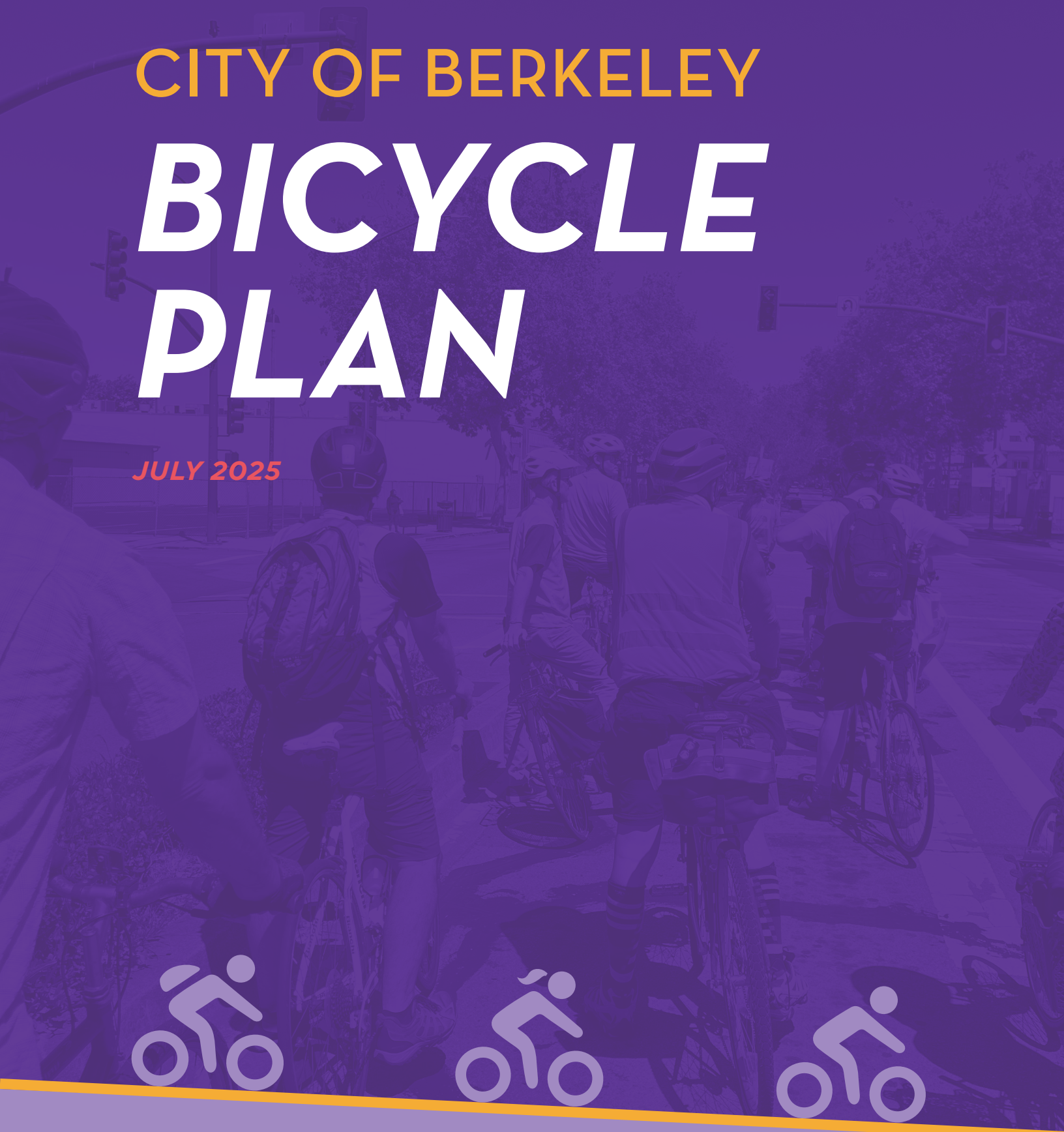
CITY OF BERKELEY

BICYCLE PLAN

JULY 2025



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EXECUTIVE SUMMARY

City of Berkeley Statement

According to the US Census 2023 American Community Survey, **one out of ten Berkeley residents who commute to work are using bikes, scooters, or other personal mobility devices**. As nearly any Berkeleyan can tell you, getting to work is not the only reason people bike, scoot, or roll in this city. In Berkeley, people ride for a myriad of purposes—including shopping at a store or farmers' market; dropping off or picking up kids from school or day care; visiting the UC Berkeley campus; going to concerts, restaurants, and social events; and exercising. When considering non-commute trips like going to school or shopping, more than one in five Berkeleyans are bicycling or rolling every day.

Bicycling and rolling in Berkeley are not only efficient, environmentally friendly, and utilitarian modes of transport, they are also a source of health and enjoyment. A central focus of this 2025 City of Berkeley Bicycle Plan Update is improving the comfort, convenience, and enjoyment of bicycling and rolling as a viable strategy for achieving many of the City's public health and wellness goals.

For nearly six decades, Berkeley has been a leader in the effort to promote the use of the bicycle for pleasant transportation and recreation. The first *City of Berkeley Bicycle Plan*—created in 1971—laid out a citywide network of bikeways that are still in use today.

This is a citywide planning document that presents recommendations for improving bicycle safety, comfort, and connectivity at a network level. As such, the recommendations in this plan require further project-specific planning, data collection, analysis, public engagement, and engineering design before they may be implemented. The City of Berkeley is committed to a Complete Streets approach that supports the needs of all users of our roadways—people walking, bicycling, riding transit, and driving, and commercial deliveries necessary for a vibrant local economy. When considering whether and how to implement these projects, the City also incorporates many operational and design needs, including maintaining and improving access for persons with disabilities; preserving and improving response times for emergency response personnel; preserving or improving roadway capacity during mass evacuations; preserving maintenance access for utilities, drainage, street trees, and street sweeping; and designing streets to meet the stormwater requirements of the San Francisco Bay Regional Water Quality Control Board.

Land Acknowledgment

On behalf of the City of Berkeley, we acknowledge that we are on the unceded ancestral homeland of the xučyun (Huichin) Ohlone (Uh-lone-knee), who are the original inhabitants of the East Bay. As the indigenous stewards of this land and in accordance with their traditions, the xučyun Ohlone have never ceded, lost, nor forgotten their responsibilities as the caretakers of this place, as well as for all peoples who reside in their traditional territory. As guests, we recognize that we benefit from living and working on their traditional homeland, and we affirm their sovereign rights as First Peoples.

Plan Update Purpose

The most recent *City of Berkeley Bicycle Plan* was completed in 2017. Cities in California are required to update their citywide bicycle plans every five years to retain funding eligibility from the Transportation Development Act Article 3 (TDA 3) fund, a state-level funding source for bicycle- and pedestrian-related projects. The purpose of this plan update is to make Berkeley a model bicycle-friendly city where bicycling is a safe, comfortable, and convenient form of transportation and recreation for people of all ages and abilities. Because the Public Works Department is producing this plan update, the focus is on physical infrastructure changes that support bicycling to achieve the City's safety, health, and environmental goals.

Commitment to All Ages & Abilities

A bikeway network works best when it is accessible, safe, comfortable, and welcoming to people of all ages and abilities. The "All Ages and Abilities" approach in transportation planning prioritizes creating accessible, safe, and comfortable active transportation options for everyone, including children, older adults, people with disabilities, and those with varying levels of confidence and experience.

In Berkeley, this translates to a commitment to building out the Low-Stress Network of separated bikeways and bicycle boulevards (see page 14 and **Figure 2**), and connecting residents, workers, students, and visitors to the local destinations they need to reach. This commitment also extends to all the types of devices, including but not limited to: bicycles, e-bikes, electric scooters, skateboards, mobility scooters, and powerchairs.

Commitment to Disability Access

Berkeley is the heart of the disability rights movement in the United States. Organizations such as the Center for Independent Living, Bay Area Outreach and Recreation (BORP) Adaptive Sports and Recreation, Berkeley's Accessible Right-of-Way (BAROW), and the Berkeley Commission on Disability advocate for a community fully accessible to all users. As some of our most vulnerable road users, people with disabilities are often the most impacted by changes and challenges in the transportation system.

Berkeley is committed to seeking input from community members and utilizing resources such as the Public Right-of-Way Accessibility Guidelines (PROWAG), formally adopted by the Federal Highway Administration in 2024.

Existing Bikeways & Progress

Since the adoption of the 2017 Bicycle Plan, the City of Berkeley has implemented almost 11 miles of new or upgraded bikeway network facilities and constructed over 20 Low-Stress Network intersection crossing improvements. The City of Berkeley works with neighboring cities Albany, Emeryville, and Oakland to coordinate the continuation of bikeway networks and the timing of project construction. These changes are detailed in **Table 1** and **Figure 1**.

The bicycle network is made up of several different types of on- and off-street facilities. These facilities carry a classification number as defined by the California Department of Transportation (Caltrans) *Highway Design Manual* and are described below:

Shared use paths (Class I bike paths or multi-use trails) provide completely separated, exclusive right-of-way for bicycling, walking, and using mobility devices and other forms of active transportation.

Bicycle lanes (Class II) are striped, preferential lanes on roadways for one-way bicycle travel.

Upgraded bicycle lanes (Class II) include striped buffers that add a few feet of separation between the bicycle lane and traffic lane or parking aisle or use green thermoplastic striping to increase visibility in areas of conflict.

Bicycle routes (Class III) are signed bicycle facilities where people riding bicycles share a travel lane with people driving motor vehicles. Bicycle routes may include shared lane markings (sharrows) or other pavement stenciling. Because they are mixed-flow facilities, Class III bicycle routes are only appropriate for low-volume streets with slow travel speeds.

Bicycle boulevards (Class III) are roadways where people riding bicycles share a travel lane with people driving motor vehicles. However, traffic calming, diversion infrastructure, and crossing enhancements are intended to prioritize bicycle travel for people of all ages and abilities along these roadways. Some facilities in the Bicycle Boulevard Network may include separated bikeways or bicycle lanes.

Separated bikeways (Class IV), also known as a cycletrack or protected bicycle lanes, are on-street bicycle lanes physically separated from motor vehicle traffic by a vertical element or barrier, such as a curb, bollards, or parking aisle. Separated bikeways can be one-way or two-way.

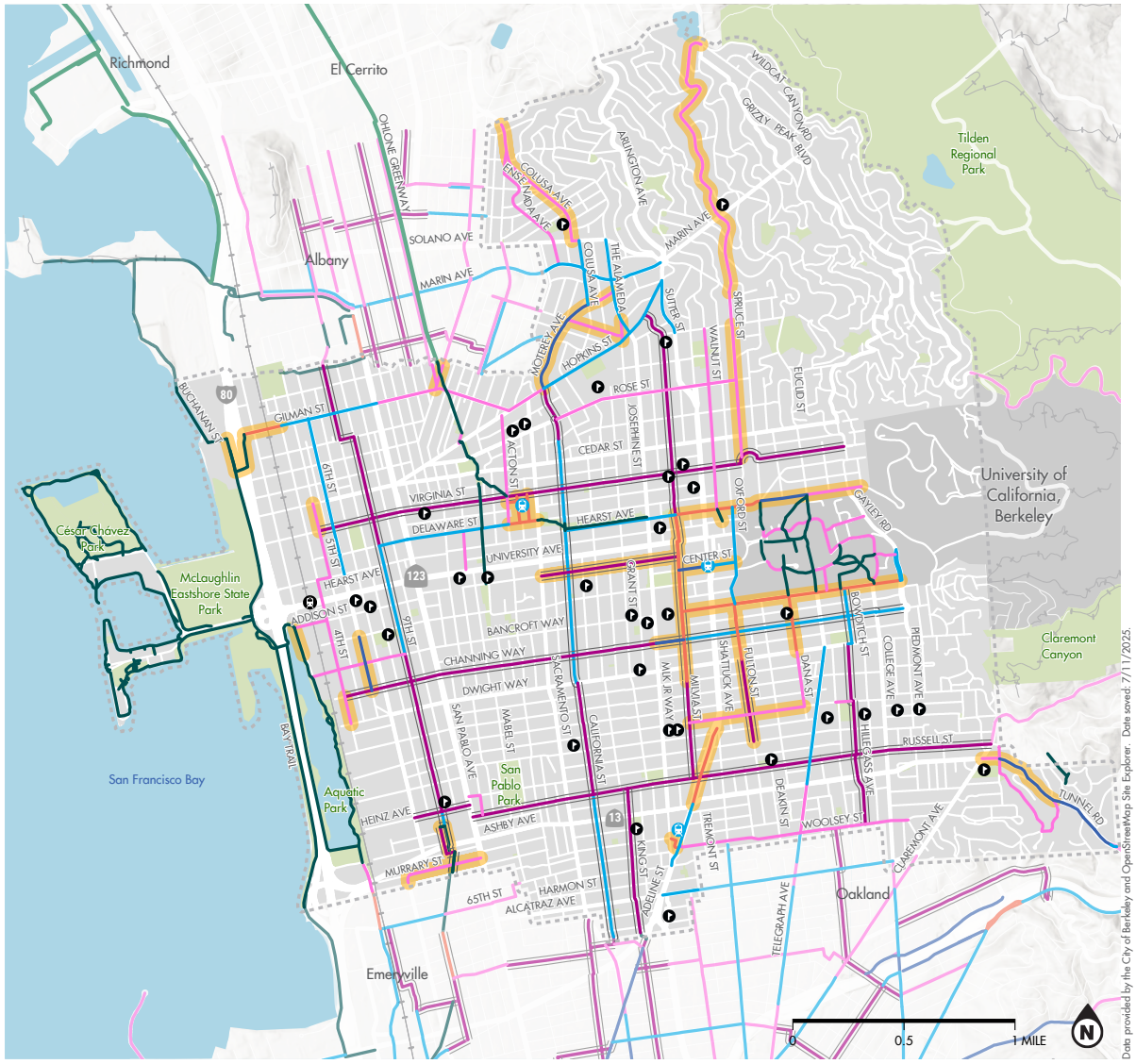
***Table 1:** . Bikeway Network Implementation, 2017–2025*

FACILITY TYPE	2017 (MI)	2025 (MI)
Shared use path (Class I)	18.2	18.9
Bicycle lane (Class II)	12.1	10.9*
Upgraded bicycle lane (Class II)	0.3	1.8
Bicycle route (Class III)	8.1	12.6
Bicycle boulevard (Class III)	11.9	12.5
Separated bikeway (Class IV)	0.1	4.2
Total	50.8	60.9
Bicycle boulevard network**	15.8	17.6

*Standard bicycle lane mileage decreased in 2025 due to standard bicycle lanes being improved to upgraded bicycle lanes or separated bikeways.

**The Bicycle Boulevard Network includes only some segments of Class I, II, III, and IV facilities.

Figure 1: *Existing 2025 Bikeway Network*



EXISTING BIKEWAY NETWORK

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EXISTING FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)
- New or Upgraded since 2017

BICYCLE BOULEVARD NETWORK

- Amtrak Station
- BART Station
- School
- Railroad
- Park

Public Outreach

The plan update included two phases of public outreach (April to June 2022 and January to February 2025), engaging over 1,500 residents directly and collecting over 2,500 comments. Public engagement used various online and in-person outreach methods to account for public health concerns during the COVID-19 pandemic. Events included virtual listening sessions with low-income residents, pop-up events (including the Juneteenth Festival, the Ashby Flea Market, and multiple farmers' markets), community bike rides, interviews with key community groups, and citywide workshop presentations. The project also involved multiple presentations to the Berkeley Transportation and Infrastructure Commission and a presentation to the Commission on Disability.

Public outreach was supported by a regularly updated project website, and interactive webmap commenting tool, regular communication through the project email list, and postcard mailers to over 15,000 Berkeley households—with a focus on reaching residents in Berkeley's Equity Priority Areas in the city's west and southwest.

Public engagement for the Bicycle Plan Update focused on understanding the safety and accessibility needs of people riding bikes in Berkeley, and as such did not address the full range of roadway operations issues on Berkeley streets. For example, the community engagement process used to inform these recommendations did not include community education of potential impacts to emergency response times, nor did it offer an opportunity or structure for respondents to consider emergency response times or impacts to evacuation as a priority in bike infrastructure planning. These important issues are usually considered at the development and design stages as part of project implementation. One outcome of this planning process is an increased awareness of the need to discuss operational and public safety issues early in future community engagement processes.

MAIN THEMES OF THE PUBLIC INPUT INCLUDED:

- A desire for more robust intersection crossing treatments where the Low-Stress Network (bicycle boulevards and separated bikeways) crosses a major roadway
- Support for continued implementation of the Low-Stress Network, including bicycle boulevards and separated bikeways
- Facility design that is inclusive of all devices that may legally use the bikeway network, including powerchairs, mobility scooters, electric scooters, skateboards, and more
- Improved pavement quality along the entire bikeway network
- Ensuring bikeway design is compatible with the mobility needs of people with a disability

Project Recommendations

This plan update's recommended bikeway network supports a vision for Berkeley where bicycling is safe, comfortable, and convenient for people of all ages and abilities. These recommendations were guided by the plan update's goals and policies, as well as extensive community input. Recommendations were modified and adjusted from those in the 2017 Bicycle Plan, seeking to reprioritize projects based on Berkeley's diverse input, needs, and values. Recommendations prioritized extending newly completed projects, connecting the Low-Stress Network, connecting to Low-Stress Networks in surrounding cities, and addressing key intersection crossings with major roadways.

Table 2: *Summary of Project Recommendations and Cost Estimates.*

PLACEHOLDER

VISION FOR A LOW-STRESS BIKEWAY NETWORK

Figure 2 illustrates a vision of a Low-Stress Network in Berkeley, including bicycle boulevards and separated bikeways. This envisioned network is safe and comfortable for people of all ages and abilities, with inclusive design to accommodate the broadest possible range of network users. Safe bikeway connections are especially important for parents riding with their children, older children riding independently, seniors using low-speed electric devices, and people with a mobility disability using an assistive device.

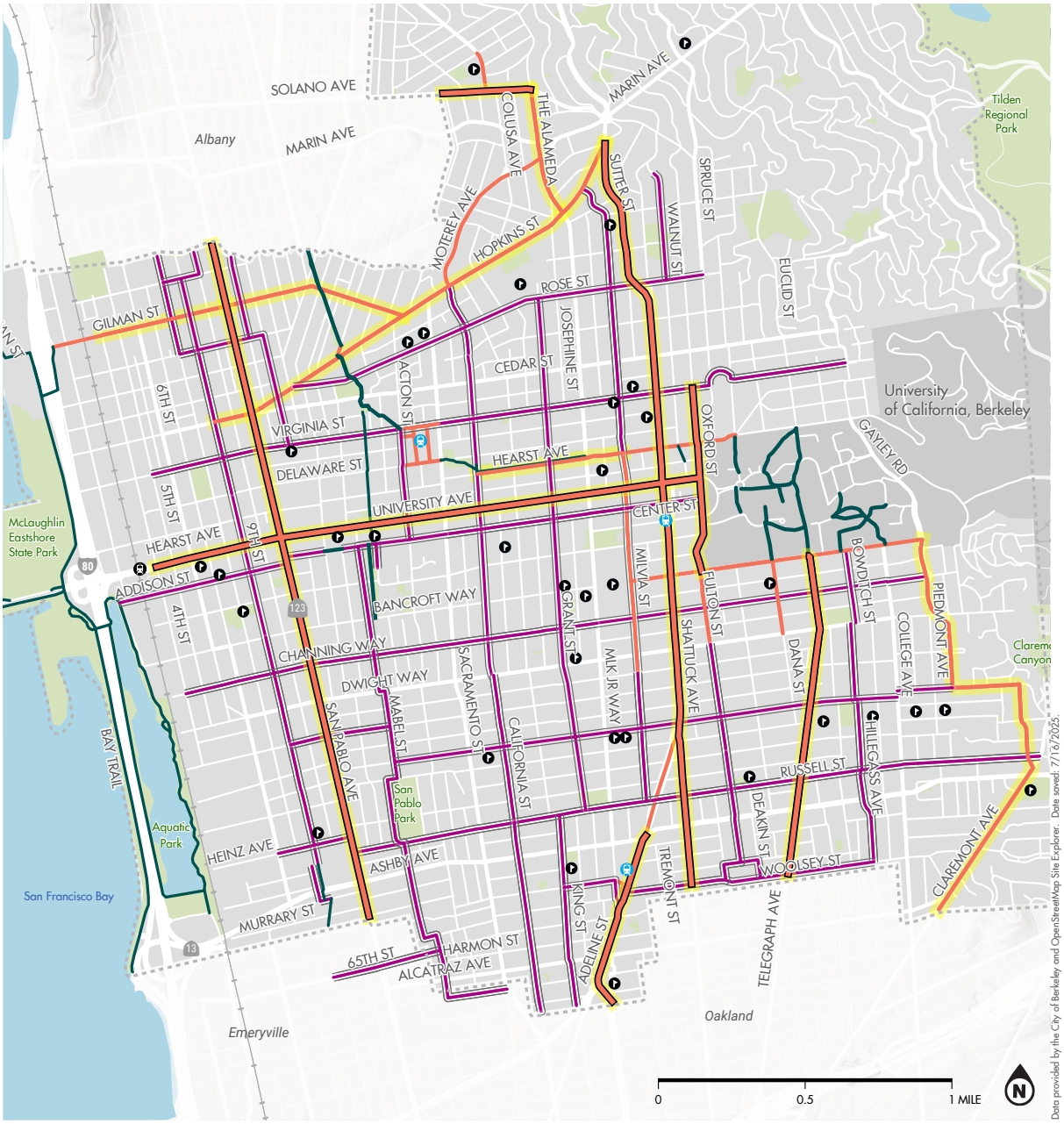
The City of Berkeley envisions a layered network of bicycle boulevards and corridor studies for separated bikeways on major streets. Bicycle boulevards on minor streets connect neighborhoods across Berkeley, while separated bikeways on major streets allow residents to safely and conveniently access key destinations.

The Berkeley Unified School District, by policy, does not provide school bus service to households within 1.5 miles of their assigned schools.

In terms of the potential for reducing traffic congestion and helping to achieve the City's climate action goals, school trips account for a significant portion of morning auto traffic, and yet are often less than a mile in length. Therefore, it is important that the Low-Stress Network connects to as many schools in Berkeley as possible to provide parents and children the option of a completely low-stress bicycle trip from their residence to school.

Figure 3 shows the updated network recommendations for the City of Berkeley bikeway network. More details can be found in Chapter 5.

Figure 2: *Low-Stress Bikeway Network Vision*



LOW-STRESS BIKEWAY NETWORK VISION

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Low-Stress Bikeway Network Vision

- Bike Path (Class I)
- Bike Boulevard Network
- Cycletrack (Class IV)

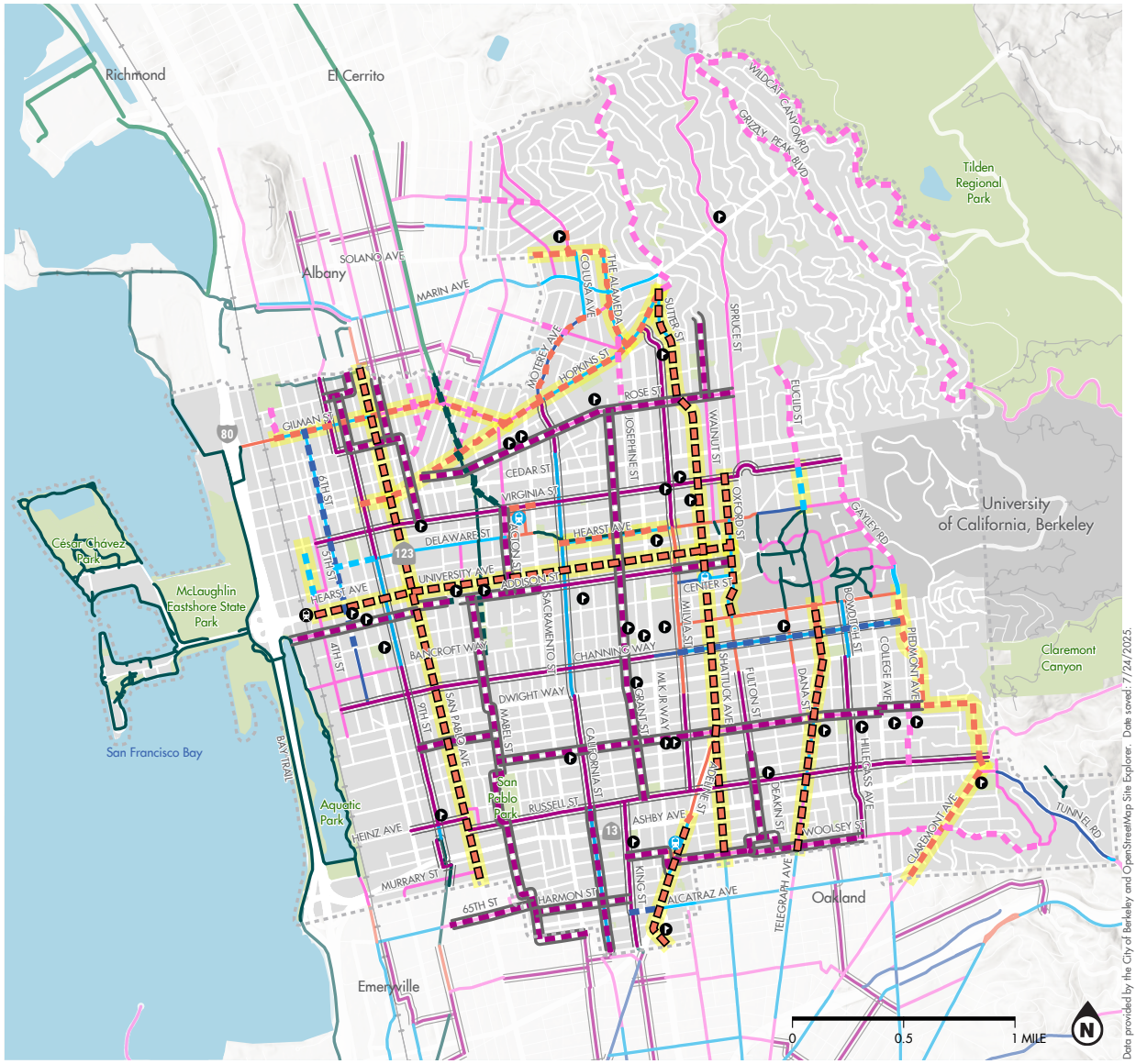
Complete Street Corridor Studies* - Low Stress Bikeway Recommendation

- Study Cycletrack*
- Primary Transit Route - Study Cycltrack*

- Amtrak Station
- BART Station
- School
- Railroad
- Park
- City Boundary

*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

Figure 3: *Recommended Network Improvements*



RECOMMENDED NETWORK IMPROVEMENTS

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2025 EXISTING/RECOMMENDED FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bike Boulevard (Class III)
- Cycletrack (Class IV)
- Complete Street Corridor Study - Primary Transit Route*
- Complete Street Corridor Study*

BIKE BOULEVARD NETWORK

School | Amtrak Station | BART Station | Railroad | Park

* Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

COMPLETE STREETS CORRIDOR STUDIES

As defined by the Berkeley Complete Streets Policy, "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including:

- People walking
- People bicycling
- People with disabilities
- Users and operators of public transportation
- People driving motor vehicles
- Movers of commercial goods
- Emergency responders
- Seniors
- Youth
- Families

Providing a complete network does not require dedicated facilities for all transportation modes on every street. Instead, it means creating convenient, safe, and connected routes for all modes throughout the city. For bikeway planning, Berkeley considers both arterial and collector roads and parallel streets as part of a Complete Streets Corridor. Arterial roads are designed primarily for traffic movement and have higher speeds, while collector roads are characterized by slower-moving traffic designed to gather traffic from local streets and direct it to arterials or highways. Potential bikeways on either type should be evaluated within a Complete Streets Corridor Study.

Major and collector streets with recommendations for separated bikeways (Class IV) require further study to evaluate their suitability and impacts on other transportation modes and emergency response traffic. These streets provide access to local businesses and sometimes offer the only direct path across neighborhoods or to nearby cities that parallel routes do not provide. They currently serve multiple transportation modes and emergency response traffic, and provide on-street parking, necessitating broader consideration beyond bicycle travel alone. These streets are labeled "Complete Streets Corridor Studies" within this plan update.

Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies. Potential bikeways to be considered as part of future Complete Streets Corridor Studies will be evaluated in the context of the modal priorities established by the *Berkeley General Plan Transportation Element*. The City will coordinate bikeway planning with proposed improvements to transit performance on Primary Transit Routes, such as bus boarding islands, transit-only lanes, transit signal priority/

queue jump lanes, far-side bus stop relocations, and other improvements as described in the 2023 *Berkeley Transit-First Policy Implementation Plan*. In addition, these studies should approach Secondary Transit Routes as opportunities for transit improvements, such as bus stop optimization and relocation, among other potential improvements. At the conclusion of the Complete Streets Corridor Study process, design alternatives that have a significant negative effect on transit located on Primary Transit Routes will not be recommended. The City will develop criteria to define what constitutes a significant negative effect on transit and it will be applied to each corridor study. Allocation of limited public right-of-way among various travel modes and users will be consistent with the Berkeley General Plan modal priorities.

As defined by the Berkeley Complete Streets Policy, "Complete Streets" are intended to enable safe and convenient travel for all roadway users, including emergency responders. The City will coordinate improvements to the public right-of-way, in an effort to see that changes do not adversely impact emergency response and evacuation. Throughout the Complete Streets Corridor Study process, the City will work to maintain or improve emergency response times that, at a minimum, meet the recommendations in the City of Berkeley *Standards of Cover and Community Risk Assessment*. As part of the project development and design process, the City is committed to developing a methodology and set of evaluative criteria for comparing the project's impacts to emergency response times and evacuation against the project's benefits to traffic safety. Based on the outcome of this analysis, design alternatives that would significantly impair the delivery of emergency services or community evacuation, as outlined in the City of Berkeley Evacuation Time Study and subsequent sensitivity studies, will not be recommended unless no other alternative exists to solve a critical traffic safety issue. Criteria to define significant negative effects on emergency response and evacuation are in development by the Department of Public Works, Fire Department, and Police Department.

These corridors may have interim treatments installed while the corridor study and final recommended design are being completed. Interim treatments are those that do not require a full Complete Streets Corridor Study. Interim or phased treatments may still require traffic study, interagency coordination, and public process if they impact roadway capacity, parking, emergency response, evacuation, or transit operations. Interim or phased treatments should not negatively impact existing transit operations, emergency response, or evacuation; mitigations should accompany interim treatments to prevent degradation of transit service, emergency response, or evacuation. For example, shared roadway bicycle markings may be installed, or existing bicycle lanes may first be colored green, then later converted into a separated bikeway (Class IV) if feasible without negatively impacting existing or planned transit operations on Primary or Secondary Transit Routes, emergency response, or evacuation.

Implementation

PROJECT PRIORITIZATION

This plan update rescored all old and new projects for prioritization against new criteria, ensuring that the City's workplan going forward focuses on projects that would advance cyclist safety, equity, and access to the bikeway network, and contribute to climate goals.

Project recommendations were grouped into corridors, inclusive of both street segments and intersections, and were divided into three implementation tiers. Scoring was based on a set of evaluation criteria that included cyclist safety, community support, and equity factors.

Figure 4 shows the recommended project network by tier.

Tables showing projects and corridors by tier can be found in Chapter 6.

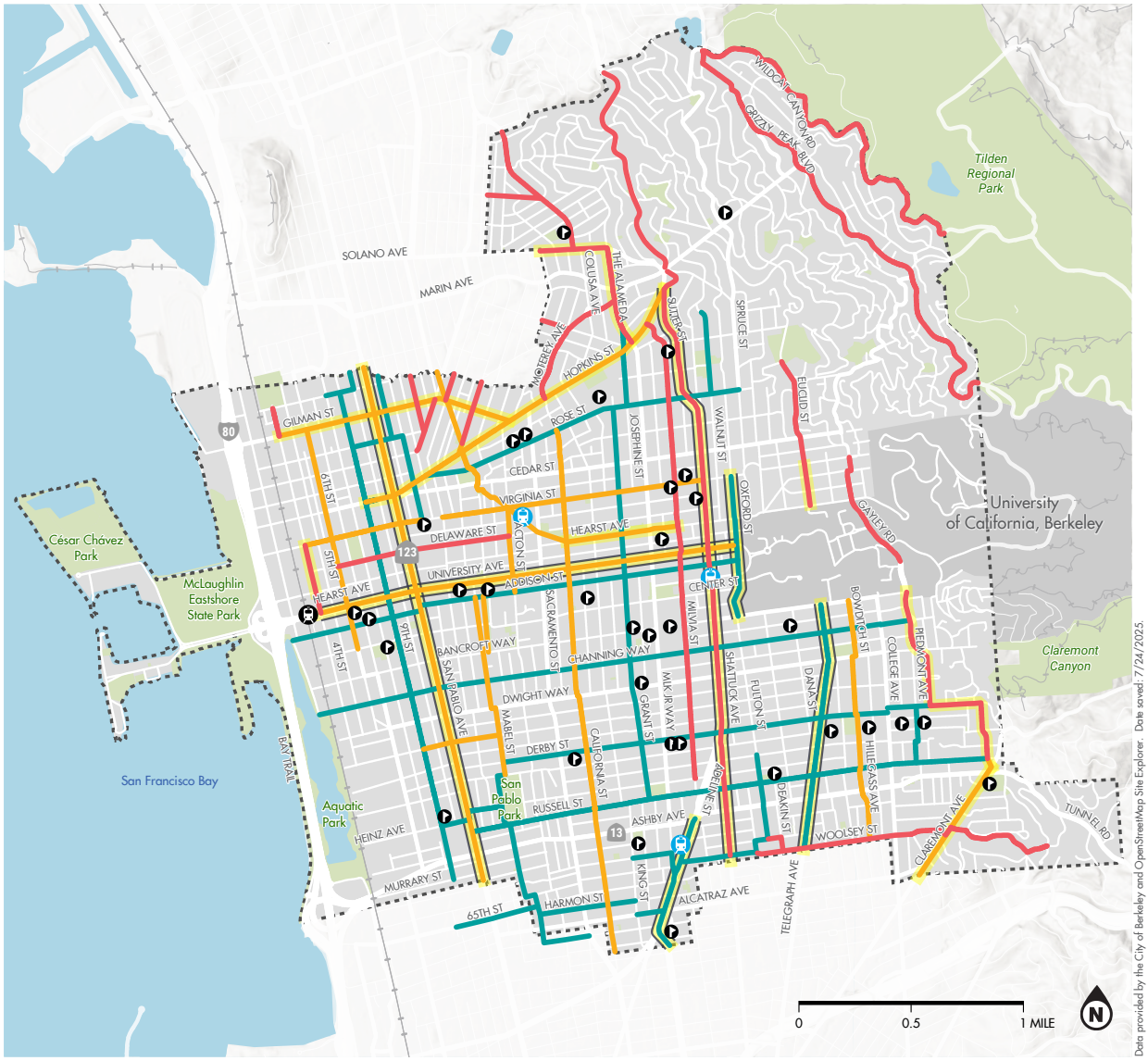
PROJECT DELIVERY

The City of Berkeley historically has relied on two mechanisms to deliver bike projects:

- Integrating project elements into streets scheduled for repaving through the City's five-year paving plan.
- Securing federal, state, and regional grants to advance the implementation of bikeway network projects.

With the passage of Berkeley's infrastructure bond (Measure FF) in the fall of 2024, the City has a new funding source for project delivery. The Measure FF infrastructure bond is a property parcel-tax, allowing the City to issue bonds against future revenues. These bonds will be largely dedicated to street resurfacing, traffic safety improvements, and sidewalk repair across Berkeley, with the stipulation that repaving projects through Measure FF shall include traffic calming, Complete Streets elements, and implementation of projects identified in the 2017 *City of Berkeley Bicycle Plan* and 2020 *City of Berkeley Pedestrian Plan*.

Figure 4: *Proposed Project Tiers*



PROJECT PRIORITIZATION CORRIDORS

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PROJECT PRIORITY TIER

- Tier 1
- Tier 2
- Tier 3

COMPLETE STREETS STUDY CORRIDOR

- Complete Street Corridor Study - Primary Transit Route*
- Complete Street Corridor Study*

- School
- BART Station
- Amtrak Station
- Railroad
- Parks
- City Boundary

*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

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INTRODUCTION

1.1 City of Berkeley Statement

According to the US Census 2023 American Community Survey, 9% of Berkeley residents who commute to work do so by bicycle. Another 3.6% of Berkeley residents commute using "other" devices, which include electric scooters, mobility scooters, and powerchairs, meaning that more than 10% of Berkeleyans traveling for work do so using devices permissible for the bikeway network. In 2023, over 30% of Berkeleyans reported working from home, which may increase their flexibility to use alternative transportation options like bicycle, scooter, and mobility devices for short trips to local destinations and business districts. Lastly, more than 1 in 4 Berkeley households do not own a private vehicle, with a proportionately more significant share of zero-car households among students, low-income residents, and residents with a disability. It is critical to increase mobility for these residents with the fewest options.

As nearly any Berkeleyan can tell you, getting to work is not the only reason people bike or roll in this city. In Berkeley, people bike and roll for a myriad of purposes—including shopping at a store or farmers' market; dropping off or picking up kids from school or day care; visiting the UC Berkeley campus; going to concerts, restaurants, and social events; and exercising. Bicycling and rolling in Berkeley are not only efficient, environmentally friendly, and utilitarian modes of transport, but they are also a source of health and enjoyment. A central focus of this 2025 City of Berkeley Bicycle Plan Update is improving the comfort, convenience, and enjoyment of bicycling and rolling as a viable strategy for achieving many of the City's public health and wellness goals.

Berkeley has also seen in recent years the introduction and rapid adoption of other mobility devices that can legally use the bicycle lane, including electric bikes, electric scooters, and other devices like skateboards, e-trikes, mobility scooters, and powerchairs. The expansion of unique devices on the market has broadened the range of users of the bikeway network, with people choosing the device that works best for them. As a result, the bikeway network is more democratic and equitable, with Berkeleyans now using the bikeway network even if they would never ride a bicycle. But this new opportunity also comes with drawbacks: with more devices traveling at different speeds, there is more opportunity for conflict in the bikeway network. This plan update provides guidance for facility design that is inclusive and welcoming for all legal users of the bikeway network.

For nearly six decades, Berkeley has been a leader in promoting bicycle use for pleasant transportation and recreation. The first *City of Berkeley Bicycle Plan*—created in 1971—laid out a citywide network of bikeways that are still in use today.

This 2025 Bicycle Plan Update builds off the strengths and successes of the 2017 Bicycle Plan. It is not a new plan but a focused update of the 2017 plan.

During the era of the "Bicycle Boom," in 1970, the City of Berkeley conducted a survey of existing bicycle use patterns, asking respondents to draw their most common bike trip route on a map to help the City understand where cyclists were riding at that time. This survey was the basis for the first *City of Berkeley Bicycle Plan* of 1971. One goal of this plan update effort was to replicate this broad-based outreach strategy for the digital age and account for the constraints of the COVID-19 pandemic. With engagement starting in 2022, outreach strategies included an interactive webmap that collected over 1,000 comments, curated listening sessions on Zoom with low-income residents, and presentations with key stakeholder groups (in-person, hybrid, and virtual)—all to ensure the feedback represented the depth and breadth of the Berkeley community, especially those hardest to reach and those most vulnerable to transportation challenges.

This plan update continues the 2017 Bicycle Plan recommendations of a core network of low-stress bikeways, a continuous and connected system of safe and comfortable bikeways that serve all types of people riding bicycles in Berkeley. The 2025 update recommendations focus on consolidating and connecting the segments of the Low-Stress Network built out by the City of Berkeley between 2017 and 2025. The core Low-Stress Network is part of a more extensive overall bikeway system in Berkeley that is supported by wayfinding signage, bike parking, a high maintenance standard, and education, encouragement, and outreach programs.

This is a citywide planning document that presents recommendations for improving bicycle safety, comfort, and connectivity at a network level. As such, the recommendations in this plan require further project-specific planning, data collection, analysis, public engagement, and engineering design before they may be implemented. The City of Berkeley is committed to a Complete Streets approach that supports the needs of all users of our roadways—people walking, bicycling, riding transit, and driving, and commercial deliveries necessary for a vibrant local economy. When considering whether and how to implement these projects, the City also incorporates many operational and design needs, including maintaining and improving access for persons with disabilities; preserving and improving response times for emergency response personnel; preserving or improving roadway capacity during mass evacuations; preserving maintenance access for utilities, drainage, street trees, and street sweeping; and designing streets to meet the stormwater requirements of the San Francisco Bay Regional Water Quality Control Board.

1.2 Plan Organization

Chapter 2: Goals & Policies: This section is not updated as part of this plan update.

Chapter 3: Existing Conditions: An inventory of present-day bicycling in Berkeley, including physical conditions like bikeways.

Chapter 4: Needs Assessment/Public Engagement: Who did we talk to, and how was that input used to shape plan recommendations? This chapter summarizes our strategy for engagement, the events held, and the key feedback received.

Chapter 5: Proposed Bikeway Network: Proposals to support Berkeley residents who already ride a bicycle, eliminate barriers to bicycling more frequently, and encourage others to try bicycling for the first time.

Chapter 6: Implementation: A practical roadmap for implementing the proposals in this plan update, including project details, cost estimates, and project bundles grouped for the purpose of successful grant funding applications and evaluation and staffing needs for a measurable and successful bicycle program.

Appendices: Resources critical to the implementation of the proposed projects which includes:

- Detailed Bicycle Boulevard Design Guidelines based on the latest federal and state guidelines and national best practices from organizations such as the National Association of City Transportation Officials (NACTO)
- 2022 Outreach Summary
- 2025 Outreach Summary
- Network Update Memo
- Prioritization Memo

1.3 How to Use This Plan Update

This plan update serves as a workplan for City of Berkeley staff for the next 5 to 10 years. It provides relevant guidance for the design process of future bikeway projects and recommendations for continued engagement practices with the full range of community stakeholders in Berkeley.

1.4 What Does "All Ages & Abilities" Mean?

To increase bicycling use, bikeway design needs to meet the needs of a broader set of potential bicyclists. Many existing bicycle facility designs exclude most people who might otherwise ride, traditionally favoring very confident riders who tend to be adult men. When selecting a bikeway design strategy, identify potential design users in keeping with both network goals and the potential to broaden the bicycling user base of a specific street.

Children: School-age children are an essential bicycling demographic but face unique risks because they are smaller and thus less visible from the driver's seat than adults, and often have less ability to detect risks or negotiate conflicts.

Seniors: People aged 65 and over are the fastest growing population group in the US, and the only group with a growing number of car-free households. Seniors can make more trips and have increased mobility if safe riding networks are available. Bikeways need to serve people with lower visual acuity and slower riding speeds.

People with disabilities: People with disabilities may use adaptive bicycles, including tricycles and recumbent handcycles, which often operate at lower speeds, are lower to the ground, or have a wider envelope than other bicycles. High-comfort bicycling conditions provide mobility, health, and independence, often with a higher standard for bike infrastructure needed.

Women: Women are consistently underrepresented as a share of total bicyclists, but the share of women riding increases as better riding facilities are available. Research shows that women have a stronger preference for facilities with greater separation, when compared to men.[1] Concerns about personal safety beyond traffic stress are often also relevant. Safety in numbers has additional significance for female bicyclists.

People riding bike share: Bike share systems have greatly expanded the number and diversity of urban bicycle trips. Since its launch in 2017, the Bay Wheels bikeshare system serving San Francisco, the East Bay, and San Jose has logged over 11 million trips across a fleet of 6,000 bikes and 500+ stations. Riders often use bike sharing to link to other transit or make spontaneous or one-way trips, placing a premium on comfortable and easily understandable bike infrastructure. Bike share users range widely in stress tolerance, but creating low-stress bikeways will accommodate the preferences of all riders, ensuring a better experience for everyone. All Ages and Abilities networks are essential to bike share system viability.

People of color: While cyclists of color make up a rapidly growing segment of the riding population, a recent study found

1 Aldred, R., Elliott, B., Woodcock, J., & Goodman, A. (2016). Cycling provision separated from motor traffic: a systematic review exploring whether stated preferences vary by gender and age. *Transport Reviews*, 37(1), 29–55. https://doi.org/10.1080/01441647.2016.1200156.

that fewer than 20% of adult Black and Latinx bicyclists and non-bicyclists feel comfortable in conventional bikeways; fear of exposure to theft or assault and being a target for enforcement were cited as barriers to bicycling. Long-standing disinvestment in street infrastructure and inequitable decision making have resulted in these riders being disproportionately burdened by pedestrian and bicyclist fatalities and serious injuries.[2]

Low-income riders: Low-income riders make up half of all Census-reported commuter bicyclists, relying extensively on bicycles for basic transportation like getting to work. In addition, basic infrastructure is often deficient in low-income neighborhoods, exacerbating safety concerns. An All Ages and Abilities bikeway is often needed to bring greater safety and comfort to the major streets these bicyclists use every day.

People moving goods or cargo: Bicycles and tricycles outfitted to carry multiple passengers or cargo, or bicycles pulling trailers, increase the types of trips that can be made by bike but are not well accommodated by bicycle facilities designed to minimal standards.

2 USDOT FHA. (2024). Exploring Risk Factors to Disparities in Pedestrian and Bicyclist Fatalities and Serious Injuries. https://highways.dot.gov/sites/fhwa.dot.gov/files/FHWA-HRT-25-035.pdf.

Confident cyclists: While a small percentage of experienced cyclists may feel comfortable riding in mixed motor vehicle traffic and may still choose to do so, they are also well accommodated by All Ages and Abilities facilities, which provide a more inclusive option for riders of all comfort levels.

1.5 Bicycling & Rolling: Who Can Use the Bike Lane?

Since the adoption of the 2017 Bicycle Plan, the emergence of micromobility has introduced a broad array of new personal mobility devices. Each of these devices has different speeds, considerations, and users. Designing a Low-Stress Network for all ages and abilities means the needs of these different users need to be taken into account for facility selection and design. Legal uses of the bikeway network include:

Bicycles: Bicycles can legally be used on the bikeway network. This includes modified bicycles such as unicycles, cargo bikes, bikes with trailers, or longtail bikes.

E-bikes & e-trikes: California regulates three classes of e-bikes. E-bikes that are pedal-assist or limit throttle top speeds to 20 mph or under may be used on the entire bikeway network. E-bikes with a pedal-assisted top speed of 28 mph are not permitted on shared use paths (Class I) but may be used on the rest of the bikeway network. E-bikes with a top speed over 28 mph are classified as mopeds and are not permitted on the bikeway network.

Skateboards & scooters: Human-powered skateboards and scooters are legal users of the bikeway network. Given their lower travel speeds, human-powered skateboard and scooter users should exercise due care on the bikeway network.

E-skateboards & e-scooters: E-skateboards and e-scooters (including those with seats) with a top speed of 20 mph may be used on the bikeway network. E-skateboards and e-scooters with a top speed over 20 mph are not permitted on the bikeway network.

Hoverboards & similar devices: Hoverboards, one-wheels, E-unicycles, and other types of electric mobility devices with a top speed of 20 mph may be used on the bikeway network. Devices with a top speed over 20 mph are not permitted on the bikeway network.

Mobility scooters & powerchairs: California allows any pedestrian to use a bicycle lane, and a person using a motorized mobility scooter is considered a pedestrian according to California Vehicle Code. Given their lower travel speeds, mobility scooter users should exercise due care on the bikeway network.

1.6 Accessibility Interviews

Berkeley is the heart of the disability rights movement in the US. Organizations such as the Center for Independent Living, Bay Area Outreach and Recreation (BORP) Adaptive Sports and Recreation, Berkeley's Accessible Right-of-Way (BAROW), and the Berkeley Commission on Disability continue to advocate for a community fully accessible to all users. As some of our most vulnerable road users, people with disabilities are often the most impacted by changes and challenges in the transportation system.

Berkeley is committed to accessible design for the bikeway network, using resources such as the Public Right-of-Way Accessibility Guidelines (PROWAG), formally adopted by the Federal Highway Administration in 2024. Equally important is leveraging the expertise and lived experience of Berkeley residents with a disability. During the public outreach process, the project team held a workshop with the Center for Independent Living, gave a presentation to the Commission on Disability, and held interviews with five leaders in the Berkeley disability movement to get specific input on project approaches and design challenges. Key takeaways from this input are listed below.

The recommendations below are not legally required guidelines. They should be considered within the context of PROWAG, the Americans with Disabilities Act (ADA), *California Manual on Uniform Traffic Control Devices* (CA MUTCD), the Caltrans *Highway Design Manual*, and the various Design Information Bulletins issued by Caltrans.

Michaela Tsztoo (left) and Eric Knaresboro (right) with their service animals; they rely on road noise to help them cross the street, making bicycles and scooters a challenge.

Kathi Pugh using her powerchair in the Milvia Street separated bikeway; she prefers to ride against traffic to see people on bikes coming.

Accessibility Recommendations

ENGAGEMENT

» Work proactively with the Commission on Disability, BAROW, and the Center for Independent Living to engage members of the disability community in the early stages of project design.

» Make all presentation materials compliant with current Web Content Accessibility Guidelines (WCAG) and always provide verbal descriptions of images and maps during presentations for blind and low-vision participants.

FACILITY DESIGN

» Consider the needs of slow and wide-based devices, such as e-trikes, mobility scooters, and powerchairs, during separated bikeway design. Limit cross slopes, design for width that accommodates safe and comfortable passing, and design breaks in vertical elements wide enough for a wide-based device to leave the bikeway.

» Consider the needs of low-vision users when designing separated bikeways. Apply reflective paint and reflectors to vertical elements and use consistent hatch-striping in buffers for users to pick up in their peripheral vision.

INTERSECTIONS

» Consider the needs of low-vision users crossing at separated bikeways. Consider a second row of truncated domes in the crosswalk to delineate between the bikeway and the vehicle portion of the roadway. Ensure curb ramps point directly at each other on either side of a crosswalk. Consider braille messages or audible messages for pedestrian push buttons alerting users to the presence of a separated bikeway.

» Consider transit boarding island accessibility as part of separated bikeway design. Where possible, integrate transit boarding island ramp access into a preexisting crosswalk, using truncated domes to demarcate the extent of the transit boarding island. Where transit boarding island access is not at a crosswalk, consider a raised crossing of the separated bikeway at sidewalk level, with corresponding yield signage and markings for separated bikeway users.

PARKING & LOADING

» Provide a minimum 4-foot buffer/path of travel adjacent to parking-protected separated bikeways wherever possible. When placing bollards within a buffer space, place them at the edge of the buffer space to maximize path of travel width.

» Consider opportunities to establish blue-zone parking stalls adjacent to intersections with preexisting curb ramps, especially on longer blocks, blocks without midblock curb ramps, or blocks where driveway slopes exceed minimum requirements for use by a wheelchair.

CONSTRUCTION MITIGATION

» Increase enforcement of construction mitigation plans, in particular: accessible crosswalks, audible warning devices announcing crosswalk closures, and sufficiently wide path of travel for temporary walkways or bikeways.

Helen Walsh with her electric tricycle on Milvia Street; narrow separated bikeways are a challenge for her wider bike.

02

EXISTING CONDITIONS & PLAN PROGRESS

This chapter details the existing state of bicycle infrastructure in Berkeley, the implementation status of network recommendations from the 2017 Bicycle Plan, notable projects completed since the 2017 plan, and transportation and land use patterns in Berkeley.

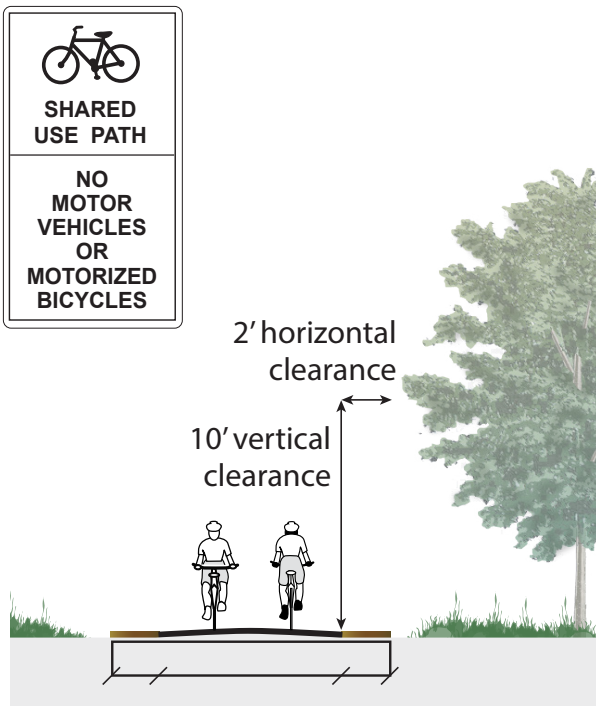
2.1 Bikeway Classification

The California Department of Transportation (Caltrans) designates four classes of bicycle facilities: Classes I, II, III, and IV. Caltrans Design Information Bulletin 94 (DIB-94) provides additional supplemental guidance for bikeway design, as does the NACTO *Urban Bikeway Design Guide* and the American Association of Highway and Transportation Officials' Comprehensive Bike Guide.

CLASS I MULTI-USE PATHS

Shared use paths (Class I bike paths or multi-use trails) provide completely separated, exclusive right-of-way for bicycling, walking, and other nonmotorized uses.

In 2017, there were 18.2 miles of shared use paths; as of 2025, this number has increased to 18.9



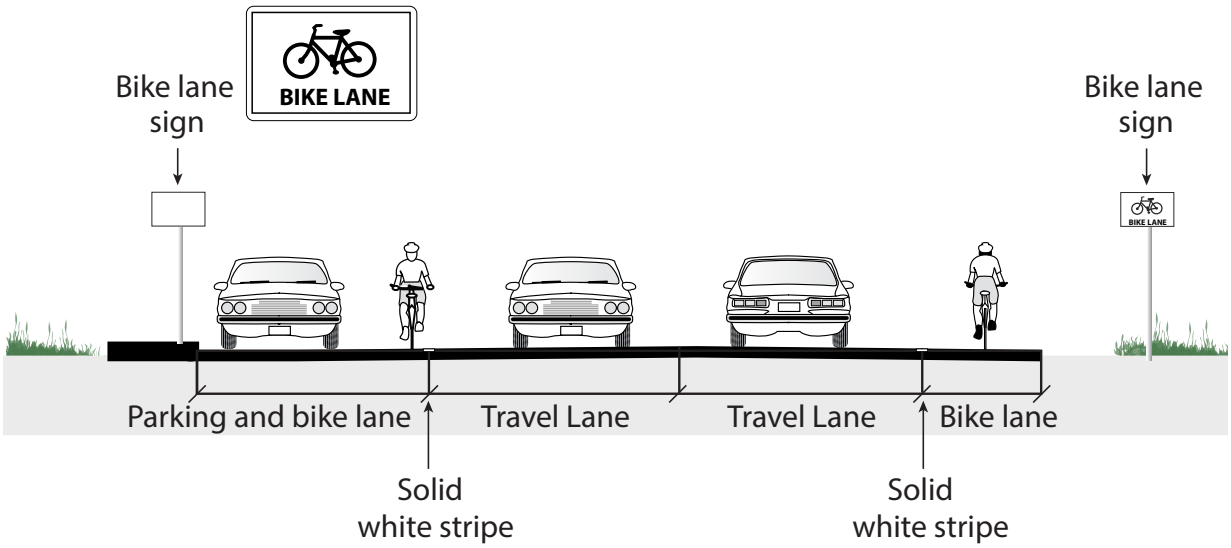
CLASS II BICYCLE LANES/UPGRADED BICYCLE LANES

Bicycle lanes (Class II) are striped, preferential lanes on roadways for one-way bicycle travel.

In 2017 there were 12.1 miles of bicycle lanes; as of 2025, this number has decreased to 10.9. This is because many bicycle lanes were upgraded.

Upgraded bicycle lanes (Class II) include striped buffers that add a few feet of separation between the bicycle lane and traffic lane or parking aisle, or use green thermoplastic striping to increase visibility at areas of conflict.

In 2017 there were 0.3 miles of upgraded bicycle lanes; as of 2025, this number has increased to 1.8.



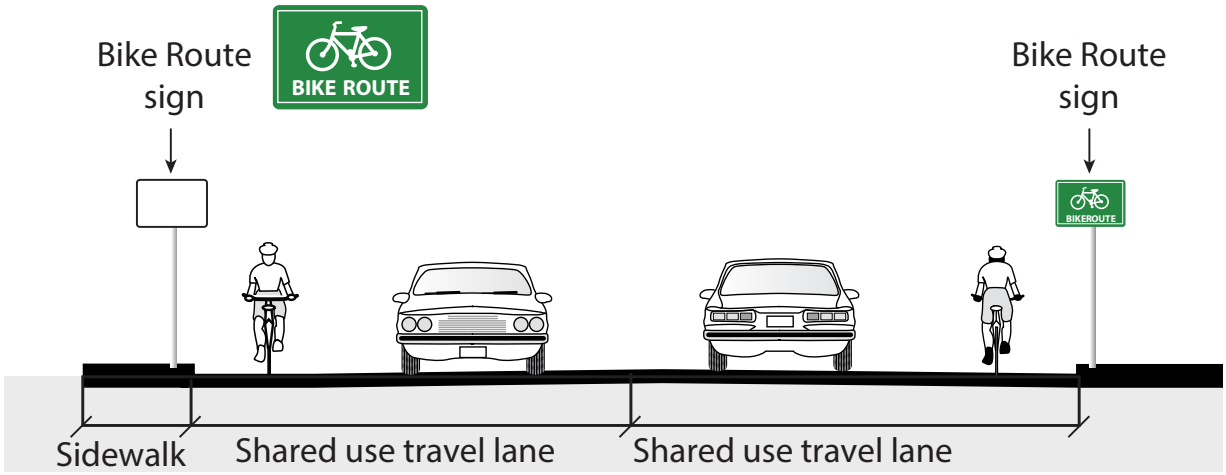
CLASS III BICYCLE ROUTES/BICYCLE BOULEVARDS

Bicycle routes (Class III) are signed roadways where people riding bicycles share a travel lane with people driving motor vehicles. They may include shared lane markings (sharrows) or other pavement stenciling. Because they are mixed-flow facilities, Class III bicycle routes are only appropriate for low-volume streets with slow travel speeds.

In 2017 there were 8.1 miles of bicycle routes; as of 2025, this number has increased to 12.6.

Bicycle boulevards (Class III) are roadways where people riding bicycles share a travel lane with people driving motor vehicles. However, traffic calming and diversion infrastructure and crossing enhancements are intended to prioritize bicycle travel of people of all ages and abilities along these roadways. Some bicycle boulevards may include separated facilities and bicycle lanes.

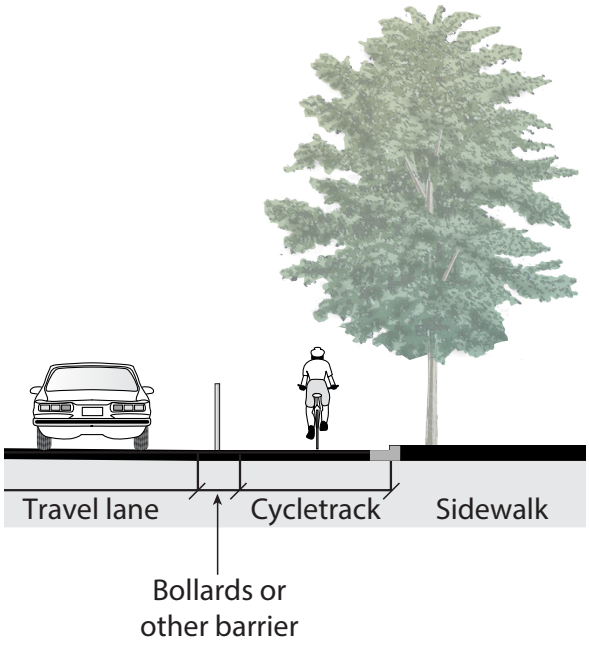
In 2017 there were 11.9 miles of bicycle boulevards; as of 2025, this number has increased to 12.5.



CLASS IV SEPARATED BIKEWAYS

Separated bikeways (Class IV), also known as cycletracks, are on-street bicycle lanes that are physically separated from motor vehicle traffic by a vertical element or barrier, such as a curb, bollards, or parking aisle.

In 2017 there were 0.1 miles of separated bikeways; as of 2025, that number has increased to 4.2.



UPDATES IN BEST PRACTICES SINCE 2017

Since 2017, several notable best practices have emerged in active transportation infrastructure that further enhance safety, accessibility, and inclusivity. Here are some key updates:

Micromobility: The use of micromobility devices has surged, and governments have responded by developing regulatory frameworks and adapting infrastructure to enhance user safety. E-scooter and e-bike systems have also been integrated with public transportation systems, with docking stations located near stops and stations. This allows users to seamlessly use different modes of transportation to get to their destinations.

Data-driven planning & equity considerations: The use of data analytics and technology has improved how cities plan and implement active transportation infrastructure. Equity has also been integrated into transportation data analytics to prioritize investments in historically underserved communities.

Green infrastructure: There is a growing emphasis on integrating green infrastructure with active transportation. This includes incorporating green spaces, permeable pavements, and rain gardens adjacent to bicycle lanes and pedestrian paths to enhance the environment and improve urban aesthetics.

Design guidelines: There has been a shift toward design guidelines that allow cities to adapt infrastructure to meet the needs of all road users. The *Public Right-of-Way Accessibility Guidelines* (PROWAG), formalized in 2024, ensures facilities are accessible to pedestrians with disabilities. These updates have led to tangible improvements in sidewalks, curb ramps, pedestrian signals, on-street parking, and shared use paths. The National Association of City Transportation Officials (NACTO) *Urban Street Design Guide* has helped cities lead the movement in redesigning and reinvesting in streets to make them safer, more livable, and more economically vibrant.

Safety focus: The City is implementing several safety improvements for people walking and bicycling:

1. Traffic signals that can detect people walking and bicycling
2. Better wayfinding and signage
3. Safe Routes to School programs
4. Education campaigns about sharing the road

These changes aim to make active transportation safer for everyone.

Vision Zero: More cities have adopted Vision Zero programs aimed at eliminating traffic fatalities by reducing vehicle speeds, redesigning intersections, and expanding pedestrian safety infrastructure. Together, these advancements reflect a broader commitment to creating safer, more inclusive, and multimodal transportation networks for all users.

Street Trauma Prevention Program (STPP): The STPP embodies a new and emerging approach to Berkeley's safety goals, reinforcing the Fire Department's commitment to positive patient outcomes, trauma prevention, and emergency

response access. In the context of bicycle planning, this approach calls for balancing the need to implement new bikeways and traffic calming with the need to preserve and improve emergency personnel response times. This supports positive patient outcomes from fires, medical emergency and other service calls responded to by the Berkeley Fire Department. For example, this approach suggests future integration of public safety responder and evacuation needs in planning processes and incorporation of innovative devices like removable/ retractable barriers that can facilitate emergency responder access.

These advancements reflect a growing recognition of the importance of active transportation in creating sustainable, livable cities, and demonstrate an ongoing commitment to improving infrastructure for all users.

2.2 Existing Bikeway Network

Since adopting the 2017 Bicycle Plan, the City of Berkeley has constructed almost 11 miles of new upgraded bikeway network facilities. **Figure 5** shows the existing bikeway network in Berkeley, with new or upgraded facilities highlighted in gold. **Table 3** lists the total miles of bicycle facilities by classification for 2017 and 2025. Mileage for standard bicycle lanes (Class II) decreased between 2017 and 2025, as many of those facilities were upgraded to either upgraded bicycle lanes (Class II) or separated bikeways (Class IV).

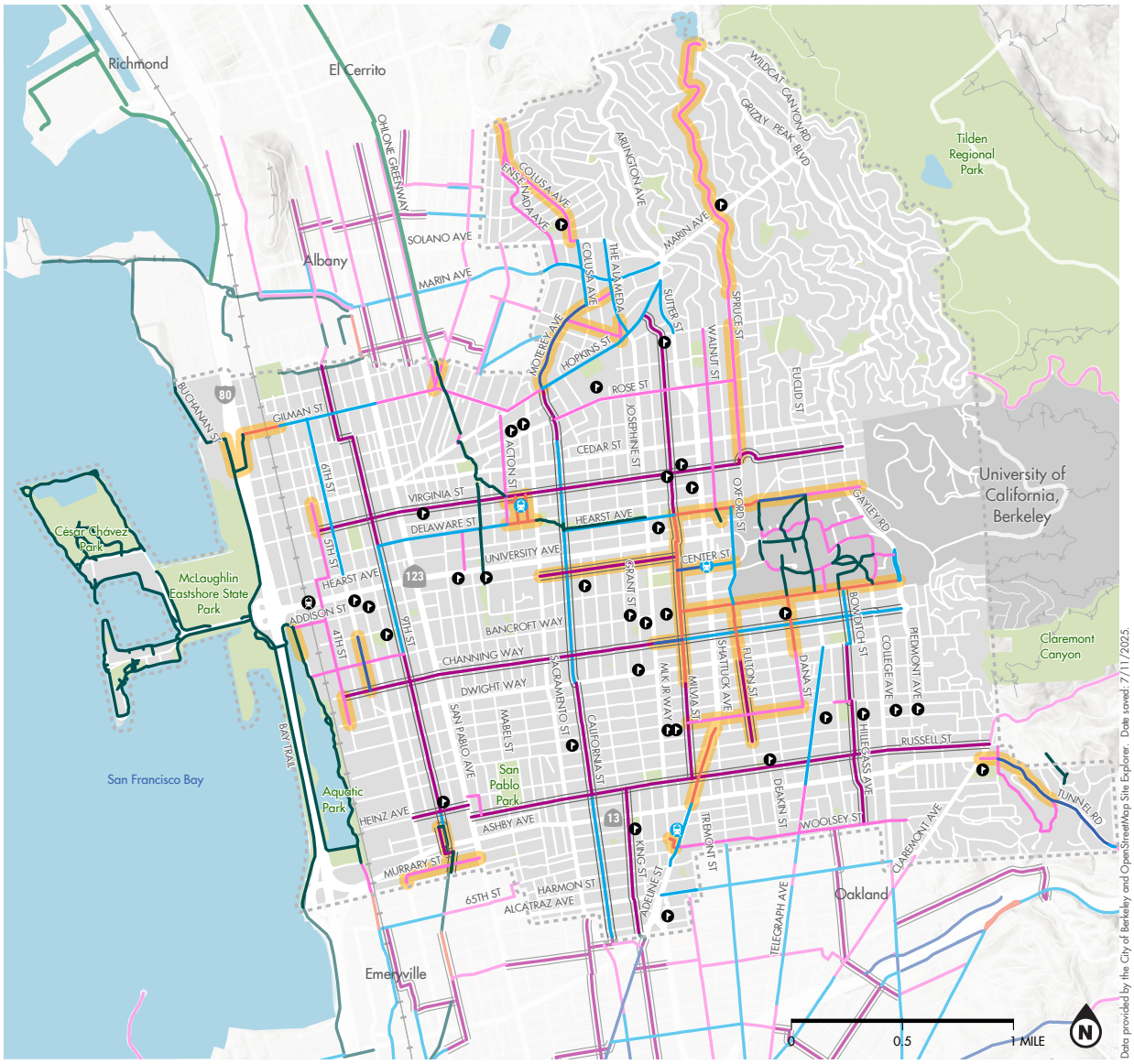
Table 3: *Bikeway Network Mileage Comparison for 2017 and 2025*

FACILITY TYPE	2017 (MI)	2025 (MI)
Shared use path (Class I)	18.2	18.9
Bicycle lane (Class II)	12.1	10.9*
Upgraded bicycle lane (Class II)	0.3	1.8
Bicycle route (Class III)	8.1	12.6
Bicycle boulevard (Class III)	11.9	12.5
Separated bikeway (Class IV)	0.1	4.2
Total	50.8	60.9
Bicycle boulevard network**	15.8	17.6

*Standard bicycle lane mileage decreased in 2025 due to standard bicycle lane being improved to upgraded bicycle lanes or separated bikeways.

**The Bicycle Boulevard Network includes only some segments of Class I, II, III, and IV facilities.

Figure 5: *Existing Bikeway Network (2017–2025)*



EXISTING BIKEWAY NETWORK

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EXISTING FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)
- New or Upgraded since 2017

BICYCLE BOULEVARD NETWORK

- Amtrak Station
- BART Station
- School
- Railroad
- Park

2.3 Low-Stress Network Intersection Controls

Since adopting the 2017 Bicycle Plan, the City of Berkeley has focused on improving the comfort and safety of crossings where the Low-Stress Network intersects with major roadways. Intersection crossings are often the most dangerous part of a trip on the bikeway network; high levels of discomfort for vulnerable users at intersection crossings are most likely to discourage people from bicycling and rolling. This section describes the intersection treatments currently used in Berkeley.

A **median crossing (1)** is a median refuge island placed between directions of travel on a collector or arterial roadway at uncontrolled intersections, allowing users to cross the street having only to watch for one direction of travel at a time. Median crossings also prohibit through movements for vehicles on the local cross street while allowing bicycle and pedestrian travel to make through movements, and are designed to preserve the opportunity for emergency and City service vehicles to pass through. This treatment is useful on the Bicycle Boulevard Network, as it will divert vehicle traffic off the bikeway network while improving crossings at challenging intersections.

Rectangular rapid flashing beacons (2) (RRFBs) are user-actuated amber LEDs that supplement warning signs at uncontrolled intersections and midblock crosswalks. They can be activated by people walking and bicycling by manually pushing a button.

RRFB + median crossing (3) is an enhanced version of an RRFB treatment, including a median crossing for users to focus on one direction of travel at a time. An RRFB and median should be considered on streets with higher traffic volumes or on parts of the Bicycle Boulevard Network that would benefit from the traffic-diverting elements of a median crossing.

A **pedestrian hybrid beacon (4)** (PHB), also known as a high-intensity activated crosswalk (HAWK) beacon, is a traffic control device used to stop roadway traffic and allow people to walk or bike across an intersection. They can be activated by people walking and bicycling by manually pushing a button or passively by a video detection or detector loop system. The City of Berkeley is in the early stages of implementing passive detection, with ongoing calibration to detect bicyclists.

PHBs installed on the Bicycle Boulevard Network should include an in-lane push button for people bicycling or rolling to activate the signal without having to go onto the sidewalk. PHBs are generally recommended for streets with more than one lane of traffic per direction. PHBs can also be paired with a median crossing.

MEDIAN CROSSING on California Street at Dwight Way.

RRFB at MLK Jr. Way at Virginia Street.

PHB on Virginia Street at San Pablo Avenue.

RRFB + MEDIAN CROSSING on Addison Street at MLK Jr. Way.

A **two-way cycletrack crossing (1)** is a treatment where two bikeways meet at an offset intersection with a major roadway. This treatment implements a two-way separated bikeway facility on one side of the street, or a one-way separated bikeway facility on each side of the street, along the major roadway to facilitate safe crossings in conjunction with a traffic signal. This treatment eliminates uncontrolled turning conflicts and provides a signalized crossing for the bikeway.

A **raised crossing/intersection (2)** is a treatment where the pavement level of an intersection is raised up to sidewalk height. This creates a pedestrian-prioritized intersection, with the slope on either side of the raised intersection acting as a traffic calming device for vehicles before entering the intersection.

A **traffic signal (3)** is a fully controlled intersection, phased by a traffic signal. Traffic signals are appropriate at crossings of major streets. Partial traffic diversion at signalized intersections may be used to enhance bicycle boulevards, such as the intersection of MLK Jr. Way at Channing Way.

A **protected intersection (4)** is a signalized intersection with physical bikeway barriers extending into the intersection. Protected intersections force tighter angled turns by vehicles, improving sight visibility of people walking, bicycling, and rolling across the intersection. Protected intersections also position people bicycling and rolling further into the intersection while waiting for the signal to change, improving their visibility to people in vehicles preparing to turn. Protected intersections are typically built in conjunction with separated bikeways but can supplement standard bicycle lanes.

TWO-WAY CYCLETRACK CROSSING at Holmes in Davis, CA.

RAISED CROSSING at the intersection of Telegraph Avenue at Bancroft Street.

TRAFFIC SIGNAL CROSSING of MLK Jr. Way at Channing Way.

PROTECTED INTERSECTION on Hopkins Street at The Alameda (credit: Melanie Curry).

2.4 Existing Low-Stress Intersection Controls

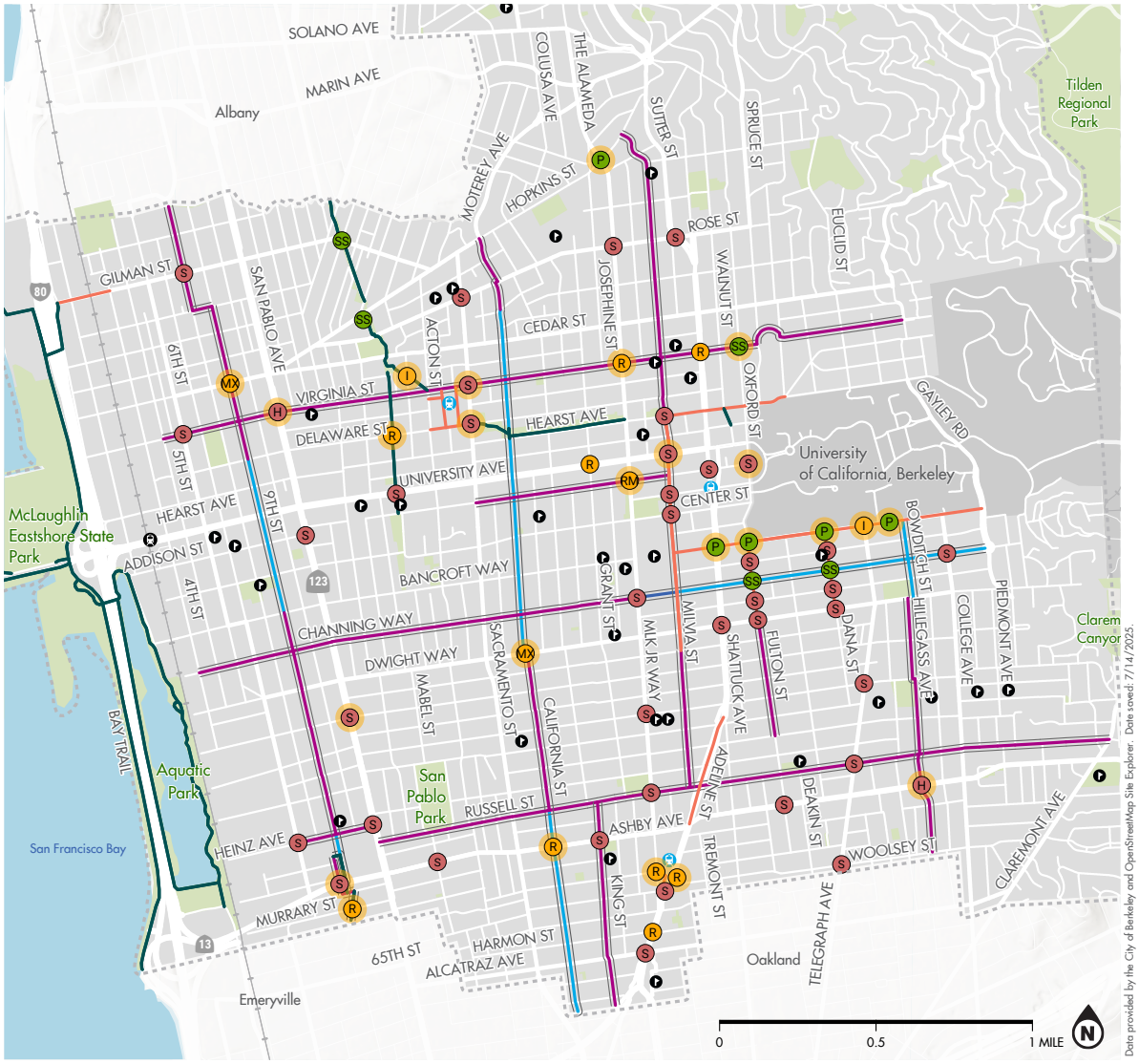
Since adopting the 2017 Bicycle Plan, the City has implemented over 20 different intersection crossing improvements on the Low-Stress Network, including the Bicycle Boulevard Network and separated bikeways. Some of the intersection controls shown on this map are not on the current Low-Stress Network but will be integrated with upcoming, funded bicycle boulevard projects. **Figure 6** shows the existing Low-Stress Network and all low-stress intersection controls, with new or upgraded facilities highlighted in gold. **Table 4** below lists the inventory of low-stress intersection controls for 2017 and 2025.

Table 4: *Low-Stress Network Intersection Controls 2017 vs. 2025*

INTERSECTION CONTROLS (LOW-STRESS NETWORK) *	2017	2025
Median Crossing	0	2
RRFB	4	10
RRFB + Median Crossing	0	2
PHB	0	2
Raised Crossing/Intersections	0	2
Traffic Signal	33	39
Protected Intersection	0	5
Total Intersection Controls	37	62

* The list does not include intersection controls installed by the City of Berkeley on streets other than the Low-Stress Network.

Figure 6: *Existing Low-Stress Intersection Crossings (2017 to 2025)*



EXISTING LOW-STRESS INTERSECTION CROSSINGS

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Low-Stress Intersection Control

- P Protected Intersection
- SS All-Way Stop Sign
- MX Median Crossing
- RM RRFB + Median
- R RRFB
- I Raised Intersection
- H Pedestrian Hybrid Beacon
- S Traffic Signal
- Built After 2017

BART Station
Amtrak Station
School
Railroad
Parks

Bike Boulevard Network

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)

2.5 Bicycle Boulevards

WHAT IS A BICYCLE BOULEVARD?

A bicycle boulevard is a roadway intended to prioritize bicycle travel and provide a low-stress experience for people of all ages and abilities. The goal of bicycle boulevards is to provide low-stress bikeways on pleasant neighborhood streets that are both safe and convenient. To achieve these goals, bicycle boulevards are only appropriate on streets without large trucks or transit vehicles, and where traffic volumes and speeds are already low, or can be further reduced through traffic calming. For convenience, bicycle boulevard routes should not require people bicycling or rolling to stop any more frequently than they would on a parallel route.

The first seven bicycle boulevards in Berkeley were developed through community workshops in 1999, from which a set of design tools and guidelines were created. The guidelines outlined three phases of implementation: (1) signs and markings; (2) traffic calming and stop sign removal; and (3) intersection crossings. The first phase of implementation was finished in 2003, with continual modification and expansion in the intervening years.

ELEMENTS OF BICYCLE BOULEVARDS

Distinct visual identity: Unique pavement markings and wayfinding signs increase visibility of bicycle boulevard routes, assist with navigation, and alert drivers that the roadway is a priority route for people bicycling.

Bicycle priority: Traffic calming treatments such as traffic circles, diverters, and chicanes, sometimes in place of existing stop signs, can prioritize bicycle through-travel and discourage cut-through motor vehicle traffic.

Safe, convenient crossings: Traffic controls, warning devices, or separated facilities at intersections facilitate safe and convenient crossings of major streets along the Bicycle Boulevard Network.

BICYCLE BOULEVARD NETWORK

The Bicycle Boulevard Network consists of five north-south routes and four east-west routes:

North-South Routes

- Ninth Street/Eighth Street
- California Street/King Street
- Milvia Street
- Hillegass Avenue/Bowditch Street
- Fulton Street (in progress)

East-West Routes

- Virginia Street
- Channing Way
- Russell Street/Heinz Avenue
- Addison Street (in progress)

Figure 7 shows this existing network. The City of Berkeley has four bicycle boulevard projects in various states of construction, funding, and design. The details of these upcoming projects are documented in Chapter 5.

SIGNAGE AND MARKING SYSTEM

Berkeley pioneered a unique bicycle boulevard signage and marking system. The distinct purple signs are instantly recognizable and provide greater wayfinding information than standard bicycle route (Class III) signs.

Signage and markings used along Berkeley's bicycle boulevards include:

- Destination and distance information signs
- Route and off-route guidance signs
- Street and advance street identification signs
- Pavement markings ("bike blvd" stencils)

Each of these signs provides one or more of the four Ds of a complete wayfinding system: destination, direction, distance, and distinction.

TRAFFIC CALMING

Berkeley's bicycle boulevards use traffic calming and bicycle priority to achieve a safe, comfortable, and convenient experience for people who bicycle. Traffic calming reduces the speed of vehicles and directs them away from streets where bicyclists have priority but share the roadway with vehicles. Some of the traffic calming treatments used along Berkeley's Bicycle Boulevard network include those shown below:

- **Traffic circle:** Reduces speed of intersection using a raised center median
- **Speed table:** Reduces speed along segments using vertical deflection
- **Diverter:** Prohibits auto traffic from entering into, or exiting from, a street

More detail is provided in Appendix A: Bicycle Boulevard Design Guide.

Figure 7: *Existing Bicycle Boulevard Network (2017–2025)*

EXISTING BIKE BOULEVARD NETWORK

CITY OF BERKELEY
BIKE PLAN UPDATE

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TRAFFIC CALMING

- Traffic Circle
- Traffic Diverter
- Built After 2017

- Amtrak Station
- BART Station
- School
- Railroad
- Park

EXISTING BIKE BOULEVARD NETWORK

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)

2.6 Notable Projects Built Since 2017

Since adopting the 2017 Bicycle Plan, the City of Berkeley has implemented 10.5 miles of new or upgraded bicycle facilities around the city and upgraded 20 intersection crossings on the Low-Stress Network. The following sections provide a summary of the most notable projects built since 2017.

MILVIA BIKEWAY PROJECT

This project covers 12 contiguous blocks of Milvia Street (0.75 miles), from Hearst Avenue in the north to Blake Street in the south. The project converted a Class III Bicycle Boulevard to a Class IV Separated Bikeway, including two-way to one-way street conversions from Berkeley Way to University Avenue, University Avenue to Center Street, and Channing Way to Dwight Way, as well as a modified traffic signal at University Avenue to add bicycle signal heads for north/south bicycle movements. The project was completed in 2022.

ADDISON STREET BICYCLE BOULEVARD

The Addison Street Bike Boulevard project covers 22 contiguous blocks of Addison Street (2.0 miles) from Bolivar Drive to Oxford Street. The first phase of the Addison Street Bike Boulevard project covers nine contiguous blocks (0.62 miles) from Sacramento Street to Milvia Street and was constructed in 2022. The project included the installation of an RRFB and median crossing island on MLK Jr. Way at Addison Street. This crossing prohibits through and left-turn movements for vehicles on Addison Street while maintaining emergency vehicle access.

The unbuilt second phase of the Addison Street Bike Boulevard is in two segments: Bolivar Drive to Sacramento Street and Milvia Street to Oxford Street. It includes two uncontrolled intersection crossings (one RRFB with median, and one PHB); signal upgrades and addition of a Class IV bikeway at the offset San Pablo Avenue and Addison Street intersection; and traffic calming including new speed tables and several new traffic circles.

SOUTHSIDE COMPLETE STREETS

The Southside Complete Streets project covers 16 contiguous blocks (1.5 miles) of Bancroft Way, Fulton Street, and Dana Street on the southern side of the UC Berkeley campus. All three streets received separated bikeways (Class IV), and the project was completed in 2024. Project details include:

Bancroft Way (Piedmont Avenue to Milvia Street): Concrete curb-protected two-way separated bikeway on the south side of Bancroft. The project includes a transit lane from College Avenue to Shattuck Avenue, a raised intersection at Telegraph Avenue, and fully or partially protected intersections at Bowditch Street, Dana Street, Fulton Street, and Shattuck Avenue.

Fulton Street (Bancroft Way to Dwight Way): Concrete curb-protected separated bikeways, with phase-separated protected bike crossings at Durant Street and Dwight Way.

Dana Street (Bancroft Way to Dwight Way): Concrete curb-protected separated bikeways, including a transit boarding island at Haste Street.

Two-way separated bikeway at Bancroft and Ellsworth.

Bridge over I-80 and Gilman Street for people walking and bicycling.

GILMAN STREET OVERCROSSING & CYCLETRACK

The I-80/Gilman interchange project is a joint project between Caltrans and the Alameda County Transportation Commission to rebuild the I-80 freeway interchange at Gilman Street, build a new bicycle and pedestrian freeway overcrossing, and construct adjacent separated bikeway improvements. The bicycle and pedestrian bridge was completed in 2023, and the adjacent bikeways were finished in 2025.

The project includes a 0.33 mile bicycle and pedestrian overcrossing (Class I) and a 0.12 mile separated bikeway (Class IV) on Gilman Street (Second Street to Fourth Street), upgrading the existing bicycle lane (Class II).

Adeline Street separated bikeway.

ADELINE STREET TRANSPORTATION IMPROVEMENTS PROJECT

Phase 1 of the Adeline Street Improvements project covers four contiguous blocks (0.33 miles) from Shattuck Avenue to Ashby Avenue. The project upgraded the existing Class II Bike Lane to a Class IV parking-protected Separated Bikeway. The project included the construction of four transit boarding islands. Phase 2 of this project will extend the Separated Bikeway south to the Oakland border.

Transit boarding island on Hearst Avenue.

HEARST AVENUE COMPLETE STREETS

The Hearst Avenue Complete Streets project covers six contiguous blocks (0.40 miles) from Milvia Street to Arch Street. The first phase, from Shattuck Avenue to Arch Street, was completed in 2018. The second phase, from Milvia Street to Shattuck Avenue, was completed in 2020. The project includes transit boarding islands on Hearst Street at Arch Street and at Euclid Avenue.

Shared use path on Ninth Street.

NINTH STREET BICYCLE BOULEVARD PATHWAY

Phase II of the Ninth Street Bicycle Boulevard Pathway project connects West Berkley to the Emeryville Greenway. The project included the construction of a new shared use path (Class I) from the terminus of Ninth Street, south across Ashby Avenue, to connect to the Emeryville Greenway at Murray Street. The project was completed in 2021.

The project included new signal improvements and intersection reconfiguration at Ashby Avenue and an RRFB crossing at Folger Street.

Separated bikeway at North Berkeley BART.

NORTH BERKELEY BART BICYCLE & PEDESTRIAN IMPROVEMENTS

The North Berkeley Bay Area Rapid Transit District (BART) Bicycle and Pedestrian Improvements project was a joint effort between BART and the City of Berkeley, funded by the Affordable Housing and Sustainable Communities Program (AHSC) grant and Measure RR funds from BART.

The project included:

- **Delaware Street (Acton Street to Sacramento Street):** a two-way cycletrack on the north side of the street.
- **BART Station Parking Lot**: three two-way cycletracks on the access lanes within the North Berkeley BART parking lot.
- **Ohlone Greenway (Virginia Street to Virginia Gardens):** widening of the Ohlone Greenway from 10 feet to 18 feet wide.

The project is currently under construction.

Two-way separated bikeway in the Ashby BART parking lot.

ASHBY BART BICYCLE CONNECTOR

The Ashby BART Bicycle Connector project constructed a separated bikeway within the access lanes of the Ashby BART station, connecting the intersection of Adeline Street at Woolsey Street to the intersection of MLK Jr. Way at Prince Street. This project will connect with the future Woolsey-Fulton Bicycle Boulevard in the east and the Southwest Berkeley Bicycle Boulevard in the west. This BART-led project was completed in 2024.

2.7 Transportation & Land Use Patterns

Transportation and land use are deeply interconnected, as land development determines where growth occurs, and transportation systems determine how people move through the region to reach destinations. The City of Berkeley is committed to a sustainable future as a Fossil Fuel Free City, prioritizing safe transportation options and connections to vibrant commercial areas and institutions, ensuring that all residents have access to the community. This commitment is reflected in various plans aligned with Berkeley's mission and values, including the 2023 update to the City's Housing Element, which serves as a key framework for guiding future growth and transportation improvements.

PLANNED GROWTH THROUGH HOUSING ELEMENT AND MANAGING TRANSPORTATION

The City of Berkeley's Housing Element Update defines specific goals, policies, and programs to support the region's population growth. As Berkeley continues to grow, the City recognizes that increasing housing density can lead to multiple benefits, such as reduced greenhouse gas emissions, improved health, and greater access to affordable housing. Over 10,000 housing units are expected to enter the market with the various housing programs outlined in Chapter 5 of the Housing Element. The housing programs were developed through extensive community engagement, such as Program 20 – Livable Neighborhoods, which includes infrastructure, streetscape, and active transportation improvements in Equity Priority Areas. These efforts are supported by several key plans, including but not limited to the 2017 *City of Berkeley Bicycle Plan*, 2020 *City of Berkeley Pedestrian Plan*, *Vision Zero Action Plan*, and the *Berkeley Strategic Transportation (BeST) Plan*.

As part of these goals, the City Council has emphasized seven key principles in the Housing Element, one of which is Transit Proximity and Reducing Vehicle Miles Traveled. To support this principle, Program 27 – Priority Development Areas (PDAs) focuses on building housing near transit hubs and commercial corridors, ensuring that new development is well connected to sustainable transportation options. Program 28 – BART Station Area Planning is another transit-focused program where the City of Berkeley and the San Francisco BART are collaborating to advance equitable transit-oriented development (TOD) at the Ashby and North Berkeley BART station areas.

BART SITE REDEVELOPMENT – NORTH BERKELEY & ASHBY

The City is working with BART to comply with AB 2923 and has adopted new zoning standards for a mixed-use district to facilitate residential development at North Berkeley and Ashby BART stations. The new zoning will primarily permit housing and includes new standards for height, floor area ratio, and minimum density (Program 28 – BART Station Area Planning). The development of the Ashby TOD and North Berkeley BART station areas is crucial for the active transportation system and will bring over 700 homes into the market, over 300 of those being affordable units.

BART's TOD Performance Targets prioritize the creation of below-market-rate housing for low and very low-income households, addressing affordable housing needs while fostering greater mobility. Active transportation improvements, including Complete Streets, are being integrated into the projects at North Berkeley BART TOD and Ashby TOD to ensure safer, more accessible routes for people walking, bicycling, and riding transit. These improvements will enhance connectivity to key destinations and encourage sustainable, nonmotorized travel, supporting a more inclusive and environmentally friendly transportation system for all.

SAN PABLO SPECIFIC PLAN

Planning Commission recommendations are expected in the middle of 2025, and the City Council's review and adoption of this plan is expected at the end of 2025. The San Pablo Specific Plan focuses on land use policies and economic development programs, such as allowed uses, development standards, and employment and industry trends. The plan will outline programs and policies to encourage and support diverse housing, commercial activities, and public amenities. To manage transportation demand on the San Pablo Corridor, planners will assess current multimodal transportation conditions and needs while summarizing potential parking and loading impacts in conjunction with public improvements. In addition to this assessment, the City is working with the Alameda County Transportation Commission and the Transit Rapid Corridor Project to ensure multiple safety enhancements are included, in addition to bus and bicycle lane projects along the San Pablo Avenue corridor.

PRIORITY DEVELOPMENT AREAS

The Priority Development Areas (PDA) program focuses on connecting housing, commercial corridors, and transit. By developing housing and commercial corridors near transit, the City aims to reduce greenhouse gas emissions while addressing housing needs. The City of Berkeley has seven PDAs, shown in **Figure 8**:

- North Berkeley BART
- Adeline Street
- Downtown
- San Pablo Avenue
- South Shattuck
- Southside/Telegraph
- University Avenue

MTC EQUITY PRIORITY COMMUNITIES

Formerly known as "Communities of Concern," Equity Priority Communities (EPCs) include Census tracts with a high concentration of underserved populations, such as low-income households and communities of color. The Metropolitan Transportation Commission (MTC) has used data from the American Community Survey to identify communities (Census tracts) that may have historically faced disadvantages and underinvestment due to their background or socioeconomic status. MTC uses this data to direct funding toward projects that enable more equitable access to transportation, housing, and services.

EQUITY PRIORITY COMMUNITIES METHODOLOGY

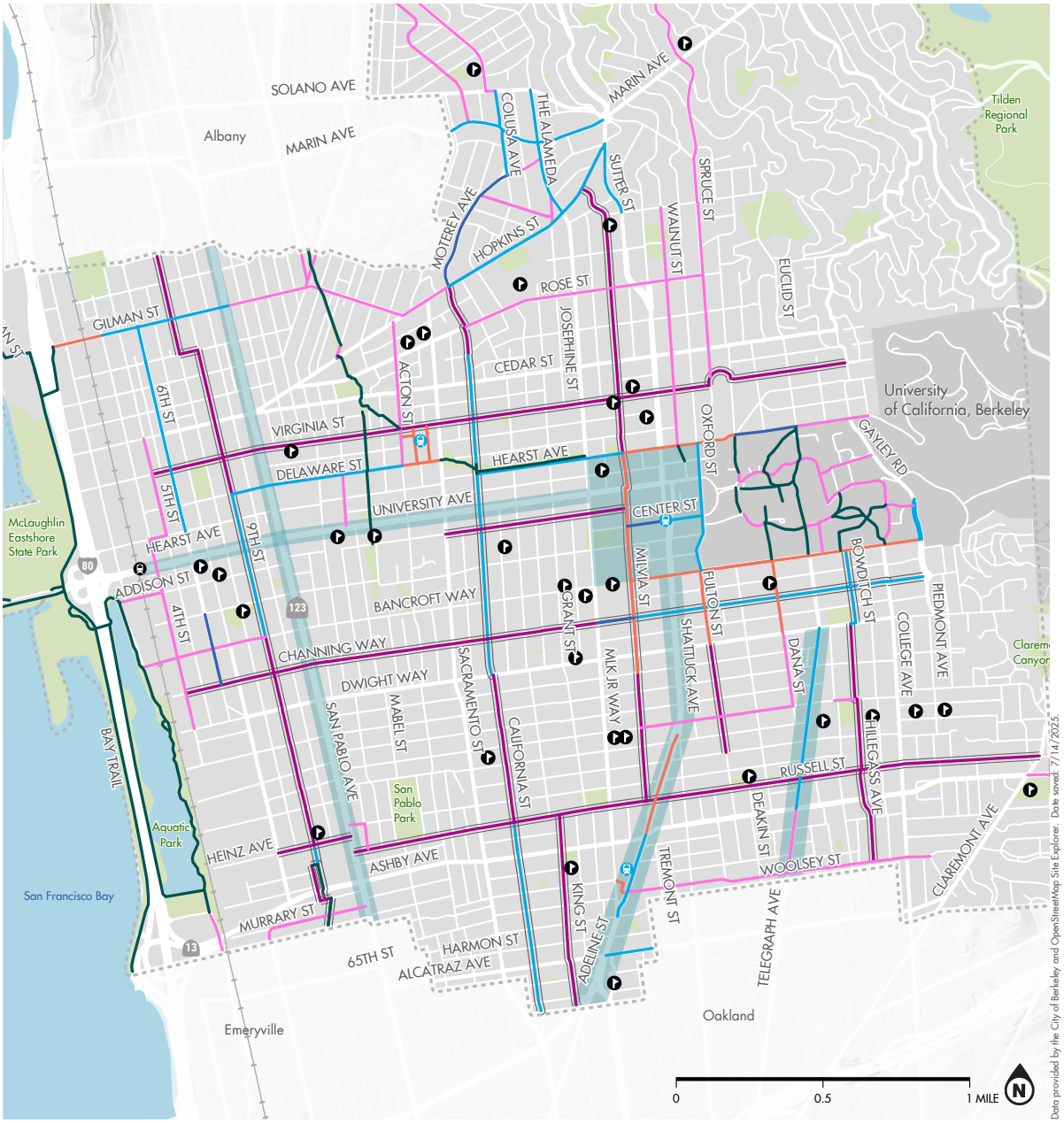
The Equity Priority Communities (tract geography) dataset is based on eight demographic variables:

1. People of Color (70% threshold)
2. Low-Income (28% threshold)
3. Limited English Proficiency (12% threshold)
4. Seniors 75 Years and Over (8% threshold)
5. Zero-Vehicle Households (15% threshold)
6. Single Parent Families (18% threshold)
7. People with a Disability (12% threshold)
8. Rent-Burdened Households (14% threshold)

If a tract exceeds both threshold values for Low-Income and People of Color shares or exceeds the threshold value for Low-Income and exceeds the threshold values for three or more other variables (#3 to #8), it is an Equity Priority Community.

Areas of Berkeley designated as Equity Priority Communities are shown in **Figure 9.**

Figure 8: *Priority Development Areas (Plan Bay Area 2050 Plus) from MTC/ABAG*



PRIORITY DEVELOPMENT AREAS

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Priority Development Areas

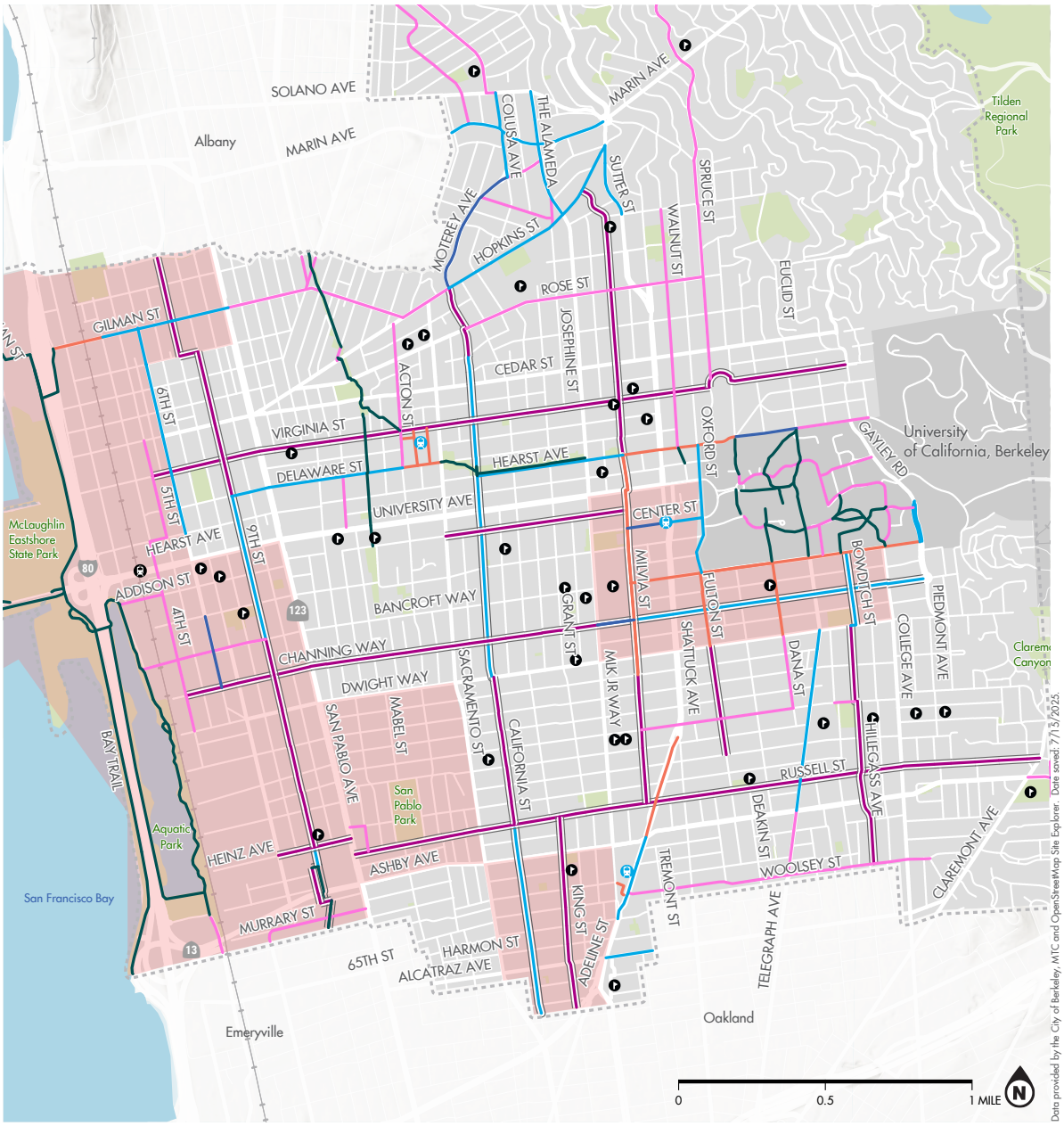
EXISTING FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)

BICYCLE BOULEVARD NETWORK

- School
- Amtrak Station
- BART Station
- Railroad
- Park

Figure 9: *Equity Priority Communities (Plan Bay Area 2050 Plus)*



EQUITY PRIORITY COMMUNITIES (2025)

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BIKE PLAN UPDATE

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Berkeley Equity Priority Communities

EXISTING FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)

BICYCLE BOULEVARD NETWORK

- Amtrak Station
- BART Station
- School
- Railroad
- Park

03

NEEDS ASSESSMENT/ PUBLIC ENGAGEMENT

3.1 Data Analysis

CENSUS DATA

The City of Berkeley is a majority-minority city, where 52% of households identify as a non-white ethnicity.[1] While the median household income is $98,000, more than a quarter of Berkeley households have an annual income above $200,000, and almost one-third have an annual income below $50,000.[2] Additionally, 17.7% of households live below the poverty line,[3] 25% of households do not have access to a private vehicle,[4] and 10.6% of Berkeley's population reports having one or more disability.[5]

US Census data provides an overall context for bicycling activity in Berkeley. The US Census American Community Survey (ACS) commute data consistently tracks long-term journey-to-work commute trends. However, the Census only collects data on the primary mode that Berkeley residents use to travel to work. It does not count residents who use a bicycle or mobility device as part of their commute (linking to a longer transit trip, for example). The Census count also excludes trips made for recreation, to run errands, or to commute to school. Census data, therefore, only tracks a portion of the total bicycle trips in Berkeley.

Table 5 shows the commute mode share as reported in the 2023 ACS one-year estimates. Almost one-third of working residents worked from home in 2023, reflecting evolving work trends related to the COVID-19 pandemic. Forty-two percent of work trips are made by low-carbon modes, which include walking, bicycling, and taking transit.

When looking at only those people traveling for work (excluding those working from home), 9% of all Berkeleyans traveling for work in 2023 chose a bicycle, representing a substantial increase over mode share estimates in 2022 and 2021.[6]

1 ACS 2023 Table B03002, 5-year estimate

2 ACS 2023 Table 1901, 1-year estimate

3 ACS 2023 Table 1701, 1-year estimate

4 ACS 2023 Table S2504, 1-year estimate

5 ACS 2023 Table S1810, 1-year estimate

6 ACS 2023 Table S0801, 1-year estimate

Table 5: *Mode Share for Work Commute (2023 ACS, 1-Year Estimate)*

MODE	PERCENTAGE	PERCENTAGE OF TOTAL TRIPS*
Bicycle	6.2%	9%
Taxicab, motorcycle, or other (including scooters and mobility devices)	2.5%	3.6%
Car, truck, or van	27.3%	39.7%
Public transportation	14.4%	21.0%
Walked	18.2%	26.5%
Worked from home	31.3%	

*"Percentage of total trips" represents only those workers commuting to a different place of work, excluding people working from home.

3.2 City Plans, Policies, and Studies Since 2017

Since adopting the 2017 Bicycle Plan, the City of Berkeley has pursued and completed other plans that substantially impact the development and implementation of bikeway network projects. Below is a summary of those plans.

VISION ZERO ACTION PLAN

VISION ZERO OVERVIEW

The City of Berkeley is committed to an equity-focused, data-driven effort to eliminate traffic deaths and severe injuries on city streets by 2028. The *Vision Zero Action Plan* prioritizes infrastructure improvements in Equity Priority Areas, particularly in conflict locations for people walking and bicycling. A key principle in the *Vision Zero Action Plan* is creating safer transportation options for people who walk, bike, and take transit. By making these transportation options safer and more comfortable, the City can encourage their use and reduce reliance on cars, ultimately leading to fewer severe and fatal collisions.

RELEVANT POLICIES AND ACTIONS

Key actions include collaborating with various partners, securing sustainable funding, and ensuring transparency and equity in data collection and reporting. The *Vision Zero Action Plan* also emphasizes designing infrastructure for vulnerable users and planning and developing projects on High-Injury Streets.

TRANSIT-FIRST POLICY IMPLEMENTATION PLAN

The City of Berkeley's *Transit-First Policy Implementation Plan* serves as a policy and design guide to public transit in the city. It was developed in coordination with a technical advisory committee and the Transportation and Infrastructure Commission.

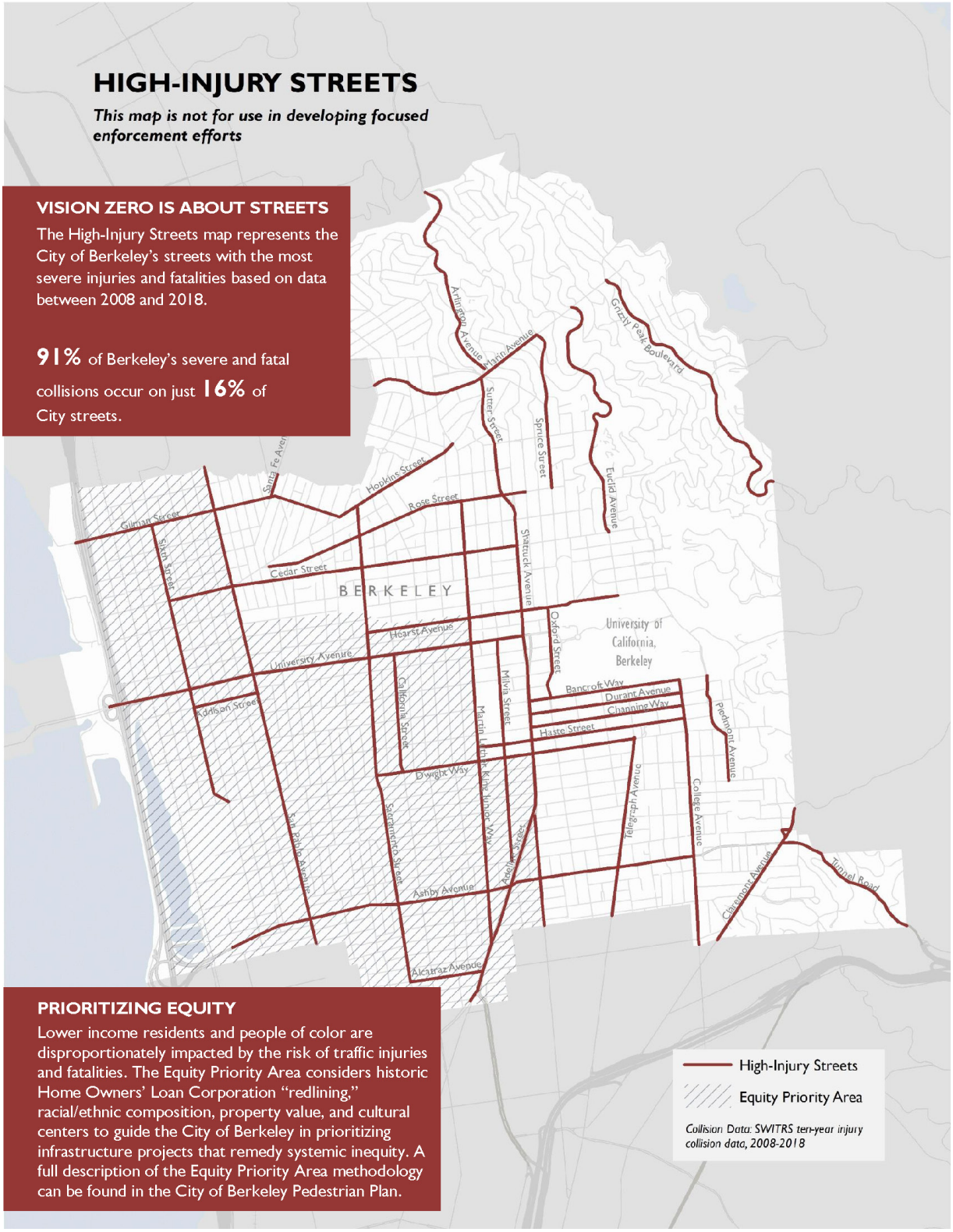
Proposed objectives of the plan include:

- Improve transit efficiency, reliability, and accessibility
- Increase transit ridership
- Prioritize transit corridors for future planning

Policy 3.2: To provide first/last mile connections at transit hubs, BART stations, or major bus lines, stops will provide parking for micromobility that is safely out of the way of the transit facilities and active sidewalk space. The actions for this policy include:

- Develop guidance or adopt existing guidance from other agencies for bikeshare and scooter-share parking zones near transit stops.
- Work with shared mobility providers to implement the guidance.

Figure 10: *Berkeley Vision Zero Action Plan High-Injury Streets Map*



Streets that required transit coordination for bikeway projects include but aren't limited to:

Redesigning Adeline Street at Ashby BART: The City and BART coordinated a study on the feasibility of a lane reduction on Adeline Street between Ashby Avenue and MLK Jr. Way. This would provide room for a public plaza with a protected bikeway adjacent to the Ashby BART station.

Adeline Street Transportation Improvements: This project began in late 2022, to work on the South Adeline corridor from MLK Jr. Way to the Oakland city border. This project aimed to move the plan's design concepts into the preliminary engineering phase of developing multimodal improvements, including protected bikeways, potential bus-only lanes and other transit improvements, and pedestrian safety improvements.

Telegraph Avenue Multimodal Corridor Project: In 2022, the City of Berkeley began this project that spans from Telegraph Avenue to Dwight Way to Woolsey Street. Preliminary engineering designs consisted of bicycle lanes, transit lanes, and pedestrian safety improvements.

EMERGENCY RESPONSE AND EVACUATION PLANNING

The recommendations of this plan may affect emergency response times. Response time is both operationally and clinically significant in life-threatening emergencies. The Fire Department's Street Trauma Prevention Program (STPP) encourages the integration of response time data into transportation plans and designs by designing infrastructure that prevents trauma while maintaining emergency vehicle access and response time performance. STPP recommends that new projects will undergo an "emergency operations compatibility " review by the Fire Department as part of the established PW/Fire Design Review Process. STPP complements the *Vision Zero Action Plan* and citywide safety plans by embedding operational needs into street designs to ensure timely emergency response. The emergency operations compatibility analysis is partially informed by the following studies.

Standards of Cover and Community Risk Assessment: In 2021, the Berkeley City Council authorized the Fire Department to undertake the City's first Standards of Cover (SOC) and Community Risk Assessment. The SOC is a nationally recognized framework used to evaluate and plan for appropriate emergency response services. It analyzes a range of factors including historical emergency response performance, existing and projected risks, population growth and demographics, built environment density and height, and local topography. Based on these data, the SOC proposes deployment strategies to ensure timely and effective fire, rescue, and emergency medical response.

While the current SOC does not recommend building new infill fire stations—based on the assumption that response times can be maintained or improved—it notes that if response times are negatively affected, the City may need to consider long-term planning for additional infill stations.

Table 6: *Berkeley Fire Department Response Time Performance, 2023*

RESPONSE COMPONENT	BEST PRACTICE		90TH PERCENTILE PERFORMANCE	PERFORMANCE VERSUS BEST PRACTICE AND CURRENT GOAL
	TIME	REFERENCE		
Call Processing/Dispatch	1:30	NFPA	2:29	**+0:59**
Crew Turnout	2:00	Citygate	2:05	**+0:05**
First-Unit Travel	**4:00**	**NFPA**	**5:53**	**+1:53**
First-Unit Call to Arrival	7:30	Citygate	9:32	**+2:02**

EVACUATION TIME STUDY

In 2023, the City contracted with KLD Associates, Inc. to conduct an Evacuation Time Study of the city to predict evacuation dynamics in the event of a wildfire, tsunami, or other emergency. The study provides overall evacuation times for different evacuating areas, considering time of day, day of week, and season. Through "what-if" analyses, the study tests different approaches to reduce evacuation times for use by field responders and Berkeley households. The study identifies congestion patterns and evaluates impacts to evacuation traffic flow from traffic calming devices, which are used extensively throughout the city with the goal of altering driver behavior so that roadway injuries and fatalities are eliminated. Additionally, the study identifies recommendations for consideration by the City of Berkeley to reduce evacuation times and improve community safety in hazard events. A key recommendation of this study is for City departments to collaborate to develop a methodology for better understanding the impacts of traffic safety improvements (e.g., traffic calming) on emergency response times and evacuation times.

PHOTO BY ELIOBED SUAREZ ON UNSPLASH.COM

Traffic signals can impact evacuation times.

Pre-timed traffic signals follow a fixed schedule to control which direction of traffic gets to go. During an evacuation, these fixed signals can slow things down.

Actuated or adaptive signals adjust their timing based on real-time traffic. These signals can help traffic move more smoothly during evacuations and in everyday use

IMAGE SOURCE: CITY OF BERKELEY EVACUATION TIME STUDY

On normal days, traffic calming devices (like diverters, traffic circles, and speed humps) make roads safer by slowing down cars, reducing traffic on residential streets and limiting how cars move through neighborhoods.

But during evacuations, the safety goal is to move traffic quickly. Traffic calming may slow down evacuees and/or add to traffic jams.

3.3 Public Outreach

Public outreach for the 2025 Bicycle Plan Update occurred during two distinct phases in 2022 and 2025. The project team used a variety of outreach methods to gather feedback and input from a diverse range of Berkeley's population, representative of various challenges, needs, and values.

2022 PUBLIC OUTREACH SUMMARY

Phase one of engagement for the plan update took place during the spring and summer months of 2022. The focus of this initial engagement effort was to gather general feedback from the public about priorities for the update, as well as focused input on the network recommendations from the 2017 Bicycle Plan.

During this phase, 14 public events were held along with the use of an interactive webmap. The engagement events included two pop-up workshops, a bike tour, 10 listening sessions, a virtual community workshop, and emails that the project team received. The outreach effort garnered input from 900 participants in total. More than 600 respondents interacted with the webmap, making it the method for greatest participation (67%). The other events were also well attended, with 100 people engaging with the pop-up workshops, 95 people participating in the listening sessions, and 78 people attending the virtual community workshop.

In total, the project team received 1,333 comments during the engagement effort. Of those, 935 came from the webmap, which accounted for the majority of comments received (70%); 264 came from the listening sessions, which accounted for 20% of all comments received; and the last 10% of comments were split relatively evenly across the other four outreach types.

During phase one, participants provided the project team with an abundance of input throughout the engagement events. The Equity Priority Area group listening sessions were meant to gather feedback from lower-income residents and provide balance to other public input mechanisms that would be over-represented by well-resourced residents. The virtual community workshop was meant to gather input from the broader public and provide participants with an overview of the project, the updated high-injury network, and information on more ways they could get involved.

Some themes that arose from public outreach sessions included:

- Desire for improved pavement quality
- Desire for better north-south connectivity throughout the city. Concern for debris in bikeways
- Concern for dangerous driving behaviors
- Near-universal support for bicycle boulevards
- Need for more bike parking

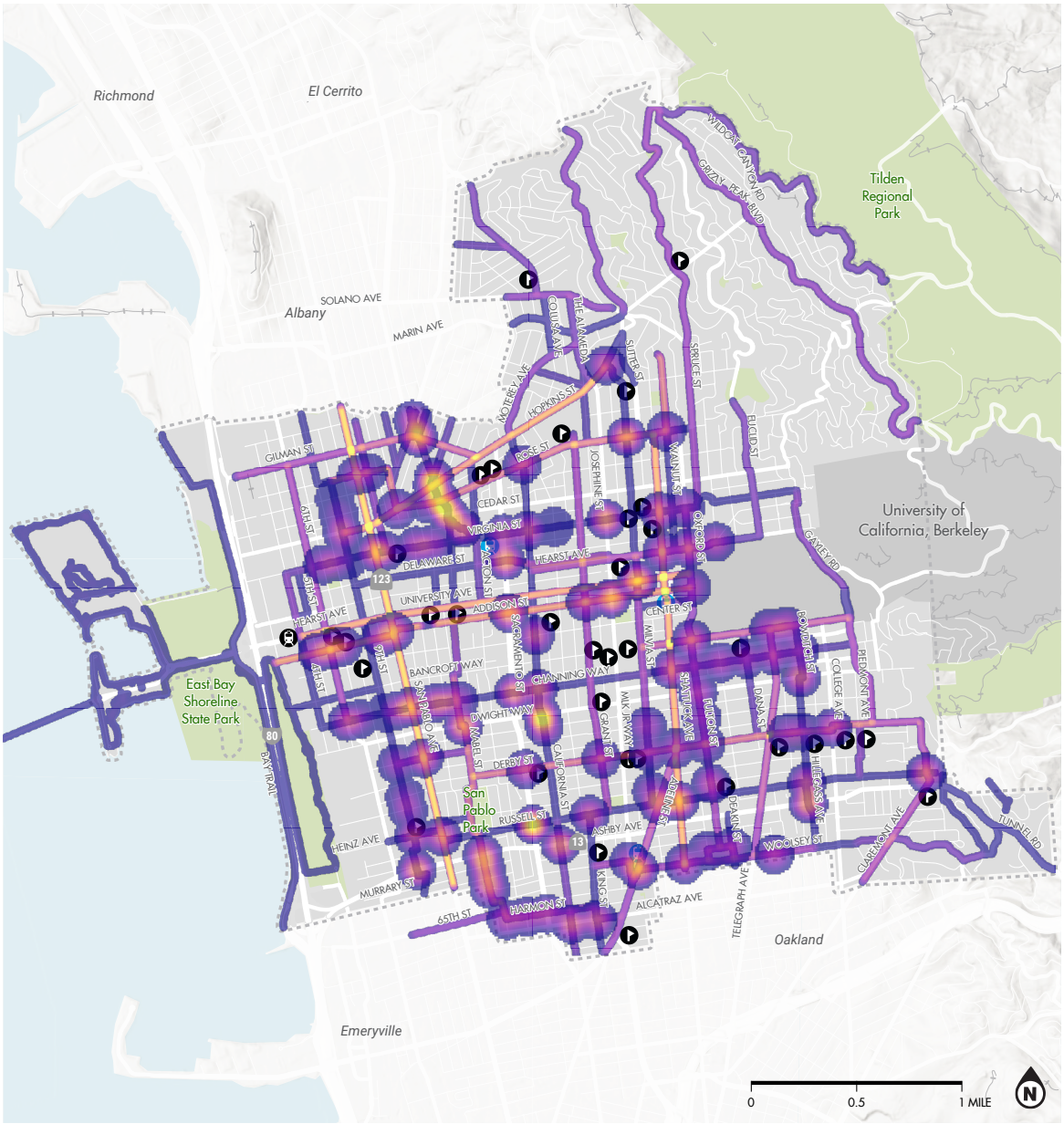
Public providing feedback at the 2022 Juneteenth Festival.

Like the workshop, the pop-up events were meant to gather input from the broader public and allowed participants to provide specific feedback on existing bicycling and rolling facilities and conditions in Berkeley. Participants identified numerous common issues with the bikeway network, including pavement quality on bicycle facilities, major arterials serving as barriers to bicycling and rolling, limited north-south connections through the city, and numerous crossings and corridors where people bicycling and rolling encounter dangerous situations.

Common themes that came from the virtual community workshop included:

- Interest in continued engagement and how input would be used
- A desire to see universal design principles in future bicycle facilities
- An interest in improving bicycle boulevards to make them lower stress
- Concern for the quality of pavement within bicycle facilities

Figure 11: *Comment Density Map for Phase One of the Outreach Process*



COMBINED 2022 OUTREACH COMMENT DENSITY

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COMMENTS ON ALL FACILITIES
Number of Comments

High

Low

FEATURES

- Amtrak Station
- BART Station
- Schools
- Parks
- City Boundary

Listening session at MLK Middle School.

2025 PUBLIC OUTREACH SUMMARY

Phase two of public outreach took place during the winter months of 2025, running from January 16 to the end of February. The focus of this phase of engagement was to introduce and validate the network recommendations with the public, as well as communicate how public input from phase one was used to develop the recommendations.

Phase two consisted of 11 events, including three pop-up events, six listening sessions, two presentations to the Transportation and Infrastructure Commission and the Commission on Disability, and two individual interviews with stakeholders with a disability. The pop-ups occurred at the Downtown Berkeley Farmers' Market, the South Berkeley Farmers' Market, and the Ashby Flea Market. The groups involved in the listening sessions were the Associated Students of UC Berkeley, the Berkeley Business District Network, the Center for Independent Living, the North Berkeley Senior Center, the MLK Middle School, and a Berkeley Way Affordable Housing Tenant meeting. In total, 521 people engaged in phase two of the outreach effort, with a majority of participants attending the listening sessions (237 people) and the pop-up events (180 people). The project team also received 63 emails and four formal letters from residents. In addition to these outreach efforts, a citywide online workshop is scheduled for August to coincide with the release of the draft plan update.

The project team received 615 comments during phase two, with most of the comments coming during the listening sessions (47%), from emails (21%), and at pop-ups (16%). The formal letters (10%) and interviews with disabled stakeholders (7%) accounted for the least number of comments.

The project team received a wealth of input from all the outreach efforts during phase two. The farmers' market pop-ups were meant to capture input from the broader public, and a few common themes emerged during these events. In general, most of the participants were supportive of enhancing the bikeway network and the specific project recommendations that were presented. The stakeholder group listening sessions were held in partnership with specific groups to capture input and participation from their constituents. Common themes captured during these sessions included a desire for a more connected bikeway network, a concern for parking loss and loading, and a desire for more education and traffic enforcement.

In keeping with the Streets and Highways Code content requirements for a Bicycle Plan Update, and industry best practice, public engagement focused on the need to identify bicycle safety issues and propose solutions to those issues. Given this, the public process for this plan did not focus on the diverse operational considerations of the roadway outlined earlier in this executive summary. For example, the community engagement process used to inform these recommendations did not include community education about potential impacts to emergency response times, nor did it offer an opportunity or structure for respondents to consider emergency response times as a priority in bike infrastructure planning. These important issues are usually considered at the development and design stages as part of project implementation. One outcome of this plan is an increased awareness of the need to discuss operational and public safety issues early in future engagement processes.

Reoccurring issues that were mentioned during all phase two outreach efforts included:

- Safety concerns
- A desire for more traffic calming and all-way stops
- An interest in prioritizing safe routes to schools
- Ensuring access and safety for residents with a disability

Milvia Street

04

PROPOSED BIKEWAY NETWORK

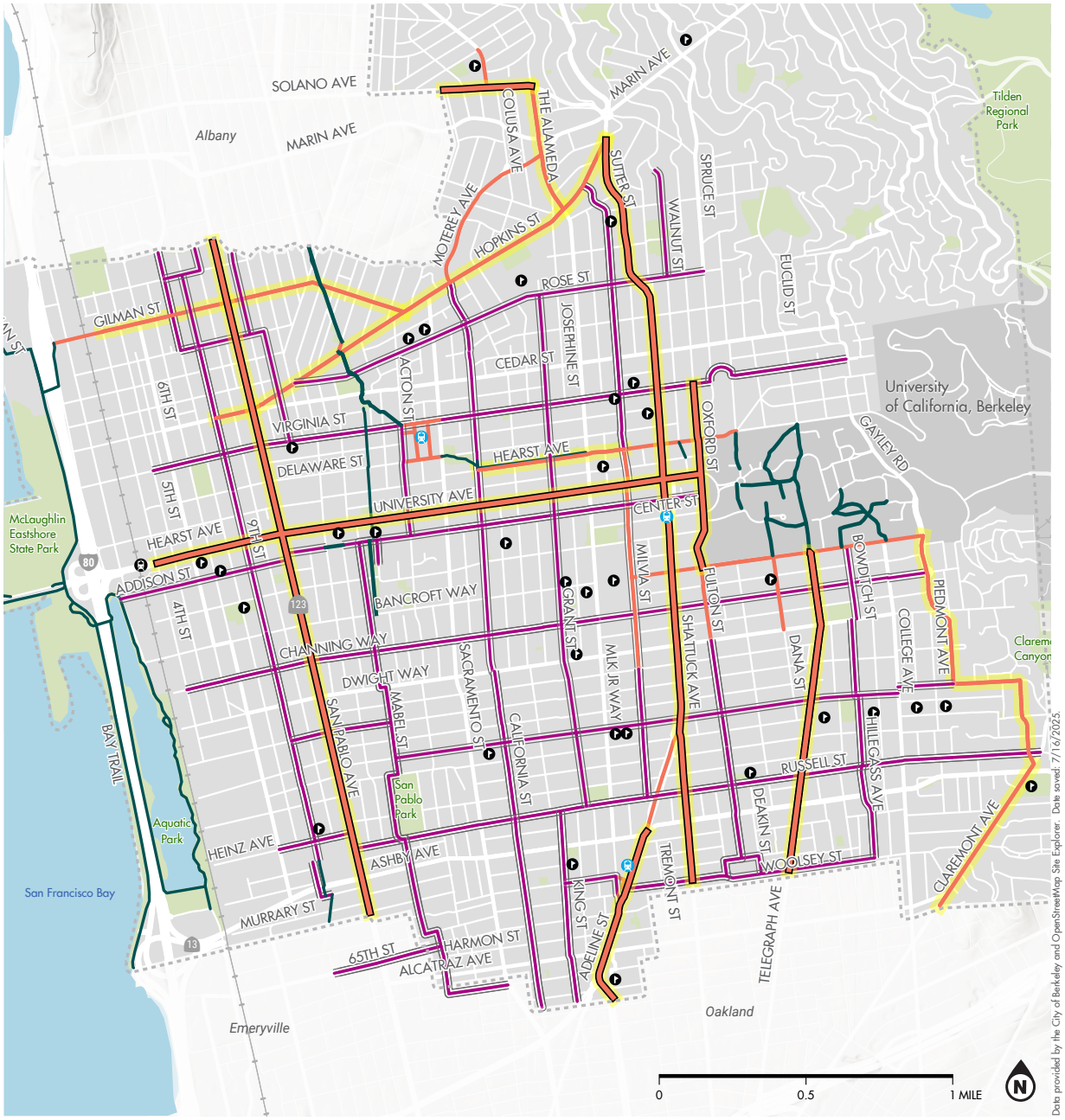
This chapter presents the recommended bikeway network, which supports a vision for Berkeley where bicycling is safe, comfortable, and convenient for people of all ages and abilities.

Recommendations consist of an update to the 2017 Bicycle Plan recommendations, with consideration given to safety (the *Vision Zero Action Plan*'s High-Injury Streets; retaining first responder access), equity (MTC Equity Priority Communities), proximity to schools and school routes, and the public input received through two separated phases of outreach.

This plan update revises the Bikeway Network Vision, first established in the 2017 Bicycle Plan: a continuous and connected system of "low-stress" bikeways that provide safe and comfortable travel for all users and links to all key destinations in Berkeley. **Figure 12** illustrates the Low-Stress Bikeway Network Vision showing how low-traffic bicycle boulevards, separated bikeways, and multi-use paths, all with safe intersection crossings, can form a network that an overwhelming majority of Berkeley's population would feel comfortable bicycling or rolling on.

Safety considerations are especially important for parents riding with their children, or for older children riding independently. The Berkeley Unified School District, by policy, does not provide school bus service to households within 1.5 miles of their assigned schools. In terms of the potential for reducing traffic congestion and helping to achieve the City's climate action goals, school trips account for a significant portion of morning auto traffic and yet are often less than a mile in length. Therefore, it is important that the Low-Stress Network connect to as many schools in Berkeley as possible, and allow parents and children within a given enrollment area to have the option of a completely low-stress trip from their residence to school.

Figure 12: *Low-Stress Bikeway Vision Network*



LOW-STRESS BIKEWAY NETWORK VISION

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Low-Stress Bikeway Network Vision

- Bike Path (Class I)
- Bike Boulevard Network
- Cycletrack (Class IV)

Complete Street Corridor Studies* - Low Stress Bikeway Recommendation

- Study Cycletrack*
- Primary Transit Route - Study Cycltrack*

- Amtrak Station
- BART Station
- School
- Railroad
- Park
- City Boundary

*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

4.1 Project Recommendation Categories

Berkeley's Bikeway network recommendations are described in detail on the following pages and have been grouped into the following categories:

1. **Planned/Funded Projects**: projects already in various stages of funding and design, expected to begin construction within the next two years.
2. **Citywide Network Recommendations:** linear project recommendations to expand and upgrade the bike network across Berkeley.
3. **Citywide Low-Stress Intersection Controls Recommendations:** intersection project recommendations to close gaps in the low-stress network and increase user comfort and safety when crossing major roadways on bicycle.
4. **Citywide Bicycle Boulevard Traffic Calming Recommendations:** project recommendations for speed tables, traffic circles, and traffic diverters across the Bicycle Boulevard Network.
5. **Complete Streets Corridors:** guidance for complete streets corridor studies when considering implementation of separated bikeways.

4.2 Planned/Funded Projects

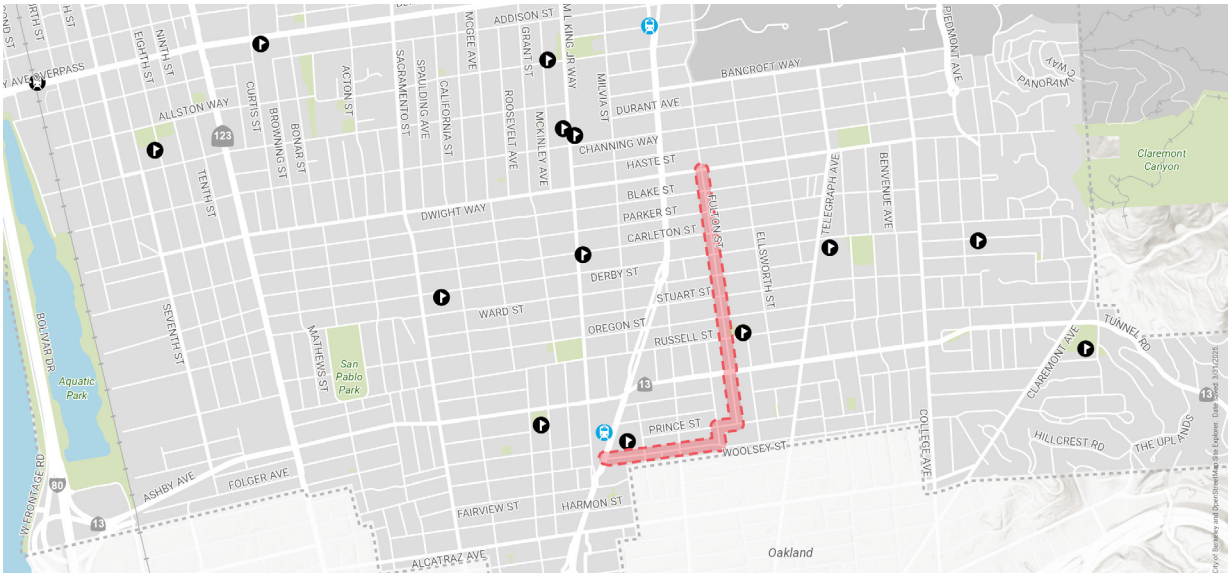
The following section provides a summary of projects that have already reached a stage of substantial funding or design by the time of the 2025 Bicycle Plan Update's adoption. As such, these projects had project details determined prior to the development of recommendations.

WOOLSEY-FULTON BICYCLE BOULEVARD

The Woolsey-Fulton Bicycle Boulevard project includes the following project elements:

- A PHB crossing at the intersection of MLK Jr. Way at Prince Street
- A PHB crossing at the intersection of Shattuck Avenue and Russell Street
- An RRFB + median crossing of Adeline Street at Woolsey Street
- An RRFB crossing of Adeline at Russell Street with curb extensions
- An RRFB crossing of Shattuck Avenue at Woolsey Street with curb extensions
- A bicycle boulevard route (1.18 miles) on Woolsey Street (Adeline Street to Wheeler Street); Wheeler Street (Woolsey Street to Prince Street); Prince Street (Wheeler Street to Fulton Street); and Fulton Street (Prince Street to Dwight Way)
- New traffic circles at the intersection of Wheeler Street at Prince Street
- New speed tables at the intersections of Fulton Street north of Oregon and south of Oregon

This project will connect Ashby BART to the separated bikeways on the south side of the UC Berkeley campus. Construction is anticipated to be complete by early 2026.



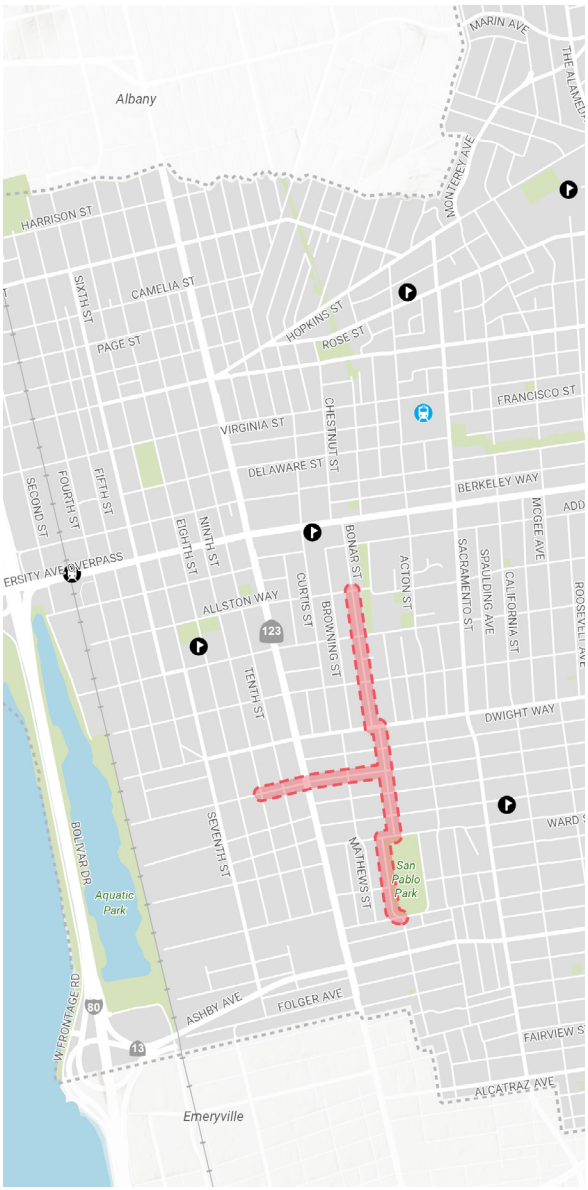
Woolsey-Fulton Bicycle Boulevard project extents

PARKER-ADDISON MOBILITY & SAFETY IMPROVEMENTS PROJECT

The Parker-Addison Mobility and Safety project includes the following project elements:

- A bicycle boulevard route (1.05 miles) on Bonar Street (Addison Street to Dwight Way) and on Mabel Street (Dwight Way to Russell Street)
- A bicycle boulevard route on Parker Street from Mabel Street to Ninth Street
- Two new traffic circles at the intersections of Bonar Street at Channing Way and Parker Street at Ninth Street
- A two-way cycletrack connector on Dwight Way between Mabel Street and Bonar Street

This project will connect the West Street Bike Path, Addison Bicycle Boulevard Phase 2 (future), the Ninth Street Bicycle Boulevard, the Channing Way Bicycle Boulevard, the Russell Street Bicycle Boulevard, and the Southwest Berkeley Bicycle Boulevard (future). This project does not include improvements on Parker Street between San Pablo Avenue and Ninth Street. This project is being constructed in coordination with the San Pablo Avenue Parallel Routes project (see page 86). Construction is anticipated to be completed in 2026.



Parker-Addison Mobility & Safety Improvements project extents

SOUTHWEST BERKELEY BICYCLE BOULEVARD

The Southwest Berkeley Bicycle Boulevard project includes the following project elements:

- A bicycle boulevard route (1.25 miles) on Mabel Street (Russell Street to 66th Street); 66th Street (Mabel Street to Idaho Street); Idaho Street (66th Street to Harmon Street); Harmon Street (Idaho Street to King Street); King Street (Harmon Street to Prince Street); and Prince Street (King Street to MLK Jr. Way)
- A bicycle lane (Class II) on Alcatraz Avenue from Adeline Street to King Street
- A PHB with a median crossing on Harmon Street at Sacramento Street
- An RRFB + median crossing of Alcatraz Avenue at California Street
- An RRFB + median crossing of Alcatraz Avenue at King Street
- Four traffic circles at the intersections of Mabel Street at Carrison Street, Mabel Street at 67th Street, Harmon Street at Idaho Street, and Harmon Street at Baker Street

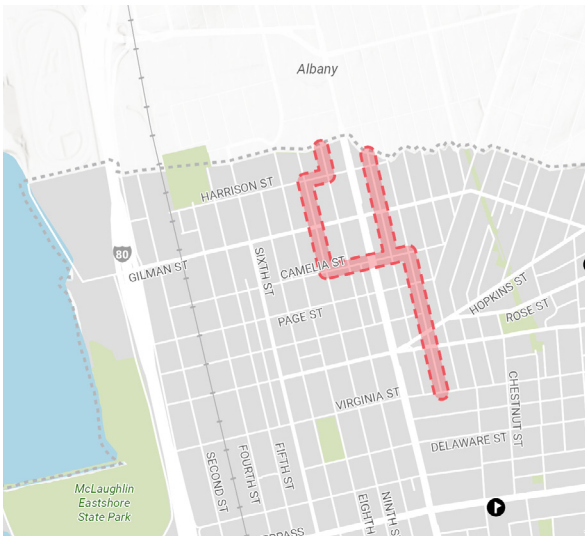
This project will connect the Russell Street Bicycle Boulevard, the California Street Bicycle Boulevard, the King Street Bicycle Boulevard, and the Ashby BART station and connect the existing Alcatraz Avenue bicycle lanes to King Street. The project is being designed in coordination with the San Pablo Avenue Parallel Routes project (see below). The project is currently recommended for funding from MTC, with construction anticipated in 2028.

Southwest Berkeley Bicycle Boulevard project extents

SAN PABLO AVENUE PARALLEL ROUTES

The San Pablo Avenue Parallel Routes project is led by the Alameda County Transportation Commission in coordination with the City of Berkeley. The project attempts to establish viable routes for north-south bicycle travel on both the east and west sides of San Pablo Avenue. The project includes the following project elements:

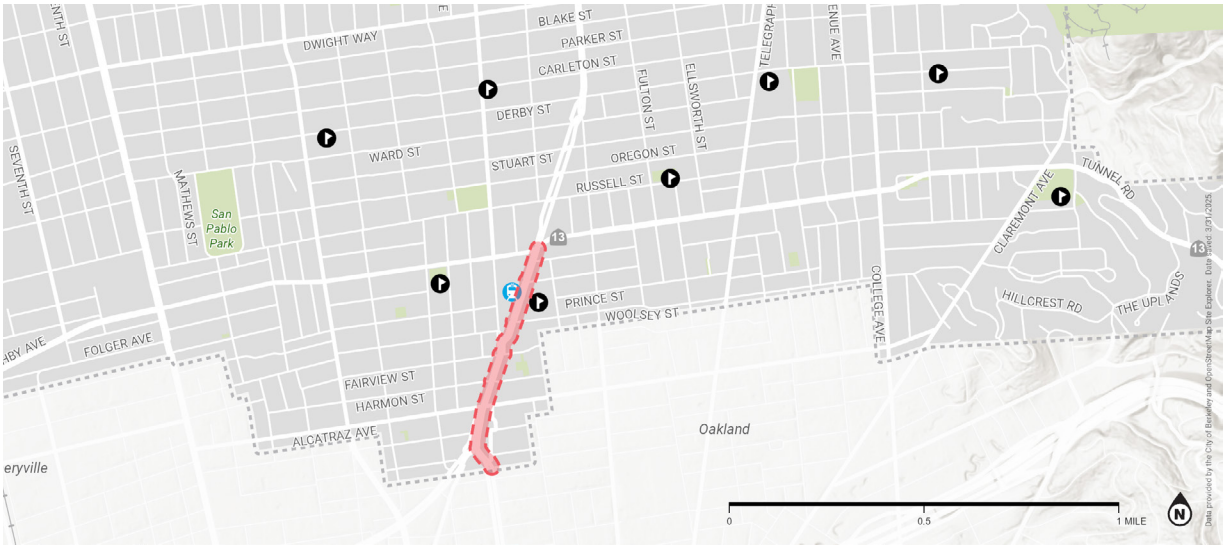
- A bicycle boulevard route (0.67 miles) on Kains Street (Albany border to Camelia Street); Camelia Street (Kains Street to Stannage Avenue); and Stannage Avenue (Camelia Street to Virginia Street)
- A bicycle boulevard route (0.17 miles) on Camelia Street from Kains Street to Ninth Street
- A bicycle boulevard route (0.40 miles) on Ninth Street (Camelia Street to Harrison Street); Harrison Street (Ninth Street to 10th Street); and 10th Street (Harrison Street to Albany border)
- Bicycle boulevard connections to Emeryville (via 65th Street) and Oakland (via Idaho Street)
- 10 new traffic circles at the intersections of Ninth Street at Harrison Street; Eighth Street at Harrison Street; Kains Street at Camelia Street; Stannage Avenue at Camelia Street; Ninth Street at Page Street (upgrade); Stannage Avenue at Virginia Street; 10th Street at Virginia Street; Ninth Street at Virginia Street (upgrade); Ninth Street at Grayson Street; Ninth Street at Heinz Avenue (upgrade)



San Pablo Avenue Parallel Routes project extents

- Diverters at the intersection of Ninth Street at Delaware Street (upgrade) and Channing Way at Curtis Street
- A PHB crossing at the intersection of San Pablo Avenue at Camelia Street and San Pablo Avenue at Channing Way
- An RRFB crossing with curb extensions at the intersections of Gilman Street at Kains Street, Hopkins Street at Stannage Avenue, and Cedar Street at Stannage Avenue
- An RRFB + median crossing at the intersection of Ninth Street at Cedar Street
- An RRFB crossing of Alcatraz Avenue at Idaho Street
- A median crossing of San Pablo Avenue at Virginia Street (enhancing the existing PHB)
- Speed tables along the majority of the route

The project is being implemented in coordination with multiple other City of Berkeley bicycle boulevard projects (listed above). Phased construction is anticipated to start in 2026.



Adeline Street Transportation Improvement project extents

ADELINE STREET TRANSPORTATION IMPROVEMENT PROJECT

The Adeline Street Transportation Improvement Project aims to redesign the stretch of Adeline Street from Ashby Avenue to the Oakland border (on MLK Jr. Way) according to the recommendations of the 2020 *Adeline Corridor Specific Plan*. This project would involve the implementation of separated bikeways (Class IV) and transit boarding islands along the length of the corridor.

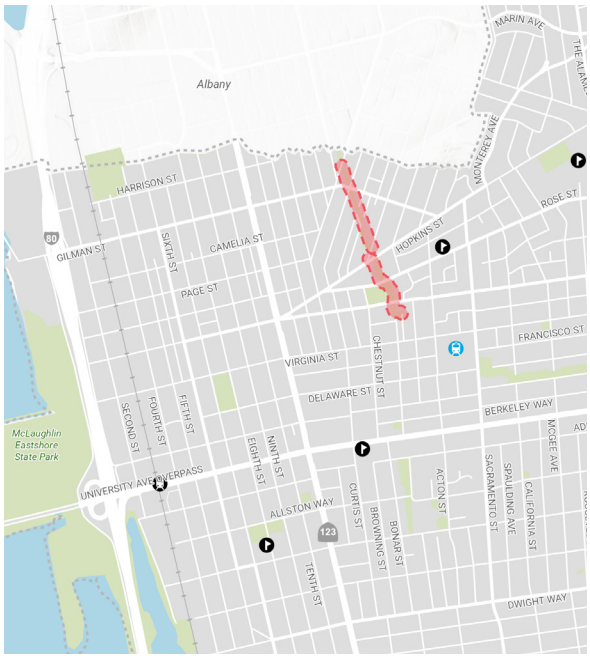
The project is in the preliminary design stage, with construction funding yet to be secured. The City of Berkeley was recently awarded grant funding for a quick-build project on this corridor, with design and construction anticipated in 2026.

OHLONE GREENWAY SAFETY IMPROVEMENTS PROJECT

The Ohlone Greenway Safety Improvements Project will make improvements to the Ohlone Greenway multi-use pathway, from Virginia Gardens to the south to Santa Fe Avenue to the north. This will include widening the pathway to 12 feet where feasible and making the following intersection improvements:

- A two-way cycletrack connector at the intersection with Rose Street
- A two-way cycletrack on Peralta Avenue, between Hopkins Street and the Ohlone Greenway
- An RRFB at the intersection with Santa Fe Avenue
- An RRFB + median crossing at the intersection of Cedar Street
- A raised crosswalk at the intersections with Peralta Avenue, Cedar Street, Rose Street, and Santa Fe Avenue

Construction is expected to be completed by 2026.



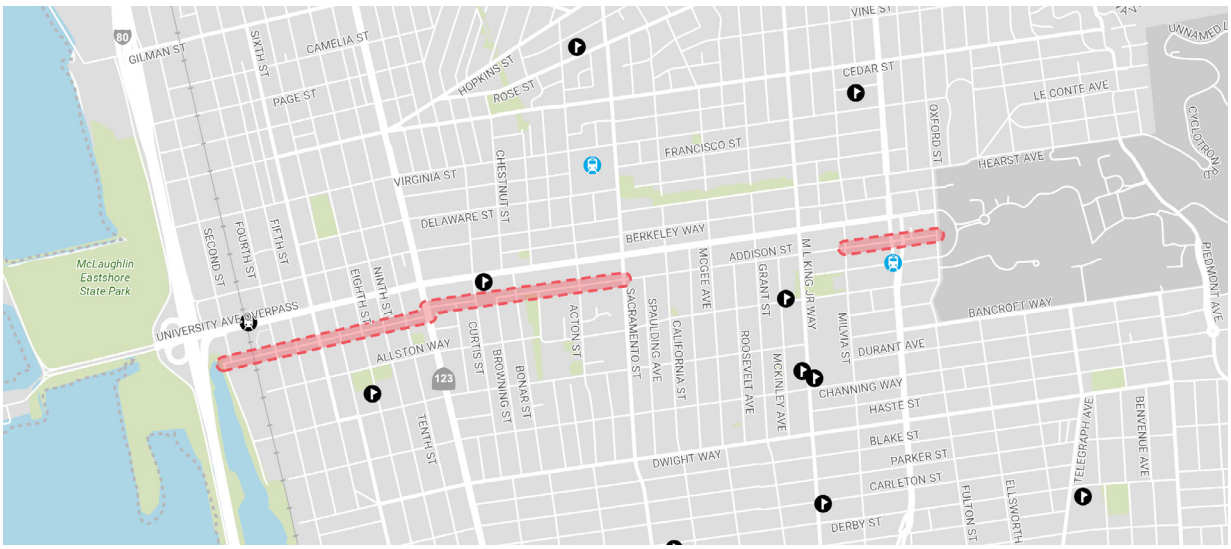
Ohlone Greenway Safety Improvements project extents

ADDISON STREET BICYCLE BOULEVARD PHASE 2

The Addison Street Bicycle Boulevard Phase 2 project is two separate segments equaling 1.4 miles combined. The two segments are from Bolivar Drive to Sacramento Street in the west and from Milvia Street to Oxford Street in the east. The project includes:

- A new bicycle boulevard route on Addison Street (Bolivar Drive to Sacramento Street; Milvia Street to Oxford Street)
- A new shared use path (Class I) along Lehua Way (Browning Street to Curtis Street)
- A two-way cycletrack connector across San Pablo Avenue
- A PHB crossing of Sacramento Street
- A median crossing at 10th Street
- An RRFB + median crossing at Sixth Street
- Two traffic circles at Seventh Street and at Fifth Street

This project will connect the Berkeley Bicycle Boulevard network to the Mario Savio bicycle/pedestrian overcrossing of I-80, creating a low-stress connection to the Bay Trail and the Berkeley waterfront. Construction is expected in 2027.



Addison Street Bicycle Boulevard Phase 2 project extents

SIXTH STREET UPGRADED BIKE LANE

Through an Affordable Housing Sustainable Communities grant win, the City of Berkeley will upgrade the existing bicycle lanes on Sixth Street between Camelia Street and University Avenue. Construction will be coordinated with the construction of the North Berkeley BART Bridge Phase 1 affordable housing development, according to the terms of the grant agreement.

Sixth Street Upgraded Bike Lane project extents

4.3 Project Recommendations

RECOMMENDATIONS SUMMARY

The bikeway network recommendations remain largely the same as those in the 2017 Bicycle Plan, with three types of adjustments:

1. Removing projects that have been completed since 2017
2. Updating projects that are currently funded or in design
3. Adding new connections to link existing sections of the Low-Stress Network

Most notable among network additions are:

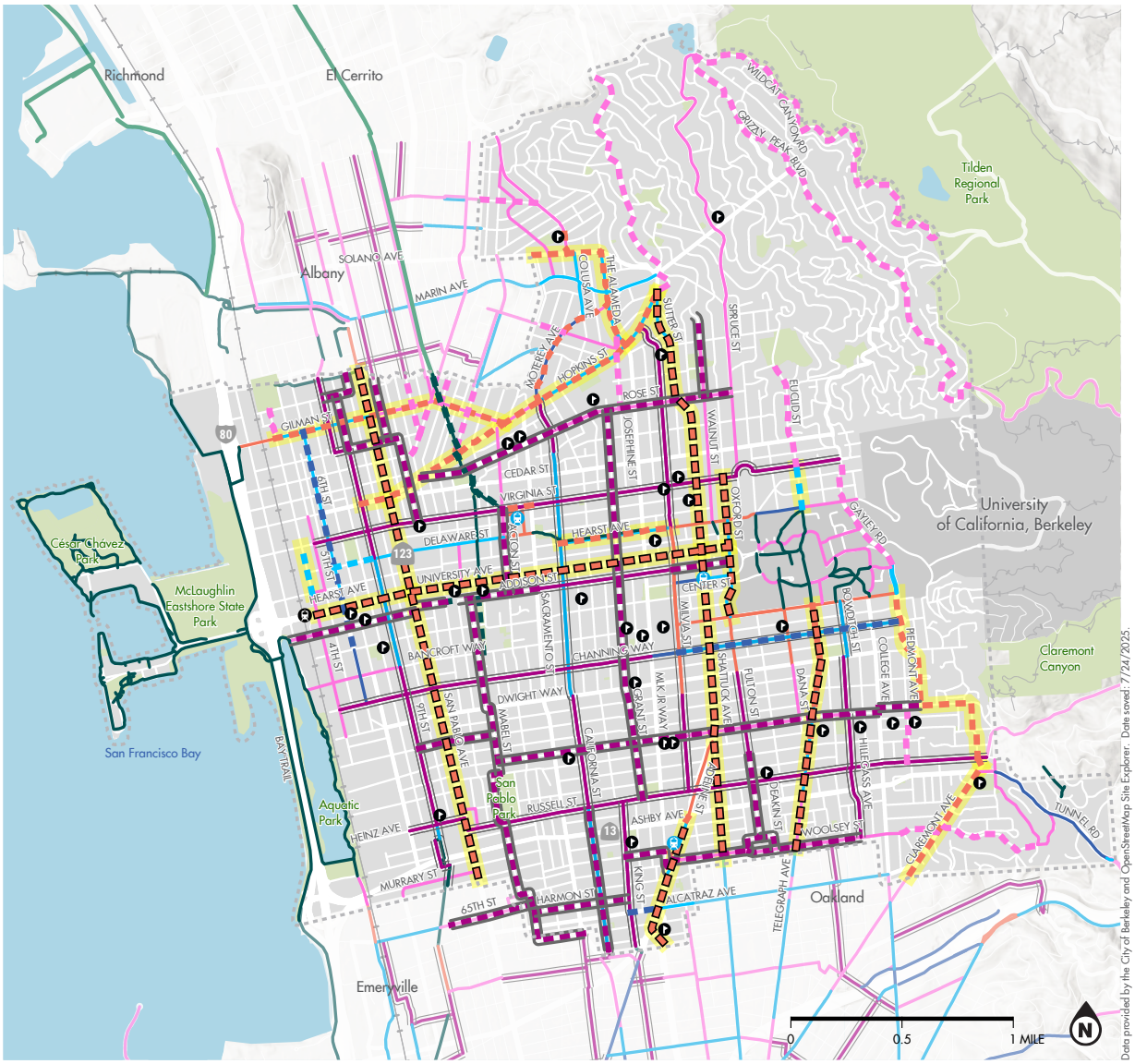
- A proposed bicycle boulevard on Grant Street, providing a low-stress parallel route immediately west of MLK Jr. Way and connecting students and families directly to MLK Middle School.
- A study recommendation for a separated bikeway on Henry Street and Sutter Street, connecting a proposed separated bikeway on Shattuck Avenue with another proposed separated bikeway on Hopkins Street.

The network recommendations shown on **Figure 13** also include the removal of a few bicycle routes, such as Chestnut Street, which have lost their utility due to better network options being built nearby since the 2017 Bicycle Plan. **Table 7** shows the mileage proposed for each facility class.

Table 7: *Summary of Network Recommendation*

BIKEWAY FACILITY	MILEAGE PROPOSED
Shared use path (Class I)	1.3 mi
Bicycle lane (Class II)	0.5 mi
Upgraded bicycle lane (Class II)	2.2 mi
Bicycle boulevard (Class III)	14.0 mi
Bicycle route (Class III)	9.0 mi
Separated bikeway (Class IV)	15.5 mi
Total	**42.7 mi**

Figure 13: *Recommended Network Improvements*



RECOMMENDED NETWORK IMPROVEMENTS

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2025 EXISTING/RECOMMENDED FACILITIES

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bike Route (Class III)
- Bike Boulevard (Class III)
- Cycletrack (Class IV)
- Complete Street Corridor Study - Primary Transit Route*
- Complete Street Corridor Study*

BIKE BOULEVARD NETWORK

School
Amtrak Station
BART Station
Railroad
Park

* Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

SAFE CROSSINGS RECOMMENDATIONS

Major street crossings are a critical piece of the Bicycle Boulevard Network. One of the three goals for bicycle boulevards is to "develop a network of efficient routes for bicyclists," which means reducing the number of times a cyclist must stop along the route and improving the ability to cross major intersections.

Many bicycle boulevard corridors are low-stress within the neighborhood until a person on bike must cross a major street such as Sacramento Street or San Pablo Avenue. These high-stress crossings are barriers to more people bicycling; a single high-stress crossing point along an otherwise low-stress bicycle boulevard route can be a major deterrent to use.

The 2017 Bicycle Plan recommended a series of crossing improvements across the existing and proposed Bicycle Boulevard Network, based on the unsignalized bikeway crossing treatment progression shown in **Table 9**, which recommended more advanced crossing treatments based on the number of travel lanes and daily volume of vehicle traffic on the major cross street. This treatment progression table attempted to provide guidance on the appropriate crossing treatment to achieve a suitably low-stress experience for users on the Bicycle Boulevard Network. Low-stress intersection control improvements are shown on **Figure 14**. The total number of intersection improvements by type is shown in **Table 8**.

The six recommended RRFBs are from ongoing funded projects currently in the construction phase. As shown in **Table 9**, RRFBs without additional traffic calming features (such as medians or curb extensions) are not recommended for crossing treatments in the future (see following page).

Table 8: *Recommended Low-Stress Intersection Controls*

LOW-STRESS INTERSECTION CONTROL	NUMBER PROPOSED
Two-Way Cycletrack Crossing	6
Pedestrian Hybrid Beacon (PHB)	12
Protected Intersection	5
Raised Intersection/Raised Crosswalk	2
Rectangular Rapid Flashing Beacon (RRFB)	6
Median Crossing	2
RRFB + Median Crossing	12
Total	**45**

Table 9: *Unsignalized Crossing Treatment Progression Table*

CROSSING TREATMENT	TRAFFIC VOLUMES (ADT)[1]						
	VERY LOW	LOW		MEDIUM		HIGH	
Cross Street	Up to 3 lanes	Up to 3 lanes	4 or 5 lanes	Up to 3 lanes	4 or 5 lanes	Up to 3 lanes	4 or 5 lanes
Marked Crossing	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
All-way STOP[2]	LTS 1	LTS 1	LTS 2	LTS 2			
Median Refuge Island[3]	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
Median with RRFB[3]	X	LTS 1	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3
Pedestrian Hybrid Beacon (PHB)[4]	X	X	LTS 1	LTS 1	LTS 1	LTS 1	LTS 1
Traffic Signal	X	X	X	LTS 1	LTS 1	LTS 1	LTS 1

1: Very Low: 0-1,500; Low: 1,501-5,000; Medium: 5,001-12,500; High: >12,500
2: Requires meeting a CA MUTCD STOP warrant before implementation
3: Minimum 6-foot-wide median to meet LTS benefit
4: Subject to successful warrant analysis

Definitions:

X: No additional benefit

Black: Not advisable or not applicable

LTS: Level of Traffic Stress, with LTS 1 or 2 ideal for low-stress crossings. See the "Low-Stress Bicycling and Network Connectivity" study at https://transweb.sjsu.edu/research/Low-Stress-Bicycling-and-Network-Connectivity for detailed discussion of LTS.

In the years following the adoption of the 2017 Bicycle Plan, City of Berkeley staff have been able to validate the effectiveness of recommended crossing treatments for different types of cross streets on the Bicycle Boulevard Network. Through implementation and public feedback, the City learned residents felt uncomfortable with the application of RRFBs on busier streets, instead preferring median crossing islands. The Unsignalized Crossing Treatment Progression table has been subsequently updated to keep in line with observed results, best practices, and updated standards and guidelines for the City of Berkeley. These changes can be summarized as:

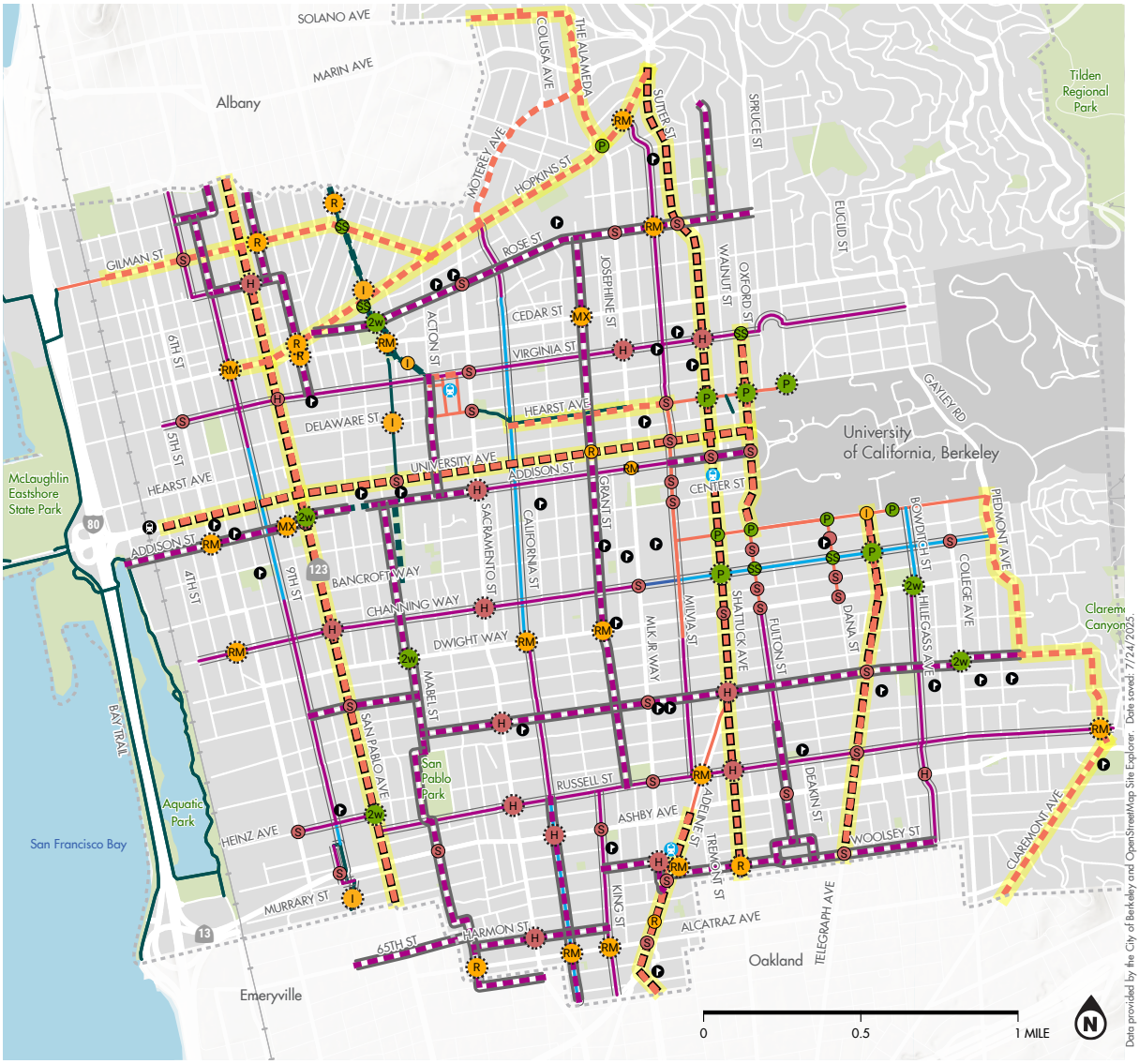
- RRFBs should be implemented in tandem with a median crossing or should include other traffic calming features such as raised crosswalks or curb extensions. This reduces crossing distances and improves visibility.
- Use an All-Way STOP sign as a stand-alone option for local street intersections, collector street intersections, and minor arterial intersections that are no more than three lanes of travel. The intersection must meet a CA MUTCD STOP warrant before being considered for this treatment.
- Median crossings, whether paired with RRFBs or PHBs, should consider the feasibility of acting as a diverter for the bicycle boulevard route. The City of Berkeley has developed designs for median crossings that divert vehicle traffic off bicycle boulevard routes while still permitting through movements by emergency vehicles.

Changes in recommendations from 2017 largely focus on accounting for funded and upcoming projects, applying updated guidance to remaining 2017 recommendations, and identifying additional crossing treatments needed for new network facility recommendations.

Transit integration: Some crossing recommendations are at intersections currently served by various AC Transit routes. The City of Berkeley will coordinate early with AC Transit to ensure crossing improvements minimize impacts to AC Transit operations and stop locations. This is especially the case in locations where median crossings may require parking removal, stop relocation, and the general reconfiguration of travel lanes to accommodate a median crossing.

Emergency response integration: Some crossing recommendations are at intersections frequently used by various emergency responder routes. City departments (Public Works, Fire, and Police) will coordinate early to ensure crossing improvements minimize impacts to emergency response times. This is especially the case in locations where median crossings may require reconfiguration of travel lanes to accommodate a median crossing.

Figure 14: *Recommended Low-Stress Bikeway Intersection Control Improvements*



RECOMMENDED LOW-STRESS BIKEWAY INTERSECTION CONTROL IMPROVEMENTS

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INTERSECTION CONTROL RECOMMENDATIONS

- Protected Intersection
- 2-Way Cycletrack Connector
- Pedestrian Hybrid Beacon
- RRFB + Median
- RRFB
- Median Crossing
- Raised Intersection

EXISTING INTERSECTION CONTROL

- Protected Intersection
- All-Way Stop Sign
- Median Crossing
- RRFB + Median
- RRFB
- Raised Intersection
- Pedestrian Hybrid Beacon
- Traffic Signal

NETWORK IMPROVEMENTS

- Bike Path (Class I)
- Bike Boulevard (Class III)
- Cycletrack (Class IV)

BICYCLE BOULEVARD NETWORK

- Bike Path (Class I)
- Bike Lane (Class II)
- Upgraded Bike Lane (Class II)
- Bicycle Boulevard (Class III)
- Cycletrack (Class IV)

COMPLETE STREETS TRANSIT CORRIDOR STUDY

- Complete Streets Corridor Study - Primary Transit Route
- Complete Street Corridor Study

Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

BICYCLE BOULEVARD RECOMMENDATIONS

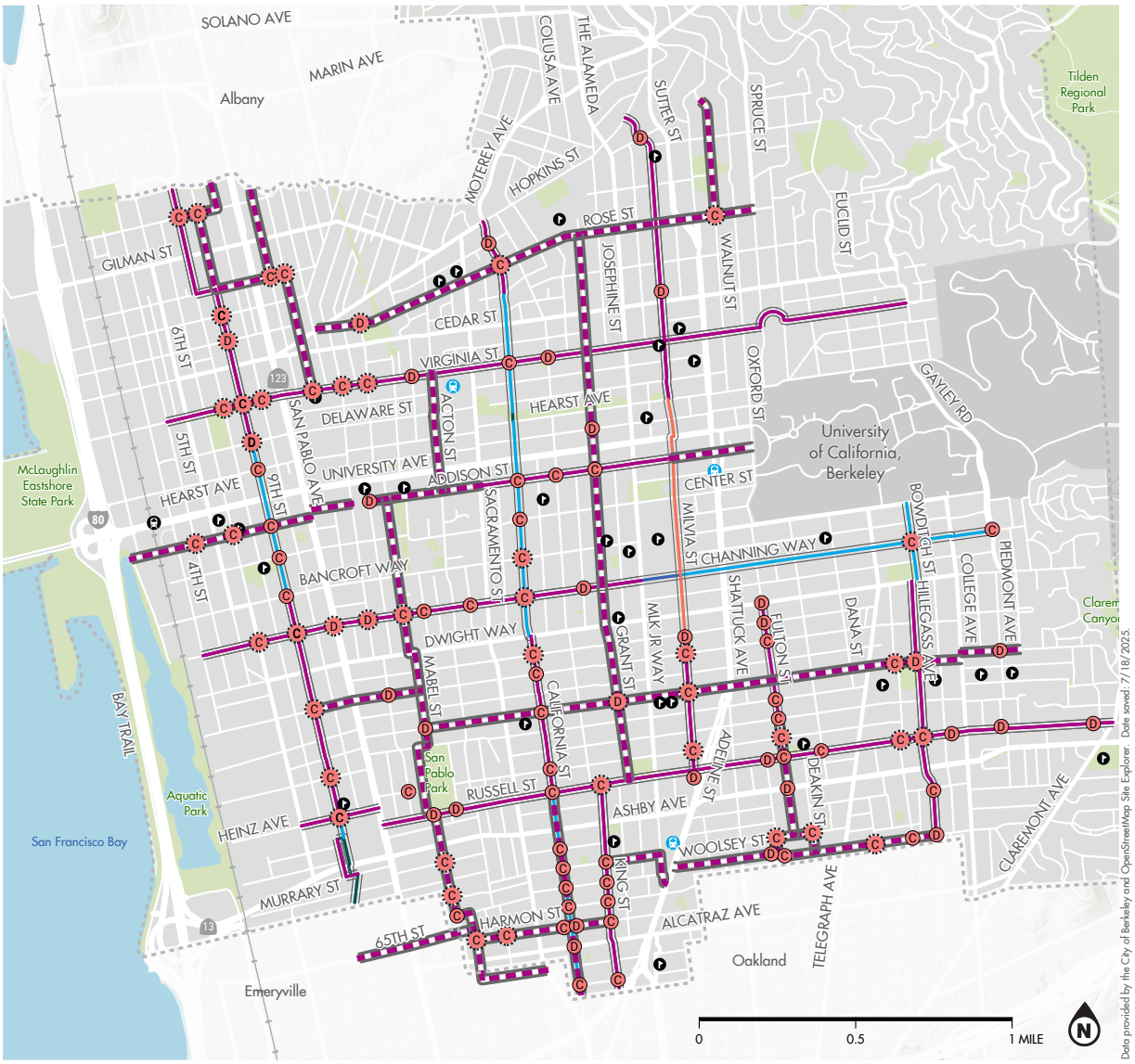
Berkeley's bicycle boulevards use traffic calming and bicycle priority to achieve a safe, comfortable, and convenient experience for people who bicycle. Intersections along bicycle boulevards will be evaluated as part of neighborhood-level public outreach and involvement to see whether traffic calming treatments would be more effective than stop signs in establishing bicycle priority while reducing the speed and volume of motor vehicle cut-through traffic. While these recommendations focus on traffic circles and diverters as primary bicycle boulevard traffic calming strategies, the City should consider the full range of traffic calming options when needed. Examples of other traffic calming treatments that have been found effective in Berkeley and Bay Area cities include speed tables and cushions, raised crosswalks, corner sidewalk bulb-outs, and chicanes. Pilot projects using temporary materials may be developed at some locations to test effectiveness before longer-term installations are pursued. Recommended traffic calming for intersections is shown on **Figure 14**.

TRAFFIC CIRCLES AND DIVERTERS

Figure 15 shows recommended conceptual traffic calming improvements along the Bicycle Boulevard Network. New traffic circles are recommended as a traffic calming feature to slow and discourage non-local vehicle traffic. Traffic circles also reduce conflicts at intersections. Diverters are recommended to direct vehicles off the bicycle boulevards and onto larger roadways, decreasing vehicle speeding and cut-through traffic. Recommendations were updated from the 2017 Bicycle Plan for both traffic circles and diverters based on new design guidelines developed by the City of Berkeley.

Recommended traffic circle and diverter locations in this 2025 Bicycle Plan Update may be changed based on traffic studies, emergency response impacts, public process, or neighborhood feedback. The City may pilot these locations with temporary installations to understand their traffic impacts before making them permanent.

Figure 15: *Recommended Low-Stress Bicycle Boulevard Traffic Calming Improvements*



RECOMMENDED LOW-STRESS BIKE BOULEVARD TRAFFIC CALMING IMPROVEMENTS

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TRAFFIC CALMING RECOMMENDATIONS

Traffic Circle
Traffic Diverter

EXISTING TRAFFIC CALMING

Traffic Circle
Traffic Diverter

Bikeway improvements that might impact emergency response traffic, parking, or roadway capacity and connectivity will not be implemented without appropriate studies of traffic circulation and evacuation and emergency response times, and will include environmental analysis, public process, and coordination with the Police and Fire Departments.

NETWORK IMPROVEMENTS

Class III Bicycle Boulevard*

* Existing speed humps will be replaced with speed tables and new speed tables will be added on each block of existing and proposed bicycle boulevards, per the Bicycle Boulevard Design Guidelines.

BICYCLE BOULEVARD NETWORK

Class I Bike Path
Class II Bike Lane
Class II Upgraded Bike Lane
Class III Bicycle Boulevard
Class IV Cycletrack

Amtrak Station
BART Station
School
Railroad
Park

SPEED TABLES AND CUSHIONS

The City should continue to use speed tables where appropriate to reduce vehicle speeds, and consider them for inclusion on bicycle boulevards where additional traffic calming is needed. It is recommended that the City apply speed tables on every block of every bicycle boulevard in the network. The City of Berkeley continue its practice of replacing existing speed humps with speed tables on bicycle boulevards when these streets are repaved.

Speed tables should be designed with gentle transitions on the approach and departure ramps, in the form of a sinusoidal curve. In partnership with Berkeley's accessibility community and the Police and Fire Departments, the City should evaluate these newer speed table design standards for use on bicycle boulevards.

The City should also consider the use of other traffic calming devices such as speed cushions. Speed cushions retain the height and slope of a speed hump while providing a cut-through space that can be used by wide-based vehicles such as fire trucks, ambulances, or buses to avoid vertical deflection and retain travel speeds. These speed-cushion cut-throughs can also be used by people on bicycles to avoid going up and over a speed cushion. This is particularly beneficial to seniors and residents with mobility disabilities who experience pain when traveling over a speed hump or a speed table. It is recommended that cut-through spacing for speed cushions be set broadly enough that drivers of vehicles with a standard wheel base cannot use them.

REMOVABLE/RETRACTABLE TRAFFIC CALMING DEVICES

Whenever possible, the City should consider using traffic calming approaches that are removable or retractable to provide roadway flexibility for emergency access by responders and/or for emergency evacuations for community members escaping a hazard.

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05

IMPLEMENTATION

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

This chapter presents the strategies Berkeley should use when implementing this 2025 Bicycle Plan Update. The chapter includes the evaluation criteria and scoring method, project cost estimates, and a map of prioritized projects.

5.1 Evaluation Criteria Update: 2017 to 2024

Recommended projects were scored against the evaluation criteria listed in **Table 10**. Prior to being scored, individual project segments and intersections were consolidated and organized into logical implementation corridors based on their location and extent.

These evaluation criteria were selected to be both Berkeley-specific and to align with the criteria used by the vast majority of transportation grant funding agencies. As such the prioritization is intended to support competitiveness for grant applications, but does not necessarily incorporate all criteria and values important to the Berkeley community in regard to these projects, such as access for persons with disabilities, emergency response times, and other important considerations that are addressed during the project development and design process.

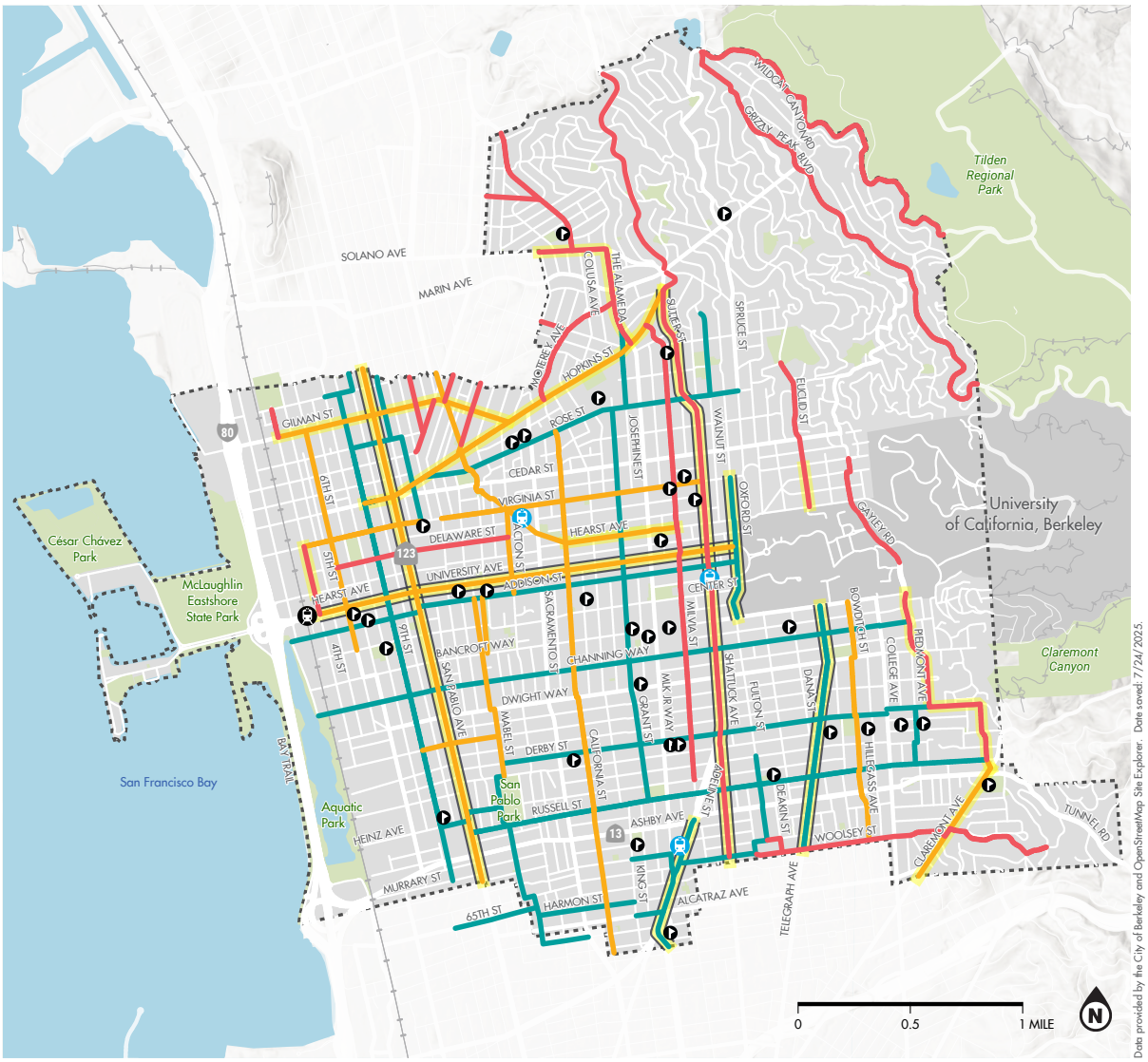
The prioritization corridors were organized into three tiers based on the evaluation scoring, with scoring criteria shown in **Table 10**. **Figure 16** shows projects in all tiers, and **Table 11** shows all projects in Tier 1, grouped by corridor. Tables showing grouped projects for Tier 2 and Tier 3 can be found in Appendix E.

Table 10: *Prioritization Criteria for Recommended Projects*

CRITERIA	SCORING METRIC	SCORING METHOD	MAXIMUM POINTS
Safety – Collisions	2019 High Injury Streets Map	Proximity	20
Safety – LTS	2024 Existing Network Map	Severity	15
Community Support – project identification	2022 Community Input	Density	10
Community Support – project prioritization	2025 Community Input	Density	20
Equity	2024 Equity Priority Communities Map (MTC)	Proximity	20
Safe Routes to Schools	BUSD campus proximity	Proximity	10
Feasibility	Engineering Judgment	Complexity	5
Total Possible Score			**100**

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

Figure 16: *Proposed Project Tiers Map*



PROJECT PRIORITIZATION CORRIDORS

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PROJECT PRIORITY TIER

- Tier 1
- Tier 2
- Tier 3

COMPLETE STREETS STUDY CORRIDOR

- Complete Street Corridor Study - Primary Transit Route*
- Complete Street Corridor Study*

- School
- BART Station
- Amtrak Station
- Railroad
- Parks
- City Boundary

*Complete Street Corridor Studies are proposed multimodal transportation studies, not planned projects. Separated bikeways (Class IV) and other bikeway types that might impact transit operations, emergency response traffic, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies. They will include a traffic study, evacuation sensitivity study, environmental analysis, public process, and coordination with the Police and Fire Departments, and all affected state, county, and local transit agencies.

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

Table 11: *Tier 1 Project List*

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	MILES	TOTAL COST ESTIMATE
Derby Street	2019 High Injury Streets Map	Proximity	20			
	Traffic Circle	Derby St	Regent St	--	--	--
	Cycletrack Crossing	Derby St	College Ave	--	--	--
	PHB	Derby St	Sacramento St	--	--	--
	PHB	Derby St	Shattuck Ave	--	--	--
	Traffic Diverter	Derby St	Grant St	--	--	--
	Class III Bike Route	Piedmont Ave	Russell St	Derby St	0.26	--
	Class III Bike Boulevard	Derby St	Mabel St	Warring St	1.92	--
Russell Street	PHB	Russell St	Sacramento St	--	--	--
	RRFB + Median	Russell St	Claremont Ave	--	--	--
	Traffic Circle	Russell St	Hillegass Ave	--	--	--
	Traffic Circle	Russell St	King St	--	--	--
	Traffic Circle	Russell St	Regent St	--	--	--
	PHB	Russell St	Shattuck Ave	--	--	--
	RRFB + Median	Russell St	Adeline St	--	--	--
Channing Way	RRFB + Median	Channing Way	6th St	--	--	--
	PHB	Channing Way	Sacramento St	--	--	--
	Traffic Circle	Channing Way	7th St	--	--	--
	Traffic Diverter	Channing Way	San Pablo Ave	--	--	--
	Traffic Circle	Channing Way	9th St	--	--	--
	Traffic Diverter	Channing Way	Curtis St	--	--	--
	Traffic Circle	Channing Way	Bonar St	--	--	--
	PHB	Channing Way	San Pablo Ave	--	--	--

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

***Table 11:** Tier 1 Project List, continued*

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	MILES	TOTAL COST ESTIMATE
Channing Way	Class II Upgraded Bike Lane	Channing Way	Milvia St	Piedmont Ave	1.00	--
San Pablo Avenue Parallel Routes	Traffic Circle	8th St	Virginia St	--	--	--
	PHB	San Pablo Ave	Camelia St	--	--	--
	Raised Intersection	Emeryville Greenway	Folger Ave	--	--	--
	RRFB	Kains Ave	Gilman St	--	--	--
	Traffic Circle	8th St	Harrison St	--	--	--
	Traffic Circle	9th St	Harrison St	--	--	--
	Traffic Circle	9th St	Page St	--	--	--
	Traffic Diverter	9th St	Jones St	--	--	--
	Traffic Circle	Kains Ave	Camelia St	--	--	--
	Traffic Circle	Stannage Ave	Camelia St	--	--	--
	Traffic Circle	Stannage Ave	Virginia St	--	--	--
	Traffic Circle	9th St	Virginia St	--	--	--
	Traffic Circle	10th St	Virginia St	--	--	--
	RRFB	Stannage Ave	Cedar St	--	--	--
	RRFB	Stannage Ave	Hopkins St	--	--	--
	RRFB + Median	9th St	Cedar St	--	--	--
	Traffic Circle	9th St	Grayson St	--	--	--
	Class III Bike Boulevard	Kains Ave	Northern City Limits	Camelia St	0.28	--
	Class III Bike Boulevard	Harrison St - 10th St	8th St	Northern City Limits	0.20	--
	Class III Bike Boulevard	Stannage Ave - Camelia St - 9th St	Harrison St	Virginia St	0.86	--
	Traffic Circle	9th St	Heinz Ave	--	--	--
Heinz Avenue	Cycletrack Crossing	San Pablo Ave	Heinz Ave/ Russell St	--	--	--
	Class IV Cycletrack	9th St	Heinz Ave	9th St Greenway	0.05	

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

***Table 11:** Tier 1 Project List, continued*

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	MILES	TOTAL COST ESTIMATE
Southwest Berkeley Bike Boulevard	RRFB + Median	Alcatraz Ave	King St	--	--	--
	PHB	Harmon St	Sacramento St	--	--	--
	Traffic Circle	Harmon St	Baker St	--	--	--
	RRFB + Median	Alcatraz Ave	California St	--	--	--
	Traffic Circle	Carrison St	Mabel St	--	--	--
	Traffic Circle	Harmon St	Idaho St	--	--	--
	Traffic Circle	67th St	Mabel St	--	--	--
	RRFB	Alcatraz Ave	Idaho St	--	--	--
	Class III Bike Boulevard	65th St	Vallejo St	Idaho St	0.38	--
	Class III Bike Boulevard	Harmon St - Idaho St - 66th St - Mabel St	Ward St	King St	1.50	--
	Class III Bike Boulevard	Prince St	King St	MLK Jr. Way	0.27	--
	Class II Upgraded Bike Lane	Alcatraz Ave	King St	Adeline St	0.12	--
Addison Street	Traffic Circle	Addison St	5th St	--	--	--
	Traffic Circle	Addison St	Seventh St	--	--	--
	Cycletrack Crossing	Addison St	San Pablo Ave	--	--	--
	RRFB + Median + Raised	Addison St	10th St	--	--	--
	RRFB + Median	Addison St	6th St	--	--	--
	PHB	Addison St	Sacramento St	--	--	--
	Class I Bike Path	Addison St	Curtis St	Browning St	0.06	--
	Class III Bike Boulevard	Addison St	Oxford St	Milvia St	0.26	--
	Class III Bike Boulevard	Addison St	Sacramento St	Browning St	0.36	--
	Class III Bike Boulevard	Addison St	Curtis St	San Pablo Ave	0.13	--
	Class III Bike Boulevard	Addison St	Bolivar Dr	San Pablo Ave	0.59	--

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

***Table 11:** Tier 1 Project List, continued*

CORRIDOR	RECOMMENDED PROJECT OR STUDY	LOCATION	CROSS ST A	CROSS ST B	MILES	TOTAL COST ESTIMATE
Woolsey-Fulton Bike Boulevard	RRFB + Median	Woolsey St	Adeline St	--	--	--
	Traffic Circle	Fulton St	Oregon St	--	--	--
	Traffic Circle	Wheeler St	Prince St	--	--	--
	PHB	Martin Luther King Jr Way	Prince St	--	--	--
	RRFB	Shattuck Ave	Woolsey St	--	--	--
	Class III Bike Boulevard	Fulton St - Prince St - Wheeler St - Woolsey St	Stuart St	Adeline St	0.83	--
Grant Street	RRFB + Median	Grant St	Dwight Way	--	--	--
	Median + Raised	Grant St	Cedar St	--	--	--
	Class III Bike Boulevard	Grant St	Rose St	Russell St	1.75	--
	Class III Bike Route	Josephine St	Rose St	The Alameda	0.35	--
Rose Street	RRFB + Median	Rose St	Milvia St	--	--	--
	Traffic Diverter	Rose St	Chestnut St	--	--	--
	Traffic Circle	Rose St	California St	--	--	--
	Traffic Circle	Rose St	Walnut St	--	--	--
	Class III Bike Boulevard	Rose St	Hopkins St	Spruce St	1.46	--
	Class III Bike Boulevard	Walnut St	Rose St	Shattuck Ave	0.37	--
Adeline Street	Class IV Cycletrack*	Adeline St	Ashby Ave	Southern City Limits	0.61	--
Telegraph Avenue	Protected Intersection	Telegraph Ave	Channing Way	--	--	--
	Class IV Cycletrack*	Telegraph Ave	Bancroft Way	Woolsey St	1.09	--
Oxford Street	Protected Intersection	Hearst Ave	Oxford St	--	0.00	--
	Protected Intersection	Hearst Ave	Arch St/Le Conte Ave	--	0.00	--
	Class IV Cycletrack*	Oxford St	Virginia St	Bancroft Way	0.63	--

* Complete Streets Corridor Studies are proposed multimodal transportation studies, not planned projects. Class IV Cycletracks and other bikeway types that might impact transit operations, parking, or roadway capacity will not be implemented without these Complete Streets Corridor Studies that will include a traffic study, public process, and coordination with the Berkeley Public Works, Police, and Fire Departments, as well as all affected State, County, and local transit agencies.

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

5.2 Project Delivery Process

This is a citywide planning document that presents recommendations for improving bicycle safety, comfort, and connectivity at a network level. As such, the recommendations in this plan require further project-specific planning, data collection, analysis, public engagement, and engineering design before they can be implemented. The City of Berkeley is committed to a Complete Streets approach that supports the needs of all users of our roadways—people walking, bicycling, riding transit, and driving, and commercial deliveries necessary for a vibrant local economy. When considering whether and how to implement these projects, the City also incorporates many operational and design needs, including maintaining and improving access for persons with disabilities; preserving and improving response times for emergency response personnel; preserving maintenance access for utilities, drainage, street trees, and street sweeping; and designing streets to meet the stormwater requirements of the San Francisco Bay Regional Water Quality Control Board.

Evacuation and Emergency Response: In this planning and policy context, and given the critical importance of preserving and, ideally, improving emergency response and evacuation capacity, future Complete Streets Corridor Studies must carefully consider how proposed roadway changes impact emergency responder access and evacuation efficiency. The City will coordinate improvements to the public right-of-way so that changes do not adversely impact emergency response and evacuation. Throughout the Complete Streets Corridor Study process, the City will work to maintain or improve emergency response times that meet the recommendations in the City of Berkeley Standard of Coverage and Community Risk Assessment.

The City is committed to developing a methodology to evaluate the benefits of traffic safety interventions against negative impacts to response times. As a result of this analysis, design alternatives that would significantly impair the delivery of emergency services or community evacuation, as outlined in the City of Berkeley Evacuation Time Study and subsequent sensitivity studies, may not be recommended unless there is no other viable solution to critical traffic safety issues. Even then, project details should be carefully designed to minimize impacts to emergency operations and evacuation. Criteria to define significant negative effects on emergency response and evacuation will be developed by the Public Works, Fire, and Police Departments, and applied during the study process for each corridor.

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

Studies that consider the inclusion of bikeways or other right-of-way reallocations will be evaluated alongside the potential impacts to emergency vehicle access, roadway capacity, and evacuation times. Potential trade-offs, such as reductions in median width, repurposing of parking or travel lanes, or alterations to intersection configurations, must be reviewed to avoid unintended consequences for emergency operations and evacuation. Design considerations may include roadway widths required for fire apparatus, clear zones for emergency vehicle maneuverability, and evacuation flow rates.

Generally speaking, the City contemplates the following existing and recommended internal processes to deliver these projects:

Project Development, Scoping, Funding: As the first phase in the development of projects for the purpose of grant applications, the City conducts a series of meetings with key stakeholders to define the scope of the projects. The scoping level defines the project recommended in the bike plan in additional detail and assesses traffic safety benefits against operational impacts, ensuring the project study, public engagement, design, and/or construction is adequately scoped to meet the City's needs. City stakeholders at this phase should include planning and engineering technical staff from Public Works Transportation and Engineering Divisions as well as representatives from the Berkeley Fire Department.

Concept Design: Funded projects move into the concept design phase, which includes developing design alternatives and ultimately identifying a preferred alternative for vetting with City Commissions and approval by the Berkeley City Council. This stage includes collecting traffic, safety, parking, and operations data and analyzing the data to understand existing conditions, and propose and evaluate alternatives. Key studies required to fully understand the project impacts and benefits include parking and loading inventory and occupancy; traffic studies; and operational studies of potential impacts to emergency response and evacuation times as well as other City roadway operational concerns. Agency stakeholders at this phase includes planning and engineering technical staff from Public Works Transportation and Engineering Divisions as well as representatives from the Berkeley Fire Department, Police Department, Office of Economic Development, Parks Recreation and Waterfront, AC Transit, BART, and other affected City departments and outside agencies. During this phase, Public Works adheres to departmental public engagement guidelines to obtain public input for the project.

[COST ESTIMATES FOR ALL PROJECTS WILL BE DEVELOPED FOLLOWING THE RELEASE OF THE DRAFT PLAN]

Detailed Engineering Design: Once concepts are approved by City Council, detailed engineering design prepares the project for construction, developing a full plan set suitable for requests for proposals to complete the project scope. The purpose of this stage is to answer remaining technical questions and develop accurate cost estimates for the purpose of finalizing the funding plan and soliciting construction bids. Agency stakeholders at this phase should include planning and engineering technical staff from Public Works Transportation and Engineering Divisions as well as representatives from the Berkeley Fire Department, Police Department, Office of Economic Development, Parks Recreation and Waterfront, AC Transit, BART, and other affected City departments and outside agencies. Importantly, engagement with stakeholders will taper off as the detailed design work advances through the 35%, 65%, 95%, and 100% design completion phases.

Construction: Following award of the construction contract, the project will be built, with appropriate notifications to affected residents, property owners, and merchants. Details of the project may change slightly as a result of site-specific limitations encountered by the contractor. For the most part, designs are typically constructed per plan.

DEVELOPMENT COORDINATION

The City of Berkeley often relies upon private development to fund transportation infrastructure projects as part of a development agreement. These transportation improvements typically help to mitigate anticipated transportation impacts from increased activity within the immediate area of the development.

The City of Berkeley also will partner with affordable housing developers to submit for grant funding from the Affordable Housing and Sustainable Communities (AHSC) program. This funding source ties funds for affordable housing construction to projects that will enhance mobility and safety for future residents of affordable housing sites. For example, the City has secured an AHSC grant which will fund bicycle lane improvements on Sixth Street in coordination with the construction of an affordable housing site at North Berkeley BART.

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5.3 Key Projects

As part of the 2025 Bicycle Plan Update five "Key Project" concept designs were developed in consultation with the public during 2025 outreach. Following the outreach phase, City of Berkeley staff considered public input against project feasibility, available funding, grant competitiveness, and other factors. City of Berkeley staff selected the following five projects to move forward to development of concept designs:

1. **Gilman Street** – proposed separated bikeway
2. **Derby Street** – proposed bicycle boulevard
3. **Heinz Avenue** – proposed bicycle boulevard improvement, two-way cycletrack connector across San Pablo Avenue, and separated bikeway to connect to the 9th Street pathway
4. **Sacramento Street at Channing Way** – proposed PHB and median crossing
5. **Sacramento Street at Russell Street** – proposed PHB and median crossing

The following pages contain concept design "cut-sheets" meant to inform future grant applications. Once the project is funded, a feasibility study will be conducted to determine whether the design is feasible on the corridor. After feasibility is confirmed, additional engineering, design, and community engagement will be necessary before these projects can be brought forward for approval and implementation.

GILMAN STREET SEPARATED BIKEWAY

4TH ST TO SAN PABLO AVE

PROJECT CHARACTERISTICS

- Gilman Street is a major street. The project area has standard bicycle lanes.
- Gilman Street has a mostly uniform 48 feet wide right-of-way throughout the project area.
- Gilman Street has a two-way separated bikeway on the south side of the street from 2nd Street to 4th Street. From 2nd Street, it connects to the Bay Trail via a bicycle/pedestrian bridge over I-80.
- This section of Gilman Street has eight intersections, four of which are signalized. The other four intersections have STOP controls on side-streets.
- AC Transit runs Line 12 on Gilman Street east of 6th Street, with five bus stops in the project area.
- Gilman Street is classified as a High-Injury Street in the Berkeley *Vision Zero Action Plan*, with two severe driver collisions and two severe pedestrian collisions between 2008 and 2018.
- Gilman Street is a primary response route for the fire department; a new Fire HQ and ambulance deployment center is in construction on Gilman Street between 8th & 9th Streets.

Gilman St at 4th St

RECOMMENDED IMPROVEMENTS

1 Installation of Two-Way Separated Bikeway

This key project recommends extending a two-way separated bikeway on Gilman Street from 4th Street up to San Pablo Avenue, running on the south side of the street. City staff should consider terminating the project at existing/proposed bikeways on 6th Street, 8th Street, or 9th Street if it improves feasibility and deliverability. A proposed bicycle boulevard on Camelia Street, one block to the south, provides an additional low-stress crossing of San Pablo Avenue.

2 Removal of Street Parking

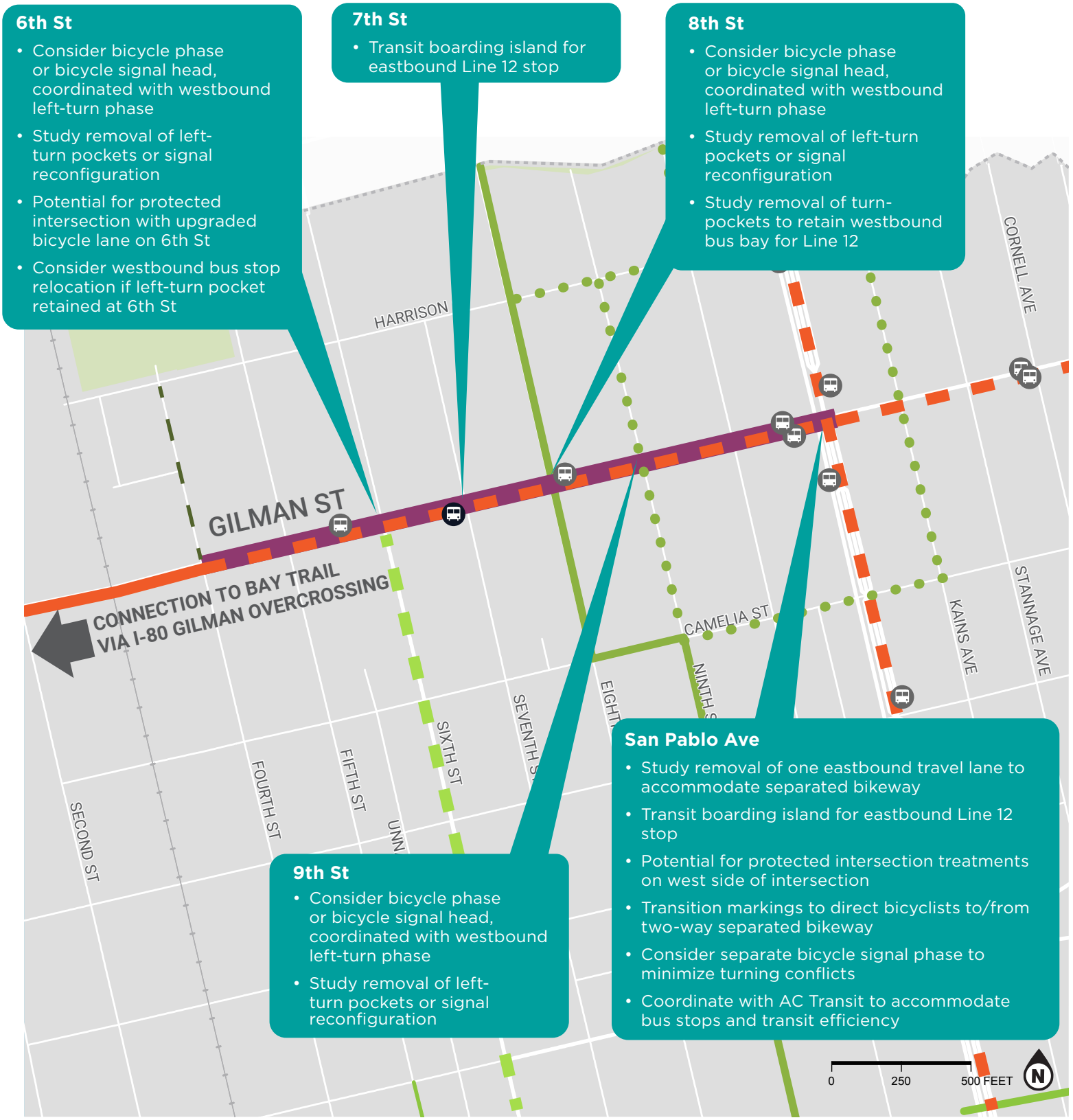
This project would require the removal of street parking on the south side of the street to accommodate the separated bikeway while providing sufficient clear-space for emergency vehicles. South-side parking removal involves approximately 33 spaces between 4th Street and San Pablo Avenue.

3 Analysis of Need for Left-Turn Pockets

Retaining left-turn pockets at 6th Street, 8th Street, and 9th Street would require parking removal on the north side of the street, involving approximately 10 additional spaces between 7th Street and 9th Street. As part of a Complete Streets Corridor Study, staff should analyze the necessity of these turn pockets, the removal of which could help retain north-side parking spaces.

4 Study of Impacts to Transit Line 12

Consider transit signal priority along this corridor and how it will work in tandem with proposed bike signals. The project should coordinate with AC Transit to study impacts to Line 12 and to provide transit boarding islands on the south side of the street approaching 7th Street and approaching San Pablo Avenue. Line 12 also appears to have a layover at 7th Street on the south side of the street, which may need to be relocated to a north-side bus stop, or to a side-street, to accommodate the project.



GILMAN STREET: 4TH STREET TO SAN PABLO AVENUE

CITY OF BERKELEY
BIKE PLAN UPDATE

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DESTINATIONS + BOUNDARIES

- AC Transit Bus Stop
- AC Transit Line 12 Layover Stop
- Railroad
- City Boundary
- Park
- Key Project Corridor

- Existing Bicycle Lane (Class II)
- Existing Bicycle Blvd (Class III)
- Existing Bicycle Route (Class III)
- Existing Cycletrack (Class IV)
- Proposed Bicycle Lane (Class II)
- Proposed Bicycle Blvd (Class III)
- Proposed Bicycle Route (Class III)
- Proposed Cycletrack (Class IV)

DERBY STREET BICYCLE BOULEVARD

MABEL ST TO WARRING ST

PROJECT CHARACTERISTICS

- Derby Street is a local street. The project area is a marked bicycle route from Milvia Street to Telegraph Avenue.
- Derby Street has a mostly uniform 35 feet wide right-of-way.
- This section of Derby Street has 20 intersections. Two of these intersections are uncontrolled crossings of major roadways: at Sacramento Street and at Shattuck Avenue.
- AC Transit runs Line 27, 51B, 604, 605, and 851 on College Avenue where the Derby Street route jogs on College Avenue for approximately 90 feet.
- Derby Street is not a High Injury Street in the Berkeley *Vision Zero Action Plan*, but there was a pedestrian fatality at the intersection of Derby Street at Warring Street between 2008 and 2018.

RECOMMENDED IMPROVEMENTS

1. **Installation of Bicycle Boulevard**

   This key project recommends a 1.95 mile bicycle boulevard route from Mabel Street in the west to Warring Street in the east. It would provide a parallel route to existing bicycle boulevards on Russell Street (approximately 1,300 feet to the south) and Channing Way (approximately 2,000 feet to the north).

2. **Enhancement of Street Crossings**

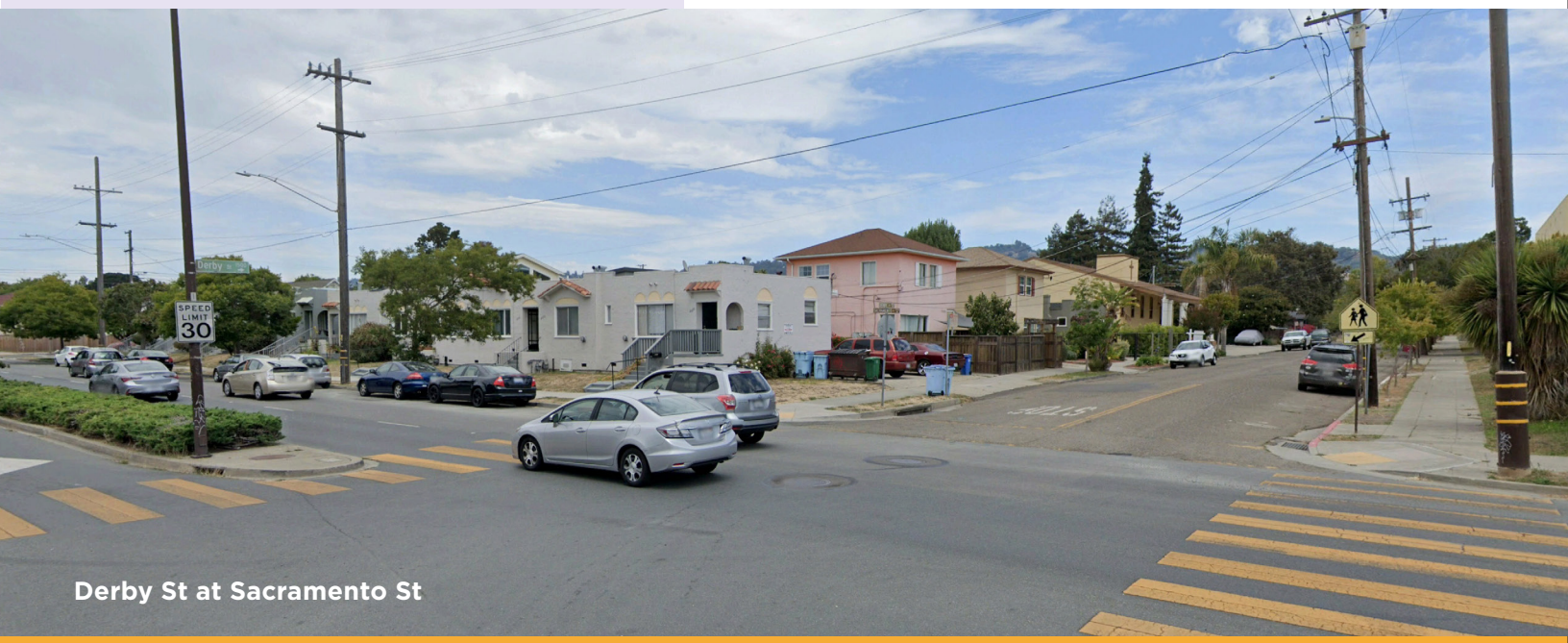
   The Derby Street bicycle boulevard takes advantage of a number of preexisting diverters and traffic circles along the route and includes recommendations for enhanced crossings of major streets at Sacramento Street, at Shattuck Avenue, and at College Avenue.

3. **Study of Impacts to Transit Lines**

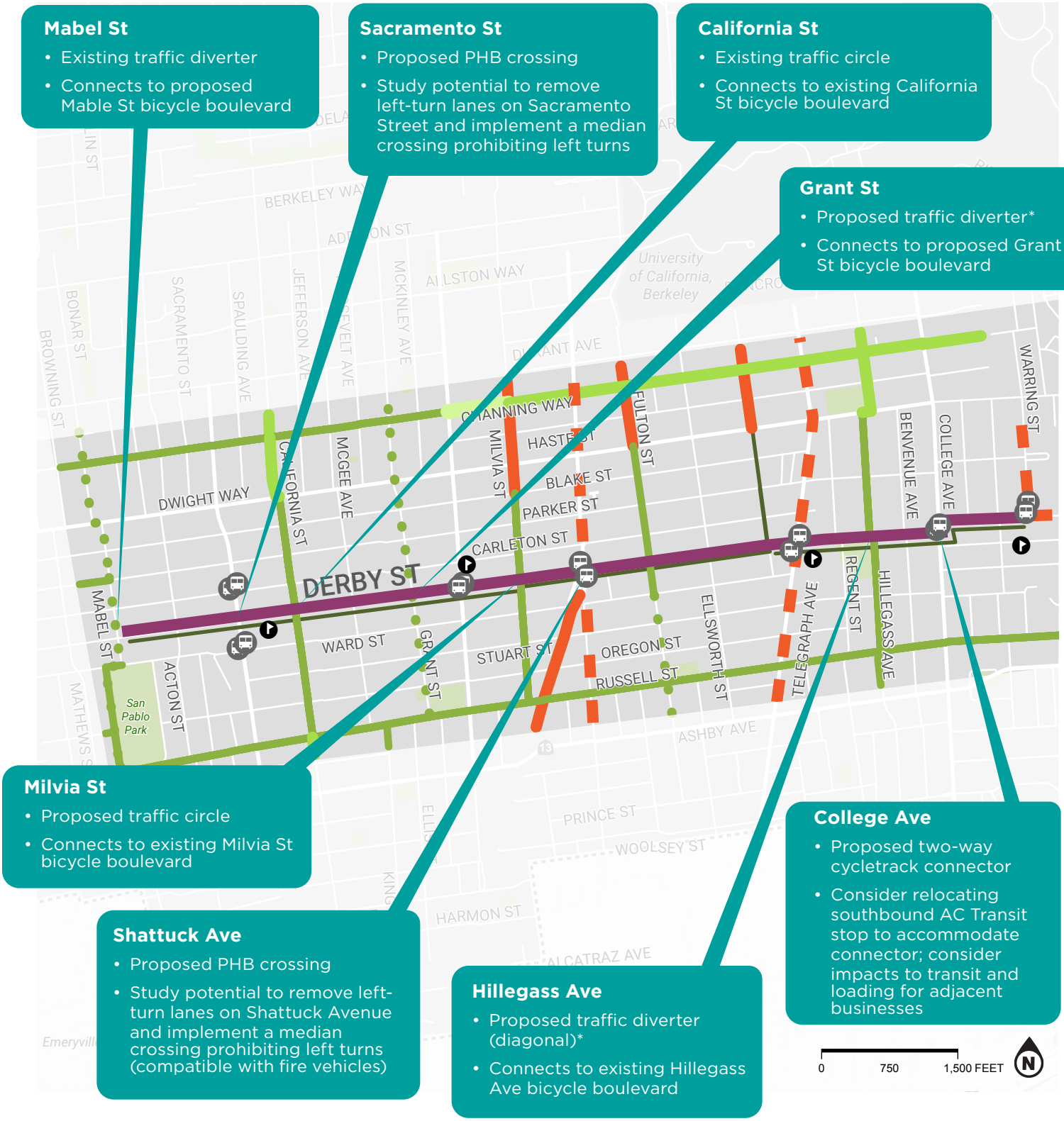
   Additional study and design consideration will be required at the College Avenue crossing to minimize transit impacts for AC Transit lines running on College Avenue.

4. **Ensure Emergency Access**

   There is a Berkeley Fire Department station at the intersection of Derby Street at Shattuck Avenue. All Bicycle Boulevard treatments should allow full access by emergency responder vehicles.



Derby St at Sacramento St



DERBY STREET: MABEL STREET TO WARRING STREET

CITY OF BERKELEY
BIKE PLAN UPDATE

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DESTINATIONS + BOUNDARIES

- Key Corridor Project
- AC Transit Bus Stop
- School
- Railroad
- City Boundary
- Park

- Existing Upgraded Bicycle Lane (Class II)
- Existing Bicycle Lane (Class II)
- Existing Bicycle Blvd (Class III)
- Existing Bicycle Route (Class III)
- Existing Bicycle Path(Class I)
- Existing Cycletrack (Class IV)
- Proposed Bicycle Blvd (Class III)
- Proposed Cycletrack (Class IV)

** Subject to traffic analysis; may be converted to a traffic circle based on potential impacts to neighborhood vehicle access and emergency response time*

HEINZ AVENUE BICYCLE BOULEVARD

7TH ST TO SAN PABLO AVE

PROJECT CHARACTERISTICS

- While Heinz Avenue is currently classified as a bicycle boulevard, the high traffic volumes and demand from adjacent uses require additional measures to achieve standards of safety and comfort for the Bicycle Boulevard Network.
- This project examines two potential routes east of San Pablo Avenue: one on Russell Street and one on Oregon Street.
- Heinz Avenue has a mostly uniform 36 feet wide right-of-way throughout the project area, with bulb-outs between 8th Street and 9th Street.
- This project area has eight intersections. The signalized intersection with San Pablo Avenue is offset, with Oregon Street approximately 200 feet to the north and Russell Street approximately 300 feet to the south.
- The Alameda County Transportation Commission is leading a San Pablo Avenue corridor project, which proposes a two-way separated bikeway on the west side of San Pablo Avenue, connecting Heinz Avenue to Russell Street.
- While Heinz Avenue is not a High Injury Street in the Berkeley *Vision Zero Action Plan*, it is immediately parallel to the high-injury Ashby Street to the south.

Heinz Ave at 9th St

RECOMMENDED IMPROVEMENTS

1. **Heinz Avenue Bike Boulevard**

   Separated bikeways on Heinz Avenue between San Pablo Avenue and 9th Street would require removal of parking on both sides of the street. This stretch has approximately 35 spaces, one of which is a blue-curb Americans with Disabilities Act (ADA) zone.

   As an alternative to a separated bikeway, implement speed tables between 9th Street and San Pablo Avenue, with additional traffic calming treatments such as a mountable traffic circle at 10th Street and curb extensions.

2. **Evaluation of Two-way Cycletrack on 9th Street**

   The City should consider a two-way cycletrack on the east side of 9th Street to connect Heinz Avenue to the 9th Street Greenway. Design should account for ADA access to parking stalls, emergency vehicle access, and large vehicle loading/routing.

3. **Evaluation of Two-way Cycletrack on San Pablo Avenue**

   Russell Street Option
   A two-way cycletrack on San Pablo Avenue connecting to the existing facilities on Russell Street would require removal of 13 parking spaces on the west side of San Pablo Avenue and a new signalized crossing at Russell Street.

   Oregon Street Option
   A two-way cycletrack on San Pablo Avenue connecting to existing facilities on Oregon Street would require removal of one blue-curb ADA zone and relocation of an existing AC Transit stop serving Line 72. This alignment may also require modification of the existing median to accommodate two lanes of travel and the two-way cycletrack connector.

   Quick-Build Option
   As a quick-build alternative to a two-way cycletrack connector, implement one-way cycletracks on either side of San Pablo Avenue. Additionally, include an RRFB at Oregon and San Pablo Avenue.

   Coordinate with AC Transit to accommodate bus stops and transit efficiency.

Route 1: Heinz to Russell

- Two-way cycletrack on south side of the street requires loss of 13 parking stalls
- New signal and bike crossing at Russell Street
- Connects to planned cycletrack on San Pablo Avenue through Oakland as part of AC Transit project

Route 2: Heinz to Oregon

- Two-way cycletrack on north side of street requires loss of one ADA parking stall and relocation of bus stop
- Requires reconstruction of existing median

Additional Considerations

- Adjacent schools and grocery store present challenges to reaching traffic volume goals for a bicycle boulevard on Heinz Ave

9th St

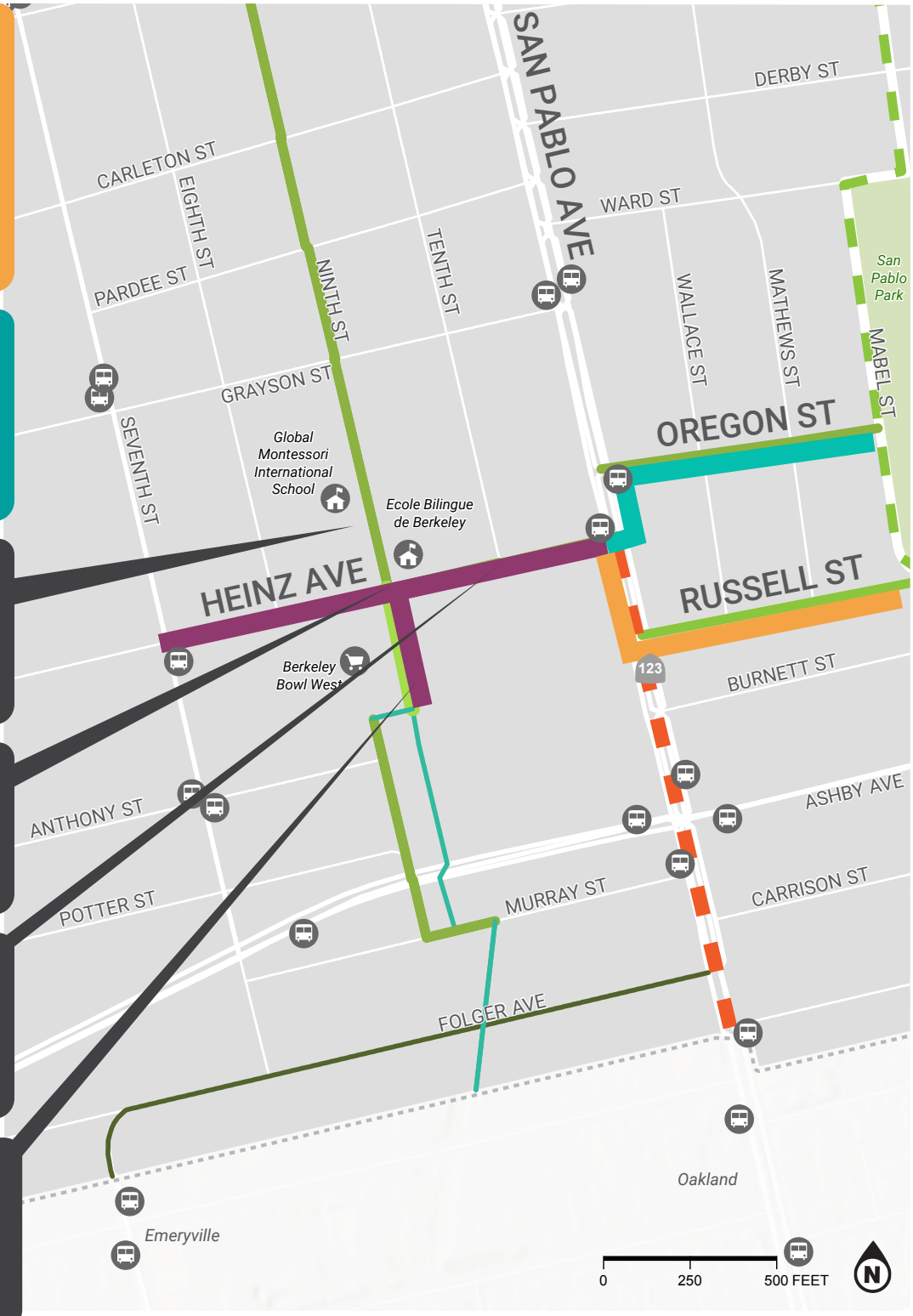
- 9th & Heinz temporary traffic circle to be reconstructed with permanent materials as part of San Pablo Parallel Routes project

Heinz Ave - 8th St to 10th St

- Speed tables on each block and mountable traffic circles at all intersections
- Curb extensions at San Pablo Avenue

9th St: South of Heinz Ave

- Two-way separated bikeway on the east side of the street
- Consider minimum clear width requirements for fire and large freight vehicles



HEINZ AVENUE: 7TH STREET TO SAN PABLO AVENUE

CITY OF BERKELEY
BIKE PLAN UPDATE

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DESTINATIONS + BOUNDARIES

- City Boundary
- Park
- AC Transit Bus Stop
- School
- Grocery Store
- Proposed Bicycle Blvd (Class III)
- Proposed Cycletrack (Class IV)
- Key Project Corridor: Route 1 & Route 2
- Key Project Corridor: Route 1
- Key Project Corridor: Route 2
- Existing Bicycle Lane (Class II)
- Existing Bicycle Blvd (Class III)
- Existing Bicycle Route (Class III)
- Existing Bicycle Path (Class I)
- Existing Cycletrack (Class IV)

SACRAMENTO ST AT RUSSELL ST

PROJECT CHARACTERISTICS

- The Russell Street bicycle boulevard has an uncontrolled crossing of the intersection at Sacramento Street. Sacramento Street is a major arterial with four through lanes of traffic, left-turn lanes, and a speed limit of 25 mph.
- This intersection is the only uncontrolled crossing of a major street on the Russell Street bicycle boulevard for over a mile (San Pablo Avenue to Adeline Street).
- The Sacramento leg of this intersection is a very wide crossing (76 feet) for users of the bicycle boulevard to cross unaided.
- Sacramento Street is a High Injury Street on the Berkeley *Vision Zero Action Plan*, and the intersection with Russell Street had one severe pedestrian collision between 2008 and 2018.

IMPROVEMENT GUIDANCE

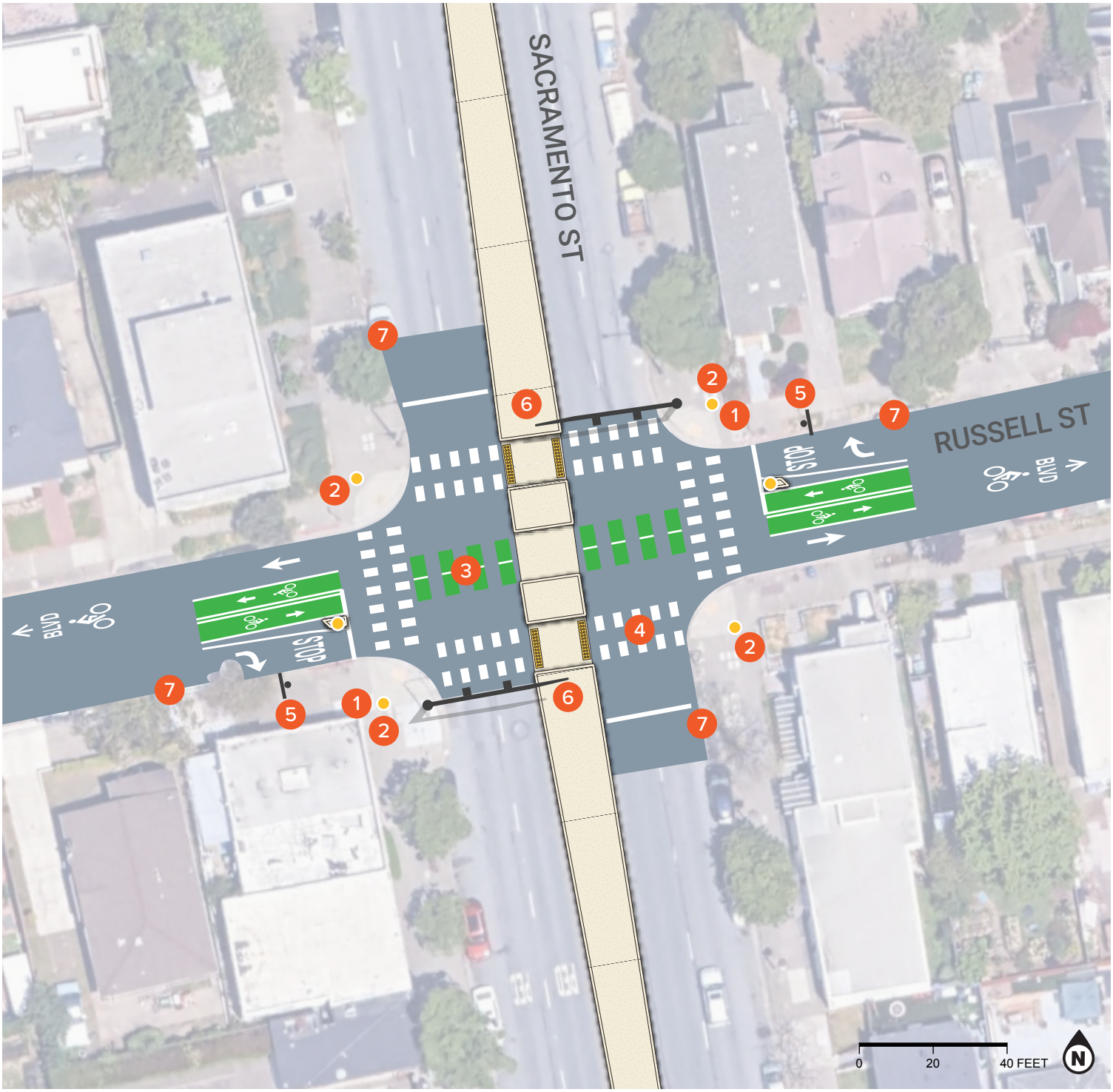
A **Installation of Pedestrian Hybrid Beacon**

Implement a PHB crossing of Sacramento Street at Russell Street. Consider closing the left-turn lanes on Sacramento Street and implementing a median crossing. This median crossing would prohibit vehicular left-turn movement from Sacramento Street and would prohibit vehicular left-turn and through movements on Russell Street. The median crossing would be built to allow through movements by emergency vehicles.

B **Construction of Divider Islands**

Construct divider islands on the approaches to the intersection on Russell Street, with bicycle lane segments positioned in the center of the street. This would require vehicular right turns by drivers on Russell Street and position bicycles to avoid conflicts with right-turning drivers. Install a push button in the divider island to activate the PHB.

Sacramento St at Russell St



SACRAMENTO STREET & RUSSELL STREET INTERSECTION

CITY OF BERKELEY
BIKE PLAN UPDATE

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RECOMMENDED IMPROVEMENTS

1. Install pedestrian hybrid beacon (PHB)
2. Ensure push button for PHB is accessible by pedestrians and bicyclists (may need two push buttons at southwest and northeast corners) OR bike activation for PHB
3. Add intersection conflict markings
4. Upgrade to crosswalk markings on all approaches
5. Add bicycle boulevard wayfinding signs
6. Evaluate prohibiting left turns from Sacramento St and provide designated space for bicyclists and pedestrians
7. Daylight parking at all approaches

SACRAMENTO ST AT CHANNING WAY

PROJECT CHARACTERISTICS

- The Channing Way bicycle boulevard has an uncontrolled crossing of the intersection at Sacramento Street. Sacramento Street is a major arterial with four through lanes of traffic, a large median (approximately 28 feet wide) between directions of travel, and a speed limit of 25 mph.
- This intersection is the only uncontrolled crossing of a major street on the Channing Way bicycle boulevard for over two miles (San Pablo Avenue to Piedmont Ave).
- The Sacramento leg is this intersection is a very wide crossing (85 feet) for users of the bicycle boulevard to cross unaided, but does offer a 28 feet wide median.
- Sacramento Street has AC Transit bus stops for lines 88 and 688 adjacent to this intersection.
- Sacramento Street is a High Injury Street on the Berkeley *Vision Zero Action Plan* and the intersection with Channing Way had one severe bicycle collision between 2008 and 2018.

IMPROVEMENT GUIDANCE

A **Installation of Pedestrian Hybrid Beacon**

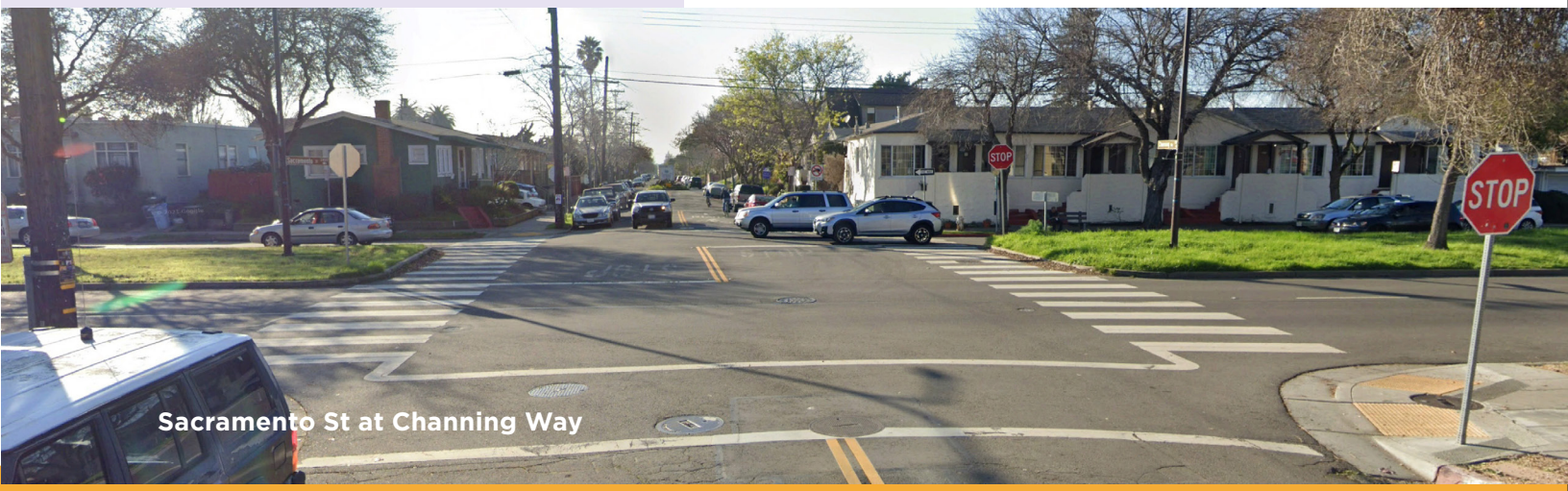
Implement a PHB crossing of Sacramento Street at Channing Way with a median crossing. This median crossing would prohibit vehicular left-turn movement from Sacramento Street and would prohibit vehicular left-turn and through movements on Channing Way. The median crossing would be built to allow through movements by emergency vehicles.

B **Construction of Divider Islands**

Construct divider islands on the approaches to the intersection on Channing Way, with bicycle lane segments positioned in the center of the street. This would require vehicular right turns by drivers on Channing Way and position bicycles to avoid conflicts with right-turning drivers. Install a push button in the divider island to activate the PHB.

C **Evaluation of Bus Stop Relocation**

Consult with AC Transit about relocating the near-side bus stops on Sacramento Street to the far side of the intersection. This would minimize impacts to transit travel times caused by the PHB.



Sacramento St at Channing Way

SACRAMENTO ST & CHANNING WAY INTERSECTION

CITY OF BERKELEY
BIKE PLAN UPDATE

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RECOMMENDED IMPROVEMENTS

1. Install pedestrian hybrid beacon (PHB)
2. Ensure push button for PHB is accessible by pedestrians and bicyclists (may need two push buttons at southwest and northeast corners) OR bike activation for PHB
3. Add intersection conflict markings
4. Upgrade to crosswalk markings on all approaches
5. Designate space at median for bicyclists (can be green paint protected by bollards/flex posts)
6. Add bicycle boulevard wayfinding signs
7. Daylight parking at all approaches

AC Transit Bus Stop

5.4 Capital Cost Estimate Assumptions

[SECTION TO BE COMPLETED FOLLOWING DRAFT PLAN]

5.5 Transit Integration

City of Berkeley staff should collaborate with transit agencies early in the design stage to identify potential travel time or operational impacts from future bikeway network projects. This primarily deals with separated bikeway projects, but could include other projects which may remove travel lanes, introduce new intersection controls, or require modification of existing bus stop locations.

When pursuing new projects, the City should refer to the 2023 Berkeley Transit-First Policy Implementation Plan and the 2025 AC Transit "Transit-Supportive Design Guidelines" to ensure project design that enhances transit access and transit service.

Some crossing recommendations are at intersections currently served by various AC Transit routes. The City of Berkeley should coordinate early with AC Transit to ensure crossing improvements minimize impacts to AC Transit operations and stop locations. This is especially the case in locations where median crossings may require parking removal, stop relocation, and the general reconfiguration of travel lanes to accommodate a median crossing.

5.6 Complete Streets Corridor Study Recommendations

The 2017 Bicycle Plan established "Complete Streets Corridor Studies" as a required component of recommendations for separated bikeways (Class IV) likely to have a substantial impact on other modes.

As defined by the Berkeley Complete Streets Policy, "Complete Streets" describes a comprehensive, integrated transportation network with infrastructure and design that allows safe and convenient travel along and across streets for all users, including:

- People walking
- People bicycling
- People with disabilities
- People driving motor vehicles
- Movers of commercial goods
- Users and operators of public transportation
- Emergency responders
- Seniors
- Youth
- Families

Providing a complete network does not require dedicated facilities for all transportation modes on every street. Instead, it means creating convenient, safe, and connected routes for all modes throughout the city. For bikeway planning, Berkeley considers both major and collector streets and parallel streets as part of a Complete Streets Corridor. Potential bikeways on either type should be evaluated within a Complete Streets Corridor Study. Most major and collector streets with recommendations for separated bikeways (Class IV) require further study to evaluate their suitability and impacts on other transportation modes, emergency response, and evacuation. These streets provide access to local businesses and sometimes offer the only direct path across neighborhoods or to nearby cities that parallel routes do not provide. They currently serve multiple transportation modes, emergency response traffic, and provide on-street parking, necessitating broader consideration beyond bicycle travel alone. These streets are labeled "Complete Streets Corridor Studies" within the Bicycle Plan Update.

Separated bikeways (Class IV) and other bikeway types that may impact transit operations, parking, or roadway capacity will not be implemented without the completion of comprehensive Complete Streets Corridor Studies. These studies will include a thorough traffic analysis, environmental analysis, a robust public process, and close coordination with Berkeley's Public Works, Police, and Fire Departments, as well as all affected state, county, and local transportation and transit agencies. This approach ensures that all design decisions are informed by national best practices, California-specific guidelines, and comprehensive operational considerations. Potential bikeways to be considered as part of future Complete

Streets Corridor Studies will be evaluated in the context of the modal priorities established by the *Berkeley General Plan Transportation Element*.

Completed Complete Streets Corridor Studies

- Bancroft Street
- San Pablo Avenue

In-Progress Complete Streets Corridor Studies

- Hopkins Street
- Telegraph Avenue
- Adeline Street

As defined by the *Berkeley General Plan Transportation Element*, most of the future Complete Streets Corridor Studies are either Primary or Secondary Transit Routes. General Plan Policy T-4 "Transit-First Policy" gives priority to alternative transportation and transit over single-occupant vehicles on Transit Routes. The *Alameda County Transportation Commission Countywide Multimodal Arterial Plan* identifies many of the future Complete Streets Corridor Studies as part of the Transit Emphasis modal priority network. In this planning and policy context and given the importance of approaching Complete Streets from an integrated, layered network perspective, it is critically important to consider how transit service can be maintained and improved as an outcome of future Complete Streets Corridor Studies. The City will coordinate bikeway planning with proposed improvements to transit performance on Primary Transit Routes, such as bus boarding islands, transit-only lanes, transit signal priority/queue jump lanes, far-side bus stop relocations, and other improvements as described in the AC Transit Major Corridor Study. In addition, these studies should approach Secondary Transit Routes as opportunities for transit improvements, such as bus stop optimization and relocation, among other potential improvements. At the conclusion of the Complete Streets Corridor Study process, design alternatives that have a significant negative effect on transit on Primary Transit Routes will not be recommended. Criteria to define what constitutes a significant negative effect on transit will be developed and applied during the study process for each corridor. Consideration of how to allocate limited public right-of-way among various travel modes will be made consistent with Alameda County Transportation Commission modal priorities and the Berkeley General Plan.

The City will coordinate improvements to the public right-of-way, in an effort to ensure that changes do not adversely impact emergency response and evacuation. Throughout the Complete Streets Corridor Study process, the City will work to maintain or improve


Allston Way

emergency response times recommended in the City of Berkeley Standards of Cover and Community Risk Assessment. Design alternatives that would significantly impair the delivery of emergency services or community evacuation, as outlined in the City of Berkeley Evacuation Time Study and subsequent sensitivity studies, will not be recommended. Criteria to define significant negative effects on emergency response and evacuation are in development by the Public Works, Fire, and Police Departments.

Future Complete Streets Corridor Studies should be undertaken by considering national design best practices, including guidance from documents such as the NACTO *Transit Street Design Guide* and *Urban Street Design Guide*. These studies will also adhere to relevant California guidelines, such as the California Highway Design Manual (HDM), the California Manual on Uniform Traffic Control Devices (CA MUTCD), and local City of Berkeley standards, ensuring designs are context-sensitive and balance all modes of transportation effectively.

Local guidance such as the Berkeley Transit-First Policy Implementation Plan or the AC Transit Design Standards and Guidelines Manual for Safe and Efficient Multimodal Transit Stops and Corridors will also be consulted.

Studies should carefully consider the potential impacts and trade-offs of including bikeways on Primary and Secondary Transit Routes and emergency response or high-capacity routes including potential median reductions, repurposing of parking or travel lanes, and the need to avoid impacts to transit operations, emergency response, and evacuation that could otherwise occur. Example transit performance criteria that may be considered as part of future Complete Streets Corridor Studies could include: on-time performance and reliability; gapping/bunching; transit travel time; operational and safety conflicts with other modes of transportation; maintaining minimum lane widths; and other criteria to be identified through the study process.


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