APPENDIX 3.18-B: CUMULATIVE TRANSPORTATION PLANS AND PROJECTS LISTS

Table 1 California High-Speed Rail Projects List

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
California High-Speed Rail Project, San Jose to Merced Project Section	Construction of the high-speed rail alignment connecting San Jose Diridon Station and Gilroy to the Central Valley.	New transportation facility (high-speed rail)	Environmental compliance documentation in progress (2020)	Transportation, air quality, noise and vibration, biological and aquatic resources, safety and security, land use, agricultural farmland, parks and recreational resources, aesthetics and visual quality, cultural resources	Santa Clara County, San Benito County, Merced County, Madera County, City of San Jose, City of Morgan Hill, City of Gilroy, City of Los Banos
California High-Speed Rail Project, Merced to Fresno Project Section: Central Valley Wye	Construction of the high-speed rail alignment that connects the San Jose to Merced Project Section to the west and the north-south portion of the Merced to Fresno Project Section to the east.	New transportation facility (high-speed rail)	Draft Supplemental EIR published in May 2019 Draft Supplemental EIR/EIS published in September 2019	Noise and vibration, socioeconomics and communities, agricultural farmland, aesthetics and visual quality, cultural resources	Merced County, Madera County, City of Chowchilla, Fairmead

EIR = environmental impact report
EIS = environmental impact statement

Table 2 City and County of San Francisco Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Plan Bay Area[1]	Plan Bay Area 2040 is a limited and focused update that builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic and financial trends from the last four years.	Regional transportation plan, includes specific projects	Final EIR published in July 2017.	Transportation, land use	Approximately 4.4 million acres that includes nine counties that may be aggregated geographically into four subareas: North Bay (Marin, Napa, Solano, and Sonoma Counties); East Bay (Alameda and Contra Costa Counties); South Bay (Santa Clara County); and the West Bay (San Francisco and San Mateo Counties).
San Francisco Transportation Plan 2040[2]	The San Francisco Transportation Plan is the blueprint for San Francisco's transportation system development and investment over the next 30 years. The San Francisco Transportation Plan brings all transportation modes, operators, and networks together, with a view to improving travel choices for all users.	Countywide transportation plan	Final Report published December 2013	Transportation, land use	County of San Francisco
Metropolitan Transportation Commission Transportation Improvement Program 2015[3]	The TIP is the region's comprehensive four-year spending plan that lists all transportation projects and programs for which any action by a federal agency is expected, including major regional projects with no federal funding. The TIP is financially constrained by year, meaning that the amount of dollars committed to the projects must not exceed the amount of dollars estimated to be available. MTC must adopt a new TIP at least once every four years, and the TIP must also be approved by the Federal Highway Administration and the Federal Transit Administration.	Transportation plan, includes specific projects	Draft published June 17, 2016	Transportation, air quality	County of San Francisco

[1] Association of Bay Area Governments and Metropolitan Transportation Commission. 2017. *Plan Bay Area 2040 Final Environmental Impact Report.* Available: http://2040.planbayarea.org/cdn/farfuture/j4rYVyyr8XsHyZRCy6OJV2NwxTI56KqFLqcb6qX8-pI/1499723588/sites/default/files/2017-07/PBA2040-FEIR-07.10.17_0.pdf. Accessed: January 17, 2019.

[2] San Francisco County Transportation Authority. 2013. *San Francisco Transportation Plan 2040 Final Report.* Available: https://www.sfcta.org/sites/default/files/content/Planning/SFTP2/FinalReport/SFTP_final_report.pdf. Accessed: January 17, 2019.

[3] Metropolitan Transportation Commission. 2016. *Draft 2017 Transportation Improvement Program.* Available: https://mtc.ca.gov/our-work/fund-invest/transportation-improvement-program-tip/draft-2017-tip. Accessed: January 17, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Muni Forward[4]	Muni Forward aims to make getting around San Francisco more reliable and safer. Through improvements to Muni service and transit projects, Muni Forward makes upgrades where they are needed most to provide excellent transit service.	Transit capital improvement program – expansion, route changes, and service improvements. Includes lane modifications, traffic signal and stop sign changes, transit stop changes, parking and turn restrictions, and pedestrian improvements.	Implementation workbook last updated April 2015	Transportation	40 miles of streets in San Francisco
Central Subway Project[5]	The Central Subway Project will improve public transportation in San Francisco by extending the Muni Metro T Third Line through SoMa, Union Square and Chinatown. By providing a direct, rapid transit link between downtown and the existing T Third Line route on 3rd Street, the Central Subway will vastly improve transportation to and from some of the city's busiest, most densely populated areas.	Light rail transit project, 1.7-mile extension of Muni's T Third Line	Predicted completion 2019	Transportation	Third Line trains will travel mostly underground from the 4th Street Caltrain Station to Chinatown, bypassing heavy traffic on congested 4th Street and Stockton Street. Four new stations will be built along the 1.7-mile alignment: ▪ 4th and Brannan Station at 4th and Brannan Streets (street level) ▪ Yerba Buena/Moscone Station at 4th and Folsom Streets (subway) ▪ Union Square/Market Street Station on Stockton Street at Union Square (subway) ▪ Chinatown Station at Stockton and Washington Streets (subway)
28 19th Avenue Rapid Project[6]	Together, the 28 19th Avenue and 28R 19th Avenue carry about 15,000 customers every day, making the corridor one of Muni's busiest. As part of Muni Forward, SFMTA is proposing transit priority and pedestrian safety improvements along the route that will make it safer to walk, increase the frequency and reliability of service, and enhance the customer experience—on and off the bus. This includes optimizing bus stop locations, increasing bus stop spacing, and adding pedestrian and transit bulbs along 19th Avenue.	Transit priority and pedestrian safety improvements	Project under environmental review	Transportation	Bus Routes and Rail Lines: M Ocean View 28 19th Avenue 28R 19th Avenue Rapid Neighborhoods: Lakeshore Outer Sunset Parkside Outer Richmond Inner Richmond
Geneva Avenue and Visitacion Valley Multimodal Improvement Project[7]	The Geneva-Harney BRT line is a proposed service envisioned to provide existing and future neighborhoods along the San Mateo–San Francisco County border with a bus connection to the border area's key regional transit system hubs. The corridor extends from Balboa Park BART/Muni Station in the west to Hunters Point Shipyard in the east, including a connection to the Bayshore Caltrain Station. The study conducts conceptual feasibility planning and design work and initiates a cross-jurisdictional, community consensus-building process to prepare the bus project for the environmental clearance phase.	Transit priority and pedestrian safety improvements	Completed in 2015	Transportation	The corridor extends from Balboa Park BART/Muni Station in the west to Hunters Point Shipyard in the east, including a connection to the Bayshore Caltrain Station.

[4] San Francisco Municipal Transportation Agency. 2015. *Muni Forward Implementation Workbook*. Available: https://www.sfmta.com/sites/default/files/reports-and-documents/2018/04/muni_forward_implementation_workbook_v16.3_web.pdf. Accessed: January 17, 2019.

[5] San Francisco Municipal Transportation Agency. 2019. *Central Subway Project.* Available: https://www.sfmta.com/projects/central-subway-project. Accessed: January 17, 2019.

[6] San Francisco Municipal Transportation Agency. 2019. *28 19th Ave Rapid Project.* Available: https://www.sfmta.com/projects/28-19th-avenue-rapid-project. Accessed: January 17, 2019.

[7] San Francisco County Transportation Authority. 2019. *Geneva-Harney Bus Rapid Transit Feasibility Study*. Available: https://www.sfcta.org/geneva-harney-bus-rapid-transit-feasibility-study. Accessed. January 17, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
5 Fulton Rapid Project[8]	Muni is working on multiple fronts to make getting around San Francisco safer, more reliable, and more comfortable for our customers. As part of this effort, we're creating a Rapid Network that will improve the frequency and reliability on lines and routes that carry 70% of customers, including the 5 Fulton. Several changes are proposed along the 5 Fulton corridor. These changes will build on those already implemented as part of the 5L Fulton Limited pilot project, including optimizing bus stop locations, adding transit bulbs and right turn pockets, replacing all-way stop-controlled intersections with traffic signals or traffic calming measures, adding pedestrian bulbs and ladder-style crosswalks, and more.	Transit priority and pedestrian safety improvements	Project under environmental review	Transportation, air quality	Various locations along Fullerton and McAllister, starting at Ashbury and going east with improvements ending at Larkin.
9 San Bruno Rapid Project[9]	The 9 San Bruno Rapid Project includes transit and safety improvements along 11th Street and Bayshore Boulevard. With this project, thousands of Muni riders will have a quicker, more reliable ride, with a safer space to get on and off the bus. Construction was completed in March 2017 on several transit bulbs and transit islands to improve Muni reliability, reduce delay, and enhance safety and accessibility.	Transit priority and pedestrian safety improvements	Project completed	Transportation, community impact	Various projects along 9 San Bruno bus stops
22 Fillmore Transit Priority Project[10]	The project will provide transit and streetscape improvements for the southeastern portion of the 22 Fillmore route along 2.2 miles of 16th Street, including: ▪ Dedicated transit lanes ▪ Sidewalk bulbs and boarding islands at transit stops that speed up boarding and improve safety ▪ New traffic and accessible pedestrian signals ▪ Removing 3 bus stops in each direction to reduce travel time ▪ Updated bus shelters ▪ Approximately 200 new trees and additional sidewalk landscaping	Transit priority and pedestrian safety improvements	Construction to be completed in 2020	Transportation	Mission, South of Market, and Potrero Hill neighborhoods
30 Stockton Transit Priority Project[11]	The 30 Stockton is one of Muni's busiest routes, serving about 28,000 customers every day. As part of Muni Forward, SFMTA is proposing transit priority and pedestrian safety improvements along the route that will make it safer to walk, increase the frequency and reliability of service, and enhance the customer experience—on and off the bus. Project segments on the route include Columbus, Stockton, North Point, Van Ness and Chestnut.	Transit priority and pedestrian safety improvements	Project under environmental review	Transportation	Chinatown, North Beach, Russian Hill neighborhoods
7 Haight Noriega Rapid Project[12]	As part of Muni Forward, SFMTA is implementing pedestrian safety and transit reliability improvements along the 7 Haight/Noriega route between Stanyan and Laguna, including transit and pedestrian bulbs, traffic signals, right turn pockets and stop consolidation.	Transit priority and pedestrian safety improvements	Project under environmental review	Safety and security, transportation	Haight Ashbury

[8] San Francisco Municipal Transportation Agency. 2019. *5 Fulton Rapid Project*. Available: https://www.sfmta.com/projects/5-fulton-rapid-project. Accessed: January 18, 2019.
[9] San Francisco Municipal Transportation Agency. 2019. 9 San Bruno Rapid Project. Available: https://www.sfmta.com/projects/9-san-bruno-rapid-project. Accessed: January 18, 2019.
[10] San Francisco Municipal Transportation Agency. 2019. 22 Fillmore Transit Priority Project. Available: https://www.sfmta.com/project-updates/summer-2017-update-22-fillmore-transit-priority-project. Accessed. January 18, 2019.
[11] San Francisco Municipal Transportation Agency. 2019. 30 Stockton Transit Priority Project. Available: https://www.sfmta.com/projects/30-stockton-transit-priority-project. Accessed: January 18, 2019.
[12] San Francisco Municipal Transportation Agency. 2019. 7 Haight Noriega Rapid Project. Available: https://www.sfmta.com/projects/7-haight-noriega-rapid-project. Accessed: January 18, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Octavia Boulevard Enhancement Project[13]	The Octavia Boulevard Enhancement Project is a series of capital projects, guided by the Market-Octavia Area Plan, to make the boulevard and surrounding streets safer, more pedestrian-friendly, and better at serving multiple users. After years of engaging the community to confirm priorities, there are a handful of streetscape upgrades in various stages of design and implementation, with some near-term improvements completed in 2015/2016.	Traffic safety and circulation improvements	Project under environmental review	Transportation, safety and security	South of Market and Western Addition neighborhoods
San Bruno Avenue Multimodal Improvement Project[14]	The San Bruno Avenue Multimodal Improvement Project was approved by the SFMTA Board of Directors in Fall 2016 after extensive community outreach. View project details for intersections on San Bruno Avenue between Arleta Boulevard and Silver Avenue. The first phase of construction work has been completed in August 2017, which included pedestrian safety, transit priority and parking modifications. The project extended bus zones to accommodate longer 9R San Bruno Rapid and 8/8AX Bayshore buses to help buses travel more smoothly along the corridor, serving 42,000 daily Muni riders.	Pedestrian safety, transit priority and parking management improvements	Construction scheduled to begin in early winter 2019	Transportation	Intersections on San Bruno Avenue between Arleta Boulevard and Silver Avenue.
J Church Rapid Project[15]	Part of Muni Forward projects and planning efforts to create a safer, more reliable experience on Muni. Aimed to improve transit stops, support increased Muni service and reengineer city streets to better organize traffic.	Transit priority and pedestrian safety improvements	Part of the Muni Transportation 2030 Program. To be completed by 2022	Transportation	San Francisco
L Taraval Rapid Project[16]	In response to numerous collisions and reported safety concerns, temporary enhancements and community engagement are currently underway to make Taraval better for everyone who depends on it, including the Muni riders who make 30,000 trips on the L Taraval each day. This is the first step toward much-needed rehabilitation on Taraval Street that will replace infrastructure like the worn rails, overhead wires, water and sewer lines, as well as repave the entire street beginning in 2019.	Transit priority and pedestrian safety improvements	Construction to occur from 2019–2021	Transportation	Outer Sunset, Parkside, and Inner Sunset neighborhoods along Taraval Street
Geary BRT[17]	The Geary BRT project includes a full suite of design treatments to help the City achieve safer streets and reach its goal of zero traffic deaths by 2024, referred to as Vision Zero. Design treatments would slow down through traffic and turning cars where there is frequent speeding and make crossings safer by shortening crossing distances and increasing the visibility of people walking.	Transit priority and pedestrian safety improvements	Final EIS published June 2018	Transportation	Geary bus routes
Van Ness Improvement Project[18]	Major upgrades are underway on Van Ness Avenue. This massive civic improvement project is bringing San Francisco its first Bus Rapid Transit system, a much-needed and globally proven solution to improve transit service and address traffic congestion on Van Ness Avenue, a major north-south arterial. To maximize the benefits during construction, the project also includes extensive utility maintenance, civic improvements and safety enhancements that will revitalize this historic corridor.	BRT system	To be completed in 2021	Transportation	Marina, Nob Hill, Pacific Heights, Russian Hill, and South of Market neighborhoods

[13] San Francisco Municipal Transportation Agency. 2019. *Octavia Boulevard Enhancement Project.* Available: https://www.sfmta.com/projects/octavia-boulevard-enhancement-project. Accessed: August 1, 2019.
[14] San Francisco Municipal Transportation Agency. 2019. *San Bruno Ave Multimodal Improvement Project.* Available: https://www.sfmta.com/projects/san-bruno-ave-multimodal-improvement-project. Accessed: December 20, 2019.
[15] San Francisco Municipal Transportation Agency. 2019. *J Church Rapid Project.* Available: https://www.sfmta.com/projects/j-church-improvement-project. Accessed: December 1, 2019.
[16] San Francisco Municipal Transportation Agency. 2020. *L Taraval Rapid Project.* Available: https://www.sfmta.com/projects/l-taraval-rapid-project. Accessed: March 1, 2020.
[17] San Francisco County Transportation Authority. 2019. *Geary Corridor Bus Rapid Transit.* Available: https://www.sfcta.org/geary-corridor-bus-rapid-transit-home. Accessed: January 18, 2019.
[18] San Francisco Municipal Transportation Agency. 2019. *Van Ness Improvement Project.* Available: https://www.sfmta.com/projects/van-ness-improvement-project. Accessed: January 18, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
San Francisco Congestion Management Program 2015[19]	The San Francisco Congestion Management Program is a biennial program conducted in accordance with state law to monitor congestion and adopt plans for mitigating traffic congestion that falls below certain thresholds.	Congestion management program	Adopted December 15, 2015	Transportation	San Francisco
San Francisco Bicycle Plan[20]	The San Francisco Bicycle Plan presents a guideline for the City to provide the safe and attractive environment needed to promote bicycling as a transportation mode.	Bicycle transportation plan	Adopted in 2009	Transportation	Various locations in the Bay Area
San Francisco Better Streets Plan[21]	The Better Streets Plan provides a blueprint for the future of San Francisco's pedestrian environment. It describes a vision, creates design guidelines, and identifies next steps to create a truly great pedestrian realm.	Transportation plan	Adopted in December 2010	Transportation	Various streets in San Francisco
Bayview Hunters Point Neighborhood Transportation Plan[22]	The Bayview Hunters Point NTP is a community-based study of transportation needs and priorities in the Bayview Hunters Point neighborhood of San Francisco. The Transportation Authority led the NTP, in cooperation with City agencies and funding partners.	Transportation plan	Adopted in 2010	Transportation	Hunters Point neighborhood
Western South of Market Neighborhood Transportation Plan[23]	The Western South of Market NTP addresses existing needs and supports the implementation of the land use changes envisioned in the recent Western SoMa Community Plan by advancing high-priority transportation improvements that can be implemented in the short term.	Transportation plan	Adopted in March 2012	Transportation	The recommended improvements, which have been developed to conceptual design, include traffic calming and pedestrian improvements to the alleys of Minna, Natoma, and Ringold Streets and signalized mid-block crossings of 7th and 8th Streets.
Caltrain Peninsula Corridor Electrification Project[24]	The PCEP is a key component of the Caltrain Modernization program. The PCEP would electrify the Caltrain Corridor from San Francisco's 4th and King Street Caltrain Station to approximately the Tamien Caltrain Station, convert diesel-hauled to Electric Multiple Unit trains, and increase service up to six Caltrain trains per peak hour per direction. Operating speed will be up to 79mph, which is what it is today.	Transit improvements	To be in service in January 2022	Transportation, energy, public utilities, air quality	From San Francisco's 4th and King Street Caltrain Station to approximately the Tamien Caltrain Station,
Caltrain Communications Based Overlay Signal System Positive Train Control Project[25]	Caltrain is currently working on the Caltrain CBOSS PTC Project to develop a new advanced signal system. The Caltrain CBOSS PTC Project will meet two specific criteria: Meet the Federal mandate to implement PTC by 2015; and Increase system capacity to allow for future increases in ridership demand.	Transit improvements	In service	Transportation	Caltrain corridor between San Jose and San Francisco

[19] San Francisco County Transportation Authority. 2015. *2015 Congestion Management Program.* Available: https://www.sfcta.org/CMP-archive. Accessed: January 18, 2019.
[20] City and County of San Francisco. 2009. *The San Francisco Bicycle Plan* Available: https://sfgov.org/bac/san-francisco-bicycle-plan. Accessed: January 18, 2019.
[21] Better Streets San Francisco. 2010. *Better Streets Plan.* Available: https://www.sf-planning.org/ftp/BetterStreets/proposals.htm#Final_Plan. Accessed: January 18, 2019.
[22] San Francisco County Transportation Authority. 2010. *Bayview Hunters Point Neighborhood Transportation Plan.* Available: https://www.sfcta.org/bayview-hunters-point-neighborhood-transportation-plan-home. Accessed; January 18, 2019.
[23] San Francisco County Transportation Authority. 2012. *Western South of Market Neighborhood Transportation Plan.* Available: https://mtc.ca.gov/sites/default/files/CBTP%20San%20Francisco%20Western%20South%20of%20Market%20Neighborhood%20Transportation%20Plan%202012.pdf. Accessed: January 18, 2019.
[24] Caltrain. 2019. *Peninsula Corridor Electrification Project.* Available: http://www.caltrain.com/projectsplans/CaltrainModernization/Modernization/PeninsulaCorridorElectrificationProject. Accessed: January 18, 2019.
[25] Caltrain. 2019. *Caltrain Communications Based Overlay Signal System Positive Train Control Project*. Available: http://www.caltrain.com/projectsplans/Projects/Caltrain_Modernization_Program/Caltrain_CBOSS_PTC_Project.html. Accessed: January 18, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Downtown Rail Extension[26]	The Downtown Rail Extension will extend Caltrain commuter rail from its current terminus at 4th and King Streets to the new Transit Center. It will also deliver the California High-Speed Rail Authority's future high-speed rail service to the Transit Center. The 1.3-mile rail extension (1.95 miles of total construction length) will be constructed principally below grade using cut-and-cover and mined tunneling methods underneath Townsend and 2nd Streets. The project includes an underground station at 4th and Townsend Streets, six structures for emergency exit, and ventilation along the alignment, utility relocation and rail systems work.	Extension of Caltrain commuter rail from its current terminus at 4th and King Streets to the new Transit Center	In service for high-speed rail by 2025	Transportation, geology, soils, and seismicity	From current terminus at 4th and King Streets to the new Transit Center
BART Train Control Renovation[27]	A modern, improved train control system will allow BART to safely operate more frequent service. A train control system consists of both hardware and software that are used to ensure safe operation of the system. It monitors train location, ensures sufficient distance between trains, manages train movements, and helps staff to analyze and report on any issues. The Train Control Modernization Project entails removing aging train control equipment from the BART system and upgrading to a new system. BART staff is recommending a Communication-Based Train Control system that will improve the reliability of the system, decrease the runtime of trains between stations, and allow trains to run closer together.	Replace obsolete elements and subsystems of the train control system	Service with new train control by 2025/2026	Transportation	BART train system
BART Traction Power System Renovation[28]	BART has called for replacing 28 substations under Measure RR. Five sites have been identified for new, additional substations. The improvements will allow it to increase the number of trains it runs through the Transbay Tube from 24 an hour to 30.	Systemwide replacement of obsolete elements and subsystems of the traction power system	Preliminary work on the new substations began late last year.	Transportation, energy, public utilities	BART train system – M lines
BART Transbay Tube Seismic Retrofit[29]	The Transbay Tube is BART's most critical asset. Although the tube is structurally sound, in a very large and very rare earthquake event, the outer shell and concrete liner are predicted to crack, causing leakage. To minimize leakage in the event of a 1,000-year earthquake, BART has awarded a 313-million-dollar contract (to Shimmick Construction and California Engineering Contractors Inc.) for a massive project that will retrofit the Transbay Tube.	Seismically retrofit BART Tube/Tunnel that connects Oakland to San Francisco	Project under environmental review; presented to the board in October 2018	Transportation, geology, soils, and seismicity	BART Transbay Tube
BART Rail, Way and Structures Program[30]	Replace worn out mainline rail and make other timely reinvestments in way.	Systemwide replacement of worn out mainline rail	Project funded for 2019/2020	Transportation	BART systemwide
BART Railcar Procurement Program[31]	Procure 790 rail cars (includes replacement of 669 rail cars).	Systemwide procurement of 873 railcars (includes replacement of 669 railcars)	Project funded for 2019/2020	Transportation	BART systemwide

[26] Caltrain. 2019. *Downtown Rail Extension.* Available: http://tjpa.org/project/downtown-rail-extension. Accessed: January 18, 2019.
[27] Bay Area Rapid Transit. 2019. *Train Control Modernization.* Available: https://www.bart.gov/about/projects/traincontrol. Accessed: January 18, 2019.
[28] Bay Area Rapid Transit. 2018. *Upper M-Line Traction Power Upgrades.* Available: https://www.bart.gov/sites/default/files/docs/5-C%20Upper%20M%20Line%20Traction%20Power_01.25.2018%20Rev.pdf. Accessed: January 18, 2019.
[29] Bay Area Rapid Transit. 2019. *Transbay Tube Retrofit.* Available: https://www.bart.gov/about/projects/eqs/retrofit. Accessed: January 18, 2019.
[30] Alameda Contra Costa Transit District. 2019. *Transit Project Listings.* Available: https://mtc.ca.gov/sites/default/files/Project_Listings_Transit.pdf. Accessed: January 18, 2019.
[31] The List. 2017. *Transportation Infrastructure Projects Ranked by Total Project Cost.* Available: https://www.bizjournals.com/sanfrancisco/subscriber-only/2017/05/05/transportation-infrastructure-projects.html. Accessed: January 22, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Caltrain Electrification[32]	The Caltrain Modernization Program (CalMod) includes electrification and other projects that will upgrade the performance, efficiency, capacity, safety and reliability of Caltrain's service. Electrification provides the foundation that future CalMod improvements are based on, including full conversion to an electric fleet, platform and station improvements, the extension of service to Downtown San Francisco, and other projects that allow Caltrain to grow and evolve with the Bay Area.	Electrification of the Caltrain corridor from San Francisco to Tamien	Project in service in 2029	Transportation, public utilities, energy	Caltrain corridor from San Francisco to Tamien
Historic Streetcar Extension to Fort Mason[33]	A tunnel extension, proposed to allow the F-Market and Wharves historic streetcars to extend to Fort Mason.	Transit extension	Record of Decision, published in March 2013, project funded in 2017	Transportation, geology, soils, and seismicity, cultural resources, water resources	F-Market and Wharves to Fort Mason
Muni Transit Center in Hunters Point[34]	The project transit improvements include: the Hunters Point Transit Center, bus rapid transit connecting to Caltrain and likely BART, new downtown express bus routes from both Candlestick Point and Hunters Point and other service expansions. Street improvements will include transit preferential signaling and streetscape improvements. An extensive pedestrian and bicycle network that includes a cycle track connecting Candlestick Point with Hunters Point and connecting both areas to regional transit.	Construction of new transit center with 10 bays, low-level platform, bus shelters	Full build-out of infrastructure to be completed in 2031	Transportation	Hunters Point
Muni Oakdale-Palou Interim High-Capacity Bus Corridor[35]	Transit Preferential improvements for the Palou Avenue corridor, including bus bulbs, up to six traffic signals with transit signal priority, new bus shelters and pedestrian safety treatments.	Transit improvements	Planned for 2019	Transportation, safety and security	Palou Avenue corridor
Port of San Francisco Embarcadero Corridor Transportation Improvements[36]	The project will develop and implement "Complete Street" improvements along The Embarcadero from Townsend Street near Oracle Park to North Point Street near Pier 39 and Fisherman's Wharf. Focused on providing a physically-protected, two-way waterside bikeway to reduce conflicts with other modes, the project will also include shorter, more accessible pedestrian crossings, more efficient traffic signals and intersections, improved load zones, and opportunities to enhance streetcar service and overall urban design of the northeast waterfront.	Transit, parking, bike/pedestrian improvements in Embarcadero corridor (China Basin and Fisherman's Wharf)	Construction to begin 2021–2022	Transportation	Along The Embarcadero from Townsend Street near Oracle Park to North Point Street near Pier 39 and Fisherman's Wharf
Port of San Francisco Downtown Ferry Terminal Improvements[37]	The Downtown San Francisco Ferry Terminal currently accommodates six ferry routes serving more than 10,000 passengers with approximately 130 ferry arrivals and departures daily. The Expansion project will add ferry gates, improve pedestrian circulation and ferry patron boarding, enhance emergency response capabilities, and accommodate anticipated increases in ferry ridership as new ferry services from downtown San Francisco to Berkeley, Treasure Island, Hercules, Richmond, Redwood City, Martinez, and Antioch are introduced through 2030.	Transit improvements including new intermodal transfer areas, ferry facilities, bike/pedestrian improvements, passenger amenities	Grand opening expected 2019	Transportation	Downtown San Francisco Ferry Terminal
Geneva Avenue Extension – Bayshore Boulevard. to US 101[38]	Extension of Geneva Avenue from its current terminus at Bayshore Boulevard to Harney Way with a new interchange at US 101. Part of the Bayshore Intermodal Station Access Study.	Plan Bay Area 2040 – MTC RTP/SCS	Final report adopted in 2012; to be completed in phasing	Transportation, air quality, hazardous materials and waste	Geneva Avenue from Bayshore Boulevard to Harney Way

[32] Caltrain. 2019. *Caltrain Modernization.* Available: http://www.caltrain.com/projectsplans/CaltrainModernization.html. Accessed: January 22, 2019.
[33] San Francisco Examiner. 2017. *Federal funding could drive forward tunnel's future. May 28, 2017.* Available: http://www.sfexaminer.com/federal-funding-drive-forward-tunnels-future/. Accessed: January 22, 2019.
[34] San Francisco Municipal Transportation Agency. 2019. *Candlestick Point Hunters Point Shipyard.* Available: https://www.sfmta.com/projects/candlestick-pointhunters-point-shipyard. Accessed: January 22, 2019.
[35] Alameda-Contra Costa Transit District. 2019. *Transit Project Listings.* Available: https://mtc.ca.gov/sites/default/files/Final_2017_TIP_Project_Listings-All_09-16_0.pdf. Accessed: January 22, 2019.
[36] San Francisco Municipal Transportation Agency. 2019. *The Embarcadero Enhancement Project.* Available: https://www.sfmta.com/projects/embarcadero-enhancement-project. Accessed: January 30, 2019.
[37] City and County of San Francisco. 2019. *Downtown San Francisco Ferry Terminal Expansion.* Available: https://sfport.com/downtown-ferry-terminal-expansion. Accessed: January 30, 2019.
[38] San Francisco County Transportation Authority. 2012. *Bayshore Intermodal Station Access Study.* Available: https://www.sfcta.org/sites/default/files/2020-03/Bayshore_final_report.pdf. Accessed: January 29, 2019.

Project Name	Description	Project Type	Status/Timing	Potential Significant Unavoidable impacts	Location
Harney Way Widening[39]	Widen the existing right-of-way increased to accommodate the additional BRT and auto lanes.	Plan Bay Area 2040 – MTC RTP/SCS	Included Candlestick Point Development Plan 2014	Transportation	Harney Way

BART = Bay Area Rapid Transit
BRT = Bus Rapid Transit
CalMod = Caltrain Modernization Program
CBOSS = Communications Based Overlay Signal System
EIR = environmental impact report
MTC = Metropolitan Transportation Commission
NTP = Neighborhood Transportation Plan
PCEP = Peninsula Corridor Electrification Project
PTC = positive train control
RTP = Regional Transportation Plan
SCS = Sustainable Communities Strategy
SFMTA = San Francisco Municipal Transportation Agency
TIP = Transportation Improvement Program
US = U.S. Highway

Table 3 County of San Mateo Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
San Mateo County Transit District Strategic Plan 2015-2019[40]	The 2015-2019 Strategic Plan is a policy blueprint for the San Mateo County Transit District that shapes the agency's direction for the next 5 years. It represents the foundation from which policy, investment and service decisions should be made. As the District looks to revitalize transit bus service and grow its ridership, it must continue to manage its fiscal challenges, all while investing in an organization that manages SamTrans buses, Caltrain's rail system, and the Transportation Authority's multimodal funding program and preparing the organization for change.	Transit plan	Updated December 2014	Transportation, land use	San Mateo County
Countywide Intelligent Transportation System and Traffic Operation System [41]	The San Mateo County ITS Strategic Plan represents an important element of a comprehensive transportation plan for the county. Recognizing that physical and environmental constraints limit the potential for expanding the transportation system infrastructure, ITS offers the opportunity to make more efficient use of existing transportation facilities and services. Strategic use of ITS technologies will benefit a broad cross-section of interests, such as goods movement, transit travelers, and auto drivers. It will also help local agencies with their jobs of managing congestion, providing mobility improvements, and improving air quality.	Transportation plan	Adopted July 2005	Transportation	San Mateo County

[39] San Francisco Office of Community Investment and Infrastructure. 2014. *Infrastructure Plan, Volume 1: Candlestick Point Development.* Available: https://sfocii.org/sites/default/files/Documents/Project%20Areas/HPSY/Phase%202%20%26%20Candlestick/14_1201%20CP%20Infrastructure%20Plan.pdf. Accessed: January 30, 2019.
[40] SamTrans. 2016. *2015-2019 SamTrans Strategic Plan*. Available: http://www.samtrans.com/Planning/Planning_and_Research/StrategicPlan2015-2019.html. Accessed: January 30, 2019.
[41] San Mateo County. 2005. *San Mateo County Intelligent Transportation Systems Strategic Plan 20-Year ITS Strategic Plan Final Report:* Available: http://ccag.ca.gov/wp-content/uploads/2014/05/San-Mateo-County-ITS-Strategic-Plan_A.pdf. Accessed: January 30, 2019.

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
San Bruno/South San Francisco Community-Based Transportation Plan[42]	The San Bruno/South San Francisco CBTP looks at the transportation needs of the community and recommends steps to address these needs. The project is part of the MTC's Community-Based Planning Program to look at transportation needs in low income communities.	Transportation plan	Adopted February 2012	Transportation	The study area is located in the eastern part of South San Francisco and the northeastern part of San Bruno. It is bordered by El Camino Real and Chestnut Avenue to the west, Miller and Maple Avenues to the north, San Juan Avenue to the south, and the San Francisco Bay to the east, excluding the San Francisco International Airport. It has an area of 5.40 square miles.
North Central San Mateo Community-Based Transportation Plan[43]	The North Central San Mateo CBTP will look at the transportation needs of the North Central San Mateo community and recommend steps to address these needs. The project is part of the MTC's Community-Based Planning Program to look at transportation needs in low income communities. This Existing Conditions Report is the first step in the planning process by providing information about the demographics and travel behavior of North Central San Mateo residents, the transportation infrastructure and services, related plans and programs of other agencies, and an initial assessment of transit gaps.	Transportation plan	Adopted 2010	Transportation	The City of San Mateo is located in the center of San Mateo County. The project area is located in the northern part of the City, and is bordered to the north by Poplar Avenue and US 101, and to the South by the Caltrain railroad tracks, 1st Avenue, Delaware Street, and 5th Avenue
US 101 Managed Lanes Project[44]	The new express lanes will connect to an eight-mile stretch of carpool lanes that extend from Whipple Avenue to San Antonio Road in Palo Alto. As part of the project, Caltrans will convert the carpool lanes into express lanes, creating two 22-mile express lanes in each direction from Interstate 380 to San Antonio Road.	Express lanes	Final EIR/EA FONSI published November 2018	Transportation, land use	From Whipple Avenue to San Antonio Road in Palo Alto
Bayshore Community-Based Transportation Plan[45]	The Bayshore CBTP examines the transportation needs of the Bayshore community in Daly City and recommends steps to address these needs. This project is part of the MTC's Community-Based Transportation Planning Program, a collaborative planning process to identify transportation needs in low-income communities throughout the region. With a strong emphasis on community participation, the Bayshore CBTP identifies transportation gaps within the Bayshore neighborhood, and recommends projects to address them.	Transportation plan	Adopted Fall 2008	Transportation, land use	Daly City is located at the northernmost tip of San Mateo County, adjacent to San Francisco City and County. The Bayshore neighborhood is located in the far eastern part of Daly City to the north of Brisbane. The northern border of the project area lies on the border between San Mateo County and San Francisco.
San Mateo County Transportation Plan for Low-Income Populations[46]	The purpose of the Countywide Transportation Plan for Low Income Populations is to develop strategies to increase the affordability and accessibility of transportation options for low-income residents in San Mateo County.	Transportation plan	Adopted February 2012	Transportation	The entire County of San Mateo and its cities

[42] City and County Association of Governments of San Mateo County. 2012. *San Bruno / South San Francisco Community-Based Transportation Plan*. Available: https://mtc.ca.gov/sites/default/files/CBTP%20San%20Bruno%20-%20South%20San%20Francisco%202012.pdf. Accessed: January 30, 2019.

[43] San Mateo County Transit District. 2010. *North Central San Mateo Community-Based Transportation Plan.* Available: Available: https://www.cityofsanmateo.org/DocumentCenter/View/7645/NCSM-CBTP-Appendices_82010?bidId=. Accessed: January 30, 2019.

[44] Caltrans. 2018. *Caltrans Releases Final Environmental Impact Report/ Environmental Assessment with Finding of No Significant Impact For U.S. Highway 101 Managed Lanes Project.* Available: http://www.dot.ca.gov/d4/newsreleases2018/news-release-fed-sm-managed-lanes.pdf. Accessed: January 29, 2019.

[45] San Mateo County Transit District. 2008. *Bayshore Community-Based Transportation Plan.* Available: https://mtc.ca.gov/sites/default/files/CBTP%20Bayshore%202008.pdf. Accessed: January 30, 2019.

[46] City and County Association Governments of San Mateo County. 2012. *San Mateo County Transportation Plan for Low-income Populations*. Available: http://www.dot.ca.gov/hq/tpp/offices/ocp/completed_projects/ej_communityplans/D4_Countywide_Transportation_Plan_for_Low-Income_Populations/San_Mateo_County_Transportation_Plan_for_Low-income_Populations.pdf. Accessed: January 30, 2019.

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Grand Boulevard Multimodal Transportation Corridor Plan[47]	The Grand Boulevard Multimodal Transportation Corridor Plan translates the Grand Boulevard Vision—that El Camino Real will achieve its full potential as a place for residents to work, live, shop, and play, creating links between communities that promote walking and transit and an improved and meaningful quality of life—into tangible strategies and design concepts from which local jurisdictions can choose and implement in their communities.	Countywide El Camino Real complete streets program	Adopted September 2010.	Transportation, land use	El Camino Real Corridor from Daly City to San Jose's Diridon Station
Improve SR 92 from San Mateo Bridge to I-280[48]	Widen SR 92 and add an uphill passing lane from US 101 to I-280	Road reconstruction project	Under construction	Transportation	SR 92 from San Mateo Bridge to I-280
US 101 Auxiliary lanes from Sierra Point to San Francisco County Line[49]	Addition of auxiliary lanes.	Construction of auxiliary lanes	MTC's Transportation 2030 Plan	Transportation	US 101 from Sierra Point to San Francisco County Line
Reconstruct US 101/Sierra Point Parkway interchange (includes extension of Lagoon Way to US 101)[50]	Interchange reconstruction project.	Interchange reconstruction and road extension	CIP Planned for FY 2016 through FY 2025	Transportation	US 101 and Sierra Point Parkway
US 101 Express Lane Conversion from San Mateo/Santa Clara County line to Whipple Avenue[51]	The express lanes would connect to the HOV lanes that already exist south of Whipple and extend into Santa Clara County. Would convert Santa Clara County's HOV lanes to express lanes, creating a new system of continuing express lanes on the Peninsula that will incentivize the use of public transit, carpools, and other shared ride options, while also creating a new revenue stream for additional transportation enhancements from individuals willing to pay a fee to drive in the new lanes.	Conversion of HOV lanes to express lanes	Set to open in 2021	Transportation	South of Whipple and extend into Santa Clara County
US 101 Widening, Whipple Avenue to Millbrae[52]	Project limits extend an additional one mile beyond the actual terminus of the express lane for incorporating express lane infrastructure such as signs, electrical and communication systems.	Road widening to add an express lane in each direction	Project approved May 4, 2015	Transportation, energy, public utilities and energy	US 101 from Whipple Avenue to Millbrae

Caltrans = California Department of Transportation
CBTP = Community-Based Transportation Plan
EIR = environmental impact report
EA = environmental assessment
FONSI = finding of no significant impact
FY = fiscal year
HOV = high occupancy vehicle
I- = interstate
MTC = Metropolitan Transportation Commission
SR = State Route
ITS = Intelligent Transportation System
TOS = Traffic Operation System
US = U.S. Highway

47 Grand Boulevard Initiative. 2010. *Multimodal Transportation Corridor Plan.* Available: https://grandboulevard.net/projects/multi-modal-corridor-plan. Accessed: January 30, 2019.
48 City of San Mateo. 2014. *SR 92-82 Interchange Improvement Project. Initial Study with Negative Declaration.* Available: https://www.cityofsanmateo.org/DocumentCenter/View/46135/Environmental-Document---Initial-Study-with-Negative-Declaration---Part-1-of-3?bidId=. Accessed: January 30, 2019.
49 Metropolitan Transportation Commission. 2007. *Transportation 2030 Plan for the San Francisco Bay Area.* Available: http://www.southbayrestoration.org/pdf_files/SBSP_EIR_Final/Appendix%20M%20MTC%20List%20of%20projects%20Fina%20EIS_RI.pdf. Accessed: January 28, 2019.
50 San Mateo County Transportation Authority. 2015. *Highway Capital Improvement Program.* Available: http://www.smcta.com/Assets/TA+Highway+Program+Solicitation+Letter.pdf. Accessed: January 29, 2019.
51 Climate Online. 2018. *Highway 101 express lanes in San Mateo County set to open in 2021.* Available: https://climaterwc.com/2018/04/27/expected-in-2021-highway-101-express-lanes-in-san-mateo-county/. Accessed: January 30, 2019.
52 California Department of Transportation. 2015. *Project Study Report.* Available: https://ccag.ca.gov/wp-content/uploads/2014/05/US-101-HOV-Hybrid-PSR-PDS-Complete-Signed-Approved-2015-05-04.pdf. Accessed: May 19, 2020.

Table 4 City of Brisbane Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
U.S. Highway 101/Candlestick Point Interchange Project[53]	Interchange reconfiguration for supplemental roadways.	Interchange reconfiguration	Short-range highway plan 2011–2021	Transportation	Candlestick Point
Dumbarton Rail Corridor Station Facilities and Improvements[54]	The DRC Project is a proposed passenger rail service that would span the southern portion of the San Francisco Bay, connecting communities in the East Bay (Union City, Fremont, Newark) to communities in the West Bay (Menlo Park, Redwood City, and beyond to San Jose and San Francisco). Six daily westbound trains would depart Union City in the morning and converge with the existing Caltrain line on the West Bay. From the Caltrain line, half of the trains travel north to San Francisco while the other three trains head south to San Jose. During the afternoon peak, all trains would travel eastbound back to Union City. Four stations would be directly served by DRC trains (Union City Intermodal Station, Fremont Centerville, Willow Street in Newark, and Willow Road in Menlo Park). A new bridge crossing the bay would replace the existing bridge which has not been in operation since the mid-1980s.	Improve station facilities and other rail improvements in Redwood City, Menlo Park and East Palo Alto in conjunction with the DRC	New 18-month environmental impact statement funded in 2018	Transportation	Rail corridor in the southern portion of the San Francisco Bay

DRC = Dumbarton Rail Corridor

Table 5 City of South San Francisco Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
US 101/Produce Avenue Interchange[55]	Construct a local interchange on US 101 from Utah Avenue on the east side to the vicinity of Produce Avenue on the west side.	Interchange construction project	Under environmental review	Safety and security, transportation	US 101 and Produce Avenue

US = U.S. Highway

Table 6 City of San Bruno Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Caltrain Grade Separation Program[56]	Grade separation projects along the Caltrain corridor separating the Caltrain tracks from roadways to provide increased safety benefits for drivers, bicyclists and pedestrians and also reduce congestion at the intersections.	New grade separations at existing crossings at San Bruno, San Mateo, and Angus Avenues in San Bruno. Demolition of existing San Bruno Station; reconstruction between San Bruno and San Mateo Avenues.	Timing depends on funding	Transportation, hydrology and water resources, safety and security, geology, soils, and seismicity	Various locations

[53] County of San Mateo. 2011. *San Mateo County Transportation Authority.* Available: http://www.smcta.com/Assets/SMCTA/Documents/Short+Range+Highway+Plan+2011-2021.pdf. Accessed: January 28, 2019.
[54] Dumbarton Rail Corridor. 2006. *Dumbarton Rail Corridor Environmental Phase 1.* Available: http://www.smcta.com/Assets/Dumbarton+Rail+Corridor/documentation/Dumbarton_Rail_Corridor_Report_030306_FINAL_WEB.pdf. Accessed: January 29, 2019.
[55] City of South San Francisco. 2018. *U.S. 101/Produce Avenue Interchange Project.* Available: http://www.ssf.net/home/showdocument?id=13848. Accessed: January 30, 2019.
[56] Caltrain. 2016. *Caltrain Grade Separation Program Guidelines.* Available: http://vtaorgcontent.s3-us-west-1.amazonaws.com/Site_Content/Caltrain%20Grade%20Separation%20Program%20Guidelines_ADOPTED.pdf. Accessed: January 30, 2019.

Table 7 City of Millbrae Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
US 101 Millbrae Ave Bike/Pedestrian Bridge[57]	A new bike/pedestrian bridge over US.101 at Millbrae Avenue, connecting the Bay Trail to two new Class I multiuse paths, one that will go on the north side of the station and the other across the tracks parallel to Millbrae Avenue. There are also planned bicycle facilities from the south on Rollins Road and California Drive.	Construction of new 10-ft wide Class 1 bike/pedestrian overcrossing across U.S. 101 north of and adjacent to the existing Millbrae Avenue bridge	Under environmental review	Transportation	US 101 and Millbrae Avenue

US = U.S. Highway

Table 8 City of Burlingame Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
US 101/Broadway Interchange Reconstruction Project[58]	The US 101 Broadway Interchange Project will remove the existing four-lane Broadway overpass and construct a new seven-lane overpass approximately 170 feet north of the existing structure. Broadway will be realigned to extend straight across US 101 from the Broadway/Rollins Road intersection on the west to the Bayshore Highway/Airport Boulevard intersection on the east.	Interchange reconfiguration; bridge replacement and widening	Completed fall 2017	Transportation	US 101 from the Broadway/Rollins Road intersection on the west to the Bayshore Highway/Airport Boulevard intersection on the east

US = U.S. Highway

Table 9 City of San Mateo Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
SR 92/El Camino Real (SR 82) Ramp Modifications[59]	The California Department of Transportation and the City of San Mateo have modified the interchange between SR 82/El Camino Real and SR 92 to reduce traffic congestion, bottlenecks, weaving, and queuing spillback at the on and off ramps.	Interchange improvements and modifications to existing ramps	Under construction	Transportation, noise, air quality	The proposed project is located where SR 92 and SR 82 intersect, in the City and County of San Mateo, in the San Francisco Bay Area in California. The project limits are from PM 11.0 to PM 11.5 on SR 92 and PM 10.3 at intersection of El Camino Real and West 20th Avenue to PM 10.7 at intersection of El Camino Real and17th Avenue and Bovet Road.

PM = post mile
SR = State Route

Table 10 City of Redwood City Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Woodside Road Widening - El Camino to Broadway[60]	Road widening project.	Road widening from 4 to 6 lanes	2040 Transit Improvement Plan	Transportation	Woodside Road from El Camino to Broadway

[57] Silicon Valley Bicycle Coalition. 2016. *Millbrae Campaign Update: Station Area Plan Improved.* Available: https://bikesiliconvalley.org/2016/02/millbrae-campaign-update-station-area-plan-approved/. Accessed: January 29, 2019.
[58] California Department of Transportation District 4. 2019. *U.S. 101 Broadway Interchange Reconstruction Project.* Available: http://www.dot.ca.gov/dist4/projects/broadwayrecon/index.htm. Accessed: January 30, 2019.
[59] City of San Mateo. 2019. *Caltrans: 92-82 (El Camino) Interchange.* Available: https://www.cityofsanmateo.org/2710/Caltrans-92-82-El-Camino-Interchange. Accessed: January 29, 2019.
[60] City and County Association of Governments of San Mateo County. 2017. *San Mateo Countywide Transportation Plan 2040.* Available: https://ccag.ca.gov/wp-content/uploads/2014/05/SMCTP-2040-FINAL_.pdf. Accessed: January 28, 2019.

Table 11 Santa Clara County Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Capitol Expressway LRT Extension- Phase II[61]	The Santa Clara Valley VTA Capitol Expressway Transit Improvement Project would transform Capitol Expressway into a multi-modal boulevard offering BRT, light rail transit, and safe connections to the regional transit system.	Transit expansion	Under environmental review; project paused	Transportation	Extend light rail from existing Alum Rock Light Rail Station to the Eastridge Transit Center
Stevens Creek Corridor BRT Improvements[62]	The Stevens Creek Corridor BRT Project would provide a rapid transit service for 8.5 miles from De Anza College to the Transit Mall in downtown San Jose using San Carlos Avenue and Stevens Creek Boulevard. The Stevens Creek Corridor BRT project would add a BRT service (BRT 523) in addition to the local (Line 23), which would provide fast, frequent service, with limited stops, and enhanced amenities for passengers. The Stevens Creek Corridor BRT project is the third of three BRT lines preceded by Santa Clara/Alum Rock and El Camino Real projects.	Transit improvements	Under construction; in service October 2019	Transportation	8.5 miles from De Anza College to the Transit Mall in downtown San Jose using San Carlos Avenue and Stevens Creek Boulevard
Capitol Corridor Joint Powers Authority Oakland to San Jose Double Track (Segment 2A)[63]	Construct a second mainline track, platforms and modifications to existing tracks between the cities of Oakland and San Jose, on the UPRR.	Transit expansion	Environmental review of Oakland – Newark expected in 2019–2021. Construction timing TBD. Timing for environmental review and funding of Newark to San Jose uncertain.	Transportation	Between the cities of Oakland and San Jose, on the UPRR Niles subdivision from MP 6 to MP 35, and the Coast subdivision MP 13 to MP 35, and on the Caltrain Right of Way MP 44 to MP 48.
Terminal improvements at Norman Y. Mineta San Jose International Airport[64]	The Norman Y. Mineta San José International Airport Improvement Program (more formally known as the Airport Master Plan) consists of terminal construction, access and roadway improvements, parking garages and airfield upgrades. The Airport Improvement Program's goals are to provide a world-class facility with state-of-the-art passenger amenities and a technologically advanced security system in a cost-efficient manner.	Airport improvement project	In September 2018 Master Plan	Transportation, noise	San Jose International Airport
SR 85 Express Lanes and Auxiliary Lane, I-280 to SR 87[65]	The SR 85 portion will convert approximately 24 miles of existing High Occupancy Vehicle (HOV or carpool) lanes to express lanes and will add a second express lane between SR 87 and I-280 in the median.	Express lane and auxiliary lane construction	Draft Initial Study/Environmental Assessment circulated January 2015	Transportation	SR 85, I-280 to SR 87
US 101 Southbound Trimble Road/De La Cruz Boulevard/Central Cloverleaf Modification[66]	Modify existing loop cloverleaf ramp from Southbound US 101 to Trimble Road. into a partial cloverleaf ramp (diagonal ramp with signalized intersection). Modify the Southbound US 101 on-ramp from De La Cruz Boulevard./Central Expressway. to 1 mixed flow lane, 1 HOV lane with ramp metering equipment. The on-ramp will be modified to improve merging onto Southbound US 101. The De La Cruz Boulevard bridge across US 101 will be widened from four to six lanes. The segment between De La Cruz Boulevard/Trimble Road. intersections to bridge overcrossing will be widened by an additional lane.	Cloverleaf reconfiguration	Project completed December 2016	Transportation	US 101 Southbound at Trimble Road, De la Cruz Boulevard, and Central Cloverleaf
US 101/Montague Expressway Interchange[67]	Interchange construction project.	New interchange construction	Project funded through VTP 2040 Plans	Transportation	US 101/Montague Expressway Interchange

[61] Permitting Dashboard. Federal Infrastructure Projects. 2019. *Capitol Expressway Corridor.* Available: https://www.permits.performance.gov/permitting-projects/capitol-expressway-corridor. Accessed: January 29, 2019.
[62] Santa Clara Valley Transportation Authority. 2018. *Improving Major Bus Corridors.* Available: https://www.vta.org/sites/default/files/documents/Improving_major_bus_corridors.pdf. Accessed: May 18, 2020.
[63] Permitting Dashboard. Federal Infrastructure Projects. 2019. *Capitol Expressway Corridor.* Available: https://www.permits.performance.gov/permitting-projects/capitol-expressway-corridor. Accessed: January 29, 2019.
[64] City of San Jose Airport Department. 2018. *Airport Master Plan for Norman Y. Mineta San Hose International Airport.* Available: https://www.flysanjose.com/sites/default/files/improvement/MasterPlan-Update2018.pdf. Accessed: January 29, 2019.
[65] Santa Clara Valley Transportation Authority. 2019. *US 101 and State Route 85 Express Lanes Projects.* Available: http://www.vta.org/projects-and-programs/highway/85-101-express-lanes. Accessed: January 28, 2019.
[66] Santa Clara Valley Transportation Authority. 2019. *US 101/De La Cruz Boulevard/Trimble Road Interchange Improvements.* Available: https://www.vta.org/projects/us-101de-la-cruz-boulevardtrimble-road-interchange-improvements. Accessed: November 9, 2019.
[67] Santa Clara Valley Transportation Authority. 2011. *VTP 2040: Highway Projects (Preliminary Constrained Project List).* Available: http://www.vta.org/sfc/servlet.shepherd/document/download/069A0000001EO9UIAW. Accessed: January 29, 2019.

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
San Tomas Expressway Widening, El Camino Real to Williams Road[68]	San Tomas Expressway improvement projects consist of an intersection improvement project at El Camino Real, widening of San Tomas for additional traffic lanes from 900 feet south of Homestead to El Camino Real, and extension of the San Tomas Aquino Spur Trail from its existing terminus to Homestead Road.	Road widening	Under construction	Transportation, noise, air quality	San Tomas Expressway Widening from El Camino Real to Williams Road
US 101 Express Lane Conversion, San Mateo/Santa Clara County Line to Cochrane Road[69]	This project will convert approximately 36 miles of existing HOV or carpool lanes on US 101 to express lanes from Cochrane Road in Morgan Hill to the Santa Clara/San Mateo County line. The project will extend the existing HOV lane in both direction from Dunne Avenue to Cochrane Road in Morgan Hill; and add a second express lane in both directions from Cochrane Road in Morgan Hill to SR 85 in San Jose, from Blossom Hill Road in San Jose to North Fair Oaks Avenue in Sunnyvale, and from Shoreline Boulevard in Mountain View to Oregon Expressway in Palo Alto. The project will also convert the US 101/ SR 85 HOV direct connectors in Mountain View to express lane connectors and conform to the SR 85 Express Lanes.	Conversion of HOV lanes to express lanes	Scheduled to open late 2018	Transportation	US 101 to express lanes from Cochrane Road in Morgan Hill to the Santa Clara/San Mateo County line
SR 85 Express Lane Conversion, US 101 in Mountain View to US 101 in South San Jose[70]	The US 101 portion will convert 36 miles on US 101 to express lanes and add a second express lane for the majority of the corridor from Dunne Avenue in Morgan Hill to the San Mateo County line. The second express lane will provide a two-lane facility within urbanized segments. The US 101 express lanes will connect with the SR 85 express lanes in San Jose and convert US 101/SR 85 HOV direct connectors in Mountain View to express lane connectors. The SR 85 portion will convert approximately 24 miles of existing HOV or carpool lanes to express lanes and will add a second express lane between SR 87 and I-280 in the median. The project will also convert the existing HOV direct connector in south San Jose from US 101 to SR 85 to an express lane connector.	Conversion of HOV lanes to express lanes	Construction to start in 2020; Express lanes open for service in 2021, pending funding	Transportation, hazardous materials and waste, geology, soils, and seismicity, hydrology and water resources	Corridor from Dunne Avenue in Morgan Hill to the San Mateo County line
SR 237 Express Lane Conversion, I-880 to Mathilda Avenue[71]	Addition of express lanes. The express lanes along the SR 237 and I-880 corridor in Santa Clara County begin just south of Dixon Landing Road on I-880 and North 1st Street on SR 237.	Conversion of HOV lanes to express lanes	Second phase to be completed Summer 2019	Transportation, noise, air quality	Mathilda Avenue to SR 85
I-280 Express Lane Conversion, Magdalena Avenue to Leland Avenue[72]	Conversion of HOV lanes to express lanes from Magdalena Avenue to Leland Avenue on I-280.	Conversion of HOV lanes to express lanes	Included in VTP 2040 MTI transit projects	Transportation	I-280 from Magdalena Avenue to Leland Avenue
I-880/I-280/Stevens Creek Boulevard Interchange Improvements[73]	Improvements to the I-280 and I-880, and the I-880 and Stevens Creek Boulevard interchanges were completed in 2015. Project construction began in late Fall 2012. Its purpose is to improve traffic flow, safety and access between the I-280 and I-880 freeway corridors near Stevens Creek Boulevard, including modifications to the freeway-to-freeway intersection of SR 17/I-280/I-880 freeway interchange, as well as the adjacent interchanges at I-880/Stevens Creek Boulevard.	Interchange and off-ramp reconfiguration	Completed in 2018	Transportation, noise, air quality, safety and security	Between the I-280 and I-880 freeway corridors near Stevens Creek Boulevard
Caltrain Double-Track, Segments between San Jose and Gilroy[74]	8 miles of double track on the existing UPRR corridor between San Jose and Gilroy to increase Caltrain capacity.	Transit improvements	To be completed in 2022	Transportation	Rail corridor between San Jose and Gilroy

68 County of Santa Clara. 2019. *San Tomas Expressway Improvement Projects.* Available: https://www.sccgov.org/sites/rda/PnS/CP/stexpy/Pages/improvements.aspx. Accessed: June 30, 2019.
69 Santa Clara Valley Transportation Authority. 2015. *Fact Sheet: Express Lanes. U.S. 101 Express Lanes Project.* Available: http://www.vta.org/sfc/servlet.shepherd/document/download/06912000001gBQFAA2. Accessed: January 30, 2019.
70 Santa Clara Valley Transportation Authority. 2019. *State Route 85 and US 101 Express Lanes Projects.* Available: http://www.vta.org/projects-and-programs/highway/85-101-express-lanes. Accessed: January 30, 2019.
71 Santa Clara Valley Transportation Authority. 2019. *State Route 237 Express Lanes Project.* Available: http://www.vta.org/projects-and-programs/highway/237-express-lanes. Accessed: January 28, 2019.
72 Santa Clara Valley Transportation Authority. 2011. *VTP 2040: Multimodal Transportation Investment Preliminary Constrained Project List.* Available: http://www.vta.org/sfc/servlet.shepherd/document/download/069A0000001EOT4IAO. Accessed: January 30, 2019.
73 Santa Clara Valley Transportation Authority. 2019. *I-280/I-880/Stevens Creek Boulevard Improvements Project.* Available: http://www.vta.org/projects-and-programs/highway/projects-studies-and-programs-i280i880stevens-creek-boulevard-improvements-project. Accessed: January 28, 2019.
74 Santa Clara Valley Transportation Authority. 2018. *5 Caltrain – Capacity Improvements and Electrification.* Available: https://www.vta.org/sites/default/files/documents/Improving_Caltrain_double-tracking.pdf. Accessed: January 30, 2019.

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Extend the Capitol Expressway LRT from Eastridge Transit Center to Nieman Boulevard[75]	Phase 1B included the reconstruction of the Eastridge Transit Center beginning August 2013 and took slightly under 2 years to complete. Improvements to the transit center also support of the future BRT. Expansion of the transit center began with relocating Eastridge Loop Road. Once that was complete, construction of the new transit center followed. The new center includes a new central walkway, a bike and pedestrian path, new landscaping with seat walls, new shelters with updated lighting and real time signage, and many more amenities.	Transit expansion	Ender environmental review; project paused	Transportation	Eastridge Transit Center
BART Silicon Valley Extension[76]	VTA's BART Silicon Valley involves a program of transportation improvements in the corridor that generally extends from the southern boundary of Alameda County in the City of Fremont through the cities of Milpitas, San Jose, and Santa Clara in Santa Clara County. These improvements include a planned 16-mile, six-station extension of the existing San Francisco BART system into Silicon Valley. VTA's BART Silicon Valley program also includes other related projects and activities required to prepare the rail corridor for BART, such as relocation of existing UPRR tracks and utilities, drainage improvements, and grade separation projects within the alignment that are funded through other sources.	Transit improvements	Passenger service starting 2019	Transportation, geology, soils, and seismicity, paleontology, water resources, biological resources, hazardous materials and waste	Generally extends from the southern boundary of Alameda County in the City of Fremont through the cities of Milpitas, San Jose, and Santa Clara in Santa Clara County.
Capitol Corridor Extension to Salinas[77]	The project proposes to extend passenger rail service from Santa Clara County south to Salinas. The service will start with two round trips, expanding to up to six round trips as demand warrants.	Transit extension	Start of service 2019	Transportation	From Santa Clara County south to Salinas

BART = Bay Area Rapid Transit
BRT = bus rapid transit
HOV = high occupancy vehicle
I- = Interstate
LRT = light rail transit
MP = mile post
MTC = Metropolitan Transportation Commission
MTI = multimodal transportation investment
SR = State Route
TOS = Traffic Operations System
UPRR = Union Pacific Railroad
US = U. S. Highway
VTA = Valley Transportation Authority
VTP = Valley Transportation Plan

[75] Permitting Dashboard. Federal Infrastructure Projects. 2019. *Capitol Expressway Corridor.* Available: https://www.permits.performance.gov/permitting-projects/capitol-expressway-corridor. Accessed: January 29, 2019.
[76] Valley Transportation Authority. 2019. *BART Silicon Valley*. Available: http://www.vta.org/bart/overview/bartsiliconvalley. Accessed: January 30, 2019.
[77] Transportation Agency for Monterey County. 2014. *Capitol Corridor Extension to Salinas.* Available: https://www.tamcmonterey.org/wp-content/uploads/2015/09/Kick-Start-rail-extension-flyer10-13-14.pdf. Accessed: January 30, 2019.

Table 12 City of Palo Alto Transportation Plans and Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Embarcadero Road/El Camino Real Corridor and Intersection Improvements Project[78]	The Embarcadero Road Improvements project includes preparation of final design plans, environmental documentation, construction documents and required permitting from Caltrans for intersection improvements on El Camino Real at Galvez Street/Embarcadero Road and on Embarcadero Road, from El Camino Real to Emerson Street. Improvements include, but are not limited to, traffic signal modifications, protected intersection on El Camino Real, sidewalk realignment and widening, high visibility crosswalks, pedestrian scale lighting, bicycle treatments, landscaping, signing and striping and traffic calming elements.	Traffic signal modifications, sidewalk realignment, high visibility crosswalks, signing and striping, bicycle treatments, landscaping and traffic calming elements	Construction began Summer 2018	Transportation	Intersections on El Camino Real at Galvez Street/Embarcadero Road and on Embarcadero Road, from El Camino Real to Emerson Street
Greer Road Bicycle Boulevard Project[79]	The proposed Greer Road Bicycle Boulevard will provide a new north-south bicycle route for the community from Edgewood Drive to the north to Louis Road to the south. The route will serve both commuter bicyclists and students at Palo Verde School and Ohlone School and provide connections to both Greer Park and Seale Park. The Greer Road Bicycle Boulevard will include traffic calming measures as well as bicycle boulevard branding signage and enhanced roadway markings.	New bicycle route and traffic calming measures	Under environmental review	Transportation	Greer Road from Edgewood Drive to the north to Louis Road to the south.
Moreno-Amarillo Bicycle Boulevard Project[80]	The Amarillo-Moreno bike boulevard will stretch from Middlefield Road to West Bayshore Road. At Middlefield, a new crosswalk will be added at Moreno and new slotted speed humps will be installed between Middlefield and Louis Road, with a mini traffic circle added at Ross and Moreno. The boulevard will jog along Louis and connect to Amarillo, along which the city will install raised crosswalks (including one near Ohlone Elementary School) and, at Greer Road, another traffic circle.	New bicycle route and traffic calming measures	Under construction	Transportation	The Amarillo-Moreno bike boulevard will stretch from Middlefield Road to West Bayshore Road
Churchill Avenue Enhanced Bikeway[81]	The project includes the construction of an 8 ft wide asphalt shared-use path, with a 2 ft-wide decomposed granite shoulder, which will connect the existing Caltrain Railroad pathway with the Stanford Perimeter Trail on the far side of El Camino Real. The project includes traffic calming and safety features along Churchill Avenue, such as a raised crosswalk with pedestrian activated flashing beacons (at Madrono Avenue), a large curb extension at Castilleja Avenue, and an overhaul of the intersection at Churchill Avenue and El Camino Real.	Traffic calming measures, enhanced bicycle and pedestrian facilities, and roadway capacity improvements	Under construction	Transportation	Caltrain Railroad pathway

[78] City of Palo Alto. 2019. *Embarcadero Road/El Camino Real Corridor.* Available: https://www.cityofpaloalto.org/gov/depts/pln/transit/transportation_projects/embarcadero_road_el_camino_real_corridor_and_intersection_improvements_project.asp. Accessed: January 30, 2019.
[79] City of Palo Alto. 2018. *Greer Road Bicycle Boulevard Project.* Available: https://www.cityofpaloalto.org/gov/depts/pln/transit/transportation_projects/greer_road_bicycle_boulevard_project.asp. Accessed: January 30, 2019.
[80] Palo Alto Online. 2017. *Palo Alto Approves new bike boulevards.* Available: https://www.paloaltoonline.com/news/2017/06/28/new-bike-boulevards-approved-in-palo-alto. Accessed: January 29, 2019.
[81] City of Palo Alto. 2019. *Churchill Avenue Multi-Modal Improvements.* Available: https://www.cityofpaloalto.org/gov/depts/pln/transit/transportation_projects/churchill_avenue_multi_modal_improvements.asp. Accessed: January 30, 2019.

Table 13 City of San Jose Transportation Projects List

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
BART Silicon Valley Extension[82]	Two-phase project extending BART service to Silicon Valley. Phase I includes the 10-mile, two-station Berryessa Extension. Phase II includes a 5-mile-long subway tunnel through downtown San Jose and will extend the BART system from the planned Berryessa Extension terminus for approximately six miles, ending at-grade in Santa Clara near the Caltrain Station.	Transit expansion	Phase I under construction; Phase II in environmental review with construction anticipated 2020–2024	Air quality, greenhouse gases, noise, transportation and traffic	San Jose
Parking Capital Program[83]	Program focused on projects that will adequately maintain the City's parking facilities in a safe and operational manner, upgrade the Revenue Control System within key garages, expand meter upgrade to Smart Meters, support LED lighting and security program upgrades, provide for multi-modal improvement projects in the greater Downtown and Diridon Areas, provide for temporary parking facilities to support SAP Center events to mitigate the loss of existing parking due to pending development, and provide preliminary evaluation and planning for a parking garage to serve the greater Downtown Area. Major projects include: arena area parking development; downtown event parking dynamic message sign; greater downtown area multi-modal/streetscape improvements; and greater downtown parking garage.	Parking and transit improvement program			San Jose
Construct US 101/Mabury Road/Taylor Street Interchange[84]	Construction of new interchange at US 101/Mabury Road/Taylor Street in San Jose	New interchange	Conceptual		San Jose
US 101/Blossom Hill Road Interchange Improvement Project[85]	Project includes installation of a bicycle/pedestrian path from Monterey Road to the Coyote Creek Trail, construction of a bridge structure over US 101 between two existing Blossom Hill Road bridge decks to accommodate the addition of one lane in each direction, and modification of US 101 northbound and southbound on/off ramps	Interchange improvements including a bridge over US 101	Design and environmental review phase		San Jose
I-680 Soundwalls from Capitol Expressway to Mueller Avenue	Construction of new soundwalls along I-680 between Capitol Expressway and Mueller Avenue in San Jose	Soundwall construction	Soundwall design and engineering are scheduled to begin in 2017 with construction planned for 2019		San Jose
Extend Charcot Avenue over I-880	Construction of a new 2-lane east/west connection of Charcot Avenue over I-880, extending the existing Charcot Avenue approximately 0.25 mile, with bicycle and pedestrian improvements to connect to North San Jose employment center	Road extension	Conceptual		San Jose
US 101/Buena Vista Avenue Interchange	Construction of a new freeway interchange at US 101 and Buena Vista Avenue in San Jose	New interchange	Conceptual		San Jose
Coleman Avenue Widening	Widening of Coleman Avenue from 4 to 6 lanes from I-880 to Taylor Street	Road widening	Conceptual		San Jose
Snell Avenue Widening[86]	Widening of Snell Avenue from Branham Lane to Chynoweth Avenue	Road widening	2017–2018		San Jose
Branham Lane Widening[87]	Widening of Branham Lane from Vista Park Drive to Snell Avenue (includes bicycle and pedestrian facilities	Road widening	2017–2018		San Jose

[82] Santa Clara Valley Transportation Authority. 2017. *BART Environmental Documents*. Available: http://www.vta.org/bart/environmentaldocuments. Accessed: February 9, 2017.
[83] City of San Jose. 2016. *City of San Jose 2016-2017 Proposed Capital Budget, 2017-2021 Capital Improvement Program*. Available: https://www.sanjoseca.gov/DocumentCenter/View/55966. Accessed: February 14, 2017.
[84] City of San Jose. 2016. *City of San Jose 2016-2017 Proposed Capital Budget, 2017-2021 Capital Improvement Program*. Available: https://www.sanjoseca.gov/DocumentCenter/View/55966. Accessed: February 14, 2017.
[85] City of San Jose. 2015. *Memorandum: US 101/Blossom Hill Road Interchange Improvement Project*. Available: http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=1475&meta_id=544236. Accessed: February 16, 2017.
[86] City of San Jose. 2016. *City of San Jose 2016-2017 Proposed Capital Budget, 2017-2021 Capital Improvement Program*. Available: https://www.sanjoseca.gov/DocumentCenter/View/55966. Accessed: February 14, 2017
[87] City of San Jose. 2016. *City of San Jose 2016-2017 Proposed Capital Budget, 2017-2021 Capital Improvement Program*. Available: https://www.sanjoseca.gov/DocumentCenter/View/55966. Accessed: February 14, 2017

Project Name	Description	Project Type	Status/Timing	Potential significant unavoidable impacts	Location
Autumn Parkway	Extension of Autumn Parkway from Julian Street to San Carlos Street	Road widening, partial realignment, and extension	Under construction; opening March 2017		San Jose
US 101 Zanker Road/North 4th Street/Skyport Drive Interchange Improvements[88]	Construction of a new interchange connecting Zanker Road and Old Bayshore Highway with North 4th Street and Skyport Drive on US 101 in San Jose. Proposed improvements include: constructing a new interchange and overcrossing bridge across US 101 to connect Zanker Road and Old Bayshore Highway with North 4th Street and Skyport Drive; modifying existing on- and off-ramps at North 1st Street/East Brokaw, North 4th Street and Old Bayshore Highway; modifying existing local street intersections in the area; and constructing retaining walls as needed.	Interchange improvements, addition of connection between Zanker Road and Skyport Drive and 4th Street	Environmental studies 2017–2018; construction 2021–2023		San Jose
Bay Trail Reach 9 & 9B[89]	Development of Reach 9 and 9B of the Bay Trail to permit travel from downtown San Jose to Sunnyvale and western reaches of the Bay Trail along existing, paved trails	Pedestrian improvements	Pending funding		San Jose
St. John Street Multi-Modal Improvements - Phase 1[90]	Pedestrian and bicycle improvements on St. John Street	Pedestrian and bicycle improvements	Construction January through August 2017		San Jose
San Jose Bike Plan 2020[91]		Transportation plan	Adopted November, 2009		San Jose

BART = Bay Area Rapid Transit
I- = Interstate
LED = light-emitting diode
US = U.S. Highway

88 Santa Clara Valley Transportation Authority. 2017. *US 101/Zanker Road Interchange.* Available: http://www.vta.org/projects-and-programs/highway/101-zanker. Accessed: February 16, 2017.
89 City of San Jose. No Date. *Bay Trail Fact Sheet*. Available: https://www.sanjoseca.gov/DocumentCenter/View/11602. Accessed: February 16, 2017.
90 City of San Jose. 2016. Memorandum: *St. John Street Bikeway and Pedestrian Improvements Project*. Available: http://sanjose.granicus.com/MetaViewer.php?view_id=&event_id=2660&meta_id=603019. Accessed: February 16, 2017.
91 City of San Jose. 2009. *San Jose Bike Plan 2020*. Available: http://www3.sanjoseca.gov/clerk/Agenda/20091117/20091117_0602att.pdf. Accessed: February 16, 2017.