

4.1 Cumulative Impacts

An environmental impact report (EIR) is required to examine cumulative impacts. California Code of Regulations Section 15130(a)(1) defines a cumulative impact as consisting “of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts.” The analysis of cumulative impacts need not provide the same level of detail as that for project-specific impacts, but it shall “reflect the severity of the impacts and their likelihood of occurrence” (per California Code of Regulations Section 15130(b)). The California Environmental Quality Act (CEQA) Guidelines Section 15065 states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects that are individually limited but cumulatively considerable. As defined in State CEQA Guidelines Section 15065(a)(3), *cumulatively considerable* means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” The cumulative impacts analysis in an EIR must analyze either a list of past, present, and probable future projects or a summary of projections contained in an adopted general plan or related planning document.

4.1.1 Approach and Methodology

State CEQA Guidelines Section 15130(b) states that the discussion of cumulative impacts should include:

- Either (1) a list of past, present, and probable future projects producing related or cumulative impacts or (2) a summary of projections contained in an adopted general plan or similar document, or in an adopted or certified environmental document, that described or evaluated conditions contributing to a cumulative impact
- A discussion of the geographic scope of the area affected by the cumulative impact
- A summary of expected environmental effects to be produced by these projects
- Reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects

As described in the Approach to Impact Analysis section in Chapter 3, the San Rafael Transit Center Replacement Project (proposed project) would have no impact on mineral resources or agricultural and forestry resources. Because the proposed project would have no impact, it cannot contribute to any potential cumulative impacts and these resource areas are not discussed further in the cumulative impact analysis.

4.1.2 Projections/Regional Growth Characteristics

The City of San Rafael (City) ~~is in the process of updating The City of adopted San Rafael General Plan 2020-2040 and the drafting the Downtown San Rafael Precise Plan (Downtown Precise Plan) in~~

~~August 2021, a new plan for the Downtown San Rafael neighborhood.~~ Growth forecasts ~~for in the~~ *Draft Downtown San Rafael Precise Plan* include the addition of 2,200 residential units, 698,000 square feet of non-residential use, and 2,000 jobs to the Downtown San Rafael Area. These projections are based on the addition of an assisted living facility, multiple residential and commercial developments, a hotel, and a public safety center.

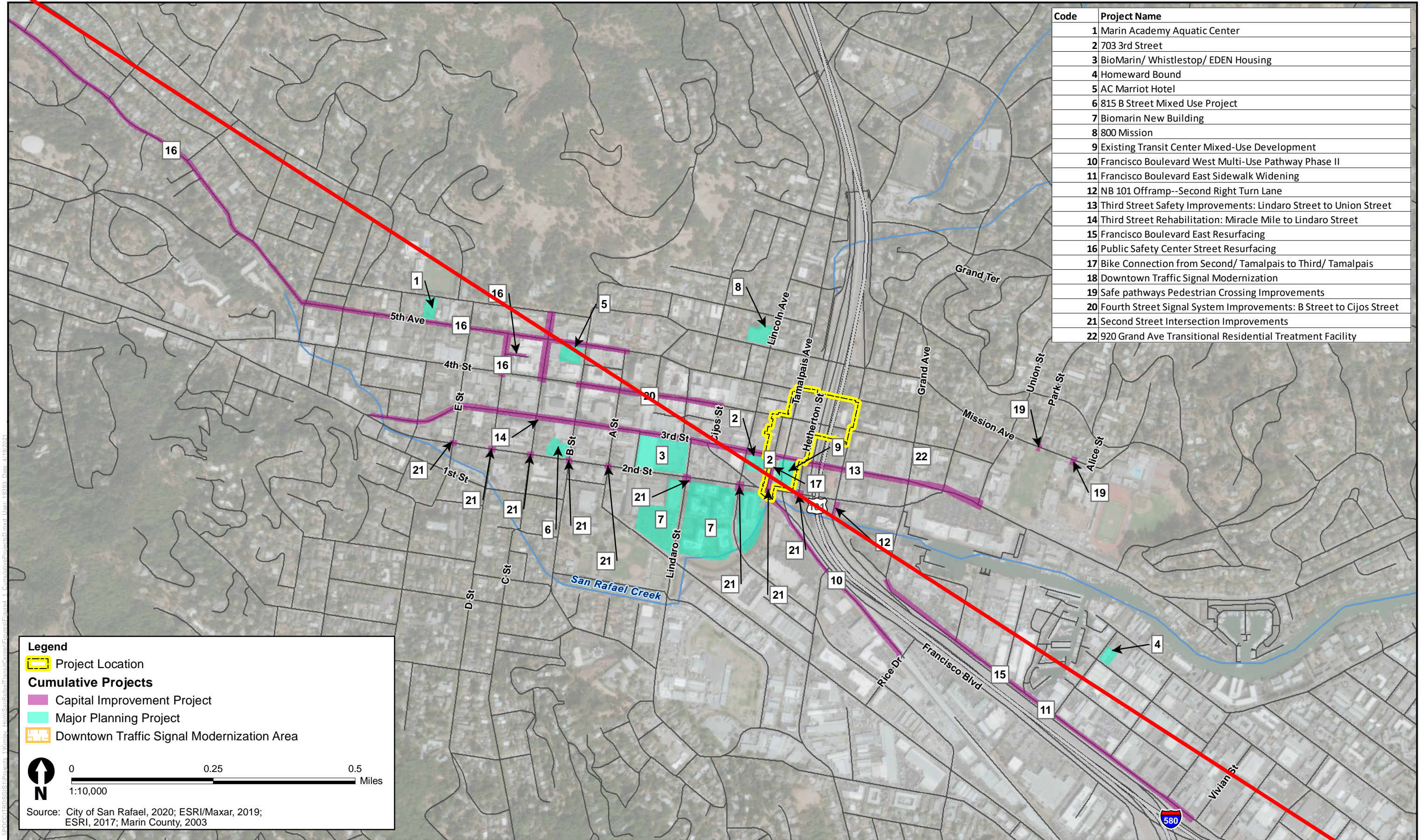
The Association of Bay Area Governments' (ABAG) projections of land use and population growth were used to estimate overall growth in the City and Marin County. By 2040, the City's population is projected to grow approximately 10.7 percent from its population in 2015, from 60,440 residents to 66,880 residents. Marin County's population is projected to grow approximately 7.8 percent from its population in 2015, from 262,305 residents to 282,670 residents (ABAG 2018).

4.1.3 Projects Considered

Reasonably foreseeable future projects are defined as the projects that have been adopted or have otherwise demonstrated likelihood to occur based on documentation from project sponsors.

The types of projects considered in this analysis include development projects within 1 mile of the project area, public projects from the City and Marin County's Capital Improvement Programs, and updates to regional plans and policies that include public transportation.

Table 4-1 presents the projects considered and includes their applicable jurisdictions, potential impact areas, estimated construction schedules, and distance from the proposed project. Cumulative projects are illustrated on Figure 4-1. Project information listed in Table 4-1 is based on information supplied by the City of San Rafael and Marin County, available environmental documents, and information posted on agency websites.



Code	Project Name
1	Marin Academy Aquatic Center
2	703 3rd Street
3	BioMarin/ Whistlestop/ EDEN Housing
4	Homeward Bound
5	AC Marriot Hotel
6	815 B Street Mixed Use Project
7	Biomarin New Building
8	800 Mission
9	Existing Transit Center Mixed-Use Development
10	Francisco Boulevard West Multi-Use Pathway Phase II
11	Francisco Boulevard East Sidewalk Widening
12	NB 101 Offramp--Second Right Turn Lane
13	Third Street Safety Improvements: Lindaro Street to Union Street
14	Third Street Rehabilitation: Miracle Mile to Lindaro Street
15	Francisco Boulevard East Resurfacing
16	Public Safety Center Street Resurfacing
17	Bike Connection from Second/ Tamalpais to Third/ Tamalpais
18	Downtown Traffic Signal Modernization
19	Safe pathways Pedestrian Crossing Improvements
20	Fourth Street Signal System Improvements: B Street to Cijos Street
21	Second Street Intersection Improvements
22	920 Grand Ave Transitional Residential Treatment Facility

Legend

- Project Location
- Cumulative Projects**
- Capital Improvement Project
- Major Planning Project
- Downtown Traffic Signal Modernization Area

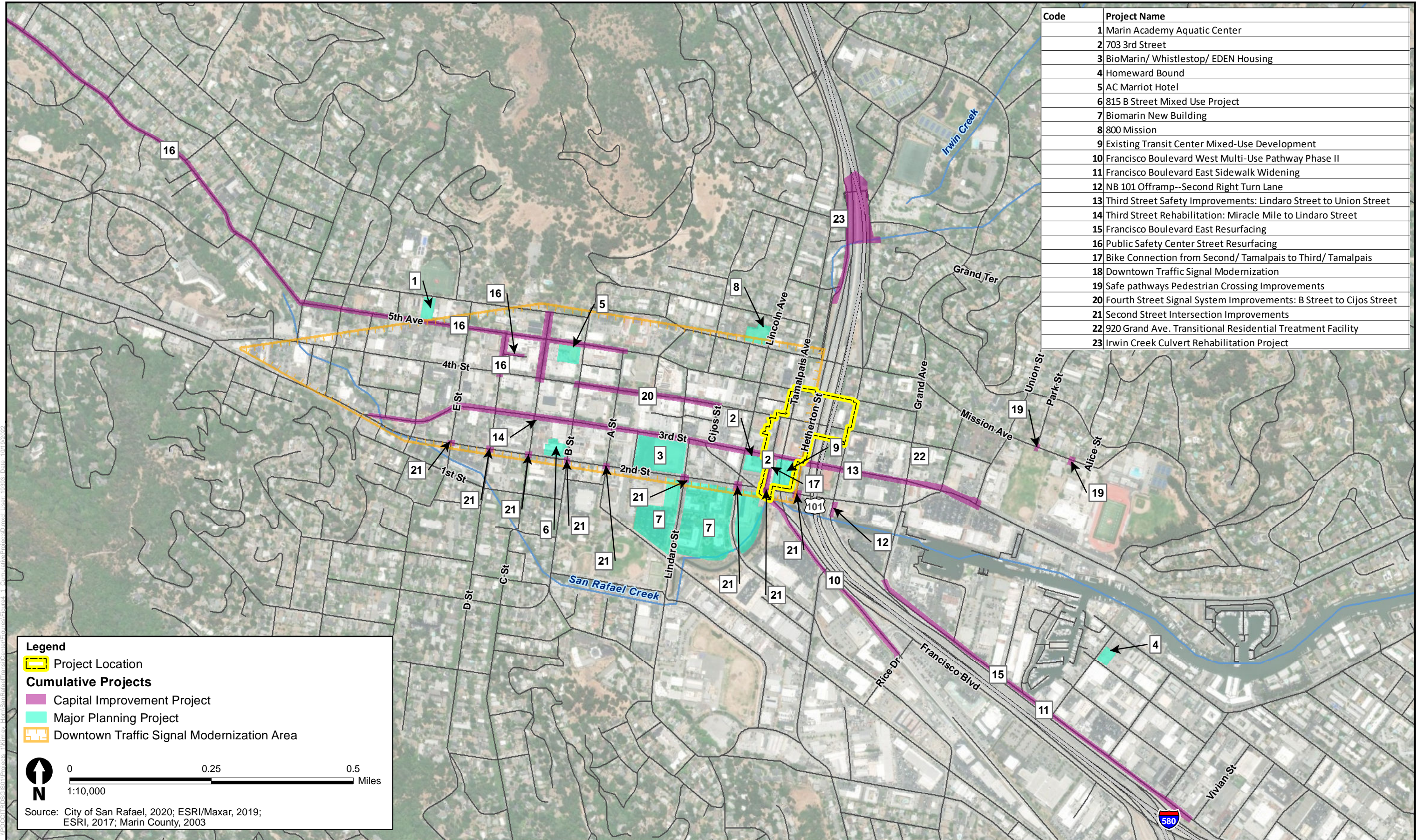
0 0.25 0.5
1:10,000 Miles

Source: City of San Rafael, 2020; ESRI/Maxar, 2019; ESRI, 2017; Marin County, 2003

I:\DCC\TRD\GIS\1\Projects_1\K\imiliv_Hom\SanRafael\TransitCenter\Figures\Figure4_1_CumulativeProjectsD.mxd - User: 19333 - Date: 4/19/2021



Figure 4-1
San Rafael Transit Center - Cumulative Projects



Code	Project Name
1	Marin Academy Aquatic Center
2	703 3rd Street
3	BioMarin/ Whistlestop/ EDEN Housing
4	Homeward Bound
5	AC Marriot Hotel
6	815 B Street Mixed Use Project
7	Biomarin New Building
8	800 Mission
9	Existing Transit Center Mixed-Use Development
10	Francisco Boulevard West Multi-Use Pathway Phase II
11	Francisco Boulevard East Sidewalk Widening
12	NB 101 Offramp--Second Right Turn Lane
13	Third Street Safety Improvements: Lindaro Street to Union Street
14	Third Street Rehabilitation: Miracle Mile to Lindaro Street
15	Francisco Boulevard East Resurfacing
16	Public Safety Center Street Resurfacing
17	Bike Connection from Second/ Tamalpais to Third/ Tamalpais
18	Downtown Traffic Signal Modernization
19	Safe pathways Pedestrian Crossing Improvements
20	Fourth Street Signal System Improvements: B Street to Cijos Street
21	Second Street Intersection Improvements
22	920 Grand Ave. Transitional Residential Treatment Facility
23	Irwin Creek Culvert Rehabilitation Project

Legend

- Project Location

Cumulative Projects

- Capital Improvement Project
- Major Planning Project
- Downtown Traffic Signal Modernization Area

0 0.25 0.5 Miles
1:10,000

Source: City of San Rafael, 2020; ESRI/Maxar, 2019; ESRI, 2017; Marin County, 2003

I:\DC\TRDSGIS\1\Projects_1\Kirmey_Horn\SanRafaelTransitCenter\Figures\Figure4_1_CumulativeProjectsD.mxd; User: 19393; Date: 10/19/2022



Updated Figure 4-1
Cumulative

Table 4-1. Projects Considered in the Cumulative Impacts Analysis

Project #	Project Title	Estimated Construction Schedule	Approximate Distance from Project Area (feet)
1	Marin Academy Aquatic Center	Spring 2021 to spring 2022	3,500
2	703 3rd Street	TBD	Adjacent
3	BioMarin/Whistlestop/EDEN Housing	2021 to 2028	1,000
4	Homeward Bound	2021 to 2022	3,000
5	AC Marriot Hotel	Fall 2019 to fall 2021	2,000
6	815 B Street Mixed Use Project	2019 to 2021	1,800
7	BioMarin New Building	TBD	750
8	800 Mission	TBD	700
9	Existing Transit Center Future Mixed-Use Development	TBD	Adjacent
10	Francisco Boulevard West Multi-Use Pathway Phase II	Early 2020 to early 2021	350
11	Francisco Boulevard East Sidewalk Widening	Summer 2020 to summer 2021	1,600
12	NB 101 Offramp: Second Right Turn Lane	Early 2021 to early 2022	700
13	Third Street Safety Improvements: Lindaro Street to Union Street	Summer 2021 to summer 2022	Adjacent
14	Third Street Rehabilitation: Miracle Mile to Lindaro Street	Summer 2021 to summer 2022	700
15	Francisco Boulevard East Resurfacing	2021 to 2022	1,600
16	Public Safety Center Street Resurfacing	2021 to 2022	2,000
17	Bike Connection from Second/Tamalpais to Third/Tamalpais	2020 to 2021	Adjacent
18	Downtown Traffic Signal Modernization	Summer 2020 to summer 2021	N/A
19	Safe pathways Pedestrian Crossing Improvements	Spring 2021 to summer 2021	2,000
20	Fourth Street Signal System Improvements: B Street to Cijos Street	2022 to 2023	1,600
21	Second Street Intersection Improvements	2022 to 2023	Adjacent
22	920 Grand Ave Transitional Residential Treatment Facility	2021 to 2023	1,100
<u>23</u>	<u>US-101 Irwin Creek Culvert Rehabilitation Project</u>	<u>2022 to 2023</u>	<u>500</u>
23	General Plan 2040: General Plan Update and <i>Downtown Precise Plan</i>	Under review	N/A
24	Parks and Recreation Master Plan	TBD	N/A

Project #	Project Title	Estimated Construction Schedule	Approximate Distance from Project Area (feet)
25	Golden Gate Bridge, Highway and Transportation District Zero-Emission Bus Rollout Plan	Phased rollout through 2040	N/A

Sources: City of San Rafael 2020a, 2020b, 2020c; County of Marin 2020; District 2021 CIP = Capital Improvement Program; FY = Fiscal Year; NB = northbound

4.1.3.1 Planned Development Projects

Development projects planned within 1 mile of the project area are discussed in the following sections.

Marin Academy Aquatic Center

Marin Academy proposes to replace and relocate its existing aquatic center with a new 25-yard by 33-meter uncovered swimming pool; a two-story, 2,256-square-foot support building (restrooms, indoor and outdoor showers, changing and office areas, mechanical equipment, and chemical storage areas); concrete decking; site lighting and landscaping; perimeter metal fencing and courtyard walls; bleacher seating; public address system; and light-emitting-diode-illuminated scoreboard on two adjacent Downtown parcels with a combined lot area of 18,737 square feet. Construction is anticipated to begin in spring 2021 and to be completed in the spring of 2022.

703 3rd Street

This project proposes to redevelop and consolidate two contiguous Downtown parcels currently developed with existing one- and two-story commercial buildings and associated surface parking. The project proposes to construct a six-story, 73-foot-tall, mixed-use building with 120 rental units or apartments above a 969-square-foot commercial space and 121 garage parking spaces, including 112 mechanical parking lifts. The project was presented to and approved by the City Council on October 7, 2019. The project's construction schedule is not yet finalized.

BioMarin and Whistlestop/EDEN Housing Project

BioMarin, in conjunction with Whistlestop/EDEN Housing, submitted a planning application for a proposed development on 999 3rd Street in Downtown San Rafael. The project site, between 2nd and 3rd Streets (at the corner of Lindaro Street), is approximately 133,000 square feet in size. The Whistlestop/EDEN Housing would be developed on a 15,000-square-foot portion of the property at the northwestern corner of the site (Brooks Street and 3rd Street). The Whistlestop/EDEN Housing component proposes a six-story, 70-foot-tall building with a senior center on the first two floors and 67 senior housing units on the upper four stories. BioMarin also proposes to construct two four-story, 72-foot-tall buildings for the purposes of laboratory, research and development, and general office space.

The San Rafael City Council approved the environmental document for this project on March 23, 2020. Whistlestop is anticipated to pursue the development of its portion of the project in 2021 or 2022, while BioMarin has 10 years through the adoption of a Development Agreement to pursue the construction of its portion of the project.

Homeward Bound Project

This project is a request by Homeward Bound for a General Plan Amendment, Zoning Amendment, and Use Permit for the following:

- General Plan Amendment to extend the high-density residential land use designation of the adjacent site such that it would include the entire 190 Mill Street property
- Zoning Map Amendment to extend the existing high-density residential zoning of the adjacent site such that it would include the entire 190 Mill Street property
- Use Permit to allow expansion of the existing emergency shelter

Separately, as a by-right project under Assembly Bill 2162, the project would include development of a 32-unit supportive housing project. This project was approved by the City Council on April 6, 2020, and construction is scheduled to commence in 2021 and be completed in 2022.

AC Marriott Hotel

The AC Marriot Hotel project is at 1201 5th Avenue and was approved on April 23, 2019. The City authorized the demolition of an existing 10,600-square-foot office building, associated tree removal, and construction of a 54-foot-tall, 140-room hotel building and associated parking and landscape improvements. The project also includes a rooftop lounge area. The City's most recent construction timeline estimated that construction would begin in August 2020 and conclude in the fall of 2021.

815 B Street Mixed Use Project

The project proposes to construct a four-story, mixed-use building with 41 residential units or apartments above 1,939 square feet of commercial retail space on four adjacent Downtown lots (at the northwest corner of B Street and 2nd Street) with a combined area of approximately 23,800 square feet. The project also proposes 48 garage parking spaces behind the commercial retail space. Vehicular and pedestrian access to the project is proposed along B Street and a secondary means of access for residents would be along 2nd Street. The project proposes to demolish all three existing structures on site, including a single-story, 4,500-square-foot commercial building at the corner of B Street and 2nd Street and two two-story, Victorian-era residences along 2nd Street, one of which is a local cultural resource. This project is currently under construction.

BioMarin New Building

BioMarin is proposing to develop a new office building on Parcel 1 of the San Rafael Corporate Center campus at 755 Lindaro Street. BioMarin acquired ownership of the campus in 2014 and is the sole owner and the largest tenant of the campus, where it maintains its corporate headquarters. This proposed new structure would be a four-story, 72,396-square-foot office building on parcel 1 and include a Phase II expansion to the six-story parking structure at 788 Lincoln Avenue with approximately 312 additional stalls on six levels, including 41 stalls on grade. With the additional parking garage expansion, there would be a total of 978 parking spaces in the six-level parking structure.

The proposed building and parking structure and associated site developments will be designed to be compatible with the architectural character of the current campus and in compliance with the established design, planning, and development goals of the City of San Rafael. The project will meet California Green Building Standards Code mandatory measures plus Tier 1 voluntary measures in

accordance with San Rafael standards for sustainability and efficiency, and will be designed to minimize impacts on the site and surrounding areas. The project's construction schedule is not yet finalized.

800 Mission Avenue Project

This project includes the construction of a four-story assisted living facility with 77 assisted living bedrooms or suites and 88 beds over 40 garage parking spaces. The project proposes one floor of memory care services. On July 10, 2018, the Planning Commission with the recommendation of the Design Review Board approved the project with conditions. Construction is anticipated to be completed in 2024.

Existing Transit Center Future Mixed-Use Development

The Golden Gate Bridge, Highway and Transportation District (District) would relocate the existing transit center and dispose of the property where existing facilities are located between 2nd Street, 3rd Street, Tamalpais Avenue, and Hetherton Street. ~~The Draft San Rafael General Plan 2040, which is expected to be adopted in 2021,~~ designates the site as "Downtown Mixed Use" (City of San Rafael 2020~~41~~) in anticipation of the transit center relocation. Any future use or development of the site would conform with City procedures for entitlements, zoning, and land use. For purposes of this EIR, it is assumed that the existing site would likely be sold and developed as some form of a mixed-use project, subject to more detailed design and approvals and subsequent CEQA review.

4.1.3.2 Public Projects

This section discusses publicly funded projects from the City's Capital Improvement Program (Fiscal Years 2020–2021 to 2022–2023) (City of San Rafael 2020a) and Marin County's Capital Improvement Program (Fiscal Years 2020–2021 to 2024–2025) (County of Marin 2020) within 1 mile of the project area.

Francisco Boulevard West Multi-Use Pathway Project, Phase II

In 2019, the City partnered with Sonoma-Marin Area Rail Transit (SMART) to complete construction of a multi-use pathway along Francisco Boulevard West between Andersen Drive and Rice Drive parallel to the railroad tracks as part of Phase I of this project. Phase II will install a bicycle pathway on Francisco Boulevard West between 2nd Street and Rice Drive by converting the roadway to a one-way southbound street, allowing the City to repurpose the other travel lane on the roadway into a bicycle pathway. This project completes the regional bicycle facility from Larkspur to Downtown San Rafael. The project is slated to receive funding for construction in Fiscal Year 2020–2021.

Francisco Boulevard East Sidewalk Widening

The existing sidewalk along Francisco Boulevard East is utilized daily by pedestrians and bicyclists that must navigate the congestion of fire hydrants and power poles. This project will install an 8-foot-wide sidewalk/bicycle pathway on Francisco Boulevard East between Vivian Street and Grand Avenue. This project was partially funded prior to the adoption of the current City Capital Improvement Program in June 2020 and is slated to receive additional construction funding in Fiscal Year 2020–2021.

NB 101 Offramp—Second Right Turn Lane

This project includes the installation of a second right-turn lane from the northbound Central San Rafael off-ramp onto 2nd Street. Construction for this improvement will be funded by the California Department of Transportation in conjunction with a bridge replacement project scheduled to start in early 2021.

Third Street Safety Improvements: Lindero Street to Union Street

Funded in part by a California Department of Transportation Highway Safety Improvement Program grant, this project will install new wheelchair ramps, modify traffic signals, install a new communications network, and rehabilitate the asphalt pavement. Planning and design of this project was funded prior to the adoption of the current City Capital Improvement Program and construction funding is anticipated in Fiscal Year 2021–2022.

Third Street Rehabilitation: Miracle Mile to Lindero Street

The City received major allocation from the Transportation Authority of Marin through the Measure A program to rehabilitate 3rd Street. In 2019, the City completed a Feasibility Study for the 3rd Street corridor. Since then, the corridor has been subdivided into two City projects, with this project covering Miracle Mile to Lindero Street. The Third Street Safety Improvements project will make roadway improvements from Lindero Street to Union Street. The intent of the improvements is to provide congestion relief and safety improvements along 3rd Street. Planning and design of this project was funded prior to the adoption of the current City Capital Improvement Program and construction funding is anticipated in Fiscal Year 2021–2022.

Francisco Boulevard East Resurfacing

This project includes removal of the existing asphalt and resurfacing Francisco Boulevard East from Vivian Way to Grand Avenue. Adjustment of utility covers and installation of new striping is included in the scope of work. Construction funding is anticipated in Fiscal Year 2020–2021.

Public Safety Center Street Resurfacing

With the new Public Safety Center nearing completion and portions of the roadways surrounding the Public Safety Center to be converted to two-way traffic, this project will resurface with either asphalt or slurry seal the following: C Street (Mission Avenue to 4th Street), D Street (5th Avenue to 4th Street), 5th Avenue (A Street to Ray Court), and Via Sessi. The project scope will also include installation of a retaining wall at the end of Via Sessi and installation of a concrete bulb-out on the southwest corner of D Street at 5th Avenue. Construction funding is anticipated in Fiscal Year 2020–2021.

Bike Connection from Second/Tamalpais to Third/Tamalpais

Beginning in summer 2020, the City will install a bicycle cycle-track on Francisco Boulevard West between Rice Drive and 2nd Street. This project will consider improvements on Tamalpais Avenue between 2nd and 3rd Streets to receive cyclists exiting the cycle-track on the south side of 2nd Street.

Downtown Traffic Signal Modernization

The traffic signals in the Downtown San Rafael area play a critical role in keeping traffic moving. The Innovative Developments to Enhance Arterials grant-funded project will improve traffic signal equipment throughout the Downtown area at many busy intersections. This project received funding prior to the adoption of the current City Capital Improvement Program.

Safe Pathways Pedestrian Crossing Improvements

Pedestrian crosswalk improvements near schools are important safety projects for the City. This project will create painted bulb-outs and install rectangular, rapid-flashing beacons at four crosswalks at Mission Avenue/Park Street, Mission Avenue/Alice Street, 5th Avenue/River Oaks Road, and Knight Drive/Ashwood Court. Construction funding is anticipated in Fiscal Year 2020–2021.

Fourth Street Signal System Improvements: B Street to Cijos Street

4th Street is the heart of the Downtown Business District conveying pedestrians, bicyclists, and motorists through San Rafael. The existing traffic signal system needs to be updated to meet current design standards and ensure reliability of the system for all types of users. Construction funding is anticipated in Fiscal Year 2022–2023.

Second Street Intersection Improvements

2nd Street is a major thoroughfare through Downtown San Rafael. This project will rehabilitate critical intersections and includes pavement resurfacing, wheelchair ramps, and traffic signal upgrades with new communication equipment. Planning and design funding is scheduled for Fiscal Year 2020–2021 and construction funding is anticipated in Fiscal Year 2022–2023.

920 Grand Ave Transitional Residential Treatment Facility

As reported in Fiscal Year 2018–2019, cost estimates to convert the facility into a Transitional Residential Treatment facility ranged from \$4–\$5 million. Since that time, the Department of Health and Human Services has identified funds to cover most of the balance of the costs of the project through the current fiscal year budget savings. In the April 2019 budget hearings, the Marin County Board of Supervisors authorized the project to proceed as originally envisioned for a Transitional Residential Treatment facility. Staff will work to develop a project plan and schedule starting in Fiscal Year 2019–2020. This project was listed as a priority in the Marin County Fiscal Year 2020–2021 to Fiscal Year 2024–2025 Capital Improvement Plan (County of Marin 2020).

Irwin Creek Culvert Rehabilitation Project

This project, sponsored by the California Department of Transportation, includes culvert rehabilitation for five of the eight culverts that make up the Irwin Creek culvert system that crosses and runs adjacent to US-101 in San Rafael, between the southbound US-101 Central San Rafael off-ramp and the US-101 Linden Lane underpass. The stated purpose of the project is to preserve the structural integrity of the Irwin Creek culvert system to prevent highway segment failures. The project's Initial Study/Mitigated Negative Declaration, certified in November 2019, projected that construction would start in summer 2022 and conclude in fall 2023.

4.1.3.3 Updates to Plans and Policies

This section discusses updates to plans and policies that have jurisdiction over the project area.

~~San Rafael General Plan 2040 and Downtown Precise Plan Update~~

~~This includes the changes in land use proposed by the *San Rafael General Plan 2040*, as well as capital projects and new or modified policies relating to topics such as transportation, housing, resource management, and safety. It also includes the *Downtown Precise Plan*, now underway. The *Downtown Precise Plan* implements the community's vision to create opportunities for reinvestment and future development in the Downtown area that is feasible, predictable, and consistent with the community's priorities and aspirations. Growth forecasts for this plan include the addition of 2,200 residential units, 698,000 square feet of non-residential use, and 2,000 jobs. These projections are based on the addition of an assisted living facility, multiple residential and commercial developments, a hotel, and a public safety center. The City is presently working on the *San Rafael General Plan 2040* and released a draft for public review in October 2020. The *San Rafael General Plan 2040* is expected to be approved and implemented in 2021 or 2022.~~

Parks and Recreation Master Plan

In consultation with the Parks and Recreation Commission, the City will review the conditions of all parks and playground structures to understand deficiencies and where future improvements should be focused to meet current codes and Americans with Disabilities Act regulations. This assessment will become part of a Parks and Recreation Master Plan. This plan is set to receive planning/design funding in Fiscal Year 2020–2021.

Golden Gate Bridge, Highway and Transportation District Zero-Emission Bus Rollout Plan

The District adopted its Zero-Emission Bus Rollout Plan in May 2021. Implementation of this plan is expected to occur gradually, with 100 percent of the fleet required to consist of zero-emission buses by 2040. The plan outlines the schedule for replacing the District's existing fleet with zero-emission buses, the anticipated sources of funding for the rollout, and the plan for training District staff on protocols associated with the zero-emission fleet rollout.

4.1.4 Cumulative Impacts Analysis

The following discussion presents the cumulative impacts of the proposed project, organized by resource area. There is the potential for cumulative construction impacts where cumulative projects and the proposed project overlap in location or are adjacent (affecting the same resource/receptor but potentially at different times), or if they overlap in time (affecting the same resource/receptor at the same time).

4.1.4.1 Aesthetics

Cumulative impacts are those resulting from past, present, and reasonably foreseeable future actions, combined with the potential visual impacts of the proposed project. The combined visual effect of the proposed project and other development projects planned, recently in construction, or currently in construction would contribute to change in the visual character of the project area. Implementation of ~~*The City of San Rafael General Plan 2020*~~, *San Rafael General Plan 2040*, and

~~Downtown Vision~~ *Downtown San Rafael Precise Plan* will contribute to growth and redevelopment within and surrounding the project area, resulting in a cumulative visual impact. Once implemented, these plans will improve existing transportation corridors with repaving street surfaces and redeveloping parcels within and near the Downtown area. The proposed project will contribute to redevelopment in the area in addition to the approved Marin Academy Aquatic Center, 703 3rd Street, BioMarin/Whistlestop/EDEN Housing, AC Marriot Hotel, 815 B Street Mixed Use Project, BioMarin New Building, and 800 Mission Avenue Project, and future development of the existing transit center site, which would contribute to cumulative impacts.

The proposed project is driven by implementation of ~~The City of San Rafael General Plan 2020-2040~~ and the ~~San Rafael-Downtown San Rafael Precise Plan-Community Plan~~ to improve local access, create a transportation center in the Downtown area, create public plazas, and add connectivity for future land uses in the vicinity. All alternatives would contribute to the same cumulative visual impacts. Temporary construction activities associated with the proposed project would not result in a cumulatively considerable contribution to visual impacts because of their relatively short-term duration. The planned redevelopment in the Downtown area would alter the existing visual character of the area in the long term and would be visible from the project area by changing existing land uses. The proposed project would contribute to the addition of transportation infrastructure, landscaping, and plaza-like spaces. Roadway users, residents, businesses, and recreationists will see undeveloped areas within the landscape gradually transition and infill to mixed-use, commercial, and residential development, including the associated utility infrastructure needed to support it. Redevelopment and roadway improvements will also increase ambient atmospheric lighting and glare in the area by developing unlit areas with lit buildings, redeveloping areas with a higher number of light sources (e.g., replacing a one-story building with a multiple-story building), and adding reflective surfaces to areas that are currently undeveloped or not as densely developed. The proposed project would contribute incrementally to these cumulative impacts related to planned and proposed redevelopment in the area, but it would not substantially alter the existing visual landscape or degrade the visual quality of the project area, and is likely to result in beneficial cumulative impacts by creating public spaces that are landscaped and attractive streetscapes. In addition, it would comply with local regulations and policies that facilitate the redevelopment of these areas.

However, the 4th Street Gateway Alternative and Under the Freeway Alternative would both have a contribution would be potentially cumulatively considerable contribution to aesthetic impacts due to their potential to affect historic buildings and increase nuisance light and glare. Implementation of Mitigation Measure MM-CULT-CNST-1 (Prepare and Implement Relocation Plans) would relocate would ensure that historic buildings affected by the 4th Street Gateway Alternative and the Under the Freeway Alternative are relocated or, if relocation is not feasible, that the features of the buildings are retained in an onsite interpretive display commemorating the historical significance of the demolished building (refer to Mitigation Measure MM-CULT-CNST-3). historic structures affected by the 4th Street Gateway Alternative and the Under the Freeway Alternative, ensuring that the visual integrity of these structures are retained within the City, and Additionally, Mitigation Measure MM-AES-OP-3 (Apply Minimum Lighting Standards) would ensure lighting impacts are minimized, reducing the proposed project's contribution to cumulative effects on visual resources to a less-than-cumulatively considerable level with mitigation.

4.1.4.2 Air Quality

The cumulative geographic context for air quality is the San Francisco Bay Area Air Basin (SFBAAB). The cumulative geographic context for health risks is the immediate vicinity of the project area (i.e., within 1,000 feet). The cumulative geographic context for odors is the City.

Conflict With or Obstruct Implementation of the Applicable Air Quality Plan

As discussed in Section 3.2, the proposed project would support the goals of the Bay Area Air Quality Management District's (BAAQMD's) 2017 Clean Air Plan, would include all applicable control measures, and would not conflict with 2017 Clean Air Plan implementation. The purpose of the 2017 Clean Air Plan is to improve regional air quality in the air basin; therefore, the analysis and less-than-significant finding are inherently cumulative. Consequently, this impact would not be cumulatively considerable. For these reasons, the proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact related to air quality plan consistency. The cumulative impact would be ***less than significant***.

Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Project Region Is a Nonattainment Area for an Applicable Federal or State Ambient Air Quality Standard

As discussed in Section 3.2, BAAQMD has identified project-level thresholds to evaluate criteria pollutant impacts (Table 3.2-6 in Section 3.2). In developing these thresholds, BAAQMD considers levels at which project emissions are cumulatively considerable. As noted in BAAQMD's *California Environmental Quality Act Air Quality Guidelines*:

In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is unnecessary.

Consequently, exceedances of project-level thresholds would be cumulatively considerable, and the cumulative impact would be significant. As discussed in Section 3.2, Air Quality, the proposed project would not contribute a significant level of air pollution such that regional air quality within the SFBAAB would be degraded. Accordingly, the proposed project's contribution to a cumulative criteria pollutant emissions impact would be ***less than significant***.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

As discussed in Section 3.2, health risk impacts associated with construction and operation of the proposed project were evaluated in a Health Risk Assessment. According to BAAQMD's *California Environmental Quality Act Air Quality Guidelines*, combined risk and concentration levels should be determined from all nearby diesel particulate matter (DPM) and inhalable fine particle (PM_{2.5}) sources within 1,000 feet of a project site, respectively, and these combined risk and concentration levels should be compared to BAAQMD's cumulative thresholds.

The proposed project would generate DPM and PM_{2.5} during construction activities and from relocating diesel-powered buses. There are existing nearby DPM and PM_{2.5} sources within 1,000 feet of the project area, which, along with the proposed project, could contribute to a cumulative health risk for existing sensitive receptors adjacent to and within the project area (see Figure 3.2-1 in

Section 3.2). This is a potentially **significant** cumulative impact. BAAQMD data files and distance multipliers provided by BAAQMD were used to estimate the background impacts and concentrations for existing stationary, roadway, and rail sources. The combined risks from mitigated construction and operation of the proposed project and ambient sources are summarized in the tables below.

As shown in Tables 4-2 through 4-5, cancer risk and chronic non-cancer chronic risk would be below BAAQMD thresholds; however, the cumulative annual PM_{2.5} concentrations would exceed the BAAQMD threshold for all alternatives. It should be noted that the annual PM_{2.5} concentrations from background sources exceed the cumulative threshold without any project-related emissions.

Table 4-2. Maximum Mitigated Cumulative Health Risks for the Move Whistlestop Alternative

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Contribution from Existing Sources for Cancer Risk Scenario 1			
Stationary ^a	4.29	0.02	-
Roadway ^b	62.54	-	0.58
Rail ^b	1.31	-	0.004
Existing Total	68.14	0.02	0.59
Contribution from Proposed Project for Cancer Risk Scenario 1			
Project Construction (1.5-year exposure duration)	0.36	0.0005	0.05
Project Operations (28.75-year exposure duration)	2.55	-	-
Existing + Construction + Operations	71.05	-	-
Existing + Construction	-	0.02	0.64
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	No
Contribution from Existing Sources for Cancer Risk Scenario 2			
Stationary ^b	4.29	0.02	-
Roadway	44.10	-	0.95
Rail	1.11	-	0.001
Existing Total	49.50	0.02	0.95
Contribution from Proposed Project for Cancer Risk Scenario 2			
Project Operations (30-year exposure duration)	3.66	0.001	0.13
Existing + Operations	53.16	0.02	1.08
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	Yes

See Appendix **DB** for detailed modeling files.

^a For existing stationary sources, the values represent the highest possible risk values of any maximally affected receptor among any build alternative.

^b The maximum affected receptor for Scenario 1 and Scenario 2 are at different locations; therefore, the existing roadway and rail source values are different and are associated with the maximally affected receptor for each scenario.

^c No data were available for chronic values for roadway and rails sources.

^d All stationary sources were gasoline-dispensing facilities and do generate PM_{2.5} emissions.

Table 4-3. Maximum Mitigated Cumulative Health Risks for the Adapt Whistlestop Alternative

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Contribution from Existing Sources for Cancer Risk Scenario 1			
Stationary ^a	4.29	0.02	-
Roadway ^b	62.54	-	0.58
Rail ^b	1.31	-	0.004
Existing Total	68.14	0.02	0.59
Contribution from Proposed Project for Cancer Risk Scenario 1			
Project Construction (1.5-year exposure duration)	0.37	0.004	0.05
Project Operations (28.75-year exposure duration)	2.55	-	-
Existing + Construction + Operations	71.06	-	-
Existing + Construction	-	0.02	0.64
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	No
Contribution from Existing Sources for Cancer Risk Scenario 2			
Stationary ^b	4.29	0.02	-
Roadway	44.10	-	0.95
Rail	1.11	-	0.001
Existing Total	49.50	0.02	0.95
Contribution from Proposed Project for Cancer Risk Scenario 2			
Project Operations (30-year exposure duration)	3.66	0.001	0.13
Existing + Operations	53.16	0.02	1.08
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	Yes

See Appendix B-D for detailed modeling files.

^a For existing stationary sources, the values represent the highest possible risk values of any maximally affected receptor among any build alternative.

^b The maximum affected receptor for Scenario 1 and Scenario 2 are at different locations; therefore, the existing roadway and rail source values are different and are associated with the maximally affected receptor for each scenario.

^c No data were available for chronic values for roadway and rails sources.

^d All stationary sources were gasoline-dispensing facilities and do generate PM_{2.5} emissions.

Table 4-4. Maximum Mitigated Cumulative Health Risks for the 4th Street Gateway Alternative

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Contribution from Existing Sources for Cancer Risk Scenario 1			
Stationary ^a	4.29	0.02	-
Roadway ^b	34.06	-	0.57
Rail ^b	2.88	-	0.004
Existing Total	41.24	0.02	0.57

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Contribution from Proposed Project for Cancer Risk Scenario 1			
Project Construction (1.5-year exposure duration)	1.26	0.001	0.15
Project Operations (28.75-year exposure duration)	3.31	-	-
Existing + Construction + Operations	45.81	-	-
Existing + Construction	-	0.02	0.72
BAAQMD Cumulative Thresholds	100	10	0.8
Exceeds Thresholds?	No	No	No
Contribution from Existing Sources for Cancer Risk Scenario 2			
Stationary ^b	4.29	0.02	-
Roadway	34.06	-	0.96
Rail	2.88	-	0.001
Existing Total	41.24	0.02	0.96
Contribution from Proposed Project for Cancer Risk Scenario 2			
Project Operations (30-year exposure duration)	4.65	0.001	0.12
Existing + Operations	45.89	0.02	1.08
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	Yes

See Appendix **DB** for detailed modeling files.

^a For existing stationary sources, the values represent the highest possible risk values of any maximally affected receptor among any build alternative.

^b The maximum affected receptor for Scenario 1 and Scenario 2 are at different locations; therefore, the existing roadway and rail source values are different and are associated with the maximally affected receptor for each scenario.

^c No data were available for chronic values for roadway and rails sources.

^d All stationary sources were gasoline-dispensing facilities and do generate PM_{2.5} emissions.

Table 4-5. Maximum Mitigated Cumulative Health Risks for the Under the Freeway Alternative

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Contribution from Existing Sources for Cancer Risk Scenario 1			
Stationary ^a	4.29	0.02	-
Roadway ^b	44.54	-	0.97
Rail ^b	1.12	-	0.00
Existing Total	49.96	0.02	0.97
Contribution from Proposed Project for Cancer Risk Scenario 1			
Project Construction (1.5-year exposure duration)	2.18	0.002	0.27
Project Operations (28.75-year exposure duration)	3.84	-	-
Existing + Construction + Operations	55.98	-	-
Existing + Construction	-	0.02	1.24
BAAQMD Cumulative Thresholds	100	10	0.8

Source ^a	Maximum Affected Residential Receptor		
	Cancer Risk (per million)	Non-Cancer Hazard Index ^c	Annual PM _{2.5} Concentration (µg/m ³) ^d
Exceeds Thresholds?	No	No	Yes
Contribution from Existing Sources for Cancer Risk Scenario 2			
Stationary ^b	4.29	0.02	-
Roadway	34.06	-	0.96
Rail	2.88	-	0.001
Existing Total	41.24	0.02	0.96
Contribution from Proposed Project for Cancer Risk Scenario 2			
Project Operations (30-year exposure duration)	5.40	0.001	0.12
Existing + Operations	55.35	0.02	1.08
BAAQMD Cumulative Thresholds	100	10.0	0.8
Exceeds Thresholds?	No	No	Yes

See Appendix BD for detailed modeling files.

^a For existing stationary sources, the values represent the highest possible risk values of any maximally affected receptor among any build alternative.

^b The maximum affected receptor for Scenario 1 and Scenario 2 are at different locations; therefore, the existing roadway and rail source values are different and are associated with the maximally affected receptor for each scenario.

^c No data were available for chronic values for roadway and rails sources.

^d All stationary sources were gasoline-dispensing facilities and do generate PM_{2.5} emissions.

As shown in the tables above, each build alternative would be below the cancer risk and non-cancer chronic thresholds; however, each build alternative would exceed the BAAQMD cumulative threshold for annual PM_{2.5} concentrations. However, it should be noted that the annual PM_{2.5} concentrations for the existing background sources exceed BAAQMD's cumulative thresholds without the proposed project's contributions. Furthermore, the BAAQMD *California Environmental Quality Act Air Quality Guidelines* (BAAQMD 2017) state that if a project would exceed the project-level thresholds of significance, then the proposed project would result in a significant impact and would have a cumulatively considerable contribution. As discussed in Section 3.2, the proposed project's contributions of PM_{2.5} concentrations would be below the project-level thresholds for all project build alternatives. Accordingly, the contribution of the proposed project's emissions would not be cumulatively considerable. This impact would therefore be ***less than significant***.

Result in Other Emissions (Such as Those Leading to Odors) Adversely Affecting a Substantial Number of People

Each build alternative would result in less-than-significant odor impacts. Construction activities would generate odors from diesel exhaust, asphalt paving, and the use of architectural coatings and solvents, but activities would be temporary and would not result in nuisance odors that would violate BAAQMD's Regulation 7. In addition, future project activities are not associated with the operation of odor-generating facilities. For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative odor impact. The cumulative impact would be ***less than significant***.

4.1.4.3 Biological Resources

Given the proposed project's location in an urban area, the cumulative impacts analysis was limited to the immediate vicinity of the proposed build alternatives and Irwin Creek, immediately downstream of the project area. As discussed in Section 3.3, Biological Resources, the dominant land use in the project area is commercial development. Twenty-four~~five~~ projects have been proposed or are approved for construction in the immediate vicinity of the project area (Table 4-1). Past, current, and future projects that result in the loss of biological resources contribute to cumulative biological impacts. Construction of the proposed project would add to those cumulative impacts.

All build alternatives have the potential to affect special-status or non-special-status roosting bats, nesting migratory birds, protected wetlands, and native wildlife nursery sites. Impacts that result in the mortality of bats or migratory birds would contribute to the cumulative loss of populations of these animals. The cumulative loss of roosting and nesting habitat (which are also considered native wildlife nursery sites) would contribute to a general decline of these habitats in the project vicinity, resulting in the loss or displacement of wildlife that would have to compete for suitable habitats with existing adjacent populations. With Mitigation Measures MM-BIO-CNST-1: Conduct Environmental Awareness Training for Construction Employees, MM-BIO-CNST-2: Conduct Preconstruction Surveys for Bats and Implement Protective Measures, and MM-BIO-CNST-6: Conduct a Preconstruction Survey for Nesting Birds and Implement Protective Buffers Around Active Nests to avoid or minimize potential effects on roosting bats and migratory birds, the loss of structures that provide suitable bat roosting habitat and the loss of vegetation that provides suitable nesting habitat, when combined with other impacts on habitat and special-status species from other past, present, and future projects, would not be considerable.

The Under the Freeway Alternative would result in permanent and temporary losses of wetland (Irwin Creek), which would contribute to the cumulative loss of wetlands in the project vicinity. The Irwin Creek Rehabilitation Project would include work in the Irwin Creek channel to implement culvert improvements, temporarily affecting waters potentially subject to regulation by the U.S. Army Corps of Engineers, San Francisco Regional Water Quality Control Board, and California Department of Fish and Wildlife and contributing to cumulative biological impacts. Water quality impacts, such as increased turbidity and chemical runoff, could result from construction under all alternatives and could extend downstream of the immediate project area; however, implementation of water quality protection measures and construction site best management practices would avoid these impacts. Mitigation Measures MM-BIO-CNST-1, MM-BIO-CNST-3: Install Orange Construction Fencing Between the Construction Area and Adjacent Sensitive Biological Resources, MM-BIO-CNST-4: Conduct Periodic Biological Monitoring, and MM-BIO-CNST-5: Compensate for Temporary and Permanent Loss of Perennial Stream would minimize and mitigate potential effects on wetlands from the Under the Freeway Alternative and the contribution to cumulative impacts on wetlands would not be considerable.

4.1.4.4 Cultural Resources

The project is proposed in San Rafael's Downtown commercial district, an area where several past, present, and reasonably foreseeable projects have already occurred or would occur in the future. The cumulative projects generally constitute new development and transportation facility improvements. Some cumulative projects are within or adjacent to the boundaries of the project area, while others are dispersed throughout Downtown San Rafael, some more than 0.25 mile to the west of the project area.

Regarding built-environment historical resources, none of the cumulative projects would involve direct, physical changes to the ~~properties~~ individual built-environment resources within the project area. It is anticipated that the cumulative projects could result in changes to the settings of those built-environment historical resources, as well as resources near the project area from which the proposed project would be visible. However, these changes in setting would be minor in nature and would be consistent with the degree of urban development that has already occurred in the resources' setting across the 20th and early 21st centuries. The significance of any of the historical resources in the project area is not premised on it possessing an intact and cohesive visual or functional relationship with nearby properties. Likewise, and reciprocally, the significance of nearby offsite historical resources does not appear to be premised on the resource having an intact and cohesive visual or functional relationship with the project area. Such changes would not combine to result in a significant cumulative impact on individual built-environment historical resources.

Furthermore, the cumulative projects in combination with the project would not result in discernible changes to the East Downtown Core Historic District, which extends into the project area and contains buildings that would be demolished by the project. Only one cumulative project would also overlap with the East Downtown Core Historic District: the Fourth Street Signal System Improvements project. This project would replace existing street signals along the 4th Street corridor, which would involve upgrades to common, modern streetscape features that do not contribute to the significance of the East Downtown Core Historic District; the new signaling equipment would be similar in visual character to the equipment currently in place within the district. As a result, the Fourth Street Signal System Improvement project would not alter the defining characteristics of the East Downtown Core Historic District and would not combine with the proposed project to diminish the historic district's defining sense of concentration, linkage, and continuity in a manner that materially impairs the district's significance. Therefore, the impact would be **less than significant**. No mitigation is required.

The cumulative context for archaeological resources and human remains includes urban development projects and transportation and streetscape improvements occurring in or within 1,000 feet of the project area, which together could lead to ground-disturbing activities that could result in impacts on archaeological resources and human remains. The past, present, and reasonably foreseeable future projects within and surrounding the project area include projects that will require ground disturbance during project construction and therefore have the potential to affect archaeological resources and human remains. Taken together, the proposed project and the identified cumulative projects have the potential to result in an overall cumulative impact on archaeological resources and/or human remains.

The project area is considered sensitive for archaeological resources. Additionally, numerous archaeological sites including human burials have been recorded within 0.25 mile of the project area. Implementation of Mitigation Measures MM-CULT-CNST-4 through MM-CULT-CNST-7 recommend archaeological testing and monitoring, cultural resource training, and compliance with laws regarding human remains. These measures would reduce cumulative impacts of the proposed project on archaeological resources and human remains to less-than-significant levels.

With implementation of mitigation measures, the contribution from the proposed project to impacts on archaeological resources and human remains would be reduced to less-than-considerable levels. The impact would be **less than significant after mitigation**; therefore, the proposed project's contribution to the cumulative impact would be less than cumulatively considerable.

4.1.4.5 Energy

The cumulative geographic context for energy is the service area of Marin Clean Energy (MCE) and Pacific Gas and Electric Company (PG&E) (i.e., electric and natural gas service area), which comprises several counties in the north and east Bay Area, and the larger Northern California area, respectively.

Continued growth throughout MCE's and PG&E's service areas could contribute to ongoing increases in demand for electricity and natural gas. These anticipated increases would be countered, in part, as state and local requirements related to renewable energy become more stringent and energy efficiency increases. The extent to which cumulative development through 2025, the proposed project's buildout year, could result in the wasteful, inefficient, or unnecessary consumption of energy resources would depend on the specific characteristics of new development, which are not known at this time. As discussed previously, Senate Bill 100 obligates utilities to supply 100 percent carbon-free electricity by 2045; PG&E reached California's 2020 renewable energy goal 3 years ahead of schedule and is currently projected to meet the new SB 100 goal that calls for 60 percent renewable energy by 2030, also ahead of schedule. Similarly, MCE has outpaced the state in both its renewable and greenhouse gas (GHG)-free portfolio content. In addition, the Pavley standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025, thereby lowering the demand for fossil fuels. In May 2021, the District adopted its Zero-Emission Bus Rollout Plan, which outlines the schedule for replacing the District's existing fleet with zero-emission buses by 2040, the anticipated sources of funding, and the plan for training District staff on protocols associated with the zero-emission fleet rollout. In summary, it is anticipated that future energy users will become more efficient and less wasteful over time.

Similar to the proposed project, the cumulative projects would most likely include features that would reduce energy consumption and increase renewable energy generation. For these reasons, the proposed project in combination with past, present, and reasonably foreseeable future projects would not result in a significant cumulative impact related to the wasteful, inefficient, or unnecessary consumption of energy resources. The cumulative impact would be ***less than significant***. No mitigation is required.

4.1.4.6 Geology and Soils

Geology, Soils, and Seismicity

The proposed project, combined with past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact on geology and soils. In general, a project's potential impacts related to geology and soils are individual and localized, depending on the project site and underlying soils. Each project requires different levels of excavation, cut-and-fill work, and grading, which would affect local geologic conditions in different ways; therefore, the geographic context for geology and soils is site-specific. As each project would be required to complete a site-specific detailed geotechnical investigation as required by the California Building Code, the *Marin Countywide Plan*, the San Rafael Municipal Code, and ~~The City of San Rafael General Plan 2020, 2040~~, each project would be provided with site-specific design recommendations, which would reduce each project's impacts to a less-than-significant level. Similar seismic safety standards would also apply to the reasonably foreseeable future projects. For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result

in a significant cumulative geology and soils impact. The cumulative impact would be ***less than significant***. No mitigation is required.

Paleontological Resources

Because the geologic units present in the project area, Holocene alluvium, Holocene intertidal deposits, and the Franciscan Formation, have very low likelihood to contain significant paleontological resources, it is unlikely that there would be a cumulative impact on paleontological resources. As such, the proposed project, combined with past, present, and reasonably foreseeable future projects shown in Table 4-1 and on Figure 4-1, is unlikely to result in a cumulatively considerable contribution to a cumulative impact on paleontological resources. Impacts would be ***less than significant***.

4.1.4.7 Greenhouse Gas Emissions

GHG emissions and climate change are exclusively cumulative impacts; there are no non-cumulative GHG emissions impacts from a climate change perspective. Climate change is the result of cumulative global emissions. No single project, when considered in isolation, can cause climate change because a single project's emissions are not enough to change the radiative balance of the atmosphere. Because climate change is the result of GHG emissions and GHGs are emitted by innumerable sources worldwide, global climate change will have a significant cumulative impact on the natural environment as well as human development and activity. As such, GHGs and climate change are cumulatively considerable, even though the contribution may be individually limited. California Air Resources Board and BAAQMD methodology and thresholds are thus cumulative in nature. The proposed project would be consistent with statewide targets and with adopted plans and policies for reducing GHGs; therefore, impacts from the proposed project would be ***less than significant***.

4.1.4.8 Hazards and Hazardous Materials

The cumulative geographic context for hazards and hazardous materials is the project area and nearby properties in the immediate vicinity. Similar to the proposed project, reasonably foreseeable projects could result in construction impacts related to the routine transport, disposal, or handling of hazardous materials; intermittent use and transport of hazardous materials commonly used for construction; and transport of affected soil to and from sites. However, hazardous waste generated during construction of any project would be collected, properly characterized for disposal, and transported in compliance with regulations such as those described under Section 3.8.1.1, Regulatory Setting. Additionally, implementation of Mitigation Measure MM-HYD-CNST-1, Prepare and Implement Stormwater Pollution Prevention Plan, would contain BMPs to minimize potential impacts related to hazardous materials during construction. Hazardous materials are strictly regulated by local, state, and federal laws. Specifically, these laws are designed to ensure that hazardous materials do not result in a gradual increase of toxins to the environment. For each of the reasonably foreseeable projects under consideration, various project-specific measures (such as those identified for the proposed project) would be implemented as a condition of development approval to mitigate risks associated with exposure to hazardous materials. For these reasons, the proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative hazards or hazardous materials impact. The cumulative impact of the proposed project on hazards and hazardous materials would be ***less than significant***.

4.1.4.9 Hydrology and Water Quality

Future development within the San Rafael Creek Watershed would increase stormwater runoff and erosion runoff, which would increase the amount and rate of surface water runoff throughout the watershed. Cumulative impacts on water quality could occur due to erosion and sedimentation and/or from the release of nonpoint-source pollutants associated with cumulative development in Marin County and the City of San Rafael.

When the effects of the proposed project on water quality are considered in combination with the overall proposed project and potential effects of other cumulative projects, there would be the potential for cumulative impacts on surface and groundwater quality. The geographic area is fully developed. Buildout of cumulative projects would involve redevelopment of existing developed sites that contain substantial impervious surfaces. The incremental water quality impact contribution from implementation of the proposed project would be minor. The combined effects on water quality from the proposed project and other projects could result in a cumulatively significant impact. However, all future development projects would be required to comply with laws and regulations pertaining to water resources, including development of stormwater pollution prevention plans, water quality management plans, and source control/treatment control best management practices to prevent water quality degradation and reduce potential impacts to the maximum extent feasible.

Potential sources of flooding near the project area include San Rafael Creek and San Rafael Bay, runoff generated on site, and offsite runoff that passes through the project area. It is also anticipated that flooding and storm surge will likely become more intense in the coming years as a result of climate change. The system of onsite controls, as planned as required by existing regulations, serves to regulate flows off site, minimizing the proposed project's contribution to the volume and rate of downstream flow. The proposed project has been designed to be protected from flooding up to and including the 100-year flood event. Notwithstanding, cumulative development within the project area could increase the volume and rate of stormwater runoff. Such increases could cause localized flooding if the storm drainage capacity is exceeded or conveys excess flows to areas where flood storage may not be available. Generally, cumulative projects would occur in developed areas with existing impervious surfaces and would not be expected to substantially increase the amount of new impervious surfaces. All new development would be required to address stormwater management in a manner that ensures that flooding as a result of storm surges would not increase and flood flows would not be redirected to other areas not currently prone to flooding. All cumulative projects would be required to include stormwater management features, such as Low-Impact Development measures into project designs, to reduce flows to pre-project conditions.

Developments are required by the state and City to maximize hydrologic and water quality mitigation efforts and are reviewed by other jurisdictions for hydrologic impacts. Additionally, implementation of Mitigation Measure MM-HYD-CNST-1 would contain BMPs to minimize the proposed project's potential construction impacts related to water quality. With implementation of BMPs and compliance with applicable regulations pertaining to hydrology and water quality, the proposed project would not have cumulatively considerable impacts related to flooding, stormwater drainage, or water resources within the City. Impacts would be ***less than significant***.

4.1.4.10 Land Use and Planning

The proposed project would not conflict with any applicable land use regulations, land use policies, or land use planning documents. Although the proposed project involves improvements to roadway intersections and bicycle and pedestrian facilities, these improvements would occur in the existing right-of-way and parcels within Downtown San Rafael and would not include construction of any new roadways or other substantial infrastructure improvements that would restrict access or otherwise divide an established community. Therefore, the proposed project would not contribute toward any cumulative impacts in these regards. For these reasons, the proposed project would not contribute to a cumulative impact or result in land use conflicts. The proposed project would not affect land use policies; therefore, taken with past, present, and reasonably foreseeable projects, impacts are considered not cumulatively considerable and ***less than significant***, and no mitigation is required.

4.1.4.11 Noise and Vibration

The geographic scope of analysis for cumulative noise and vibration construction impacts, as well as stationary noise sources, encompasses reasonably foreseeable projects within approximately 1,000 feet of the project area. Beyond 1,000 feet, the contributions of noise from other projects would be greatly attenuated through both distance and intervening structures, and their contribution would be expected to be minimal.

Construction

Move Whistlestop and Adapt Whistlestop Alternatives

The nearest major planning projects in the project area are 703 3rd Street and the BioMarin/Whistlestop/EDEN Housing project. Other projects in the vicinity of the project area include bicycle connection between 2nd Street and 3rd Street, Third Street Rehabilitation: Miracle Mile to Lindaro Street, and 2nd Street intersection improvements. Construction of these projects could overlap with construction of the chosen build alternative. As described Section 3.11, Noise, for the Move Whistlestop and Adapt Whistlestop Alternatives, City daytime noise limits are likely to be exceeded at the nearest receptors during construction. These build alternatives would be near the major planning projects identified above, which may produce noise levels during construction that would be cumulatively higher if done during project construction. For the Move Whistlestop and Adapt Whistlestop Alternatives, this would contribute to a **significant** cumulative impact.

Therefore, construction of the Move Whistlestop and Adapt Whistlestop Alternatives would potentially contribute to a significant cumulative impact. Mitigation Measure MM-NOI-CNST-1 would reduce this impact to ***a less-than-significant level with mitigation***.

4th Street Gateway and Under the Freeway Alternatives

For the 4th Street Gateway or Under the Freeway Alternatives, heavy equipment would not exceed City construction noise limits during daytime hours. Nighttime work may be required during construction but only for utility work. As such, it is unlikely that the proposed project in combination with other planned projects would contribute to a significant cumulative impact for these two build alternatives, resulting in a less-than-significant impact.

Therefore, cumulative impacts for the 4th Street Gateway and Under the Freeway Alternatives would be *less than significant*. No mitigation is required.

Vibration

All Build Alternatives

Groundborne vibration from non-impact equipment is only perceptible within a localized area around the source of the vibration, generally at a distance of less than 50 feet. Vibration effects from the proposed project are not likely to combine with other planned projects in the area. As such, vibration from the proposed project is not expected to result in a cumulative impact. Impacts would be *less than significant*.

Vehicle Traffic

All Build Alternatives

The cumulative impacts analysis for operational noise focuses on changes in traffic patterns. Noise level estimates were based on average traffic volumes for p.m. peak-hour turning movement volumes for adjacent local roadways. A logarithmic comparison of traffic volumes among all four build alternatives was used to develop noise level increase values for roadway segments adjacent to Hetherton Street. The traffic noise analysis indicates that the redistribution of traffic under all build alternatives would not result in a noticeable increase in noise levels. The increase would be less than 1 decibel on nearly all segments, except for Hetherton Street between 2nd Street and 3rd Street, where there are no sensitive uses. For these reasons, vehicle traffic in combination with other projects is not expected to produce noise levels that would be cumulatively significant. Impacts would be *less than significant*.

Bus Operations

All Build Alternatives

The existing transit center's bus operations would be transferred to the new transit facility, and the proposed transit center is expected to generate a similar level of noise from buses and transportation operations. The proposed project is in an urban setting with a high level of existing ambient noise, and the increase in ambient noise introduced by the transit center is not expected to be noticeable. For these reasons, operation of the proposed project in combination with other projects is not expected to produce noise levels that would be cumulatively significant. Impacts would be *less than significant*.

4.1.4.12 Population and Housing

Direct Population Growth

The proposed project under all four alternatives does not propose any new housing units and would not directly induce population growth. Because the proposed project would not involve the construction of residential housing units and would not directly introduce any new residents, the proposed project falls within ABAG projections for the City and Marin County. Therefore, the proposed project would not result in a cumulatively considerable impact. The cumulative impact would be *less than significant*. No mitigation is required.

Indirect Population Growth

Indirect population growth is not anticipated because construction work would be temporary, construction workers would be drawn from the construction employment labor force already residing in San Rafael and the surrounding communities, and the proposed project would be considered infill development and would not require the construction of any new roads. For these reasons, the proposed project under all four build alternatives, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant indirect population growth as a result of expansion of infrastructure. The cumulative impact would be ***less than significant***. No mitigation is required.

4.1.4.13 Public Services and Recreation

The cumulative geographic context for public services and recreation (i.e., police and fire protection services, public school facilities, recreational facilities, or other public service facilities) is the City of San Rafael. A project that would result in unanticipated population growth (e.g., population growth beyond existing projections) may generate a corresponding increase in demand for public services, such as police and fire protection services, public school facilities, recreational facilities, or other public service facilities, that would exceed the existing capacities of these public services. The proposed project would not directly induce population growth in the City because the existing workforce capacity in the City and Marin County would be sufficient to serve the new transit center and no new residents would be added. Therefore, the proposed project would not result in a significant contribution to a cumulative increase in demand for public services and recreational facilities. The proposed project would not be anticipated to contribute to the accelerated deterioration of existing public service and recreational facilities and would not require new or physically modified facilities to be built. This impact would be ***less than significant***.

4.1.4.14 Transportation

The cumulative geographic context for transportation is the project area and the study area reviewed in the Transportation Summary Report. The nearest major planning projects in this geographic area are the 703 3rd Street Project and the BioMarin/Whistlestop/EDEN Housing Project. Capital improvement projects in the vicinity of the project area include a bicycle connection between 2nd Avenue and 3rd Avenue, Third Street Rehabilitation: Miracle Mile to Lindaro Street, and 2nd Street intersection improvements. As described in Section 3.14, Transportation, all of the build alternatives would have the potential to interfere with traffic hazards, circulation, and emergency response during the construction period; however, these impacts would be temporary, intermittent, and less than significant. As such, coordination with regional transit agencies identified in the Construction Traffic Control Plan would make it unlikely that the proposed project, in combination with other planned projects in the area, would considerably contribute to a significant cumulative impact, resulting in a ***less-than-significant*** impact.

4.1.4.15 Tribal Cultural Resources

The project is proposed in San Rafael's Downtown commercial district, an area where several past, present, and reasonably foreseeable projects have already occurred or would occur in the future. The cumulative projects generally constitute new development and transportation facility improvements. Some cumulative projects are within or adjacent to the boundaries of the project area, while others are dispersed throughout Downtown San Rafael, some more than 0.25 mile to the west of the project area.

The cumulative context for tribal cultural resources includes urban development projects and transportation and streetscape improvements occurring in or within 1,000 feet of the project area, which together could lead to ground-disturbing activities that could result in impacts on tribal cultural resources. The past, present, and reasonably foreseeable future projects within and surrounding the project area include 11 projects that will require ground disturbance during project construction and therefore have the potential to affect tribal cultural resources. Taken together, the proposed project and the identified cumulative projects have the potential to result in an overall cumulative impact on tribal cultural resources.

The project area is considered sensitive for tribal cultural resources. Additionally, numerous archaeological sites, including human burials, have been recorded within 0.25 mile of the project area. Implementation of Mitigation Measures MM-CULT-CNST-4 through MM-CULT-CNST-7 would reduce cumulative impacts of the proposed project on tribal cultural resources to ***less-than-significant levels with mitigation***.

4.1.4.16 Utilities and Service Systems

The cumulative geographic contexts for utilities and service systems are the service territories of the utility providers. Over time, growth throughout the City will result in increased demand for water, wastewater treatment, solid waste disposal, natural gas, electricity, and telecommunications. Construction and the operation of proposed cumulative projects including the future mixed-use development at the exiting transit center site have the potential to induce growth and increase need for utilities. However, as part of the local entitlement process, projects are required to demonstrate ability to provide and obtain adequate utilities for their projects. Although the proposed project would aid the circulation of transit Downtown for commuters, the proposed project would not directly induce growth within the City. The proposed project would replace the existing transit center nearby to improve transit connectivity and would maintain the same number of employees and bus service. Therefore, the majority of increased usage of utilities would occur during construction and would be temporary. The increased usage of utilities compared to the existing transit center, if any, would be minimal. Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to impacts on water supply and wastewater, stormwater, or solid waste generation. Impacts would be ***less than significant***.

4.1.4.17 Wildfire

Table 4-1 lists the related projects that were considered in the cumulative impact analyses. As the proposed project would be replacing the existing transit center and would not increase development in the City, the incremental effects of the proposed project related to wildfire would be minimal. The proposed project would be required to comply with applicable requirements set forth by the Marin County Operational Area Emergency Response Plan, San Rafael Fire Department, San Rafael Police Department, and adherence to county and City regulations and hazard plans. In addition, no off-site improvements would be required that would exacerbate fire risks. Therefore, the proposed project would not result in incremental effects related to wildfire that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. The proposed project would not result in cumulatively considerable impacts related to or from wildfires. Impacts would be ***less than significant***.