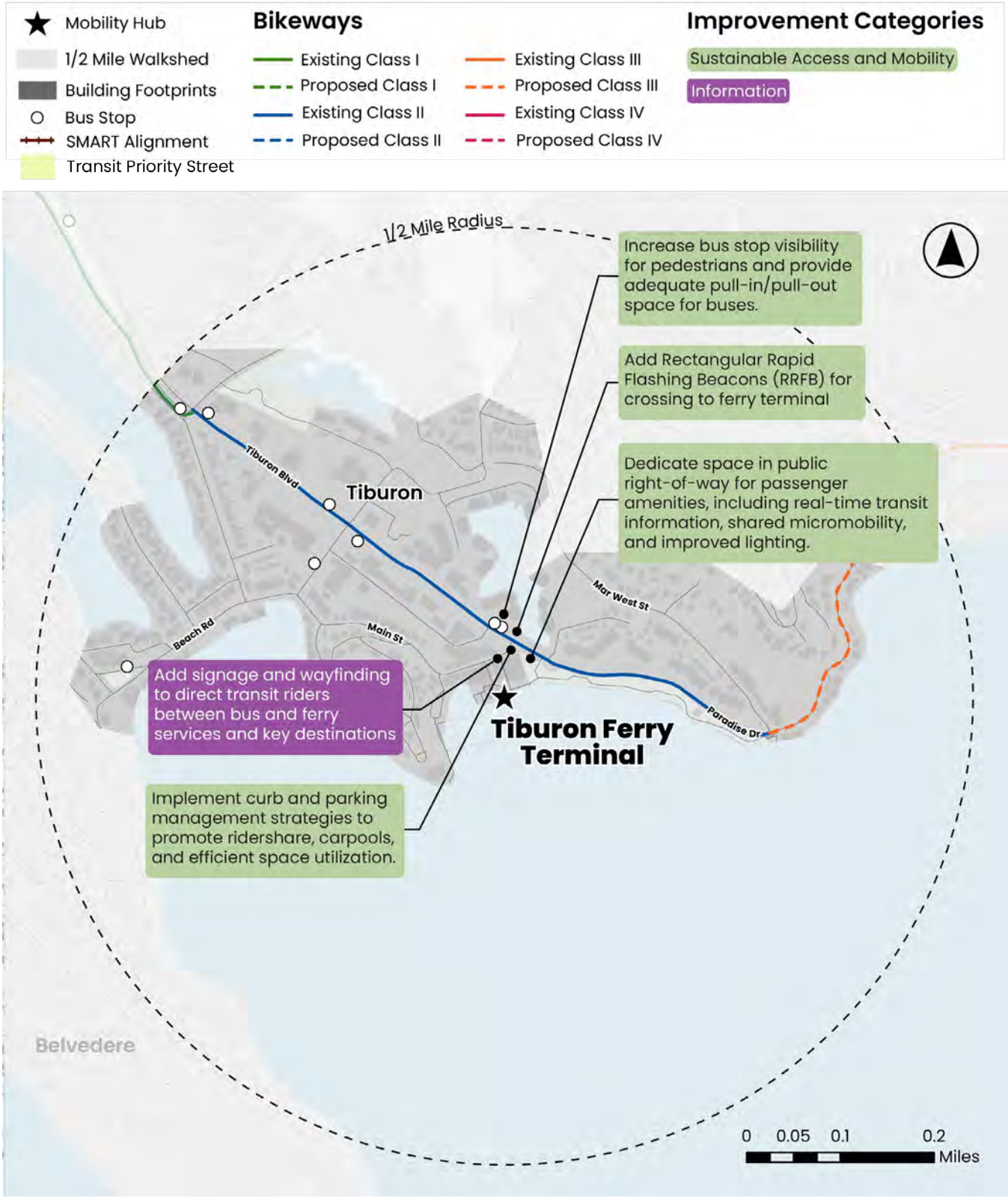
Proposed Improvements

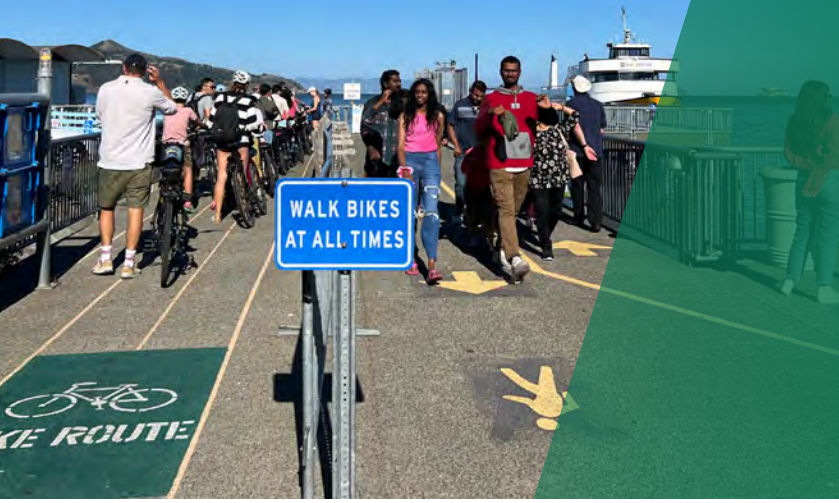
Improvements within the walkshed of this site focus on:

- **Enhancing pedestrian crossings** to the ferry terminal
- **Increasing bus stop visibility** along Tiburon Boulevard
- **Utilizing wayfinding** to improve connections between the ferry terminal and bus stops

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 9**.

Figure 9: Tiburon Ferry Terminal Access Gaps and Improvement Opportunities





Sausalito Ferry Terminal

At a Glance

Role

Downtown ferry terminal serving Sausalito, Marin City, and other nearby destinations; heavily used by tourists and recreational cyclists, many of whom bicycle across the Golden Gate Bridge

Primary Challenges

Scattered bus facilities and lack of wayfinding hinder bus-ferry and bus-bus transfers; lack of mobility hub amenities to encourage access beyond highly-utilized parking lots

Focus of Improvements

Consolidate bus boarding areas, improve safety and comfort of pedestrian crossings, provide convenient connections for nearby equity priority communities, and enhance passenger amenities

Site Context

The **Sausalito Ferry Terminal** is located in Downtown Sausalito and is served by Marin Transit and GGBHTD bus routes. Both landside (Ferry Landside Improvement Project) and waterside (Sausalito Ferry Dock Replacement Project) improvement projects are currently underway or were recently completed at the terminal. Surface parking lots are very well utilized, particularly on weekends. The area has significant tourist activity, including for-profit bike rentals, tour buses, and tourist-oriented businesses.

Opportunities remain to strengthen pedestrian crossings along Bridgeway and improve bus waiting areas and public bicycle facilities.

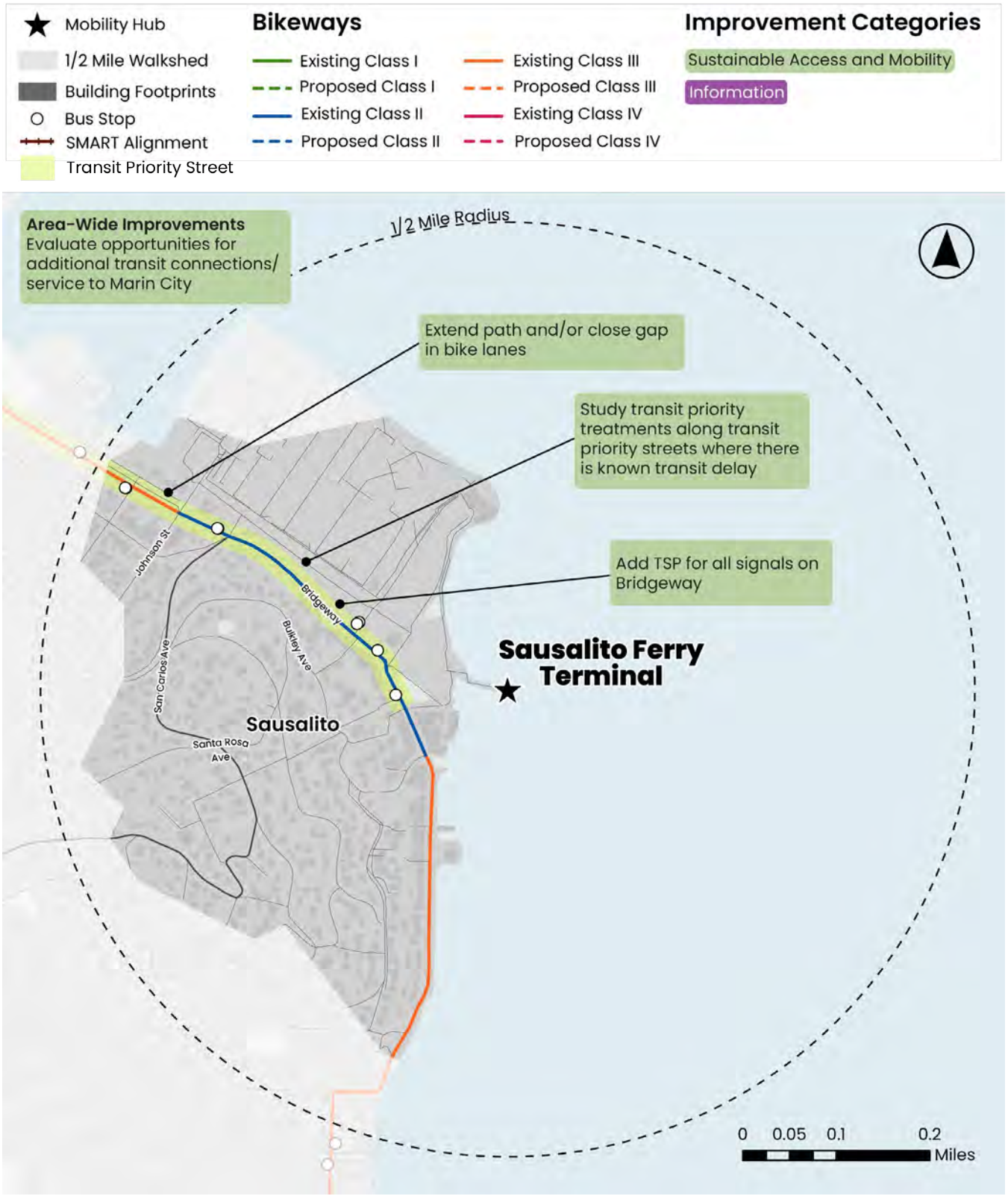
Proposed Improvements

Improvements within the walkshed of this site focus on:

- **Closing gaps in the existing bicycle network** on Bridgeway
- **Improving transit reliability and performance for bus connections** to the ferry terminal, including transit priority treatments and intersection modifications

The opportunities and constraints within a 0.5-mile radius of the site are shown in **Figure 10**.

Figure 10: Sausalito Ferry Terminal Access Gaps and Improvement Opportunities



Design Concepts and Implementation Strategies

This chapter presents detailed concept plans and implementation strategies for the six mobility hub locations that were selected for more detailed consideration. Each site includes an illustrative concept and a table summarizing project details including recommended improvements, the lead and partner agencies, ROM cost, and implementation considerations. Some sites were also selected for 3D illustrations.

Design concepts were not developed for the remaining three locations due to the following reasons:

San Rafael SMART Station

Major site modifications, including mobility hub amenities, are included in the San Rafael Transit Center Relocation Project, currently in development by GGBHTD.

Larkspur Ferry Terminal

A separate GGBHTD project is currently advancing both landside and waterside improvements at this location, including planned increases in ferry service and modifications to the parking area.

Tiburon Ferry Terminal

The ferry dock is privately owned and due to the configuration of transportation facilities there are limited opportunities for mobility hub amenities and improved site access relative to the other hub locations.

Novato San Marin SMART Station

Design Concept Priorities

The Novato San Marin SMART Station has limited pedestrian connectivity, constrained circulation, and minimal mobility hub amenities. Three improvement projects with a total cost of $8.7 Million have been identified to enhance site access and safety, improve bus and curb operations, and provide additional amenities.

Proposed Improvement Projects

NSM1: Pedestrian Access and Related Improvements on Rush Landing Road and Redwood Boulevard

Improve pedestrian safety and connectivity along Rush Landing Road and Redwood Boulevard through bulbouts, refuge islands, high-visibility crosswalks, curb ramps, and bikeway markings to strengthen access to surrounding land uses.

NSM2: Site Circulation and Motorized Access

Improve transit access and reliability by reconfiguring station access and circulation to separate bus and general vehicle traffic and provide rider amenities to improve transit user experience.

NSM3: Mobility Hub Amenities

Provide additional user amenities, including lighting, wayfinding, bike repair stations, EV charging, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

A proposed concept design is depicted in **Figure 11**. The proposed improvements are distributed into three projects, with costs, implementation considerations, and operational considerations shown in **Table 1**. Further information on improvement costs is provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 11: Novato San Marin SMART Station Concept Design

Table 1: Novato San Marin SMART Station Project List

Project #	**NSM1:** Pedestrian Access and Related Improvements on Rush Landing Road and Redwood Boulevard	**NSM2:** Site Circulation and Motorized Access	**NSM3:** Mobility Hub Amenities
Project Description	• Bulbouts, medians, pedestrian refuge islands, RRFBs, high vis crosswalks, and curb ramps along Redwood Blvd • Curb ramps, bike ramp, shark teeth road markings, and landscaping along Rush Landing Rd	• New station entry from Rush Landing Rd • Shelters, benches, and trash cans on station platform • Solar canopy over parking lot • PUDO spaces in parking lot • Concrete bus pad • Bus stop amenities, including real-time signage • Bus only markings • PUDO along Redwood Blvd	• Wayfinding and signage • Landscaping • Drinking fountain • Larger bike lockers • Bike repair station • Lighting • EV and e-bike charging
Lead Agency	City of Novato	SMART	TAM, SMART
Stakeholder Partners	SMART	City of Novato, Marin Transit	City of Novato
Capital Cost	$1.9 Million	$3.5 Million	$3.2 Million
Implementation Considerations	• Opportunity to implement in conjunction with development on the west side of Redwood Blvd if that project advances • Need to investigate potential for utility conflicts • Assess opportunity for landscaping in median and bulbouts	• Solar canopy requires electrical capacity and utility connection • Reduction in standard parking supply with addition of PUDO • Real-time signage requires electrical and broadband access/capacity	• May be phased depending on funding availability and demand • Wayfinding should align with MTC regional wayfinding standards • Landscaping should be designed to be easily maintained and to not diminish safety and security • Reduction in standard parking supply with EV parking added • Lighting, WiFi, and device charging requires electrical and broadband access/capacity • EV and e-bike charging requires electrical capacity and utility connection
Next Steps to Implementation	• Include in City CIP • Advance design incl. drainage and utility review • Coordinate with emergency services and transit operators	• Validate bus loop design, turning radii, layover, and future service expansion needs with Marin Transit • Advance site design • Coordinate with Marin Transit on bus stop amenities • Conduct solar feasibility assessment	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity
Operational Considerations	• City maintains improvements	• Marin Transit maintains bus stop and amenities (shelters, benches, real-time signage, trash) • SMART maintains other on-site elements including pavement, striping, and solar canopy • Assess systemwide solar business models	• SMART and TAM to develop maintenance agreement to cover on-site amenities • Assess bike lockers management system • Assess systemwide EV charging and carshare business models

Novato Downtown SMART Station

Design Concept Priorities

The Novato Downtown SMART Station is currently an unimproved parking lot with minimal user amenities and includes a gap in the SMART Pathway. Two improvement projects with a total cost of $3.0 Million have been identified to activate the site, provide additional amenities, and eliminate the SMART Pathway gap.

Proposed Improvement Projects

ND1: Site Access and Circulation Improvements

Close the gap between existing and planned SMART Pathway segments, improve pedestrian safety crossing Grant Avenue and Scott Court, and formalize PUDO space to improve multimodal access.

ND2: Mobility Hub Amenities

Provide additional user amenities, including lighting, wayfinding, bike repair stations, EV charging, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

A proposed concept design is depicted in **Figure 12**. An illustration of the proposed re-purposing of the existing depot building and parking lot into a mobility hub is provided in **Figure 13**. The proposed improvements are distributed into two projects, with costs, implementation considerations, and operational considerations shown in **Table 2**. Further information on improvement costs are provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 12: Novato Downtown SMART Station Concept Design

Figure 13: Novato Downtown SMART Station 3D Rendering

Table 2: Novato Downtown SMART Station Project List

Project #	**ND1:** Site Access and Circulation Improvements	**ND2:** Mobility Hub Amenities
Project Description	• Pathway from Shared-Use Path at northern end of station to existing SMART Pathway south of station • RRFBs at Grant Ave and Scott Ct • PUDO on Grant Ave	• EV and e-bike charging • Wayfinding and signage • Bike repair station • Landscaping • Larger bike lockers
Lead Agency	City of Novato, SMART	TAM, City of Novato
Stakeholder Partners	-	SMART
Capital Cost	$0.7 Million	$2.3 Million
Implementation Considerations	• May not be need for PUDO on Grant Ave until after site is redeveloped • Assess implementation timing of pathway with respect to site redevelopment	• Assess implementation timing with respect to site redevelopment • Wayfinding should align with MTC regional wayfinding standards • Validate bike parking and e-bike charging demand • EV charging requires electrical capacity and utility connection • Consider developing a station area parking management plan as part of redevelopment of existing parking area • Landscaping should be designed to be easily maintained and to not diminish safety and security
Next Steps to Implementation	• Include in City CIP • Advance design	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity
Operational Considerations	• Determine maintenance responsibility for pathway • City responsible for PUDO curb enforcement	• City, SMART, and TAM to develop maintenance agreement to cover on-site amenities • Opportunity to place maintenance responsibility on developer • Assess bike lockers management system • Assess systemwide EV charging and carshare business models

Novato Hamilton SMART Station

Design Concept Priorities

The Novato Hamilton SMART Station is currently inaccessible by bus and the SMART Pathway terminates at the station. Three improvement projects with a total cost of $14.8 Million are proposed to accommodate transit connections on-site, strengthen active transportation linkages, and provide amenities that support long-term hub activation.

Proposed Improvement Projects

NH1: Bus Loop, PUDO, and Parking Reconfiguration

Establish a one-way bus loop with furnished bus stops and provide a separate PUDO space to formalize circulation and support efficient and safe operations.

NH2: Pedestrian and Bicycle Access Improvements

Provide a pathway connection between Main Gate Road and the SMART Pathway and install a RRFB at Main Gate Road to improve safe and direct first/last-mile access.

NH3: Mobility Hub Amenities

Provide additional user amenities, including lighting, wayfinding, bike repair stations, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

A proposed concept design is depicted in **Figure 14**. An illustration of the proposed on-site bus circulation and solar canopy is provided in **Figure 15**. The proposed improvements are distributed into three projects, with costs, implementation considerations, and operational considerations shown in **Table 3**. Further information on improvement costs are provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 14: Novato Hamilton SMART Station Concept Design

Figure 15: Novato Hamilton SMART Station 3D Rendering

Table 3: Novato Hamilton SMART Station Project List

Project #	**NH1:** Bus Loop, PUDO, and Parking Reconfiguration	**NH2:** Pedestrian and Bicycle Access Improvements	**NH3:** Mobility Hub Amenities
Project Description	• One way bus loop • Stormwater treatment area and landscaping • PUDO area • Bus stops with shelters • ADA parking • EV charging • Carshare parking • Carpool/vanpool parking • Solar canopy	• Pathway from SMART Pathway to Main Gate Rd • RRFB across Main Gate Rd	• Lighting • Landscaping • Drinking fountain • Wifi and device charging • Wayfinding and signage • Bike repair station • Larger bike lockers • e-bike charging
Lead Agency	SMART	City of Novato, SMART	TAM, SMART
Stakeholder Partners	TAM, City of Novato, Marin Transit	-	City of Novato
Capital Cost	$13.2 Million	$0.4 Million	$1.3 Million
Implementation Considerations	• Reduction in standard parking supply with reconfiguration and addition of EV, carshare, and carpool/vanpool parking • ADA parking placement must meet path-of-travel and slope standards • EV charging and solar require electrical capacity and utility connection • City to evaluate future roadway connection to Hamilton Pkwy or Cottage Ln	• May trigger drainage, grading, or retaining improvements	• May be phased depending on funding availability and demand • Wayfinding should align with MTC regional wayfinding standards • e-bike charging requires electrical capacity • Drinking fountain requires water tie-in • Lighting, WiFi, and device charging requires electrical and broadband access/capacity • Landscaping should be designed to be easily maintained and to not diminish safety and security
Next Steps to Implementation	• Validate bus loop design, turning radii, layover, and future service expansion needs with Marin Transit • Advance site design • Coordinate with Marin Transit on shelter standards and bus stop placement • Conduct solar feasibility assessment	• Include in City CIP • Advance design	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity
Operational Considerations	• Marin Transit maintains bus stop and amenities (shelters, benches, real-time signage, trash) • SMART maintains pavement and striping • City responsible to enforce HOA shuttle program TDM requirement • Assess systemwide EV charging and carshare business models • Assess systemwide solar business models	• City maintains RRFB • SMART maintains pathway as part of SMART Pathway maintenance	• SMART and TAM to develop maintenance agreement to cover on-site amenities • Assess bike lockers management system

Marin Civic Center SMART Station

Design Concept Priorities

The Marin Civic Center SMART Station can be accessed from both Civic Center Drive and Merrydale Road, both of which have planned projects to improve station access. Three improvement projects with a total cost of $2.7 Million are proposed to accommodate the planned improvement projects and improve safety and comfort.

Proposed Improvement Projects

MCC1: Mobility Hub Amenities

Provide additional user amenities, including lighting, wayfinding, bike repair stations, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

MCC2: Civic Center Bicycle and Pedestrian Access

Implement safety treatments including bulbouts, curb ramps, two-stage bike boxes, and intersection modifications to calm traffic and improve access to the station from the Marin Civic Center, the SMART Pathway, a separate City of San Rafael Civic Center Connector Project, and bus bays on Civic Center Drive.

MCC3: Merrydale Road Access

Establish a defined PUDO area on the west side of the station with supporting lighting and seating to formalize curb activity and improve safe passenger loading and unloading. In conjunction with the Multi-Use Path Civic Center SMART Station to Northgate Project, a separate City of San Rafael project, this project enhances connectivity to the station from the Northgate Town Square redevelopment area. The Multi-Use Path Civic Center SMART Station to Northgate Project should be reviewed to ensure it does not negatively impact transit access.

A proposed concept design is depicted in **Figure 16**. An illustration of the proposed PUDO area at the end of Merrydale Road is provided in **Figure 17**. The proposed improvements are distributed into three projects, with costs, implementation considerations, and operational considerations shown in **Table 4**. Further information on improvement costs are provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 16: Marin Civic Center SMART Station Concept Design

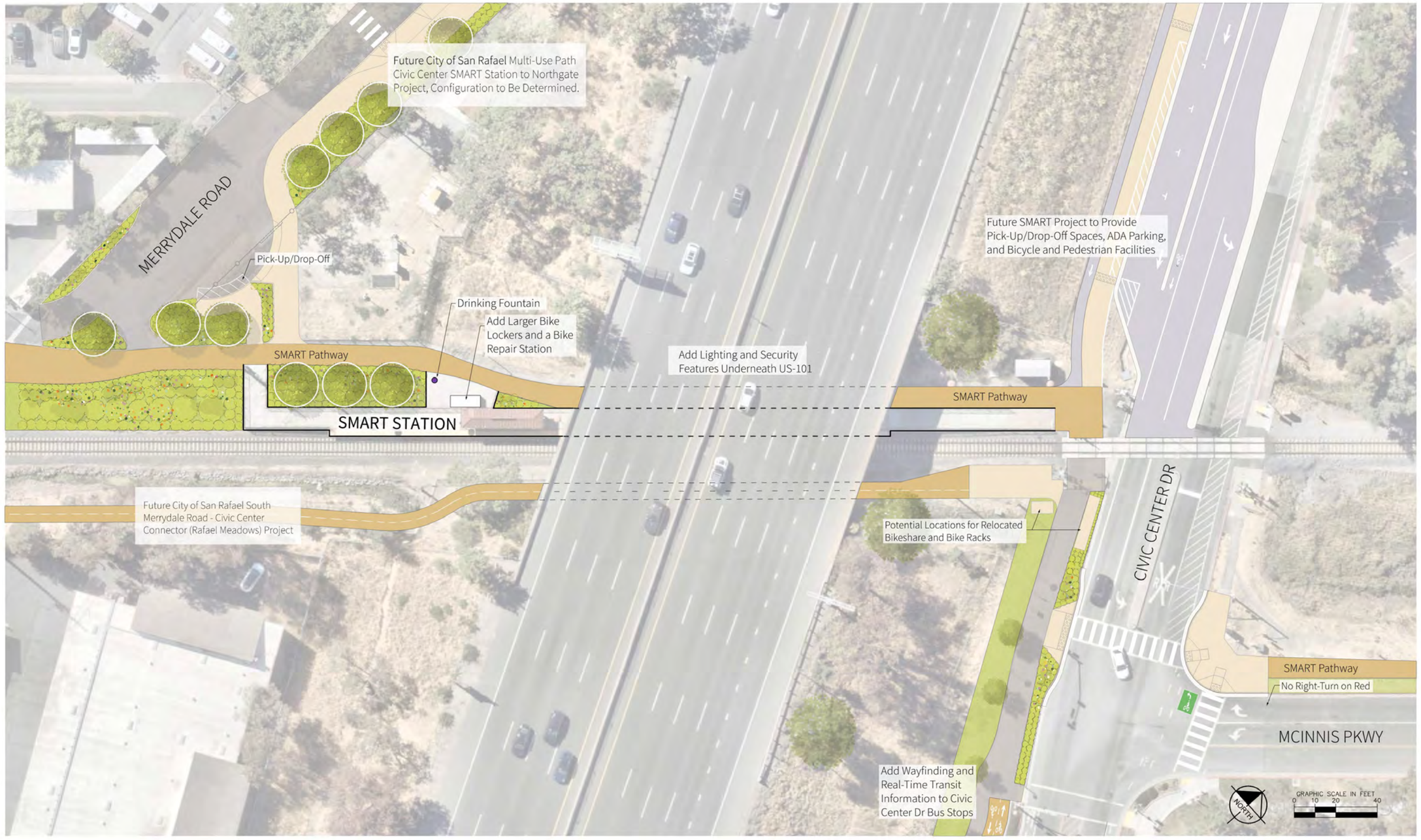


Figure 17: Marin Civic Center SMART Station 3D Rendering

Table 4: Marin Civic Center SMART Station Project List

Project #	**MCC1: Mobility Hub Amenities**	**MCC2:** Civic Center Bicycle and Pedestrian Access	**MCC3:** Merrydale Road Access
Project Description	• Lighting • Security • Drinking fountain • Larger bike lockers • Bike repair station • Landscaping adjacent to tracks • Relocate bikeshare and bike racks • Wayfinding and real-time transit information at Civic Center Dr bus stops • e-bike charging	• No RTOR from McInnis Pkwy • Two-stage left turn bike box • Bulbout • Landscaping along Civic Center Dr • Curb ramps	• PUDO area on Merrydale Rd (just paint and path) • Include lighting and bench around PUDO area
Lead Agency	TAM, SMART, City of San Rafael	City of San Rafael	City of San Rafael
Stakeholder Partners	Caltrans, Marin Transit	Marin Transit	Las Gallinas Valley Sanitary District, Marin Transit
Capital Cost	$2.1 Million	$0.4 Million	$0.2 Million
Implementation Considerations	• May be phased depending on funding availability and demand • Wayfinding should align with MTC regional wayfinding standards • e-bike charging requires electrical capacity • Drinking fountain requires water tie-in • Lighting, WiFi, and device charging requires electrical and broadband access/capacity • Real-time transit information must integrate with operator data feeds • Landscaping should be designed to be easily maintained and to not diminish safety and security	• No RTOR and bike box may require signal timing updates • Bulbouts may impact drainage • Improvements must maintain emergency access	• To be implemented along with future City of San Rafael Multi-Use Path Civic Center SMART Station to Northgate Project • Lighting and bench placement must maintain ADA clear path • Coordinate with Sanitary District on maintaining access and ROW needs
Next Steps to Implementation	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity • Coordinate with Marin Transit on real-time information hardware	• Include in City CIP • Conduct traffic operations and signal analysis • Advance roadway design including drainage review	• Incorporate changes into design for future City of San Rafael Multi-Use Path Civic Center SMART Station to Northgate Project • Coordinate with Marin Transit on transit access
Operational Considerations	• City, SMART, and TAM to develop maintenance agreement to cover on-site amenities • Marin Transit to maintain real-time signage • Assess bike lockers management system	• City maintains improvements	• City maintains improvements

Larkspur SMART Station

Design Concept Priorities

The Larkspur SMART Station serves as a critical connector between the Larkspur Ferry Terminal, regional transit services, and the US-101 corridor but currently lacks direct and intuitive pedestrian and transit access. Three improvement projects with a total cost of $13.3 Million are proposed to strengthen connectivity and introduce mobility hub features that support multimodal access. All three projects include significant landscaping improvements to provide shade and enhance the aesthetics of the station area.

Proposed Improvement Projects

LS1: Connectivity to Larkspur Ferry

Provide a pedestrian ramp from Larkspur Landing Circle and improve sidewalks and curb ramps to create a direct, continuous, and accessible connection between the SMART Station, adjacent land uses, and the Larkspur Ferry Terminal. The ramp is located on a parcel that is being studied as part of The Larkspur Service Expansion and Parking Study. That Study has not been approved and the inclusion and footprint of the ramp will depend on the ultimate project determined by GGBHTD.

LS2: New Bus Stop on US-101

Construct bus-only treatments, a bus pad, shelter, and pedestrian access improvements to allow for buses on US-101 to avoid deviating into the station area, improving operational efficiency and connectivity to the SMART station.

LS3: Mobility Hub Amenities

Provide additional user amenities, including lighting, wayfinding, bike repair stations, EV charging, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

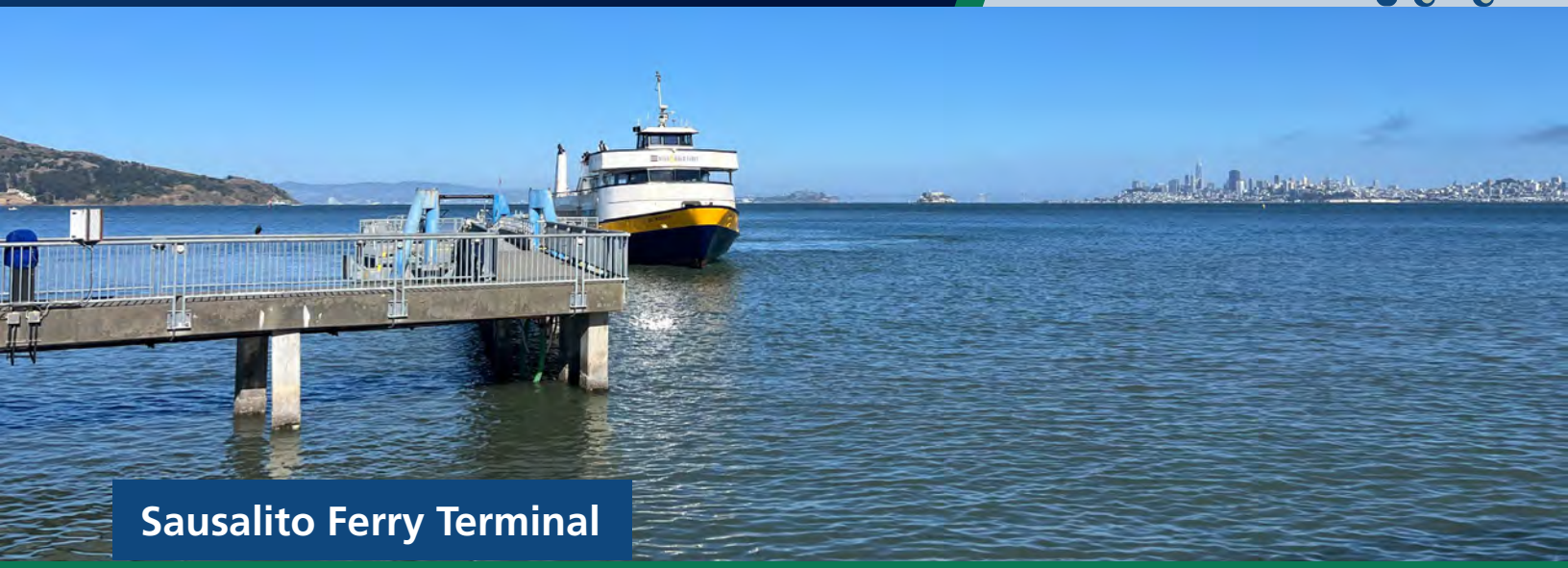
The proposed concept design is depicted in **Figure 18**. An illustration of the proposed pedestrian connection ramp, TOD, and solar canopy over the parking lot is provided in **Figure 19**. The proposed improvements are distributed into three projects, with costs, implementation considerations, and operational considerations shown in **Table 5**. Further information on improvement costs are provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 18: Larkspur SMART Station Concept Design

Figure 19: Larkspur SMART Station 3D Rendering

Table 5: Larkspur SMART Station Project List

Project #	**LS1:** Connectivity to Larkspur Ferry	**LS2:** New Bus Stop on US-101	**LS3:** Mobility Hub Amenities
Project Description	• Improvements along Larkspur Landing including sidewalk, landscaping, bus stop, curb ramps, etc • Ramp between Larkspur Landing and Cal Park Hill Pathway	• Bus only markings on US-101 off ramp • Bus pad • Shelter and bench • Sidewalk from Sir Francis Drake Blvd to bus stop • Bulbout at Sir Francis Drake Blvd and US-101 on ramp including landscaping	• Larger bike lockers • Bike repair station • Drinking fountain • Wayfinding and signage • Landscaping • Solar canopy • EV and e-bike charging • Shelter and bench (for shuttle/PUDO)
Lead Agency	City of Larkspur, TAM	TAM	TAM, SMART
Stakeholder Partners	Golden Gate Transit, Marin Transit, SMART	Marin Transit, GGBHTD, Caltrans, City of Larkspur	-
Capital Cost	$4.0 Million	$0.8 Million	$8.5 Million
Implementation Considerations	• Requires use of GGBHTD overflow parking lot and reduces available existing parking • Coordinate with GGBHTD on potential TOD redevelopment of overflow parking lot. Opportunity to integrate vertical circulation into a TOD, if advanced	• Requires Caltrans approval	• May be phased depending on funding availability and demand • Wayfinding should align with MTC regional wayfinding standards • EV and e-bike charging requires electrical capacity • Drinking fountain requires water tie-in • Lighting, WiFi, and device charging requires electrical and broadband access/capacity • Shelter at shuttle/PUDO must maintain SMART service access • Landscaping should be designed to be easily maintained and to not diminish safety and security
Next Steps to Implementation	• Include in City CIP • Advance design • Coordinate with GGBHTD on ramp configuration and ROW • Coordinate with Marin Transit on relocation of bus stop	• Advance design • Conduct operations analysis • Determine Caltrans approval process • Confirm shelter placement and ADA accessibility	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity
Operational Considerations	• Marin Transit maintains bus stop and amenities (shelters, benches, real-time signage, trash) • City maintains sidewalks and landscaping • Memorandum of understanding may be needed for construction and maintenance of ramp	• Marin Transit maintains bus stop and amenities (shelters, benches, real-time signage, trash) • Caltrans maintains pavement and markings	• SMART and TAM to develop maintenance agreement to cover on-site amenities • Assess bike lockers management system • Assess systemwide EV charging and carshare business models



Sausalito Ferry Terminal

Design Concept Priorities

The Sausalito Ferry Terminal encompasses multiple streets serving as gateways to regional transit and waterfront destinations but currently lacks pedestrian safety treatments and mobility hub amenities. Three improvement projects with a total cost of $6.5 Million are proposed to improve corridor safety and connectivity between the ferry and bus services and add amenities to improve access for transit users.

Proposed Improvement Projects

S1: Pedestrian Improvements on Bridgeway

Install bulbouts, high-visibility crosswalks, RRFBs, and bike markings to improve safety on Bridgeway, especially for transit riders connecting via bus stops on southbound Bridgeway.

S2: Bus Facility Improvements and Related Improvements on Anchor Street and Humboldt Avenue

Consolidate bus stops closer to the Ferry Terminal for more convenient connections and wayfinding and provide shelter and seating to support safe and convenient access and user comfort.

S3: Parking Area and Mobility Hub Amenities

Reconfigure the parking area to support EV charging, carshare, and vanpool spaces. Provide additional user amenities, including lighting, wayfinding, bike repair stations, and landscaping to expand ridership by enhancing the customer experience and improve access via a variety of modal options.

A proposed concept design is depicted in **Figure 20**. The proposed improvements are distributed into three projects, with costs, implementation considerations, and operational considerations shown in **Table 6**. Further information on improvement costs is provided in **Appendix E: Mobility Hub Cost Estimates**. All costs are in Year 2026 dollars.

Figure 20: Sausalito Ferry Terminal Concept Design

Table 6: Sausalito Ferry Terminal Project List

Project #	**S1:** Pedestrian Improvements on Bridgeway	**S2:** Bus Facility Improvements and Related Improvements on Anchor Street and Humboldt Avenue	**S3:** Parking Area and Mobility Hub Amenities
Project Description	• Bulbouts and high vis crosswalks at Bay St and Bridgeway • Bulbouts, RRFBs, and bus stop with shelter at Anchor St and Bridgeway • RRFBs and bus stop with shelter at El Portal and Bridgeway • Parking along Bridgeway • Bike markings along Bridgeway	• Bulbouts and bus stops with shelters along Anchor St • Bulbouts and bus stops with shelters along Humboldt St • PUDO area on Bay St • Seating on Bay St	• EV charging • Carshare parking • Carpool/vanpool parking • Larger bike lockers • e-bike charging • Lighting • Landscaping • Drinking fountain • Wifi and device charging • Wayfinding and signage • Bike repair station
Lead Agency	City of Sausalito	TAM, City of Sausalito	TAM, City of Sausalito
Stakeholder Partners	Marin Transit, GGBHTD	Marin Transit, GGBHTD	GGBHTD
Capital Cost	$1.4 Million	$3.0 Million	$2.1 Million
Implementation Considerations	• Assess parking capacity changes due to bulbouts and bus stop relocation • Relocated bus stops require coordination with transit operators • Bulbouts may impact drainage	• Confirm relocation of PUDO and private shuttles to Bay St • Relocated bus stops require coordination with transit operators • Bulbouts may impact drainage	• May be phased depending on funding availability and demand • Wayfinding should align with MTC regional wayfinding standards • EV and e-bike charging requires electrical capacity • Drinking fountain requires water tie-in • Lighting, WiFi, and device charging requires electrical and broadband access/capacity • Landscaping should be designed to be easily maintained and to not diminish safety and security • Assess area-wide bike parking needs, including relationship to private operators
Next Steps to Implementation	• Include in City CIP • Advance roadway design • Coordinate with transit operators on bus stop placement and shelter siting	• Include in City CIP • Advance roadway design • Coordinate with emergency services	• Prepare amenity layout plan with required utility connections and ADA clearances • Validate bike parking and e-bike charging demand • Evaluate electrical capacity and advance design • Develop cohesive signage and wayfinding plan for site • Identify utility tie in for drinking fountains (water) • Evaluate broadband and electrical capacity • Develop parking management plan
Operational Considerations	• City maintains curb extensions, striping, RRFBs • Transit operators maintain bus stops and amenities (shelters, benches, real-time signage, trash)	• City maintains curb extensions, striping, and public area seating • Transit operators maintain bus stops and amenities (shelters, benches, real-time signage, trash) • City enforces PUDO zone • Coordinate changes with private operators	• City, TAM, and GGBHTD to develop maintenance agreement to cover on-site amenities • Assess area-wide bike storage management solutions • Assess systemwide EV charging and carshare business models

Funding Considerations

Advancing mobility hub improvements will require a layered funding approach. Potential funding sources include:

- Regional Measure 3 (RM3)
- One Bay Area Grant (OBAG)
- MTC Transit-Oriented Communities (TOC) Planning and Implementation Grants
- Active Transportation Program (ATP)
- Senate Bill 1 (SB1) competitive programs
- State Transit Assistance (STA)
- Transit Intercity Rail Capital Program (TIRCP)
- Ferry capital funding programs
- Local transportation sales tax revenues
- FTA Section 5307 / 5339 (Transit Capital)
- Congestion Mitigation and Air Quality (CMAQ)
- California Energy Commission (CEC) / California Air Resources Board (CARB) Programs
- Public-private partnerships

Near-term improvements may be delivered through local and regional funding programs. The aggregation of multiple projects into a program of improvements may support competitiveness for state or federal grants.

Importantly, future OBAG cycles are expected to prioritize investments in TOC Policy compliant station areas, strengthening the competitiveness of these recommended projects.

TAM
Transportation Authority of Marin

Funding Sources

Regional Measure 3 (RM3)

RM3 is a voter-approved toll supplement on the seven state-owned bridges in the Bay Area, approved in 2018. The allocation of funds is prescribed in its expenditure plan and it includes funding North Bay Transit Access Improvements in the amount of $100 Million. MTC has programmed these funds to be split equally among the County Transportation Agencies (CTAs) in five counties, including Marin. Of Marin's $20 Million allocation, $10 Million has been set aside to fund mobility hub improvements identified in this Plan.

One Bay Area Grant (OBAG)

OBAG funds regional and county-priority transportation projects that advance Plan Bay Area 2050+ goals. Eligible activities include complete streets, transit access, station-area improvements, and active transportation projects. Future OBAG cycles are expected to prioritize investments in TOC-compliant station areas, positioning mobility hub access, safety, and integration improvements for competitiveness. The next funding cycle, OBAG 4, is anticipated to have a call for projects in 2026.

MTC Transit-Oriented Communities (TOC) Planning and Implementation Grants

MTC's TOC Planning and Implementation Grants support projects that advance compliance with the TOC Policy, including station access, circulation, and multimodal improvements. Mobility hub projects that improve pedestrian and bicycle connectivity, enhance transit integration, or implement shared mobility elements within TOC-designated areas may be strong candidates for this program.

Active Transportation Program (ATP)

ATP funds projects that improve pedestrian and bicycle safety and connectivity. Sidewalk gap closures, bikeways, Safe Routes to Transit improvements, and station-area crossing enhancements are strong candidates. Mobility hub projects that demonstrate safety benefits and equity outcomes may be particularly competitive. The ATP program includes requirements to prioritize funding to disadvantaged communities.

SB1 Competitive Programs

SB1 programs such as the Solutions for Congested Corridors Program (SCCP) and Local Partnership Program (LPP) support multimodal corridor improvements and congestion relief. Larger-scale hub projects such as transit priority lanes, bus circulation improvements, or multimodal access enhancements, may align with these programs when tied to system performance benefits.

State Transit Assistance (STA)

STA formula funds can support transit capital and operating improvements. Transit agencies may use STA funds for eligible mobility hub elements such as bus stop enhancements, passenger amenities, and minor capital improvements that improve transit access and integration.

Transit Intercity Rail Capital Program (TIRCP)

TIRCP funds transformative rail and transit projects that reduce greenhouse gas emissions and increase ridership. Rail station integration improvements, bus-rail transfer enhancements, and larger mobility hub capital projects may align with TIRCP objectives when tied to measurable climate and mobility outcomes.

Ferry Capital Funding Programs

Federal and state ferry programs may support terminal modernization, ADA upgrades, electrification infrastructure, and landside access improvements. Mobility hub projects at ferry terminals that enhance multimodal connectivity and passenger experience may be eligible when coordinated with ferry operators.

Local Transportation Sales Tax Revenues

TAM currently collects a ½ cent transportation sales tax, approved as Measure AA in 2018. Every six years, TAM is required to review and approve an updated Expenditure Plan. The sales tax revenue is allocated to specific buckets, including local transit services and maintaining roadways, by the Expenditure Plan. Programs funded by the sales tax include Safe Routes to School and expanded transit services for seniors and rural areas. Some mobility hub improvements may align with applicable funding categories.

FTA Section 5307 / 5339 (Transit Capital)

Urbanized Area Formula and Bus and Bus Facilities funds may support passenger amenities, bus stop improvements, and station-area transit integration elements when programmed by transit operators. Bus and Bus Facilities grant funds are highly competitive at the federal level and are commonly used for bus purchases.

Congestion Mitigation and Air Quality (CMAQ)

CMAQ is a federal transportation grant program that funds projects that reduce emissions and vehicle miles traveled (VMT). It is administered by the Federal Highway Administration (FHWA) and distributed to regions by metropolitan planning organizations (MPOs), such as the MTC. Shared mobility pilots, transit priority treatments, and micromobility integration could be eligible if tied to air quality benefits.

California Energy Commission (CEC) / California Air Resources Board (CARB) Programs

CEC and CARB provide state-level funding and regulatory programs to support transportation, zero-emission vehicles, and greenhouse gas reductions. The two agencies often coordinate but have different roles; CEC focuses on energy infrastructure and technology deployment while CARB focuses on air quality regulation and emissions reduction programs. These grants can be used to fund many mobility hub type improvements as they contribute to the reduction of greenhouse gas emissions from autos. CARB often funds local community shuttle programs that connect residents and workers to mobility hubs. Among other improvements, solar canopies, EV charging, and electrification infrastructure well align with the goals of these funding programs.

Public-Private Partnerships

Public-private partnerships may support elements such as shared micro-mobility, EV charging, solar canopies, parking reconfiguration, and amenities integrated with adjacent development. Opportunities may be particularly strong at sites with planned transit-oriented development or privately owned ferry facilities.

Shared Mobility Policy Development

Many shared mobility services are provided and operated by the private sector. While this may result in lower costs and faster implementation for public agencies, it raises additional challenges around data management, equity, and access. Recommended strategies for agencies in Marin County to effectively deploy and manage privately operated shared mobility services are included in **Appendix F: Shared Mobility Policy Development**. That appendix includes a summary of emerging and current best practices that cities, regions, and transit agencies are using to implement privately-operated shared mobility services (for example, carshare, bikeshare, e-bikes, scooters, and other shared micromobility) at mobility hubs and other areas within the public right-of-way (ROW). The focus is on how agencies move beyond one-off encroachment permits to more comprehensive, programmatic tools that can be applied consistently across a jurisdiction or series of jurisdictions.

TAM
Transportation Authority of Marin

As further described in that appendix, an implementation pathway for TAM and its partner jurisdictions could include the following steps:

Adopt a program-level shared mobility in the ROW policy or resolution that establishes goals, authority to permit and revoke operators, and the relationship between shared mobility and mobility hubs.

Create standard terms and conditions for shared mobility permits that cover safety, equity, operations, data, and communications, using MTC, SFMTA, Berkeley, and San José examples as templates.

Establish an annual, revocable street-use or vehicle-area permit template that local jurisdictions can use for shared micromobility and carshare spaces in the public ROW, drawing on examples from San Francisco, Berkeley, San José, Denver, Columbus, Washington, D.C., Salt Lake City, and Seattle.

For hub locations on or adjacent to transit property, **develop template license agreements or longer-term leases or easements** that can be used when longer-term investments in infrastructure are needed, referencing MTC's Mobility Hub Implementation Playbook and local carshare precedents.

Coordinate through MOUs among TAM, Marin cities and towns, and transit agencies to clarify who issues which permits at each mobility hub and how monitoring and enforcement will be handled.

Launch one or more pilots at priority hubs using pilot permits or MOUs, with a clear evaluation framework and decision points for transition to ongoing permits.

Update permit conditions, fee structures, and curb allocation over time based on performance data and feedback from users and partner agencies.

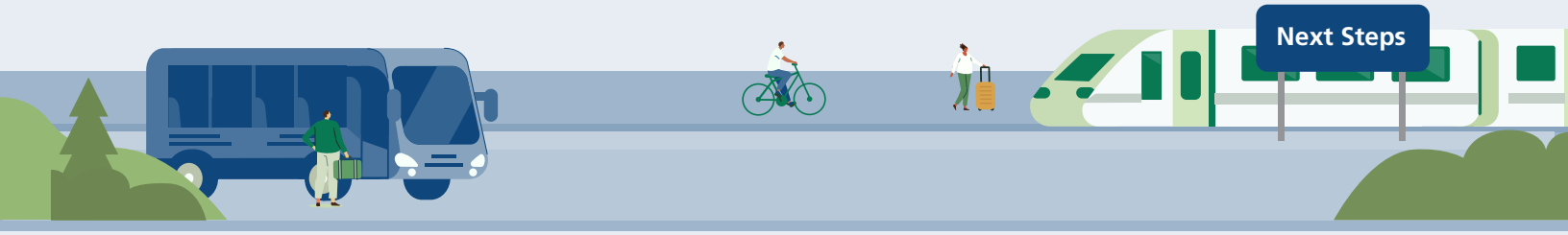
Next Steps

Immediate Actions to Advance Implementation

This Plan provides a roadmap but does not represent final design or secured funding commitments. To move from planning to delivery, TAM and partner agencies should:

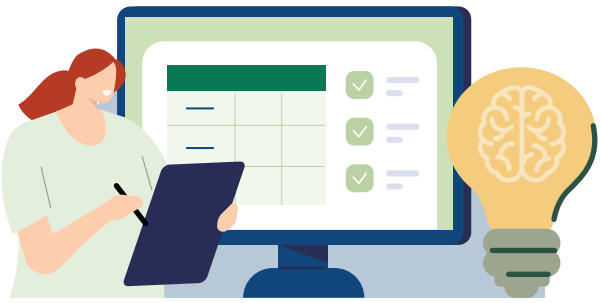
- Confirm priority projects, scope, and phasing
- Incorporate relevant improvements into CIPs and Bicycle and Pedestrian Plans
- Ensure consistency with TOC Policy requirements to strengthen competitiveness for future OBAG and discretionary funding
- Coordinate with related capital projects already underway
- Refine cost estimates and conduct feasibility or preliminary engineering studies, as needed
- Identify and pursue grant opportunities

Early integration of recommended projects into adopted plans and funding strategies will improve readiness and accelerate implementation.



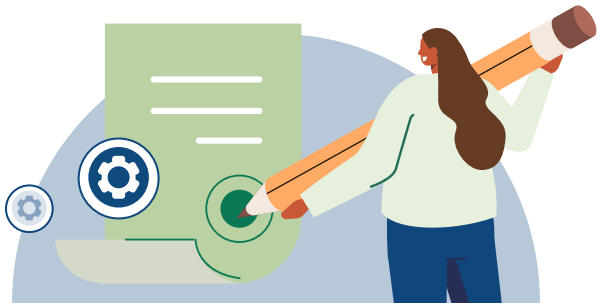
Shared Mobility Policy and Pilot Advancement

To position TAM and its partner jurisdictions to implement shared mobility services at mobility hubs, the following steps are recommended:



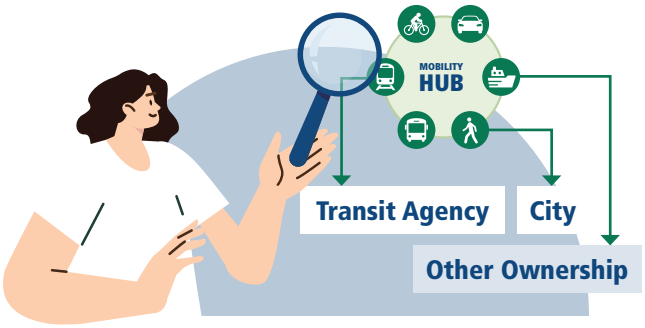
Partner workshop

Convene a workshop with Marin jurisdictions and transit agencies to review the models and identify local priorities and constraints.



Draft policy and permit package

Prepare draft shared mobility policy language, standard terms and conditions, and permit templates for annual, revocable ROW permits and, where appropriate, longer-term license or lease agreements.



Site-specific application

For each priority hub, identify which parts of the site fall under city, transit agency, or other ownership, and outline which approval instruments are needed.

Pilot design

Define pilot locations, participating operators, evaluation metrics, data requirements, and decision points.

By taking these steps, TAM and its partners can transition from planning to coordinated implementation and position mobility hub projects for near-term advancement.

Appendix A:

Existing Conditions Report

Transportation Authority of Marin

Marin County

Mobility Hub Plan

Existing Conditions - June 2025

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TAM Transportation Authority of Marin

Executive Summary

In 2022 the Metropolitan Transportation Commission (MTC) adopted the Transit Oriented Communities (TOC) Policy. Within Marin County, the Policy identifies nine rail and ferry terminals as Tier 4 transit service under the TOC policy. Three of the sites are in Novato, two are in San Rafael, two are in Larkspur, one is in Tiburon, and one is in Sausalito. These sites are therefore subject to the TOC Policy requirements, including those for transit station access and circulation. In 2023 the Transportation Authority of Marin successfully secured $400,000 from the MTC Mobility Hubs Grant for the Marin County Mobility Hub Plan (Plan).

The goals of the Plan are to:

1. **support transit ridership, specifically on regional rail and ferry services**
2. **support access and mobility options at regional transit locations and increase Equity Priority Community (EPC) access to transit**
3. **support jurisdictions' compliance with station access requirements included in MTC's TOC Policy**

The objective of the Plan is to identify station access improvements and desirable hubs amenities at all nine sites, to develop conceptual mobility hub designs for six of the hub locations, and also to identify best practices for implementation.

This Existing Conditions Report is the first deliverable for the Plan. The existing conditions were informed by analyzing available data; meeting with operators including SMART, Golden Gate Transit, and Marin Transit; as well as site visits. For each of the nine sites, information on the location, existing station amenities, existing bike and pedestrian connections, existing transit service, and planned development and transportation projects is provided. Mobility hub walk sheds (0.5 mile), bike sheds (1.5 mile), and transit sheds (15-minute trip), are provided to define the hub catchment area and focus area for hub access improvements.

The typology of each of the sites is also defined using the MTC Hub Typology Definitions. San Rafael SMART Station is classified as Urban District, with the remaining sites all being classified as Suburban/Rural.

Purpose

MTC TOC Policy

In 2022, the Metropolitan Transportation Commission (MTC) adopted Resolution 4530, which defined a Transit Oriented Communities (TOC) Policy. The TOC Policy is intended to "support the region's transit investments by creating communities around transit stations and along transit corridors that not only support transit ridership, but that are places where Bay Area residents of all abilities, income levels, and racial and ethnic backgrounds can live, work, and access services, such as education, childcare, and healthcare". MTC released draft Administrative Guidance for TOC Policy implementation during the course of preparing this existing conditions report. The TOC Policy applies to areas within 1/2 mile of existing and planned fixed-guideway transit stops and stations. Within Marin County, the six rail stations and three ferry terminals shown in **Figure 1** are identified as Tier 4 transit service under the TOC policy and are subject to the TOC policy requirements.

Future One Bay Area Grant (OBAG) funding cycles will be used to prioritize investment in transit areas that are subject to and compliant with the TOC Policy. Key Policy requirements for transit stations are given below. The focus of this Plan is to support compliance with transit station access and circulation requirements, including preparing an access gap analysis.

Minimum residential and commercial office densities for new developments

Policies supporting affordable housing

Parking management

Transit station access and circulation

Figure 1: Mobility Hub Sites within Marin County

Mobility Hubs

Mobility hubs are defined by the MTC Mobility Hub Implementation Playbook (MTC, April 2021) as "safe, comfortable, convenient, and accessible space to seamlessly transfer across different travel modes." They enhance access to frequent and high capacity transit by bringing together a range of transportation options in one place. In addition to transportation access, Mobility Hubs often have other amenities creating activated public spaces that can be used while waiting for a connection or can even be a destination of their own. This Plan will support the development of Mobility Hubs at the nine sites by identifying and resolving access gaps, documenting opportunities for new or enhanced amenities and mobility services, and developing conceptual designs for Mobility Hubs at six of the sites.

Purpose of this Report

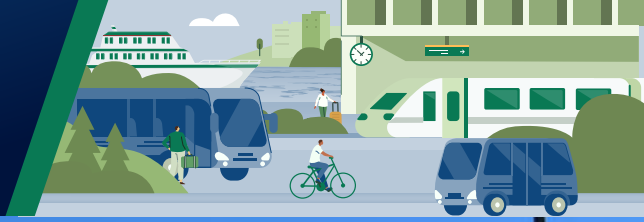
This report summarizes the existing conditions of the nine sites in Marin County based on existing data, operator interviews, and site visits. Mapping is included to visualize transit, bike, and walk sheds, and identify existing and planned pedestrian and bicycle facilities. This contextualization will help inform future work, including the station access analysis.

The second section of this report lists the mobility hub typologies defined by MTC's Mobility Hub Implementation Playbook. These typologies classify the mobility hubs based on existing land-use and transportation connections outlined in the first section. This will help to inform what amenities and policies will be relevant when considering mobility solutions for each of the sites.

Mobility Hubs

Existing conditions of each of the nine sites are discussed on the following pages under the following headings:

- Location
- Existing station amenities, including an aerial image showing the location of the amenities. Blue icons denote transit amenities, green icons denote bike amenities, orange icons denote pedestrian amenities, purple icons denote motorized services and amenities, and pink icons denote support services and amenities
- Bike and pedestrian connections, including a 0.5 mile walk shed and a 1.5 mile bike shed
- Existing transit service, including ridership and a 15 minute transit shed from boarding of first transit service
- Planned development and transportation projects within the vicinity of each site



Novato San Marin SMART Station

Location

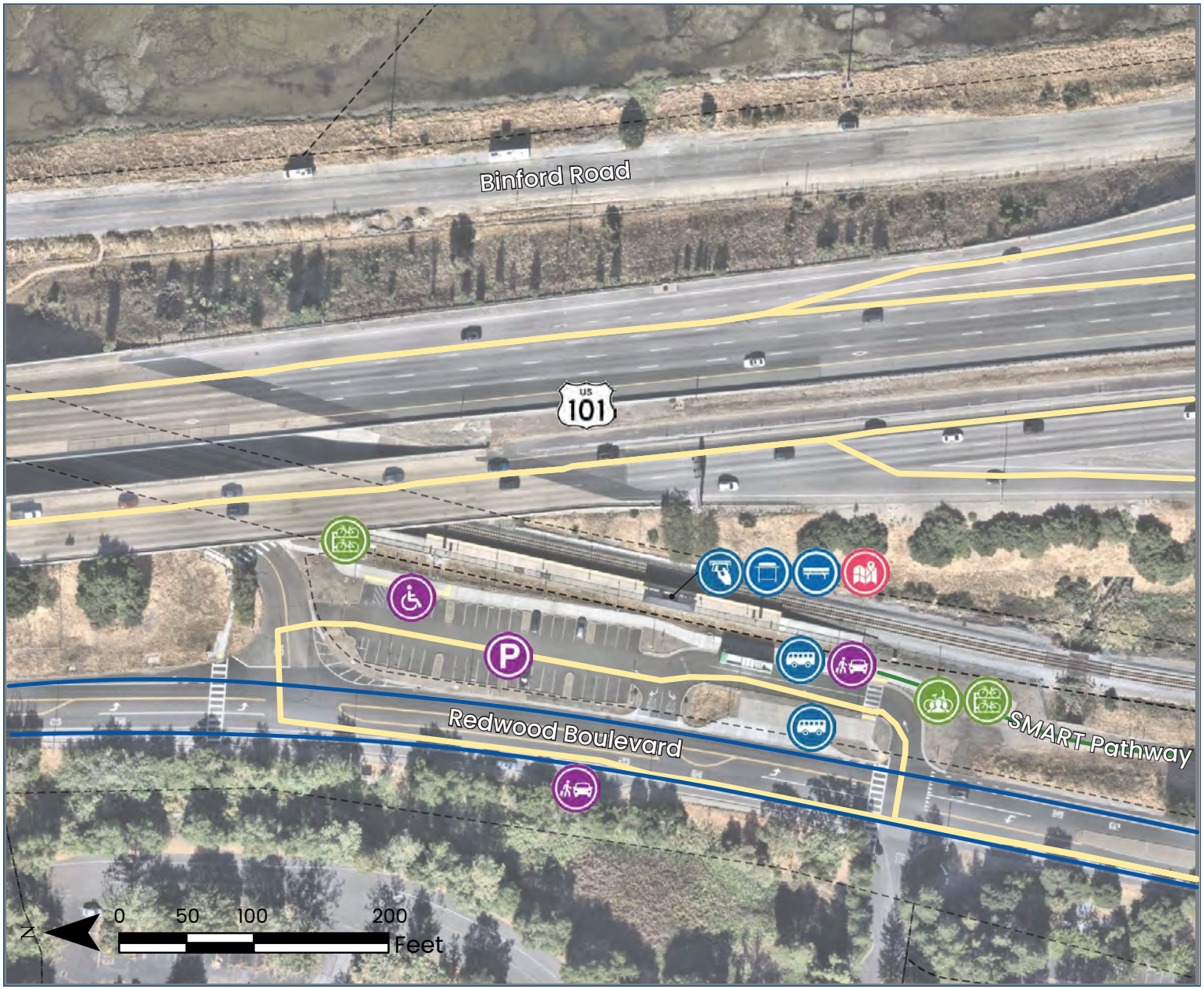
Novato San Marin SMART Station is located approximately 1-mile north of Novato Downtown SMART Station. Novato San Marin is situated between Redwood Boulevard to the west and US-101 to the east. The station platform runs north-south. The station is only accessible by automobile from Redwood Boulevard. Pedestrian/bicycle access is via Redwood Boulevard, Rush Landing Road, and the SMART Pathway. South of the station is generally low-density residential land use. To the north and west of the station is commercial development, including the Buck Institute for Research on Aging, along with residential single-family and multi-family residential uses. To the east of the station, east of US-101, is the Rush Creek Marsh Wildlife Area and Preserve.

Existing Station Amenities

Table 1: Existing Amenities at Novato San Marin SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 6 x Standard Bike Lockers • 1 x Large Bike Locker • 10 x Bike Racks • Bike Share	• 1 x Rail Station Shelter • 4 x Rail Station Benches • Fare Vending • 1 x On-Street Bus Stop with no Shelter or Bench (currently inactive) • 1 x Off-Street Bus Stop with no Shelter or Bench	• Parking • 4 x ADA Parking • Pick-Up/Drop-Off Zone	• Wi-Fi • System Map and Information

Figure 2: Amenities at Novato San Marin SMART Station

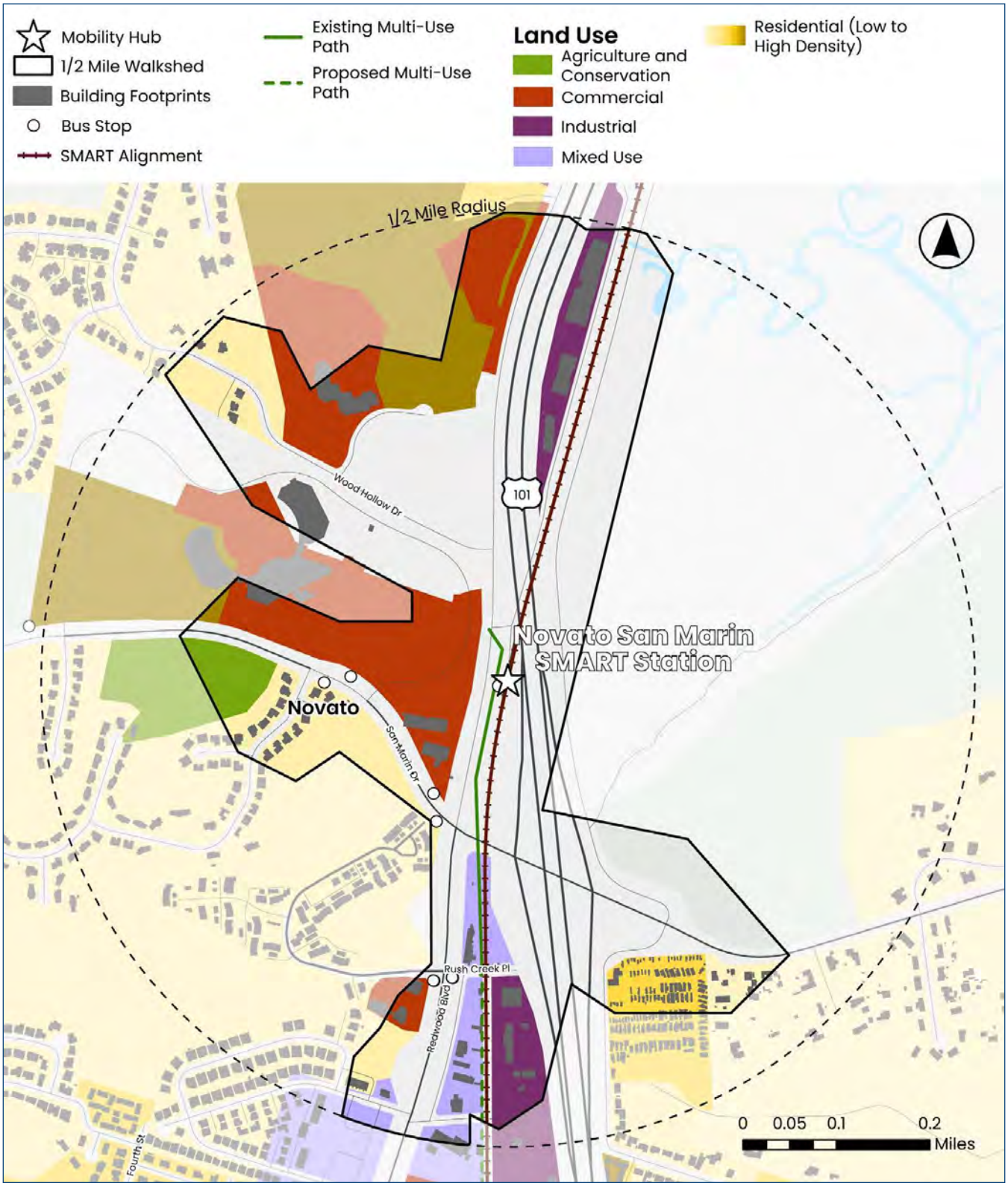


LEGEND

- Class I Bikeway
- Class II Bike Lanes
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- System Map & Information
- Bus Stop
- Station Shelter
- Station Bench
- Fare Vending
- Parking
- ADA Parking
- Pick Up Drop Off Zone

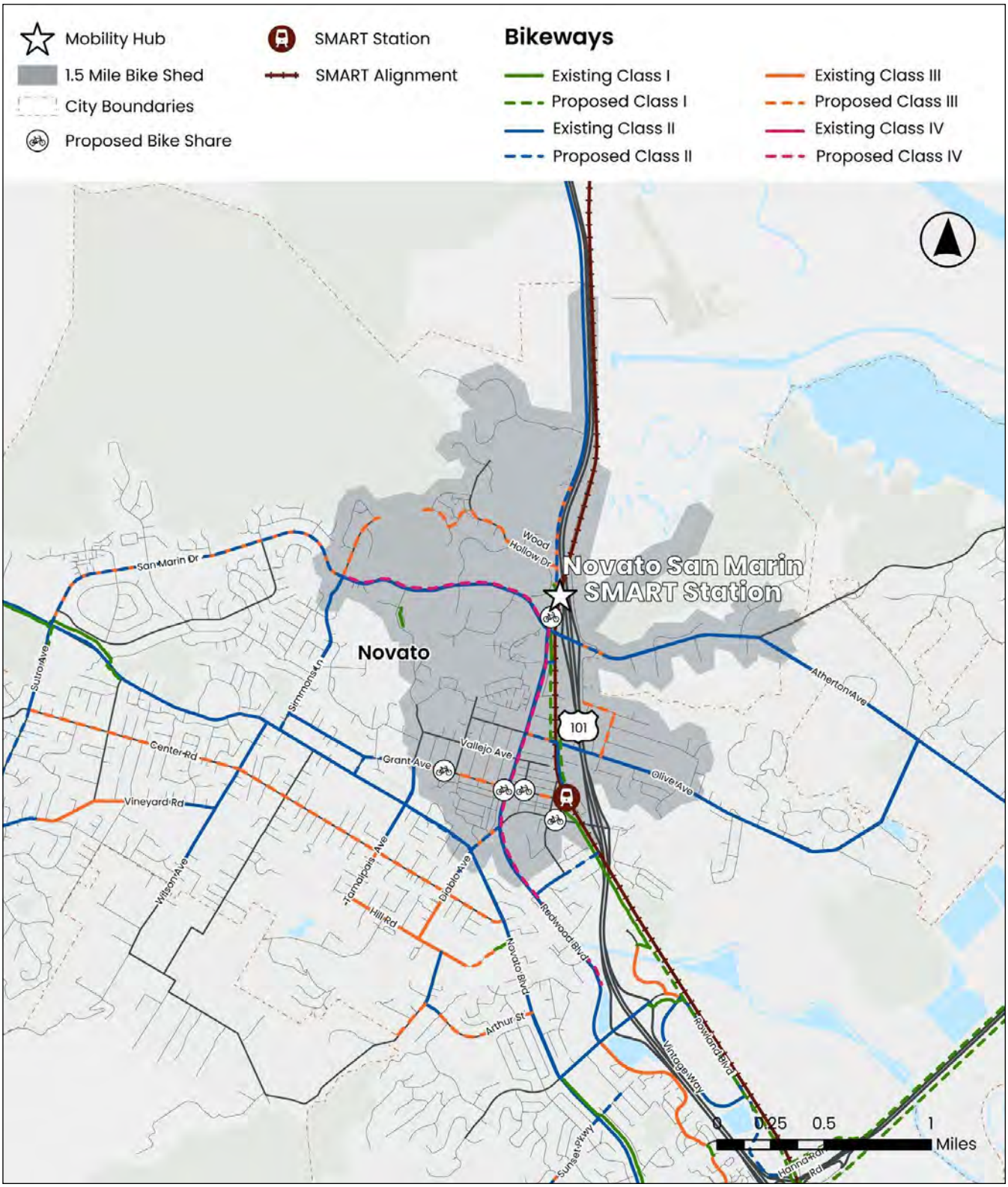
TAM Transportation Authority of Marin

Figure 3: Novato San Marin SMART Station Walk Shed



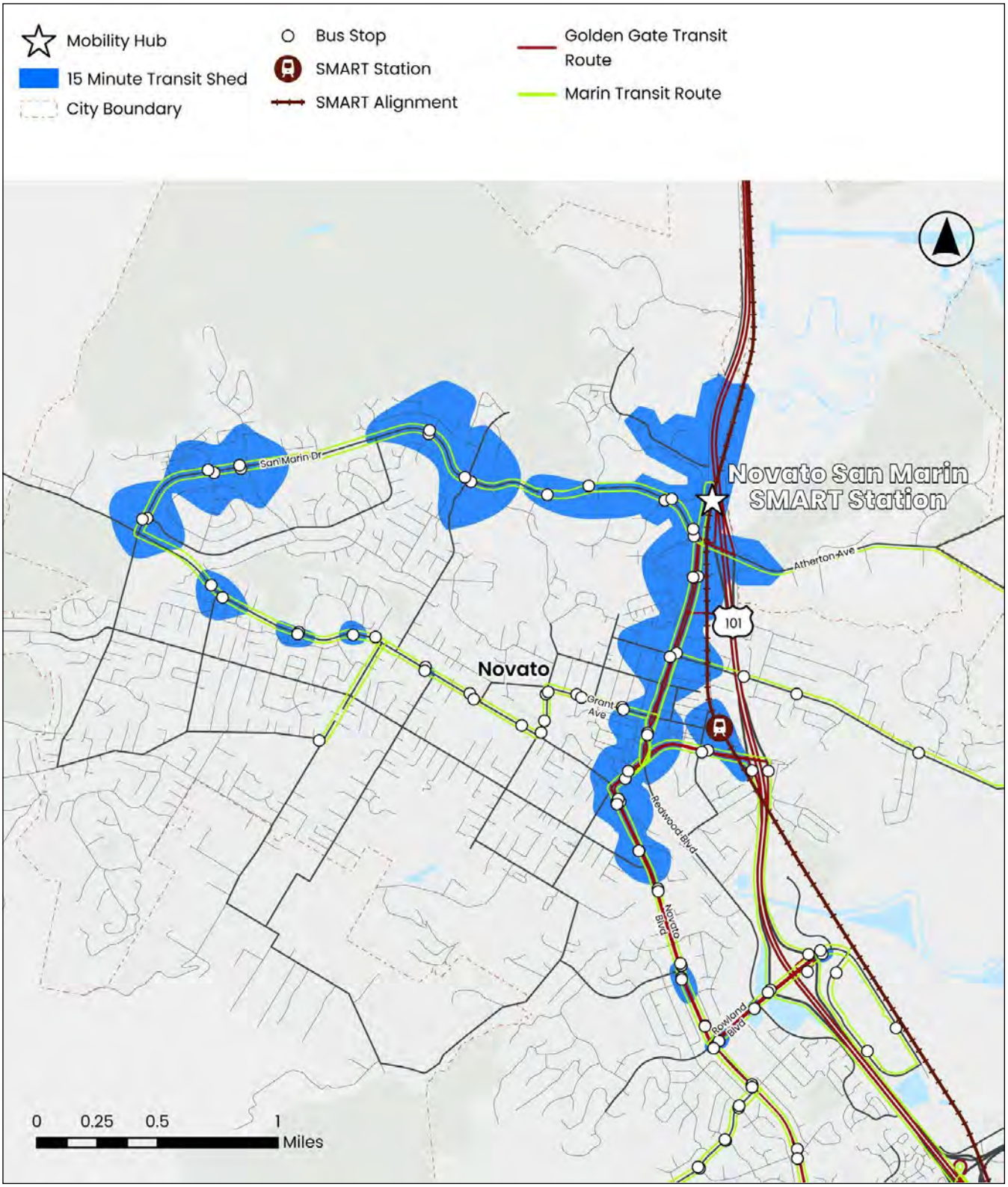
TAM Transportation Authority of Marin

Figure 4: *Novato San Marin SMART Station Bike Shed*



TAM Transportation Authority of Marin

Figure 5: *Novato San Marin SMART Station Transit Shed*



Bike and Pedestrian Connections

The SMART Pathway – a north-south bicycle and pedestrian pathway parallel to the SMART tracks – terminates at Novato San Marin and extends south (with some existing gaps) to Larkspur SMART Station. SMART plans to extend the SMART Pathway north to Cloverdale in Sonoma County. There is also an existing Class II bike lane along Redwood Boulevard. While there are a number of crosswalks, there is no crosswalk on the southern leg of the intersections of Redwood Boulevard/Rush Landing Road and Redwood Boulevard/station access.

There is a bike share station along the SMART Pathway, just south of the station.

Existing Transit Service

The on-street and off-street bus stops at the SMART station are used by Marin Transit. There is also a Marin Transit operations facility to the north of the station, along Rush Landing Road.

Table 2: Weekday Ridership (Marin Transit - January 2025, SMART - Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Marin Transit	49: Downtown San Rafael – Novato San Marin	30 mins	10	13
	Marin Transit	57: Downtown San Rafael - Novato	1 hour	9	7
Rail	SMART		32 mins	116	106
			Total	**135**	**126**

Planned Development and Transportation Projects

The former Fireman's Fund office campus sits across Redwood Boulevard from the station and is planned for redevelopment into a master planned residential community with 1,081 residential units on 36-acres of the 65-acre property.

An 80-unit townhome development was recently completed less than 1/2 mile north of the station and the City has approved entitlements for an additional 126 units (townhomes and single-family units, some with JADUs). Approximately 1 mile walking distance north of the station, the City approved entitlements for 80 residential units. The office complex at 100 Wood Hollow Drive, located approximately 1/3 mile walking distance from the station, is proposed to be demolished and redeveloped into 66 residential units. A 100-room hotel was recently completed on Redwood Boulevard, approximately 1/2 mile walking distance south of the station.

Novato Downtown SMART Station

Location

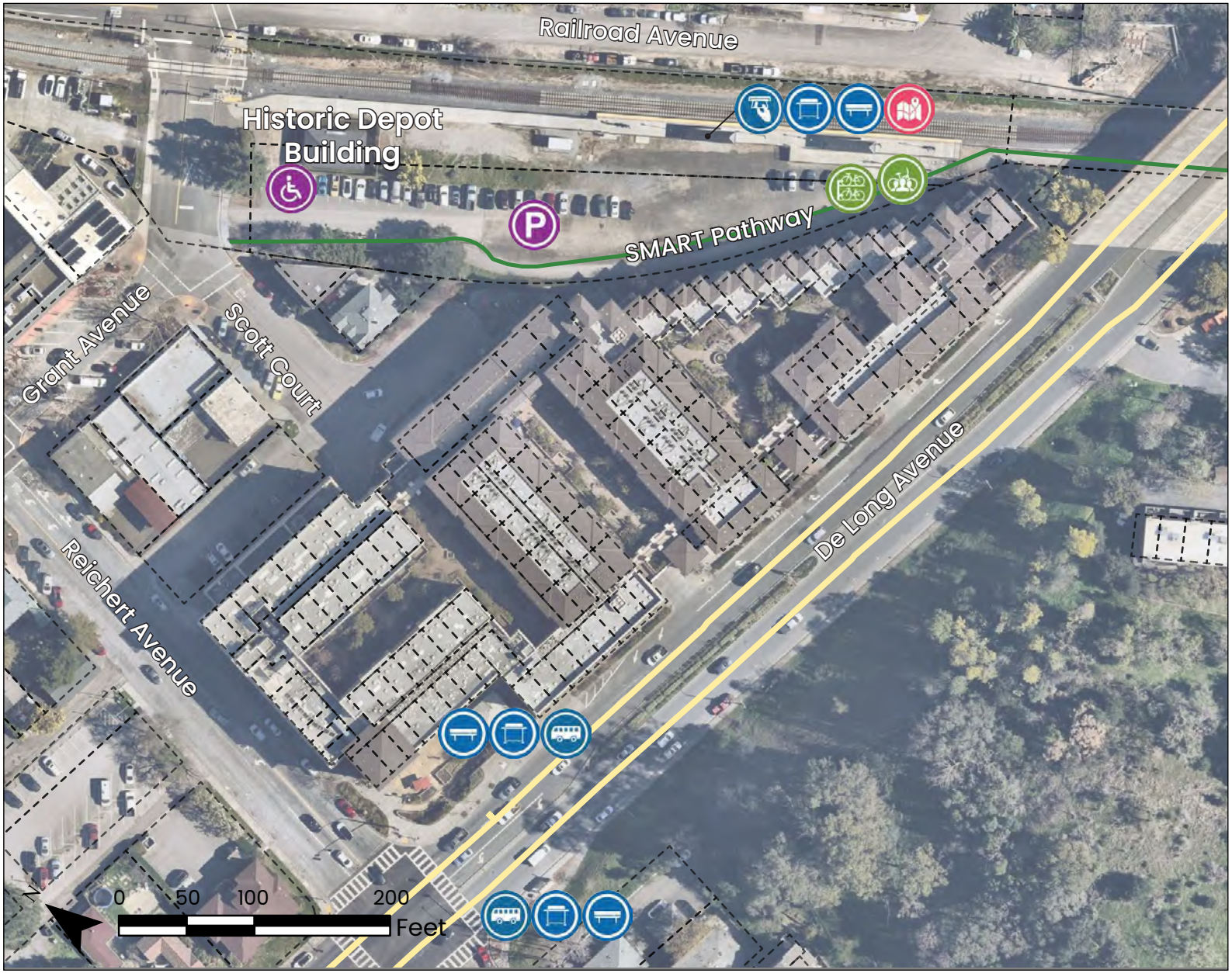
Novato Downtown SMART Station is located on the eastern edge of Downtown Novato and is bounded to the north and south by Grant Avenue and De Long Avenue, respectively. The station is accessible by automobile from Grant Avenue. Pedestrian/bicycle access is via Grant Avenue and the SMART Pathway to the south of the station. There is no connection from De Long Avenue, which passes over the SMART tracks. Southwest of the station sits Millworks Apartments, a moderate density (4-story) mixed-use apartment complex. East of the station, along Railroad Avenue, lies predominately single-family residential land uses. The station parking area is currently mostly unpaved and a historic depot building sits adjacent.

Existing Station Amenities

Table 3: Existing Amenities at Novato Downtown SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 6 x Standard Bike Lockers • 1 x Large Bike Locker • 5 x Bike Racks • Bike Share	• 2 x Rail Station Shelters • 4 x Rail Station Benches • Fare Vending	• Parking • 2 x ADA Parking	• Wi-Fi • System Map and Information

Figure 6: *Amenities at Novato Downtown SMART Station*

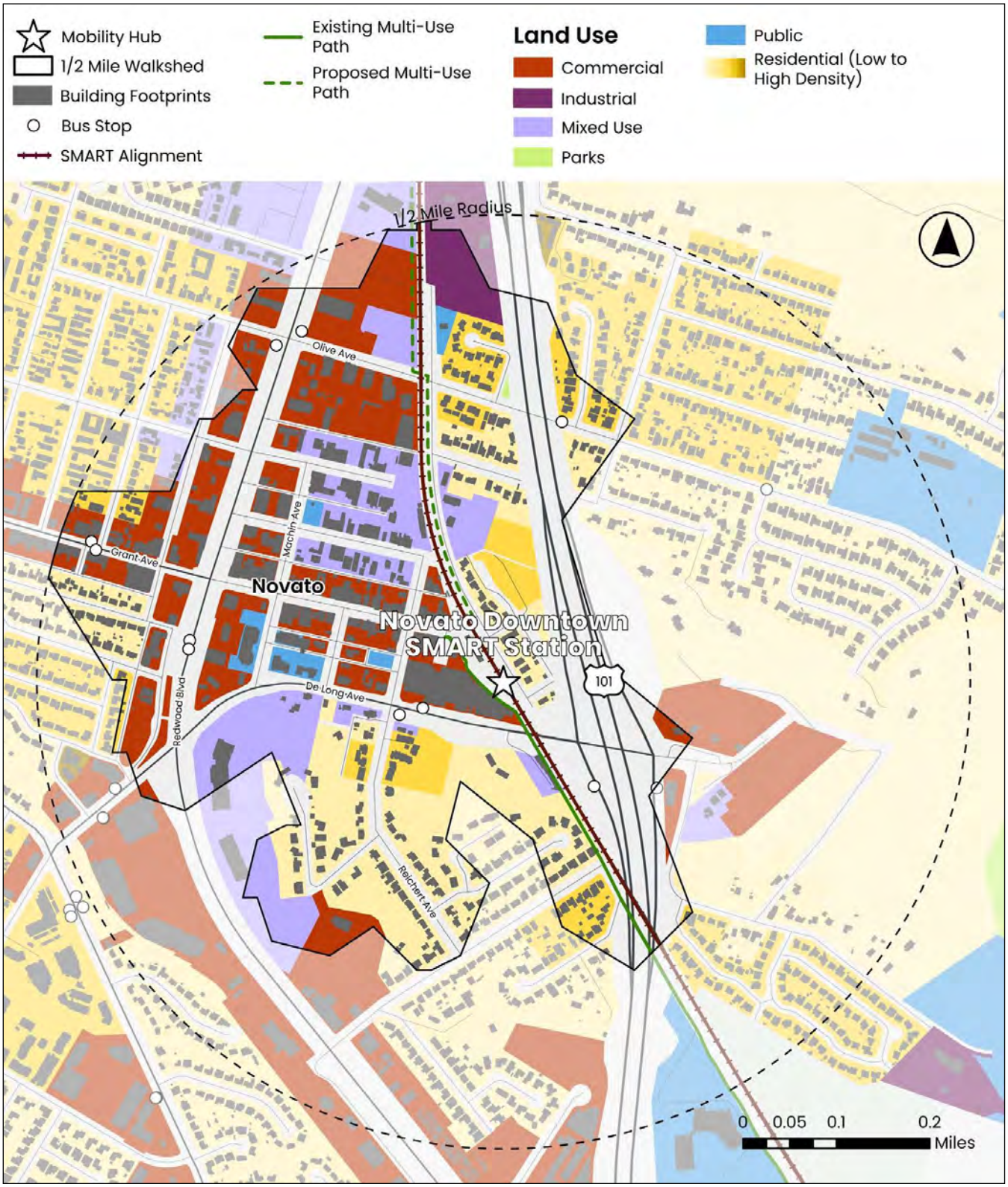


LEGEND

- Class I Bikeway
- Class II Bike Lanes
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- System Map & Information
- Bus Stop
- Station Shelter
- Station Bench
- Fare Vending
- Parking
- ADA Parking

TAM Transportation Authority of Marin

Figure 7: Novato Downtown SMART Station Walk Shed



TAM Transportation Authority of Marin

Figure 8: Novato Downtown SMART Station Bike Shed

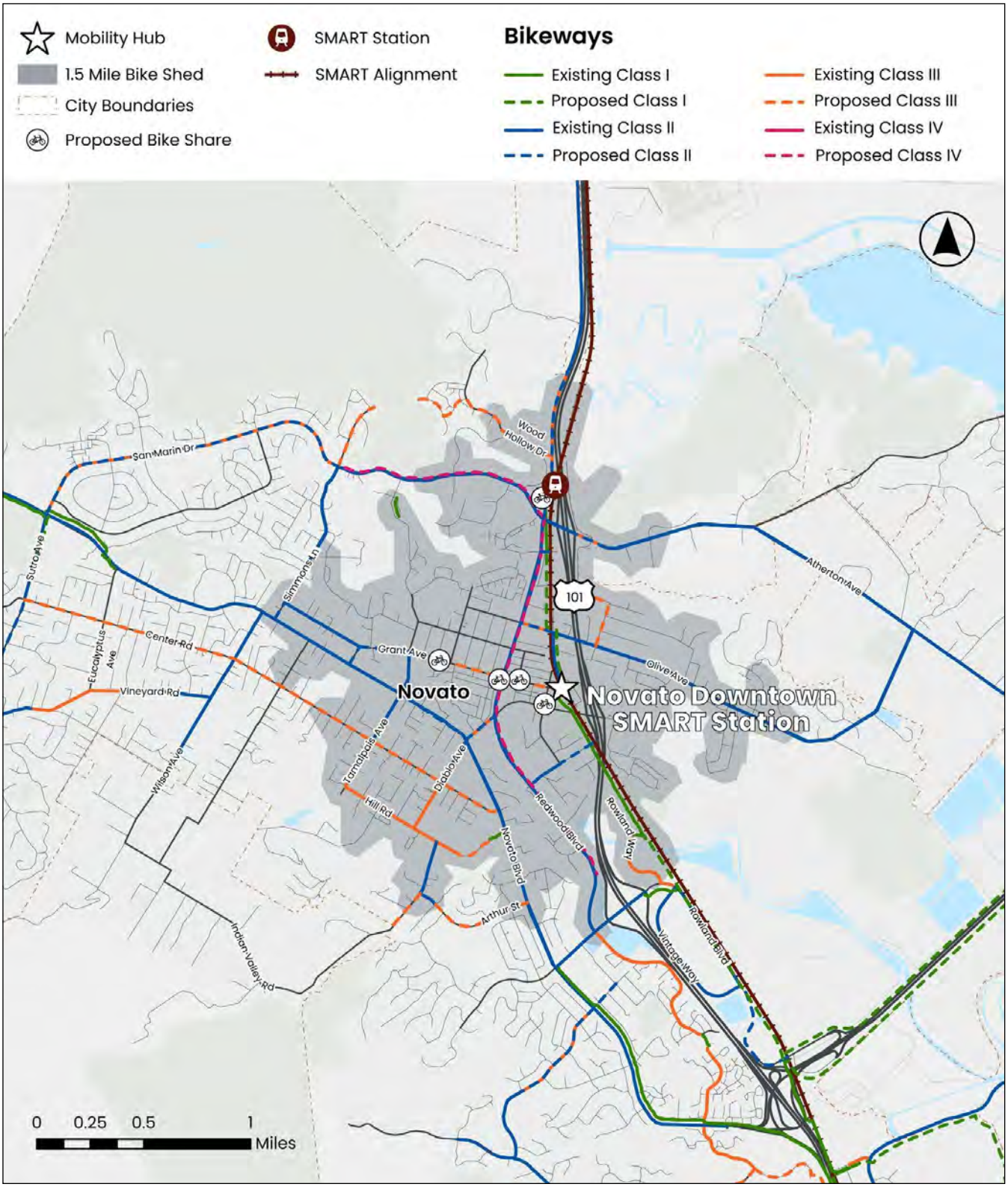
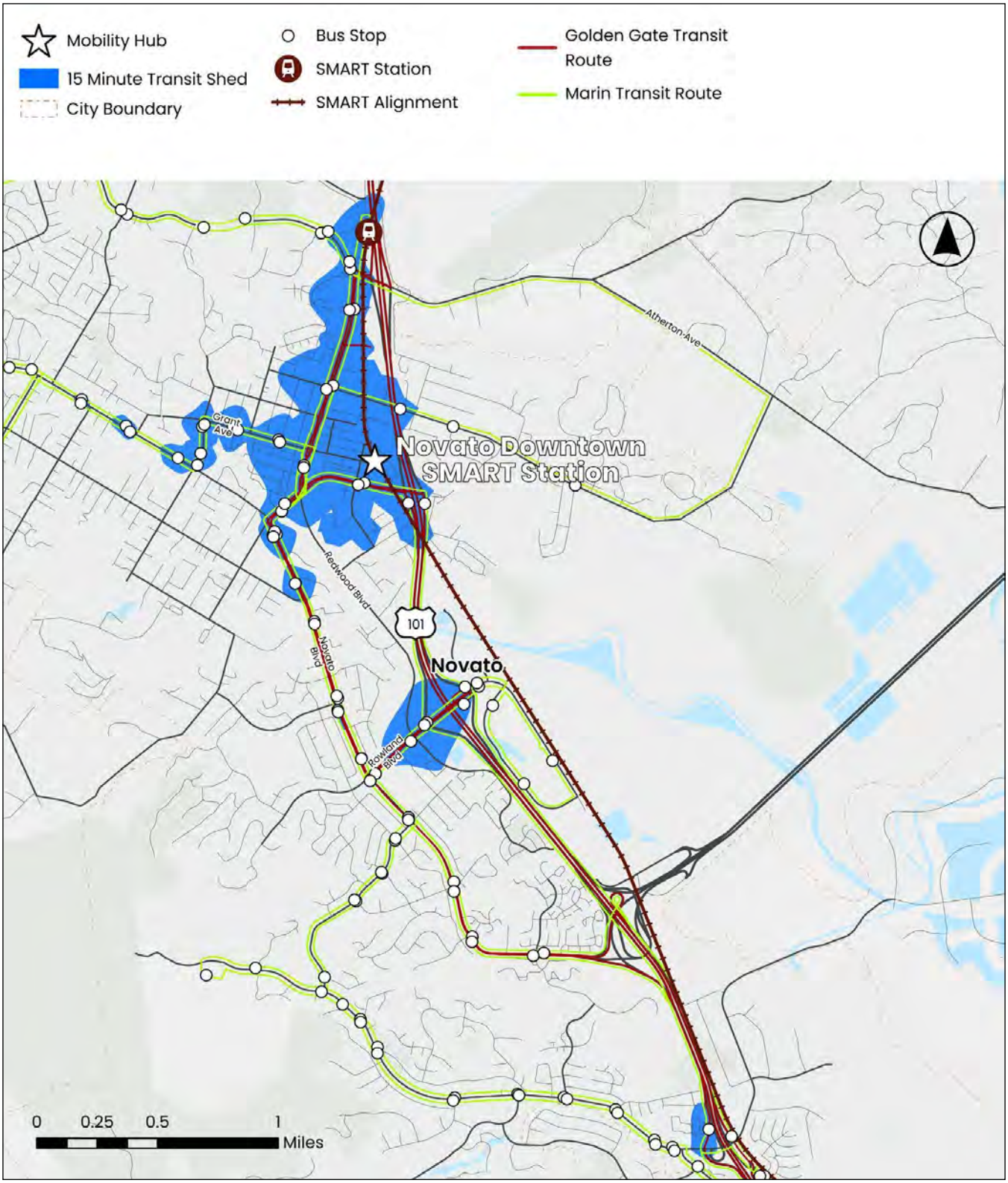


Figure 9: *Novato Downtown SMART Station Transit Shed*



TAM Transportation Authority of Marin

Bike and Pedestrian Connections

The SMART Pathway currently begins at the station and runs to the south along the western side of the tracks. SMART is currently designing an extension of the pathway connection to close an existing gap to the north of the station. There are also bike lanes on Railroad Avenue, north of Grant Avenue. No marked bike facilities are provided to connect the station and the rest of downtown Novato.

There is a bike share station at the Station.

Existing Transit Service

There is no bus service directly to the SMART station. The closest bus stop is 0.2 miles away on De Long Avenue and Reichert Avenue and the Novato Transit Center, on Redwood Boulevard at Grant Avenue, is approximately 0.4 miles west of the SMART Station.

Table 4: Weekday Ridership (Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Rail	SMART		32 mins	225	210
			Total	**225**	**210**

Planned Development and Transportation Projects

Redevelopment of the historic train depot building into a beer garden has been withdrawn. The City has approved entitlements for approximately 810 units within 1/2 mile walking distance of the station and another 252 units are pending entitlement approval. An additional 301 units are located within 1 mile walking distance to the station. New commercial space totaling 14,000 square feet is entitled within 1/2 mile of the station.

Novato Hamilton SMART Station

Location

Novato Hamilton SMART Station is located approximately 4 miles southeast of Novato Downtown SMART Station and is built within the former Hamilton Field, a decomissioned U.S. Air Force base. The former base now serves as planned community with residential, commercial, open space, and civic uses. Novato Hamilton SMART Station is accessible by automobile from Main Gate Road and is nestled between hills on the east and west that limits access to adjacent land uses. There are overhead power lines in the open space to the north and east of the station. Adjacent land uses include South Novato Library and Novato Charter School to the west of the station and single-family residential homes to the east of the station.

Existing Station Amenities

Table 5: Existing Amenities at Novato Hamilton SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 6 x Standard Bike Lockers • 1 x Large Bike Locker • 5 x Bike Racks • Bike Share	• 1 x Rail Station Shelter • 4 x Rail Station Benches • Fare Vending	• Parking • 6 x ADA Parking • 4 x Motorcycle Parking • Pick-up/Drop-Off Zone	• Wi-Fi • System Map and Information

Figure 10: Amenities at Novato Hamilton SMART Station

LEGEND

- Class I Bikeway
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- System Map & Information
- Station Shelter
- Station Bench
- Fare Vending
- Parking
- ADA Parking
- Pick Up Drop Off Zone

TAM Transportation Authority of Marin

Figure 11: Novato Hamilton SMART Station Walk Shed

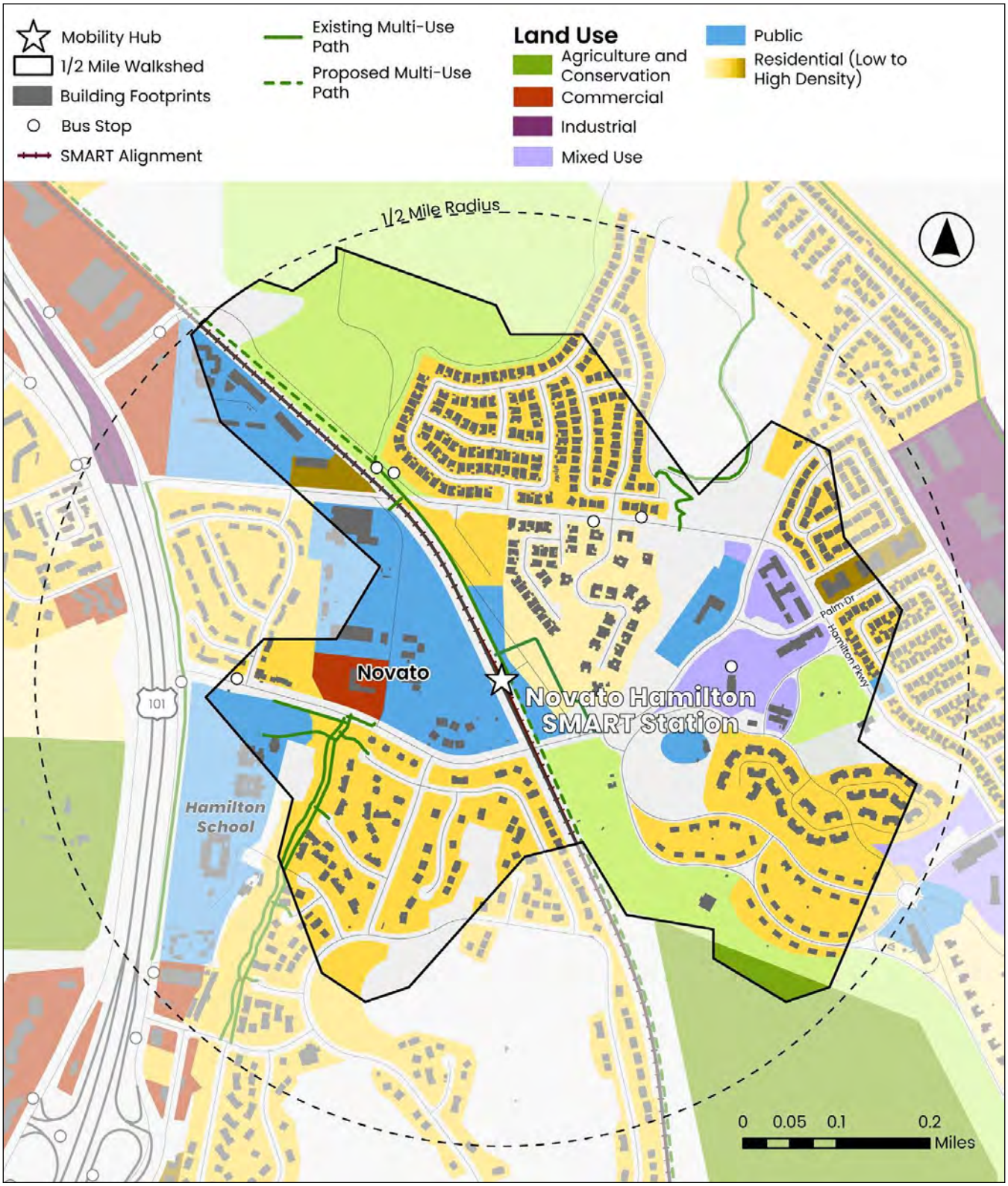
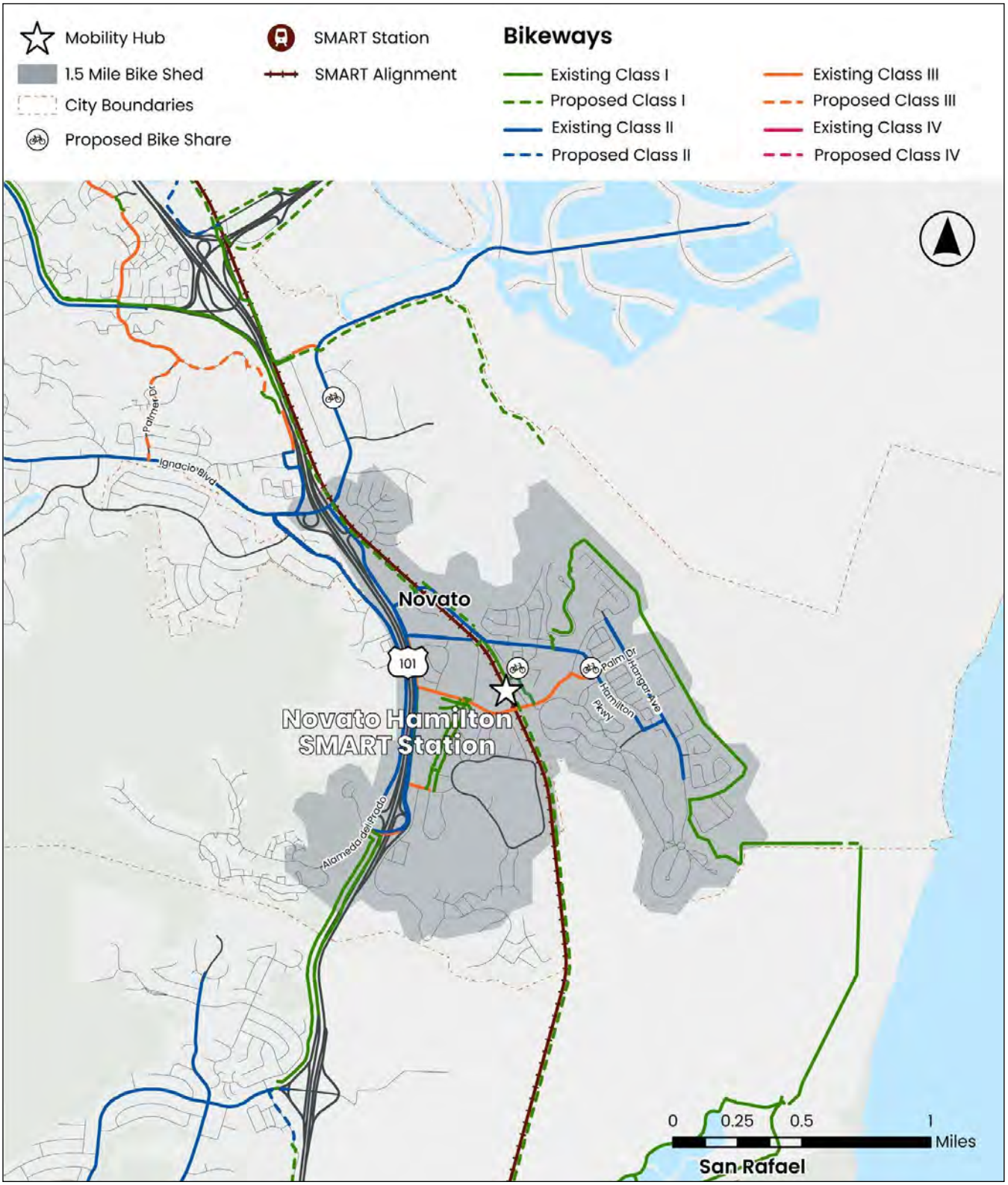


Figure 12: Novato Hamilton SMART Station Bike Shed



TAM Transportation Authority of Marin

There is no 15 minute transit shed for Novato Hamilton SMART Station as there are no bus connections that can be made within 15 minutes since there are no stops at or around the station.

Bike and Pedestrian Connections

The SMART Pathway runs to the north of the station on the east side of the railroad tracks. There is currently a gap in the SMART Pathway to the south of the station. SMART is currently advancing design to close the gap between Main Gate and Smith Ranch Road. A shared use trail runs along Main Gate Road to the south of the station. The crosswalk between the SMART Pathway and the shared use trail on Main Gate Road is not controlled.

There is a bike share station at the Station.

Existing Transit Service

Although there is a passenger loading platform and markings for a bus stop within the station parking lot, buses are unable to circulate within the lot. Bus routes remain on Main Gate Road with the closest stops being at the Hamilton Theatre parking lot, approximately 0.3 miles to the east, and at Main Gate Road and Nave Drive, 0.4 miles to the west. A shuttle service was previously operated by the nearby Homeowners Association but is no longer in operation.

Table 6: Weekday Ridership (Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Rail	SMART		32 mins	163	156
			Total	**163**	**156**

Planned Development and Transportation Projects

The Hamilton Village townhome project, which consists of 75 units, is now fully constructed and occupied. The Homeward Bound workforce and veteran housing is now constructed, which includes 50 units. The replacement of the North Bay Children's Center with 7,000 sq ft of commercial development is under construction.

Marin Civic Center SMART Station

Location

Marin Civic Center SMART Station is located approximately 0.5 miles northwest of the Marin County Civic Center. The station is accessible from Civic Center Drive to the east and Merrydale Road to the west. The station sits under the US-101 overpass. Adjacent destinations include the Marin County Fair, Marin County Civic Center, and Northgate shopping mall.

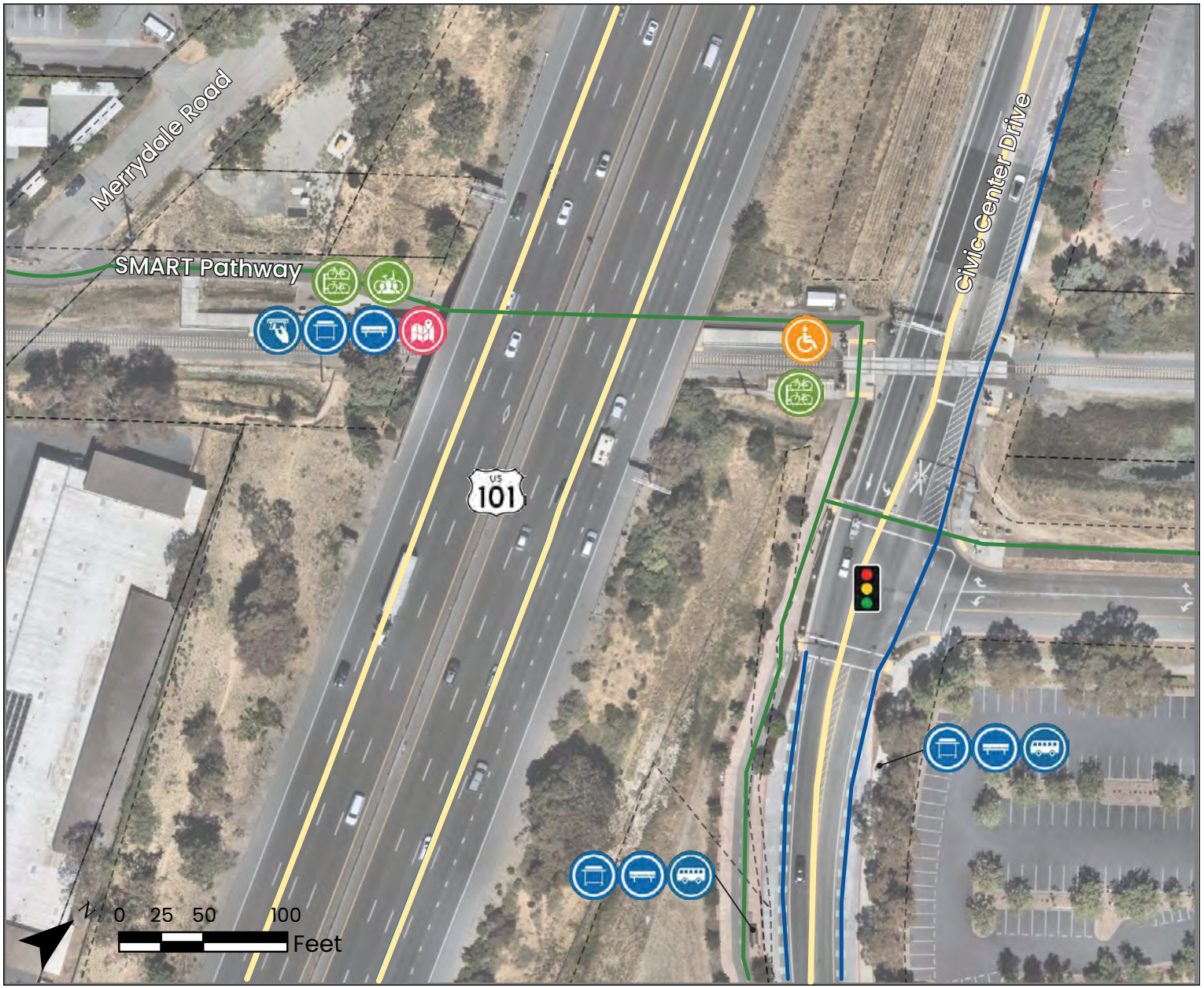
The area to the west of the station is considered an MTC Equity Priority Community.

Existing Station Amenities

Table 7: Existing Amenities at Marin Civic Center SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 2 x Standard Bike Lockers • 1 x Large Bike Locker • 12 x Bike Racks • Bike Share	• 1 x Rail Station Shelter • 3 x Rail Station Benches • Fare Vending • 2 Bus Stops with shelters and benches on Civic Center Drive		• Wi-Fi • System Map and Information

Figure 13: Amenities at Marin Civic Center SMART Station



LEGEND

- Class I Bikeway
- Class II Bike Lanes
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- ADA Pedestrian Ramp
- System Map & Information
- Bus Stop
- Station Shelter
- Station Bench
- Fare Vending
- Traffic Signal

Figure 14: Marin Civic Center SMART Station Walk Shed

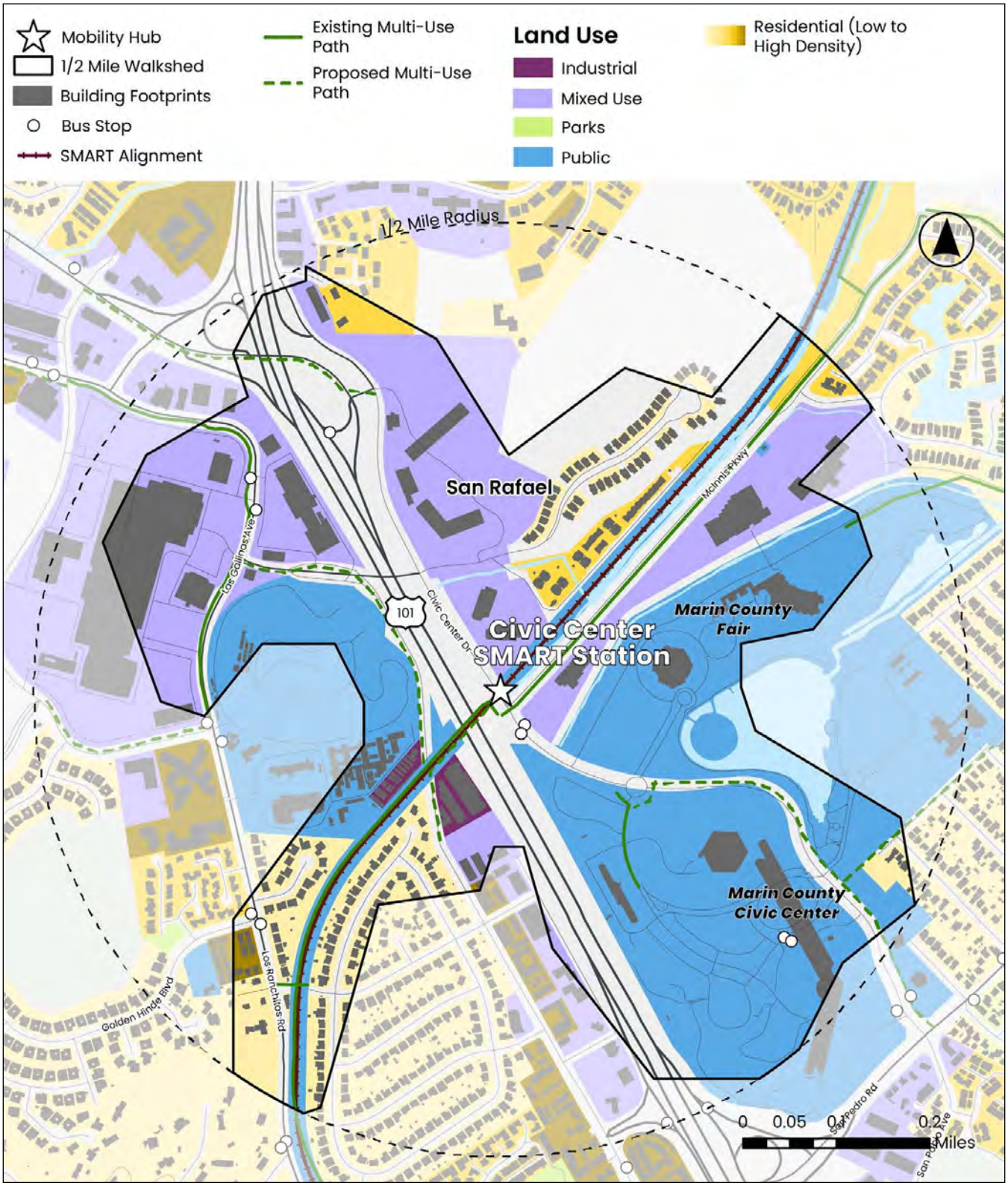


Figure 15: Marin Civic Center SMART Station Bike Shed

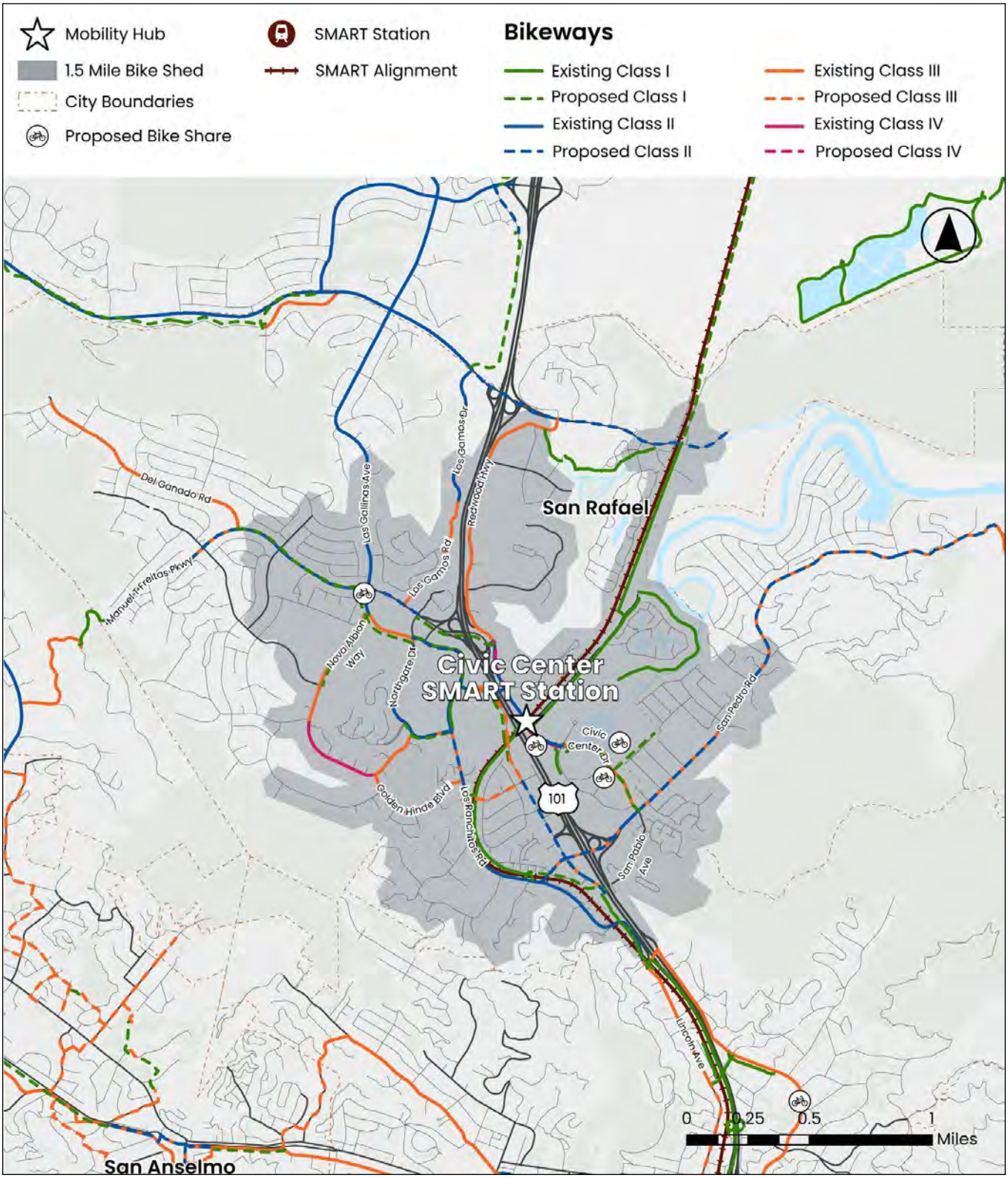
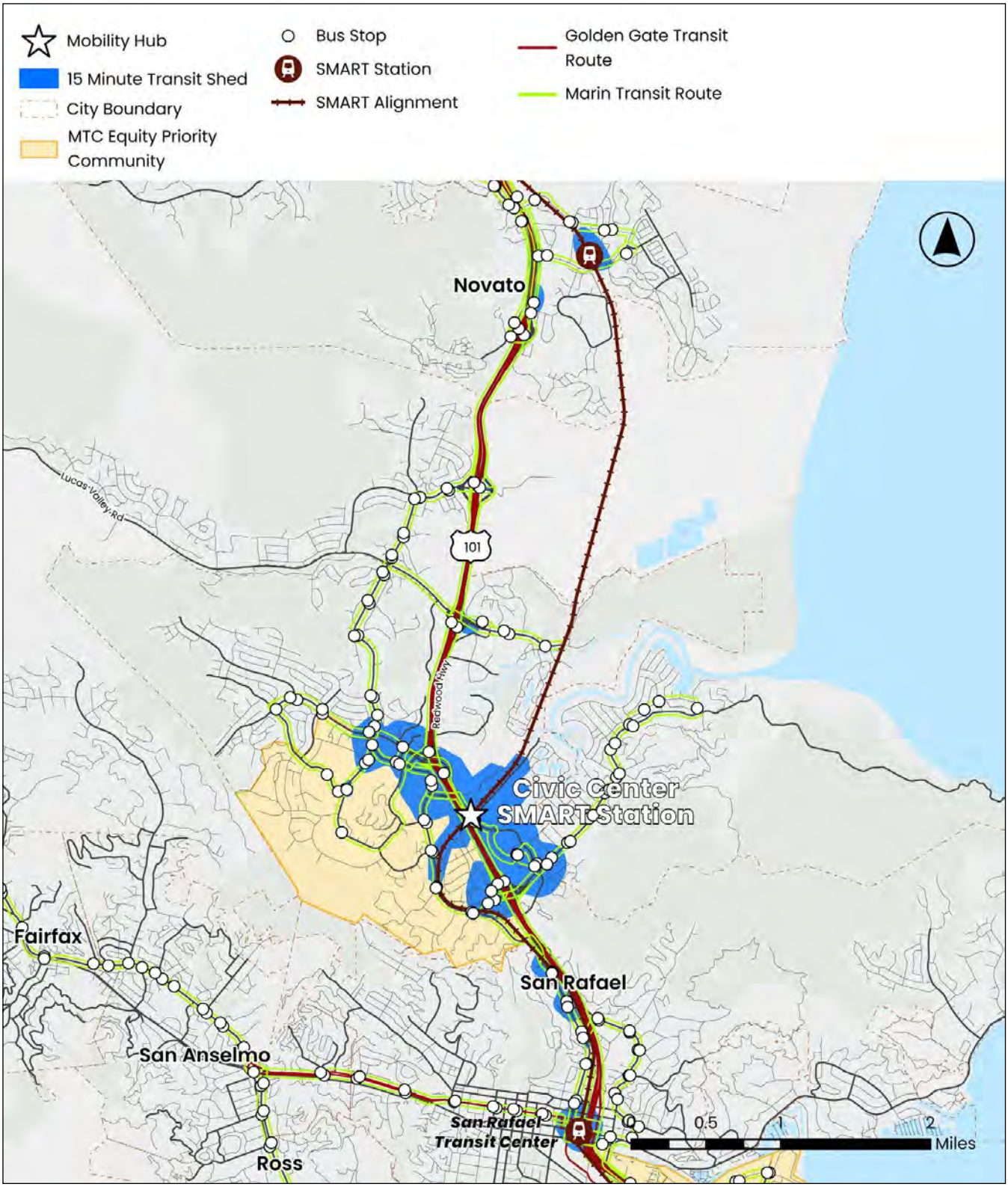


Figure 16: Marin Civic Center SMART Station Transit Shed



Bike and Pedestrian Connections

There are both on-street and off-street bike lanes along portions of Civic Center Drive. The SMART Pathway runs along the north side of the railroad tracks to the west of the station. Another path is provided along Gallinas Creek/McInnis Parkway east of Civic Center Drive. At present, there is a gap in the SMART Pathway between Novato Hamilton SMART Station and Marin Civic Center SMART Station. Several bicycle facility improvements are planned in the area, including the north-south Promenade along Merrydale Road and the Rafael Meadows Path connection through the station area under US-101.

A bike share station was recently installed at the Marin Civic Center SMART Station and an additional station is planned at the Marin County Civic Center.

Existing Transit Service

Bus stops on Civic Center drive serve the station. These bus stops have both shelters and benches.

Table 8: Weekday Ridership (Marin Transit - January 2025, SMART - Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Marin Transit	35: Canal – Northgate	30 mins	10	9
	Marin Transit	49: Downtown San Rafael – Novato San Marin	30 mins	15	11
Rail	SMART		32 mins	213	214
			Total	**238**	**234**

Planned Development and Transportation Projects

Adjacent to the Marin Civic Center SMART Station, the Northgate Mall is redeveloping from a commercial mall complex to a mixed-use town square with residential and retail. The 775,000 square feet mall is converting 500,000 square feet to 1,400 residential units. This project includes circulation changes to the northwest of the station area, including Merrydale Road and Las Gallinas Avenue.

SMART is currently in the planning stages for a project to provide pick-up/drop-off space and ADA parking for the station east of US-101 along the west side of Civic Center Drive. It will also include bicycle and pedestrian facilities on the west side of Civic Center Drive north of the station. A turnaround/drop-off area and customer parking has been proposed in the past at the end of Merrydale Road adjacent to the station but that project is not currently advancing.

San Rafael SMART Station

Location

San Rafael SMART Station is located within downtown San Rafael, adjacent to the San Rafael Transit Center. The SMART station is accessible from both 4th Street and 3rd Street, to the north and south, respectively. Land uses surrounding San Rafael SMART Station are largely commercial. The San Rafael Transit Center bus bays are planned to relocate north to either side of the SMART station. That project is not planned to modify the SMART platforms or shelters.

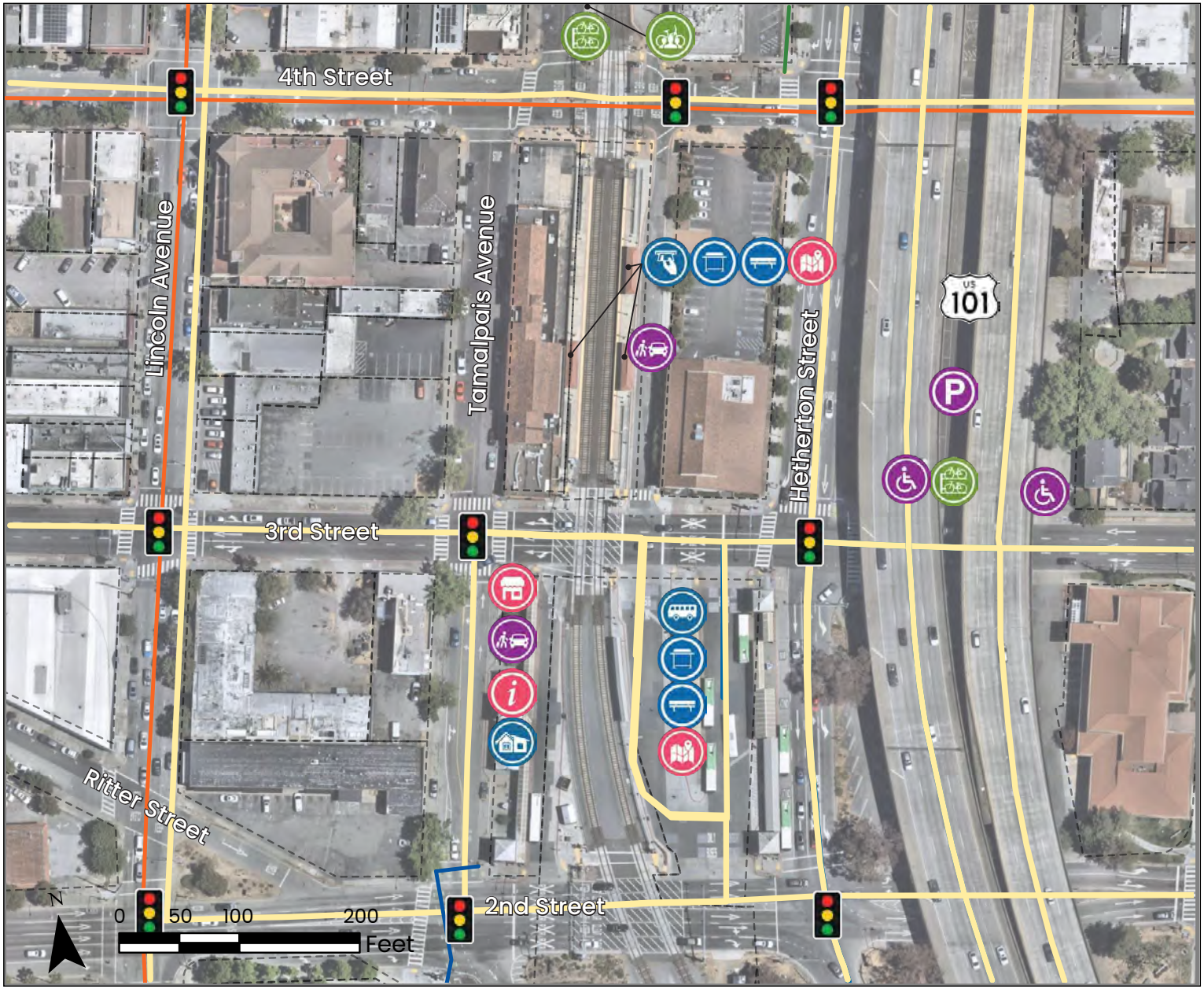
Areas to the north and to the south of the station are considered MTC Equity Priority Communities.

Existing Station Amenities

Table 9: Existing Amenities at San Rafael SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 2 x Standard Bike Lockers • 1 x Large Bike Locker • 10 x Bike Racks • Bike Share	• 3 x Rail Station Shelters • 6 x Rail Station Benches • Fare Vending • 17 Bus Stops with shelters and benches, at Transit Center	• Pick-up/Drop-off Zones along East Tamalpais Avenue (for SMART) and West Tamalpais Avenue (for buses) • Commuter parking in Caltrans park-and-ride lots underneath US-101	• Wi-Fi • System Map and Information • Customer service building, including restrooms, located at Transit Center

Figure 17: Amenities at San Rafael SMART Station



LEGEND

- Class I Bikeway
- Class II Bike Lanes
- Class III Bike Route
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- Vending/Retail Services
- System Map & Information
- Information Booth
- Restrooms
- Bus Stop
- Station Shelter
- Station Bench
- Fare Vending
- Pick Up Drop Off Zone
- ADA Parking
- Parking
- Traffic Signal

TAM Transportation Authority of Marin

Figure 18: San Rafael SMART Station Walk Shed

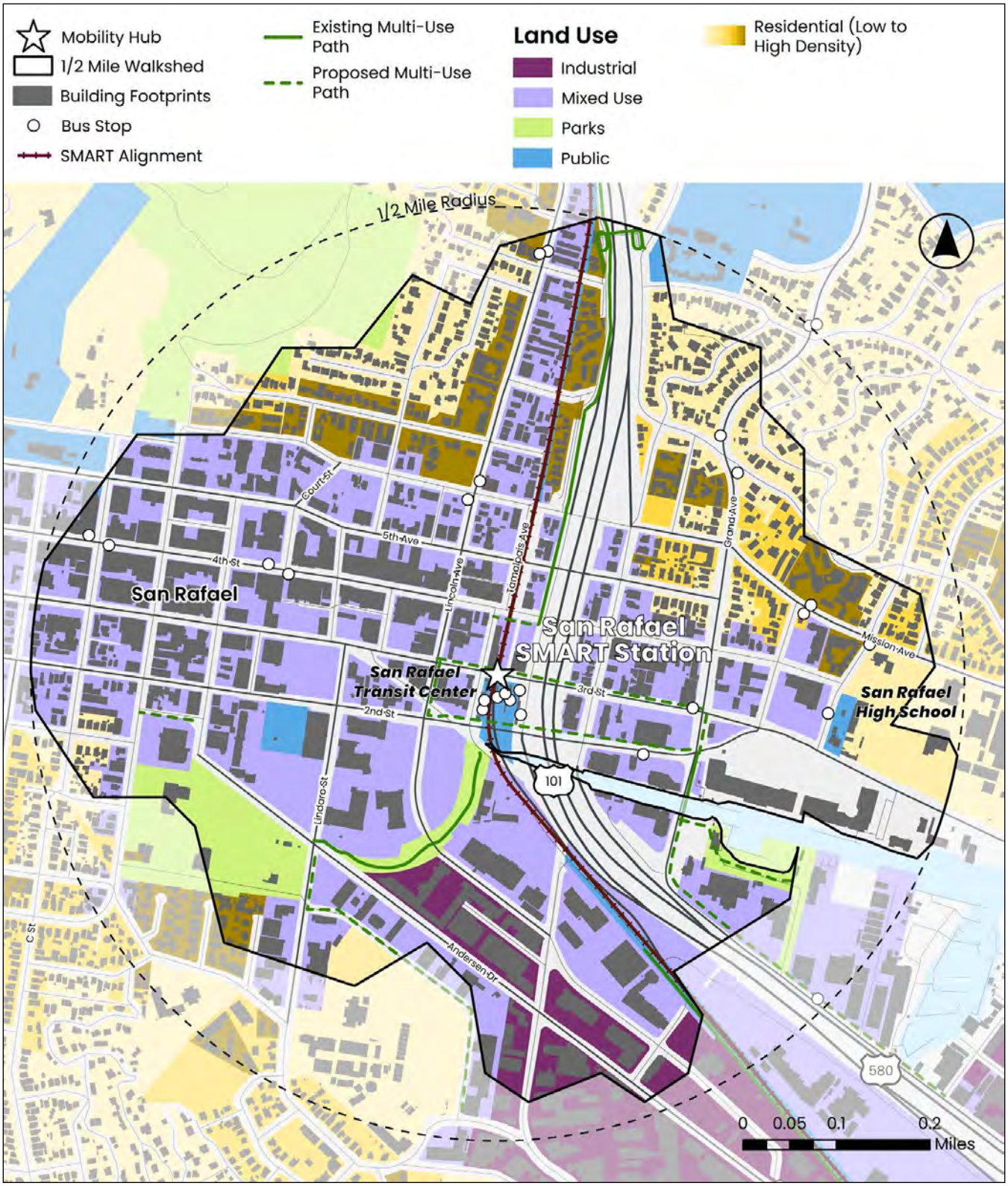


Figure 19: San Rafael SMART Station Bike Shed

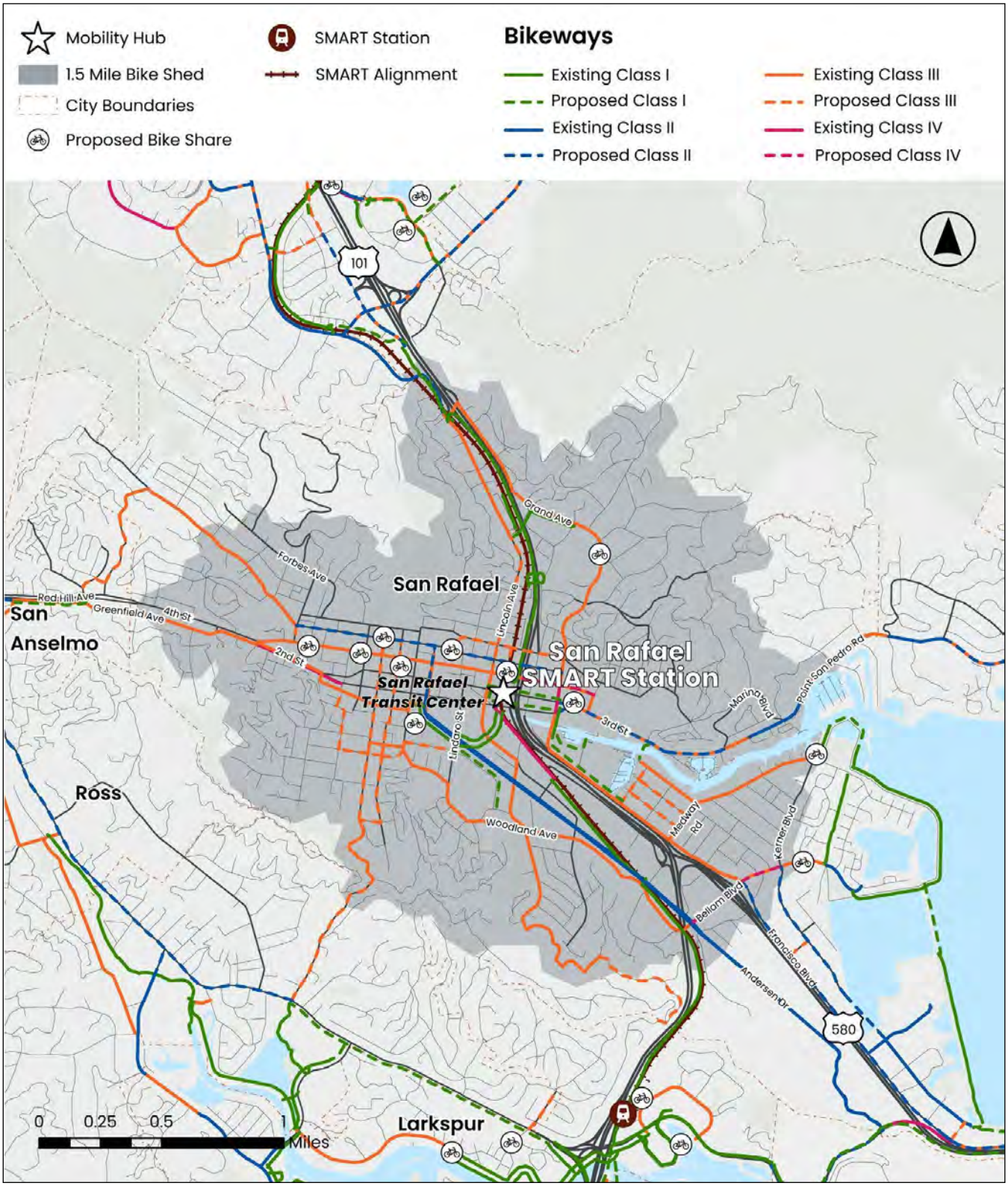
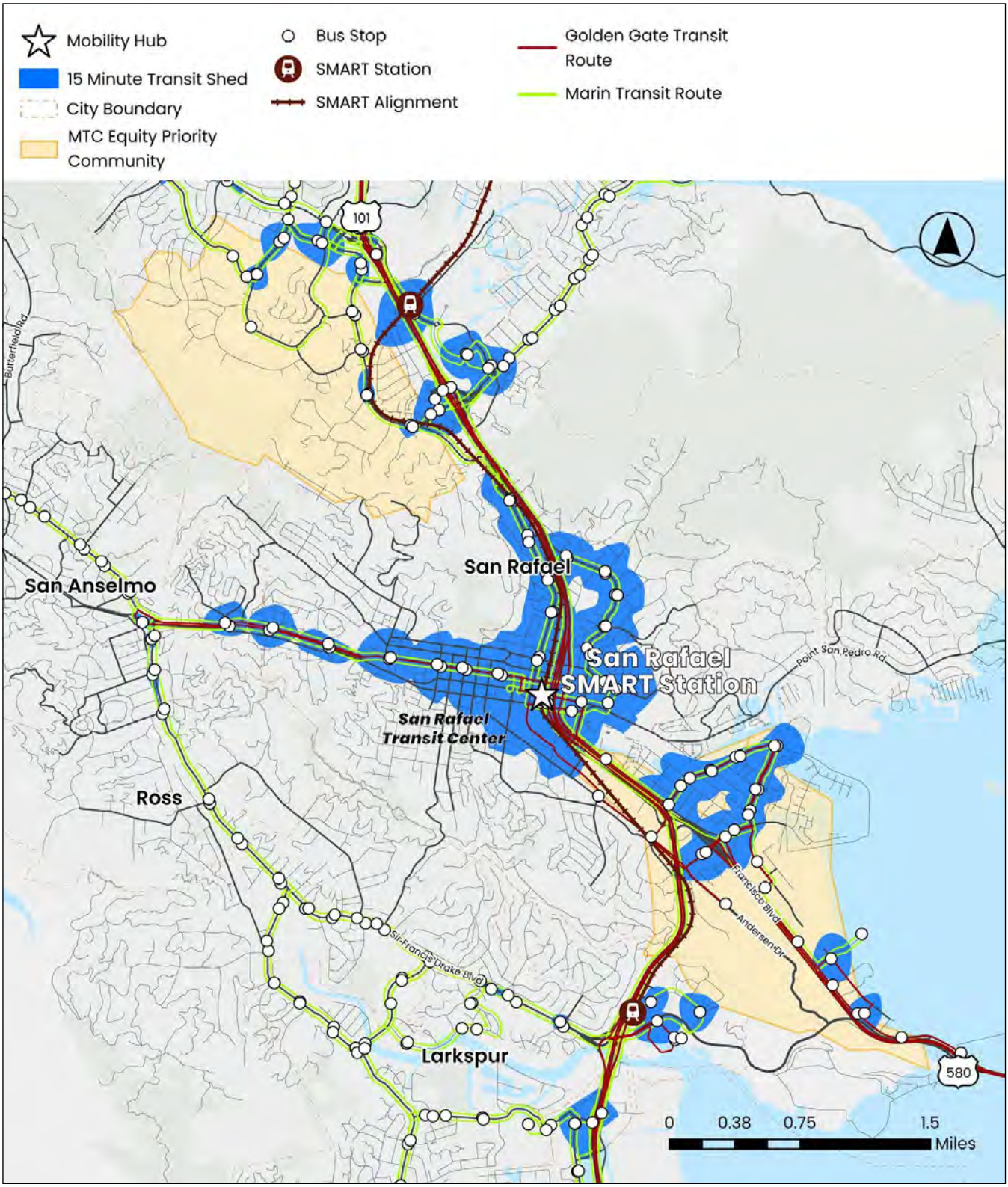


Figure 20: *San Rafael SMART Station Transit Shed*



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Bike and Pedestrian Connections

Downtown San Rafael has a robust pedestrian network. There are no bicycle facilities immediately adjacent to the SMART station, although several paths are nearby, including the Mahon Creek Trail, Francisco Boulevard West cycle track, the Puerto Suello Bike Path, and the Grand Avenue cycle track. There is currently a gap between the Puerto Suello path, which extends along Hetherton Street to 4th Street and the Francisco Boulevard West cycle track, which ends at 2nd Street. The San Rafael Transit Center Relocation Project will close that gap with a cycle track along relocated Tamalpais Avenue. The City is also seeking funds to connect the SMART Station with the Grand Avenue cycle track along 4th Street.

A bike share station was recently installed at the SMART station and other locations nearby in downtown San Rafael.

Existing Transit Service

The SMART station is located adjacent to the San Rafael Transit Center which provides connections to various Golden Gate Transit and Marin Transit bus routes.

Table 10: Weekday Ridership (Golden Gate Transit - October 2023, Marin Transit - January 2025, SMART - Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Golden Gate Transit	101: Santa Rosa – San Francisco	30 mins	221	133
	Golden Gate Transit	130: San Rafael – San Francisco	1 hour	1	94
	Golden Gate Transit	132: San Anselmo – San Francisco	30 mins	Not Available	
	Golden Gate Transit	150: San Rafael – San Francisco	1 hour	0	133
	Golden Gate Transit	580: Del Norte BART Station – San Rafael	1 hour	4	168
	Golden Gate Transit	580X: Del Norte BART Station – San Rafael Express	1 hour	Not Available	
	Marin Transit	17: Downtown San Rafael – Sausalito	30 mins	204	179
	Marin Transit	22: Downtown San Rafael – Marin City	30 mins	205	141
	Marin Transit	23: Canal – Fairfax Manor	40 mins	337	252
	Marin Transit	29: San Rafael – E. Corte Madera	50 mins	11	26
	Marin Transit	35: Canal – Northgate	20 mins	745	734
	Marin Transit	36: Canal – Marin City	30 mins	373	301
	Marin Transit	49: Downtown San Rafael – Novato San Marin	30 mins	234	280
	Marin Transit	57: Downtown San Rafael – Novato	1 hour	83	92
	Marin Transit	68: Downtown San Rafael – Inverness	1 hour	36	45
	Marin Transit	71: Novato – Marin City	30 mins	571	504
	Marin Transit	228: Downtown San Rafael – Fairfax Manor	1 hour	72	71
	Marin Transit	233: San Rafael (Downtown – Santa Venetia)	1 hour	39	43
	Marin Transit	245: San Rafael (Downtown – Smith Ranch Rd)	1 hour	53	58
Rail	SMART		32 mins	382	423
			Total	**3,571**	**3,677**

Planned Development and Transportation Projects

As noted previously, the San Rafael Transit Center Relocation Project will shift the bus bays, customer service building, and other supporting uses one block to the north, adjacent to the SMART station. It is currently undergoing environmental review. The existing transit center site will be redeveloped.

Caltrans is currently advancing a mobility hub pilot project for state-owned land underneath US-101.

A development project (703 3rd Street Mixed Use Project) is planned to the southwest of the SMART station. It is planned for 120 multi-family residential units, as well as some commercial space.

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Larkspur SMART Station

Location

Larkspur SMART Station is the southern terminus of the SMART rail line and is located approximately 0.3 miles northwest of Larkspur Ferry Terminal. The station is bounded to the west by US 101 and to the east by Larkspur Landing. The station is accessible from Larkspur Landing Circle.

The area to the east of US-101, between San Rafael and Larkspur, is considered an MTC Equity Priority Community.

Existing Station Amenities

Table 11: Existing Amenities at Larkspur SMART Station

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• 14 x Standard Bike Lockers • 1 x Large Bike Locker • 6 x Bike Racks • Bike Share	• 2 x Rail Station Shelters • 4 x Rail Station Bench • Fare Vending	• Parking • 6 x ADA Parking • Pick-up/Drop-off Zone	• Wi-Fi • System Map and Information

TAM Transportation Authority of Marin

Figure 21: Amenities at Larkspur SMART Station

LEGEND

- Class I Bikeway
- Class III Bike Route
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- System Map & Information
- Fare Vending
- Station Shelter
- Station Bench
- Parking
- ADA Parking
- Pick Up Drop Off Zone
- Traffic Signal

TAM Transportation Authority of Marin

Figure 22: Larkspur SMART Station Walk Shed

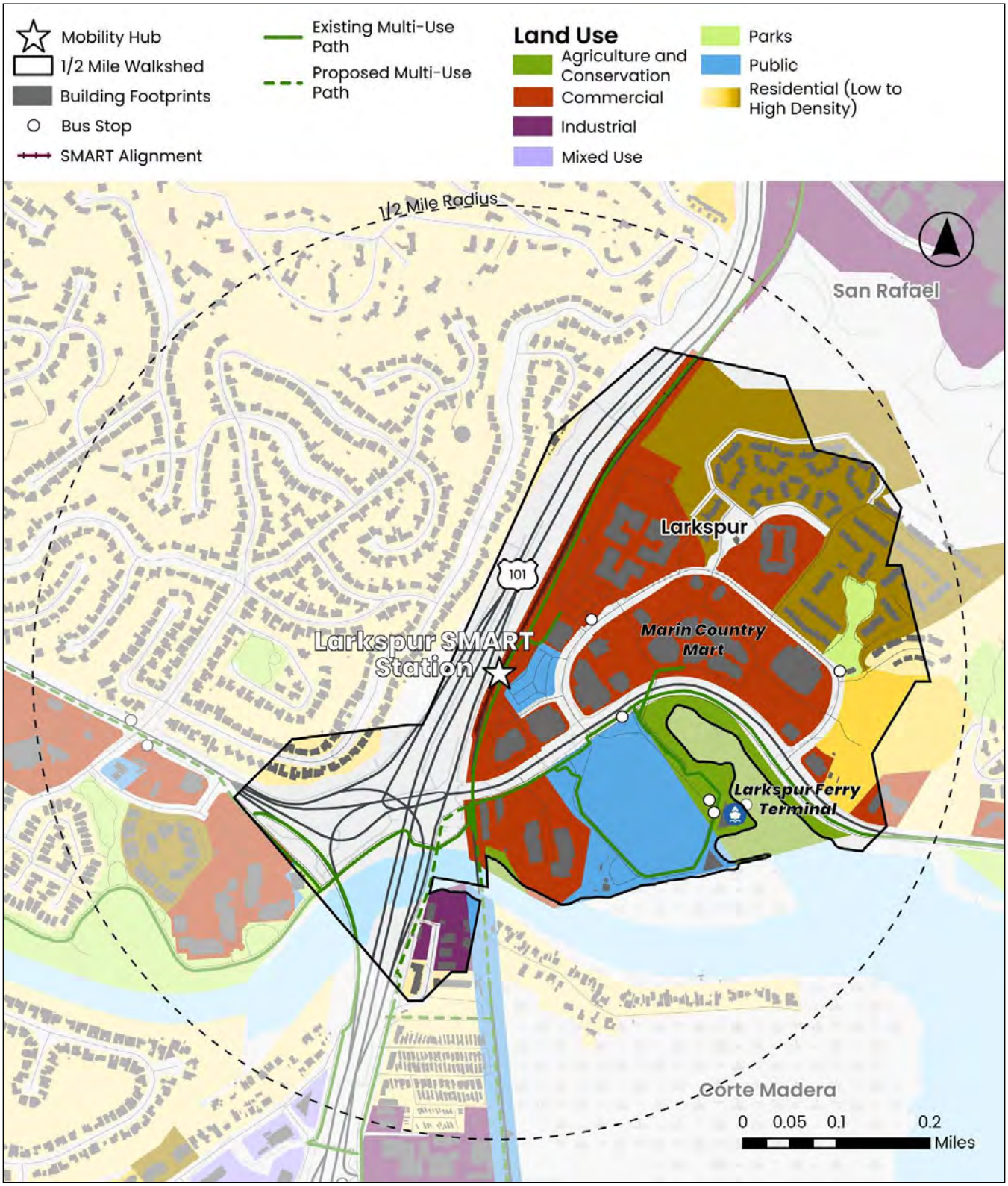


Figure 23: Larkspur SMART Station Bike Shed

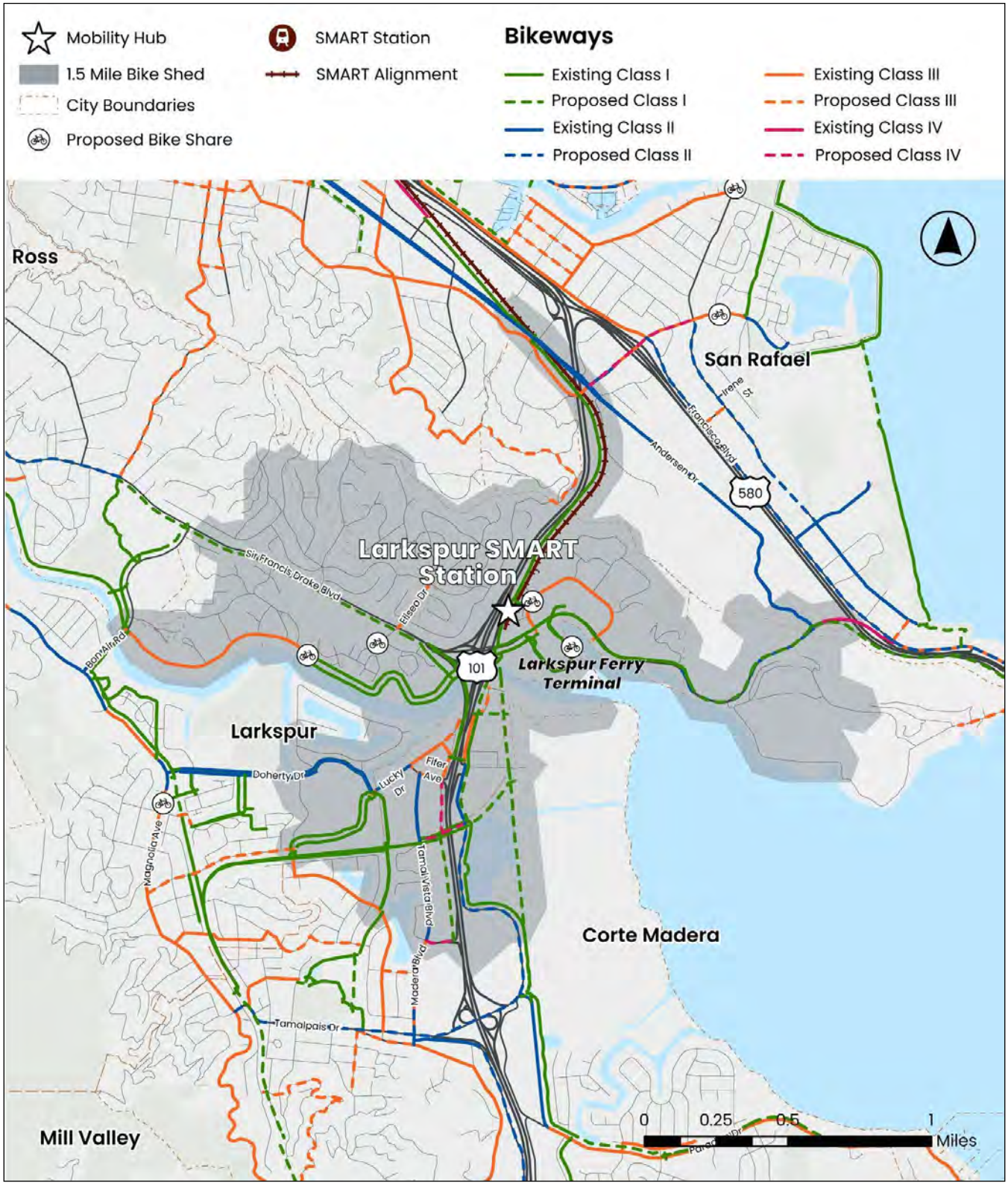
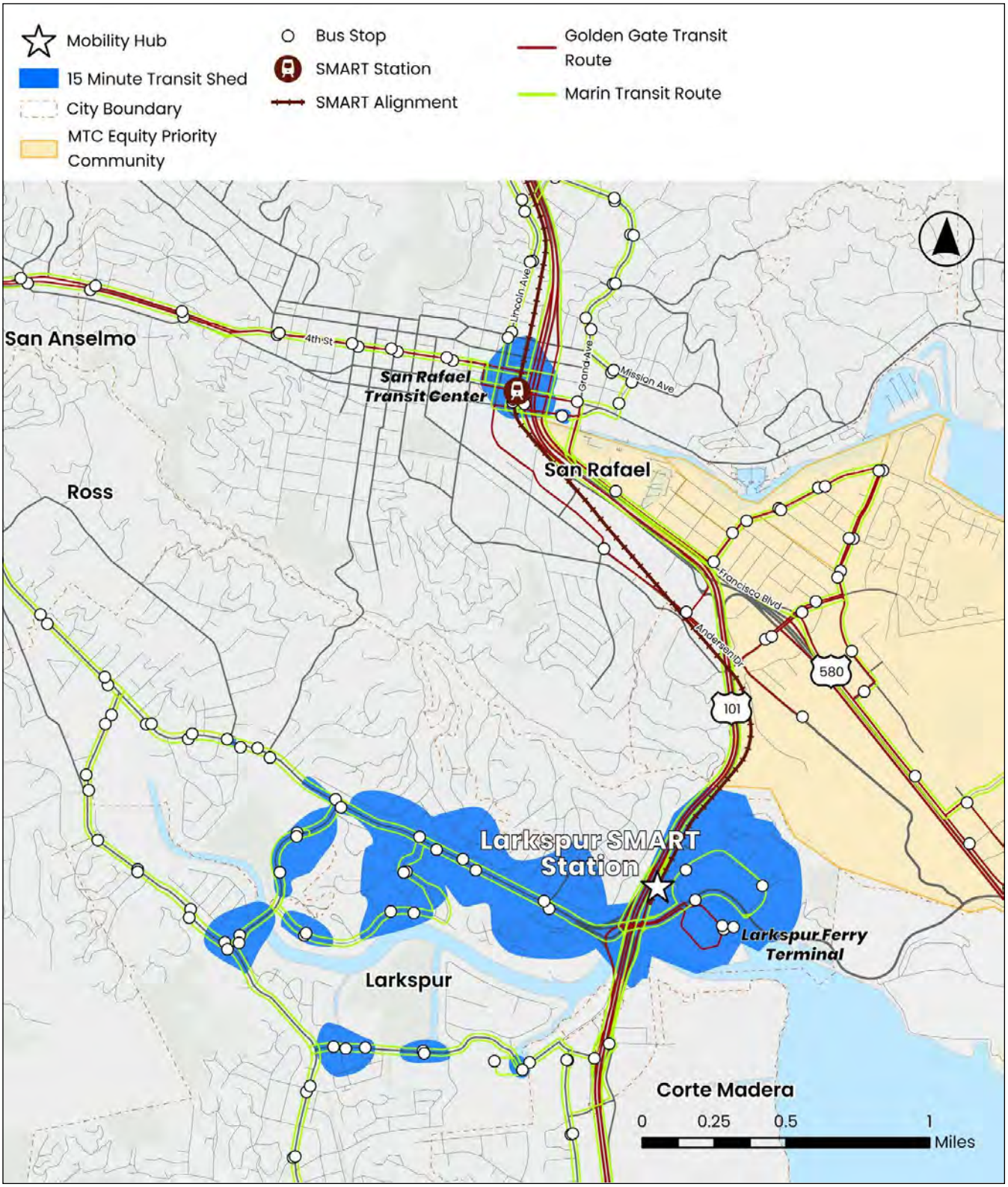


Figure 24: Larkspur SMART Station Transit Shed



Bike and Pedestrian Connections

Cal Park Hill Pathway, which is part of the SMART Pathway, is a multimodal path that connects the Larkspur SMART Station to San Rafael. Cal Park Hill Parkway connects to Larkspur Landing Circle via the parking lot of the Larkspur Landing Cinema. However, many people were also observed walking on the vehicle ramp. Cal Park Hill Pathway crosses Sir Francis Drake Boulevard and connects the Larkspur SMART station and Larkspur Ferry Terminal. A new extension of the multi-use pathway along the east-side of US-101 connects the station area to points south.

A bike share station was recently installed at the Larkspur SMART Station.

Existing Transit Service

The closest bus stops to the SMART station are on Larkspur Landing Circle and Sir Francis Drake Boulevard. SMART operates the Connect shuttle in the vicinity of the station, with connections between the SMART station and ferry terminal. The shuttle only operates limited hours Thursday through Sunday.

Table 12: Weekday Ridership (Golden Gate Transit - October 2023, Marin Transit - January 2025, SMART - Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Marin Transit	17: Downtown San Rafael – Sausalito	3 trips daily	3	0
	Marin Transit	29: San Rafael – E. Corte Madera	50 mins	4	1
	Marin Transit	228: Downtown San Rafael – Fairfax Manor	1 hour	14	11
	Golden Gate Transit	132: San Anselmo – San Francisco	1 trip daily	Not Available	
Rail	SMART		32 mins	362	335
			Total	**383**	**347**

Planned Development and Transportation Projects

Based on the Larkspur 2023-2031 Housing Element, the City plans to develop sites near the Larkspur SMART station into residential housing. Sites include the Marin Country Mart shopping mall and other commercial office space north of the mall.

Larkspur Ferry Terminal

Location

Larkspur Ferry Terminal is located approximately 0.3 miles southeast of Larkspur SMART Station. The terminal is bounded to the north by Sir Francis Drake Boulevard and to the south by Corte Madera Creek. The terminal is accessible from Sir Francis Drake Boulevard. Marin County Mart shopping mall is just to the north of the terminal.

The area to the east of US-101, between San Rafael and Larkspur, is considered an MTC Equity Priority Community.

Existing Station Amenities

Table 13: Existing Amenities at Larkspur Ferry Terminal

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• Bike Racks (numerous types, inside and outside) • Bike Share	• 6 x Fare Vending • Bus Stops in Ferry Terminal • 1 Bus Stop with shelter and bench on Sir Francis Drake Boulevard	• Parking • ADA Parking • Motorcycle Parking • Pick-up/Drop-off Zone	• System Map and Information • Staffed Information Desk • Restrooms • Retail

Figure 25: Amenities at Larkspur Ferry Terminal

LEGEND

- Class I Bikeway
- Class III Bike Route
- Bus Route
- Parcel Line
- Bike Storage
- Bike Share
- Information Booth
- Restrooms
- Vending/Retail Services
- Bus Station
- Station Shelter
- Station Bench
- Fare Vending
- Parking
- ADA Parking
- Pick Up Drop Off Zone
- Traffic Signal

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Figure 26: Larkspur Ferry Terminal Walk Shed

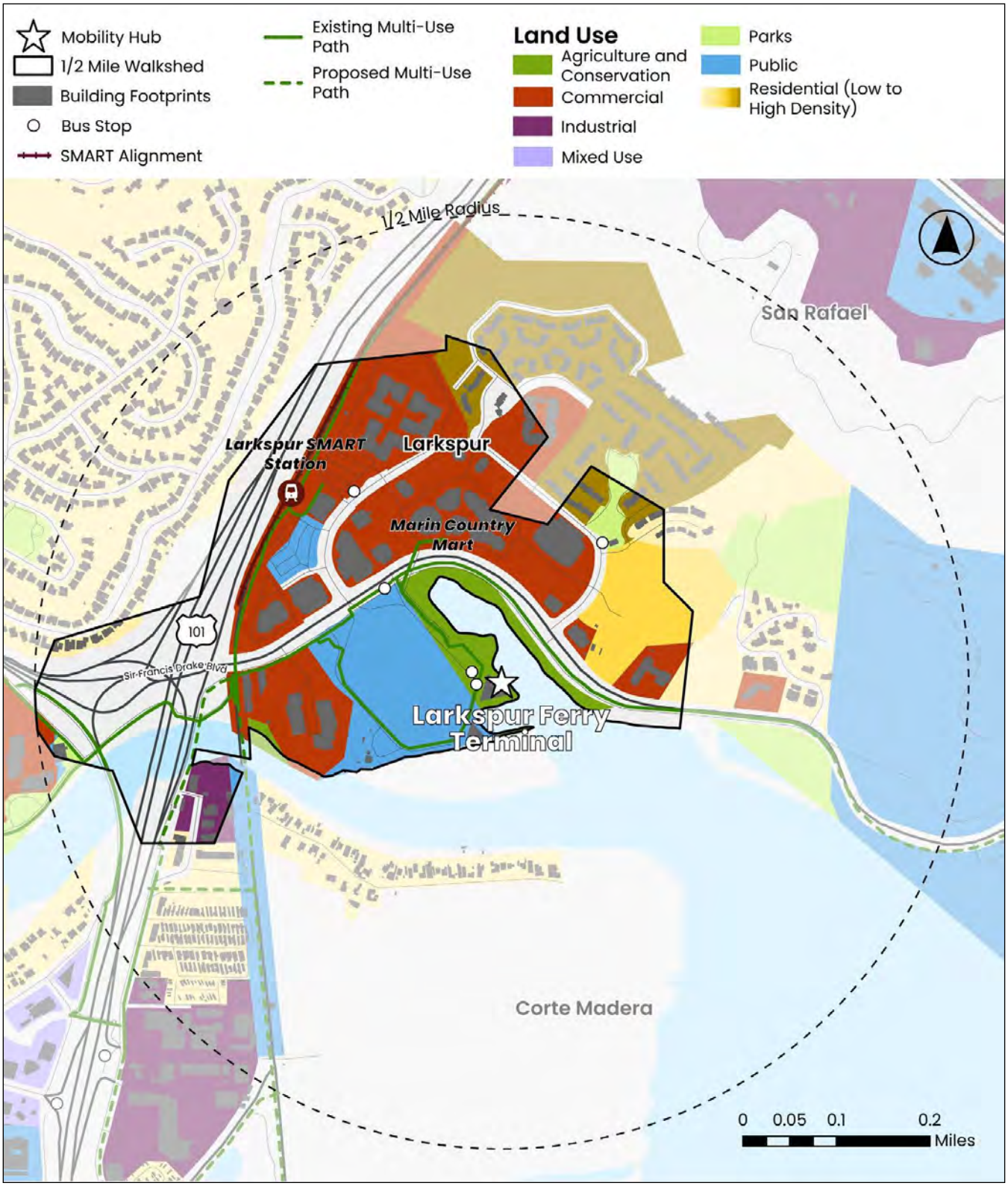

Figure 27: Larkspur Ferry Terminal Bike Shed

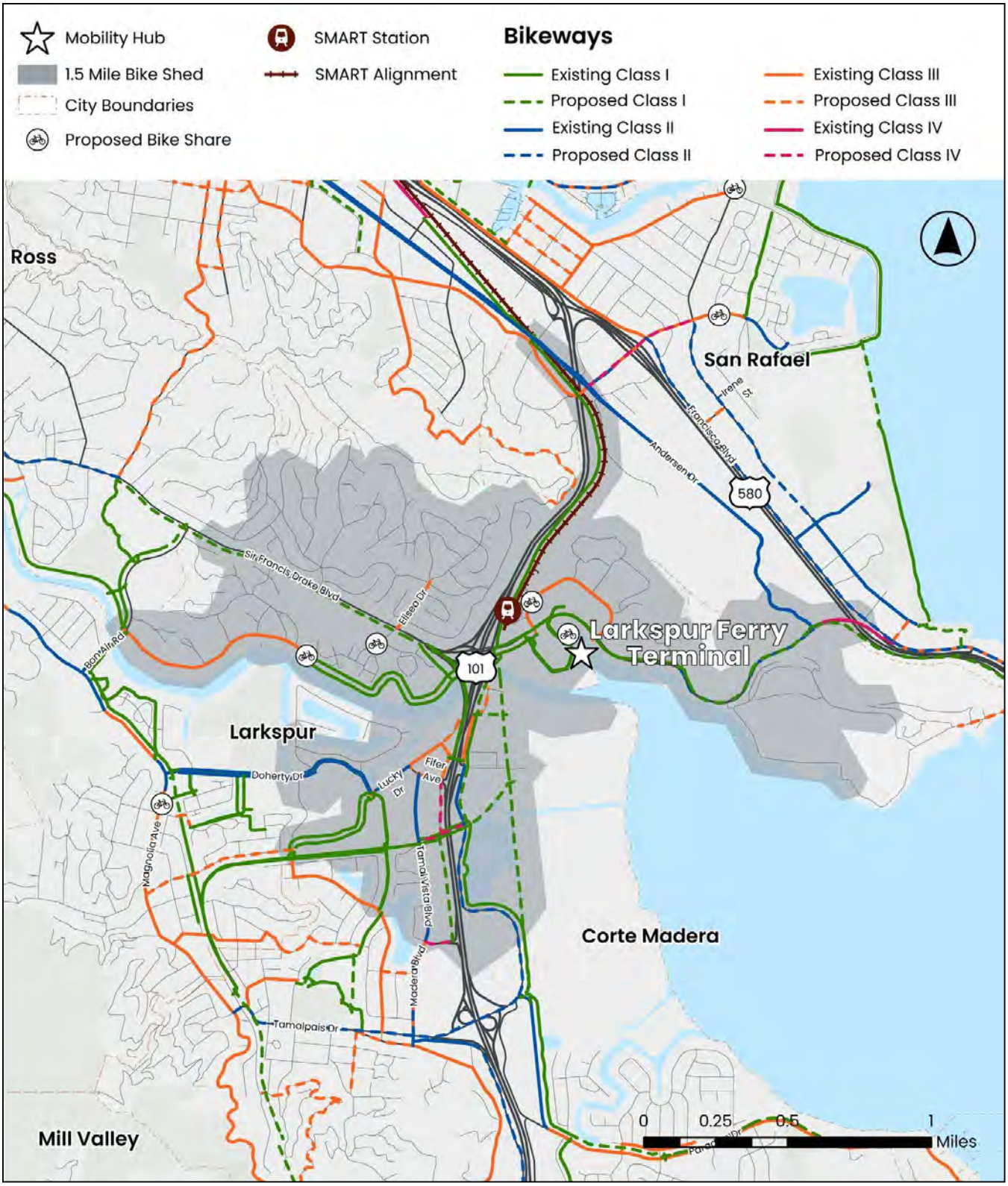

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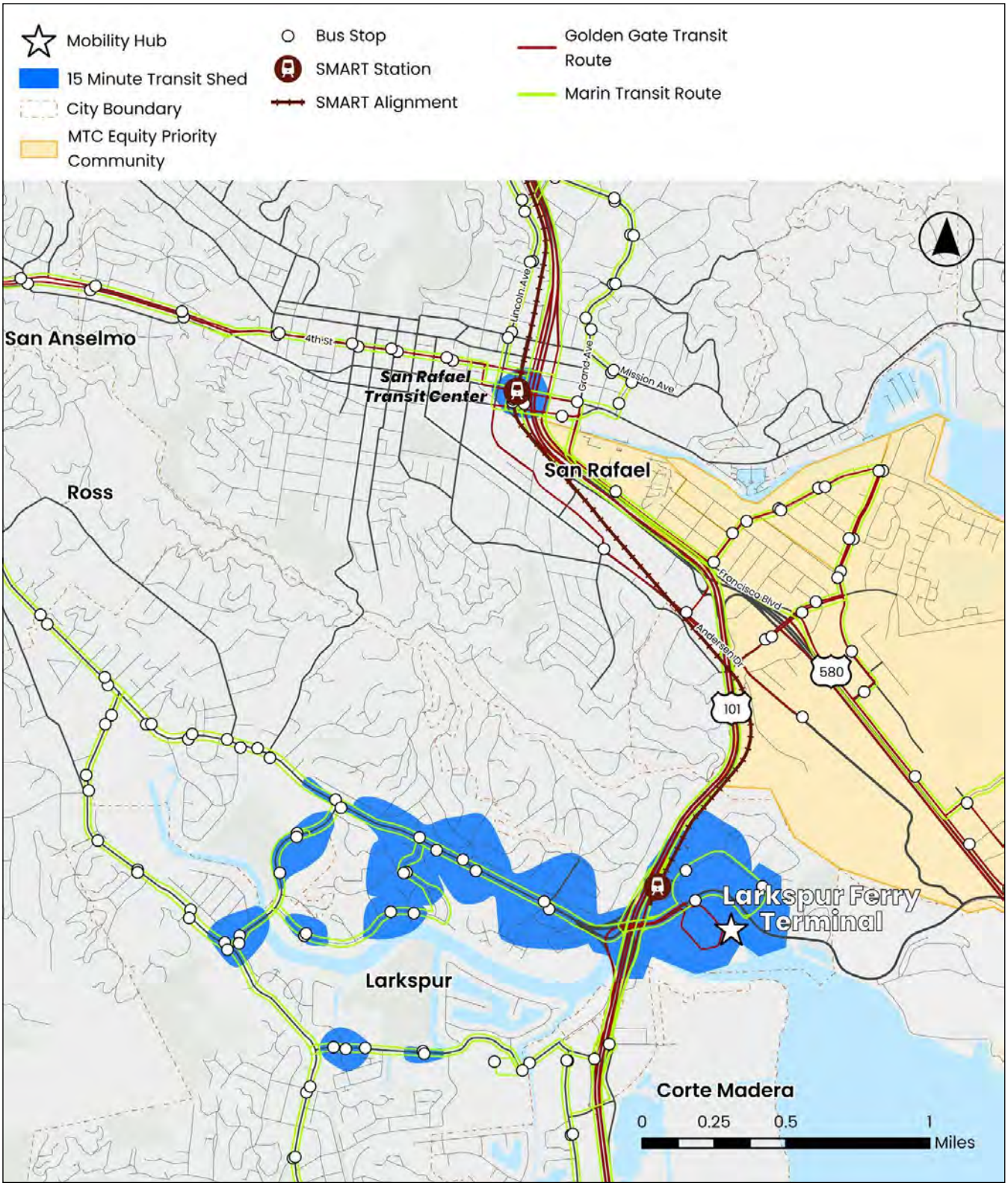
Figure 28: *Larkspur Ferry Terminal Transit Shed*



Backup ferry bus Route 197 serves Larkspur Ferry Terminal in the case of severe weather or mechanical issues

Bike and Pedestrian Connections

Cal Park Hill Pathway, which is part of the SMART Pathway, is a multimodal path that connects Larkspur to San Rafael. Cal Park Hill Pathway crosses Sir Francis Drake Boulevard and connects the Larkspur Ferry Terminal and Larkspur SMART station. A new extension of the multi-use pathway along the east-side of US-101 connects the ferry terminal to points south. There is also a pedestrian bridge across Sir Francis Drake Boulevard that connects the ferry terminal to Marin Country Mart shopping mall.

A bike share station was recently installed at the Larkspur Ferry Terminal.

Existing Transit Service

A number of buses directly serve the ferry terminal, including the Muir Woods shuttle. SMART operates the Connect shuttle in the vicinity of the terminal, with connections between the SMART station and ferry terminal. The shuttle only operates limited hours Thursday through Sunday. There are additional bus stops on Sir Francis Drake Boulevard that are served by local and regional buses, including the Marin Airporter.

Table 14: Weekday Ridership (Golden Gate Transit - October 2023, Marin Transit - January 2025, SMART - Average of October 2024 and February 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Golden Gate Transit	132: San Anselmo – San Francisco	30 mins	11	1
	Marin Transit	17: Downtown San Rafael – Sausalito	3 trips daily	0	1
	Marin Transit	29: San Rafael – E. Corte Madera	50 mins	1	0
	Marin Transit	228: Downtown San Rafael – Fairfax Manor	1 hour	2	2
Ferry	Golden Gate Transit	Larkspur – San Francisco	45 mins	1,213	1,179
			Total	**1,227**	**1,183**

Backup ferry bus Route 197 serves Larkspur Ferry Terminal in the case of severe weather or mechanical issues

Planned Development and Transportation Projects

The Larkspur Ferry Service and Parking Expansion Study is developing solutions to increase ferry ridership and reduce traffic congestion on US-101. This study will examine how the terminal can accommodate increased ferry demand, expand landside access, and forecast future traffic circulation resulting from increased ferry demand.

Tiburon Ferry Terminal

Location

The Tiburon Ferry Terminal is located near the intersection of the southern terminus of Tiburon Boulevard/SR 131 and Main Street. Tiburon Boulevard, which is maintained and operated by Caltrans, serves both the Town of Tiburon and City of Belvedere as the only road in and out. The terminal is located on private property and is adjacent to moderate density, tourist-oriented commercial land uses. The terminal is predominately accessed from Tiburon Boulevard.

Existing Station Amenities

Table 15: Existing Amenities at Tiburon Ferry Terminal

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• Bike Racks (adjacent public bike parking)	• Benches (adjacent public benches)	• Pick-up/Drop-off Zone (adjacent public zone)	• System Map and Information

Figure 29: *Amenities at Tiburon Ferry Terminal*

LEGEND

- Class I Bikeway
- Class II Bike Lanes
- Bus Route
- Parcel Line
- Bike Storage
- Pick Up Drop Off Zone
- Public Plaza
- System Map & Information
- Bus Stop
- Station Shelter
- Bench

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Figure 30: *Tiburon Ferry Terminal Walk Shed*

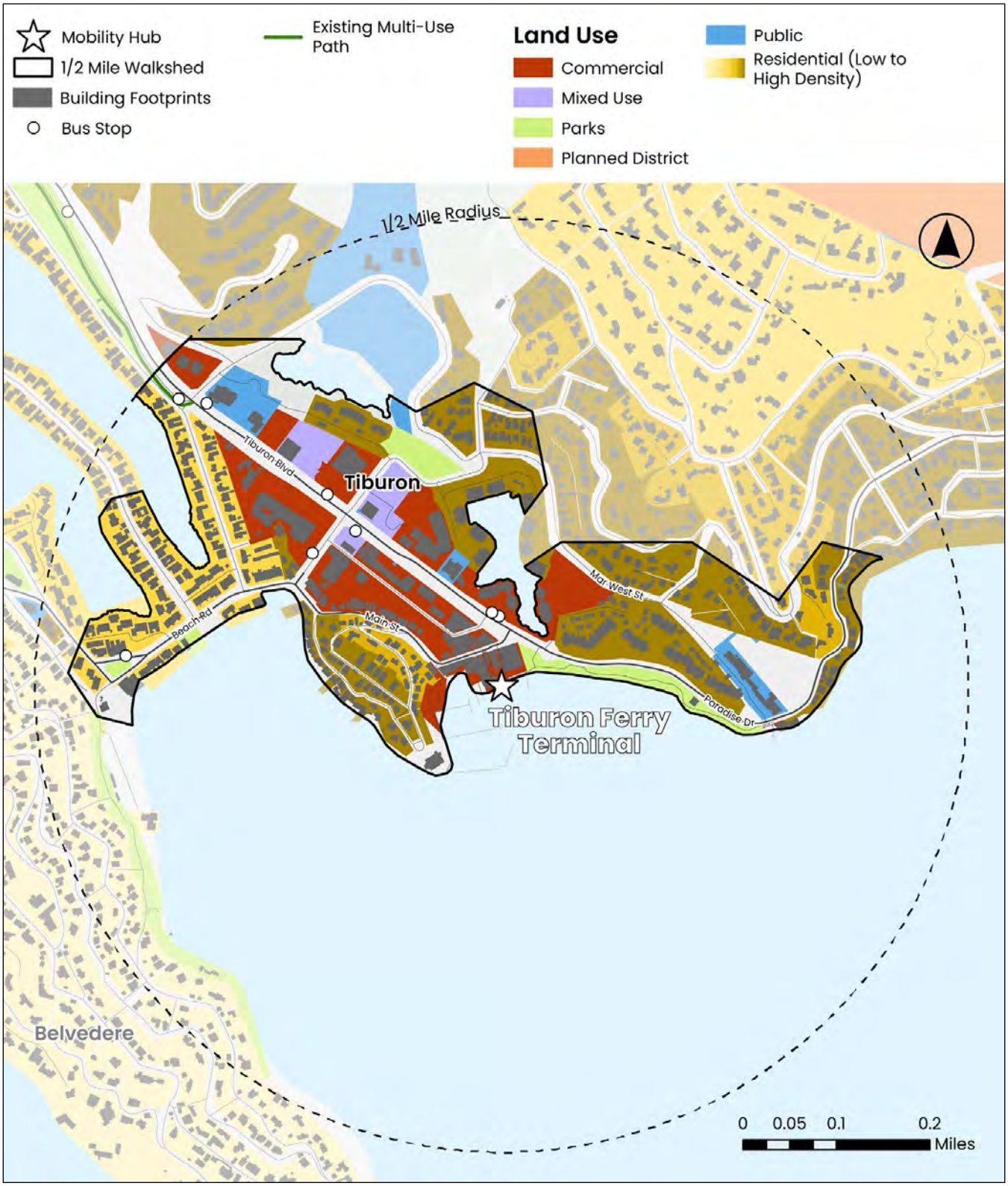

Figure 31: Tiburon Ferry Terminal Bike Shed

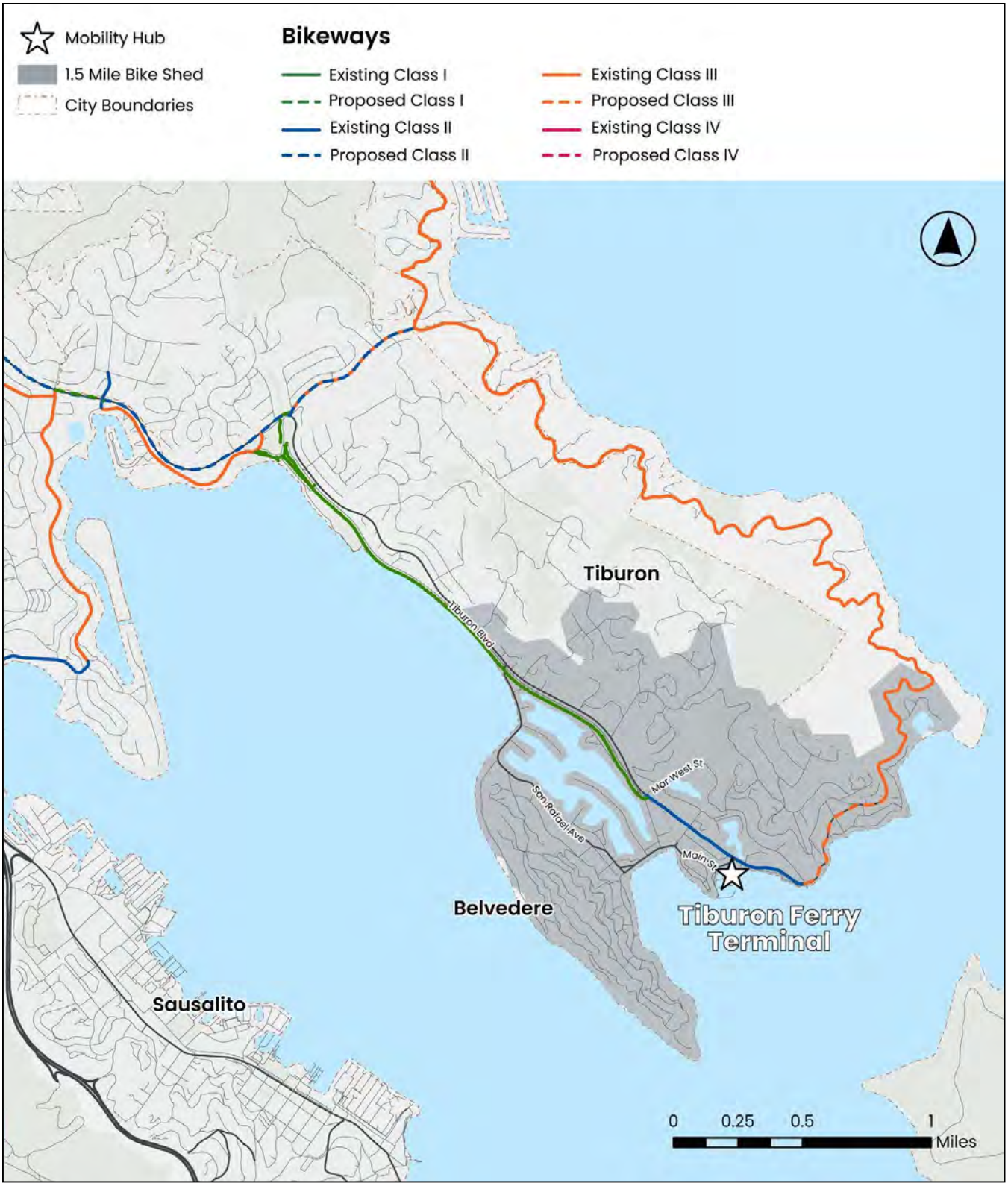

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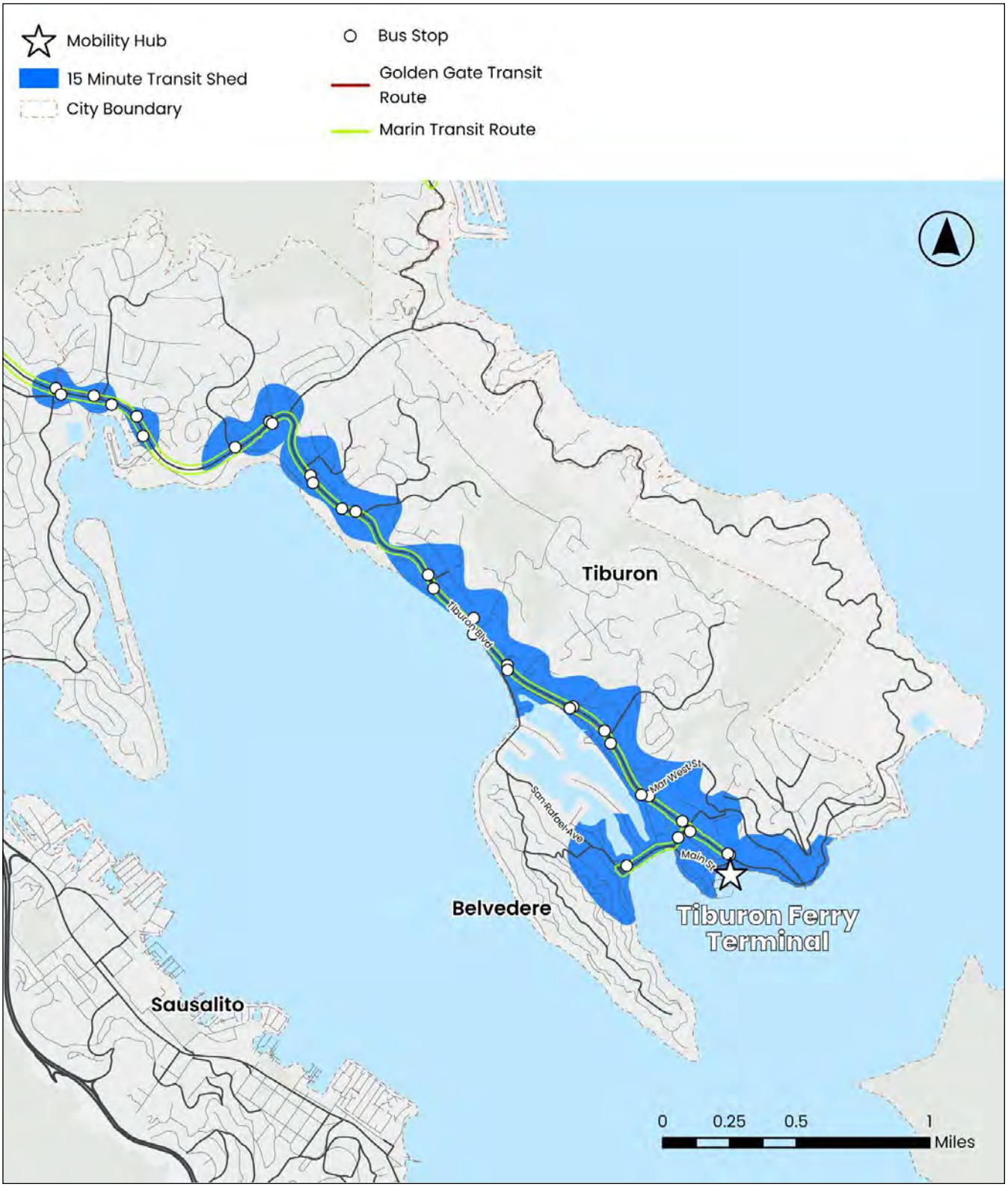
Figure 32: *Tiburon Ferry Terminal Transit Shed*



Backup ferry bus Route 198 serves Tiburon Ferry Terminal in the case of severe weather or mechanical issues

Bike and Pedestrian Connections

Bike lanes on Tiburon Boulevard and Paradise Drive and the adjacent Shoreline Pathway provide bicycle and pedestrian connections to the terminal.

Existing Transit Service

Adjacent to the Tiburon Ferry Terminal is the Angel Island Ferry terminal. The closest bus stop to the ferry terminal is approximately 0.1 miles away on Tiburon Boulevard.

Table 16: Weekday Ridership (Golden Gate Transit - October 2023, Marin Transit - January 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Marin Transit	219: Tiburon – Strawberry	40 mins	29	26
	Marin Transit	619: Tiburon - Redwood HS	3 trips per direction per day	7	12
Ferry	Golden Gate Transit	Tiburon – San Francisco	1.5 hours	199	174
			Total	**235**	**212**

Backup ferry bus Route 198 serves Tiburon Ferry Terminal in the case of severe weather or mechanical issues

Planned Development and Transportation Projects

Caltrans District 4 is currently developing a $19.7 million Capital Preventive Maintenance project along Tiburon Boulevard, which is slated to begin construction in 2026. The project aims to improve serviceability and ride quality on Tiburon Boulevard, enhance and complete streets, and improve bicycle access throughout the area.

The Town of Tiburon has recently begun a traffic study that is slated to be complete by summer of 2025. The traffic study is focusing on three major arterials and seeks to develop a plan to reduce delays and congestion, primarily on Tiburon Boulevard. The traffic study will seek community input from Tiburon and Belvedere residents.

Sausalito Ferry Terminal

Location

Sausalito Ferry Terminal is located in Downtown Sausalito and is surrounded by medium density mixed-use commercial and residential land uses. The terminal is located east of Bridgeway and is accessible from Anchor Street or El Portal.

Marin City is considered an MTC Equity Priority Community and is located to the northwest of the ferry terminal.

Existing Station Amenities

Table 17: Existing Amenities at Sausalito Ferry Terminal

Pedestrian Amenities	Bike Amenities	Transit Amenities	Motorized Services and Amenities	Support Services and Amenities
Amenity				
• Crosswalks and Sidewalks	• Bike Storage	• Station Benches (adjacent public benches) • Fare Vending • Bus Stops	• Parking • 6 x ADA Parking Space • Pick-up/Drop-off Zone	• System Map and Information

Figure 33: Amenities at Sausalito Ferry Terminal

LEGEND

- Class II Bike Lanes
- Bus Route
- Ferry Route
- Parcel Line
- Bike Storage
- Information Booth
- System Map & Information
- Public Plaza
- Traffic Signal
- Restrooms
- Bus Stop
- Station Shelter
- Station Bench
- Fare Vending
- Pick Up Drop Off Zone
- ADA Parking
- Parking

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Figure 34: Sausalito Ferry Terminal Walk Shed

Figure 35: Sausalito Ferry Terminal Bike Shed

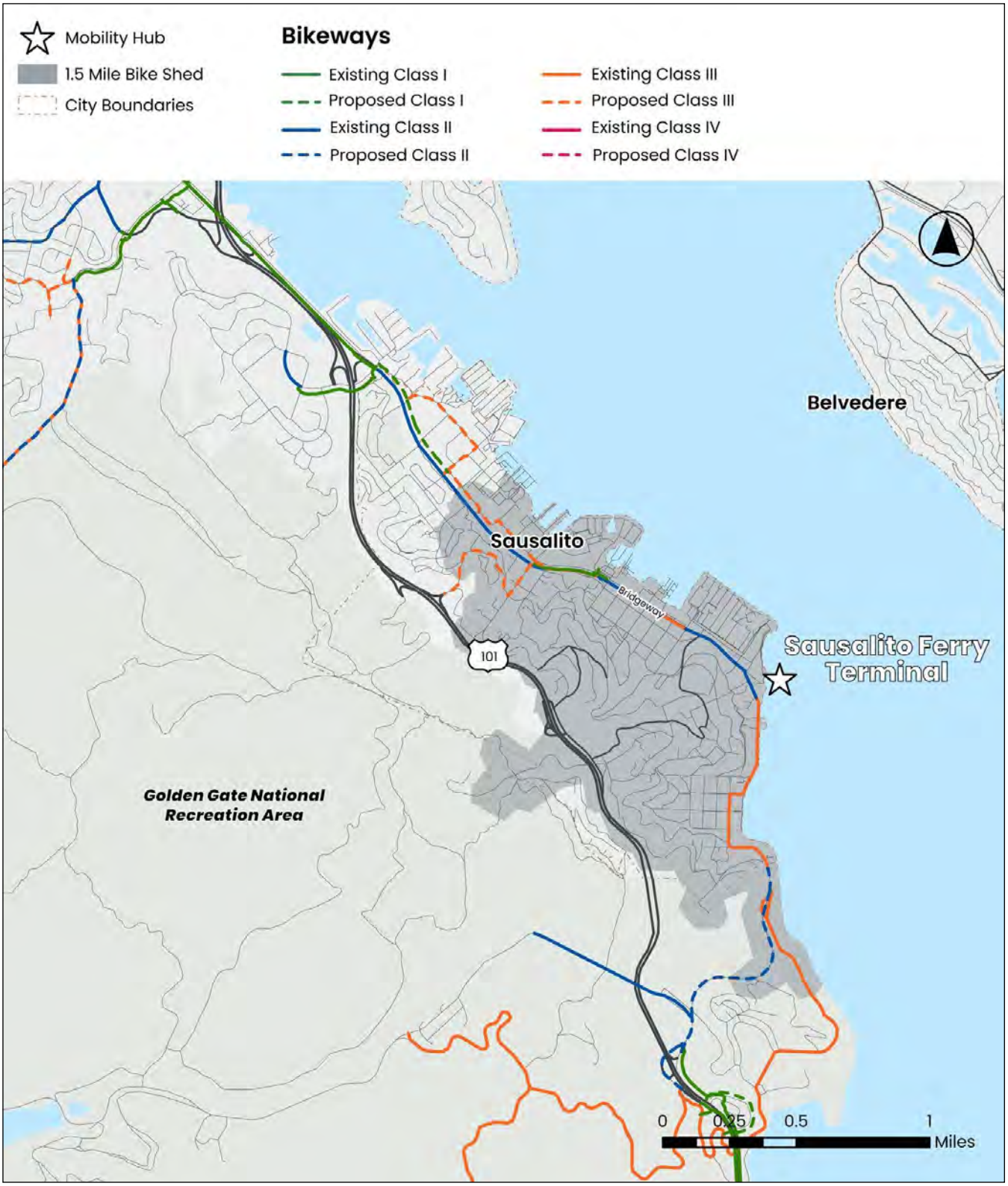
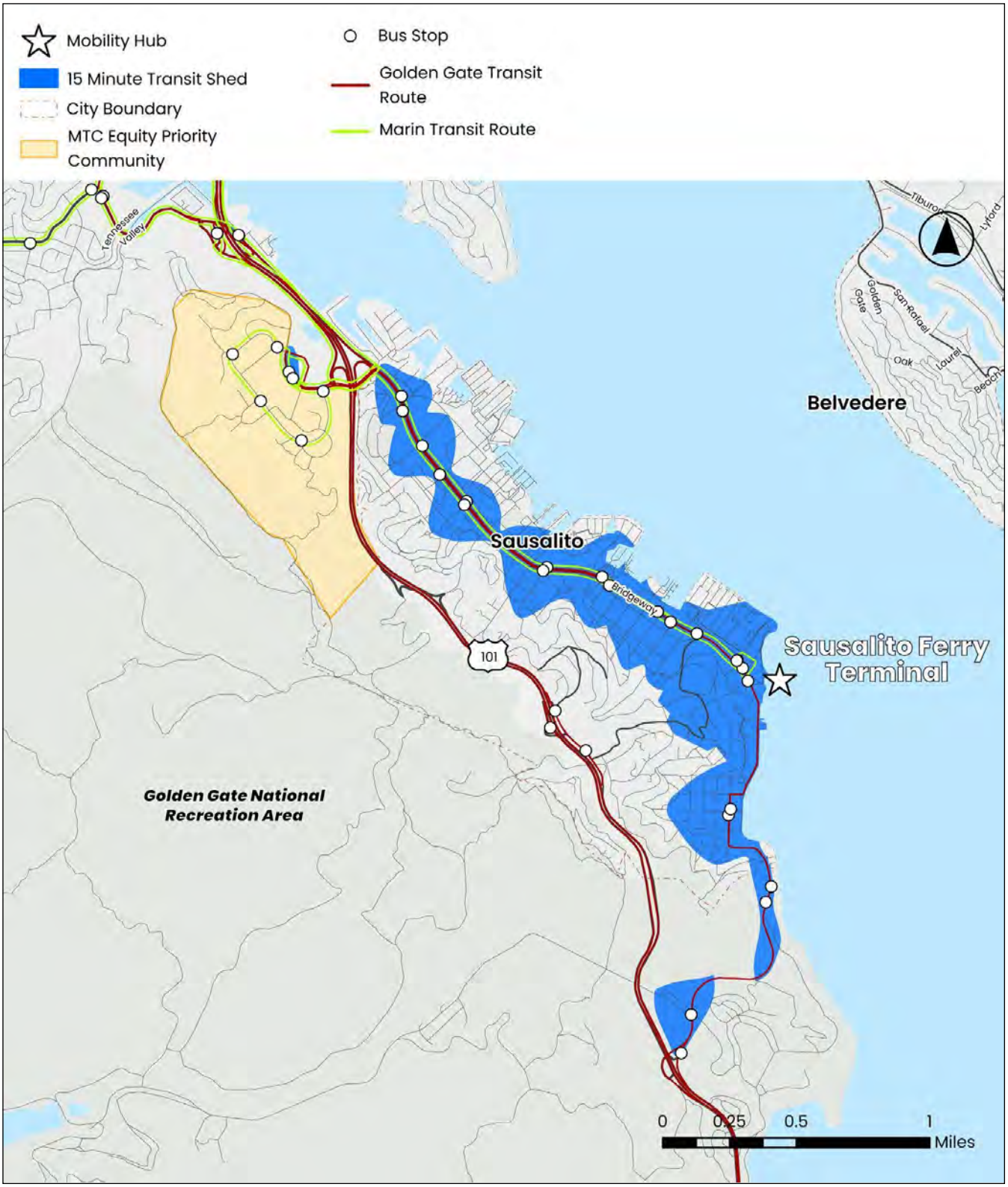


Figure 36: Sausalito Ferry Terminal Transit Shed



Backup ferry bus Route 196 serves Sausalito Ferry Terminal in the case of severe weather or mechanical issues

Bike and Pedestrian Connections

Adjacent to the ferry terminal, there is an on-street bike lane on Bridgeway that extends north and south through the entire city limits. Tracy Way has been closed to auto access in order to provide privately-operated bike parking, at a fee of $5 per bike.

Existing Transit Service

The closest bus stops are on Bridgeway, Humboldt Avenue, and Bay Street, approximately 0.1 miles from the ferry terminal.

Table 18: Weekday Ridership (Golden Gate Transit - October 2023, Marin Transit - January 2025)

Mode	Operator	Route	Peak Frequency	Average Weekday Boardings	Average Weekday Alightings
Bus	Golden Gate Transit	130: San Rafael – San Francisco	1 hour	98	117
	Marin Transit	17: Downtown San Rafael – Sausalito	30 mins	42	42
	Marin Transit	61: Sausalito – Bolinas	~2 hours	8	6
Ferry	Golden Gate Transit	Sausalito – San Francisco	32 mins	596	371
			Total	**744**	**536**

Backup ferry bus Route 196 serves Sausalito Ferry Terminal in the case of severe weather or mechanical issues.

Planned Development and Transportation Projects

Proposed developments near the Sausalito Ferry Terminal include two mid-rise residential housing complexes on Bridgeway. One complex along the waterfront will include 47 apartment units as well as ground floor commercial retail. The other complex will have 16 condo units just west of the waterfront area.

Below is a list of additional projects near the Sausalito Ferry Terminal:

- Ferry Landside Improvement Project, which will improve the plaza and queuing areas, is in construction (City of Sausalito)
- Sausalito Ferry Dock Replacement Project (GGBHTD)
- Parking Lot 1 Reconstruction Project is currently in design phase (City of Sausalito)
- Sausalito Bike Return Project will move bike return to Lot 1 and will occur in the Spring (City of Sausalito)
- Gabrielson Park Improvements Project will change configuration and pathways (City of Sausalito)
- El Portal Improvements Project is a preliminary project requested by fronting property owners (City of Sausalito)
- Sausalito Bus Dropoff Modifications Project is a preliminary project that will relocate the bus drop-off to Anchor and Bay (City of Sausalito and Bus Operators)
- Bridgeway Safety Improvements Project between Princess and Richardson may include the sea wall and is many years out (City of Sausalito)

Mobility Hub Typologies

Mobility Hub Typologies

The MTC Mobility Hub Implementation Playbook (April 2021) defines six mobility hub typologies that describe the form, function, and amenities appropriate at each hub, based on underlying transit services and frequency, land use, and transportation access characteristics. The MTC-defined typologies are listed in Table 19.

Table 19: List of Mobility Hub Typologies

Hub Typology	Description	Likely Features & Anchor Services
Regional Downtown	Regional Downtown hubs are the centers of economic and cultural activity. These hubs are in the highest residential and employment densities of all hub types.	• Multiple high-capacity transit services • High frequency bus service with two or more transit agencies • Access to car share and shared micromobility services • Strong demand for TNCs and taxis
Urban District	Urban District hubs are major and local center of moderate to high residential and employment densities. These are often commuter hubs served by high-capacity or high frequency bus service, as well as local bus routes.	• High-capacity transit and/or high frequency bus service with two or more transit agencies • Access to car share and shared micromobility services • Moderate demand for TNCs
Emerging Urban District	Emerging Urban District hubs are located within areas of moderate and low residential and employment densities. These hubs are served by high-capacity transit service, function as center for smaller, local communities and economic activity.	• High-capacity transit or high frequency bus service with two or more transit agencies • Limited shared mobility services • Moderate demand for TNCs
Suburban/Rural	Suburban hubs are in auto-oriented or small neighborhood areas. These hubs provide important connections to regional transit options.	• Park-and-Ride access connected to regional rail and BRT • Frequent and infrequent local feeder bus services • Within car share and/or bike share service areas • Moderate demand for TNCs and taxis
Pulse	Pulse hubs are large trip generators, including airports, stadiums, universities, and major employer campuses. Transit may not be the focus of center of the area's economic activity.	• Defined by a large trip generator • Frequent and infrequent local feeder bus services • First- and last-mile services, including shuttles and microtransit • Access to car share and shared micromobility services • Moderate, highly peaked demand for TNCs
Opportunity	Opportunity hubs are in outlying town center areas and/or at the intersection of MTC Communities of concern. These areas have high concentrations of employment or residential density but lack high quality, frequency transit services.	• Areas with concentrated mobility demand • Limited or no anchor services

Source: Metropolitan Transportation Commission (MTC). Bay Area Regional Mobility Hubs: Mobility Hub Implementation Playbook. April 2021.

Classification of Mobility Hubs

Given existing land use, transit features, anchor services, and potential for enhancement, the following Mobility Hub typologies are defined by the MTC Playbook for each of the sites.

Table 20: Mobility Hub Typology Recommendations

Hub Type	Mobility Hub
Urban District	• San Rafael Downtown SMART Station
Suburban/Rural	• Novato Downtown SMART Station • Larkspur SMART Station • Larkspur Ferry Terminal • Tiburon Ferry Terminal • Sausalito Ferry Terminal • Novato San Marin SMART Station • Novato Hamilton SMART Station • Marin Civic Center SMART Station

Summary and Next Steps

This report summarizes the existing conditions of the nine mobility hub sites in Marin County, including existing amenities, bicycle and pedestrian connections, transit service, and current and proposed land-use and transportation projects. These mobility hub sites provide the potential for serving travelers of all backgrounds and transportation modes.

Based on the MTC typologies, Marin County's mobility hubs range from suburban/rural sites with few pedestrian and bike amenities, to urban districts with nearby retail, greenspace, and other amenities. Based on these existing features and connections, each of the hubs will have their own unique opportunities and challenges to grow ridership and become a more central component to the region's transportation network.

Next steps for this study include using the developed Potential Amenities Toolkit and feedback from the public to inform the potential amenities and priorities for each mobility hub site.

TAM Transportation Authority of Marin

Appendix B:

Mobility Hub Amenities Toolkit

Transportation Authority of Marin

Marin County Mobility Hub Plan

Mobility Hub Amenities Toolkit - November 2024

Table of Contents

Introduction

The Mobility Hub Amenities Toolkit (Toolkit) identifies the types of services and amenities that may be considered as an activation or mobility solution. This Toolkit is organized by the following four categories as defined in the Metropolitan Transportation Commission (MTC) Mobility Hub Implementation Playbook.

Sustainable Access and Mobility: features that support mode shift and prioritize active and shared mobility by resolving access and connectivity challenges across mobility services and providing a clear hierarchy of access.

Customer Experience: features that improve the quality of the waiting experience and the safety of people walking and biking at transit exchanges.

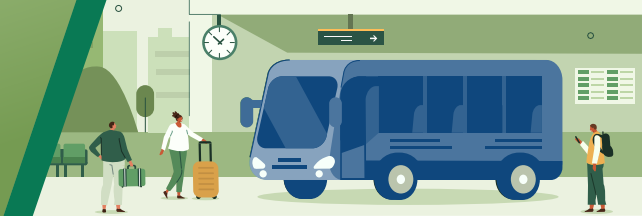
Public Realm: features that move beyond mobility to create welcoming and safe spaces through culturally relevant design and programming that support public life with cultural amenities and resources.

Information: features that provide an awareness and redundancy of options when and where users need them, even during disruptions. Investment in mobility information should solve for operational problems through real-time communication and give people an understanding of their mobility options at any time, including arrival/departure times and options if there is a disruption.

For each Mobility Hub amenity featured in this Toolkit, the following information is provided:

- Cost
- Description
- Features
- Implementation Considerations
- Technology Integration Requirements
- Typical Implementation Setting
- Implementation Examples

Sustainable Access and Mobility



Transit Shelters and Waiting Areas

Description

A safe and comfortable space for passengers who are waiting for transit or their mobility service. Features may include sidewalk furniture and additional travel information signage that can improve overall transit experience for passengers, encourage new riders, and increase passenger's sense of security.

Cost Per Unit: $ $$ $$$

Features

- Bus shelters
- Ticketing machine
- LED lighting
- Interactive kiosks
- Accessible
- Seating/Lean bars
- Trash and recycle bins
- Complimentary Wi-Fi
- USB charging ports

Implementation Considerations

- Location and configuration of the waiting areas. Minimize walking distance between transit and other mobility services, pick-up/drop-off (PU/DO) curb areas, other building entrances, and other transportation modal connections
- Regulations from the Americans with Disabilities Act (ADA) in the design of certain enhancements such as interactive kiosks, sidewalks, seating, and access between amenities
- Dedicated shelters for transit to improve transit visibility, rider comfort/safety, and operation efficiency for customer loading
- Pathways and connections between different services are clearly identified with adequate lighting and security features
- Opportunity to reflect or enhance surrounding community aesthetic and sense of place
- Ownership and maintenance responsibility to be determined in Co-Op Agreements between agencies
- Consider design and materials that are resilient, weather-appropriate, and anti-habitation

Technology Integration Requirements

- Internet connection for complimentary Wi-Fi services
- Electrical utilities for lighting and USB charging

Typical Implementation Setting

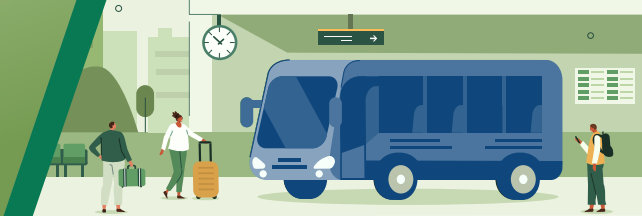
- Strong existing or future ridership
- Access to high frequency transit services
- Major transfer point between routes
- Near schools, senior citizen housing facilities, or community recreation centers where large concentrations of the young and elderly are expected

Implementation Examples

Big Blue Bus – Santa Monica, CA

Big Blue Bus and City of Santa Monica partnered with stakeholders to design and construct a locally inspired transit waiting area that incorporates real-time information, solar lighting, updated maps and other desired amenities for riders. The final design, called "The Blue Spots", is clean and unobtrusive, and was designed to enhance the City's coastal look and feel. The new bus stop structures utilize a modular system flexible enough to adapt to various sized locations and rider volumes with combinations of enhancements.

Source: Google Earth



Long- and Short-Term Secure Bike Parking

Description

Offering people safe, secure, and convenient places to park and lock up their bikes helps encourage bicycling as a transportation choice for short trips. This is especially true for people biking to and from transit stops. Mobility hubs can offer bicyclists a variety of bike parking options near transit, which provide transit riders with an alternative to bringing their bikes onto transit, which is particularly challenging for crowded transit systems. Convenient bicycle parking at mobility hubs integrated with transit helps support bicycling as a first-mile/last-mile connection, which can lead to higher transit ridership and an increasing shift from driving alone.

Cost Per Unit: $ $$ $$$

Features

- Bike lockers or secure racks
- Real-time information on available bike parking integrated into a universal transportation account/ mobility as a service account
- Charging infrastructure for electric bikes

Implementation Considerations

- Bicycle parking demand and space availability at transit stations
- Bike parking pricing. Bike parking fees can be charged on a daily basis or on a longer-term subscription
- Options for low-income customers
- Integrate into other station facilities, such as transit-supportive retail or parking structures in order to increase visibility and reduce costs
- Fee integration with universal transportation/fare account
- Consider bike parking/locker design to accommodate a variety of bike sizes

Technology Integration Requirements

- Power source for electronic bike parking/lockers

Typical Implementation Setting

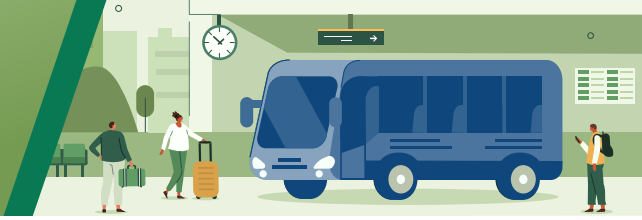
- All transit hubs

Implementation Examples

SMART Station – Marin County, CA

Select SMART stations offer U rack bike parking as well as high security storage lockers for bikes. Bike lockers are operated by BikeLink and require an account to use. Accounts can be created with a Clipper card, which can then be used to operate and pay for locker access.

Source: Kimley-Horn



Bike Stations with End-of-Trip Facilities

Description

Staffed secure bike parking areas, usually outfitted with changing rooms, maintenance tools, light retail, and other supportive end-of-trip facilities.

Cost Per Unit: $ **$$** $$$

Ongoing labor cost if staffed

Features

- Bike lockers or secure racks
- Staffed facilities
- Bike valet
- Real-time information on available bike parking integrated into a universal transportation account/ mobility as a service account
- Changing rooms

Implementation Considerations

- Bicycle parking demand and space availability at transit stations
- Bike parking pricing. Bike parking fees can be charged on a daily basis or on a longer-term subscription
- Options for low-income customers
- Integrate into other station facilities, such as transit-supportive retail or parking structures in order to increase visibility and reduce costs
- Fee integration with universal transportation/fare account
- Consider bike parking/locker design to accommodate a variety of bike sizes

Technology Integration Requirements:

- Power
- Wi-Fi

Typical Implementation Setting

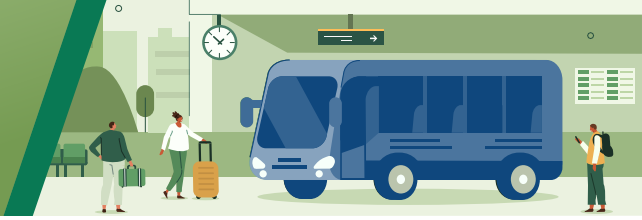
- Most transit hubs

Implementation Examples

Bike Station – Pleasant Hill, CA

A Bike Station was installed in 2018 at the Pleasant Hill/ Contra Costa Centre BART Station. The Bike Station includes 2,300 square feet to provide parking for 215 bikes located in a secure facility in close proximity to the station. Access to the facility is from a BikeLink card and is provided 24 hours a day, seven days a week. The station also includes a bike retail shop and maintenance services. It was funded by Measure J and cost $425,000.

Source: Google Earth



Clear Connections to Bike and Pedestrian Networks

Description

The greatest safety challenges for pedestrians and impact to walkability often occurs at intersections. Careful consideration should be given to the design of pedestrian crossings within the walkshed of mobility hubs. A variety of features and strategies can be implemented to improve safety and comfort of pedestrians, including marked crosswalks, median crossing islands, warning signs, and pedestrian signals.

Cost Per Unit: $ $$ $$$

Features

- Marked crosswalks
- Median islands
- Curb extensions/Bulb Outs
- Raised crossings
- Reduced curb radii
- Pedestrian scramble or leading pedestrian interval
- Midblock controlled crossings
- Narrowed and reduced number of motor vehicle travel lanes
- High visibility pedestrian warning signs
- Pedestrian signals
- Pedestrian recall phasing

Implementation Considerations

- Upgrade existing facilities to meet ADA requirements
- Identify street segments with long gaps between crossings and assess whether there is a need for a mid-block crossing. This could include demand contributors such as adjacent land uses, feeding roadway network, and transit stops
- Identify opportunities to minimize crossings within mobility hubs, where feasible
- Provide well-lit crossings

Technology Integration Requirements

- Pedestrian countdown signal heads
- Accessible pedestrian signals

Typical Implementation Setting

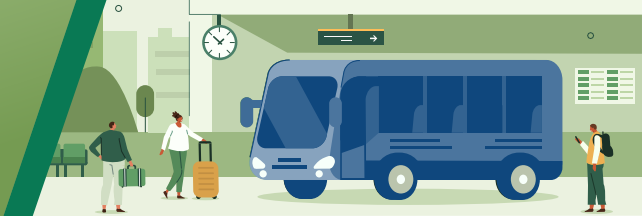
- All crossings within a mobility hub and along key pathways on the surrounding walk and bikeshed

Implementation Examples

Hollywood and Highland Crosswalks – Los Angeles, CA

Hollywood is home to one of LA's most notable landmarks which has an abundant number of pedestrians and visitors each day. Los Angeles City Councilmembers, LADOT staff, and local residents and business owners dedicated a new pedestrian scramble crosswalk at the intersection of Hollywood Boulevard and Highland Avenue. A 'scramble' is a crossing system that allows everyone to cross from each corner, in all directions, including diagonally, during the same pedestrian phase at the intersection.

Source: Google Earth



Micromobility Stations and Drop Zones

Description

Shared micromobility provides convenient, affordable, on-demand access for short-term use while enhancing access to transit. Shared micromobility stations typically are located near transit stops and major commercial destinations. These shared programs can help provide enhanced first-mile/last-mile travel options and lead to increased shift to transit. There are several shared micromobility models: station-based bikeshare, employee bikeshare program, dockless bikeshares, peer-to-peer bikeshare, and scooter share programs.

Bikeshare and scootershare programs encourage people who do not currently own a bike or scooter to begin using these modes of transportation.

Cost Per Unit: $ $$ $$$

Features

- Curbside shared mobility station lightings
- Electrical power for electric bikeshare or scooter-share stations

Implementation Considerations

- Careful coordination with local jurisdictions in charge of permitting to develop or reference shared micromobility parking policies and locations to make sure they are safe and convenient and also don't block the pubic right-of-way or path of travel
- Ensure shared mobility stations are well-lit and safe
- Bikeshare/scootershare programs are commonly permitted to include measures and compensation for enforcement of bicycle parking locations and management of fleet sizes and condition
- Differences in benefits between station-based, dockless, and peer-to-peer bikeshare programs
- Develop necessary property use agreement with any private shared micromobility operators and data reporting

Technology Integration Requirements

- Mobile app integration
- Integrate with universal transportation account

Typical Implementation Setting

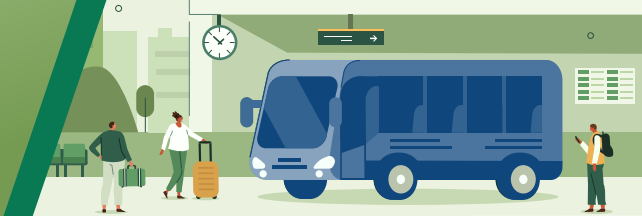
- At transit facilities located in areas with higher destination activity, such as employment centers, commercial areas, campuses, or tourist areas
- Within communities, particularly those with a supportive bicycle network

Implementation Examples

Redwood Bikeshare - Marin and Sonoma Counties, CA

Redwood Bikeshare, a collaborative effort between the Metropolitan Transportation Commission (MTC), Sonoma-Marin Area Rail Transit (SMART), the Sonoma County Transportation Authority (SCTA), and the Transportation Authority of Marin (TAM), launched in Marin and Sonoma counties in October 2024. Redwood Bikeshare is an electric, pedal-assist bike share program serving residents and visitors in Marin and Sonoma counties. The program features a fleet of 300 e-bikes distributed across seven cities. The two-year pilot program aims to provide residents and visitors with an environmentally friendly and innovative way to connect with local transit systems and travel car-free across the region.

Source: TAM



Dedicated Car Share Parking

Description

These services use smartphone apps to provide access to fleets of cars or small, low-speed personal vehicles, such as electric mopeds. Carshare allows riders to access vehicles at designated parking spaces. Users are typically charged according to how long they use the vehicles or how far they drive. Carshare fees cover car insurance, parking, emergency roadside service, and other car-related expenses. Carsharing offers people a convenient way to make connections beyond the first mile and last mile of a public transit stop, particularly on the destination side of a trip. It also offers an alternative to owning a vehicle and provides transit users with a vehicle, if needed, during the day.

Cost Per Unit: $ $$ $$$

Features

- Dedicated parking spaces with signage
- Charging for electric car share vehicles

Implementation Considerations

- Integrating alternative fuel vehicles into the program, based on existing and/or planned infrastructure such as electric vehicle charging stations
- Management of carshare, including private partnerships
- Clear wayfinding between transit and carshare services to make it easier for people to find a vehicle
- Accessibility, equity, and environmental policies in how carshare vehicles are distributed in communities
- Consider data sharing requirements and agreements with car share operators

Technology Integration Requirements

- Mobile app
- Universal transportation account

Typical Implementation Setting

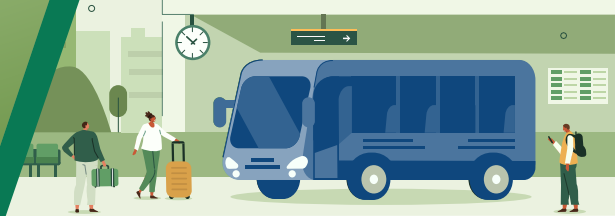
- Urban areas
- Areas with good connectivity and a density of destinations outside of the walkshed and without good transit access

Implementation Examples

SFMTA Carshare Program – San Francisco, CA

SFMTA piloted an on-street carsharing program serving up to 60 different neighbors each month. The program provides on-street spaces for shared vehicles, which helps make shared vehicles attractive to use for more neighbors. Carshare providers in San Francisco include Zipcar, Getaround, Truqit, and GIG.

Source: Adobe



Loading Zones for Ride-Hail, Shuttles, Micro/On-demand Transit, and Urban Freight

Description

An area where passenger pick-up and drop-off (PU/DO) occurs at a mobility hub, transit station, or a public street. This typically occurs at curb spaces that are marked with clear designated signage and paint and can include space for private vehicles or shared mobility services such as shuttles, microtransit, taxis, carpools, vanpools, and on-demand ridershare services.

Cost Per Unit: $ $$ $$$

Features

- Dedicated curb space
- Curb painting, marking
- Signage
- Potential for dynamic curb/signage to assign flexible curb space as needed by time of day

Implementation Considerations

- Utilization during peak times
- Signage and marking. Curb paint and signage installation must inform drivers that it is designated for passenger loading only and prohibit idling
- Dynamic curb markings and signage in constrained areas to assign curb space to user groups most in need or most prioritized

Technology Integration Requirements

- Development of in-app information with rideshare providers to locate loading zones for drivers and passengers
- Dynamic signage integrated with back-end systems coordinating curb space requests and assignments

Typical Implementation Setting

- All mobility hubs
- Dynamic or assigned loading areas are most suitable for areas that have constrained curb space and high demand

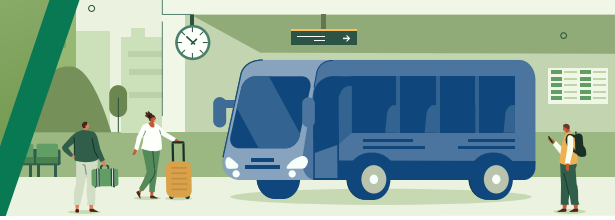
Implementation Examples

South Lake Union Neighborhood – Seattle, WA

University of Washington partnered with Seattle Department of Transportation, Uber, Lyft, and local businesses to pilot two load zones for rideshare vehicles in Seattle's South Lake Union neighborhood. The pilot added designated loading zones and geofencing to increase driver compliance in stopping at the curb and reduce the average amount of loading time. Rideshare applications automatically snap people to the correct pick-up locations, improve safety for riders and reduce congestion and confusion for drivers.

Larkspur Smart Connect on Demand – Larkspur, CA

Source: Kimley-Horn



EV Charging Infrastructure for Shared Vehicles and Micromobility

Description

EV charging stations at mobility hubs provide electric vehicle owners a way to charge their vehicle while they are at their destination and also allows bicyclists to recharge their electric bike while storing them at a mobility hub or provide them with a quick charge to finish the last leg of their trip. Battery-powered EVs, plug-in hybrid EVs (PEVs), and hybrid EVs are becoming more prevalent in private and public vehicle fleets. Therefore, electric vehicle charging can also be beneficial for recharging fleets such as NEVs, microtransit, vanpools, and other mobility-supportive services.

Cost Per Unit: $ **$$** $$$

Features

- Level 1, 2, or 3 charging equipment
- Wireless charging technologies
- Electrical power
- Charging adapter
- E-Charging station rack
- Shelter or cover for equipment
- Secure locked space or rack

Implementation Considerations

- Electric vehicle charging at a mobility hub fits in with the overall network of existing parking capacity and public charging stations in the region
- Charging station management, operation, monitoring, and maintenance
- Universal transportation accounts to pay for charging fees
- Future charging needs of fleet vehicles, including microtransit and NEVs
- Compliance with local and state regulations on electric vehicle charging provision for new or upgraded facilities
- Consider data sharing requirements and agreements with car share operators
- Providing a circulation zone in front of the bike charging racks to ensure easy access and loading distance for electric bikes
- Local electric bike volumes when sizing parking and charging needs
- Locating E-bike charging stations near the bicycle network and other access paths
- Universal charging system or adapter

Technology Integration Requirements

- Electrical connections
- Power source / connection to the power grid
- Intelligent charging processes
- Universal transportation account

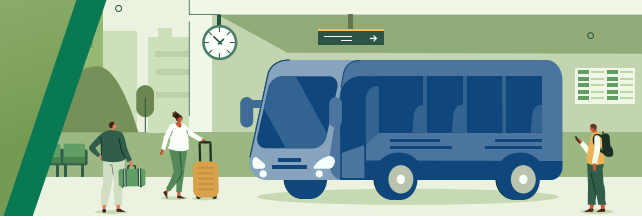
Typical Implementation Setting

- All mobility hubs with parking
- Nearby topography supportive of electric bike use
- Locations of high electric bike use

Implementation Examples

BART EV Charging at Warm Springs Station – Fremont, CA

Source: Google Earth



Digital Policy and Geofences

Description

Critical tools used to effectively and dynamically manage the public right-of-way and enforce access and deployment requirements.

Cost: $ $$ $$$

Features

- Exclusion zones
- Slow zones
- Forced drop off
- Subsidized rides within defined geofenced areas
- Curb space for pick-up/drop-off activities (shared or flexible)
- Signage

Implementation Considerations

- Shared or flexible curb management techniques to mobility hub services such as micro-transit, carshare, and mobile retail to manage the curb more effectively
- On-demand rideshare models: dynamic ridesharing and ride-hailing to provide flexible and longer distance options for transit riders at the beginning or end of their trip
- Features of specific subsidized rideshare models to best serve mobility hub users
- Consider regional curb data standards and responsibilities guidelines

Technology Integration Requirements

- Mobile application integration
- Integration with parking availability
- Integration with dynamic curb assignment
- Universal transportation account

Typical Implementation Setting

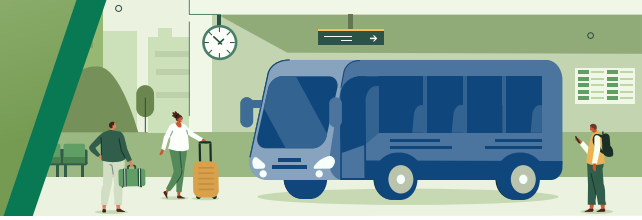
- Mid-to-long range trips to transit where other mobility options are not available, particularly in low density areas that cannot be effectively served by fixed-route transit

Implementation Examples

Uber/MTS Partnership – San Diego, CA

San Diego Metropolitan Transit System (MTS) and Uber partnered to offer one-time discounts of $5 for uberPOOL riders who arrived at or departed from one of 20 selected transit centers. The promotion was designed to encourage people to leave their cars at home, ride transit, and then reverse the trip to get back home. It also provided people with an easy way to travel downtown during Comic-Con International and the Major League Baseball games.

Source: Adobe



Common Carrier Package Pickup and Other Efficient Delivery Services

Description

Package delivery stations in the form of lockers hold packages that can be accessed 24/7 from online retailers. Placing these lockers in high volume traffic areas can save extra trips for both the delivery service and the receiver, increasing efficiency. These stations can be conveniently situated at retail spaces at mobility hubs. Offering package delivery services within a mobility hub can save people an extra trip by car to pick up a package – offering them one more reason to embrace an alternative to driving alone.

Cost Per Unit: $ $$ $$$

Features

- Package lockers

Implementation Considerations

- Memorandum of Understanding (MOU) with package delivery companies
- Ensure delivery lockers are not impeding other movements in the area yet remain convenient for people to access them
- Security features such as cameras at package delivery lockers
- Loading curb space near the lockers for delivery vehicles to off-load packages

Technology Integration Requirements

- Mobile application integration
- Power supply

Typical Implementation Setting

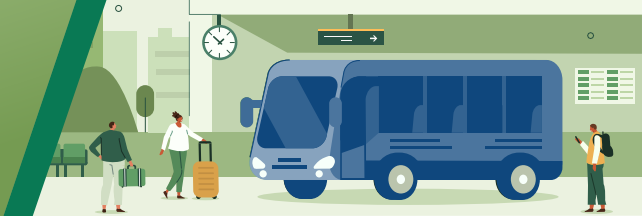
- Mobility hubs in areas where front door package delivery may not be an option and other package delivery options are limited, such as near apartment complexes and college campuses

Implementation Examples

Amazon Lockers

Amazon offers customers flexibility and security when picking up their online orders from an Amazon locker, instead of relying on home or office delivery. Upon ordering, customers choose the locker location that is most convenient, and then they stop by within three days of delivery. A unique pick-up code is provided for each order. Lockers are situated at a variety of locations such as 7-Eleven stores, college campuses, and multifamily housing complexes.

Source: Adobe



Dedicated Transit Lanes

Description

Dedicated transit lanes allow buses to operate more efficiently and reliably by allowing them to operate in a separate lane. These lanes, which may be physically separated from traffic with curbs or painted a different color to discourage driver incursion, should be prioritized in locations where either a high-frequency transit line or multiple individual lines are impacted by traffic congestion. By placing greater emphasis on transit, travelers who currently drive alone may see the benefit of switching modes, thus increasing transit ridership and overall corridor person throughput. In some cases, these lanes can be implemented as shared or managed lanes during off-peak hours when traffic congestion, and its impact on transit operations, is less.

Cost Per Mile: $ $$ **$$$**

Features

- Lane striping
- Signage
- Dedicated transit signal phases (if appropriate)

Implementation Considerations

- Transit service level
- Coordination and concurrence between transit operator and local jurisdiction for design and configuration of dedicated lane
- Business access for driveways along the transit lane
- Hours of use and directionality reserved for transit vehicles
- Requires design development to configure signing, striping, and any other associated improvements
- Clear signage and road markings identifying where private vehicles are prohibited and what fines shall be levied
- Provision for enforcement of dedicated transit lanes

Technology Integration Requirements

- None, see Transit Signal Priority for signal integration opportunities

Typical Implementation Setting

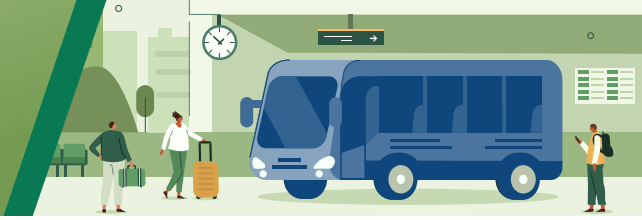
- Where traffic congestion is affecting transit service reliability
- On corridors with frequent transit service
- Areas where ridership is high, may include areas around mobility hubs

Implementation Examples

Broadway Transit Lanes – Oakland, CA

The City of Oakland added dedicated bus lanes to Broadway between 11th and 20th Streets in downtown Oakland. The lanes have improved transit travel time reliability for bus service on Broadway connecting all parts of the AC Transit system. Dedicated bus lanes replaced travel lanes and maintained on-street parking and loading.

Source: Kimley-Horn



Transit Signal Priority (TSP)

Description

Transit Signal Priority (TSP) can improve reliability and travel speeds for transit vehicles by implementing a range of improvements at signalized intersections that promote transit efficiency and reliability. These improvements typically involve modifying traffic signal timing or phasing that can detect if buses are present and prioritize signal phases to allow buses to cross an intersection without stopping. TSP can be integrated with other improvements such as dedicated transit lanes, queue jumps, and bus bulbs. TSP can operate independently at the signal level, connect with multiple signals in a corridor, or be integrated in a regional traffic management control system.

Cost Per Unit: $ $$ $$$

Features

- Transit signal heads for dedicated transit phases
- May require signal controller upgrades
- Requires technology upgrades on buses

Implementation Considerations

- Coordination between local jurisdictions and transit operators for implementation and operation plans
- Assess feasibility and impacts of integrating transit signal priority with existing or planned signal coordination
- Identify opportunities to also benefit emergency vehicles

Technology Integration Requirements

- May require traffic signal controller upgrades
- TSP equipment may include equipment both on board the vehicle and at the signal controller

Typical Implementation Setting

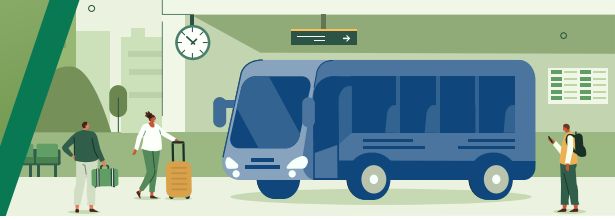
- Where transit efficiency and reliability are affected by signal delays
- Where there is a dedicated transit lane or bus queue jumps
- Where corridor streets have long signal cycles

Implementation Examples

Livermore Amador Valley Transit Authority (LAVTA) BRT Project – Pleasanton, Dublin and Livermore, CA

The Rapid TSP upgrade and expansion project installed GPS-based Transit Signal Priority equipment for 24 LAVTA-owned buses and 67 intersections served by Rapid Routes 10R and 30R in Livermore, Pleasanton, and Dublin.

Source: Google Earth



Bus Layover Zone/Driver Relief Facilities

Description

Designated areas at the layover point of a bus route for drivers to rest and to provide a place for schedule recovery before starting a new trip. This often requires a facility accessible to drivers only and a place to park the bus out of the way of moving traffic.

Cost Per Unit: $ **$$** $$$

Features

- Driver break room
- Restrooms
- Bus parking area

Implementation Considerations

- Placing layover zones to support multiple routes at regional transfer locations or transit network terminals
- Sufficient bus turning paths and the ability to easily and quickly drive between the layover zone and the route start/end
- Concrete bus pads along the layover zone to reduce roadway damage
- Access to facilities (transit staff only, all transit users, public)
- Consider implementing keyed entry and limit access to staff and operators only
- Responsibility for maintenance of the operator restroom would be determined in a maintenance or access agreement
- Determine charging infrastructure appropriate to support bus layover

Technology Integration Requirements:

- Wi-Fi

Typical Implementation Setting

- Terminal point, layover point, or timepoint where a bus may spend several minutes
- Bus charging facilities

Implementation Examples

Muni – San Francisco, CA

San Francisco Municipal Transportation Agency has layover facilities near the end of select bus routes that allow for buses to pull over in-between trips. These facilities often provide bus drivers a place to rest, eat, or use the restroom.

Source: Google Earth

Battery Electric Bus (BEB) Charging Station

Description

Electric vehicle (EV) charging stations are an essential infrastructure component that supply electricity for the recharging of battery-operated vehicles. Battery Electric Bus (BEB) charging stations allow buses that dock or park in between trips to recharge their batteries and extend their drive time, often incorporated within layover zones or relief facilities. Fast charging stations allow vehicles to charge quickly at stops along a route, which allows buses to travel longer on their routes before having to return to the yard for a full recharge.

Cost Per Unit: $ $$ $$$

Features

- Charging point
- Dedicated bus parking spaces

Implementation Considerations

- Supporting infrastructure, such as connections to the power grid and transformers, in identifying optimal placement for bus charging
- Need to determine preferred zero emission bus propulsion strategy. Not necessary if non-electric strategy is selected
- Will require coordination amongst transit operators regarding type of charging technology to implement

Technology Integration Requirements

- Integrated electric bus operating system
- Safety and energy management system
- Wireless charging facility
- Power source and transformer

Typical Implementation Setting

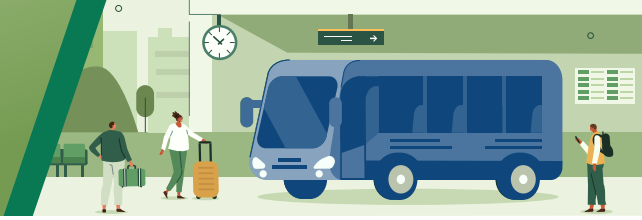
- Terminal point, layover point, or timepoint where a bus may spend several minutes

Implementation Examples

TransLink – Vancouver, Canada

TransLink is in the process of expanding their battery-electric bus fleet to 19 vehicles. They are currently testing out new electric buses and charging equipment from different manufacturers in order to determine how to best scale up their battery-electric fleet in the coming years. They have placed fast-charging units in select locations along major transit routes to test their effectiveness.

Source: Adobe



Microtransit/Autonomous Transit

Description

Emerging service model using small autonomous or electric vehicles to transport riders. Microtransit vehicles typically carry between four and 16 passengers. Microtransit or autonomous transit can reduce single-occupancy vehicles without the cost implication of a full-size fixed route transit service. This model often focuses on frequent point-to-point transportation service between stations within short distance or first-mile/last-mile connectivity to major employers or commercial hubs.

Cost Per Unit: $ **$$** $$$

Features

- May include dedicated lane, guideway or track alignment
- Automated microtransit vehicle fleet
- Vehicle charging station(s)
- Stations and loading zones

Implementation Considerations

- Shuttle services to complement or replace a fixed-route service
- Real-time information at stops and via mobile application
- Access existing and future demand; consider population and ridership growth
- Sufficient curb space is needed for pick-up/drop-off
- Would likely benefit from on-site charging infrastructure

Technology Integration Requirements

- Real-time GPS devices and system
- Integration with mobile app
- Rideshare service contract with employers

Typical Implementation Setting

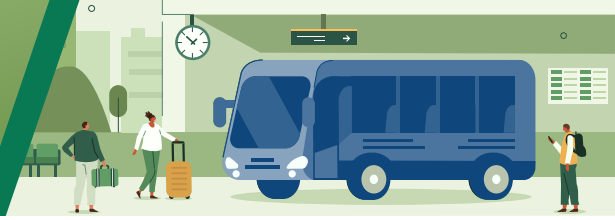
- Areas with limited auto access or roadway connectivity
- Employment and commercial areas
- Areas around major transit hubs

Implementation Examples

LAVTA Shared Autonomous Vehicle (SAV) – Dublin, CA

The Livermore Amador Valley Transit Authority (LAVTA) has tested a Shared Autonomous Vehicle (SAV) as a first-mile/last-mile solution around the Dublin/Pleasanton BART station. The goal of the project is to provide a convenient and reliable first- and last-mile zero emission service to employment, retail, and residential destinations located in the Dublin/Pleasanton BART station areas. Though autonomous, each vehicle is accompanied by an onboard operator at all times during the testing phase.

Source: Adobe



Curb Extensions (Bulb-outs)

Description

Bus bulbs are curb extensions that align the bus stop with the parking lane or bike lane, allowing buses to stop and board passengers without ever leaving the travel lane. This allows buses to move faster and more reliably by decreasing the amount of time lost when pulling in and out of a bus bay and merging with traffic.

Cost Per Unit: $ $$ $$$

Features

- Curb extension
- Other optional amenities: shelter, wayfinding maps, plantings, and trees

Implementation Considerations

- Need to consider roadway geometry. In-lane stopping generally not preferred if there is only one travel lane
- Equipped with transit shelters and other amenities whenever possible to enhance transit user experience
- May require more significant drainage or curb improvements
- Most effective with far-side stops. If implemented near-side, would require a right turn restriction to avoid right-hook conflicts or queuing in the right-hand lane
- Often implemented as part of a bus island with passageway behind the island for bike lanes and cycle tracks

Technology Integration Requirements

- None

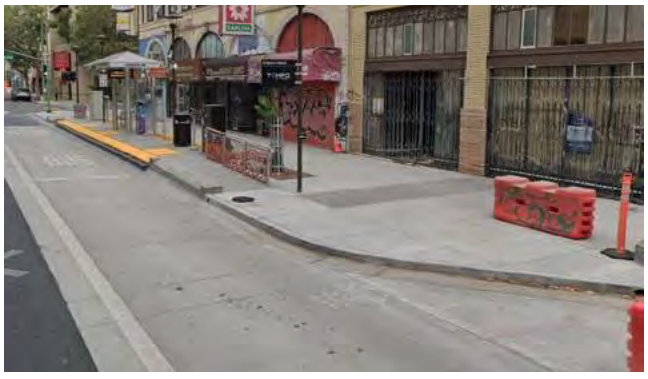
Typical Implementation Setting

- On corridors with frequent transit service

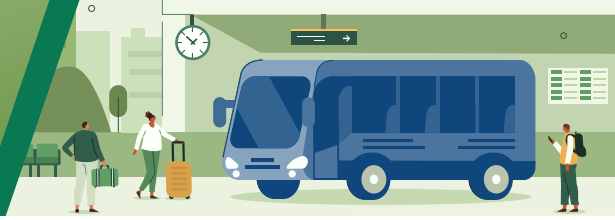
Implementation Examples

AC Transit Tempo Line – Oakland, CA

The Alameda-Contra Costa Transit District (AC Transit) implemented a 10-mile network of dedicated and bus-only lanes along the project corridor from the BART station at 19th Street in Oakland along International Boulevard and E. 14th Street to the San Leandro BART station. There are 46 new platforms station. The northbound stop at 12th Street and Harrison is an example of a bus bulb-out with full amenities.



Source: Google Earth



Neighborhood Electric Vehicles (NEVs)

Description

A variety of emerging or evolving transit service options focus on first-mile/last-mile connections to mobility hubs, major employment areas, or other points of interest. These may share several similar characteristics, including dynamic routing that allows for front door access and efficient routing, autonomous guidance that does not require a driver, electric propulsion, reduced vehicle emissions, and on-demand requests that reduce passenger wait times. NEV services commonly use smaller vehicles that carry between three and six passengers, and riders typically order the service through a mobile app.

Cost Per Unit: $ $$ $$$

Features

- ✔ Curb space/loading zones

Implementation Considerations

- Integrate real-time information on NEV programs into universal transportation account
- Leverage funding sources such as grants, parking meter revenue, development impact fees, and private sponsorships to subsidize micro-transit services in a community
- Certain design features, such as dedicated transit lanes, may benefit an autonomous transit service
- Local road and motor vehicle code restrictions in identifying vehicle type and the feasibility of using lighter/smaller NEVs

Technology Integration Requirements

- Integration with mobile app
- Rideshare service contract

Typical Implementation Setting

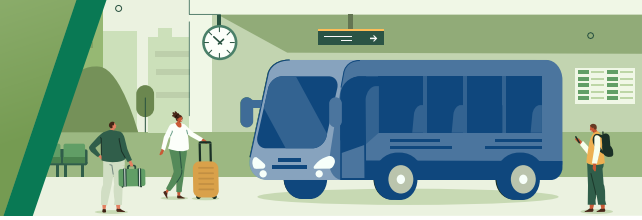
- Where additional first-mile/last-mile connection is needed to connect to key destinations beyond a typical walkshed
- Where land use density does not support additional fixed route service
- Where there is a wide distribution of origins or destinations

Implementation Examples

Free Ride Everywhere Downtown (FRED) – San Diego, CA

The City of San Diego subsidized the free electric shuttle called the Free Ride Everywhere Downtown (FRED). FRED is operated by Circuit Transit under a five-year contract. The company is tasked with maintaining the ride-hail app, handling day-to-day operations, and conducting marketing and advertising efforts. FRED shuttles (a type of NEV), which seat up to six passengers, have traveled over 950,000 miles and ported more than 900,000 passengers within the Downtown San Diego area.

Source: Kimley-Horn



Vanpool/Carpool Priority Spaces at Park-and-Ride (PNR) Lots

Description

Vanpool and carpool programs are commonly provided by employers for their employees and staff to reduce driving alone and help reduce congestion and greenhouse gas emissions. Participants are grouped with people who live in their proximity, are interested in the program, and are traveling in the same direction. BART has implemented partnerships and pilots for this type of program, incentivizing shared rides to BART through provision of priority or discounted parking. All participants must register and be approved by the program before they can acquire the carpool or vanpool permit. There is a minimum number of people required for each vanpool group. To promote the use of these programs, reserved and/or priority spaces can be provided at the mobility hub

Cost Per Unit: $ $$ $$$

Features

- Program eligibility and verification system
- Permit system
- Parking reservation system

Implementation Considerations

- Identify spaces prioritized for vanpool/carpool and/or integrate into a parking reservation system
- Identify backup options for vanpool participants, such as a TNC subsidy or dynamic ride-matching
- Consider technology solutions for carpool validations

Technology Integration Requirements

- Permit validation and monitoring system

Typical Implementation Setting

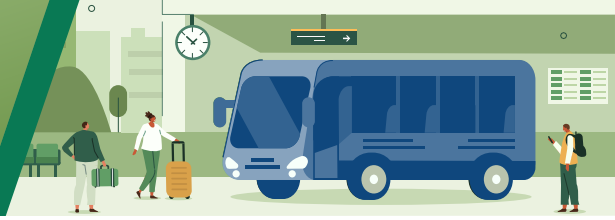
- Areas where mobility hub parking is in high demand or over-subscribed

Implementation Examples

Scoop to BART Station Partnership – Pleasanton, CA

Bay Area Rapid Transit (BART) and the Metropolitan Transportation Commission partnered with Scoop to deliver a new option for securing parking at the Colma, Concord, Daly City, Dublin/Pleasanton, Millbrae, Orinda, Pleasant Hill, Rockridge, San Bruno, South San Francisco, Union City, Warm Springs, and Lafayette stations. BART stations reported high parking demand with an extensive waitlist for drive-alone riders across their system. Commuters who use Scoop to carpool to the station are guaranteed parking until 10 a.m. BART will allocate permit parking spaces specifically for carpoolers using Scoop. The app efficiently connects neighbors and co-workers and fills seats in vehicles already driving to BART stations.

Source: Adobe



Bikeways

Description

Bikeways can encourage bicycling to, from, and within a mobility hub, offering bicyclists easier access to transit and other nearby destinations. They can provide a safe and comfortable riding experience for people of all ages and abilities as well as alert drivers to the presence of bike riders on or near the roadway. Bikeways make cycling a priority on certain routes and an important part of the local and regional travel network.

Cost Per Mile: $ **$$** $$$

Features

- Class I bike path separated from traffic by curbs
- Class II bike lane defined with pavement markings and signage
- Class III bike boulevard located on low-speed, low-volume shared roadway with autos
- Class IV cycle track exclusively for bike use with physical barriers or buffer
- Bike signals
- Crossing enhancements, such as two-stage turn boxes, bike boxes, and pedestrian-hybrid beacons (PHBs), and other conflict zones with green-paint markings
- Bicycle-oriented wayfinding
- Bike channels adjacent to stairways at stations
- Signal push-buttons accessible for cyclists
- Bike detection

Implementation Considerations

- Use within the bikeshed to prioritize both greater network connectivity and convenient connections to major generators
- Improve bike connection for areas that have weak links to existing bike network
- Need to evaluate opportunities to add bikeways, including narrowing lane widths, converting parking lanes, and implementing road diets
- Need to consider hills and topography when identifying a desirable bicycle network
- All ages and abilities facilities
- Minimizing or controlling conflicts at intersections

Technology Integration Requirements

- Dedicated bike signal detector and equipment
- Bike counters

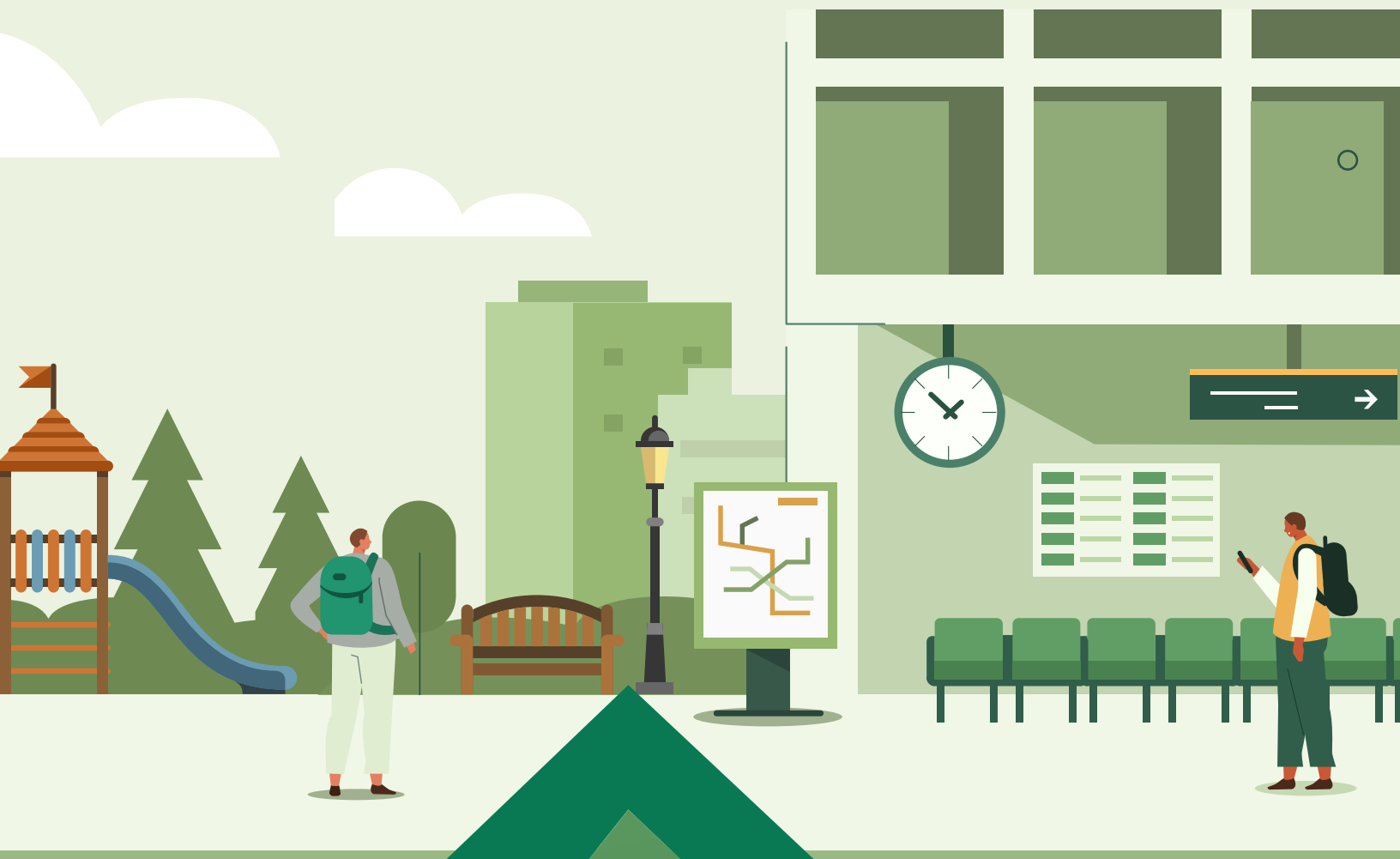
Typical Implementation Setting

- An existing strong bicycle network
- Bicycle destinations within the bikeshed, particularly considering schools, parks, and other community facilities
- Locations with existing bike network gaps

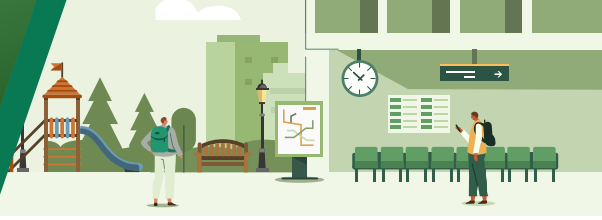
Implementation Examples

Class I and Class II Bike Path – San Rafael, CA

Source: Kimley-Horn



Public Realm



Permanent and Mobile Vending/Retail Space

Description

Mobile retail services are small food or retail stores that are "on wheels" or are easily towable in and out of a location. These services are easy to situate within parking areas or public plazas. These services may include groceries, salons, barbers, dry cleaning, and delivery services, among others. Traditional vending machines could also be considered. Providing permanent or mobile retailers at mobility hubs can encourage the use of mobility services, simplify trip-making for users, and build a sense of community focus around the mobility hub.

Cost Per Unit: $ $$ $$$

Features

- Permanent retail space
- Flexible space (parking lot, public plaza)
- Connections for power and water
- Vending machine

Implementation Considerations

- Coordinate with local government to obtain permits
- Mobile services program to provide a process for permitting, establishment of fees, and defining times and locations for access

Technology Integration Requirements

- Connections for power

Typical Implementation Setting

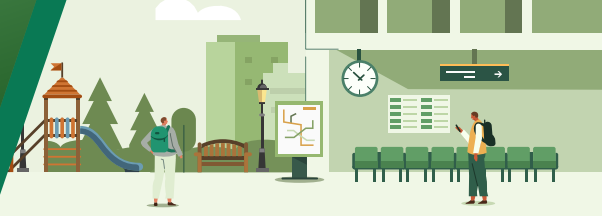
- Mobile retail at mobility hubs with available parking or public plazas
- Vending machines at mobility hubs with limited space

Implementation Examples

Off the Grid – City of Pleasant Hill, CA

The City of Pleasant Hill partners with the Off the Grid team to create a mobile food experience every Wednesday night. The event consists of food, drink, live music, and communal Adirondack chairs. The event is located near the lake across from the Pleasant Hill City Hall. Visitors can access the location via County Connection routes, take BART, on bike, or by foot. The event encourages visitors to enjoy the designated communal areas and the use of transit or other active transportation modes.

Source: Adobe



Culturally Relevant Programming

Description

The activation of public space that serves the unique needs of the community it serves. The creation of public gathering spaces that extends the community identity outdoors and establishes a sense of place.

Cost Per Unit: $ **$$** $$$

Features

- Cultural spaces
- Outdoor dining

Implementation Considerations

- Maintain a sense of openness with minimal obstructions
- Artwork, murals, water features, lighting, landscaping to create a desirable space
- Architectural features such as overheads and awnings to provide shade for the public
- Flexibility for a variety of uses (farmer's market, fairs, art, etc.)
- Size the facility to be effectively activated

Technology Integration Requirements

- Public Wi-Fi
- Lighting

Typical Implementation Setting

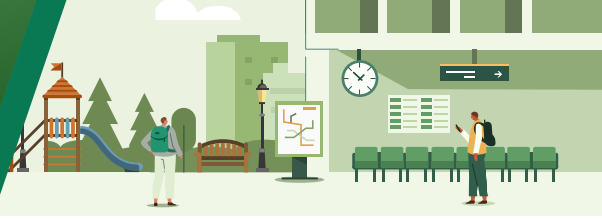
- Locations where right-of-way is available and there is community demand for an activated public space

Implementation Examples

Jane Warner Plaza – San Francisco, CA

The first of three temporary public squares created by San Francisco's "Pavement to Parks" project, Jane Warner Plaza is a hotspot for gathering in the City's Castro District. The now permanent square has small trees, colorful café tables and chairs, and art installations. The aesthetic of the plaza was planned in alignment with the neighborhood's significance as the Castro LGBTQ Cultural District. The plaza also hosts scheduled programming and events on weekends and certain holidays.

Source: Google Earth



Community-Driven Design Elements/Tactical Urbanism

Description

A community-led approach to community building using simple, temporary, low-cost design interventions that can be altered and scaled up to better serve the community.

Cost Per Unit: $ **$$** $$$

Features

- Curb extensions (bulb-outs)
- Pedestrian enhancements
- Cultural amenities
- Public art

Implementation Considerations

- Follow local and national design guidelines, including ADA requirements
- Ensure that pathways and public spaces are well maintained and lit
- The NACTO Urban Street Design Guide provides additional walkway design guidance, including descriptions of sidewalk zones
- Outreach and public engagement needed for community-driven ideas
- May require drainage or curb improvements

Technology Integration Requirements

- None

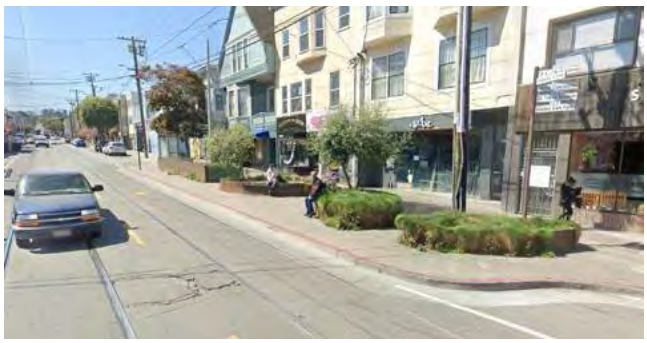
Typical Implementation Setting

- Mobility hubs with demand for community led design.

Implementation Examples

Inner Sunset Streetscape Improvements Project – San Francisco, CA

Through the Inner Sunset Streetscape Improvements Project bulb-outs were added at two corners to improve pedestrian safety as well as create a more vibrant streetscape.

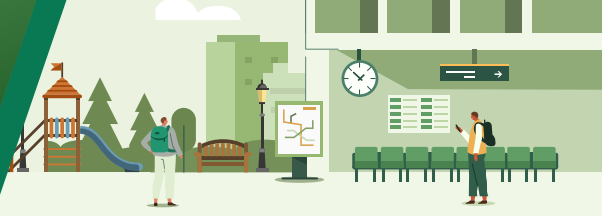


Source: Google Earth

Public Bench Project – San Francisco, CA

The Public Bench Project is a tactical urbanism group that provides bench building services for any Inner Sunset business or home owner who is interested in hosting a bench outside of their building. The Public Bench Project aims to promote community-oriented public spaces by providing accessible benches and seating in the public realm.

Source: Google Earth



Street Furniture

Description

Objects placed or fixed in the public right-of-way that activate sidewalks and establish a sense of place.

Cost Per Unit: $ $$ $$$

Features

- Furnishings
- Landscaping features

Implementation Considerations

- Maintain a sense of openness with minimal obstructions
- Placed in coordination with culturally relevant programming and greenspace to create a desirable space
- Size the facility to be effectively activated
- Water connections for watering landscaping

Technology Integration Requirements

- Lighting

Typical Implementation Setting

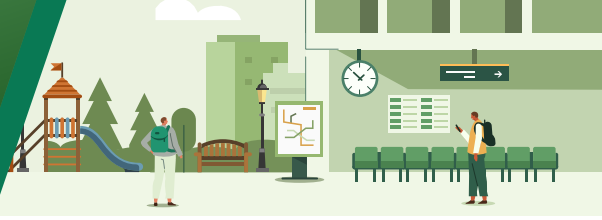
- Locations where right-of-way is available and there is community demand for an activated public space

Implementation Examples

Grand Park – Los Angeles, CA

Grand Park has four fully furnished pedestrian areas featuring historic Arthur J. Will Memorial Fountain with a new wade-able membrane pool, a small intimate performance lawn, a community terrace planted with drought tolerant specimen plants, and a grand event lawn.

Source: Google Earth



Pedestrian-Scale Lighting

Description

Outdoor lighting contributes to safety and comfort for pedestrians accessing the mobility hub. Lighting can be provided in a variety of ways depending on the context but should be oriented towards pedestrian uses and at a pedestrian scale.

Cost Per Unit: $ $$ $$$

Features

- Lighting on edge of path or sidewalk
- Pole and mounted lighting

Implementation Considerations

- Anti-glare luminance equipment to help pedestrians' eyes adapt quickly to the brightest object
- Automated operating systems
- Solar lighting
- Consider dark-sky compliant lighting
- Consider maintenance needs in lighting design

Technology Integration Requirements

- Power supply

Typical Implementation Setting

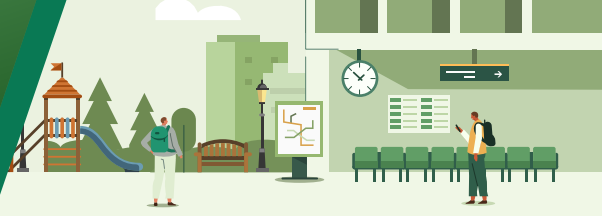
- All mobility hubs
- Connecting pedestrian facilities

Implementation Examples

Pedestrian Lighting Project – Seattle, CA

The City of Seattle developed a Pedestrian Lighting Citywide Plan to outline the needs and opportunities for pedestrian lighting citywide. The Plan specifically focuses on lighting City's sidewalks and includes street design elements that improve pedestrian safety and comfortability in neighborhood and downtown areas. Lighting pole and pavement luminaires were used at transit stops in addition to roadway streetlights. 3rd Avenue in downtown Seattle is featured with pedestrian lights.

Source: Kimley-Horn



Green Space

Description

An area that is partly or completely covered with grass, trees, shrubs, or other landscaping. The provision of green space can also serve as green infrastructure to manage and treat stormwater runoff by absorbing rainfall, reducing runoff, and filtering pollutants through soil and vegetation.

Cost: $ $$ $$$

Features

- Landscaping features
- Parklets

Implementation Considerations

- Maintain a sense of openness with minimal obstructions
- Coordinated with culturally relevant programming and street furniture.
- Architectural features such as overheads and awnings or larger trees to provide shade for the public
- Provided as part of stormwater management system

Technology Integration Requirements

- Lighting
- Water connections

Typical Implementation Setting

- Locations where right-of-way is available and there is community demand for an activated public space
- Locations requiring stormwater management

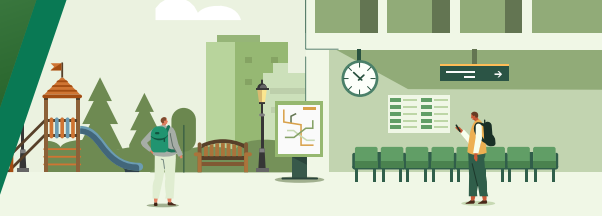
Implementation Examples

Del Mar Station Transit Village – Pasadena, CA

Del Mar Station is a transit-oriented development surrounding the Gold Line station, which connects Los Angeles and Pasadena. Del Mar features a significant amount of green space, and the streets are lined with a wide variety of tree types. Courtyards, paseos, and plazas cut between the buildings, adding secluded and shady areas to the complex while also increasing the ability to circulate pedestrians.

Tiburon Ferry Terminal – Tiburon, CA

Source: Kimley-Horn



Public Restrooms

Description

Public restrooms are sometimes provided at mobility hubs, particularly where there are a number of mobility options and large transfer volumes. It is noted that costs for maintenance and ensuring safety/security at public restrooms can be significant.

Cost Per Unit: $ **$$** $$$

Features

- Secure bathroom stalls

Implementation Considerations

- All bathrooms should be ADA-compliant
- Comply with state building codes and local municipal codes

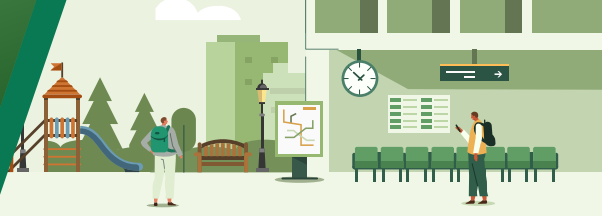
Technology Integration Requirements

- Power supply
- Plumbing system
- Water source

Typical Implementation Setting

- Areas with high volumes of transfer activity, particularly locations that already have on-site staff throughout the day

Source: Adobe



Solar Panel Canopy

Description

Solar panel canopies are an option to effectively leverage space at mobility hubs in order to reduce the energy footprint of the mobility hub itself or its mobility services. These canopies are often roof mounted steel structures topped with solar panels. Solar panels help generate green energy from large sun-exposed surfaces while providing shade and coolness for parked vehicles or other uses. Energy generated by the solar canopy can power the mobility hubs and reduce energy bills, which in turn protects from volatile utility costs, while reducing environmental impact. Excess generated energy can be stored, thus increasing the reliability of the mobility hub electrical system. Solar canopies can be integrated into existing parking lots or other facilities without impeding other spaces at the mobility hub. Solar canopies are often provided above surface parking areas, at the top level of parking garages, at bus stop shelters, and along covered walkways.

Cost Per Unit: $ **$$** $$$

Features

- Fixed-tilt or architectural solar canopy
- Integrated power grid

Implementation Considerations

- Position of parking lot in relation to the available sunlight, tall buildings or other obstructions that prevent sunlight from directly hitting the solar canopies
- Coordination and agreement between transportation agencies and power district
- Need to integrate into aesthetic and architectural design of mobility hub features to maintain sense of place as well as clear lines of sight

Technology Integration Requirements

- Electrical power system
- Integrated system with electrical consumption systems

Typical Implementation Setting

- Commercial parking lot areas for business plazas, schools, shopping centers, factories, warehouses, office buildings, hospitals, airports, and mobility hubs
- Climate with sufficient daytime temperatures between 59°F and 95°F for solar panel peak efficiency

Implementation Examples

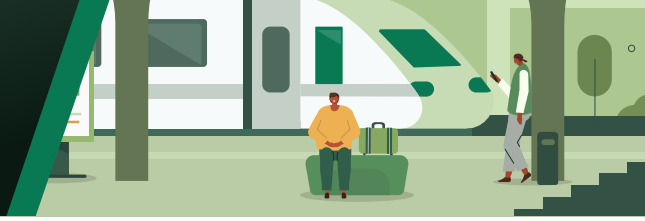
Lafayette BART Station – Lafayette, CA

BART installed a solar project consisting of over 200 parking spaces at the Lafayette BART station. The panels produce a combined 1 megawatt of electricity and began operation in Spring 2017. The project produces more power than the Lafayette BART station consumes, with the additional power going to serve other uses on the BART system.

Transportation Electrification at Schools - Marin County, CA

The Tamalpais Union High School District (TUHSD) plans to construct solar photovoltaic canopies, electric vehicle (EV) car charging stations, and battery energy storage infrastructure systems over parking lots at Archie Williams High School, Redwood High School, and Tamalpais High School. When completed, these solar energy projects will provide TUHSD an average annual savings of $630,000 in energy utility expenditures.

Customer Experience



Off-board Payment for Transit

Description

Payment systems located near transit stops that allow transit riders to pre-pay for transit before boarding to speed up boarding times.

Cost Per Unit: $ $$ $$$

Features

- Off-board farebox

Implementation Considerations

- Mobile payment, smart card, or chip reader
- May need larger transit shelters to protect equipment from weather
- Farebox must not block accessible path and boarding areas, or bus door zones
- Online management system to get update when machines are out of service
- Raised lettering and audible instructions to meet ADA requirements
- Operation and maintenance of the machines

Technology Integration Requirements

- Electrical utilities for farebox

Typical Implementation Setting

- High ridership mobility hubs where public transit service is offered

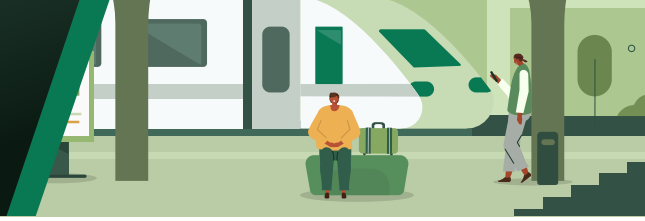
Implementation Examples

RapidRide – Seattle, WA

Seattle's RapidRide bus program includes off-board payment options that are integrated with the local Orca card system. The off-board payment options allow for all-door boarding and less dwell times at stops.

San Marin SMART Station – Novato, CA

Source: Kimley-Horn



Plan, Book, and Pay Technology with Clipper Integration

Description

Fare vending machines provide a quick and automated method for purchasing tickets on transit or other mobility services. Ticket purchasing should be convenient and flexible by accepting a variety of payment methods including cash, bank cards and mobile payments. Clipper card is being use regionally by different agencies.

Cost Per Unit: $ $$ $$$

Features

- Plug and play vending machine with dispensers, card slot, cash slot, and display screen

Implementation Considerations

- Clipper Card integration
- Online management system to get update when machines are out of service
- Mobile payment, smart card, or chip reader
- Must not block accessible path and boarding areas, or bus door zones
- Raised lettering and audible instructions to meet ADA requirements
- Shade or cover and lighting near ticket machine
- Operation and maintenance of the machines
- Explore opportunities to integrate fare vending machines with Universal Transportation Accounts to streamline transportation service access

Technology Integration Requirements

- Electronic connection
- Payment system hardware and software

Typical Implementation Setting

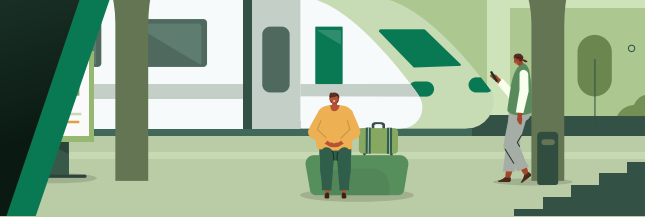
- High ridership mobility hubs where public transit service is offered

Implementation Example

Larkspur Ferry Terminal – Larkspur, CA

Ticket vending machines can be found at most SMART stations and ferry terminals. These machines allow for users to plan their trip and purchase tickets through a variety of payment methods.

Source: Kimley-Horn



Place Programming

Description

Pedestrian-focused public spaces play a prominent role in shaping a walkable, accessible, and enjoyable city. They provide places for people of all ages and abilities to enjoy their communities without competing with other modes of transportation. Well-designed public spaces integrated with mobility hubs encourage people to congregate at a centralized point, creating a sense of community and social interaction while helping to support local businesses.

Cost Per Unit: $ **$$** $$$

Features

- Landscaping features
- Furnishings
- Bollards and fencing
- Public art
- Parklets

Implementation Considerations

- Maintain a sense of openness with minimal obstructions
- Artwork, murals, water features, lighting, and landscaping to create a desirable space
- Architectural features such as overheads and awnings to provide shade for the public
- Flexibility for a variety of uses (e.g. farmers market, fairs, art, etc.)
- Size the facility to be effectively activated

Technology Integration Requirements

- Public Wi-Fi
- Lighting

Typical Implementation Setting

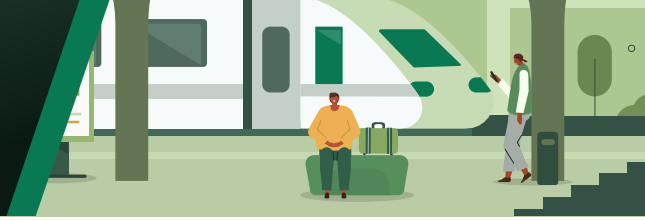
- Locations where right-of-way is available and there is community demand for an activated public space

Implementation Examples

Irving Street Parklet – San Francisco, CA

The Irving Street parklet creates a public space adjacent to commercial retail that is serviced by San Francisco's N-line streetcar. The parklet includes street furniture, bike racks, and green landscaping features.

Source: Google Earth



Digital Screens for Booking and Trip Planning

Description

Non-interactive or interactive kiosks display information that helps customers with decision making and are more efficient than making a phone call or reading printed schedules. Transit stations often utilize digital screens to broadcast real-time transit information, retail information, and station amenities. Information kiosks may provide access to mobility services and mobility information that would otherwise be inaccessible for users without smartphones. This includes the ability to reserve trips (such as carshare or bikeshare), find optimal routing or mobility connections, and obtain real-time information. Paid advertisements on these kiosks also provide a source of revenue for the agency operator while supporting local businesses by marketing products and services directly to transit riders. Digital signage or kiosks provide flexibility and enhanced capabilities to make real-time updates to information without substantial costs of reprinting or distributing paper information.

Cost Per Unit: $ $$ $$$

Features

- Mounted screen display
- Standalone digital kiosk with full HD LCD-TFT monitor with high brightness
- Real-time transit information
- Wayfinding
- Advertisement
- Digital station information and amenities
- Maintenance and operation schedule

Implementation Considerations

- Multilingual information required for areas with high percentage of non-English speakers
- Kiosks at visible locations such as entrances or pedestrian plazas, mounted at reasonable height, in well-lit and covered areas

Technology Integration Requirements

- Power supply

Typical Implementation Setting

- All mobility hubs, although the features will vary based on community needs and mobility services offered

Implementation Examples

On the Go Kiosks – New York City, NY

LinkNYC company partnered with CIVIQ Smartscapes and MTA Capital Construction/NYC Transit teams to install upgraded kiosks at three new Second Avenue subway stations. A total of four digital MTA On the Go kiosks with eight digital screens showing transit information were installed across the City. Each display functions independently from one another and operates using its own computer. The kiosks provide better scheduled trips to and from stations, with an updated map to include the new lines and scheduled arrival, departure, and service advisory information such as detour notices.

Source: Adobe

Wi-Fi and Device Charging

Description

Provide transit users with free high-speed internet and device charging. May reduce barriers to transit use and decrease perceived waiting time. May also benefit access to other mobility hub services, such as real-time information, and universal transportation accounts.

Cost Per Unit: $ $$ $$$

Features

- Wi-Fi connection
- Signage and login information
- Kiosks
- Device charging stations

Implementation Considerations

- High-speed power charging docks and connections
- Data security system to prevent identity theft or data breaches

Technology Integration Requirements

- Internet service provider
- Data hub
- Power supply

Typical Implementation Setting

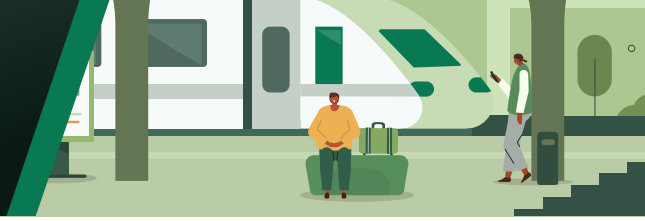
- Mobility hubs with multiple connecting transit services

Implementation Examples

LinkNYC Free Wi-Fi – New York City, NY

LinkNYC is a first-of-its-kind communications network that is replacing pay phones across the five boroughs with new structures called Links. Each Link provides super-fast, free public Wi-Fi, phone calls, device charging, and a tablet for access to city services, maps and directions.

Source: Adobe



Bicycle Repair Stations

Description

Bicycle repair stands enable bicyclists to make minor repairs and fill tires, making it more convenient for users to maintain safe bicycles. Multiple tools are securely fastened to the rack, which also serves as a bike stand for performing repairs.

Cost Per Unit: $ $$ $$$

Features

- Flat concrete surface
- Basic repairs and maintenance stand
- Bike hanger arms

Implementation Considerations

- The bike repair station must be in a highly visible and well-lit area, not blocking sidewalk areas, entryways, station ticketing machines, or autos right-of-way
- Repair station to be located in close proximity to existing bike facilities and security services to prevent vandalism and theft
- Bike repair station located within bike hub requires attendant and mechanics for assistant
- Trash receptacles and public cleaning station
- May require frequent maintenance and replacement of tools

Technology Integration Requirements

- None

Typical Implementation Setting

- Near high bicycle traffic routes and bike parking

Implementation Examples

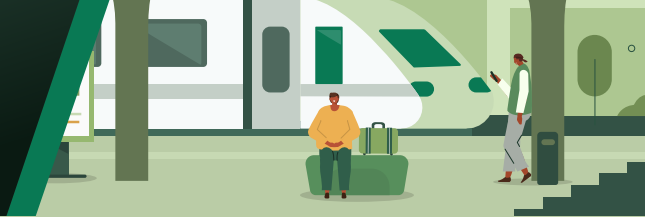
Downtown Los Angeles DOT Bike Repair Station – Los Angeles, CA

LADOT partners with small businesses and community organizations to install and maintain public bicycle repair stations. Making these available to the public is an effort by the City to encourage knowledge of bicycle repair and to make it easier for people on bicycles to get around and stay on the road.

VCU RamBikes – Richmond, VA

Virginia Commonwealth University partnered with RamBikes as part of their Department of Parking & Transportation program to provide free bicycle service and education to students, faculty and staff. Major transit hubs and other campus facilities include fix-it-yourself basic service stations.

Source: Adobe



Universal Transportation Account/Mobility as a Service (MaaS)/Mobility on Demand (MOD)

Description

Universal Transportation Accounts are an integrated mobile payment and mobility access system for a variety of mobility services (e.g. transit, parking, bikeshare, EV charging, etc.). A single smartphone app can be used to find, access, and pay for mobility services. The mobile payment account can also be used to administer travel-based incentives to reward people who seek alternatives to driving alone and provide benefits to disadvantaged populations. This reduces reliance on privately-owned automobiles and enhances access to a suite of publicly- and privately-provided transportation options. Universal Transportation Accounts can be used to implement MOD/MaaS programs where users pay for access to a suite of on-demand transportation solutions, promoting frequent and cost-effective use, and reducing reliance on the personal automobile.

Cost: $ $$ $$$

Features

- Fare integration system
- Mobile application
- Partnerships with mobility vendors
- Ability to compare cost and travel time of various mobility options
- Ability to make reservations for mobility services
- Discounts for using multiple mobility options
- Frequent user programs providing access to a suite of mobility services for a fixed cost

Implementation Considerations

- Who will create and maintain a mobile payment system
- Prepare a marketing strategy to educate the public on the benefits of a mobile payment system
- Partner with credit institutions and public and private mobility partners to accept a variety of financial instruments for a wide range of mobility services

Technology Integration Requirements

- Integration with various mobility services
- Integration with financial institutions

Typical Implementation Setting

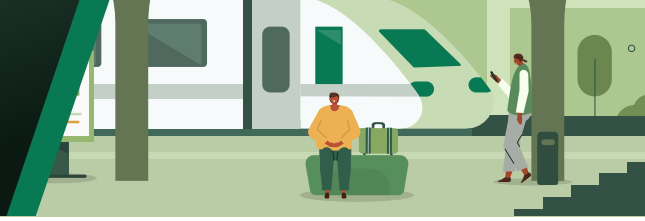
- Regional implementation

Implementation Examples

Whim

Available in the Helsinki region, the Whim app offers convenient access to a variety of shared mobility options – transit, taxi, rental cars, and bikeshare. Whim includes convenient payment options, including two monthly subscription plans for frequent users. The flexibility of Whim allows for a seamless travel experience while reducing reliance on the private automobile.

Source: Adobe



Real-Time Parking Availability

Description

Parking space management systems indicate parking availability in real-time using automated sensors by communicating availability to smartphone apps and real-time signage. This can inform drivers about parking availability at mobility hubs so they can effectively choose which mobility hub to access as well as their transportation mode. This also increases the opportunity to efficiently manage and price parking resources. Real-time parking systems create a better customer experience and lead to lower overall congestion and higher parking revenues.

Cost: $ **$$** $$$

Features

- Electronic data collection sensors and camera hardware
- Electronic signage
- Mobile apps
- Billing systems
- Gate-control

Implementation Considerations

- Information on parking availability is widely available to inform user choices
- Parking lot modifications in order to effectively monitor ins/outs and/or space utilization

Technology Integration Requirements

- Electrical wiring
- Power supply
- Integrated server
- Mobile app integration

Typical Implementation Setting

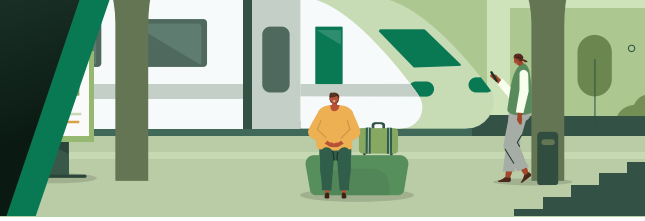
- Mobility hubs where parking is frequently fully utilized

Implementation Examples

Downtown Parking Program – City of Santa Barbara, CA

The City of Santa Barbara partners with the Downtown Community to operate a parking program that maintains nine parking lots and five parking structures with parking permit and parking availability. Real-time parking availability is available on the City website with the specific lot number, amount of space available, and the street address. The website also features a real-time map displaying color coded parking lots based on their availability.

Source: Adobe



Parking Reservation Systems

Description

Parking reservation systems allow customers to make parking reservations in advance and prepay for their parking. This can be an effective tool for prioritizing access to parking for areas with excess parking demand. For example, a parking reservation system allows for priority to be given to carpools or vanpools. It also can be effective at encouraging people to use a mobility hub, as they would have confidence that they will have a parking space available. Parking reservations can be an effective tool to increase parking revenues which can be used to improve other mobility services.

Cost: $ $$ $$$

Features

- Parking access management or enforcement system
- Online reservation system
- Online payment system
- Prioritization and/or permitting system

Implementation Considerations

- Integration with a parking availability system and/or a parking access management system, such as access gates
- Enforcement depending on the access configuration

Technology Integration Requirements

- Online reservation system
- Universal transportation account

Typical Implementation Setting

- Mobility hubs where parking is frequently fully utilized
- Mobility hubs with dedicated carpool or vanpool spaces

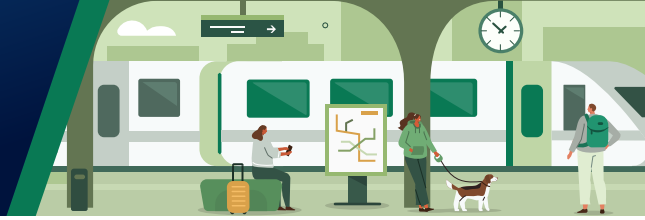
Implementation Examples

ParkMobile – Rancho Palos Verdes, CA

The City of Rancho Palos Verdes has launched an online parking reservation system for Del Cerro Park and the popular Portuguese Bend Reserve. Visitors use the ParkMobile app to reserve parking spaces at five different dedicated parking lots along Crenshaw Boulevard, totaling 60 spaces. A reservation is $10 for a time block of two hours and 45 minutes.

Source: Adobe

Information



Real-Time Travel Information

Description

Real-time travel information systems allow transit riders and other mobility service users to know how long they can expect to wait for a vehicle to arrive along with other information required for riders to plan trips. These real-time information systems provide passengers with the information to make informed travel decisions based on the availability of transit and other mobility services.

Cost Per Unit: $ $$ $$$

Features

- Real-time information signs connecting to an integrated MOD/MaaS system
- Station area maps with interactive displays
- Screens placed in major attractors and employment areas with information about nearby transit services

Implementation Considerations

- Information transit users need to make their trips more efficient
- Access to other real-time traveler information via personal smartphones and what real-time information can best complement these other sources
- ADA and universal design standards, and audio options for the visually impaired
- Partnerships with local employers, property managers, and other public and private entities to integrate transit information in high use areas
- Consider ridership levels and peak patronage foot-traffic when determining the number of interactive displays

Technology Integration Requirements

- LED screens for display
- Regional data hub and connectivity to signage
- Real-time travel mobile application

Typical Implementation Setting

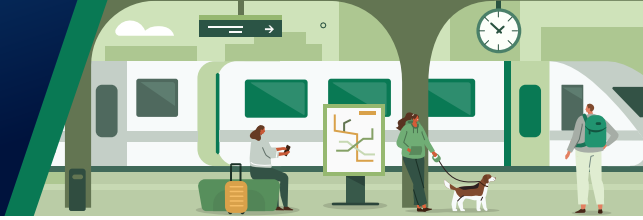
- Anywhere multiple transit services are provided
- Areas where smartphone use may be lower or cellular signal is weak

Implementation Examples

San Rafael Transit Center – San Rafael, CA

The San Rafael Transit Center provides riders with real-time arrival information via the internet, phone, and display screens. The information utilizes real-time bus locations using AVL/GPS systems. Access to real-time travel information reduces actual and perceived wait times and increases the reliability of transit, which can encourage a mode shift.

Source: Kimley-Horn



Hub Area Maps, Amenity Information, and Bulletins

Description

Physical displays that help orient users and direct them to nearby amenities and relevant announcements. Could include advertising of transportation incentives and rewards programs such as Marin Commutes.

Cost Per Unit: $ $$ $$$

Features

- Static area maps
- Amenity information posters
- Bulletin boards

Implementation Considerations

- Coordinated with digital and physical wayfinding to point users to convenient, comfortable, and safe paths of travel to frequently used destinations and mobility connections
- Informational materials must adhere to universal design standards and must be ADA accessible and include stop identification numbers, routes served, agency logo, and contact information
- Audio options for visually impaired customers
- Languages typical to the region
- Interactive touch-screen maps or kiosks

Technology Integration Requirements

- Touch screen displays

Typical Implementation Setting

- All mobility hubs

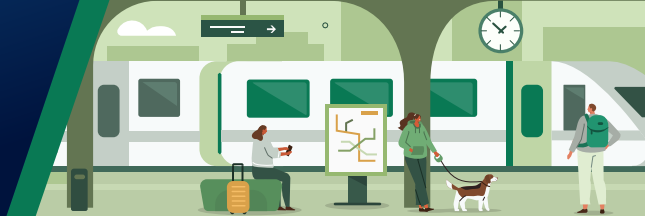
Implementation Examples

Bay Area Rapid Transit Oakland City Center – Oakland, CA

Some of BART's larger station locations include site maps to help visualize exits and station amenities. The map located at the entrance of the Oakland City Center station shows information such as the location of accessible routes (escalators and elevators), station agent booths, and ticket vending machines.

Strasbourg Saint-Denis Métro Station – Paris, France

Source: Kimley-Horn



Monitoring Systems to Measure Mobility and Public Life Metrics

Description

Sensor and/or survey-based tools that track and monitor how the hub is used and how often.

Cost Per Unit: $ $$ $$$

Features

- Sensors
- Web based or physical mobility hub usage survey

Implementation Considerations

- Data tools to iteratively refine wayfinding, signage, and mobility hub design
- May need personnel staffed on site to market survey
- Privacy concerns depending on sensor technology

Technology Integration Requirements

- Radar sensor technology
- Digital/web-based survey tools

Typical Implementation Setting

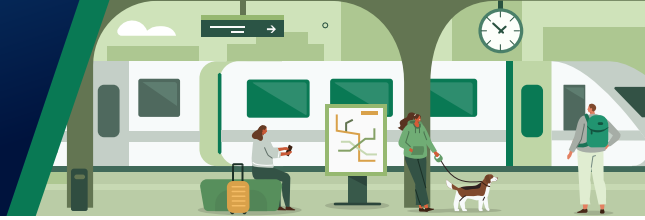
- Mobility hubs with high ridership across multiple transportation modes

Implementation Examples

Sumitomo Pedestrian Detection – Japan

Japan is currently implementing millimeter wave radar detection to enhance traffic safety and efficiency. This technology uses sensors to detect pedestrian movement and adjust crossing signal time based on the live readings of pedestrian traffic and travel times. This same technology is currently being researched to help optimize and organize pedestrian flows at busy train stations and transit terminals.

Source: Adobe



Digital and Physical Wayfinding

Description

Wayfinding is the term describing all signage and guidance that allow users to find their destination. Wayfinding is used to navigate people from point to point. This is particularly useful in transportation hubs such as airports, train stations, or bus depots, where people must make time-sensitive decisions about the route they may travel in an unfamiliar environment. At mobility hubs, wayfinding is still important given the potential diversity in services and layout.

Cost Per Unit: $ $$ $$$

Features

- Static and dynamic signage
- Paint and other materials to identify zones
- Follow regional standards and recommendations from MTC Regional Transit Wayfinding Standards. See https://mtc.ca.gov/sites/default/files/MTC_WayfindingGuidelines_2019.pdf

Implementation Considerations

- Wayfinding points users to convenient, comfortable, and safe paths of travel to frequently used destinations and mobility connections
- Signs must adhere to universal design standards and must be ADA accessible and include stop identification numbers, routes served, agency logo, and contact information
- Audio options for visually impaired customers
- Languages typical to the region
- Interactive touch-screen maps or kiosks
- Consistent wayfinding theme may be beneficial for an entire system, or may be distinctive by community

Technology Integration Requirements

- Internet connectivity for dynamic, navigable maps

Typical Implementation Setting

- All mobility hubs

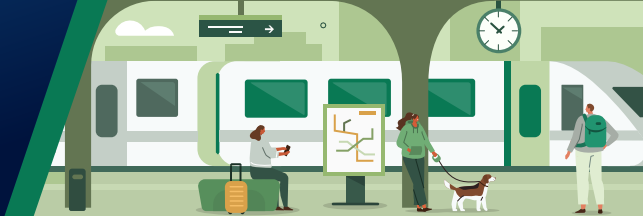
Implementation Examples

Union Station – Los Angeles, CA

LA Metro implemented a comprehensive wayfinding system for the revitalization of Los Angeles's Union Station. The design incorporated all-mounted LED signs for the arrival/departure information for both Amtrak and Metrolink lines, a large interactive pylon with four touchscreens to help travelers with trip planning, as well as identity pylons around the perimeter of Union Station, signage at Patsaouras Bus Plaza, and naming for the station's different east and west entries. The system complements the station's historic architecture, reinforces it as the premier destination for transit users in Los Angeles, and establishes the foundation for the future development of Union Station.

Oakland City Center BART Station – Oakland, CA

Source: Kimley-Horn



Ambassadors

Description

Trained personnel or volunteers that are knowledgeable about the surrounding area, amenities, and mobility options. They can also guide users on how to use mobility hubs and transit services to ensure the safety and comfort of riders.

Cost Per Unit: $ **$$** $$$

Ongoing labor cost if staffed

Features

- Ambassadors placed on-site at the mobility hubs or on-board transit services

Implementation Considerations

- Ambassadors could be placed at the mobility hub or on-board transit services (train or ferry)
- Consider placing ambassadors at high traffic mobility hubs and stations
- Ensure ambassadors have a clear description of their job duties

Technology Integration Requirements

- Communication systems for ambassadors

Typical Implementation Setting

- Where there is a large population of seniors, students, or new transit riders
- Where monitoring and security is most needed to improve safety for riders

Implementation Examples

LA Metro Rail Safety Ambassador Program – Los Angeles, CA

Metro's Community Relations Department, Metro Community Education (MCE) created the Rail Safety Ambassador (RSA) Program in 2003. In an effort to educate the public about safety when near tracks and trains and to observe and report traffic behaviors, the program started out with six RSAs on the Metro Gold Line to Pasadena. Since that time, the program has expanded but continues to support MCE's ongoing safety education outreach efforts conducted on Metro's street-running light rail alignments (Blue, Expo and Gold Lines).

Source: Adobe

C

Appendix C:

Round 1 Outreach Summary

Transportation Authority of Marin

Marin County Mobility Hub Plan

Draft Round 1 Outreach Summary

December 2024

Table of Contents

Overview

Kimley-Horn's Public Engagement Plan for the Marin County Mobility Hub Plan (Project) included strategies and activities to reach a broad cross-section of the community. The Plan includes two rounds of engagement, the first of which focused on reaching transit riders to identify mobility hub needs and opportunities. This report summarizes the activities and findings from the first round of outreach.

The first round of outreach occurred in October and November 2024 and consisted of two main components: an online survey, available for five weeks, and seven in-person pop-up events.

The online survey, in both English and Spanish, was made available on October 8, 2024, and remained open for five weeks, until November 11, 2024. It was promoted through TAM's various communication channels, including a webpage, e-newsletters, and social media via Facebook, X, and Instagram. Stakeholders and community leaders were asked to support the effort by sharing public notifications with their networks.

On October 15, in-person outreach commenced with two pop-up events held at the Novato San Marin SMART and Novato Downtown SMART stations. The in-person effort consisted of seven pop-ups over a two-and-a-half-week period at SMART and ferry terminals in Marin County as follows:

- Tuesday, 10/15: Novato San Marin SMART
- Tuesday, 10/15: Novato Downtown SMART
- Wednesday, 10/16: Novato Hamilton SMART
- Tuesday, 10/22: Sausalito Ferry (onboard)
- Wednesday, 10/23: Larkspur Ferry (onboard)
- Thursday, 10/24: Marin Civic Center SMART
- Wednesday, 10/30: Larkspur SMART

In-Person Events

Palm cards, in both English and Spanish, featuring a QR code to the project website, were developed and distributed at the in-person events. Maps on poster boards were presented, allowing participants to visualize the study area and place sticky notes where they experienced challenges or identified needs. All collateral used to engage and promote round one outreach are available in **Appendix A: Round One Outreach Collateral**.

The details of each event and key feedback themes follow, with more detailed comments available in **Appendix B: In-person Event Comments**.

October 15, 2024 – Novato San Marin SMART

Details

- Tuesday, October 15, 2024
- 6:30AM to 10:30AM
- Number of people engaged: 27
- Number of palm cards distributed: ~30

Key Feedback Themes

- Provide bathroom facilities and additional shelters on platform and at bus stops
- Provide secure bike parking
- Provide reduced fares for teachers and parents going to local schools
- Increase frequency of service
- Expand service hours to provide equitable and accessible opportunities for all riders
- Improve accessibility and reliability of train schedules
- Synchronize bus and train schedules

October 15, 2024 – Novato Downtown SMART

Details

- Tuesday, October 15, 2024
- 2PM to 6PM
- Number of people engaged: 47
- Number of palm cards distributed: ~60

Key Feedback Themes

- Provide bathroom facilities
- Improve reliability of train schedules
- Improve synchronization of bus and train schedules
- Excitement for bikeshare coming to this station

October 16, 2024 – Novato Hamilton SMART

Details

- Wednesday, October 16, 2024
- 12:30PM to 4:30PM
- Number of people engaged: 17
- Number of palm cards distributed: ~17

Key Feedback Themes

- Provide bathroom facilities and water stations
- Increase awareness of Hamilton SMART Station
- Add and improve bus and SMART train connections and synchronize schedules
- Provide additional lighting at station, on SMART trail and flashing crosswalk lights on Main Gate Road
- Add and improve wayfinding signage for pedestrians and bicyclists along the SMART trail
- Add more bike storage on trains

October 22, 2024 – Sausalito Ferry (onboard)

Details

- Tuesday, October 22, 2024
- 7AM to 11AM
- Number of people engaged: 4
- Number of palm cards distributed: ~50

Key Feedback Themes

- Improve ferry schedule consistency
- Improve connectivity and service with bus lines
- Offer Wi-Fi onboard

October 23, 2024 – Larkspur Ferry (onboard)

Details

- Wednesday, October 23, 2024
- 6AM to 10AM
- Number of people engaged: 70
- Number of palm cards distributed: ~50

Key Feedback Themes

- Provide Wi-Fi at stations and onboard
- Improve synchronization of train and ferry schedules
- Increase frequency of service and expand the number of destinations
- Improve signage at stations
- Provide heat and air conditioning onboard and at stations
- Add bike parking

October 24, 2024 – Marin Civic Center SMART

Details

- Thursday, October 24, 2024
- 2PM to 6PM
- Number of people engaged: 50
- Number of palm cards distributed: ~50

Key Feedback Themes

- Extend hours of service and frequency
- Add additional trains/cars during peak hours to accommodate people, bikes, scooters, and/or skateboards
- Improve synchronization of bus lines and train schedules
- Provide additional amenities at stations such as bathrooms, parking, additional lighting, and shuttles to the Civic Center

October 30, 2024 – Larkspur SMART

Details

- Wednesday, October 30, 2024
- 2PM to 6PM
- Number of people engaged: 46
- Number of palm cards distributed: ~35

Key Feedback Themes

- Improve synchronization of ferry and train schedules
- Improve pedestrian access between ferry terminal and train station
- Improve first and last mile access from the station into Larkspur and surrounding cities
- Improve bike facilities and paths along SMART corridor

Survey Results

The interactions at the in-person events and online promotion of the survey resulted in a total of 135 survey responses. The completion rate, or the percentage of survey takers that completed the entire survey, was 88%. The greatest number of survey responses were received during the weeks of the in-person pop-up events.

General Survey Respondent Themes

All survey respondents were asked where they live, how often they use SMART or ferry services in Marin County, and optional demographic questions. Respondents were directed to a series of questions about their experience at SMART and ferry terminals and to rank potential pedestrian, bike, vehicle, transit, and station improvements. Afterward, they were directed to more specific questions about the improvements that they prioritized. Key findings of the questions regarding current mobility patterns include:

- Approximately one-third of respondents reported to not live in Marin County (**Figure 1**).
- Almost half of the respondents used the Larkspur Ferry Terminal a few times a year (**Figure 2**).
- Over 60% of respondents travel to a SMART station or ferry terminal at least a few times per week (**Figure 3**).
- Over two-thirds of respondents use SMART and ferries to commute to and from work (**Figure 4**).
- Of respondents who live in Marin County, more than one-third indicated that they drive to access SMART and ferry terminals (**Figure 5**).
- Of respondents who access destinations in Marin County, about half walk to their final destination from SMART or ferry terminals (**Figure 6**).
- For trips both to and from SMART and ferry terminals, more than one-third of respondents identified biking as their mode of travel (**Figure 5** and **Figure 6**).

Below is a graphical representation of the survey responses to questions about residency and transit or active transportation usage.

Figure 1: Summary of survey responses – home location

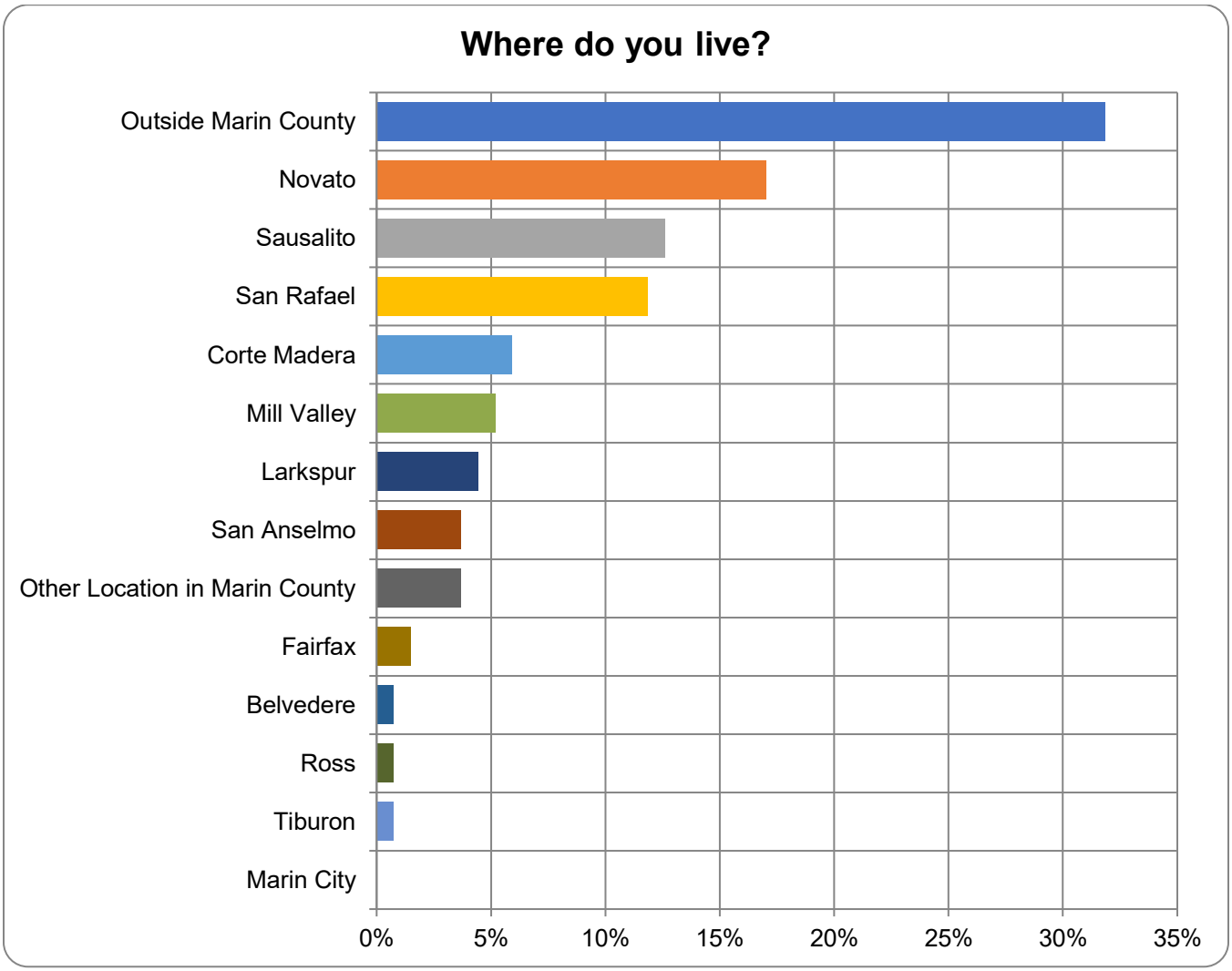


Figure 2: Summary of survey responses – use of train and ferry terminals

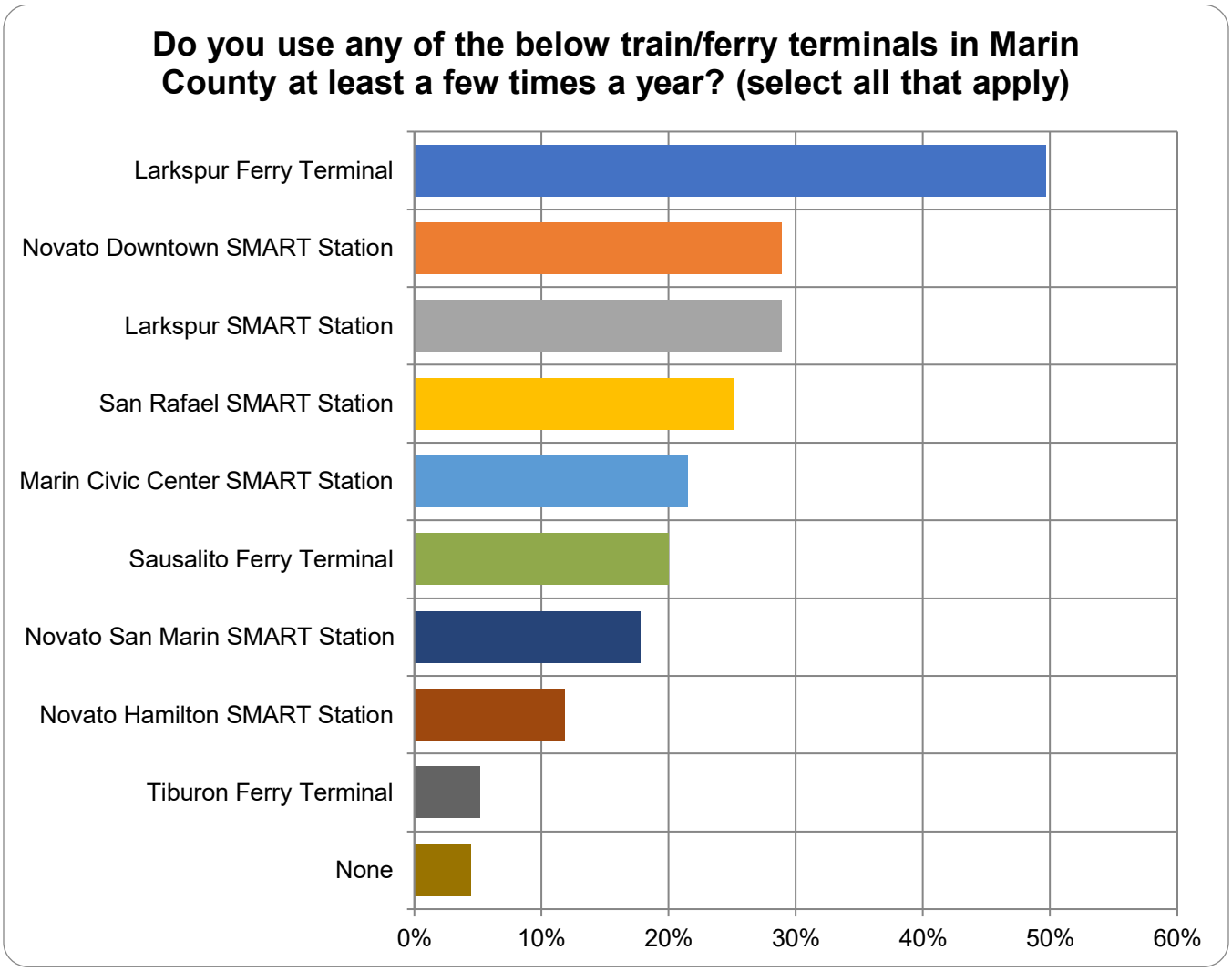


Figure 3: Summary of survey responses – frequency of use of train and ferry terminals

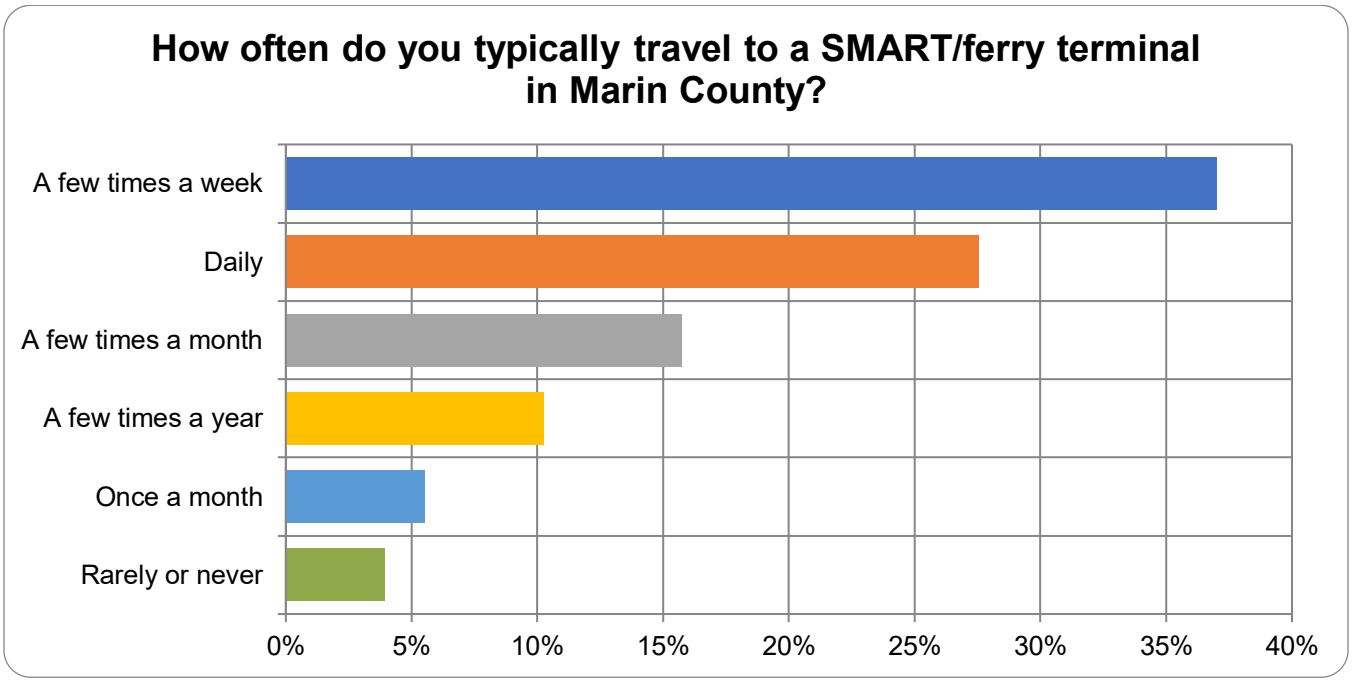


Figure 4: Summary of survey responses – type of trip using train and ferry terminals

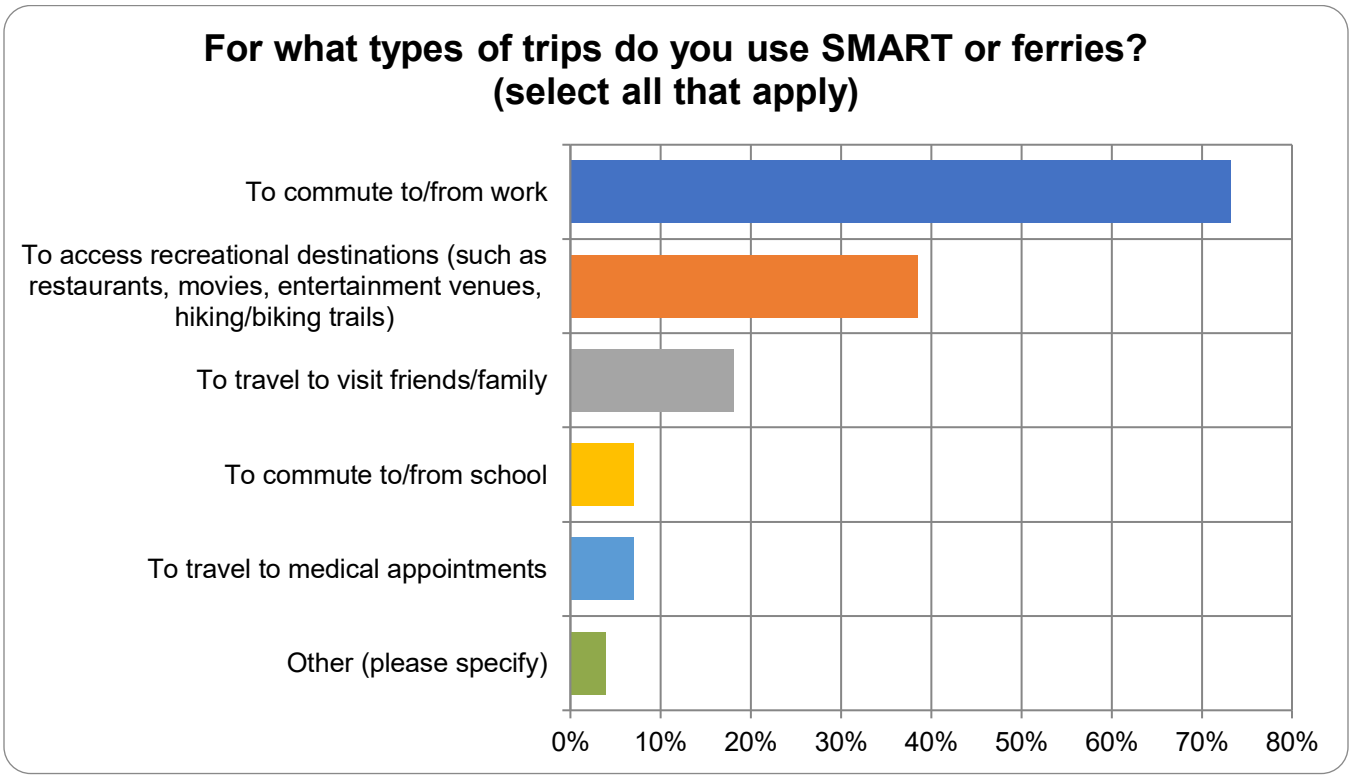


Figure 5: Summary of survey responses – access mode to train and ferry terminals

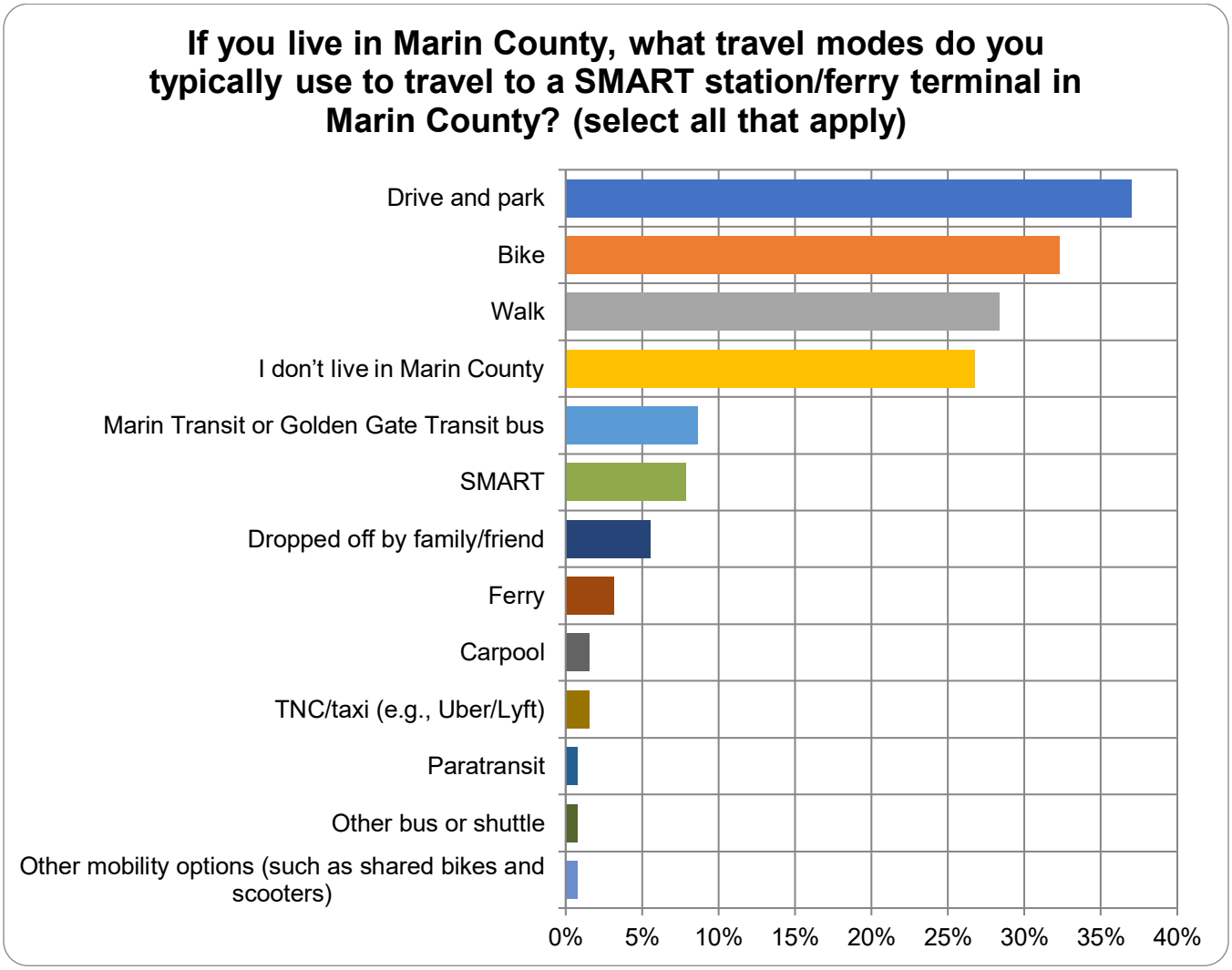
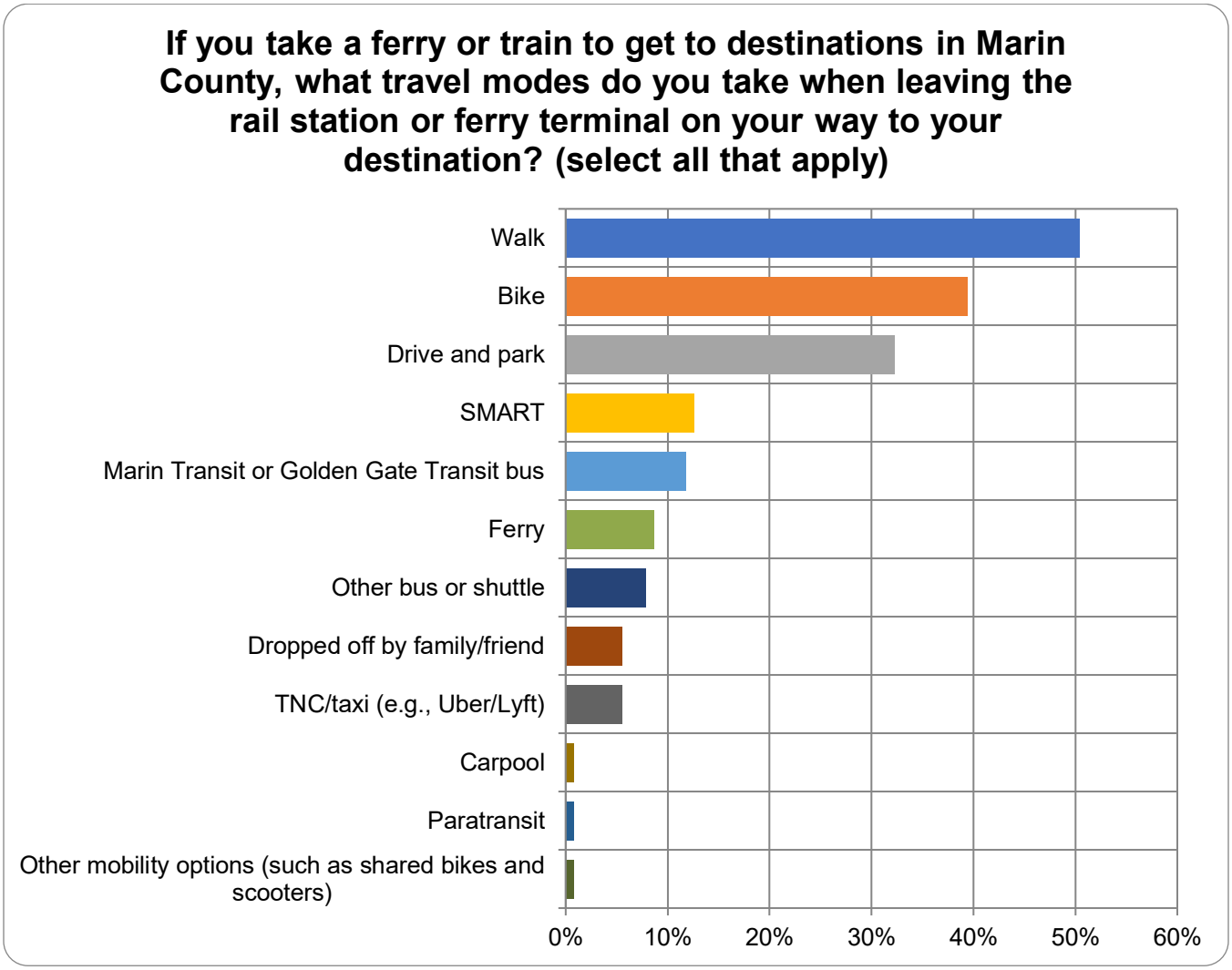


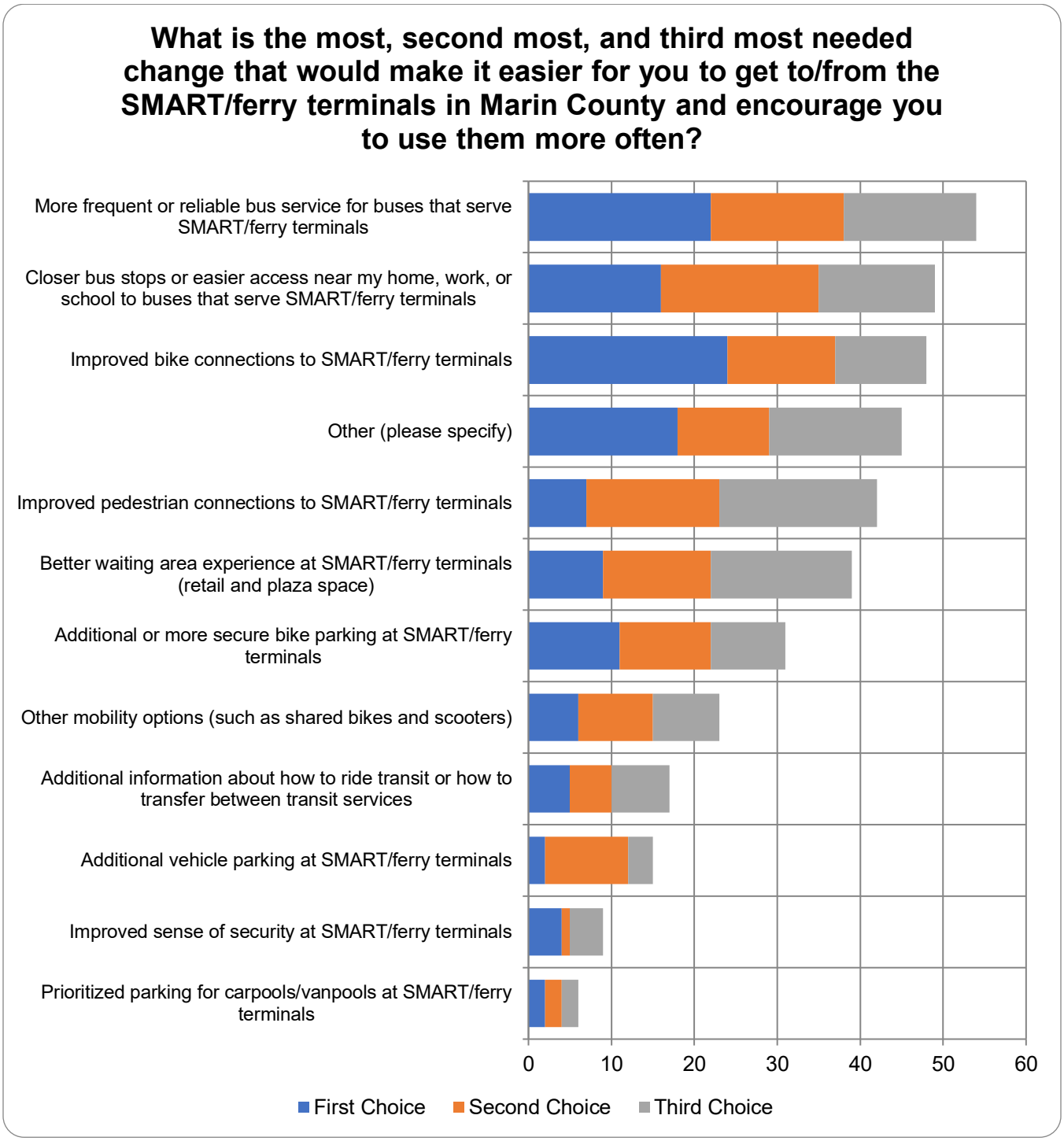
Figure 6: Summary of survey responses – departure mode to train and ferry terminals



High-Priority Improvement Themes

Survey users selected more frequent and reliable bus service, closer bus stops to key destinations (home, work, and school), and improved bike connections as their top three improvement priorities. Improved bike connections was selected as the highest priority improvement by the most respondents.

Figure 7: Summary of survey responses – priority improvements



Unique responses that were made under "Other" are listed in **Appendix C: Open-Ended Survey Responses**.

Transit Improvements

The respondents who selected "more frequent or reliable bus service for buses that serve SMART/ferry terminals" or "closer bus stops or easier access near my home, work, or school to buses that serve SMART/ferry terminals" as a first, second, or third priority, identified two key challenges: 1) 34% of these respondents identified transit connections as not being well-timed with rail and ferries, causing users to wait too long to make connections and 2) 23% of these respondents identified long travel times to get to their next destination as their biggest challenge.

Some respondents that selected "Other" named specific transit improvements that would enhance connectivity to SMART and ferry terminals. Several respondents commented on improving the synchronization between SMART, ferry, and bus schedules. Additionally, several respondents would like to see SMART increase its frequency as well as run later on weekends. One respondent also highlighted improving transit connections to existing paratransit service.

Some respondents identified transit services that do not currently exist but they believe should be added, such as a shuttle service connecting SMART stations to key destinations.

Many respondents who selected "Other" also named specific improvements on-board trains and ferries, such as increased space and Wi-Fi. Detailed results of the transit improvement follow-up question are shown in **Figure 12** in **Appendix D: Detailed Results of Follow Up Questions**.

Bike Improvements

Of the respondents who selected "improved bike connections to SMART/ferry terminals" and "additional or more secure bike parking at SMART/ferry terminals" as a first, second, or third priority, 32% of respondents do not currently bike, so the bicycle improvements that they identified may encourage them to begin biking to and from SMART stations and ferry terminals.

Three key improvements would encourage respondents to bike to SMART and ferry terminals or improve their experience: 1) new bicycle lanes and paths on nearby roadways, 2) improved bike parking facilities onboard ferries and trains, and 3) more comfortable bike lanes.

Regarding bike parking at SMART and ferry terminals, most respondents would like to see enhanced security around bike parking areas and larger, more accessible bike lockers.

Some respondents that selected "Other" named specific bike improvements that would enhance using trains and ferries for bike users. Several respondents identified adding more bike storage on-board trains, perhaps even an additional car on trains solely dedicated to bike storage. Detailed results of the bike improvement follow-up questions are shown in **Figure 13**, **Figure 14**, and **Figure 15** in **Appendix D: Detailed Results of Follow Up Questions**.

Pedestrian Improvements

Of the respondents who selected "improved pedestrian connections to SMART/ferry terminals" as a first, second, or third priority, 44% stated that more direct walking paths to the station/ferry terminal would encourage them to walk or improve their walking experience and 17% stated that safer street crossings would encourage them to walk or improve their walking experience. Detailed results of the pedestrian improvement follow-up question are shown in **Figure 16** in **Appendix D: Detailed Results of Follow Up Questions**.

Vehicle Improvements

Of the respondents who selected "additional vehicle parking at SMART/ferry terminals" or "prioritized parking for carpools/vanpools at SMART/ferry terminals" as a first, second, or third priority, 25% identified lack of available parking and an additional 25% identified expense of parking as their biggest challenges when driving to stations and ferry terminals.

Some respondents that selected "Other" would like to see free vehicle parking at stations and nearby local bus stops, including overnight parking. Detailed results of the vehicle improvement follow-up question are shown in **Figure 17** in **Appendix D: Detailed Results of Follow Up Questions**.

Station Improvements

Of respondents who selected "improved sense of security at SMART/ferry terminals" as a first, second or third priority, 40% chose additional patrols or security presence as what could be most improved about station security. Detailed results of the security improvement follow-up question are shown in **Figure 18** in **Appendix D: Detailed Results of Follow Up Questions**.

Of respondents who selected "additional information about how to ride transit or how to transfer between transit services" and "better waiting area experience at SMART/ferry terminals (retail and plaza space)" as a first, second, or third priority, 31% chose improved waiting areas, such as seating, shade, and rain cover as what could be most improved about station facilities and 21% of respondents chose having more information about arrival and departure times. Detailed results of the station wayfinding and waiting experience follow-up question are shown in **Figure 19** in **Appendix D: Detailed Results of Follow Up Questions**.

Other Improvement Locations

Respondents were also given the opportunity to identify any other transit hubs in Marin County that need improved waiting areas or additional mobility services, and these responses are listed in **Appendix C: Open-Ended Survey Responses**. San Rafael Transit Center, adjacent to the San Rafael SMART Station, was mentioned several times. Other transit hubs named by respondents were Rowland Boulevard Park-and-Ride, Downtown Petaluma, and Downtown Novato. Some respondents also desire better connections to San Anselmo and Vallejo.

Optional Survey Questions (Demographics)

Below is a summary of the optional demographic questions.

- More than half of respondents were between 25 and 54 years old (**Figure 8**).
- Over 70% of respondents identified as Caucasian (**Figure 9**).
- The vast majority of respondents have access to a vehicle (**Figure 10**).
- Over half of respondents heard about the survey at an in-person pop-up event (**Figure 11**).

Figure 8: Summary of survey responses – age

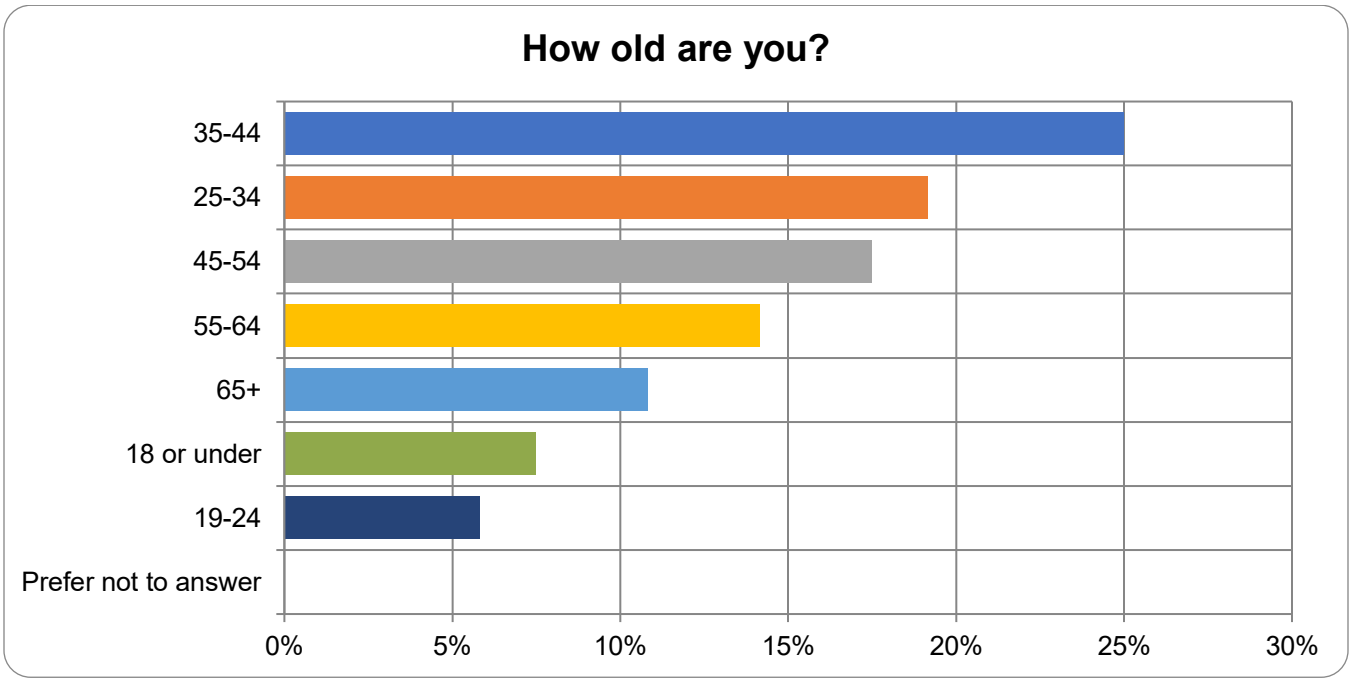


Figure 9: Summary of survey responses – ethnicity

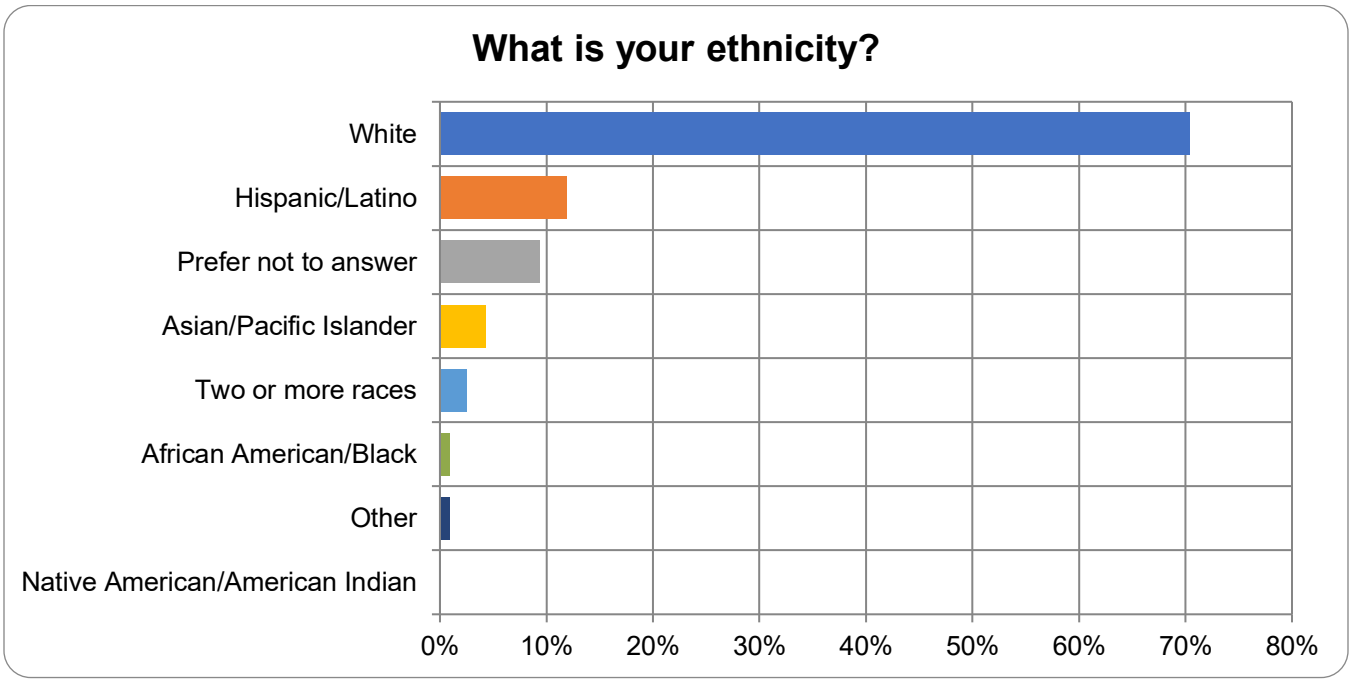


Figure 10: Summary of survey responses – access to a vehicle

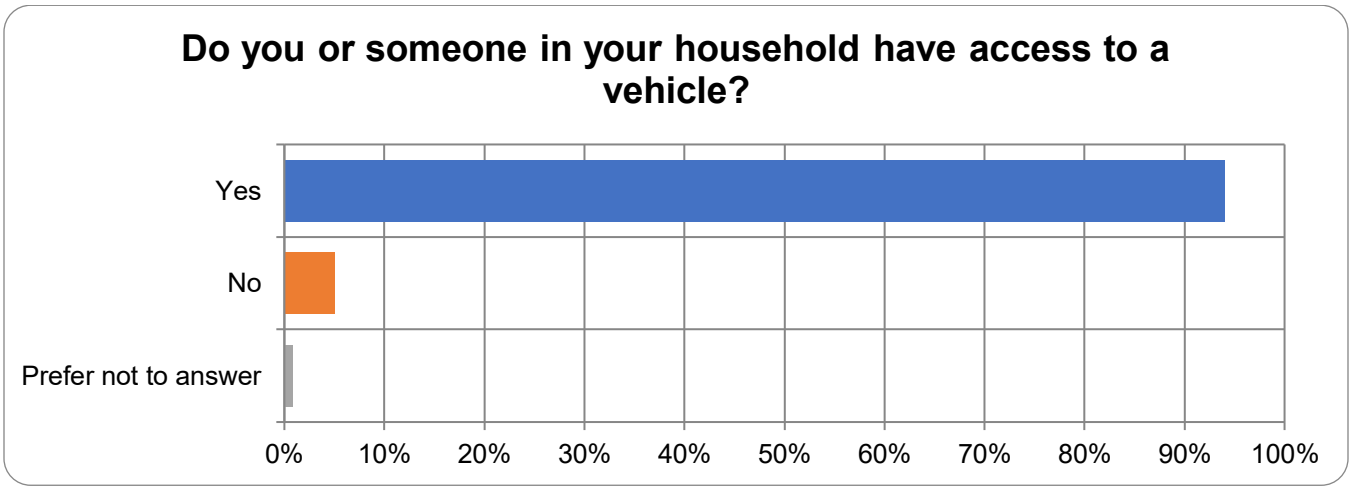
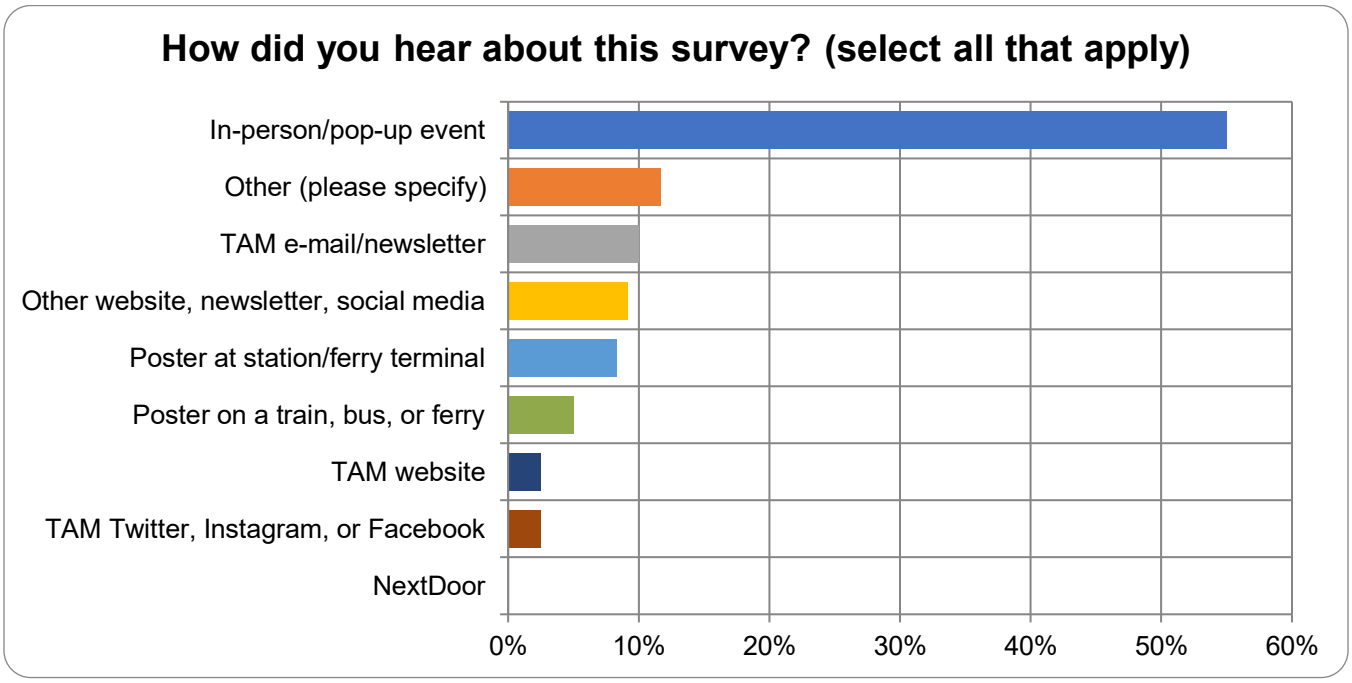


Figure 11: Summary of survey responses – informed of survey



Appendix A: Round One Outreach Collateral


Burdell Mountain
Novato San Marin SMART
Novato Downtown SMART
Novato Hamilton SMART
Big Rock Ridge
St. Vincent
Marin Civic Center SMART
China Camp State Park
San Rafael SMART
Larkspur SMART
Larkspur Ferry Terminal
Larkspur
Mount Tamalpais
Mill Valley
Mt. Tamalpais State Park
Tamalpais-Homestead Valley
El Campo
Sausalito Ferry Terminal
Tiburon Ferry Terminal
Marin Peninsula
San Pablo Bay National Wildlife Refuge
San Pablo Bay Wildlife Area
Richmond
Marin County
Mobility Hub Plan
mobility hub
/mōˈbilədē/ /həb
noun
1. Places in a community that bring together public transit, biking, walking, shared services, and other options for people to get where they want to go.
2. An active center that offers a safe, comfortable, convenient, and accessible environment to transfer seamlessly from one type of transportation to another.


TAM
Transportation Authority of Marin
Le pedimos su opinión sobre cómo hacer que las estaciones de tren, ferry y autobús del Condado de Marin sean más fáciles de acceder y más agradables de utilizar.
Ayude a dar forma al futuro de las estaciones de transporte público del Condado de Marín tomando una breve encuesta.
Aprenda más y comparta su opinión en www.tam.ca.gov/mh/.
Marin County
Mobility Hub Plan
¡ESCANEAME!


Burdell Mountain
Novato San Marin SMART
Novato Blvd
Novato
Novato Downtown SMART
101
Novato Hamilton SMART
Big Rock Ridge
San Pablo Bay National Wildlife Refuge
San Pablo Bay Wildlife Area
St. Vincent
Marin Civic Center SMART
China Camp State Park
San Rafael
San Rafael SMART
San Francisco Bay
El Sobrante
San Pablo
Larkspur SMART
Larkspur Ferry Terminal
Richmond
Larkspur
580
Mount Tamalpais
Mill Valley
Mt. Tamalpais State Park
El Campo
Tamalpais-Homestead Valley
Alameda
Sausalito Ferry Terminal
Tiburon Ferry Terminal
Marin Peninsula
Marin County
Mobility Hub Plan
centro de movilidad
/mō ˈbilədē/ /həb
sustantivo
1. Lugares de una comunidad que reúnen el transporte público, el uso de la bicicleta, los viajes a pie, los servicios compartidos y otras opciones para que la gente llegue a donde quiere ir.
2. Un centro activo que ofrece un entorno seguro, cómodo, confortable y accesible para transferir de un tipo de transporte a otro sin problemas.

Appendix B: In-person Event Comments

October 15, 2024 – Novato San Marin SMART

Amenities and Facility Improvements

- Add water stations
  - Particularly for students going to and from school
- Add bathroom facilities – portable or permanent
- Add shelters or shade structures on platform to help with the heat or rainy days
  - Include shelters with no benches for people with wheelchairs
  - Shelters on opposite ends of the platform would be good
  - Add rain/sun shelter/coverage for bus station connections
- There was a safety concern over a broken window
- Garbage and littering in the early mornings are an occasional issue
- Fare machines do not work sometimes
- It can be confusing on how to pay and where
- Include drought-tolerant landscaping and plant trees to act as a shade canopy for vehicles
  - Consider opportunity for solar panels
- Suggestion to provide a ferry-like service incorporating a snack shop, food and drinks, water stations, etc., specifically for the connection between Larkspur and the airport
- Expansion efforts should be focused on the Downtown and Hamilton stations
- A platform ramp, stairs or access should be made closer to the center of the platform to make sure people don't miss the train
- For example, this is challenging for a parent running late and having to go to the ends of the platform and then run up the ramp to catch the train with their child

Equity and Accessibility for all Riders

- Offer free or reduced fares
  - For teachers in local schools
  - For parents dropping off their children at school
  - Incorporate a "companion" ticket program/service for parents taking their kids to school
- Expand hours and frequency of service for riders
  - Suggestion to increase frequency to 30 mins. during high traffic/rush hour
  - Add additional times for the trains
- Synchronize the bus and train schedules for commuters
  - For example, if the 49-line bus is running behind schedule, the 9:03 a.m. train will be missed, and the rider would have to wait another hour for the next train.

Connectivity and Networks

- Increase late train departures after 9 p.m.
  - Residents enjoy dining or visiting other areas such as San Rafael, Petaluma, etc.
- Connection to Healdsburg would help increase ridership

- Observation from rider that the current rail system is synchronized because they seem to operate on a single track. Therefore, if one train is delayed, then the next train down the line gets delayed and so on and is not ideal.

Accessibility to Transit Schedules

- Improve the transit app
  - Make it more reliable, accessible and accurate
  - One rider mentioned the transit app was incorrect once, so they deleted the app
- Improve user experience of online schedule for different devices such as phone, tablet and computer
  - SMART Train scheduled between southbound and northbound is split into two separate tables when viewing them online on a mobile device and a tablet. This makes it difficult to read and creates accessibility issues for new users.
- Add real-time train arrival/departure signs for people who do not have smartphone and visitors/tourists, as well as clocks
- Improve transit schedules accessibility for people who are visually impaired
  - Suggestion to incorporate a machine with a button that will voice out loud the name of the station, what train is coming next, how much the fare is, etc., for people who are visually impaired.

Bikes & Bike Paths

- These provide good connections to the downtown area
- Add connections to bike trails along the train route
- Add bike lock areas and storage
  - Add bike racks so there are racks on both sides of the stations

Additional Feedback & Input Received

- Overall great facility and service
- Good reliability on the trains
- Good networks with the Santa Rosa bus lines
- Northbound late train departure at 9 p.m. is good
- Happy with San Marin Station and the Downtown Station
- Good ridership experience
- Good connectivity with shuttle network
- Great service and connections when going to festivals or visiting friends and family in the northern region (i.e. Petaluma, Santa Rosa, etc.)

October 15, 2024 – Novato Downtown SMART

Amenities and Facility Improvements

- Add bathroom facilities

Connectivity and Networks

- Many were happy with the train service

- SMART makes it easy for them to commute and their commute time is much more enjoyable

Equity and Accessibility for all Riders

- People like the fact that the transportation agencies are seeking their input on how to improve their transportation experience to and from the station
- The possibility of adding additional amenities at the station was taken positively

Accessibility to Transit Schedules

- Improve accessibility and reliability of train schedules
- Synchronize bus and train schedules to help ensure rides will arrive on time for their next connection

Bikes & Bike Paths

- Riders expressed appreciation for the ease of being able to take their bikes on the train

October 16, 2024 – Novato Hamilton SMART

Amenities and Facility Improvements

- Add restrooms and water fountains at the station, particularly students waiting for their train after school
- Add amenities for pets, for example, dog waste disposal, plastic bags for collecting waste, etc.
- Improve signage at station
    - Currently one faded and peeling signage at the station
    - Faded signs may make riders feel unsafe and may encourage loitering
- There was a concern related to loitering at the station
- Parking is underutilized
    - Novato Hamilton Station has a large parking lot which is sparsely used. Petaluma is the opposite, with a smaller lot and lots of use.
    - People need to be better informed that Hamilton is an option, or the other lot should be extended.
- Add trees and/or additional cooling methods along the SMART trail at this station
    - Many people use the trail to walk to the station due to a lack of buses
    - Others use it to bike or walk dogs and it gets dangerously hot in the summer

Equity and Accessibility for all Riders

- Increase awareness of Hamilton Station
    - Not many people know about this station
    - One rider suggested MTC Tam utilize the large parking lot to host a farmers' market or some event to bring people in and show that the station exists and is accessible
- Lack of buses and connectivity
- Add flashing crosswalk lights on Main Gate Road
    - Vehicles drive at high speeds on this road
    - Unsafe for pedestrians using this crosswalk to get to and from the station
- Ferry fares have increased and are expensive for some riders

- Difficulties and barriers to using public transportation to get to San Francisco from Novato
    - This trip takes about 1.5 hours on both SMART + ferry or when taking the bus, especially as there are no longer express bus options

Connectivity and Networks

- Improve bus lines at the Hamilton SMART Station
    - Since COVID 19, local buses have stopped and need to be reinstated
    - Many questions why city buses do not stop at the station
    - Buses stop on the road, but do not make it to the station because the entrance to the parking lot of the station is too narrow and therefore not functional for buses
- Request to add another SMART Station Stop between Hamilton and Downtown, near the Vintage Oaks Shopping center
    - It is a 30-minute walk from that location, or an expensive Uber, and many people work there.
- Improve connectivity and schedules
    - Particularly the connection between the early morning SMART train and ferries

Accessibility to Transit Schedules

- Transit App needs improvement
    - Not very good at tracking schedules or coordinating the systems together
    - It's not very user friendly and makes using public transit more complicated

Bikes & Bike Paths

- Add additional bike storage on trains
    - Not much room for bike storage
    - People crowd around bike racks and make storing bikes difficult
- Additional lighting measures on the SMART trail for the morning and evening
    - Gets very dark at night.
- Increase signage/wayfinding for bike routes
- Signage and lights for bikers and pedestrians along Main Gate Road
- Concerns with conflicts with vehicles driving at high speeds
- People enjoy the bike path as a greenspace

October 22, 2024 – Sausalito Ferry (onboard)

Equity and Accessibility for all Riders

- Suggestion to expand hours and frequency of service for riders
- Synchronize the bus and train schedules for a.m. and p.m. commuters
- Recommendation to improve connectivity with local bus lines and synchronized bus schedules in regions that the ferry provides services to, including Sausalito
- Suggestion to keep the ferry schedule consistent year-round to make it a reliable form of transportation for all users, as the current ferry schedule changes every six months
    - A staff member onboard the ferry noted that the recent schedule change is based on the seasons, however it makes taking the ferry unreliable and inconsistent for people to keep up with per conversations he has had in the past with passengers.

October 23, 2024 – Larkspur Ferry (onboard)

Amenities and Facility Improvements

- Add speed bumps for vehicles entering and exiting the Larkspur Ferry Terminal
- Improve signage at Larkspur station, for both the SMART train and general wayfinding
- Provide a map of the local area
- Provide Wi-Fi at stations and onboard the ferry
- Renovate bathroom facilities at Larkspur station
- Beer is too expensive
- Ferry gets packed
- Provide towels outside on the ferry and in the stations to keep passenger items dry, such as bikes and backpacks, especially in the morning
- Add chargers and outlets on the ferry and at the stations

Equity and Accessibility for all Riders

- Work with employers to subsidize ferry rides
- Need standing areas in the stations and on board for people with mobility issues
- Larkspur is not pedestrian friendly
- Improve ease and access of ramps
    - Ramps are hard to navigate getting on and off the train for people with disabilities
    - Ramp is too steep
    - Ramp access gets too crowded and is hard to navigate getting on and off the train with a wheelchair
- Provide a shuttle between SMART and Larkspur everyday
    - Current shuttle only provides service Thursday through Sunday
    - Shuttle service should be provided every day
- Ferry needs better temperature control; it's too cold in the mornings and too hot midday
- Fare is too expensive
- Parking should be free as there is a massive lot
- Provide easier and accessible public transportation from Novato

Connectivity and Networks

- Add service frequency or additional ferries in the early morning
- Expand service to the early mornings and evenings coming to and from San Francisco
- Some riders preferred the old schedule
- Improve commuter shuttles
- Synchronize SMART train and ferry connections (leave a time gap for connections)
- Provide additional ferries during rush hour
- Add additional ferries in the East Bay

Accessibility to Transit Schedules

- Integrate the ferry schedule with the SMART connect app

Bikes & Bike Paths

- Add more bike racks and parking onboard and at the station
    - Need more bike-friendly areas on board
    - Too hot during the day for sweaty bikers
    - Improve accessibility to bike parking at Larkspur
- Improve bike lanes
- Add more protected bike lanes
- Provide proper cover and protection for bikes
    - When there isn't proper cover, saltwater spray can easily rust bikes

October 24, 2024 – Marin Civic Center SMART

Amenities and Facility Improvements

- Request for more lighting at the station
- Provide all day parking even if people have to pay for it
- Clean the windows on trains
- Lower/dim lights for very early AM trains for those that want to get a little more sleep in, add more lighting in the evening
- Add bathroom facilities at the station
- A significant number of riders requested more trains/cars during peak hours, particularly during the 7:15 a.m. and 5:10 p.m. trains
- Add security cameras
- Add a Civic Center parking area
- Add a snack/drink bar for post work

Equity and Accessibility for all Riders

- Add a moving platform for ADA to get to and from the Civic Center
- Several riders stated that they did not know how to use the new bike hub/rentals and did not know they were now available for use
    - Issues due to language barrier and inequitable access to technology resources
- Add handles on trains for people to grab on in case they have to stand
- Sometimes Clipper card does not work and blocks the card
- Add air conditioning in the trains during the summer
- Provide shuttles for folks who have health/accessibility issues and/or additional mobility options for the aging community
- Synchronize bus lines and trains to make sure we can catch the bus on time and vice versa
- Offer veterans a reduced rate – similar to students and seniors reduced/free fee

Connectivity and Networks

- Add additional times for the trains
- Incorporate a weekday pass type of fare for people to hop on and off the trains, similar to the weekend pass
- Add more north and south connections
- Add Penngrove station

- Add Santa Rosa railroad square stop, Santa Rosa downtown station and a connection to the ferry building
- Increase regional connections

Accessibility to Transit Schedules

- Extend the southbound train schedule so it leaves Santa Rosa at 10 p.m.
- Add express trains from the Civic Center, with:
    - 1 stop for Novato
    - 1 stop for Santa Rosa
    - 1 stop for other heavy lines
- Add a 6 p.m. train since there is no train from 5:47pm to 6:51pm
- Expand hours of service until 8-9 p.m.
- Add earlier trains on Saturday and Sunday
- Extend service hours on Saturday and Sunday to and from Santa Rosa until about 8:30 p.m.–9 p.m.
- Extend hours of service and frequency

Bikes & Bike Paths

- A significant number of people requested a train (or trains) just for bike parking or scooters
    - Bikes/scooters take up space for two seats and sometimes are not hung right
    - Ample bike parking for bigger bikes
    - E-bikes and scooters take up space
    - Turn snack bar into bike/scooter parking
    - 6:49 a.m. and 5:15 p.m. trains do not have a lot of bike space or bike parking
    - Hard to get the bike in and out of the train due to how full the trains can get during peak commute times
- A few riders shared that they did not have information on how to use the new bike hub, asking questions about where they can leave the bikes, how much this cost, and if they could be left at County offices.

October 30, 2024 – Larkspur SMART

Connections to Larkspur Ferry

- Timing of ferry arrivals and train departures are not sufficiently synchronized
    - Times should account for the 10-to-15-minute travel time (for pedestrians) between ferry arrival and train departure.
- Add a digital sign at the ferry terminal indicating the next train departure times.
- People had mixed feedback on the path between the ferry and train, with some liking the existing path and others saying the path is too long for seniors. To compensate, some suggested having the existing shuttle run more often.
- Residents would like a safer way to cut through the parking lot from the ferry to the station (this path is 5 minutes faster than the existing pedestrian path, and often used by commuters). There were suggestions to add a crosswalk at the intersection of Larkspur Landing Circle and Victoria Way and add better pedestrian facilities, like a sidewalk, along Larkspur Landing Circle.

First and Last Mile Connections

- Many people were interested in the Redwood Bikeshare program and were considering using the service for first/last mile travel (i.e. to Downtown Petaluma). There was a suggestion to extend the program to major employment centers beyond Larkspur, like Corte Madera.
- A rider regularly walks a mile from the train to work and is interested in another option (i.e. bus, shuttle, etc.) in case of heavy rain or bad weather. Similarly, another rider noted lacking transportation options in the direction of Anderson Dr. and would appreciate a shuttle or bus along this route.
- Others suggested the need for better connections (i.e. buses) in general from the train station to destinations across Larkspur.

Bike Amenities

- There was a request for improved bike paths along the SMART corridor, as cyclists like to take the train up the corridor and cycle back.
- There was a concern expressed about lacking bike paths from Santa Rosa to Larkspur, especially the paths on Anderson Dr., which are too small.
- Commuters suggested increasing space for bikes on the train, especially for morning commutes.
- A cyclist suggested implementing more bike paths from the station to major destinations across Larkspur.
- There was also a request to open the Alto Tunnel for cyclists.

Other Comments

- Riders, especially seniors, suggested printing schedules and making them available at the stations.
- There were requests to extend weekend and weekday hours to 10 p.m. and increase train frequency; for those without cars, weekend service isn't frequent enough.
- There was a request for a shorter handicapped path to access the station platform.
- Cyclists suggested the need for better signage to indicate a SMART bike/ped trail, including directional signage for the transition from trail to street.
- Several people appreciated the planned SMART extensions into Healdsburg and Cloverdale

Appendix C: Open-Ended Survey Responses

What is the most, second most, and third most needed change that would make it easier for you to get to/from the SMART/ferry terminals in Marin County and encourage you to use them more often?

1. Improved Larkspur SMART/Ferry connection times. More connections that are 10 mins apart, not 40.
2. More micro shuttle service.
3. Better connections using Paratransit.
4. SMART to destination shuttles.
5. Additional cars, seating, and bike storage. Overwhelmingly needed!
6. More closely aligned bus schedules with SMART train schedules. In the morning, I think the 150 bus schedule is 2 minutes behind the SMART northbound schedule in San Rafael.
7. Lowering cost
8. More room on ferry
9. Free parking at the ferry terminal in Larkspur
10. Put SMART train in Sausalito.
11. Monthly pass for ferry between Sausalito and San Francisco
12. More frequent and later SMART train service. Particularly for going out to dinner after work or on weekends.
13. Run late on Friday, Saturday and Sunday
14. Shuttles at each stop like they have at the Sonoma airport stop
15. Connections to SMART and shuttles to destination
16. Free parking at local bus stops
17. N/A - always drive
18. Change the ParkMobile monthly parking BACK to auto renewal. This makes it easier on us and we don't have to think about every month. Why did it change?????
19. Expanded and more frequent SMART schedules
20. Vending machines/water refill stations at each stop
21. Newer ferry boats w more bike storage, wifi and call booths
22. More capacity
23. 100% syncing up the SMART schedule with the ferry schedule
24. Another car to transport bikes on the train
25. Free overnight parking at SMART stations? Teacher discount?
26. Improve the lighting in the Ferry parking lot!
27. I don’t know
28. More space for bikes on the train
29. Rain coverage

Are there any other transit hubs in Marin County that need improved waiting areas or additional mobility services?

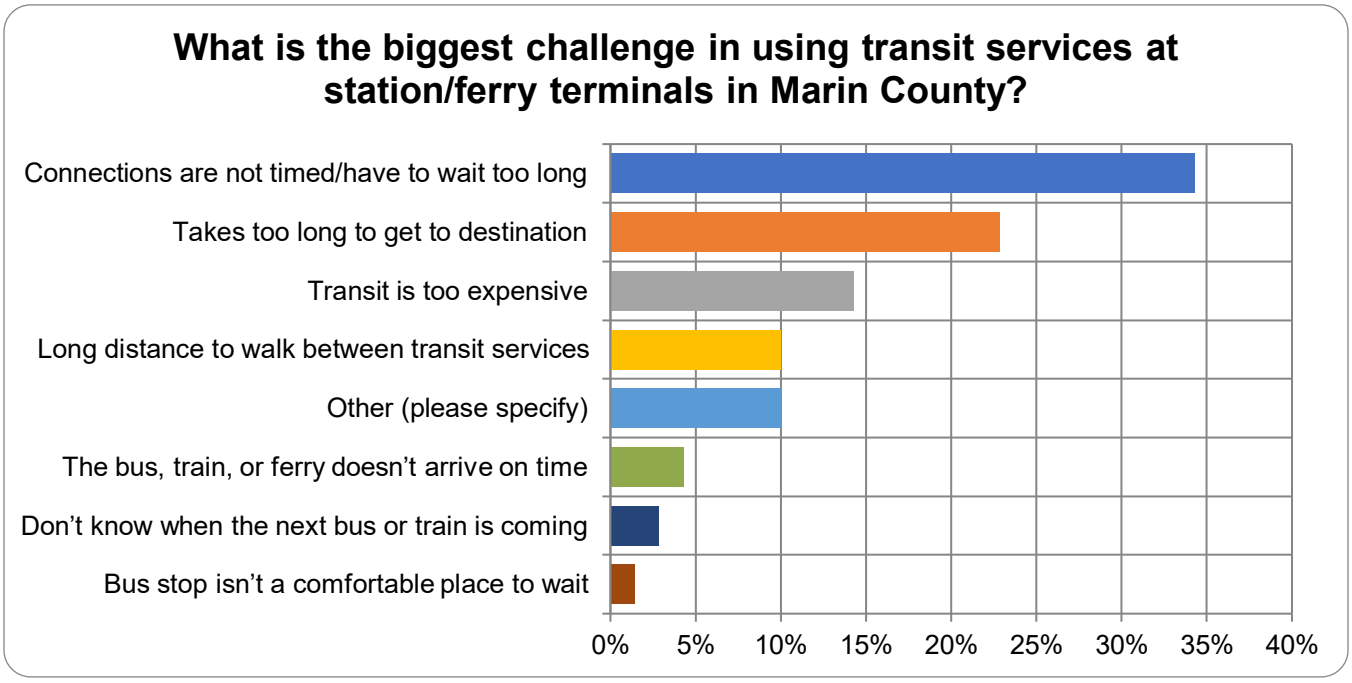
1. Downtown Novato
2. San Anselmo- better information on connections
3. Fill in smart train pathway gaps
4. Yes. All of them!
5. The Rowland Park 'n Ride lot is a lost opportunity. This should be a major bus hub connecting buses on Highway 101 with buses serving State Route 37.
6. Not that I know of
7. Not that I use.
8. Not sure. I took the bus from the Marin civic center Smart Train to Lucas Valley Ranch, and the access to the Lucas Valley Ranch bus pad at 101s was hard to find/access.
9. I only use the train so idk
10. Connection across to Vallejo
11. I don't know, I haven't lived in Marin in years.
12. San Rafael transit center, Novato transit center
13. San Rafael Transit HUB is a total cluster... The traffic and pedestrian safety must be addressed soon.
14. San Rafael bus station is pretty good, but could use more benches. And a toilet that is open on weekends!
15. Larkspur ferry terminal- better waiting area for cold weather/rain
16. Novato downtown (and Petaluma downtown) should utilize the old stations as cafes, etc.
17. Downtown Novato
18. More bike parking on the train.
19. Need to improve bike space for people to lock up their bikes on the train.
20. I think they are good but water stations would be nice.

Appendix D: Detailed Results of Follow Up Questions

Transit Improvements

70 respondents answered the follow-up question about transit improvements.

Figure 12: Summary of survey responses – transit improvements



"Other" responses:

1. Caltrans closed downtown San Rafael parking lots
2. Transit to ferry terminal
3. Don't use, don't know
4. Lack of transit at destination
5. Infrequent
6. Additional train cars
7. The bus doesn't come close to my house. I would need to take a bus to San Rafael from my home and get another bus from there

Bike Improvements

59 respondents answered all follow-up questions about bike improvements.

Figure 13: Summary of survey responses – bike parking

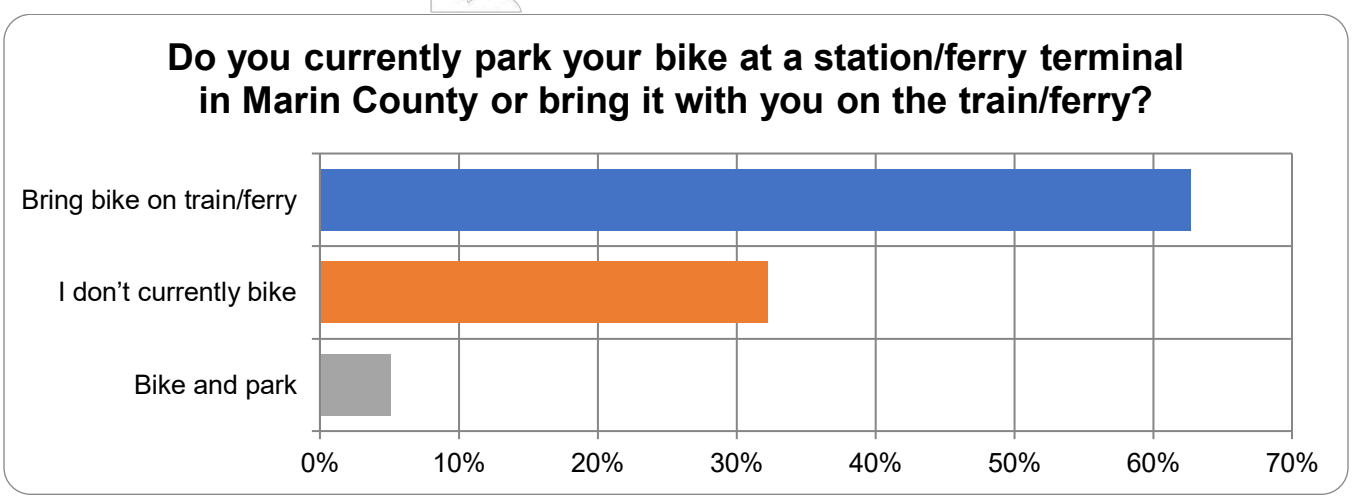
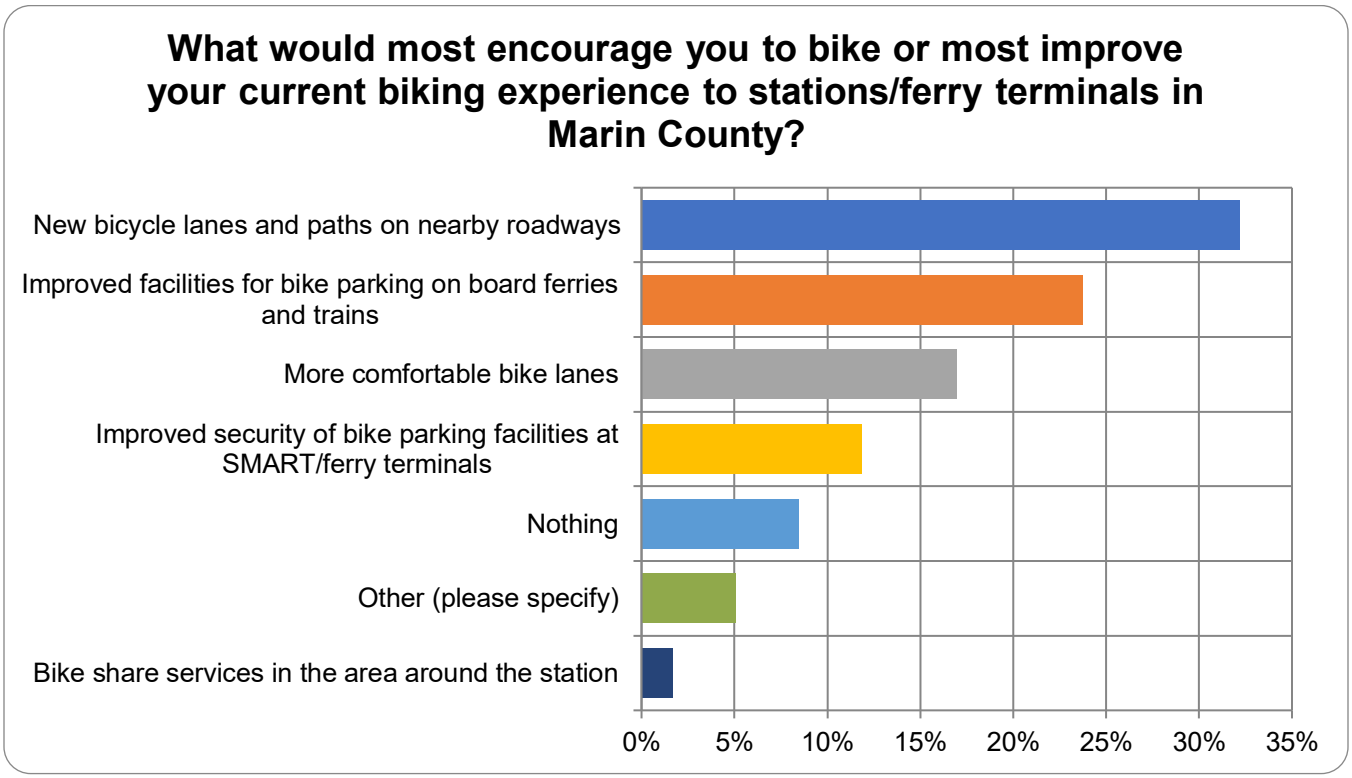


Figure 14: Summary of survey responses – bike experience

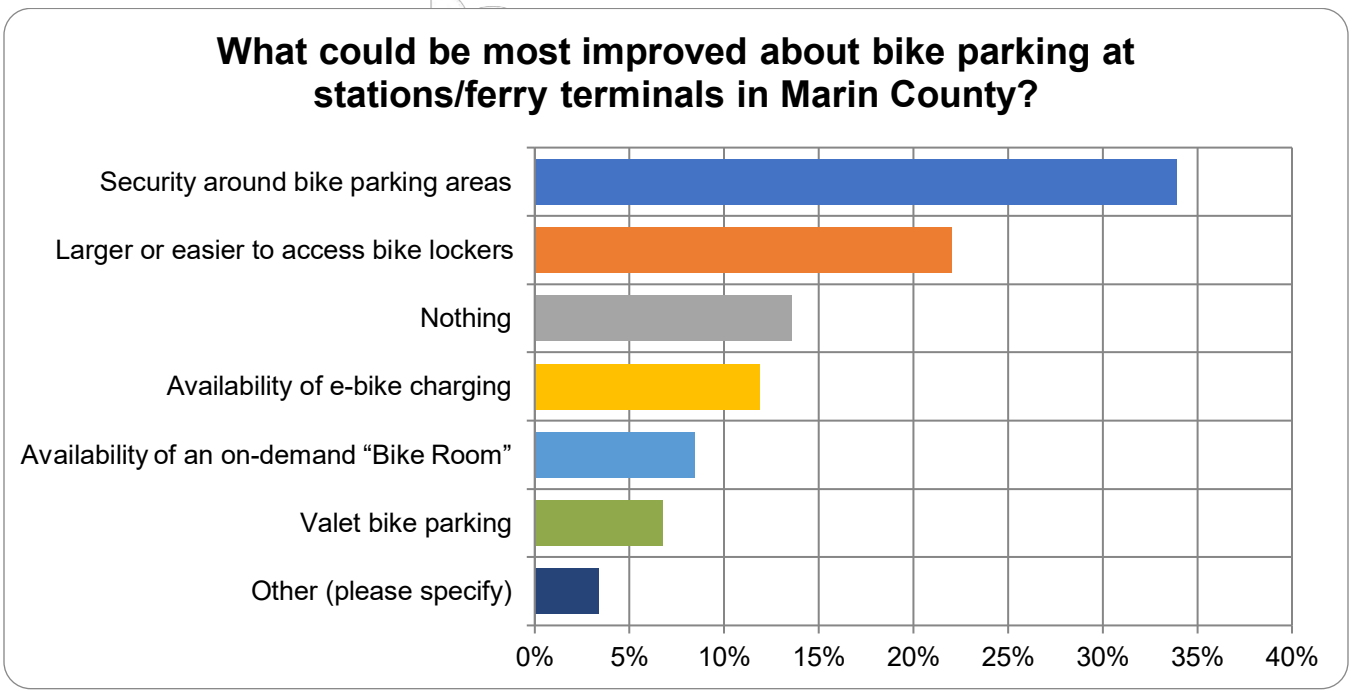


"Other" responses:

1. Fill in SMART pathway gaps
2. Bike placement in boat to keep 100% out of salt water spray which ruins bikes

3. Add more areas in the train for bikes. Rules about the sitting areas where it is shared the bike space.

Figure 15: Summary of survey responses – bike parking improvements



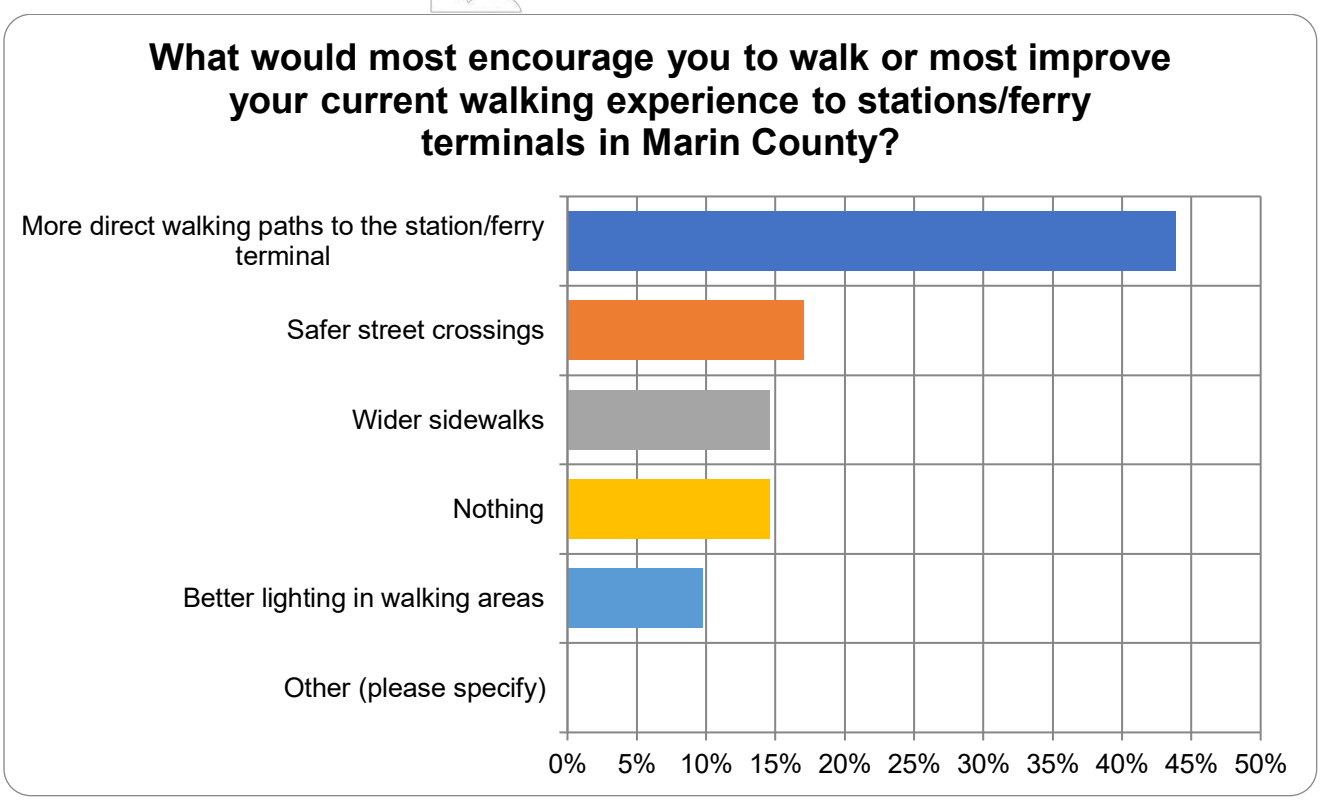
"Other" responses:

1. I don't have an opinion as I bring my bike aboard
2. I don't leave my bike at the ferry terminal

Pedestrian Improvements

41 respondents answered the follow-up question about pedestrian improvements.

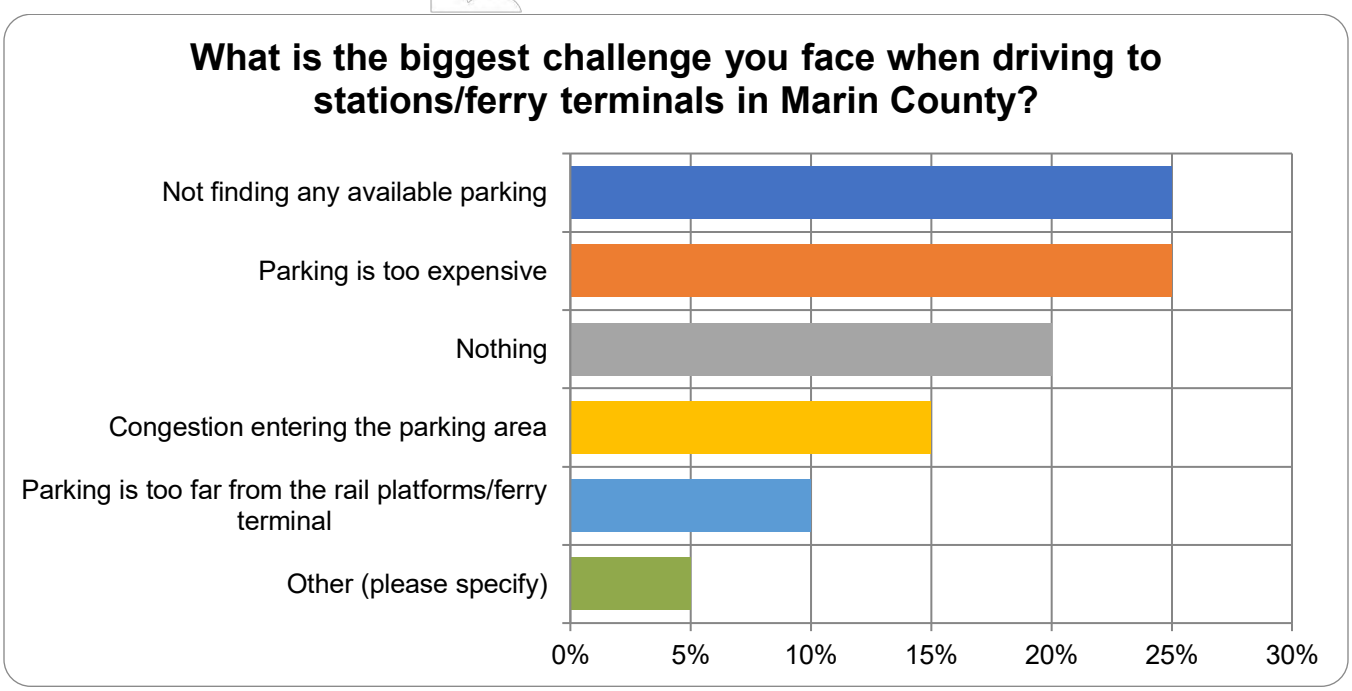
Figure 16: Summary of survey responses – pedestrian improvements



Vehicle Improvements

20 respondents answered the follow-up question about vehicle improvements.

Figure 17: Summary of survey responses – vehicle experience



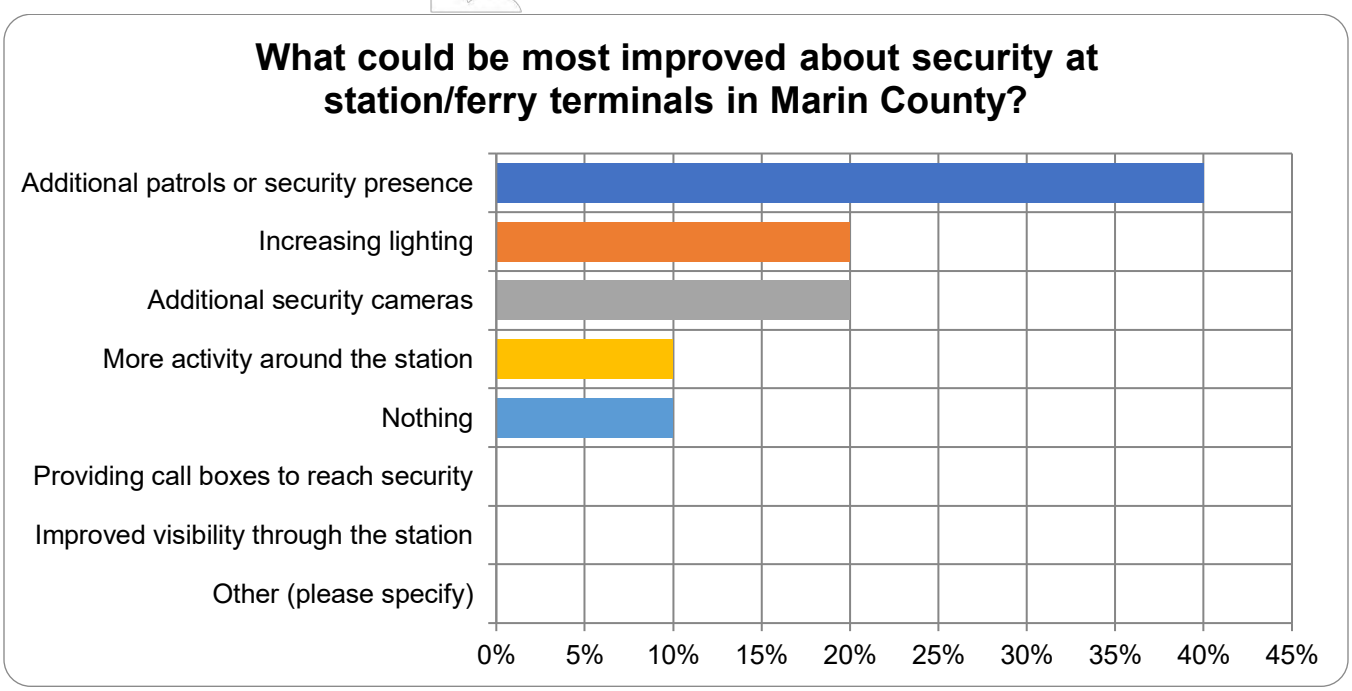
"Other" responses:

1. Concern that there would be no parking, although that hasn't been an issue so far

Station Improvements

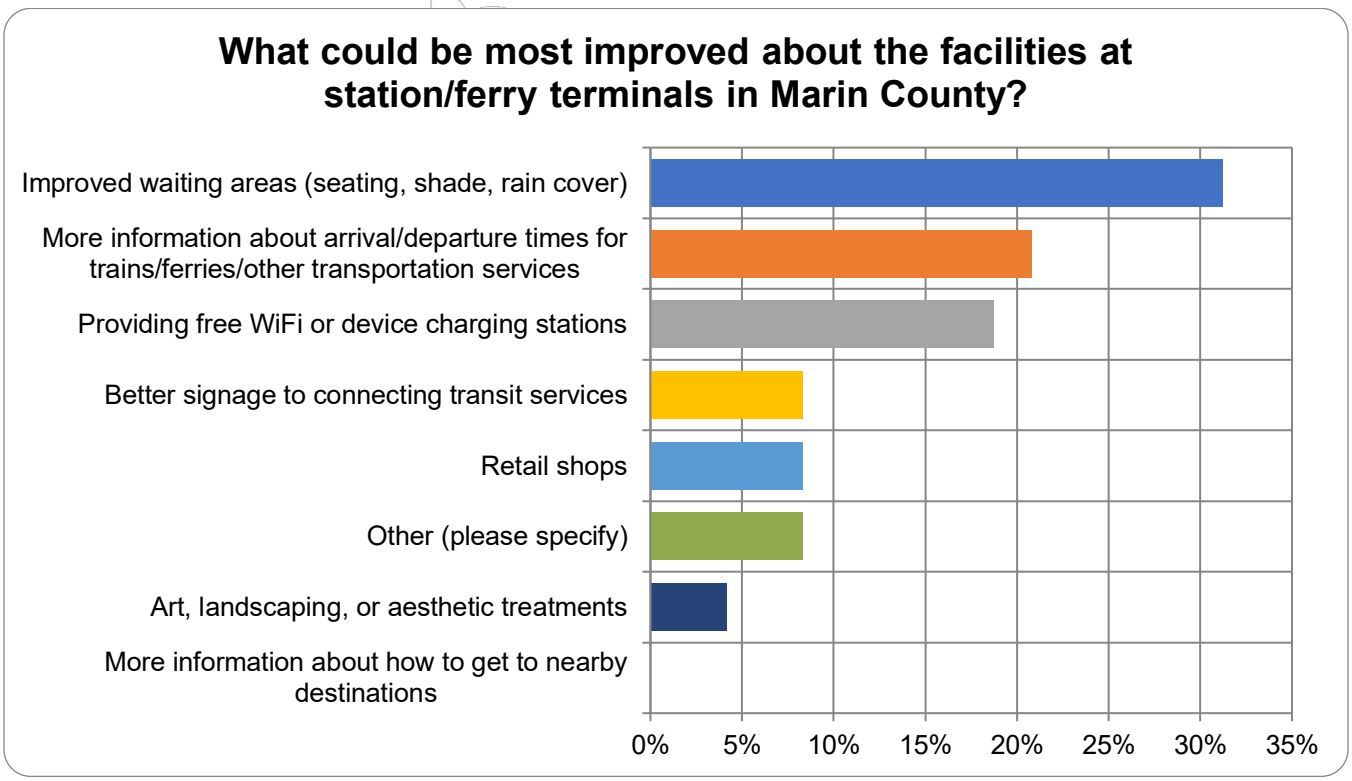
10 respondents answered the follow-up question about security improvements.

Figure 18: Summary of survey responses – station security



48 respondents answered the follow-up question about station wayfinding and waiting experience improvements.

Figure 19: Summary of survey responses – station facilities



"Other" responses:

1. Pedestrian crossing that is more direct and efficient from SMART to ferry. Going over Sir Francis drake is silly
2. Public restrooms
3. N/A
4. All of the above, especially signage, arrival/departure info, improved waiting areas. Also, water fountains

Appendix D:

Station Access Gap Analysis

Transportation Authority of Marin

Marin County Mobility Hub Plan

Station Access Gap Analysis – August 2025

Contents

Introduction

The Marin County Mobility Hub Plan (Plan) is supporting the development of nine mobility hubs in Marin County, consistent with the Metropolitan Transportation Commission (MTC) Transit Oriented Communities (TOC) Policy. The objective of the Plan is to identify station access improvements and desirable hub amenities, develop conceptual mobility hub designs for six of the locations, and identify best practices for implementation.

The first deliverable of the Plan, the Existing Conditions Report, summarized the existing conditions of the nine mobility hub sites based on existing data, operator interviews, and site visits. Existing amenities, land use, bicycle facilities, pedestrian facilities, transit service, and planned projects were all identified as part of this deliverable.

The second deliverable of the Plan, the Mobility Hub Amenities Toolkit (Toolkit), identified the types of services and amenities that can be implemented at the mobility hubs to enhance their functionality and community value. The Toolkit defined the following four amenity categories:

1. **Sustainable Access and Mobility:** features that expand the mobility options provided at the hub, including enhancing safety and prioritizing active and shared mobility services.
2. **Public Realm:** features that create welcoming and safe spaces to support public life.
3. **Customer Experience:** features that improve the quality of the passenger experience by enhancing the waiting environment or add ancillary amenities that make the hub more usable.
4. **Information:** features that expand the user understanding of how to navigate the hub and surrounding area, as well as increase awareness of transit services.

The third deliverable of the Plan, Round 1 Outreach Summary, presented and analyzed feedback received during public engagement activities, including in-person events and an online survey. It documented community priorities for mobility needs and identified opportunities for improvements at the hubs.

Purpose of this Report

Leveraging findings from the previous three deliverables of the Plan, the Station Access Gap Analysis Memo (Memo) identifies key access gaps and associated proposed solutions at and around the nine mobility hubs. The opportunities and constraints are classified based on the Toolkit's amenity categories. For each hub, recommended access improvements are proposed both in the immediate station area and within 0.5 mile from the station. The Memo satisfies MTC's TOC Policy requirements for an access gap analysis and will be utilized as the basis to develop design concepts for enhancing six of the mobility hubs in a future project task.

Mobility Hubs

The location of the nine mobility hubs are depicted in **Figure 1**. Detailed information about existing amenities and services at each mobility hub can be found in the Existing Conditions Report.

Figure 1: Mobility Hub Sites within Marin County

Access Gaps and Improvement Opportunities

Additional Station Amenities Across all Hubs

The following amenities were identified in the Toolkit and were found to generally be desirable at all mobility hubs.

- Wayfinding signage and information that meets regional standards
- Outlets for device charging
- Bike repair station
- Larger bike lockers
- Restrooms
- Vending machines and/or water fountains
- Carpool/vanpool/carshare parking
- Electrical vehicle charging
- Transit signal priority (TSP)

Transit priority routes within the vicinity of each mobility hub, as identified in the Marin Countywide Transportation Plan (CTP) 2050, are indicated on both Opportunities and Constraints maps for each mobility hub. Further study, including analysis of specific hotspots and causes of transit delay, are recommended to determine the most appropriate transit priority improvement(s) along each route. Multi-modal improvements on these corridors should be further evaluated to include opportunities for transit priority and to avoid impact to bus operations.

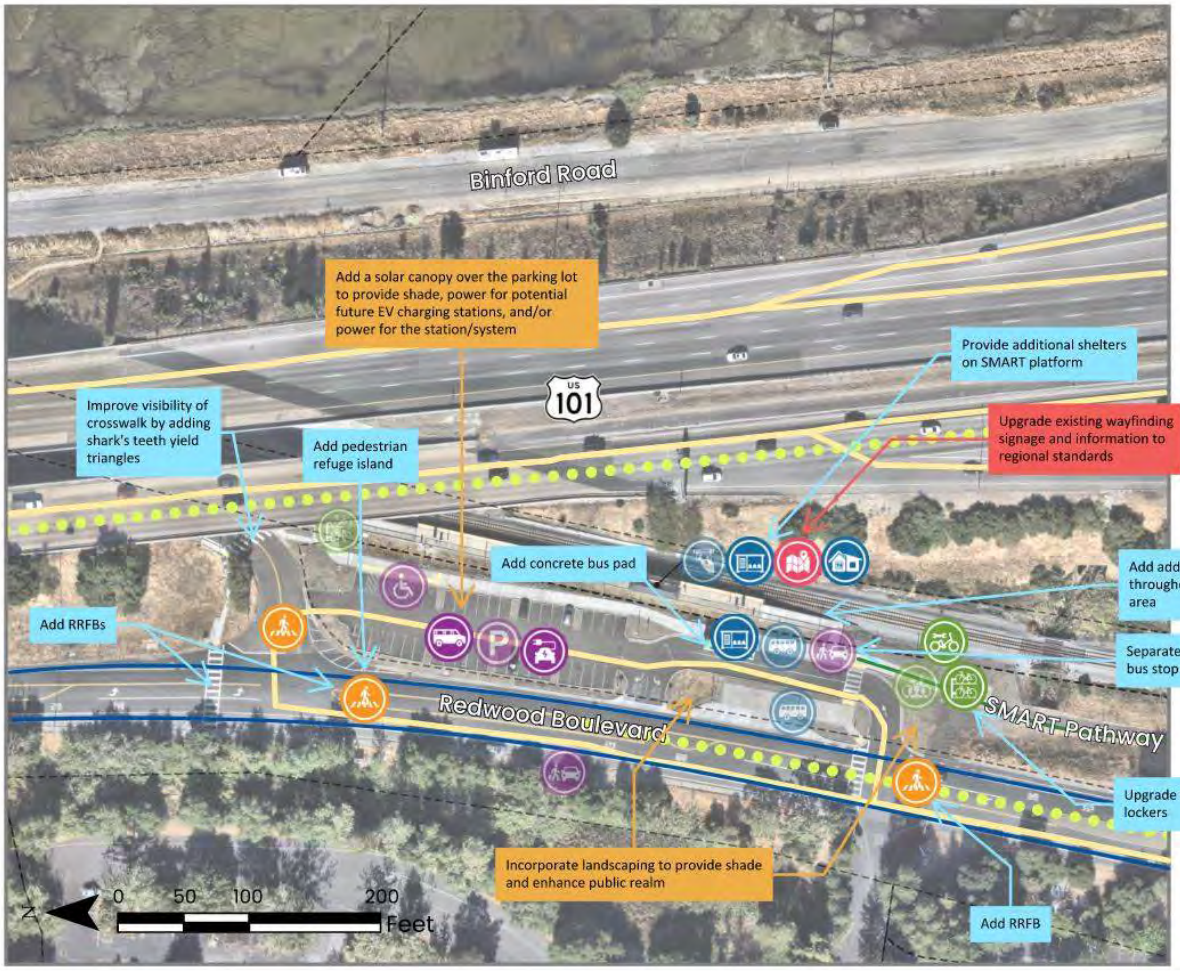
Station access gaps and needs unique to each mobility hub are discussed in the following sections. All proposed improvements are subject to further review by local jurisdictions. All bicycle and pedestrian improvements should be coordinated with transit operators serving each station to ensure compatibility with operations.

Novato San Marin SMART Station

The Novato San Marin SMART Station is located north of downtown Novato, just west of US-101. In addition to SMART, this station is served by Marin Transit. Just to the west of the station, across Redwood Boulevard, the former Fireman's Fund office campus is planned for redevelopment into a master planned residential community. Priorities for hub access improvements at the Novato San Marin SMART Station are:

- Enhance user comfort by providing shade, shelter, and seating, particularly at the bus stop
- Expand the walking and biking network around the station, including connecting the station to nearby land uses with new sidewalks and improved crossings
- Overcome access barriers between the station and nearby trip generating uses by providing comfortable walking and biking facilities through the US-101 interchange

Figure 2 shows improvements within the station area, and **Figure 3** shows improvements surrounding the station area.



Novato San Marin SMART Station
Figure 2: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class II Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line

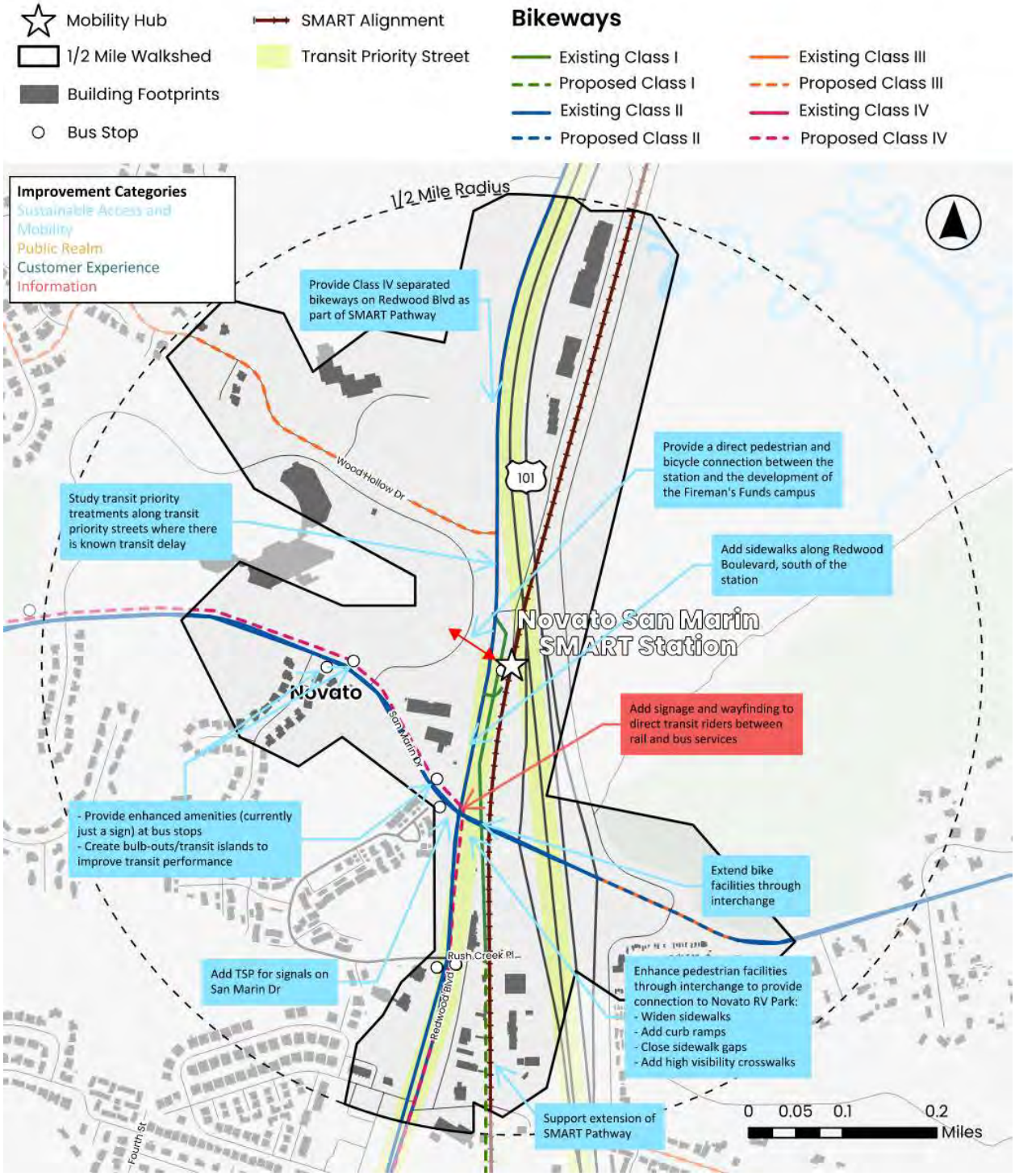
Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- Carpool/Vanpool/ Carshare Parking
- EV Charging
- Parking
- Pick Up Drop Off Zone
- High Visibility Crosswalk
- Bus Stop
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Wayfinding

Novato San Marin SMART Station
Figure 3: Surrounding Opportunities & Constraints
August 2025



Novato Downtown SMART Station

The Novato Downtown SMART Station sits on the eastern edge of Downtown Novato between Grant Avenue to the north and De Long Avenue to the south. This station is not directly served by any bus service with the closest bus stops being 0.2 miles away. Priorities for hub access improvements at the Novato Downtown SMART Station include:

- Enhance walking and biking connections between the station and Downtown, including the Redwood and Grant Transit Center, as well as to nearby bus stops on De Long Avenue
- Expand user amenities for transit users at the station, including electric vehicle charging, larger bike lockers, and additional wayfinding
- Create a sense of place at the station and enhance accessibility by reconfiguring and paving the station parking lot

Figure 4 shows improvements within the station area, and **Figure 5** shows improvements surrounding the station area.

Novato Downtown SMART Station
Figure 4: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class II Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line
- Proposed Path

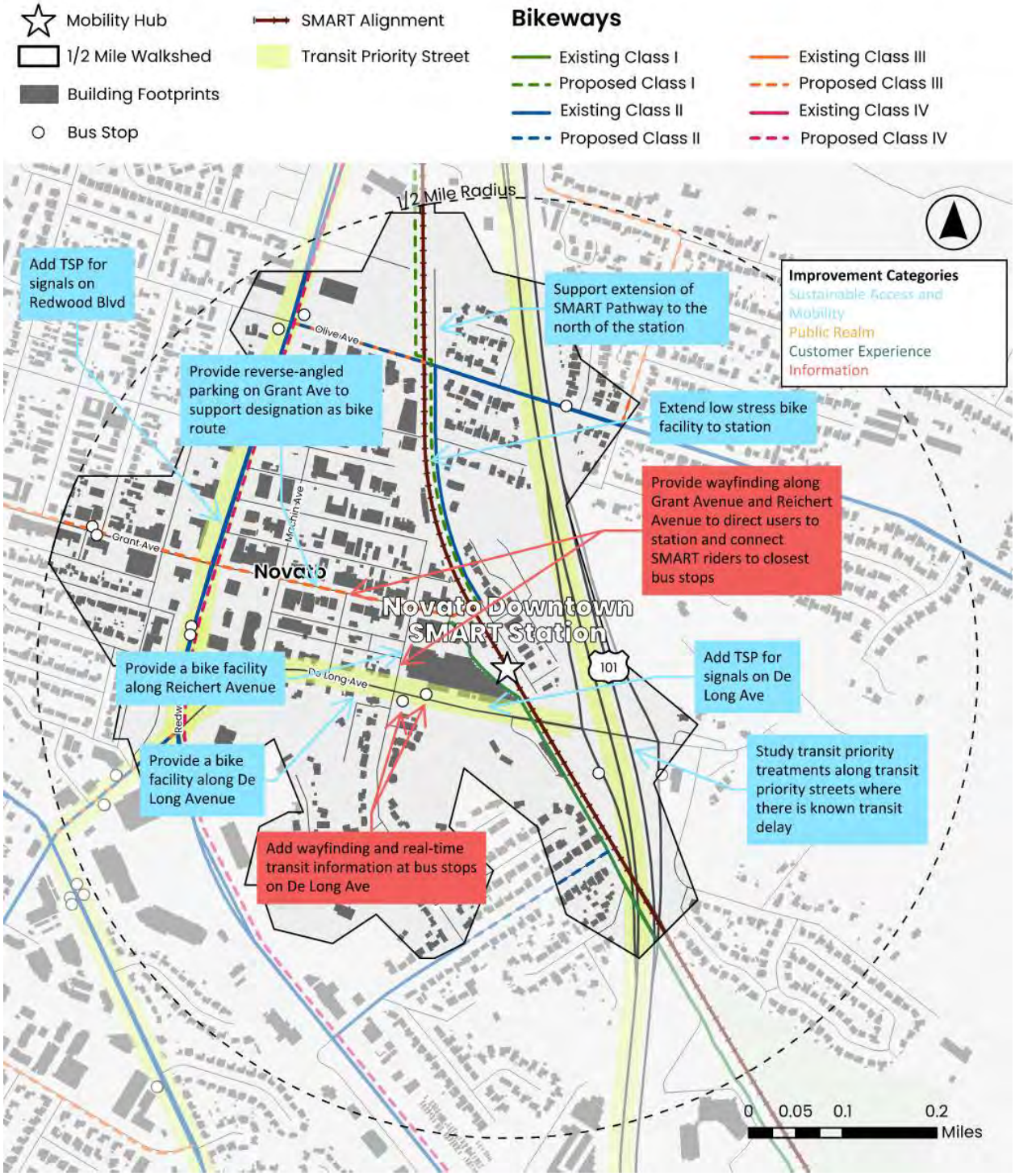
Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities — EXISTING / NEW OR ENHANCED

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- Carpool/Vanpool/ Carshare Parking
- EV Charging
- Parking
- Fare Vending
- Restrooms with Water Fountains
- Station Shelter with Bench
- Real-Time Transit Information
- Wayfinding
- High Visibility Crosswalk

Novato Downtown SMART Station
Figure 5: Surrounding Opportunities & Constraints
August 2025

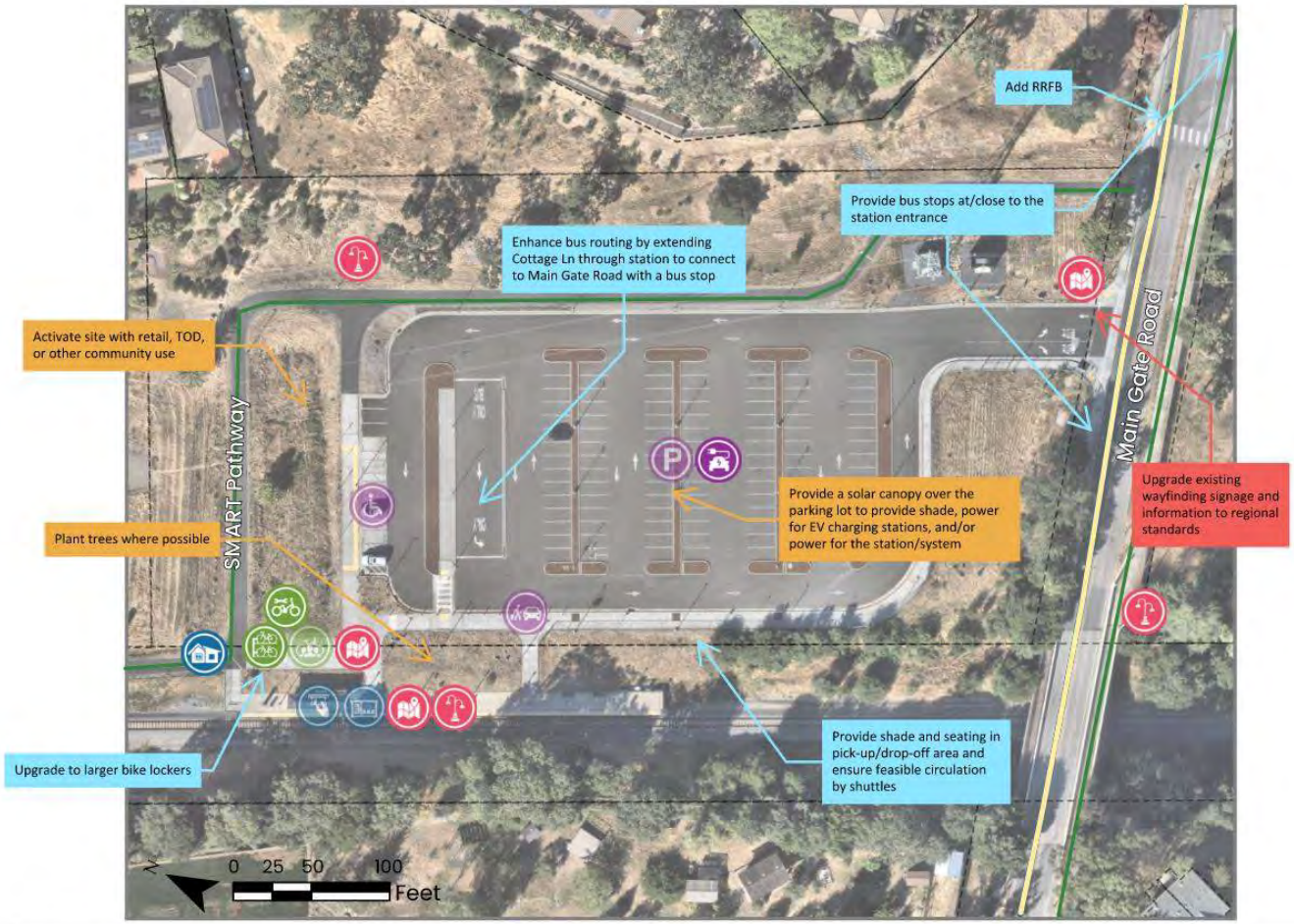


Novato Hamilton SMART Station

The Novato Hamilton SMART Station is located approximately four miles southeast of the Novato Downtown SMART Station along Main Gate Road. This station is not directly served by any bus service with the closest bus stops being 0.3 miles away. Priorities for hub access improvements at the Novato Hamilton SMART station are:

- Provide an opportunity for convenient transfers between SMART and the bus network
- Enhance connections to the station through strategies such as a neighborhood shuttle and closure of gaps in the SMART Pathway
- Activate the site to create a sense of place and security
- Enhance the user experience through additional customer amenities and comfort, such as wayfinding, lighting, and bike amenities

Figure 6 shows improvements within the station area, and **Figure 7** shows improvements surrounding the station area.



Novato Hamilton SMART Station
Figure 6: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Bus Route
- Parcel Line

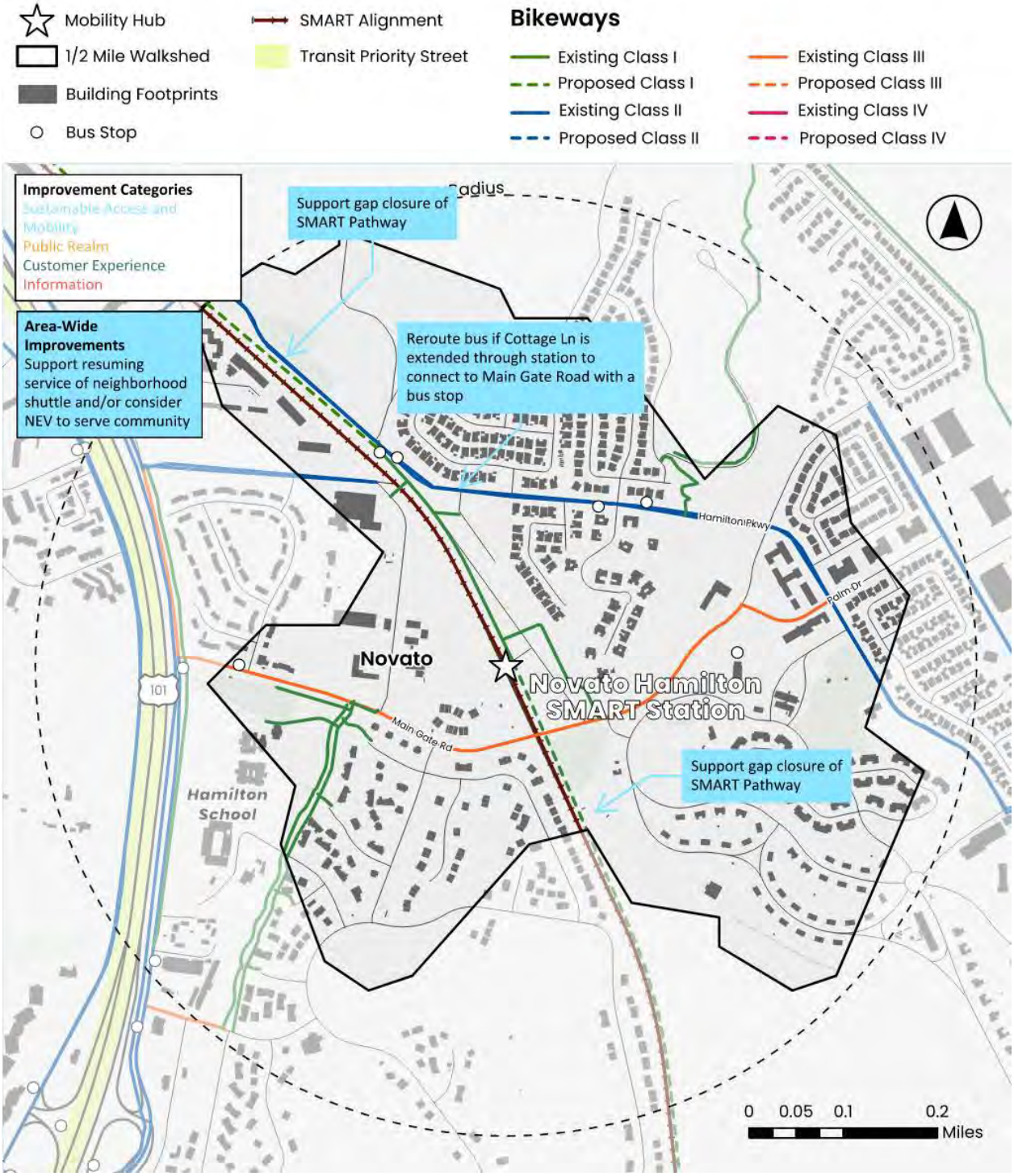
Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- EV Charging
- Parking
- Pick Up Drop Off Zone
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Lighting
- Wayfinding

Novato Hamilton SMART Station
Figure 7: Surrounding Opportunities & Constraints
August 2025

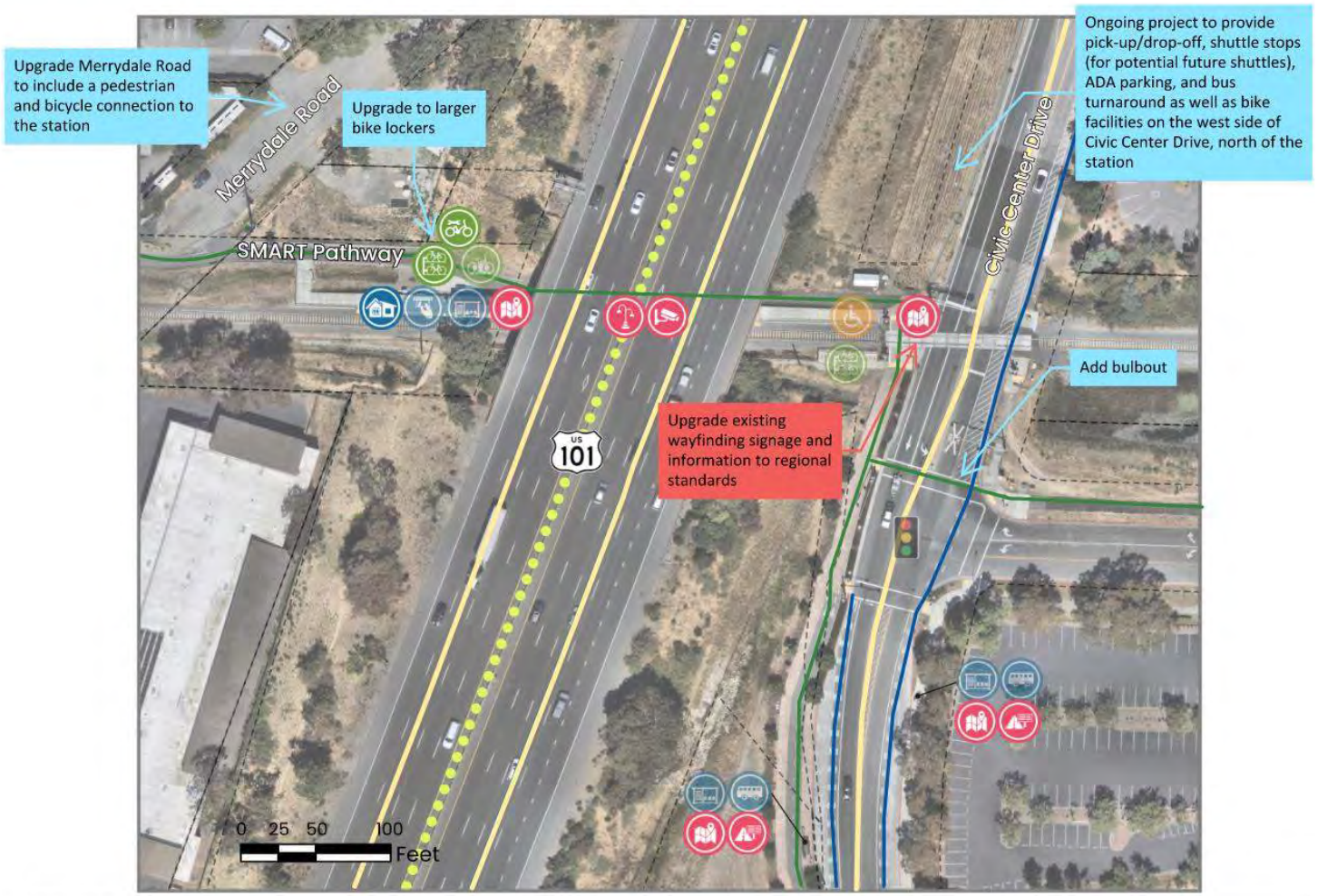


Marin Civic Center SMART Station

The Marin Civic Center SMART Station is located underneath the US-101 overpass approximately 0.5 miles northwest of the Marin County Civic Center. In addition to SMART, this station is also served by Marin Transit with stops on Civic Center Drive. A project is currently advancing to provide pick-up/drop-off space, shuttle stops, ADA parking spaces, a bus turnaround space, and bike facilities on Civic Center Drive, just north of the station. In addition to these planned improvements, the following are priorities to enhance station access:

- Improve passenger comfort on the station platform underneath US-101 by enhancing lighting
- Enhance connections to the future Northgate development and the Marin County Civic Center via shuttle and improved pedestrian and bike pathways
- Enhance wayfinding in the station area to connect to bike and pedestrian pathways and major nearby destinations

Figure 8 shows improvements within the station area, and **Figure 9** shows improvements surrounding the station area.



Marin Civic Center SMART Station
Figure 8: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class II Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line

Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

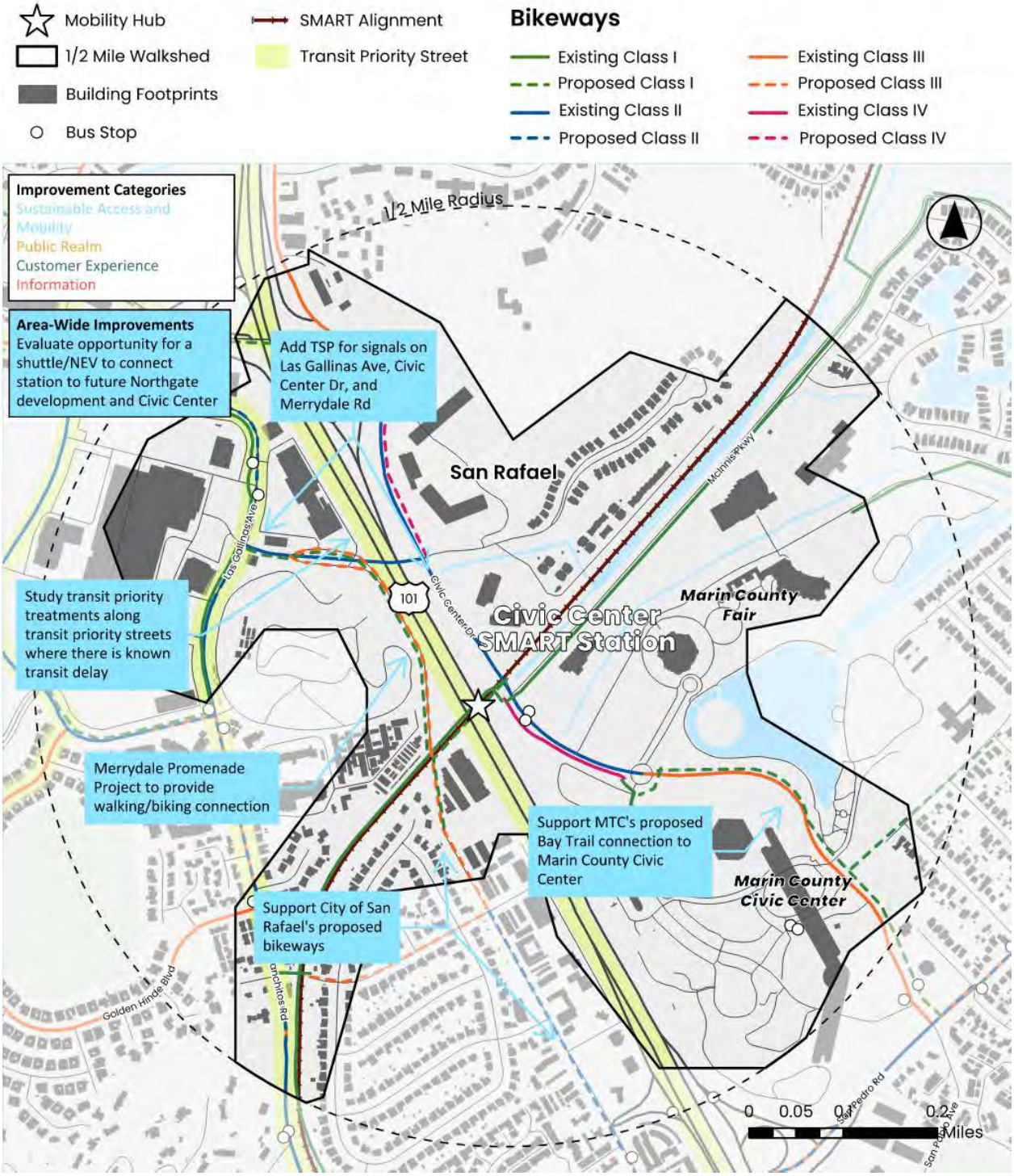
Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Pedestrian Ramp
- Bus Stop
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Lighting
- Real-Time Transit Information
- Security Cameras
- Wayfinding

Marin Civic Center SMART Station

Figure 9: Surrounding Opportunities & Constraints

August 2025

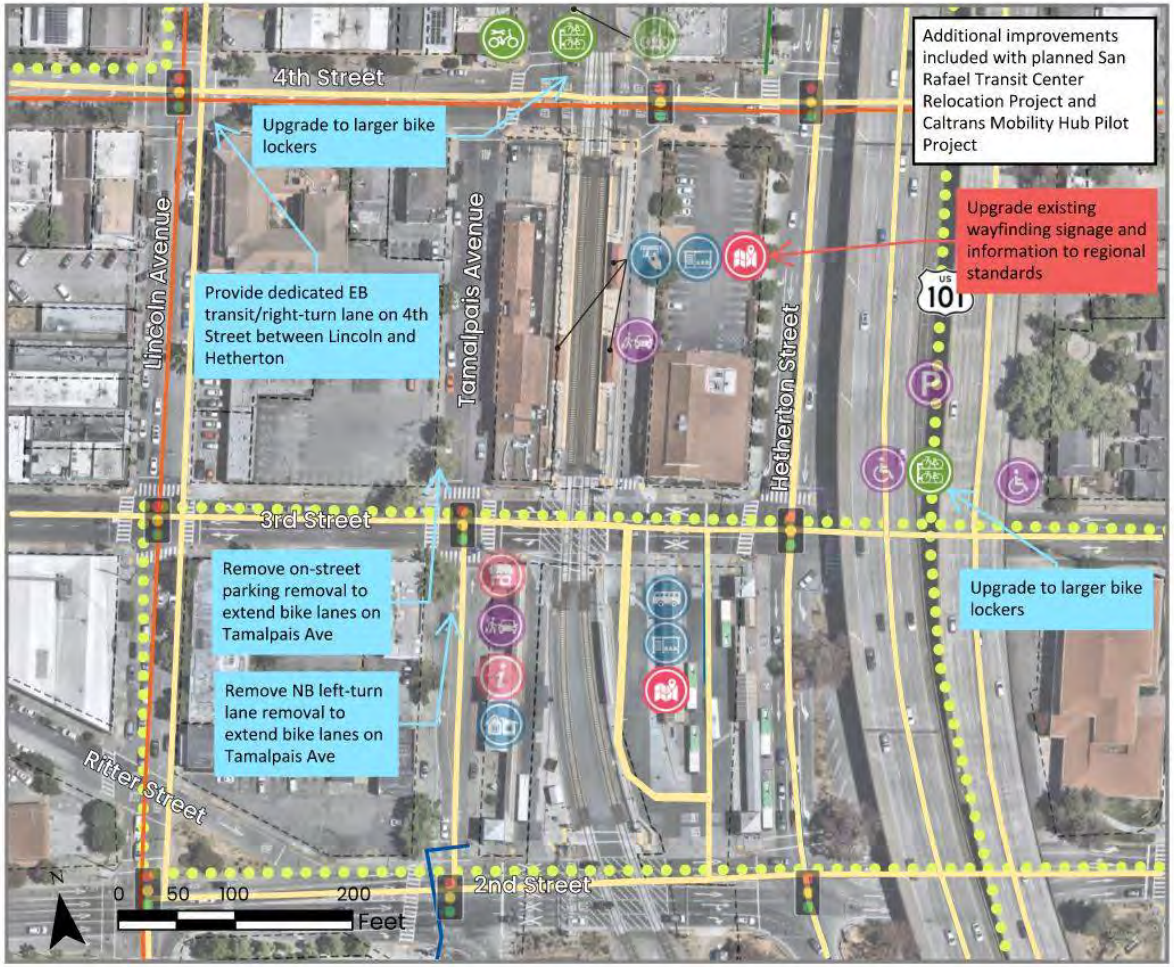


San Rafael SMART Station

The San Rafael SMART Station is located within downtown San Rafael, across 3rd Street from the San Rafael Transit Center. The Transit Center is served by Golden Gate Transit and Marin Transit buses. The San Rafael Transit Center Relocation Project will relocate bus bays, the customer service building, and other supporting uses one block to the north, immediately adjacent to the SMART station. Caltrans is advancing a separate Mobility Hub Pilot Project that includes improvements and new amenities for the state-owned land underneath US-101. Improvement priorities for station access improvements, in addition to the projects currently being advanced, include:

- Enhance transit reliability and performance by adding transit priority treatments around the station, particularly near-term improvements prior to the implementation of the San Rafael Transit Center
- Close gaps in the existing bike network to provide comfortable biking facilities to connect nearby trails to the mobility hub
- Study transit priority treatments along transit priority streets where there is known transit delay

Figure 10 shows improvements within the station area, and **Figure 11** shows improvements surrounding the station area.



San Rafael SMART Station
Figure 10: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class II Bikeway
- Class III Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line

Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

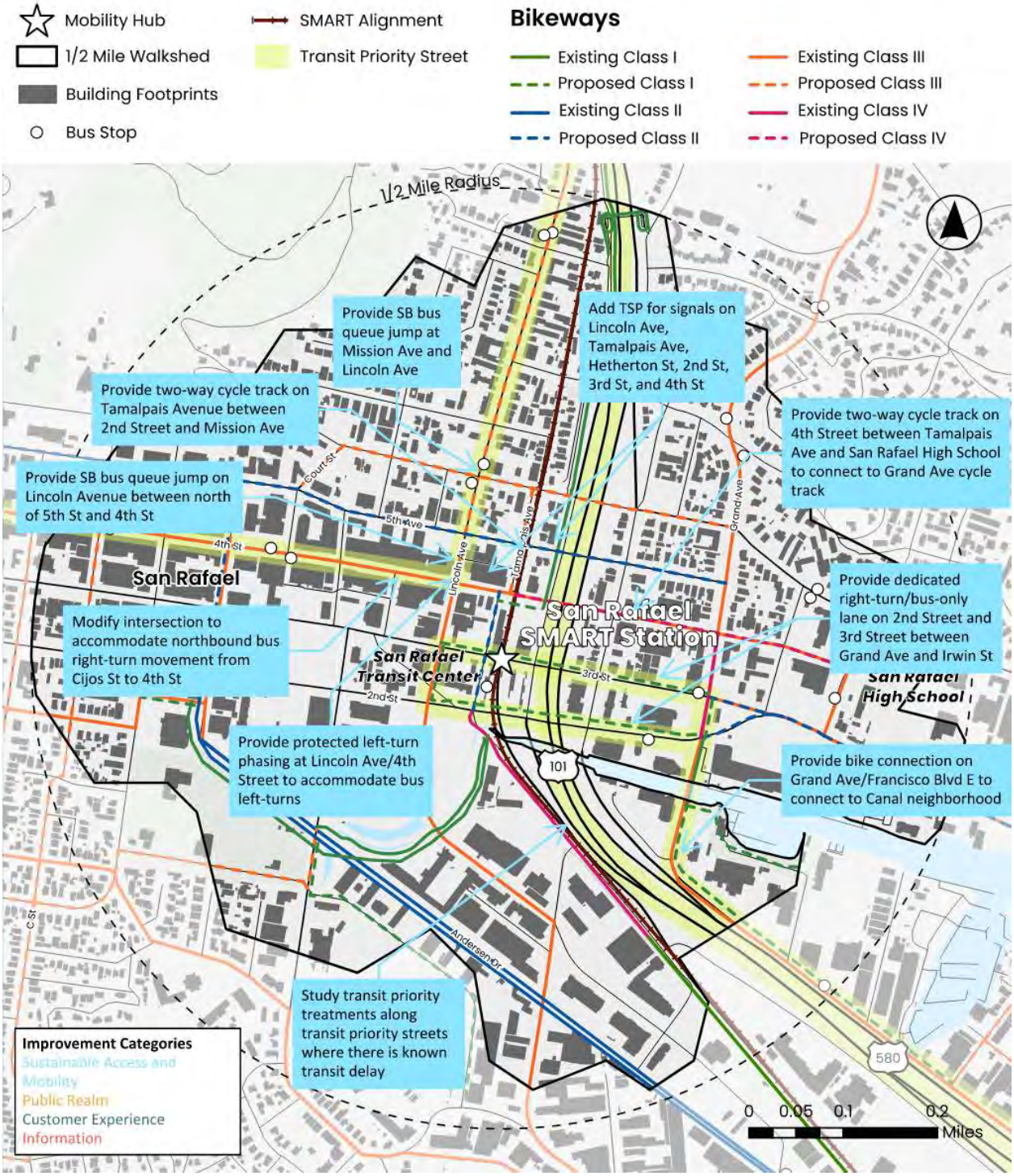
Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- Parking
- Pick Up Drop Off Zone
- Bus Stop
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Information Booth
- Vending/Retail Services
- Wayfinding

San Rafael SMART Station

Figure 11: Surrounding Opportunities & Constraints

August 2025

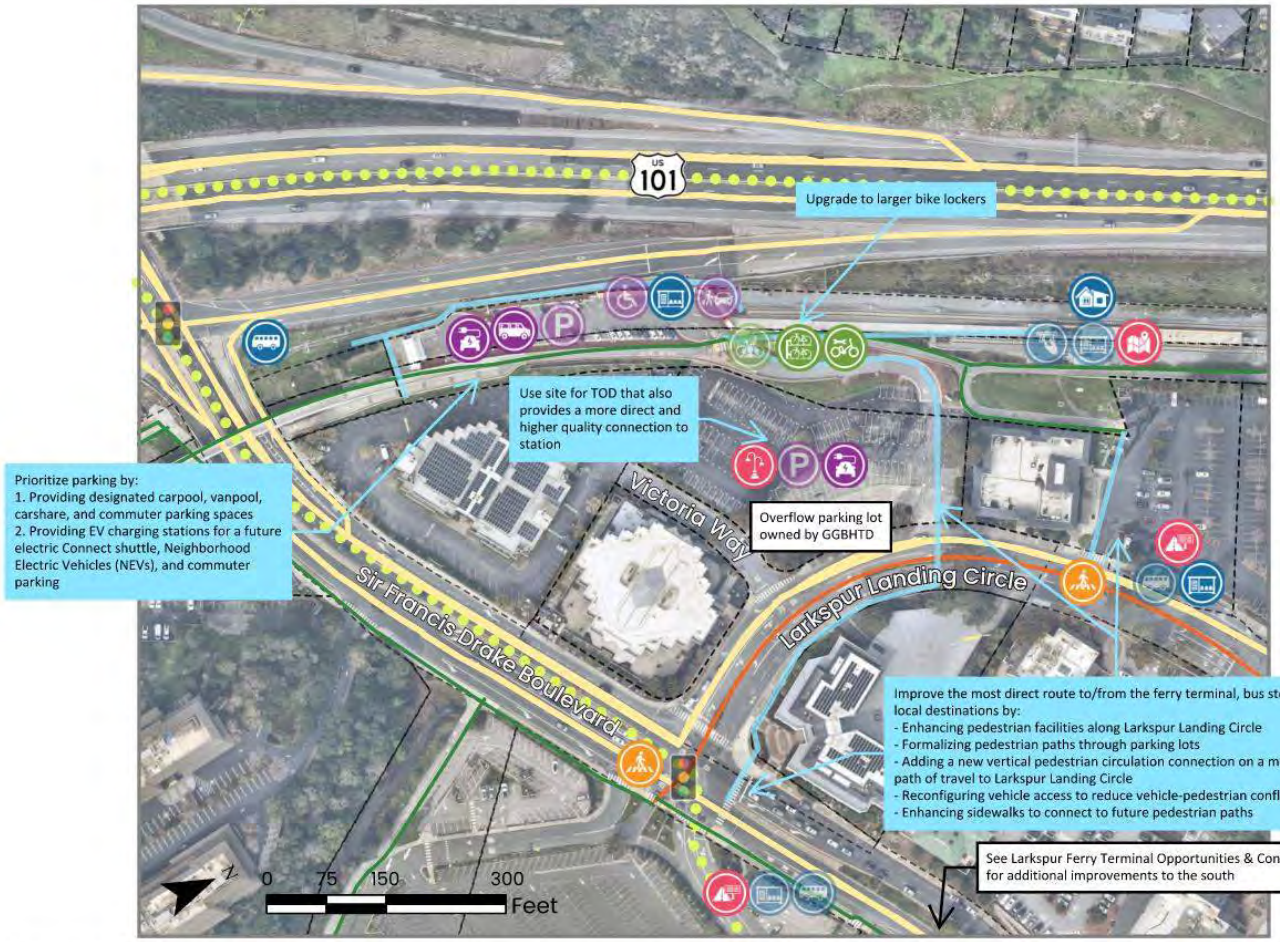


Larkspur SMART Station

The Larkspur SMART Station is the southern terminus of the SMART rail line and is located approximately 0.3 miles northwest of the Larkspur Ferry Terminal. Marin Transit buses stop on nearby streets, including Larkspur Landing Circle and Sir Francis Drake Boulevard. The Larkspur SMART Station is a pilot site for the MTC Regional Mapping and Wayfinding Project, which aims to make it easier for travelers to navigate and explore the Bay Area using public transit and connecting services. Priorities for hub access improvements are:

- Improve connectivity between the Larkspur SMART Station and Larkspur Ferry Terminal by providing a more comfortable and direct route
- Better leverage existing nearby parking lots to provide additional station amenities and pathways, including electric vehicle charging, carshare, and improved paths of travel
- Expand station access through improved bikeway crossings of major barriers, such as US-101
- Study transit priority treatments along transit priority streets where there is known transit delay

Figure 12 shows improvements within the station area, and **Figure 13** shows improvements surrounding the station area.



Larkspur SMART Station
Figure 12: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class III Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line
- Proposed Path

Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

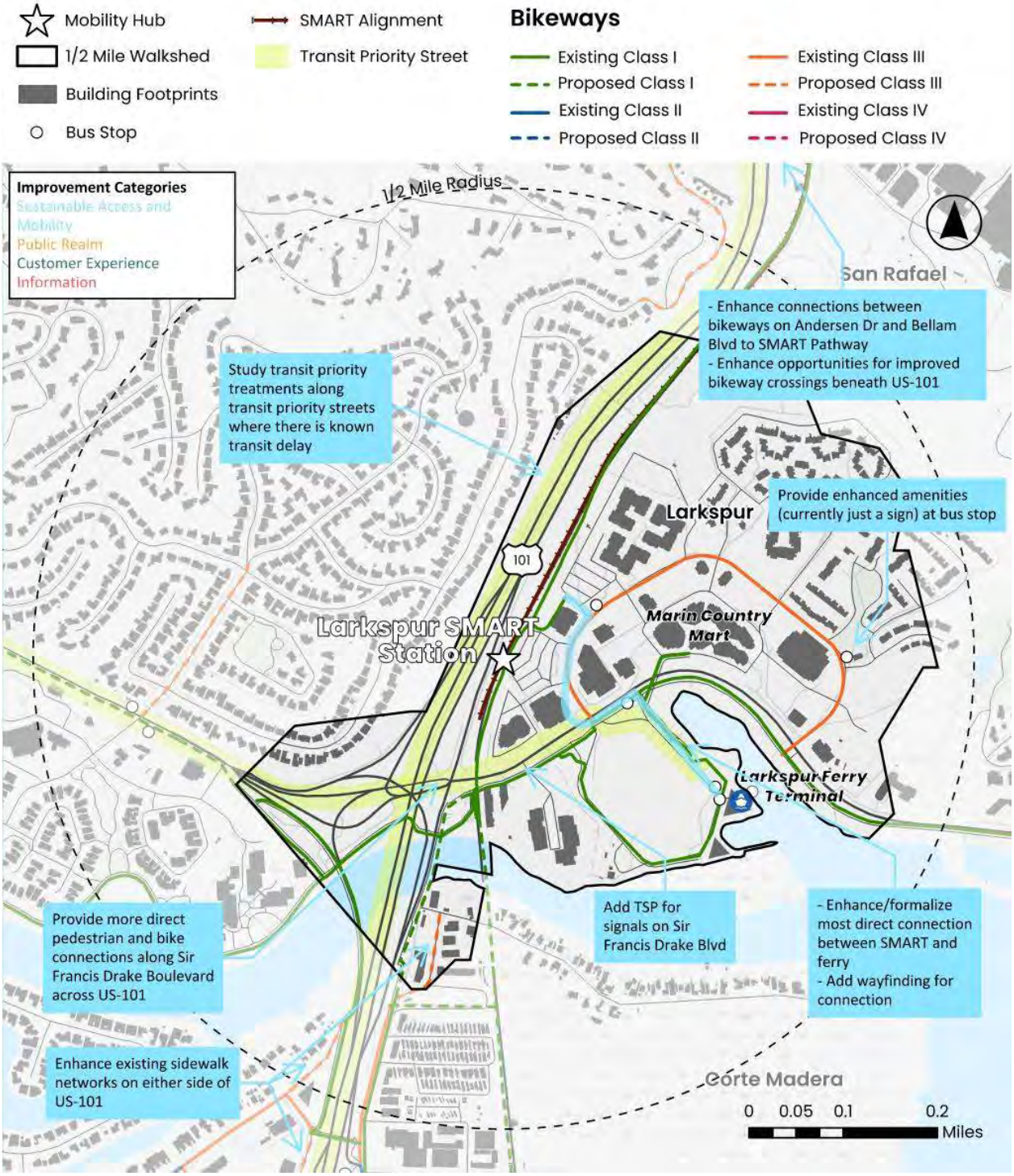
Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- Carpool/Vanpool/ Carshare Parking
- EV Charging
- Parking
- Pick Up Drop Off Zone
- High Visibility Crosswalk
- Bus Stop
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Lighting
- Real-Time Transit Information
- Wayfinding

Larkspur SMART Station

Figure 13: Surrounding Opportunities & Constraints

August 2025

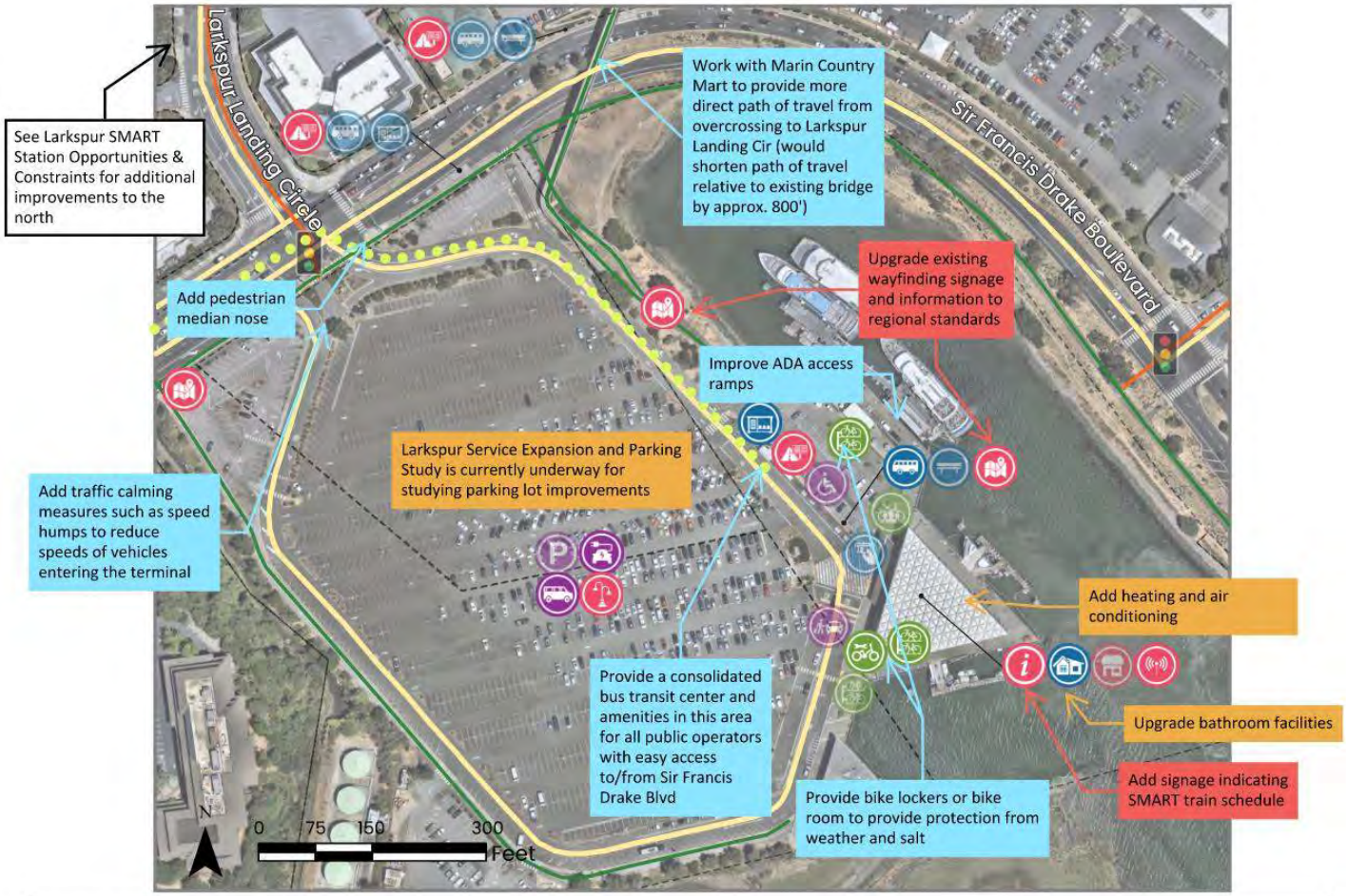


Larkspur Ferry Terminal

The Larkspur Ferry Terminal is located approximately 0.3 miles southeast of the Larkspur SMART Station. The terminal is served by Golden Gate Transit and Marin Transit bus routes. The Larkspur Service Expansion and Parking Study is currently underway to identify and evaluate improvements to the Terminal, including expanding ferry service and parking. Along with the Larkspur SMART Station, the Larkspur Ferry Terminal is also a pilot site for the MTC Regional Mapping and Wayfinding Project. Access improvement priorities at the Larkspur Ferry Terminal include:

- Consolidate bus connections at a location near the terminal and minimize transit travel time penalties and delays for bus circulation
- Improve connectivity between the Larkspur SMART Station and Larkspur Ferry Terminal by providing a more comfortable and direct route
- Enhance existing passenger amenities and provide new amenities, such as upgraded bathroom facilities, heating/air conditioning, and bike parking
- Provide new and enhanced pedestrian connections through improved roadway crossings
- Study transit priority treatments along transit priority streets where there is known transit delay

Figure 14 shows improvements within the station area, and **Figure 15** shows improvements surrounding the station area.



Larkspur Ferry Terminal
Figure 14: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class III Bikeway
- Bus Route
- Transit Priority Street
- Parcel Line

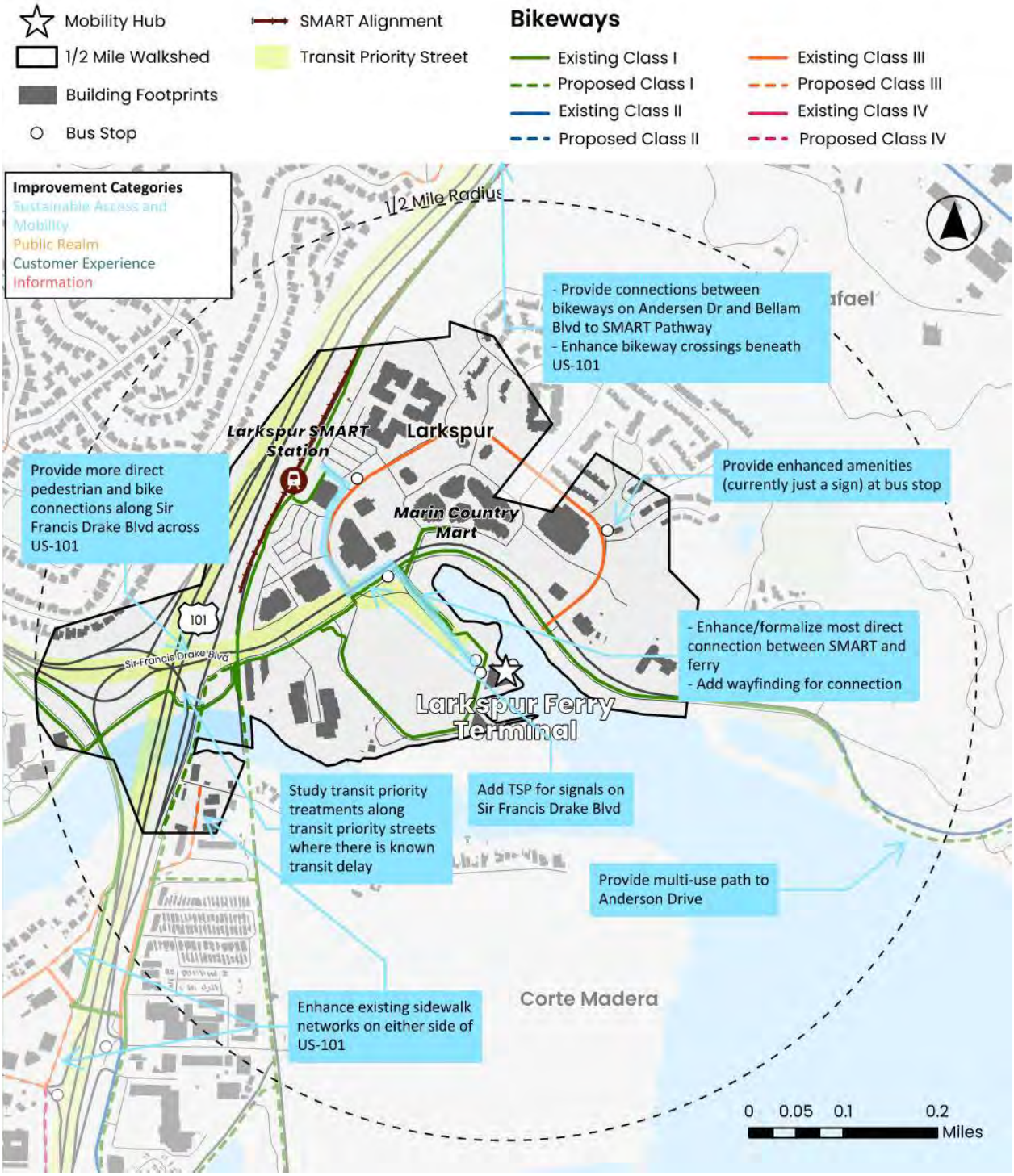
Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Share
- Bike Storage
- ADA Parking
- Carpool/Vanpool/ Carshare Parking
- EV Charging
- Parking
- Pick Up Drop Off Zone
- Bus Stop
- Fare Vending
- Restrooms
- Station Shelter with Bench
- Information Booth
- Lighting
- Real-Time Transit Information
- Vending/Retail Services
- Wayfinding
- Wi-Fi and Device Charging

Larkspur Ferry Terminal
Figure 15: Surrounding Opportunities & Constraints
August 2025

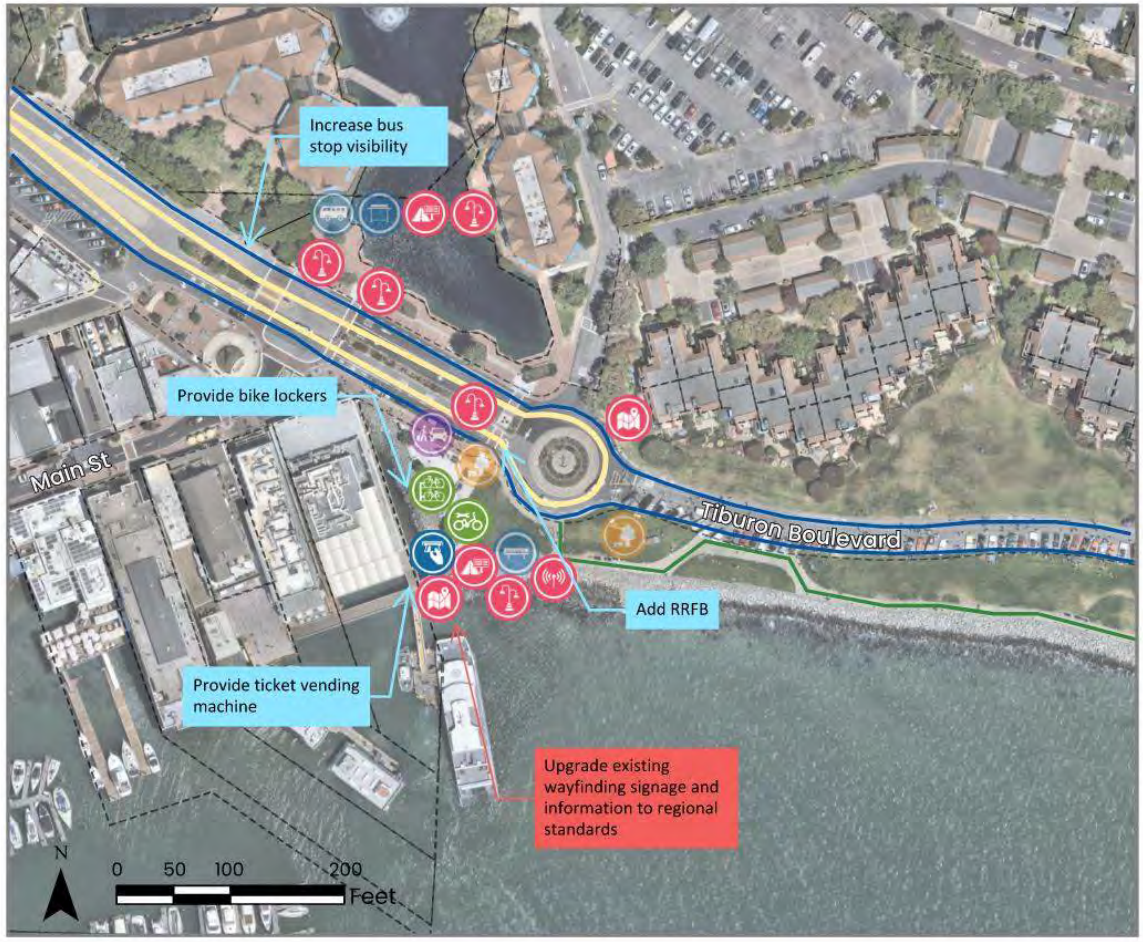


Tiburon Ferry Terminal

The Tiburon Ferry Terminal is located near the intersection of the southern terminus of Tiburon Boulevard/SR 131 and Main Street. Both Golden Gate Transit and Marin Transit bus routes use an on-street bus stop on Tiburon Boulevard to serve the terminal. Caltrans currently has an ongoing project for improvement along Tiburon Boulevard, including enhanced pedestrian crossings. The ferry dock used by Golden Gate Ferry service is privately owned, which limits opportunities for improvements in the immediate hub area. The following are priorities for hub access improvements at the Tiburon Ferry Terminal:

- Enhance the connection between the ferry and buses by improving the visibility of the bus stop and providing enhanced pedestrian crossings of Tiburon Boulevard
- Expand passenger amenities in nearby publicly-owned areas, including additional wayfinding, lighting, and bicycle amenities

Figure 16 shows improvements within the station area, and **Figure 17** shows improvements surrounding the station area.



Tiburon Ferry Terminal
Figure 16: Station Area Opportunities & Constraints
August 2025

Legend

- Class I Bikeway
- Class II Bikeway
- Bus Route
- Parcel Line

Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Storage
- Pick Up Drop Off Zone
- Public Plaza
- Bench
- Bus Stop
- Fare Vending
- Station Shelter with Bench
- Lighting
- Real-Time Transit Information
- Wayfinding
- Wi-Fi and Device Charging

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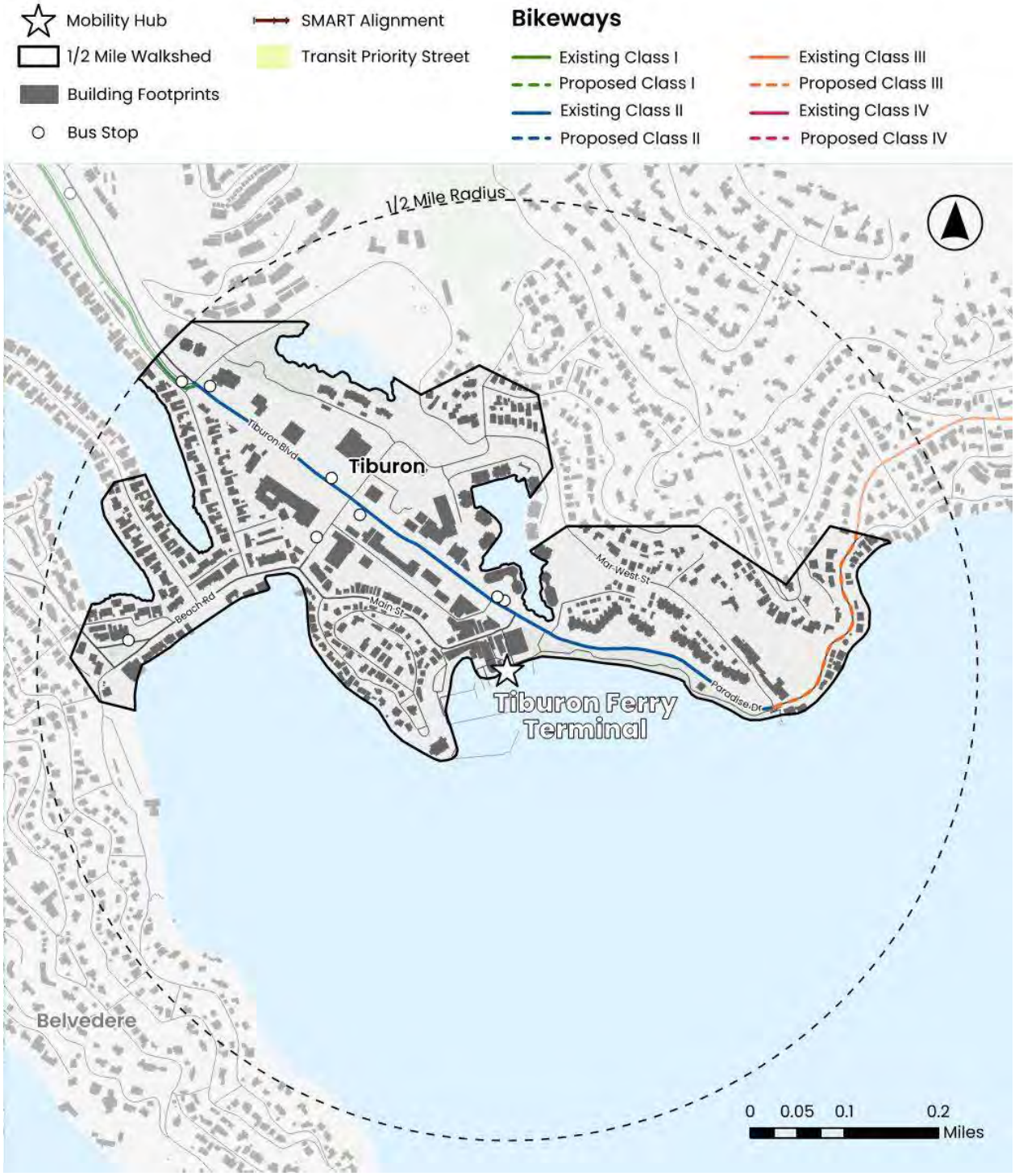
TAM Transportation Authority of Marin

Tiburon Ferry Terminal
Figure 17: Surrounding Opportunities & Constraints
August 2025

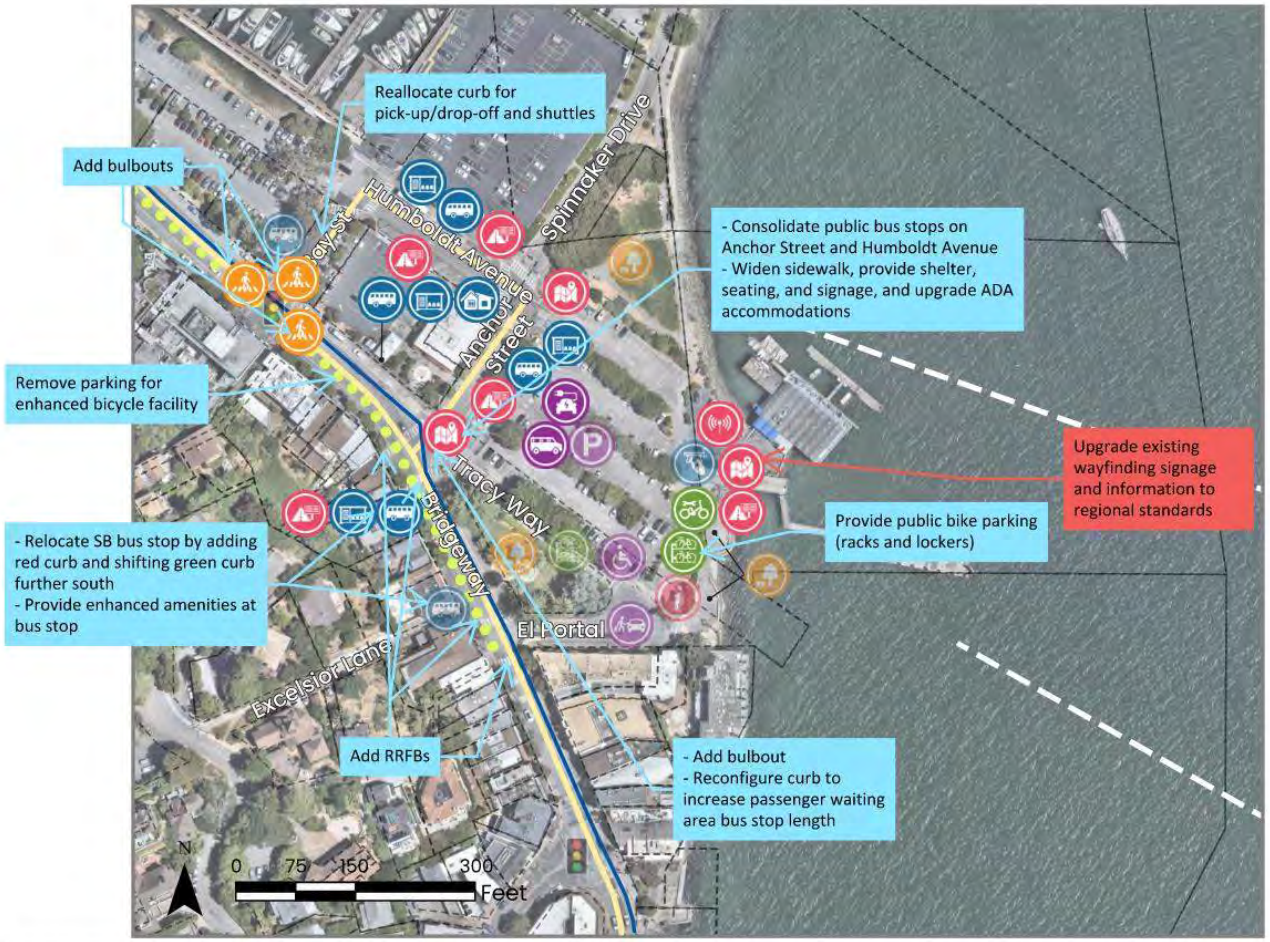


Sausalito Ferry Terminal

The Sausalito Ferry Terminal is located in Downtown Sausalito. This mobility hub is served by Marin Transit and Golden Gate Transit bus routes. There are both landside (Ferry Landside Improvement Project) and waterside (Sausalito Ferry Dock Replacement Project) projects currently underway at the Sausalito Ferry Terminal. Hub access improvement priorities for the Sausalito Ferry Terminal are the following:

- Provide additional transit connections and service to nearby destinations and to Marin City
- Provide improved bus connections and improved bus passenger waiting areas within the hub area
- Provide public secure bike parking facilities
- Enhance pedestrian crossings across Bridgeway

Figure 18 shows improvements within the station area, and **Figure 19** shows improvements surrounding the station area.



Sausalito Ferry Terminal
Figure 18: Station Area Opportunities & Constraints
August 2025

Legend

- Class II Bikeway
- Ferry Route
- Bus Route
- Transit Priority Street
- Parcel Line

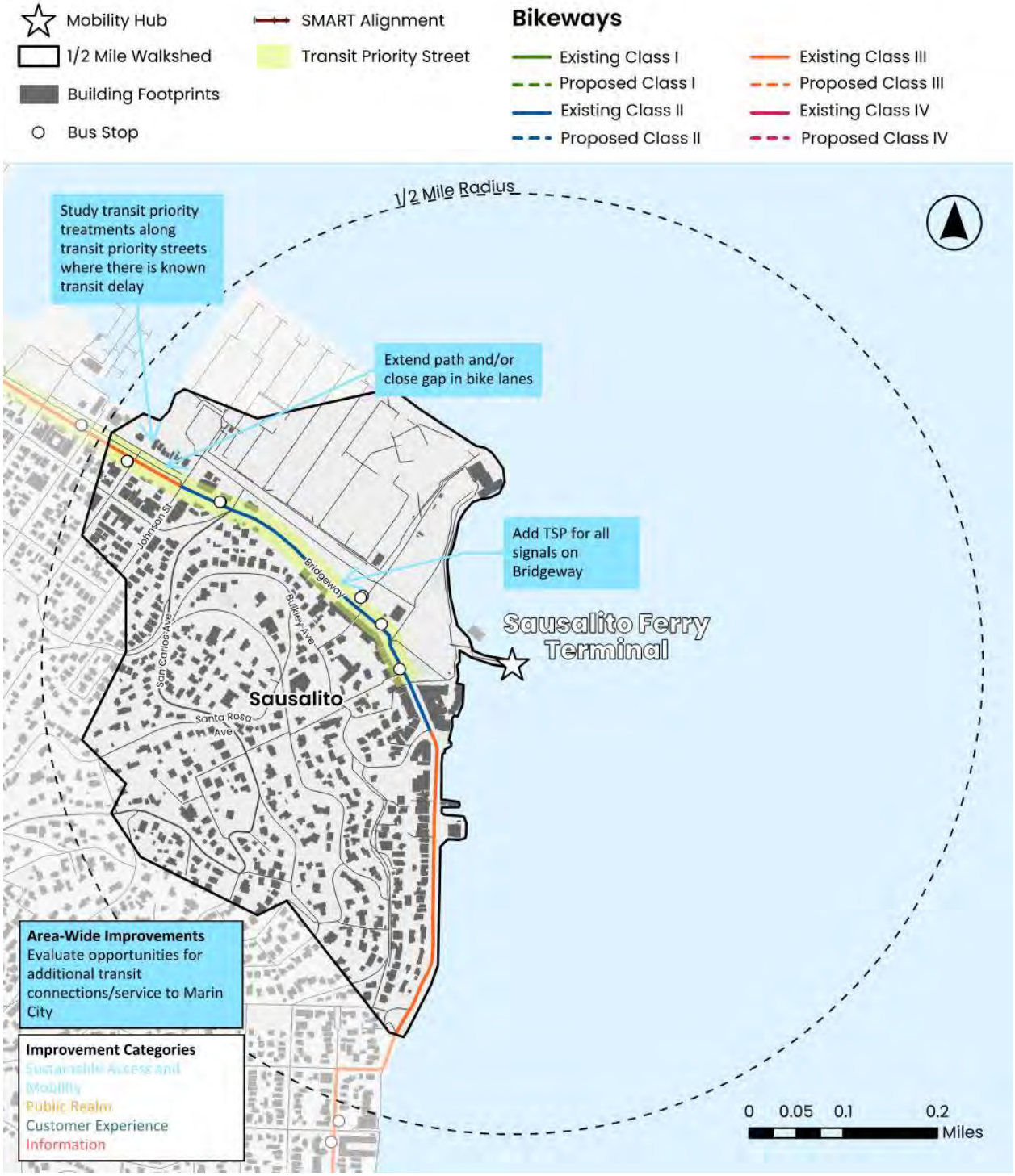
Improvement Categories

- Sustainable Access and Mobility
- Public Realm
- Customer Experience
- Information

Amenities (EXISTING / NEW OR ENHANCED)

- Bike Repair Station
- Bike Storage
- ADA Parking
- Carpool/Vanpool/ Carshare Parking
- EV Charging
- Parking
- Pick Up Drop Off Zone
- High Visibility Crosswalk
- Public Plaza
- Bus Stop
- Fare Vending
- Restrooms with Water Fountains
- Station Shelter with Bench
- Information Booth
- Real-Time Transit Information
- Wayfinding
- Wi-Fi and Device Charging

Sausalito Ferry Terminal
Figure 19: Surrounding Opportunities & Constraints
August 2025



Next Steps

The access opportunities identified in this document will be used to inform the definition of future transportation improvement projects in the hub areas. It is recommended that local jurisdictions incorporate the identified opportunities into future planning and budgetary documents, such as Active Transportation Plans (ATP), Priority Development Area (PDA) plans, and Capital Improvement Plans (CIP). For six of the nine sites, conceptual designs for improvements in the immediate hub areas will be prepared as part of this project. These will include identification of improvement costs to allow for future funding programming. An Implementation Plan, to be prepared in a later phase of this planning effort, will identify potential funding sources to support implementation of the recommendations contained within.

Appendix E:

Mobility Hub Cost Estimates

MARIN MOBILITY HUBS

PROJECT: NOVATO SAN MARIN SMART STATION

Sub-Project	Total	Design	Construction
Project 1 (Pedestrian Access Improvements and Related Improvements on Rush Landing Road and Redwood Boulevard) w/ 30% contingency	$ 1,888,788	$ 369,833	$ 1,518,955
Project 2 (Site Circulation and Transit/Motorized Access) w/ 30% contingency	$ 3,535,632	$ 692,292	$ 2,843,341
Project 3 (Additional Site Amenities) w/ 30% contingency	$ 3,244,699	$ 635,326	$ 2,609,373
Total	**$ 8,669,118**	$ 1,697,450	$ 6,971,669

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato San Marin SMART Station

Project 1 (Pedestrian Access Improvements and Related Improvements on Rush Landing Road and Redwood Boulevard)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Curb Ramps	15	EA	$ 10,000	$ 150,000	
2	Curb and Gutter	407	LF	$ 175	$ 71,225	
3	Curb	694	LF	$ 115	$ 79,810	
4	Concrete Sidewalk	5,010	SF	$ 40	$ 200,400	
5	Median Hardscape	2,415	SF	$ 45	$ 108,675	
6	RRFBs	2	LS	$ 57,500	$ 115,000	
7	Striping and Pavement Markings	1	LS	$ 27,500	$ 27,500	
				SUBTOTAL	**$ 752,610**	
OTHER CONSTRUCTION ITEMS						
8	Drainage	1	LS	$ 75,261	$ 75,261	10% of construction bid items
9	Traffic Control	1	LS	$ 75,261	$ 75,261	10% of construction bid items
10	Mobilization	1	LS	$ 75,261	$ 75,261	10% of construction bid items
11	Utility Relocation/Removals	1	LS	$ 37,631	$ 37,631	5% of construction bid items
				SUBTOTAL	**$ 263,414**	
PROFESSIONAL SERVICES						
12	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 182,884	$ 182,884	18% of hard costs
13	Project Management	1	LS	$ 101,602	$ 101,602	10% of hard costs
14	Construction Administration & Management (+DSDC)	1	LS	$ 152,404	$ 152,404	15% of hard costs
				SUBTOTAL	**$ 436,890**	
				PROJECT SUBTOTAL	**$ 1,452,914**	
				UNALLOCATED CONTINGENCY (30%)	$ 435,874	
				TOTAL PROJECT COST	**$ 1,888,788**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato San Marin SMART Station

Project 2 (Site Circulation and Transit/Motorized Access)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Bus Pad	1	LS	$ 140,000	$ 140,000	Assuming 12in Concrete depth and 12in Class 2 AB depth Bus Pad = $900/CY (CRCP) + $550/CY (AB) Total = 96CY
2	Bus Shelter	1	EA	$ 102,000	$ 102,000	Custom Shelters with Bench and Trash Can. Includes rerouting SMART Pathway behind bus shelter.
3	SMART Shelter	1	EA	$ 130,000	$ 130,000	Large Custom Shelters with Trash Cans
4	New Driveway Entrance from Rush Landing Road	1	LS	$ 17,000	$ 17,000	Assumes demolition of existing conditions and includes driveway concrete
5	Benches on SMART Platform and near Pick-up/Drop-off	5	EA	$ 5,000	$ 25,000	Custom Benches
6	Bus Real-Time Arrival Sign	1	EA	$ 30,000	$ 30,000	
7	Striping and Pavement Markings	1	LS	$ 19,000	$ 19,000	
				SUBTOTAL	**$ 463,000**	
SUPPORT SERVICES & AMENITIES						
8	Solar Canopy	12,500	SF	$ 80	$ 1,000,000	
				SUBTOTAL	**$ 1,000,000**	
OTHER CONSTRUCTION ITEMS						
9	Drainage	1	LS	$ 146,300	$ 146,300	10% of construction bid items
10	Traffic Control	1	LS	$ 73,150	$ 73,150	5% of construction bid items
11	Mobilization	1	LS	$ 146,300	$ 146,300	10% of construction bid items
12	Utility Relocation/Removals	1	LS	$ 73,150	$ 73,150	5% of construction bid items
				SUBTOTAL	**$ 438,900**	
PROFESSIONAL SERVICES						
12	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 342,342	$ 342,342	18% of hard costs
13	Project Management	1	LS	$ 190,190	$ 190,190	10% of hard costs
14	Construction Administration & Management (+DSDC)	1	LS	$ 285,285	$ 285,285	15% of hard costs
				SUBTOTAL	**$ 817,817**	
				PROJECT SUBTOTAL	**$ 2,719,717**	
				UNALLOCATED CONTINGENCY (30%)	$ 815,915	
				TOTAL PROJECT COST	**$ 3,535,632**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato San Marin SMART Station

Project 3 (Additional Site Amenities)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
SITE AMENITIES						
1	Lighting	1	LS	$ 125,000	$ 125,000	
2	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
3	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
4	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 460,000**	
BICYCLE AMENITIES						
5	E-Bike Charging	4	EA	$ 10,250	$ 41,000	
6	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
7	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 57,000**	
MOTORIZED/SUPPORT SERVICES & AMENITIES						
8	Electric Vehicle Charging Stations	1	LS	$ 230,000	$ 230,000	(2 Dual, 1 Single, Level 2)
9	New Service Needs	1	LS	$ 50,000	$ 50,000	
				SUBTOTAL	**$ 280,000**	
LANDSCAPING						
10	Landscaping	15,500	SF	$ 35	$ 542,500	
11	Trees	23	EA	$ 5,000	$ 115,000	
				SUBTOTAL	**$ 657,500**	
OTHER CONSTRUCTION ITEMS						
12	Drainage	-	LS	$ -	$ -	
13	Traffic Control	-	LS	$ -	$ -	
14	Mobilization	1	LS	$ 145,450	$ 145,450	10% of construction bid items
15	Utility Relocation/Removals	1	LS	$ 145,450	$ 145,450	10% of construction bid items
				SUBTOTAL	**$ 290,900**	
PROFESSIONAL SERVICES						
17	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 314,172	$ 314,172	18% of hard costs
18	Project Management	1	LS	$ 174,540	$ 174,540	10% of hard costs
19	Construction Administration & Management (+DSDC)	1	LS	$ 261,810	$ 261,810	15% of hard costs
				SUBTOTAL	**$ 750,522**	
				PROJECT SUBTOTAL	**$ 2,495,922**	
				UNALLOCATED CONTINGENCY (30%)	$ 748,777	
				TOTAL PROJECT COST	**$ 3,244,699**	

MARIN MOBILITY HUBS			
PROJECT: NOVATO DOWNTOWN SMART STATION			
Sub-Project	**Total**	**Design**	**Construction**
Project 1 (Site Access and Circulation Improvements) w/ 30% contingency	$ 682,073	$ 133,553	$ 548,520
Project 2 (Mobility Hub Amenities) w/ 30% contingency	$ 2,307,763	$ 451,870	$ 1,855,893
Total	**$ 2,989,835**	$ 585,422	$ 2,404,413

*Excludes SMART Pathway extension north of Grant Avenue, including intersection modifications at Grant Avenue & Railroad Avenue.
*Excludes on-site improvements for site activation and retail use.

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato Downtown SMART Station

Project 1 (Site Access and Circulation Improvements)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Pathway from Shared-Use Path at northern end of station to existing SMART Pathway south of station	1	LS	$ 26,500	$ 26,500	Assuming 3" thickness HMA and 5" thickness AB $400/ton HMA + $550/CY AB 30.3 tons HMA + 25.8 CY AB
2	RRFBs	2	LS	$ 50,000	$ 100,000	
3	Curb and Gutter	146	LF	$ 175	$ 25,550	
4	Curb	282	LF	$ 115	$ 32,430	
5	Curb Ramps	1	EA	$ 10,000	$ 10,000	
6	Concrete Sidewalk	1,445	SF	$ 40	$ 57,800	
7	PUDO Area Pad	1	LS	$ 10,000	$ 10,000	Assuming 6" Concrete depth and 6" Cass 2 AB depth Pad = $900/CY (CRCP) + $550/CY (AB) Total = 6.77CY
8	Striping and Pavement Markings	1	LS	$ 9,500	$ 9,500	
				SUBTOTAL	**$ 271,780**	
OTHER CONSTRUCTION ITEMS						
9	Drainage	1	LS	$ 27,178	$ 27,178	10% of construction bid items
10	Traffic Control	1	LS	$ 27,178	$ 27,178	10% of construction bid items
11	Mobilization	1	LS	$ 27,178	$ 27,178	10% of construction bid items
12	Utility Relocation/Removals	1	LS	$ 13,589	$ 13,589	5% of construction bid items
				SUBTOTAL	**$ 95,123**	
PROFESSIONAL SERVICES						
13	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 66,043	$ 66,043	18% of hard costs
14	Project Management	1	LS	$ 36,690	$ 36,690	10% of hard costs
15	Construction Administration & Management (+DSDC)	1	LS	$ 55,035	$ 55,035	15% of hard costs
				SUBTOTAL	**$ 157,768**	
				PROJECT SUBTOTAL	**$ 524,671**	
				UNALLOCATED CONTINGENCY (30%)	$ 157,401	
				TOTAL PROJECT COST	**$ 682,073**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato Downtown SMART Station

Project 2 (Mobility Hub Amenities)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
	SITE AMENITIES					
1	Lighting	1	LS	$ 100,000	$ 100,000	
2	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
3	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
4	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 435,000**	
	BICYCLE AMENITIES					
5	E-Bike Charging	4	EA	$ 10,250	$ 41,000	
6	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
7	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 57,000**	
	MOTORIZED/SUPPORT SERVICES & AMENITIES					
8	Electric Vehicle Charging Stations	1	LS	$ 230,000	$ 230,000	2 Dual, 1 Single, Level 2 Chargers
9	New Service Needs	1	LS	$ 50,000	$ 50,000	
				SUBTOTAL	**$ 280,000**	
	LANDSCAPING					
10	Landscaping	5,500	SF	$ 35	$ 192,500	
11	Trees	14	EA	$ 5,000	$ 70,000	
				SUBTOTAL	**$ 262,500**	
	OTHER CONSTRUCTION ITEMS					
12	Drainage	-	LS	$ -	$ -	
13	Traffic Control	-	LS	$ -	$ -	
14	Mobilization	1	LS	$ 103,450	$ 103,450	10% of construction bid items
15	Utility Relocation/Removals	1	LS	$ 103,450	$ 103,450	10% of construction bid items
				SUBTOTAL	**$ 206,900**	
	PROFESSIONAL SERVICES					
16	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 223,452	$ 223,452	18% of hard costs
17	Project Management	1	LS	$ 124,140	$ 124,140	10% of hard costs
18	Construction Administration & Management (+DSDC)	1	LS	$ 186,210	$ 186,210	15% of hard costs
				SUBTOTAL	**$ 533,802**	
				PROJECT SUBTOTAL	**$ 1,775,202**	
				UNALLOCATED CONTINGENCY (30%)	$ 532,561	
				TOTAL PROJECT COST	**$ 2,307,763**	

MARIN MOBILITY HUBS			
PROJECT: NOVATO HAMILTON SMART STATION			
Sub-Project	**Total**	**Design**	**Construction**
Project 1 (Bus Loop, PUDO, and Parking Reconfiguration) w/ 30% contingency	$ 13,157,131	$ 2,576,221	$ 10,580,910
Project 2 (Pedestrian and Bicycle Access Improvements) w/ 30% contingency	$ 353,861	$ 69,287	$ 284,573
Project 3 (Additional Site Amenities) w/ 30% contingency	$ 1,320,634	$ 258,586	$ 1,062,048
Total	**$ 14,831,625**	$ 2,904,094	$ 11,927,531

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato Hamilton SMART Station

Project 1 (Bus Loop, PUDO, and Parking Reconfiguration)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
	HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES					
1	One Way Bus Loop	1	LS	$ 850,375	$ 850,375	Road Reconstruction = Assuming 6" thickness HMA and 18" thickness AB. $400/ton HMA + $550/CY AB. 616.25 tons HMA + 945 CY AB. Bus Pad = Assuming 12in Concrete depth and 12in Class 2 AB depth. $900/CY (CRCP) + $550/CY (AB). Total Area= 53CY
2	Curb Ramps	8	EA	$ 10,000	$ 80,000	
3	Curb and Gutter	1,334	LF	$ 175	$ 233,450	
4	Curb	2,466	LF	$ 115	$ 283,590	
5	Concrete Sidewalk	3,225	SF	$ 40	$ 129,000	
6	Median Hardscape	1,866	SF	$ 45	$ 83,970	
7	Bus Stops with Shelters	2	EA	$ 80,000	$ 160,000	Custom Shelters with Bench and Trash Can
8	Bus Real-Time Arrival Signs	2	EA	$ 30,000	$ 60,000	
9	Striping and Pavement Markings	1	LS	$ 30,000	$ 30,000	
				SUBTOTAL	**$ 1,910,385**	
	MOTORIZED SERVICES & AMENITIES					
10	Electric Vehicle Charging Stations	1	LS	$ 385,000	$ 385,000	11 Dual Chargers, 3 Single Chargers, Level 2
11	New Service Needs	1	LS	$ 70,000	$ 70,000	
12	Carshare/Carpool/Vanpool Parking	7	EA	$ 530	$ 3,710	Special Signage
13	ADA Parking	5	EA	$ 5,000	$ 25,000	Grading, Striping and Repaving
				SUBTOTAL	**$ 483,710**	
	SUPPORT SERVICES & AMENITIES					
14	Solar Canopies	23,575	SF	$ 80	$ 1,886,000	
15	Stormwater Infiltration Planters with Curb Cuts	1,740	SF	$ 40	$ 69,600	
16	Stormwater Treatment Area	11,000	SF	$ 50	$ 550,000	
				SUBTOTAL	**$ 2,505,600**	
	LANDSCAPING					
17	Landscaping	11,416	SF	$ 35	$ 399,560	
18	Trees	29	EA	$ 5,000	$ 145,000	
				SUBTOTAL	**$ 544,560**	
	OTHER CONSTRUCTION ITEMS					
19	Drainage	1	LS	$ 544,426	$ 544,426	10% of construction bid items
20	Traffic Control	1	LS	$ 272,213	$ 272,213	5% of construction bid items
21	Mobilization	1	LS	$ 544,426	$ 544,426	10% of construction bid items
22	Utility Relocation/Removals	1	LS	$ 272,213	$ 272,213	5% of construction bid items
				SUBTOTAL	**$ 1,633,277**	
	PROFESSIONAL SERVICES					
23	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 1,273,956	$ 1,273,956	18% of hard costs
24	Project Management	1	LS	$ 707,753	$ 707,753	10% of hard costs
25	Construction Administration & Management (+DSDC)	1	LS	$ 1,061,630	$ 1,061,630	15% of hard costs
				SUBTOTAL	**$ 3,043,339**	
				PROJECT SUBTOTAL	**$ 10,120,870**	
				UNALLOCATED CONTINGENCY (30%)	$ 3,036,261	
				TOTAL PROJECT COST	**$ 13,157,131**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato Hamilton SMART Station

Project 2 (Pedestrian and Bicycle Access Improvements)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
PEDESTRIAN & BICYCLE AMENITIES						
1	Pathway from SMART Pathway to Main Gate Road	1	LS	$ 91,000	$ 91,000	Assuming 3" thickness HMA and 5" thickness AB. Intersection improvements(concrete sidewalk, curb ramps, striping) $400/ton HMA + $550/CY AB. 47.4 tons HMA + 40CY AB.
2	RRFB for Main Gate Road Crossing	1	LS	$ 50,000	$ 50,000	
				SUBTOTAL	**$ 141,000**	
OTHER CONSTRUCTION ITEMS						
3	Drainage	1	LS	$ 14,100	$ 14,100	10% of construction bid items
4	Traffic Control	1	LS	$ 14,100	$ 14,100	10% of construction bid items
5	Mobilization	1	LS	$ 14,100	$ 14,100	10% of construction bid items
6	Utility Relocation/Removals	1	LS	$ 7,050	$ 7,050	5% of construction bid items
				SUBTOTAL	**$ 49,350**	
PROFESSIONAL SERVICES						
7	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 34,263	$ 34,263	18% of hard costs
8	Project Management	1	LS	$ 19,035	$ 19,035	10% of hard costs
9	Construction Administration & Management (+DSDC)	1	LS	$ 28,553	$ 28,553	15% of hard costs
				SUBTOTAL	**$ 81,851**	
				PROJECT SUBTOTAL	**$ 272,201**	
				UNALLOCATED CONTINGENCY (30%)	$ 81,660	
				TOTAL PROJECT COST	**$ 353,861**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Novato Hamilton SMART Station

Project 3 (Additional Site Amenities)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
SITE AMENITIES						
1	Lighting	1	LS	$ 200,000	$ 200,000	
2	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
3	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
4	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 535,000**	
BICYCLE AMENITIES						
5	E-Bike Charging	4	EA	$ 10,250	$ 41,000	
6	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
7	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 57,000**	
OTHER CONSTRUCTION ITEMS						
8	Drainage	-	LS	$ -	$ -	
9	Traffic Control	-	LS	$ -	$ -	
10	Mobilization	1	LS	$ 59,200	$ 59,200	10% of construction bid items
11	Utility Relocation/Removals	1	LS	$ 59,200	$ 59,200	10% of construction bid items
				SUBTOTAL	**$ 118,400**	
PROFESSIONAL SERVICES						
12	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 127,872	$ 127,872	18% of hard costs
13	Project Management	1	LS	$ 71,040	$ 71,040	10% of hard costs
14	Construction Administration & Management (+DSDC)	1	LS	$ 106,560	$ 106,560	15% of hard costs
				SUBTOTAL	**$ 305,472**	

PROJECT SUBTOTAL	**$**	**1,015,872**
UNALLOCATED CONTINGENCY (30%)	$	304,762
TOTAL PROJECT COST	**$**	**1,320,634**

MARIN MOBILITY HUBS			
PROJECT: MARIN CIVIC CENTER SMART STATION			
Sub-Project	**Total**	**Design**	**Construction**
Project 1 (Mobility Hub Amenities) w/ 30% contingency	$ 2,053,451	$ 402,074	$ 1,651,377
Project 2 (Civic Center Bicycle and Pedestrian Access) w/ 30% contingency	$ 406,563	$ 79,607	$ 326,957
Project 3 (Merrydale Road Access) w/ 30% contingency	$ 192,128	$ 37,619	$ 154,508
Total	**$ 2,652,142**	$ 519,301	$ 2,132,842

*Excludes San Rafael Merrydale Promenade Project, Rafael Civic Center (Rafael Meadows) Connector Project, and SMART station access along Civic Center Drive.

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Marin Civic Center SMART Station

Project 1 (Mobility Hub Amenities)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
	SITE AMENITIES					
1	Lighting	1	LS	$ 125,000	$ 125,000	
2	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
3	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
4	Bus Real-Time Arrival Signs	2	EA	$ 30,000	$ 60,000	
5	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 520,000**	
	BICYCLE AMENITIES					
6	Relocate Bikeshare and Bike Racks	12	EA	$ 1,000	$ 12,000	
7	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
8	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 28,000**	
	SUPPORT SERVICES & AMENITIES					
9	Security	1	LS	$ 150,000	$ 150,000	
				SUBTOTAL	**$ 150,000**	
	LANDSCAPING					
10	Landscaping	5,500	SF	$ 35	$ 192,500	
11	Trees	6	EA	$ 5,000	$ 30,000	
				SUBTOTAL	**$ 222,500**	
	OTHER CONSTRUCTION ITEMS					
12	Drainage	-	LS	$ -	$ -	
13	Traffic Control	-	LS	$ -	$ -	
14	Mobilization	1	LS	$ 92,050	$ 92,050	10% of construction bid items
15	Utility Relocation/Removals	1	LS	$ 92,050	$ 92,050	10% of construction bid items
				SUBTOTAL	**$ 184,100**	
	PROFESSIONAL SERVICES					
16	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 198,828	$ 198,828	18% of hard costs
17	Project Management	1	LS	$ 110,460	$ 110,460	10% of hard costs
18	Construction Administration & Management (+DSDC)	1	LS	$ 165,690	$ 165,690	15% of hard costs
				SUBTOTAL	**$ 474,978**	
				PROJECT SUBTOTAL	**$ 1,579,578**	
				UNALLOCATED CONTINGENCY (30%)	$ 473,873	
				TOTAL PROJECT COST	**$ 2,053,451**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Marin Civic Center SMART Station

Project 2 (Civic Center Bicycle and Pedestrian Access)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & BICYCLE/PEDESTRIAN AMENITIES						
1	No Right-Turn on Red Sign and Post	1	EA	$ 550	$ 550	
2	Two-Stage Left-Turn Bike Box	1	LS	$ 2,000	$ 2,000	
3	Curb and Gutter	166	LF	$ 175	$ 29,050	
4	Curb Ramps	3	EA	$ 10,000	$ 30,000	
5	Concrete Sidewalk	1,600	SF	$ 40	$ 64,000	
6	Crosswalk Striping	1	LS	$ 8,400	$ 8,400	
				SUBTOTAL	**$ 134,000**	
LANDSCAPING						
7	Landscaping	800	SF	$ 35	$ 28,000	
8	Trees	-	EA	$ 5,000	$ -	
				SUBTOTAL	**$ 28,000**	
OTHER CONSTRUCTION ITEMS						
9	Drainage	1	LS	$ 16,200	$ 16,200	10% of construction bid items
10	Traffic Control	1	LS	$ 16,200	$ 16,200	10% of construction bid items
11	Mobilization	1	LS	$ 16,200	$ 16,200	10% of construction bid items
12	Utility Relocation/Removals	1	LS	$ 8,100	$ 8,100	5% of construction bid items
				SUBTOTAL	**$ 56,700**	
PROFESSIONAL SERVICES						
13	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 39,366	$ 39,366	18% of hard costs
14	Project Management	1	LS	$ 21,870	$ 21,870	10% of hard costs
15	Construction Administration & Management (+DSDC)	1	LS	$ 32,805	$ 32,805	15% of hard costs
				SUBTOTAL	**$ 94,041**	
				PROJECT SUBTOTAL	**$ 312,741**	
				UNALLOCATED CONTINGENCY (30%)	$ 93,822	
				TOTAL PROJECT COST	**$ 406,563**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Marin Civic Center SMART Station

Project 3 (Merrydale Road Access)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	PUDO Area	1	LS	$ 19,500	$ 19,500	Includes sidewalk and striping improvements
2	Lighting	1	LS	$ 50,000	$ 50,000	
3	Benches	2	EA	$ 5,000	$ 10,000	
				SUBTOTAL	**$ 79,500**	
OTHER CONSTRUCTION ITEMS						
4	Drainage	1	LS	$ 7,950	$ 7,950	10% of construction bid items
5	Traffic Control	1	LS	$ 3,975	$ 3,975	5% of construction bid items
6	Mobilization	1	LS	$ 7,950	$ 7,950	10% of construction bid items
7	Utility Relocation/Removals	1	LS	$ 3,975	$ 3,975	5% of construction bid items
				SUBTOTAL	**$ 23,850**	
PROFESSIONAL SERVICES						
8	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 18,603	$ 18,603	18% of hard costs
9	Project Management	1	LS	$ 10,335	$ 10,335	10% of hard costs
10	Construction Administration & Management (+DSDC)	1	LS	$ 15,503	$ 15,503	15% of hard costs
				SUBTOTAL	**$ 44,441**	
				PROJECT SUBTOTAL	**$ 147,791**	
				UNALLOCATED CONTINGENCY (30%)	$ 44,337	
				TOTAL PROJECT COST	**$ 192,128**	

MARIN MOBILITY HUBS			
PROJECT: LARKSPUR SMART STATION			
Sub-Project	**Total**	**Design**	**Construction**
Project 1 (Connectivity to Larkspur Ferry and Larkspur Landing Circle Improvements) w/ 30% contingency	$ 4,023,973	$ 787,911	$ 3,236,062
Project 2 (New Bus Stop on US-101) w/ 30% contingency	$ 784,027	$ 153,516	$ 630,511
Project 3 (Mobility Hub Amenities) w/ 30% contingency	$ 8,461,424	$ 1,656,782	$ 6,804,642
Total	**$ 13,269,424**	$ 2,598,209	$ 10,671,215

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Larkspur SMART Station

Project 1 (Connectivity to Larkspur Ferry and Larkspur Landing Circle Improvements)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Curb Ramps	3	EA	$ 10,000	$ 30,000	
2	Curb and Gutter	1,171	LF	$ 175	$ 204,925	
3	Curb	890	LF	$ 115	$ 102,350	
4	Concrete Sidewalk	7,430	SF	$ 40	$ 297,200	
5	Median Hardscape	1,565	SF	$ 45	$ 70,425	
6	Multi-Use Path Ramp to Station	1	LS	$ 500,000	$ 500,000	Assuming 3" thickness HMA and 5" thickness AB $400/ton HMA + $550/CY AB 69.2 tons HMA + 59 CY AB = $60,500 320ft (path length) x 12ft (avg retaining wall height) = 3840sq ft 3840sq ft x $100/SF (segmental block MSE) = $384,000 + 15% design (Eng + geotech) =$441,600
7	Bus Pad	1	LS	$ 55,000	$ 55,000	Assuming 12in Concrete depth and 12in Class 2 AB depth Bus Pad = $900/CY (CRCP) + $550/CY (AB) Total = 37.7CY
8	Bus Shelter	1	EA	$ 80,000	$ 80,000	Custom Shelter with Bench and Trash Can
9	Bus Real-Time Arrival Sign	1	EA	$ 30,000	$ 30,000	
10	Striping and Pavement Markings	1	LS	$ 11,000	$ 11,000	
				SUBTOTAL	**$ 1,380,900**	
LANDSCAPING						
11	Landscaping	3,500	SF	$ 35	$ 122,500	
12	Trees	20	EA	$ 5,000	$ 100,000	
				SUBTOTAL	**$ 222,500**	
OTHER CONSTRUCTION ITEMS						
13	Drainage	1	LS	$ 160,340	$ 160,340	10% of construction bid items
14	Traffic Control	1	LS	$ 160,340	$ 160,340	10% of construction bid items
15	Mobilization	1	LS	$ 160,340	$ 160,340	10% of construction bid items
16	Utility Relocation/Removals	1	LS	$ 80,170	$ 80,170	5% of construction bid items
				SUBTOTAL	**$ 561,190**	
PROFESSIONAL SERVICES						
17	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 389,626	$ 389,626	18% of hard costs
18	Project Management	1	LS	$ 216,459	$ 216,459	10% of hard costs
19	Construction Administration & Management (+DSDC)	1	LS	$ 324,689	$ 324,689	15% of hard costs
				SUBTOTAL	**$ 930,774**	
				PROJECT SUBTOTAL	**$ 3,095,364**	
				UNALLOCATED CONTINGENCY (30%)	$ 928,609	
				TOTAL PROJECT COST	**$ 4,023,973**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Larkspur SMART Station

Project 2 (New Bus Stop on US-101)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Bus Pad	1	LS	$ 30,000	$ 30,000	Assuming 12in Concrete depth and 12in Class 2 AB depth Bus Pad = $900/CY (CRCP) + $550/CY (AB) Total = 20CY
2	Bus Shelters	1	EA	$ 80,000	$ 80,000	Custom Shelters with Bench and Trash Can
3	Curb	395	LF	$ 115	$ 45,425	
4	Concrete Sidewalk	2,122	SF	$ 40	$ 84,880	
5	Bus Real-Time Arrival Sign	1	EA	$ 30,000	$ 30,000	
6	Striping and Pavement Markings	1	LS	$ 19,000	$ 19,000	
				SUBTOTAL	**$ 289,305**	
LANDSCAPING						
7	Landscaping	660	SF	$ 35	$ 23,100	
8	Trees	-	EA	$ 5,000	$ -	
				SUBTOTAL	**$ 23,100**	
OTHER CONSTRUCTION ITEMS						
9	Drainage	1	LS	$ 31,241	$ 31,241	10% of construction bid items
10	Traffic Control	1	LS	$ 31,241	$ 31,241	10% of construction bid items
11	Mobilization	1	LS	$ 31,241	$ 31,241	10% of construction bid items
12	Utility Relocation/Removals	1	LS	$ 15,620	$ 15,620	5% of construction bid items
				SUBTOTAL	**$ 109,342**	
PROFESSIONAL SERVICES						
13	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 75,914	$ 75,914	18% of hard costs
14	Project Management	1	LS	$ 42,175	$ 42,175	10% of hard costs
15	Construction Administration & Management (+DSDC)	1	LS	$ 63,262	$ 63,262	15% of hard costs
				SUBTOTAL	**$ 181,351**	
				PROJECT SUBTOTAL	**$ 603,098**	
				UNALLOCATED CONTINGENCY (30%)	$ 180,929	
				TOTAL PROJECT COST	**$ 784,027**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Larkspur SMART Station

Project 3 (Mobility Hub Amenities)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
SITE AMENITIES						
1	Lighting	1	LS	$ 150,000	$ 150,000	
2	Shelter and Bench	1	EA	$ 60,000	$ 60,000	Custom Shelter and Bench
3	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
9	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
10	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 545,000**	
BICYCLE AMENITIES						
4	E-Bike Charging	4	EA	$ 10,250	$ 41,000	
5	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
6	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 57,000**	
SUPPORT SERVICES & AMENITIES						
7	Electric Vehicle Charging Stations	1	LS	$ 235,000	$ 235,000	4 Dual, Level 2 Chargers
8	New Service Needs	1	LS	$ 50,000	$ 50,000	
11	Solar Canopy	15200	SF	$ 80	$ 1,216,000	
				SUBTOTAL	**$ 1,501,000**	
LANDSCAPING						
12	Landscaping	45,000	SF	$ 35	$ 1,575,000	
13	Trees	23	EA	$ 5,000	$ 115,000	
				SUBTOTAL	**$ 1,690,000**	
OTHER CONSTRUCTION ITEMS						
14	Drainage	-	LS	$ 379,300	$ -	
15	Traffic Control	-	LS	$ 379,300	$ -	
16	Mobilization	1	LS	$ 379,300	$ 379,300	10% of construction bid items
17	Utility Relocation/Removals	1	LS	$ 379,300	$ 379,300	10% of construction bid items
				SUBTOTAL	**$ 758,600**	
PROFESSIONAL SERVICES						
18	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 819,288	$ 819,288	18% of hard costs
19	Project Management	1	LS	$ 455,160	$ 455,160	10% of hard costs
20	Construction Administration & Management (+DSDC)	1	LS	$ 682,740	$ 682,740	15% of hard costs
				SUBTOTAL	**$ 1,957,188**	
				PROJECT SUBTOTAL	**$ 6,508,788**	
				UNALLOCATED CONTINGENCY (30%)	$ 1,952,636	
				TOTAL PROJECT COST	**$ 8,461,424**	

MARIN MOBILITY HUBS			
PROJECT: SAUSALITO FERRY TERMINAL			
Sub-Project	**Total**	**Design**	**Construction**
Project 1 (Pedestrian Improvements on Bridgeway) w/ 30% contingency	$ 1,440,691	$ 282,093	$ 1,158,597
Project 2 (Bus Facility Improvements and Related Improvements on Anchor Street and Humboldt Avenue) w/ 30% contingency	$ 3,020,499	$ 591,426	$ 2,429,072
Project 3 (Parking Area and Mobility Hub Amenity Improvements) w/ 30% contingency	$ 2,065,130	$ 404,361	$ 1,660,769
Total	**$ 6,526,319**	$ 1,277,881	$ 5,248,438

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Sausalito Ferry Terminal

Project 1 (Pedestrian Improvements on Bridgeway)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS						
1	Curb and Gutter	458	LF	$ 175	$ 80,150	
2	Concrete Sidewalk	3,658	SF	$ 40	$ 146,320	
3	Curb Ramps	8	EA	$ 10,000	$ 80,000	
4	RRFBs	3	LS	$ 50,000	$ 150,000	
5	Striping and Pavement Markings	1,400	SF	$ 20	$ 28,000	
6	Lighting	1	LS	$ 50,000	$ 50,000	
				SUBTOTAL	**$ 534,470**	
OTHER CONSTRUCTION ITEMS						
7	Drainage	1	LS	$ 106,894	$ 106,894	20% of construction bid items
8	Traffic Control	1	LS	$ 53,447	$ 53,447	10% of construction bid items
9	Mobilization	1	LS	$ 53,447	$ 53,447	10% of construction bid items
10	Utility Relocation/Removals	1	LS	$ 26,724	$ 26,724	5% of construction bid items
				SUBTOTAL	**$ 240,512**	
PROFESSIONAL SERVICES						
11	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 139,497	$ 139,497	18% of hard costs
12	Project Management	1	LS	$ 77,498	$ 77,498	10% of hard costs
13	Construction Administration & Management (+DSDC)	1	LS	$ 116,247	$ 116,247	15% of hard costs
				SUBTOTAL	**$ 333,242**	

PROJECT SUBTOTAL	**$**	**1,108,224**
UNALLOCATED CONTINGENCY (30%)	$	332,467
TOTAL PROJECT COST	**$**	**1,440,691**

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Sausalito Ferry Terminal

Project 2 (Bus Facility Improvements and Related Improvements on Anchor Street and Humboldt Avenue)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
HARDSCAPE IMPROVEMENTS & TRANSIT AMENITIES						
1	Bus Shelters	6	EA	$ 80,000	$ 480,000	
2	Bus Pads	1	LS	$ 203,000	$ 203,000	Assuming 12in Concrete depth and 12in Class 2 AB depth Bus Pad = $900/CY (CRCP) + $550/CY (AB) Total = 140CY
3	Concrete Sidewalk	3,000	SF	$ 40	$ 120,000	
4	Curb and Gutter	103	LF	$ 175	$ 18,025	
5	Curb	135	LF	$ 115	$ 15,525	
6	Curb Ramps	2	EA	$ 10,000	$ 20,000	
7	Striping and Pavement Markings	450	SF	$ 20	$ 9,000	
8	Bus Real-Time Arrival Signs	6	EA	$ 30,000	$ 180,000	
9	Lighting	1	LS	$ 75,000	$ 75,000	
				SUBTOTAL	**$ 1,120,550**	
LANDSCAPING						
10	Landscaping	4365	SF	$ 35	$ 152,775	
11	Trees	8	EA	$ 5,000	$ 40,000	
				SUBTOTAL	**$ 192,775**	
OTHER CONSTRUCTION ITEMS						
12	Drainage	1	LS	$ 224,110	$ 224,110	20% of construction bid items
13	Traffic Control	1	LS	$ 112,055	$ 112,055	10% of construction bid items
14	Mobilization	1	LS	$ 112,055	$ 112,055	10% of construction bid items
15	Utility Relocation/Removals	1	LS	$ 56,028	$ 56,028	5% of construction bid items
				SUBTOTAL	**$ 504,248**	
PROFESSIONAL SERVICES						
16	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 292,464	$ 292,464	18% of hard costs
17	Project Management	1	LS	$ 162,480	$ 162,480	10% of hard costs
18	Construction Administration & Management (+DSDC)	1	LS	$ 243,720	$ 243,720	15% of hard costs
				SUBTOTAL	**$ 698,663**	
				PROJECT SUBTOTAL	**$ 2,323,460**	
				UNALLOCATED CONTINGENCY (30%)	$ 697,038	
				TOTAL PROJECT COST	**$ 3,020,499**	

PROJECT: MARIN MOBILITY HUBS

Conceptual Draft Cost Estimate - Sausalito Ferry Terminal

Project 3 (Parking Area and Mobility Hub Amenity Improvements)

February 2026

Item	Description	Estimated Quantity	Unit	Unit Cost	Total Cost	Comment
SITE AMENITIES						
1	Lighting	1	LS	$ 50,000	$ 50,000	
2	Drinking Fountains/Refill Stations	2	EA	$ 17,500	$ 35,000	
3	Wifi and Device Charging	1	LS	$ 25,000	$ 25,000	
4	Wayfinding and Signage	1	LS	$ 275,000	$ 275,000	Includes Monumentation
				SUBTOTAL	**$ 385,000**	
BICYCLE AMENITIES						
5	E-Bike Charging	4	EA	$ 10,250	$ 41,000	
6	Larger Bike Lockers	4	EA	$ 2,750	$ 11,000	
7	Bike Repair Station	1	EA	$ 5,000	$ 5,000	
				SUBTOTAL	**$ 57,000**	
LANDSCAPING						
8	Landscaping	1,715	SF	$ 35	$ 60,025	
9	Trees	8	EA	$ 5,000	$ 40,000	
				SUBTOTAL	**$ 100,025**	
MOTORIZED SERVICES & AMENITIES						
10	Carshare/Carpool/Vanpool Parking	7	EA	$ 530	$ 3,710	Special Signage
11	Electric Vehicle Charging Stations	1	LS	$ 310,000	$ 310,000	12 Dual Chargers, 1 Single Charger, Level 2
12	New Service Needs	1	LS	$ 70,000	$ 70,000	
				SUBTOTAL	**$ 383,710**	
OTHER CONSTRUCTION ITEMS						
13	Drainage	-	LS	$ -	$ -	
14	Traffic Control	-	LS	$ -	$ -	
15	Mobilization	1	LS	$ 92,574	$ 92,574	10% of construction bid items
16	Utility Relocation/Removals	1	LS	$ 92,574	$ 92,574	10% of construction bid items
				SUBTOTAL	**$ 185,147**	
PROFESSIONAL SERVICES						
17	Permitting, Preliminary Engineering, and Final Design	1	LS	$ 199,959	$ 199,959	18% of hard costs
18	Project Management	1	LS	$ 111,088	$ 111,088	10% of hard costs
19	Construction Administration & Management (+DSDC)	1	LS	$ 166,632	$ 166,632	15% of hard costs
				SUBTOTAL	**$ 477,679**	
				PROJECT SUBTOTAL	**$ 1,588,561**	
				UNALLOCATED CONTINGENCY (30%)	$ 476,568	
				TOTAL PROJECT COST	**$ 2,065,130**	

F

Appendix F:

Shared Mobility Policy Development

Transportation Authority of Marin

Marin County Mobility Hub Plan

Policy Development – November 2025

Table of Contents

1. Purpose and Background

This technical memorandum (memo) summarizes emerging and best practices that cities, regions, and transit agencies are using to implement privately-operated shared mobility services (for example, carshare, bikeshare, e-bikes, scooters, and other shared micromobility) at mobility hubs and other areas within the public right-of-way (ROW). The focus is on how agencies move beyond one-off encroachment permits to more comprehensive, programmatic tools that can be applied consistently across a jurisdiction or series of jurisdictions.

The memo is intended to support the Transportation Authority of Marin's (TAM's) Marin County Mobility Hub Plan (Plan) by identifying implementation approaches that clarify:

1. coordination between TAM, local jurisdictions, regional agencies, and transit operators;
2. implementation roles and responsibilities;
3. operation and maintenance responsibilities; and
4. approval processes for shared mobility vendors using public space.

The policies and approaches described in this memo are intended to be adapted and adopted by TAM and/or its partner jurisdictions to support implementation of the mobility hubs identified during the Plan and to align with local and regional goals related to safety, equity, climate, and mode shift.

This memo draws on several key Bay Area and national resources, including the Bay Area Carshare Implementation Strategy prepared for the Metropolitan Transportation Commission (MTC) and the Shared-Use Mobility Center, MTC's Bay Area Regional Mobility Hub Implementation Playbook, the San Francisco Municipal Transportation Agency's (SFMTA) On-Street Shared Vehicle Parking Permit Program, shared micromobility permit programs in Berkeley and San José, and examples from Denver, Columbus, Salt Lake City, Seattle, and Washington, D.C. Additional guidance comes from national shared mobility policy playbooks and micromobility guidelines.

Policy Context: Why Manage Shared Mobility in the ROW?

Shared mobility services can reduce single-occupant vehicle trips, reduce vehicle miles traveled and greenhouse gas emissions, expand access to alternatives to private car ownership, and provide crucial, seamless, multimodal, first and last mile connections to transit.

These services depend on access to the public ROW: curbs, on-street parking, sidewalks, and station plazas. As programs have expanded, agencies have moved from ad hoc encroachment permits toward structured frameworks that:

1. establish clear rights and obligations for operators;
2. align private operations with public policy goals;
3. create transparent selection processes; and
4. give agencies the ability to scale, modify, or revoke access as conditions change.

2. Models for Allocating Public ROW to Private Operators

Table 1 summarizes common models used to authorize private shared mobility use of the public ROW. In practice, many cities layer these tools (for example, launching with a pilot permit and later converting to an annual, revocable street-use permit).

Table 1: Summary of Models for Allocating Public ROW to Private Operators

Model	Description	Strengths	Considerations
Annual, revocable ROW permit (street-use or vehicle-area permit)	Agency issues an annual, revocable permit that allows an operator to occupy specified spaces in the public ROW for shared mobility devices or carshare vehicles. Permit sets fleet caps, service areas, data requirements, and fees, and can be revoked for non-compliance.	Relatively quick to implement; flexible year-to-year; supports multiple operators; clear right-to-revoke and ability to adjust caps and conditions.	Requires ongoing staff capacity and data systems; legal authority and fee structure must be clearly defined; may require coordination with separate encroachment permits for any fixed infrastructure.
Concession or franchise agreement	City, transit agency, or region selects one or a few operators through a competitive process and grants exclusive or semi-exclusive rights to operate in designated zones (often including curb or parking bays near mobility hubs). Agreements include detailed service, equity, and reporting requirements and may include revenue sharing or in-kind benefits.	High degree of public control; supports integration with transit and co-branding; potential for revenue sharing and targeted investments (for example, memberships for low-income residents).	Longer procurement timeline; less nimble if technology or markets change; may reduce competition and require careful design of performance standards.
Pilot or demonstration permit	Time-limited permit or memorandum of understanding that authorizes shared mobility operations as a pilot, with clearly defined evaluation metrics and decision points on whether to scale up, modify, or sunset the program.	Low-risk approach to testing new services; allows agencies to learn and adjust; builds local experience and political comfort before committing to a long-term framework.	Provides less certainty for operators if transition path is unclear; requires follow-through to a permanent framework; pilots can drag on if evaluation and decision points are not clearly established.

Model	Description	Strengths	Considerations
Public-private partnership with longer-term leases, easements, or license agreements	Agency leads planning and invests in physical infrastructure (for example, mobility hubs, parking bays, or charging) and provides access to public property through a longer-term lease, easement, or license agreement. Private partners provide vehicles, technology, and operations. This model is common for station-based carshare and for mobility hubs on or adjacent to transit property.	High alignment with public goals; supports deeper integration with transit and mobility hubs; greater predictability for long-term investments in infrastructure and branding.	Requires more upfront negotiation and legal work; public agency may take on more risk and responsibility; harder to modify quickly if market conditions change.
Curb management and mobility zone allocation	Shared mobility is managed within a broader curb management program that designates specific curb and on-street zones for uses such as micromobility corrals, carshare parking, and passenger loading. Access to these zones is governed by permits or agreements as described above.	Integrates shared mobility with freight, loading, and transit curb needs; reduces clutter and conflicts; well suited to mobility hubs and Complete Streets projects.	Requires curb inventory, signage, and enforcement; needs coordination between local, regional, and transit agencies; requires community engagement where curb uses change.

Bay Area jurisdictions and regional agencies are already using several of these models, providing relevant precedents for TAM. Example jurisdictions for each model are listed below:

- **Annual, revocable ROW permit (street-use or vehicle-area permit):** San Francisco On-Street Shared Vehicle Parking Permit Program; Berkeley Shared Electric Micromobility Permit Program (SEMPP); San José Shared Micro-Mobility Permit Regulations; Denver carshare vehicle area permits; Columbus Shared Mobility Device permits; Washington, D.C. dockless micromobility permits; Seattle shared micromobility street-use permits.
- **Concession or franchise agreement:** Bay Area station-based carshare at BART and in San Francisco and Berkeley as documented in carsharing research and planning guidance; early Seattle dockless bike share contracts; other U.S. cities using franchised bikeshare systems.
- **Pilot or demonstration permit:** San José's early shared e-scooter and bike pilots; San Francisco's pilot phase of on-street car-share before the permanent permit program was adopted; Seattle and King County scooter-share pilots; Washington, D.C. dockless pilots.
- **Public-private partnership with longer-term leases, easements, or license agreements:** Bay Area agencies implementing carshare spaces through development requirements and long-term leases (for example, San Francisco Planning Code Section 166 and car-share program implementation); regional carsharing strategies calling for public-private partnerships; Salt Lake City license agreements for shared dockless mobility devices.

- **Curb management and mobility zone allocation:** San Francisco's designated on-street shared vehicle parking spaces and scooter parking rules; Seattle's shared micromobility parking zones and corrals; Columbus and Salt Lake City staging and parking requirements for shared devices; examples in MTC's Mobility Hub Implementation Playbook.

Regional Guidance

MTC's Bay Area Carshare Implementation Strategy, developed with the Shared-Use Mobility Center, identifies strategies to scale carsharing throughout the nine-county Bay Area in order to reduce single-occupant vehicle trips, vehicle miles traveled, and greenhouse gas emissions. The strategy recommends that regional and local agencies provide dedicated on- and off-street carshare parking spaces, integrate carshare into development review and transportation demand management (TDM) requirements, and use model agreements and tools to standardize implementation across jurisdictions.

MTC's Bay Area Regional Mobility Hub Implementation Playbook provides a technical assistance guide for planning, designing, and operating mobility hubs, with specific discussion of carshare, bikeshare, and micromobility as key components of hub offerings. The Playbook emphasizes the importance of clear governance, consistent signage and branding, and allocation of curb and parking space to shared modes in order to support convenient and reliable multimodal access.

City Examples Relevant to TAM

The following examples illustrate how jurisdictions have implemented the models in **Table 1**. These are particularly relevant precedents for how TAM and Marin jurisdictions might structure their own ROW access programs for carshare and shared micromobility around mobility hubs.

San Francisco – On-Street Shared Vehicle Parking Permits and Carshare

San Francisco's On-Street Shared Vehicle Parking Permit Program designates curbside spaces for exclusive use by qualified vehicle sharing organizations (VSOs). The program was adopted as a permanent permit program in 2017 following an on-street carshare pilot. Permitted spaces are signed and marked to reserve parking for shared vehicles, and VSOs pay permit fees based on the location of the space, as set out in the San Francisco Transportation Code Section 911.

Evaluation of the pilot found that on-street shared vehicles supported vehicle shedding and reductions in vehicle ownership. The permanent program now provides a clear annual, revocable permit framework for carshare providers to use the public ROW in a way that aligns with San Francisco's climate and TDM goals. These tools are complemented by Planning Code Section 166, which requires or encourages developments to provide carshare spaces that can be leased to certified carshare organizations. Together, these policies illustrate how annual permits, development requirements, and curb allocation can work together to support carshare.

Berkeley – Qualified Vehicle Share Organizations and Shared Micromobility Permits

Berkeley uses a Qualified Vehicle Share Organization (VSO) program to designate organizations that may purchase master residential parking permits and access curb space for shared vehicles, subject to terms and conditions related to operations, insurance, and data. In addition, Berkeley has adopted

Shared Electric Micromobility Permit Program (SEMPP) terms and conditions that set requirements for scooter and bike share operators using the public ROW, including service area coverage, equity provisions, maintenance standards, and data reporting.

These programs show how a smaller Bay Area jurisdiction has developed an annual, revocable permit and VSO framework that can be tailored to local street conditions while still aligning with regional shared mobility goals.

San José – Shared Micromobility Regulatory Framework

San José developed a Shared Micro-Mobility Regulatory Framework to govern station-based and dockless bikes and e-scooters in the public right-of-way. The framework defines shared micromobility services, establishes policy goals tied to the City's Bike Plan and Envision 2040 General Plan, and sets out permit conditions and administrative regulations for operators. San José has used this framework to manage multiple rounds of micromobility pilots and permit programs, and is currently redesigning its shared e-scooter program.

San José's approach is a useful reference for TAM because it combines a clear policy foundation, detailed permit conditions, and performance-based evaluation, and it demonstrates how a city can adapt its program over time as operators and technologies change.

Denver – Annual, Revocable Vehicle Area Permits for Carshare

Denver's Car Share Rules and Regulations include vehicle area permits in the public ROW for carshare vehicles. The rules specify that a vehicle area permit can be issued for on-street carshare spaces and that ROW permits issued to carshare vehicles are valid for one year after issuance and are revocable by the Department of Public Works. This creates an annual, revocable public ROW permit that allows the city to adjust conditions, fees, or the number of spaces at renewal, if needed.

Denver has also used revocable encroachment permits to allow bike share docking stations in the public ROW, as illustrated by council actions granting revocable permits to Denver Bike Sharing for multiple locations.

Columbus – Annually Renewing Shared Mobility Device Permits

Columbus has established a Shared Mobility Device (SMD) program that regulates dockless scooters and bikes through an annually renewing permit program managed by the City. The SMD permit program governs deployment, fleet caps, data requirements, and fees for operators. In parallel, the City's ROW occupancy rules and regulations define occupancy permits for activities that use or obstruct public streets and alleys. Together, these tools function as a combination of annual, revocable permits and more traditional encroachment permissions.

Salt Lake City – Business Licensing and License Agreements

Salt Lake City regulates dockless shared mobility devices through a chapter of its code that establishes a dockless shared mobility device program. The ordinance requires operators to obtain a business license, meet equipment and safety standards, and follow detailed operating requirements, including rules on where devices may be parked and required response times for relocating improperly parked devices. The code authorizes the transportation director to enter into contracts for dockless shared

mobility services. In practice, this has been implemented through license agreements between the City and operators, functioning similarly to longer-term leases or easements on specific portions of public space.

Seattle – Street-Use Permits and Curb Allocation for Shared Micromobility

Seattle's shared micromobility program is managed through free-floating shared micromobility street-use permits issued by the Seattle Department of Transportation (SDOT). The permit requirements state that the street-use permit allows a vendor to use or occupy the ROW, and that the permit is time-limited and revocable subject to compliance with detailed conditions around safety, equity, data reporting, and operations. Seattle uses these permits alongside designated parking zones, corrals, and curb management strategies to cluster shared bikes and scooters in specific locations, including near transit stops and mobility hubs.

Washington, D.C. – Dockless Shared Micromobility Permits

Washington, D.C.'s dockless shared micromobility program is governed by terms and conditions attached to annual permits. These terms specify requirements for deployment, parking, safety, and data, and state that permit holders may operate only in public ROW with the consent of the District and are subject to revocation for non-compliance. D.C.'s approach is a key example of an annual, revocable ROW permit model for micromobility.

3. Approval, Coordination, and Governance Framework

For this Plan, an additional consideration is that the mobility hubs span across multiple jurisdictions, owners, and transit agencies. Regional agencies, transit operators, and cities often share responsibility for different parts of the public realm in and around each hub. A clear governance framework helps avoid gaps and overlaps in permitting and enforcement.

Key elements of a coordinated framework include:

1. a program-level shared mobility policy or ordinance that defines authority and program goals;
2. standard terms and conditions that apply to all operators;
3. permit instruments such as annual, revocable street-use or vehicle-area permits;
4. site-specific encroachment permits for striping, corrals, signage, or charging infrastructure at hubs; and
5. interagency memoranda of understanding that clarify whether the city, transit agency, or TAM leads on specific approvals.

MTC's Mobility Hub Implementation Playbook provides additional guidance on governance and partnership structures for Bay Area mobility hubs.

4. Operations, Maintenance, and Oversight

Most shared mobility frameworks place responsibility for operations and maintenance of the mobility devices on the private operator, while the public agency maintains ROW elements and enforces program rules. Terms and conditions typically require:

1. defined inspection and maintenance schedules;
2. maximum response times to complaints and obstruction issues;
3. removal of damaged or non-functional devices; and
4. data reporting that allows agencies to monitor usage and compliance.

Shared mobility policy playbooks and guidelines developed by Transportation for America, NACTO, and university research centers emphasize the importance of clear safety, equity, and data provisions. These include minimum equipment standards, speed and geofencing rules, deployment requirements in equity priority areas, discounted pricing, and use of common data standards for trip and fleet data. Bay Area programs, including those in San Francisco, Berkeley, and San José, already incorporate many of these elements.

5. Recommended Implementation Approach for TAM Mobility Hubs

Building on the examples above, an implementation pathway for TAM and its partner jurisdictions could include the following steps:

1. Adopt a program-level shared mobility in the ROW policy or resolution that establishes goals, authority to permit and revoke operators, and the relationship between shared mobility and mobility hubs.
2. Create standard terms and conditions for shared mobility permits that cover safety, equity, operations, data, and communications, using MTC, SFMTA, Berkeley, and San José examples as templates.
3. Establish an annual, revocable street-use or vehicle-area permit template that local jurisdictions can use for shared micromobility and carshare spaces in the ROW, drawing on examples from San Francisco, Berkeley, San José, Denver, Columbus, Washington, D.C., Salt Lake City, and Seattle.
4. For hub locations on or adjacent to transit property, develop template license agreements or longer-term leases or easements that can be used when longer-term investments in infrastructure are needed, referencing MTC's Mobility Hub Implementation Playbook and local carshare precedents.
5. Coordinate through MOUs among TAM, Marin cities and towns, and transit agencies to clarify who issues which permits at each mobility hub and how monitoring and enforcement will be handled.
6. Launch one or more pilots at priority hubs using pilot permits or MOUs, with a clear evaluation framework and decision points for transition to ongoing permits.
7. Update permit conditions, fee structures, and curb allocation over time based on performance data and feedback from users and partner agencies.

6. Next Steps

To advance the Plan and position TAM and its partner jurisdictions to implement shared mobility services at mobility hubs, the following steps are recommended:

- **Partner workshop:** Convene a workshop with Marin jurisdictions and transit agencies to review the models and identify local priorities and constraints.
- **Draft policy and permit package:** Prepare draft shared mobility policy language, standard terms and conditions, and permit templates for annual, revocable ROW permits and, where appropriate, longer-term license or lease agreements.
- **Site-specific application:** For each priority hub, identify which parts of the site fall under city, transit agency, or other ownership, and outline which approval instruments are needed.
- **Pilot design:** Define pilot locations, participating operators, evaluation metrics, data requirements, and decision points.
- **Finalization:** Incorporate one round of review comments from TAM and partner agencies and finalize the policy and permit package for consideration and adoption.

7. References

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6. City of San José, "Micro-Mobility" program information and Shared Micro-Mobility Regulatory Framework/Administrative Regulations.
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9. City of Columbus, Shared Mobility Device (SMD) Permit Program and right-of-way occupancy rules and regulations.
10. Salt Lake City Code, Chapter on Dockless Shared Mobility Device Programs and related license/contract provisions.
11. Seattle Department of Transportation (SDOT), Free-Floating Shared Micromobility Permit Requirements (street-use permits).
12. District Department of Transportation (DDOT), Washington, D.C., Dockless Vehicle Sharing Terms and Conditions and related permit materials.
13. Transportation for America, "Shared Micromobility Playbook" – general provisions, operations, data, equity, and other policy sections.
14. Shaheen, S. et al., "Shared Mobility Policy Playbook," University of California, Berkeley – overview of shared mobility regulatory models and ROW policies.
15. NACTO, "Guidelines for the Regulation and Management of Shared Active Transportation" – guidance on regulating bike share and scooter share in public rights of way.
16. Transportation Sustainability Research Center (TSRC), UC Berkeley, carsharing research and summaries of carshare models and impacts.
17. San Francisco Planning Department, Car-Share Program documentation and Planning Code Section 166 – Car-Share Requirements and Guidelines.