



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: John Ristow
Jon Cicirelli

SUBJECT: BIKE PLAN AND TRAIL NETWORK ANNUAL UPDATE **DATE: 3/18/24**

Approved

Date

3/25/24

RECOMMENDATION

Accept the Bike Plan and Trail Network Annual Update.

BACKGROUND

A high-quality, interconnected network of on-street bikeways and off-street trails advances City of San José goals for safety, equity, and transportation mode shift. This memorandum provides background on the goals, policies, and planning efforts for implementation of the City’s bikeways and trail network; summarizes the implementation status of bikeways and trails, including notable work performed in 2023; provides information on maintenance and operational needs; and describes the City’s approach to funding the implementation of bikeways and trails.

Implementing the City’s bikeway network is a collaborative effort; the Department of Transportation (DOT) leads on-street bikeway development, while the Department of Parks, Recreation and Neighborhood Services (PRNS) leads off-street trail development.

While the City continues to make significant steps toward implementation of its planned bikeways network, funding remains a challenge due to the small amount of guaranteed funds received annually. The City must compete for federal, state, and local grant funding to complete its on-street bikeways and off-street trails network. Estimated costs for build-out of the remaining 34 miles of trails range from \$300-\$400 million. Build-out of the *Better Bike Plan* requires an estimated \$14-\$19 million annually to complete the plan’s five-year priority network within the 2025 horizon. Aggressive pursuit of grant funding has provided \$3-\$5 million per year, leaving a significant shortfall.

ANALYSIS

Goals, Policies, and Planning Efforts

The City has adopted several plans that guide its bikeway and trail network development. Together, these documents identify goals and strategies to increase bicycle trips and safety, as well as to reduce automobile use and greenhouse gas emissions. These plans include:

- *Vision Zero San José (2015)*: reduce traffic fatalities and severe injuries;
- *Trail Program Strategic Plan (2016)*: strategic plan for a 100-mile world-class trail network;
- *Climate Smart San José (2018)*: achieve 20% of trips by bike by 2050;
- *ActivateSJ (2019)*: 20-year strategic plan for the Department of Parks, Recreation and Neighborhood Services;
- *Better Bike Plan 2025 (2020)*: complete a 550-mile low-stress, citywide bikeway network;
- *Move San Jose (2022)*: citywide transportation plan focused on mode shift, safety, and equity.

Implementation Updates

On-Street Bikeways Implementation Updates

In 2023, the City installed 17.6 miles of new on-street bikeways and upgraded 5.3 miles of existing on-street bikeways as part of implementation of *Better Bike Plan 2025*. The current 477-mile on-street bikeways network combines with the City's existing 66 miles of off-street trails to provide a 543-mile usable network. Notable on-street bikeways completed in 2023 include:

- Saratoga Avenue, Lawrence Expressway to Williams Road: lane reduction with new bollard-protected bikeway, connecting to bike lanes on Campbell Avenue, Hamilton Avenue, and Williams Road;
- Airport Parkway, 1st Street to Airport Boulevard: enhancement of existing bike lanes to a parking-protected bikeway, connecting to the Guadalupe River Trail;
- Leigh Avenue, Hamilton Avenue to Southwest Expressway: lane reduction with new bike lanes, connecting to existing bike lanes on Southwest Expressway, new bike lanes on Stokes Street, and the Los Gatos Creek Trail;
- Almaden Boulevard at Park Avenue: raised protected bikeway connecting to existing bikeways on Park, Almaden, and San Fernando Street.



Figure 1: Protected bikeway on Saratoga Av. implemented through Vision Zero program.



Figure 2: Protected bikeway on Airport Parkway implemented through DOT pavement maintenance.



Figure 3: New Bike Lanes on Leigh Av near Blackford Elementary School.



Figure 4: Protected bikeway on Almaden Boulevard, constructed via coordination with private development.

Figure 5 shows the year-to-year progress of completed on-street bikeways by type. Note that mileage for certain bikeway types will decrease over time as existing facilities are upgraded to higher-quality bikeways.

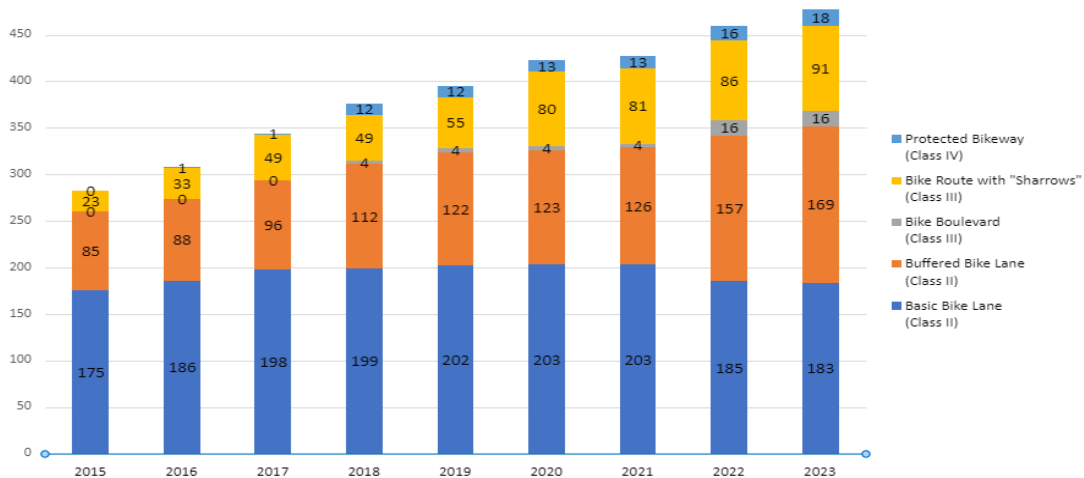


Figure 5: Existing bikeway mileage by type per year.

See Appendix A for examples of each bikeway type, Appendix B for a map of the City’s existing bikeways network, and Appendix C for a map of on-street bikeways completed in 2023.

Off-Street Trail Program Updates

The City is developing one of the largest urban trail networks in the nation. The 100-mile trail network is planned to be entirely off-street. PRNS currently has several notable trail projects in various stages of development. Trail development occurs in phases as seen in Figure 6. Below are select projects in various phases.



Figure 6: Phases of trail project development.

Open: Thompson Creek Trail (Quimby Road to Aborn Court)

The Thompson Creek Trail between Quimby Road and Aborn Court opened in summer of 2023. From 2008-2023, the trail existed in an interim unpaved status. This trail connects the Evergreen neighborhood to Lake Cunningham. To encourage trail users to learn about the local environment, the trailheads contain etched Chinook salmon, a fish species that can be found in San José waterways. Since opening, the trail has seen a 75% increase in use compared to its unpaved status, based on trail counts conducted in fall 2022 and fall 2023 before and after completion of the trail. The new trail connects with the Quimby Road on-street bikeway, completed by DOT in 2022, facilitating safe access from the neighborhood.



Figure 7: Completed Thompson Creek Trail.

Construction: Coyote Creek Trail (Mabury Road to Empire Street)

Construction of the Coyote Creek Trail from Mabury Road to Empire Street began in July 2023. The new trail segment will cross Coyote Creek and US 101 via a new pedestrian bridge and a new undercrossing. The trail will provide access to Downtown San José from Berryessa BART via Watson Park.

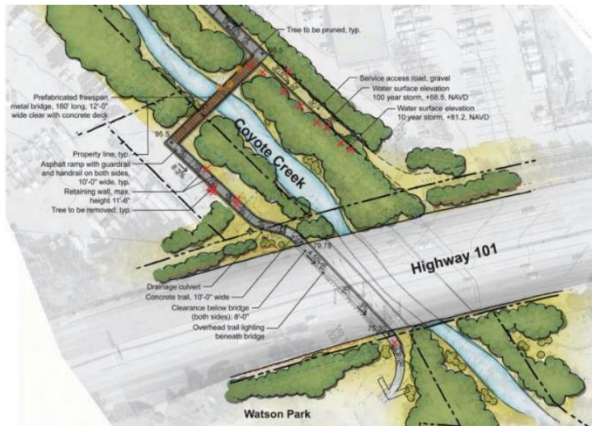


Figure 8: Drawing from the 2011 Coyote Creek Creek Trail Master Plan.



Figure 9: Photo of Coyote Creek edge near Watson Park.

Construction: Coyote Creek Trail (Phelan Ave to Tully Road)

Construction for the Coyote Creek Trail between Phelan Ave and Tully Road began in December 2023. Completion is currently scheduled for the end of 2024. This project will provide a continuous trail connection between San José and Morgan Hill. This follows community engagement conducted during the master plan phase in 2004-2005, and more recently in 2020-2023 after grant funding for construction was secured.

Maintenance and Operations

On-Street Bikeways

Maintenance activities must be appropriately resourced as the City continues to implement its on-street bikeways network. As this infrastructure is utilized, complaints have increased regarding debris, waste bins, and yard trimming collection in the right-of-way. City staff in several departments, including DOT and the Department of Environmental Services (ESD), are evaluating possible solutions to these concerns.

The City faces two challenges in addressing bikeway maintenance. The first is insufficient resources to enforce or maintain the bikeway network. Enforcement mechanisms exist within various City departments, including in DOT and ESD, however capacity for enforcement is currently limited.

The second challenge is constrained public right-of-way. In many locations, the combination of high on-street parking demand, frequent driveways, and bikeways creates competing uses for space, resulting in residents placing yard waste, recycling, and trash out for collection in ways that violate set-out requirements in the San Jose Municipal Code. Figure 10 provides an example of these challenges. Additionally, many challenges exist to effective sweeping within bikeways, including parked cars, yard trimming piles, solid waste containers, and narrow bikeways that limit or prevent sweeper access.



Figure 10: Constrained right-of-way creates competing uses for space.

ESD provides instructional information regarding set-out of garbage, recycling, and yard trimmings for collection. When ESD receives concerns about container set-out, letters with these instructions are sent to residents. Examples of these items can be found in Appendix D.

In light of these challenges, DOT is currently developing a plan to improve maintenance and keep bikeways unobstructed, which may contain educational and operational components. Infrastructure improvements, including bikeway design standard revisions to incorporate adequate space for solid waste and yard trimmings, and the implementation of protected bikeways consistent with *Better Bike Plan 2025*, will assist greatly in this effort. Additional resources will also help the City address these issues. DOT will utilize the Fiscal Year 2024-2025 budget process to outline maintenance needs and possible expected results.

Off-Street Trails

A trail safety pilot was formulated by PRNS in 2021 to make meaningful improvements to community safety. The pilot deploys San Jose Conservation Corps (Corps) under the oversight of Park Rangers to improve safety along the Coyote Creek Trail between William Street and Phelan Avenue. The Corps members provide “eyes on the trail” and perform light maintenance and

landscaping to support a sense of environmental safety. Initially undertaken as part of the City's Resilience Corps funded by the American Rescue Plan Act, this pilot has continued with the State of California Affordable Housing and Sustainable Communities grant expected to be exhausted by spring 2024. Staff is supporting the Corps' pursuit of grants, allowing the current pilot to expand to additional trails.

Additionally, the City and Santa Clara Valley Water District (Valley Water) established the Coyote Creek Trail Patrol Program, in which the San Jose Police Department patrols a three-mile stretch of the Coyote Creek Trail between William Street and Tully Road. The patrol was initially established on a one-time basis, with each organization providing \$400,000 in funding for a one-year term starting January 1, 2022. In 2022-2023, the City and Valley Water continued the then-jointly funded program for an additional year and expanded it to include the Guadalupe River Trail. The agreement between the City and Valley Water ended June 30, 2023. Valley Water did not renew the agreement and has not contributed any funds for the program since then. However, the City has continued the program in 2023-2024 on a one-time basis, allowing one Police Officer and one Police Sergeant to perform eight-hour shift patrols three to four days per week. Patrol duties include enforcing illegal activities and ensuring residents feel safe when using the trail. These patrol shifts are said to be popular among Police Officers who undertake proactive enforcement along the trails and engage the trail users. Staff and the community have reported their appreciation for the presence and service of the Police Officers in the Trail Patrol Program.

Funding Strategies and Needs

Better Bike Plan Funding

As part of its implementation strategy, *Better Bike Plan* defines a five-year priority project network to help guide planning efforts. Funding has not been identified for full implementation of the five-year priority network. Many of these corridors currently have basic and/or buffered bike lanes. Most of these corridors are planned as protected bikeways and must be upgraded as part of plan implementation. See Appendix E for further details on the funding and implementation status of the five-year network.

Capital costs for build-out of protected bikeways in the Five-Year Priority Network alone require \$14-\$19 million annually for the duration of the bike plan (from 2020 Council adoption through 2025), based on costs estimated during development of the plan. Grant funding has provided \$3-\$5 million per year. The Transportation Development Act, Article III (TDA3) state grant program is the only guaranteed (non-competitive) source of funding the City receives annually for bike and pedestrian improvements. TDA3 funding from Fiscal Year 2023-2024 was \$787,462, with \$637,462 dedicated to building bikeways. Fiscal Year 2024-2025 amounts will be provided by the Metropolitan Transportation Commission in spring 2024. Successful implementation of *Better Bike Plan 2025* requires securing additional funding.

To best leverage resources, DOT implements *Better Bike Plan 2025* by coordinating with existing City programs, such as pavement maintenance and Vision Zero; pursuing grant funding from sources such as the state Active Transportation Program and the Regional One Bay Area Grant program; incorporating bikeway elements in major infrastructure projects, such as the US 101/Trimble interchange improvement project; and through private development contributions.

Better Bike Plan 2025 emphasizes quick-build implementation. Quick-build materials like plastic bollards allow cost-effective near-term implementation of protected bikeways. However, quick-build materials can carry ongoing maintenance needs, such as replacement of damaged bollards. Forecasts indicate that 5% of bikeway bollards must be replaced annually. When funding is identified, quick-build bikeways may be upgraded with permanent materials, such as concrete separation, which will reduce ongoing maintenance needs.

Trail Network Funding

The pursuit and management of external funding sources is an essential role in the development of the trail network. PRNS staff currently manage multiple grant contracts, equaling approximately \$14 million, from various local, state, and federal funding sources. In addition, PRNS has five projects awarded under the VTA Measure B grant program: the Coyote Creek, Five Wounds, Guadalupe River, Los Gatos Creek, and Thompson Creek trails. PRNS staff continually monitor grant opportunities to best match external funding sources with prioritized trail projects to build out the trail network strategically.

Estimated costs for build-out of the remaining segments of the trail network range from \$300-\$400 million, including costs for studies, master plans, environmental work, design, construction, and project management. The 2016 *Trail Program Strategic Plan* confirms that there is no defined funding to build the remaining trail network. To date, the trail network has mostly been built by aligning and leveraging local resources to competitive grants.

Racial Equity Impact Analysis

Better Bike Plan 2025 acknowledges that past transportation decisions have prioritized exclusive forms of transportation, built highways through low-income neighborhoods, and disproportionately paved and upgraded streets in more affluent neighborhoods. The plan also recognizes that access and availability of transportation options are not experienced equitably. As a result, development of the bike plan incorporated inclusive planning practices and data analysis to focus the City's implementation efforts into areas that have historically experienced a lack of investment, many of which have also historically been communities of color. *Better Bike Plan 2025* includes these communities in its five-year priority network investment strategy.

Trail alignments are often along corridors that cover multiple jurisdictions and neighborhoods. PRNS prioritizes trails that offer full off-street opportunities to provide the safest transportation routes. To ensure fully off-street trails, rights-of-way along waterways, unused railway lines, and PG&E corridors are often the strongest options. Sufficient right-of-way opportunities for east-

west trail connections are severely limited. The partnership between DOT and PRNS enables on-street infrastructure when right-of-way is unavailable for a fully off-street trail.

Climate Smart San José Analysis

Successful implementation of the City’s on-street bikeway and off-street trail network will contribute significantly to achieving *Climate Smart San José* goals, specifically, Strategy 2.4: “Developing integrated, accessible public and active transport reduces the dependency on the car to move within the City.”

COORDINATION

This memo has been coordinated with the Department of Environmental Services and the Office of the City Attorney.

/s/
JOHN RISTOW
Director of Transportation

/s/
JON CICIRELLI
Director of Parks, Recreation, and
Neighborhood Services

For questions, please contact Ryan Smith, DOT Active Transportation Program Manager, at ryan.smith@sanjoseca.gov, and Liz Sewell, PRNS Trail Program Manager, at liz.sewell@sanjoseca.gov.

ATTACHMENTS:

- Appendix A - Bikeway Typology
- Appendix B - San José Bikeways Network
- Appendix C - 2023 On-Street Bikeway Implementation
- Appendix D - Curbside Setout Instructions for Single-Family Dwelling Garbage, Recycling, & Yard Trimmings
- Appendix E - Status of the Five-Year Priority Network

Appendix A

Bikeway Typology

The following describes the bikeway types implemented throughout the City. The class number indicates the State of California legal designation for each bikeway type.

- *Trail (Class I)* - multi-use paths for bikes and pedestrians that are fully separated from motorized traffic
- *Basic bike lane (Class II)* - an area for bikes indicated by a painted stripe
- *Buffered bike lane (Class II)* - the addition of a painted buffer to a striped bike lane
- *Bike Route (Class III)* - a roadway that uses a combination of signs and markings (bike symbols commonly referred to as “sharrows”) that are installed in vehicle travel lanes, indicating a shared space for users; bike routes are typically implemented on neighborhood streets with lower speeds and traffic volumes
- *Bike Boulevard (Class III)* - a bike route that features elements such as traffic circles, curb extensions, or traffic diverters
- *Protected Bikeway (Class IV)* - a bikeway that features vertical elements physically separating bicyclists and motorized traffic, typically on higher-volume streets; elements may include plastic posts, concrete islands, or parked cars



Trail (Class I), Coyote Creek Trail



Basic Bike Lane (Class II), Bird Avenue



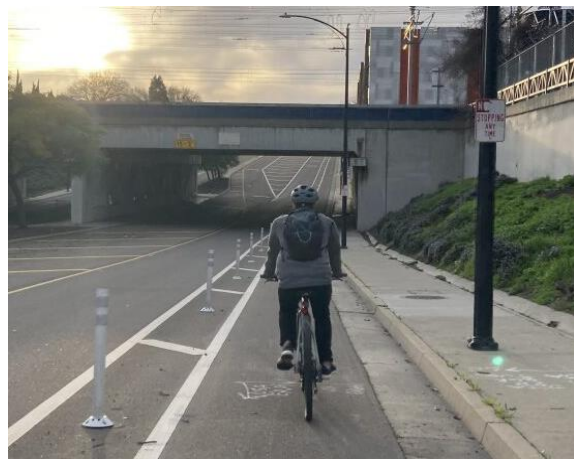
Buffered Bike Lane (Class II), McLaughlin Avenue



Bike Route with Sharrow (Class III), William Street



Bike Boulevard (Class III), San Antonio Street

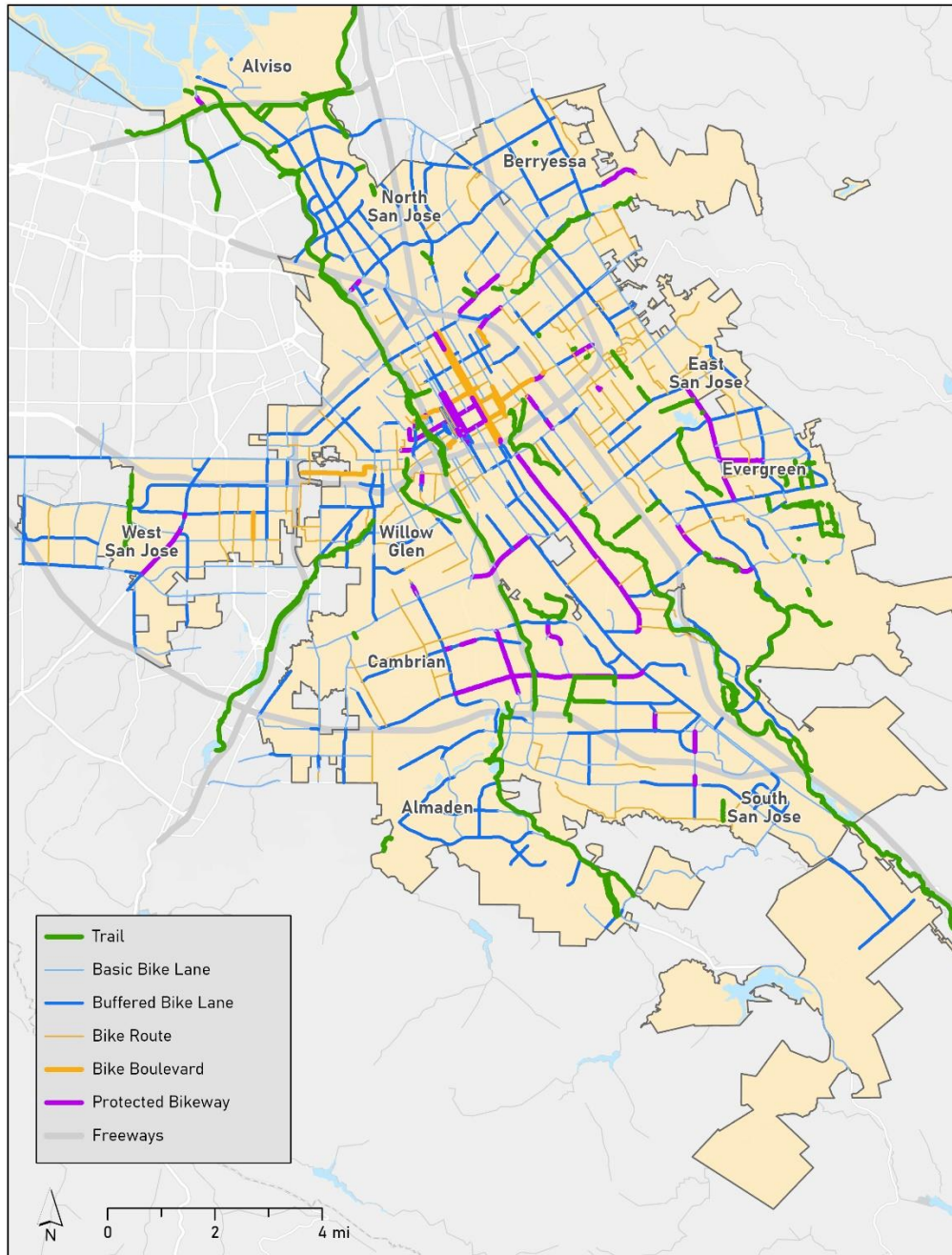


Protected Bikeway (Class IV), Park Avenue

Appendix B

San José Bikeways Network

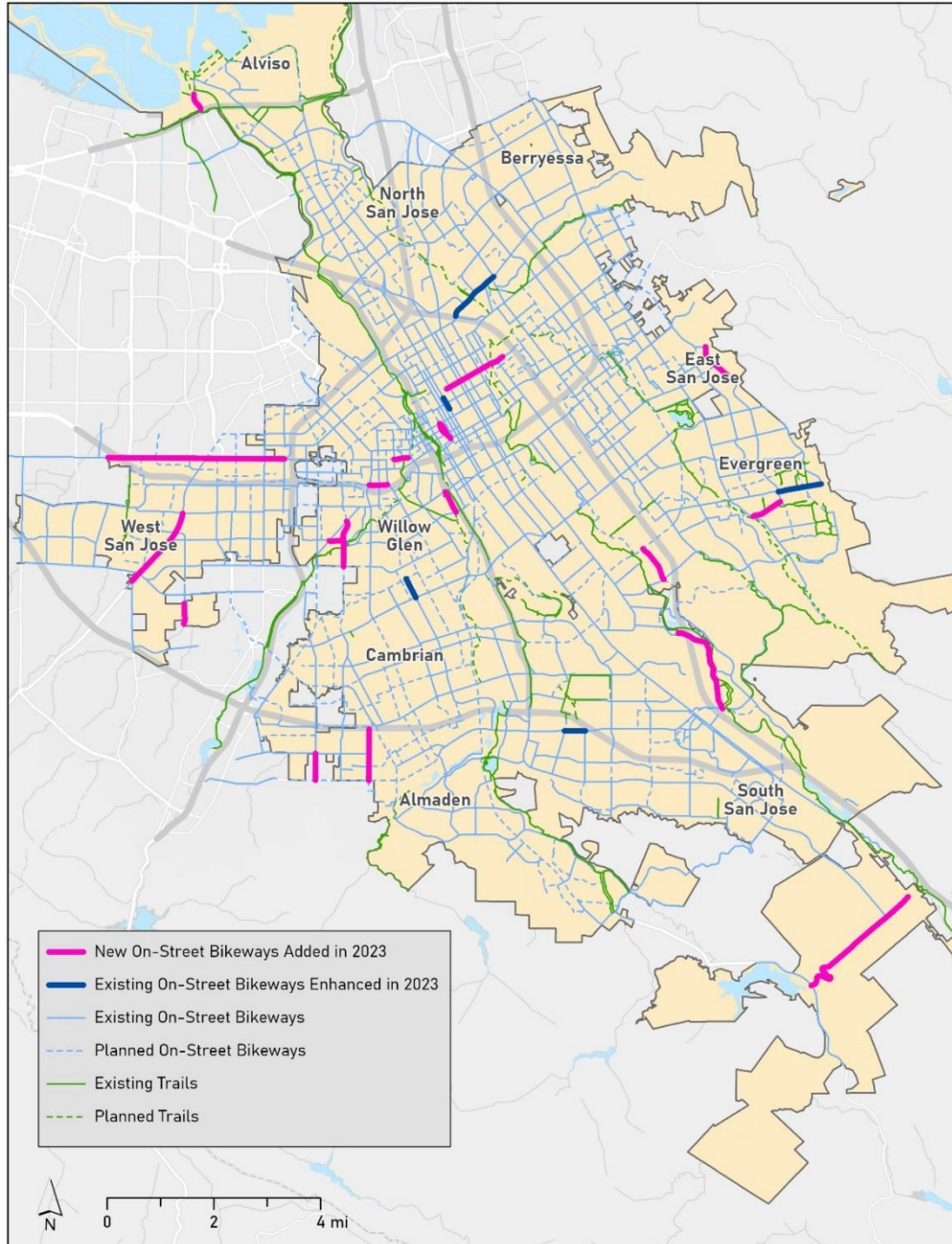
The following map displays the City of San José's existing bikeways network as of February 2023.



Appendix C

2023 On-Street Bikeway Implementation

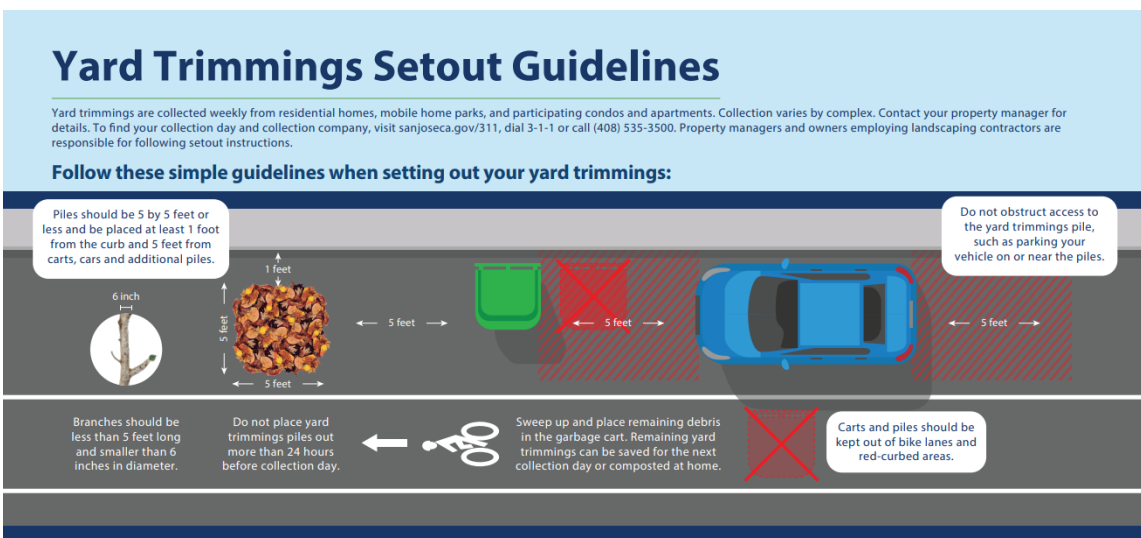
The following map displays the on-street bikeways work completed in calendar year 2023.



Appendix D

Curbside Setout Instructions for Single-Family Dwelling Garbage, Recycling, and Yard Trimmings

The following graphics are provided by the City for proper curbside setout of solid waste and yard trimmings for collection, including instructions specific to bike lanes.

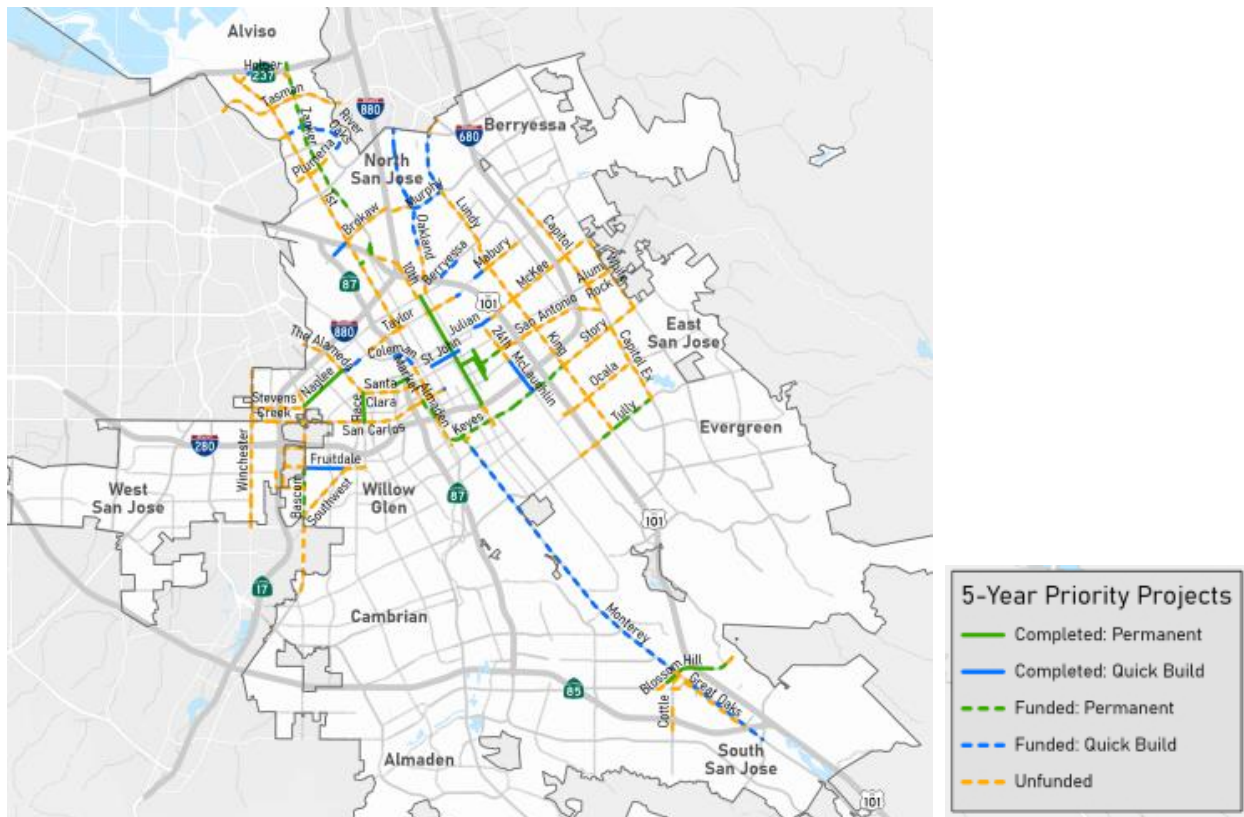


These materials can be found at SanJoseRecycles.org and on the Recycling & Garbage webpage of the City’s website at <https://www.sanjoseca.gov/your-government/departments-offices/environmental-services/recycling-garbage>

Appendix E

Status of the Five-Year Priority Network

The implementation status of the five-year priority project network in *Better Bike Plan 2025* is shown in the map and table below. The status is based on the bikeway types for each corridor as defined in the bike plan. Many of these corridors currently have basic and/or buffered bike lanes, though the majority are planned as protected bikeways. These will need to be upgraded as part of plan implementation. At this time, funding has not been identified for full implementation.



Five-Year Priority Projects Implementation Status	Miles
Completed: Quick Build	3.5
Completed: Permanent	6.5
Total Completed	10
Funded: Quick Build	15
Funded: Permanent	10
Total Funded	25
Unfunded	60
Total Priority Project Network	95