CHAPTER 2 Transportation Network

Setting

Santa Cruz County is one of 58 counties in the state of California, and one of the 15 counties bordering the Pacific coastline. Santa Cruz County is on the northern half of the Monterey Bay and is 65 miles south of San Francisco, 35 miles north of Monterey, and 35 miles southwest of the Silicon Valley. The county's location is both a spectacular natural phenomenon and a limiting factor. The meeting of the redwoods and the sea is a powerful attraction which significantly affects the demand for housing, transportation, and other infrastructure. The population of Santa Cruz County in 2020 was 270,373 according to the California Department of Finance estimates, and the total area of the county is approximately 607 square miles with a land area of 445 square miles.

Aerial view of the City of Santa Cruz with the Santa Cruz Mountains in the distance.

Transportation System

Santa Cruz County's transportation network includes facilities for private automobiles, public transit, bicycles, pedestrians, specialized transportation for seniors and people with physical or mental disabilities, transport of goods and services, and emergency vehicles. Santa Cruz County's main transportation corridors and facilities (Figure 2.1) are limited by the area's physical barriers of mountains and the sea. Population settlement patterns are primarily centered along highways, major arterials, and the Santa Cruz Branch Rail Line (SCBRL). There are 1,064 total miles of publicly maintained roadway in the county. In the urban areas of the

county, arterial roads, including major state highways, make up 14 percent of roadway miles but carry over 72 percent of the vehicle miles traveled (VMT).[1]

Santa Cruz Metropolitan Transit District (METRO) buses serve approximately 400 miles of roads throughout the county and cover the majority of roads designated as arterial and collector routes.[2] There are 218 miles of bicycle lanes and bicycle paths which generally follow primary transportation corridors. Sidewalks and other pedestrian facilities are also an important part of the transportation network.

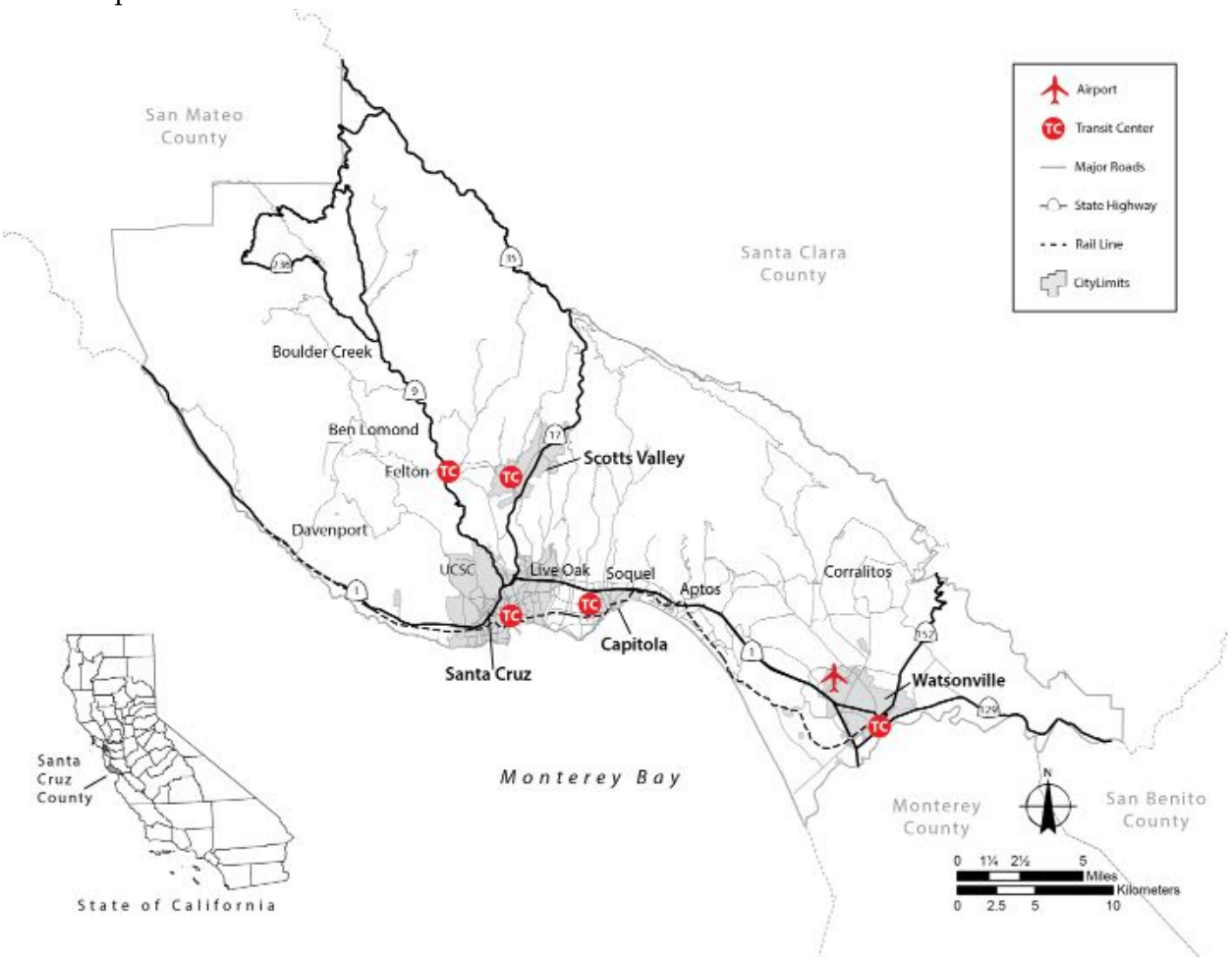


Figure 2.1 – Santa Cruz County Primary Transportation Network

Source: Santa Cruz County Regional Transportation Commission

State Highways

There are seven state highways, or State Routes (SR), in Santa Cruz County – SR 1, 9, 17, 35, 129, 152 and 236 (Figure 2.1). Highways 1 and 17 have segments that are fully grade separated freeways. Caltrans manages the state highway system, including implementation of highway maintenance and safety projects. The State Highway Operation and Protection Program (SHOPP) is the state's "fix-it-first" program. The SHOPP prioritizes maintenance, rehabilitation,

and safety improvements over capacity expansion. Therefore, any additional highway projects, such as adding new travel lanes, new auxiliary lanes, or operational improvements, must be funded from other sources. This is challenging for our county because highway projects can be relatively expensive, especially compared to the region's share of funds. Additionally, truck and automobile traffic volumes are lower than in many areas of the state or nation, which can make it difficult to compete for state and federal funds. Santa Cruz County's local Measure D sales tax measure, passed in 2016, allocates a portion of the funds to three sets of auxiliary lanes on Highway 1 between Soquel Ave and State Park Drive as discussed below. Measure D funds provide a much-needed local source of funds that could more readily leverage additional funds from state and federal sources. Along all highways except for SR 236, the RTC oversees a system of 75 call boxes that connect the user to an operator who will contact services needed (e.g., a tow service, or a relative/friend to assist you). Operation and maintenance of the Call Box Program is funded from a $1 vehicle registration fee collected by the Department of Motor Vehicles. The RTC also manages the Freeway Service Patrol Program (FSP) which operates roving tow trucks on both Highways 1 and 17 primarily during peak commute or visitor periods to provide quick fixes or tows for stranded vehicles. The FSP is a congestion management tool to keep traffic moving and reduce congestion by assisting motorists with minor roadside repairs and removing disabled vehicles from the roadway. Removing obstructions on the freeways as rapidly as possible has a positive impact on traffic volumes by eliminating problems which contribute to non-recurrent congestion.

Descriptions of each of the Santa Cruz County highways are provided below.

Highway 1 Corridor

Highway 1/17 Interchange. Photo Credit: Tim Cattera

Highway 1 is the key thoroughfare running through the most heavily populated areas of the county. Between Watsonville and the City of Santa Cruz, it is a separated freeway with at least two lanes in each direction, with a few auxiliary lanes that connect on-ramps with the next off-ramps. Highway 1 has the highest average daily traffic volumes (number of vehicles) of all local streets and highways, connects the region with other coastal areas to the north and south, and is roughly parallel to Highway 101 for the middle stretch of the state. Highway 1 is also the county's premier access route to the coast. The rural sections of State Route Highway 1 in the coastal zone are scenic two-lane roads pursuant to California Coastal Act Section 30254. Over the past

two decades a number of major capital projects have taken place on Highway 1 in the urban areas, in addition to operational projects to improve access and traffic flow.

Highway 1 Corridor Improvement Program

For the past two decades, the RTC, Caltrans, and the Federal Highway Administration (FWHA) have collaborated to identify improvements and funding options to reduce congestion, improve traffic flow, and increase carrying capacity and throughput along the corridor between Watsonville and the City of Santa Cruz. To that end, in 2003, preparation began for a combined Tier I and Tier II Environmental Impact Report/Environmental Assessment (EIR/EA) for the corridor, which was certified in 2019. Additionally, in 2016, Measure D passed providing a dedicated funding source for transportation improvements in Santa Cruz County, including improvements to Highway 1.

Highway 1 Tier I and Tier II Environmental Impact Report/Environmental Assessment (EIR/EA). The RTC, Caltrans, and FHWA prepared the Highway 1 EIR/EA which was divided into two components, Tier I and Tier II, for purposes of environmental analysis. The document was certified in 2019 and can be accessed on the RTC website.

Tier I is a long term, program level analysis for the future of the Highway 1 corridor between Santa Cruz and Aptos. The Tier I concept for the corridor could be built over time through a series of smaller incremental projects (referred to as Tier II projects). The preferred alternative selected was the High Occupancy Vehicle (HOV) Lane Project which adds a bus and carpool lane in both the north and southbound direction for the nine-mile corridor including auxiliary lanes (connecting on-ramps with the next off-ramps) between most interchanges and metering lights on the on-ramps.

Tier II is a project level analysis for auxiliary lanes between 41st Avenue and Soquel Drive and a pedestrian/bicycle overcrossing of Highway 1 at Chanticleer Avenue. Smaller incremental projects within the Tier I corridor will also undergo a Tier II analysis as projects move forward based on available funding. Each of the Tier II projects would have independent utility and benefit to the public and Highway 1 operations. The preferred alternative selected for the Tier II project was the Build Alternative.

Measure D. Existing federal, state, or local funding does not cover the cost to operate, maintain, and improve the existing transportation system. Measure D, a ½-cent, 30-year sales tax measure passed in November 2016 by over 2/3 of Santa Cruz County voters. Measure D supplements traditional transportation funding sources to improve the quality of transportation infrastructure and services in the county. The Measure D Expenditure Plan allocates 25 percent of revenue (approximately $125 million) over the 30-year life of the measure to corridor projects along Highways 1 and 17. The Expenditure Plan identifies the following projects on Highway 1 as means to improve regional traffic flow and safety:

- Adding auxiliary lanes between:

  - Soquel Drive and 41st Avenue
  - Bay Avenue/Porter Street and Park Avenue
  - Park Avenue and State Park Drive
- Constructing 2 new bicycle and pedestrian bridges over Highway 1:
  - In Live Oak at Chanticleer Avenue
  - In Seacliff/Aptos at Mar Vista Drive
- Ongoing safety and operational services including Freeway Service Patrol, Safe on 17, and Cruz511/ GO Santa Cruz County.

Current Highway 1 Projects

Highway 1 41st Avenue and Soquel Avenue/Drive Auxiliary Lanes, Bus-on-Shoulder, and Chanticleer Bicycle/Pedestrian Overcrossing Project. The project will construct northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the 41st Avenue and Soquel Avenue/Drive interchanges, along with a new bicycle and pedestrian overcrossing at Chanticleer Avenue. Historically, this section of Highway 1 has been the busiest in the county, serving over 100,000 vehicles as day, providing access to the primary regional commercial/retail activity centers on 41st Avenue and regional medical facilities located on Soquel Drive.

The auxiliary lanes will connect the on-ramps with the nest off-ramp, thereby extending the weaving and merging distance between the ramps, improving traffic operations, and reducing cut-through traffic diverting to local streets and neighborhoods. And the bus-on-shoulder improvements adds infrastructure for buses to travel in the auxiliary lanes between the interchanges and on the outside shoulder through interchanges.

The bicycle/pedestrian overcrossing at Chanticleer Avenue provides an alternative route for bicyclists and pedestrians currently using the Soquel or 41st interchanges to cross over Highway 1. The overcrossing will be lighted, 12- to 14-feet wide, and will incorporate aesthetic treatments consistent with the visual character of the corridor and the adjacent community.

The RTC is leading the delivery of this project. Measure D-Highway Corridor funds and other RTC discretionary funds were used to complete the work necessary to ready the project for construction, and as a match for Senate Bill (SB) 1, the Road Repair and Accountability Act of 2017, construction grants. This project obtained environmental clearance as part of the Highway 1 Tier I/Tier II EIR/EA and received funds from Cycle 2 of the SB1 Solutions for Congested Corridors Program competitive grant.

Construction for this project is expected to begin in late 2021 and be completed by 2024.

Highway 1 Bay Avenue/Porter Street to State Park Drive Auxiliary Lanes, Bus-on-Shoulder, and Mar Vista Bicycle/Pedestrian Overcrossing Project. The project will construct northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the Bay Avenue/Porter Street and State Park Drive interchanges and replace the existing Capitola Avenue local roadway overcrossing. This section of Highway 1 is one of the busiest in the county, providing access to the City of Capitola, Soquel and Aptos villages, and Cabrillo College.

The auxiliary lanes will connect the on-ramps with the next off-ramp, thereby extending the weaving and merging distance between the ramps, improving traffic operations, and reducing cut-through traffic diverting to local streets and neighborhoods. And the bus-on-shoulder improvements adds infrastructure for buses to travel in the auxiliary lanes between the interchanges and on the outside shoulder through interchanges.

The new Capitola Avenue overcrossing will include enhanced active transportation facilities to improve connectivity for bicyclists and pedestrians between Soquel Drive to the north and the future Coastal Rail Trail to the south. The overcrossing, sound walls, and retaining walls will incorporate aesthetic treatments consistent with the visual character of the corridor and the adjacent community.

The project also includes a new bicycle and pedestrian overcrossing at Mar Vista Drive to provide a safe link between schools, the beach, residential neighborhoods, and retail centers on each side of Highway 1.

The RTC is leading the delivery of this project. Measure D-Highway Corridor funds and other RTC discretionary funds are being used to complete the work necessary to ready the project for construction. RTC was successful in securing Cycle 2 SB1 Solutions for Contested Corridors and Local Partnership Program competitive funds in 2020, which fully funds construction of this project.

Environmental review for this project was completed in 2021. Final design is underway and is expected to be completed in 2022. The project is expected to be construction-ready by the end of 2022.

Highway 1 State Park to Freedom Boulevard Auxiliary Lanes, Bus-On-Shoulder, and Coastal Rail Trail Segment 12 Project. The project will construct northbound and southbound auxiliary lanes and bus-on-shoulder improvements between the State Park Drive and Freedom Boulevard interchanges, replace the two existing railroad bridges between the State Park Drive and Rio del Mar interchanges, and widen the Aptos Creek bridge. This section of Highway 1 provides access to Aptos Village, Rio del Mar, Aptos High School, and Aptos Hills/ Corralitos.

The auxiliary lanes will connect the on-ramps with the next off-ramp, thereby extending the weaving and merging distance between the ramps, improving traffic operations, and reducing cut-through traffic diverting to local streets and neighborhoods. And the bus-on-shoulder

improvements adds infrastructure for buses to travel in the auxiliary lanes between the interchanges and on the outside shoulder through interchanges.

The existing railroad bridges will be replaced with longer span bridges to accommodate the addition of auxiliary lanes on Highway 1. The Highway 1 bridge over Aptos Creek will be widened or replaced as part of the project. The new bridges, sound walls, and retaining walls will incorporate aesthetic treatments consistent with the visual character of the corridor and the adjacent community.

This project also includes construction of Segment 12 of the Coastal Rail Trail, a bicycle and pedestrian trail along an approximately 1.25-mile segment of the Santa Cruz Branch Rail Line (SCBRL) right-of-way from State Park Drive to Rio Del Mar Boulevard. The SCBRL corridor is an active freight line and is owned by the RTC.

The RTC is leading the delivery of this project. Measure D-Highway Corridor funds and other RTC discretionary funds are being used to perform the work necessary to ready the project for construction, and as a match for future SB1 and federal construction grants.

Environmental clearance for this project is anticipated to occur in 2022, which would make this project eligible to compete for Cycle 3 of the SB1 Solutions to Congested Corridors Program, Local Partnership Program, and Active Transportation Program competitive funds. This project is expected to begin the design phase in 2022 and to be construction-ready in 2025, pending availability of funds for construction.

Past Highway 1 Projects

The **Highway 1 Mission Street** project, finished in 2004 at a cost of $10.5 million, provided several left turn lanes and two continuous lanes for the length of this main street-type stretch of the corridor through the west side of the City of Santa Cruz. This project helped to alleviate some of the traffic congestion along Mission Street Highway 1 which is exacerbated by its proximity to the University of California, Santa Cruz and the lack of alternative parallel routes. Additions such as lighting, pedestrian crossings, and undergrounding of utilities cost an additional $3.6 million. This project included extensive community input.

The **Highway 1/17 Interchange Merge Lanes** project was a major project along the Highway 1 corridor. This project, completed in 2008 at a cost of $51 million, added merging lanes and sound walls between the junction of Highway 1/17 and the Morrissey Boulevard interchange. Auxiliary lanes in each direction provide longer and safer merging areas; installation of sound walls improves the quality of life for adjacent neighborhoods; and the reconstructed bridges provide improvements to the adjacent riparian corridors. The landscaping portion of the project, completed in 2010, included planting native trees and shrubs, and vines to cover the sound walls, and installation of an irrigation system to help establish the plants. Northbound Highway 1 coming off the fishhook onto Highway 17 was widened in 2016 to accommodate another merge lane for improvements to safety.

In 2012 and 2013, the RTC managed the construction of the **Highway 1 Soquel/Morrissey Auxiliary Lanes** project which adds approximately one mile of auxiliary lanes, in both the northbound and southbound directions, between Soquel Avenue and Morrissey Boulevard. The La Fonda Avenue Bridge was rebuilt to make it wide enough for the new auxiliary lanes (and potential future High Occupancy Vehicle (HOV) lanes) and to improve sidewalks and bicycle lanes across the bridge. The purpose of the project was to improve traffic flow by extending merging areas to shorten the bottleneck and reduce vehicle delay on the corridor.

Funding for this project was awarded by the California Transportation Commission via a competitive process using Proposition 1B Corridor Mobility Improvement Account (CMIA) bond funds (approved by state voters in 2006) and the region's share of State Transportation Improvement Program (STIP) funds.

Highway 17 Corridor

Highway 17 traverses the Santa Cruz Mountains with 2 lanes in each direction, connecting the county with Silicon Valley and the rest of the San Francisco Bay Area. Because Highway 17 straddles both Santa Cruz and Santa Clara Counties, duties such as maintenance, enforcement, transit, safety improvements, and public education are shared by entities on both sides of the summit of the Santa Cruz Mountains. Due to the steep terrain, curves, and high numbers of traffic incidents, a Safe on 17 Task Force was formed in 1998. Components of the Safe on 17 program include additional enforcement by California Highway Patrol to help enforce posted speed limits, construction projects by Caltrans to improve operational efficiency, and a public information and education campaign. Additionally, call boxes and changeable message signs were installed, and the Freeway Service Patrol (FSP) service was initiated.

In 2016, an **Access Management Plan**[3] was conducted for State Route 17 by Caltrans in partnership with Santa Cruz County and RTC. The plan identified issues and imbalances on the SR 17 corridor between Granite Creek Road in Scotts Valley and Summit Road at the Santa Cruz/Santa Clara County line through stakeholder engagement. Short- and long-term access management strategies were identified to address access, mobility and safety needs to help preserve Highway 17 as an efficient interregional corridor. Many of the projects identified in the Access Management Plan and included in the RTP project list (Appendix E) have unconstrained project costs and programming has not been identified by Caltrans or other local partners. However, Caltrans continues to work with local partners on identifying and pursuing programming opportunities to help make improvements along the highway corridor. In addition, Caltrans periodically monitors safety and operations on Highway 17.

Caltrans, RTC, Land Trust of Santa Cruz County, and resource agencies have partnered to construct a wildlife undercrossing on Highway 17 near Laurel Road in Santa Cruz County, with construction scheduled to begin in early 2022. Caltrans will construct a wildlife crossing under Highway 17 near Laurel Curve to allow safe passage for wildlife. The wildlife corridor connects

two core habitat areas that the Land Trust has protected from development. Measure D will provide $5 million for construction of this project.

Caltrans is currently developing a **State Route 17 Resiliency and Adaptation Plan**, which will explore the following topics for SR 17 in Santa Cruz and Santa Clara Counties: Climate Change Vulnerability and Resiliency, Emergency Management and Response, Equity and Socioeconomic Characteristics, Wildlife Habitat Connectivity, and Transportation and Land Use. The plan seeks to engage corridor stakeholders and the public to establish a collective corridor vision and recommend adaptation strategies that strengthen the resiliency of the SR 17 Corridor. The SR 17 Resiliency and Adaptation Plan is scheduled for kickoff in Summer 2022.

Highway 9

Highway 9 is a mountainous road connecting Santa Cruz to towns in the San Lorenzo Valley as well as providing another route over the Santa Cruz Mountains to Saratoga and Los Gatos in Santa Clara County. Through San Lorenzo Valley, the highway acts as a main street for the communities of Felton, Ben Lomond, and Boulder Creek. A **Complete Streets Plan**[4] was prepared by RTC in partnership with Caltrans and County of Santa Cruz for Highway 9 and connecting county roads through San Lorenzo Valley (SLV) that identifies and prioritizes implementation of the most critical and cost-effective transportation projects. This plan focuses on safety for pedestrians, bicyclists, and motorists; access to schools, businesses, and bus stops; traffic operations, pavement conditions, drainage, and other needs in this travel corridor. Projects have been prioritized that can be implemented in the short and mid-term to address transportation challenges on the corridor. Measure D, which was approved by voters in November 2016, includes $10 million specifically earmarked for high priority transportation projects along the Highway 9 corridor. Plans for reducing congestion through the Highway 1 and Highway 9 intersection, just south of the Mission Street segment of Highway 1, are currently under development by the City of Santa Cruz. The project has received all necessary approvals and funding to construct the project starting in mid-2021 and continuing into early 2022.[5]

Highways 236 and 35

Highway 236 is a total of 18 miles and makes a loop connecting Highway 9 in Boulder Creek to Big Basin Redwoods State Park. A significant portion of the highway is one lane in each direction and passes through densely forested areas. In August 2020, the CZU Lightning Complex Fire burned over 86,000 acres within Santa Cruz and San Mateo Counties, causing significant damage to critical roadway facilities along segments of Highway 1, 9, and partial closure of Highway 236.

Highway 35, often referred to as "Skyline Boulevard" is a two-lane road running mostly along the ridge of the Santa Cruz Mountains weaving between Santa Cruz County and Santa Clara County. Because of its scenic views and winding roadway, Highway 35 sees substantial

recreational motoring and bicycling use. The winter storms of 2016/2017 washed out a section of Highway 35 near Highway 9 that made the highway impassable.

Highway 129 and 152

Highways 129 and 152, doubling as main streets through the City of Watsonville, connect south Santa Cruz County with neighboring counties, Highway 101 and the Central Valley to the east. On the western edge, Highway 152 begins at Highway 1 and is named Main Street through the City of Watsonville, then heads up and over the Hecker Pass and county line to Gilroy in Santa Clara County and beyond. The City of Watsonville is coordinating with Caltrans options to provide context-sensitive design to enhance "walkability" and the main street character of the roadway, while maintaining operational efficiencies in the corridor. Highway 129 traverses the southern portion of the City of Watsonville and connects with Monterey County near Aromas, providing an important link to Highway 101 near San Juan Bautista. Highway 129 is heavily used for goods movement, particularly for agricultural products as this is the link from Santa Cruz County to Highway 101, a major goods-movement corridor. Caltrans has made numerous improvements to Highway 129 in recent years, including curve realignments, turnouts, additional signage, improved striping, and an increased number of roadway reflectors.

Local City and County Street Network

Local streets and roads -- including nearly 900 miles of roads, bridges, curbs and gutters, sidewalks, access ramps, bicycle lanes, stop signs and traffic signals -- are critical components of the region's transportation system. The majority of travel, whether by car, bicycle, bus or foot, is done on local streets and roads. From the moment we open our front door and head towards work, school, the store, medical facilities or other destinations, we are dependent upon our local streets and roads. Increasingly, communities are calling for their local streets and roads to be designed as 'Complete Streets' that focus on the movement of people, including non-drivers of all ages and abilities, and the variety of travel modes they may use.

The cities of Capitola, Santa Cruz, Scotts Valley and Watsonville and the County of Santa Cruz are responsible for maintaining and improving this multimodal network in Santa Cruz County. However, with such a large network and limited revenues, local jurisdictions are challenged to maintain, reduce congestion through, and add pedestrian and bicycle facilities to the multimodal local street and road network. Each of the five local jurisdiction public works departments rates the condition of their roadways using a Pavement Condition Index (PCI) to better understand the condition of their jurisdiction's road system and prioritize improvement projects. A PCI of 100 is in premium condition, and the optimum score is 70 or greater. The cost to rebuild roadways with lower PCI scores increases exponentially. Figure 2.2 shows the average PCI for each jurisdiction.

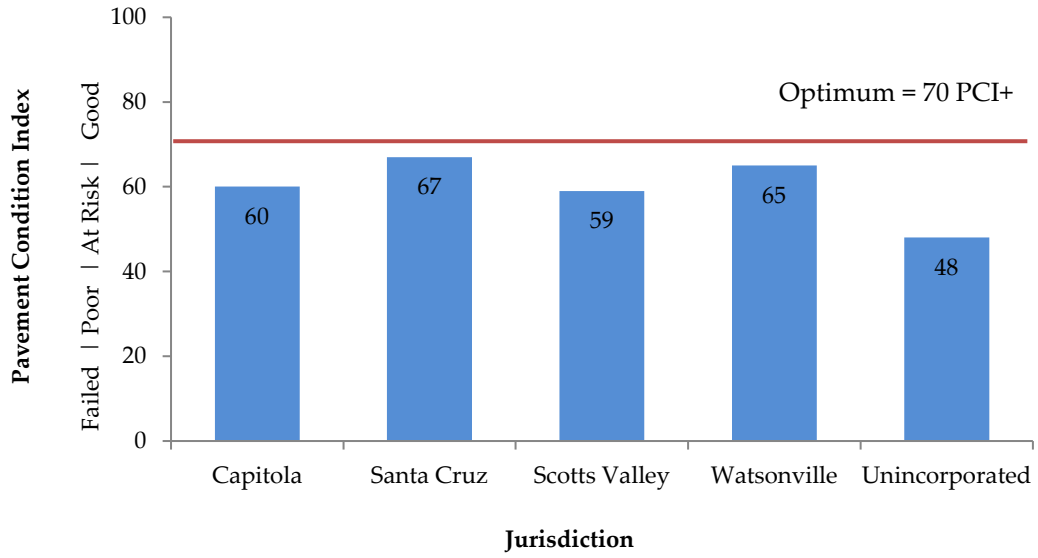


Figure 2.2 – Average Pavement Condition for Local Jurisdictions

Source: Public Works Departments of Santa Cruz County, City of Santa Cruz, Watsonville, Scotts Valley, Capitola. Data collected from 2020.

Transit

Public transit is operated locally by the Santa Cruz Metropolitan Transit District (METRO). METRO provides four types of services: local fixed-route bus service, Highway 17 Express Bus service, ParaCruz ADA-mandated paratransit, and Cruz On-Demand microservices (Figure 2.3). METRO operates over 90 buses (including 4 all electric buses) on 24 fixed routes on approximately 400 miles of roads. Higher frequency service routes (intersection of two or more major bus routes with a frequency of service interval of about 15 minutes during weekday morning and afternoon peak commute periods) are highlighted in Figure 2.3. METRO operates four transit centers in Santa Cruz County: Cavallaro Transit Center in Scotts Valley, Santa Cruz METRO Center in Downtown Santa Cruz, Capitola Mall Transit Center, and Watsonville Transit Center in Downtown Watsonville (Figure 2.1.). Funding for METRO is provided through ticket fare revenues, two local sales taxes (including a dedicated ½ cent sales tax and funds from Measure D), Transportation Development Act (TDA) funds, State Transit Assistance (STA) funds and various other state and federal dollars. This funding mix for local public transit is similar to that of other public transit systems across the state and nation.

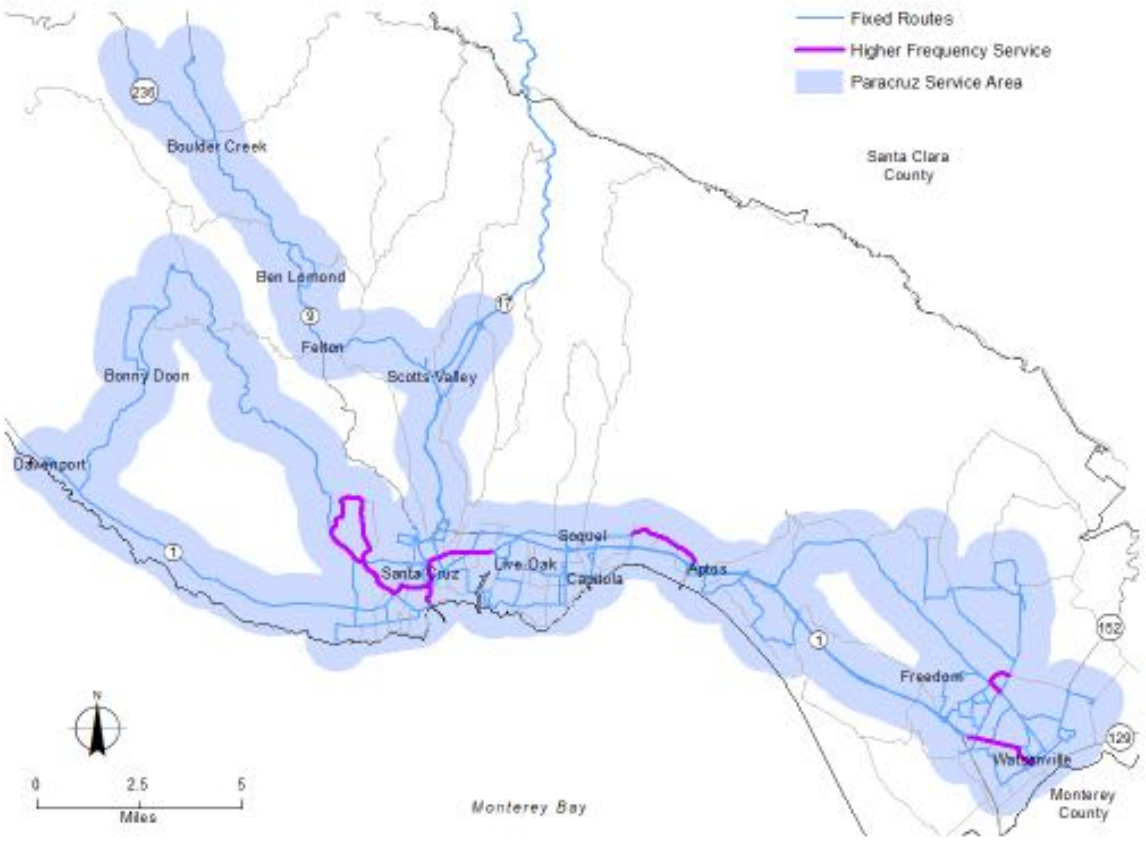


Figure 2.3 – Transit Service Provided by Santa Cruz Metropolitan Transit District (METRO)

Source: Santa Cruz County Regional Transportation Commission and Santa Cruz Metropolitan Transit District, 2021

Santa Cruz County is also connected to Monterey County by bus service provided by Monterey-Salinas Transit (MST) and to other parts of the state via the Highway 17 Express. The Highway 17 Express Bus – which is operated by METRO and overseen by a partnership of METRO, Amtrak, the Capitol Corridor, the San Joaquin Joint Powers Authority, and the Santa Clara Valley Transportation Authority (VTA) – provides a connection to Diridon Station in San Jose which serves the southern part of the San Francisco Bay Area and other regional passenger train services (see rail section for details) Single-ticket direct connections to Amtrak and Greyhound are available.

Santa Cruz METRO offers a selection of reloadable plastic CRUZ Cards, and disposable paper METRO Passes for use on all fixed-routes. Tickets can also be purchased in advance using METRO's mobile ticketing app, the METRO Splash Pass. METRO's Customer Service Department provides trip planning for the fixed route system, in addition to Cruz511 and Google Transit.

The COVID-19 pandemic and related restrictions led to major transit demand decline and impacted transit service and METRO facilities. In an effort to respond to severe decrease in ridership during the pandemic, METRO operated fewer buses with less frequency of service and later start times/ earlier end times. In response, METRO implemented a number of creative initiatives to bring back riders. In 2021, METRO established a temporary fare reduction program county-wide to provide financial relief to those who rely on METRO's services and assist in the community's recovery. METRO also began a new pilot microtransit service, Cruz On-Demand, throughout Santa Cruz County that lets riders book trips on-demand. The Cruz On-Demand service area extends 3/4s of a mile from any of METRO's fixed bus routes, excluding Highway 17 and the UCSC campus. Cruz On-Demand is intended to supplement METRO's fixed-route service in areas where service is less frequent and demand is not as great. METRO also introduced the new Watsonville Circulator Route, connecting the downtown transit center with primary retail and medical destinations in Watsonville, and serving some of the lowest income communities in METRO's service area. METRO's recovery from the service reductions implemented due to COVID-19 has been slow and steady with service restored service to pre-COVID levels on all routes with the exception of weekday Highway 17 and 91X service, and some school term trips. More information about this topic is discussed in Chapter 3.

Specialized Transportation

Many seniors and people living with disabilities need specialized transportation services to get around Santa Cruz County. This might include lifts or ramps for wheelchairs in vehicles, drivers with special training, or vehicles that kneel or are equipped with other accessible features. The RTC produces a Guide for Specialized Transportation Services that is regularly updated. Included in this guide is information about enrollment eligibility, schedule, service area, and fee information for over 30 transportation providers or agencies throughout Santa Cruz County.

The Americans with Disabilities Act (ADA) mandates that complementary paratransit service be provided for people unable to use the fixed route transit due to physical, cognitive and/or psychiatric disabilities. In our region, the ADA-mandated service is **ParaCruz** and is provided by Santa Cruz Metropolitan Transit District (METRO). METRO ParaCruz provides service to any destination within Santa Cruz County that is within three-quarters (¾) of a mile of an operating bus route. This service is a shared ride service arranged in advance. The one-way fare for METRO ParaCruz service in 2021 is $4.00 or $6.00, depending on the origin and destination of the paratransit trip.[6]

Photo Credit: Community Bridges Lift Line

Another main provider is **Community Bridges Lift Line**. This non-profit provides or contracts a range of services including local and out-of-county medical transportation, senior center/meal site delivery, bed-to-bed medical, veterans medical transportation and taxi scrip. As the area's designated Consolidated Transportation Services Agency, Community Bridges has a responsibility to work toward consolidating and coordinating specialized transportation services to avoid inefficient and duplicative social service transportation programs. Many of the rides provided by Lift Line are to individuals who are unable to afford ParaCruz or because their origin and/or destination are outside the ParaCruz service area.

Other Providers

Although Metro ParaCruz and Lift Line are the two primary providers of specialized transportation services in the county, other service providers also exist. Non-profit or private for-profit entities, such as the Volunteer Center, Veterans Services, local taxi companies, and First Transit operate specialized transportation services. Each particular service program fills a unique niche for, or offers discounted services to, seniors and people with disabilities.

Identifying Needs

To gain a better understanding about potential deficiencies, the RTC conducts a regular process to solicit input about unmet specialized transportation needs in the community. Social service entities, non-profits, local transportation providers, community organizations and human service advocates, as well as members of the public identify gaps and needs in human service transportation. Input from all these and other sources is incorporated into the development of the RTC Unmet Needs List and federally mandated Monterey Bay Region Coordinated Public Transit-Human Services Transportation Plan. The most recent version of the Coordinated Plan was finalized in 2013. The plan incorporates these identified needs and presents innovative implementation strategies for closing the gaps and improving the management of mobility services. These strategies help prioritize available funding. The Coordinated Public Transit - Human Services Transportation Plan, which is an element of the Metropolitan Transportation Plan prepared by AMBAG, is available online at www.ambag.org.

Santa Cruz Branch Rail Line

On October 12, 2012, after more than ten years of extensive due diligence and negotiations, the RTC became the owner of the Santa Cruz Branch Rail Line (SCBRL) with State funding sponsorship, thereby placing this cross-county transportation corridor into public hands. The RTC purchased the rail corridor on behalf of the community to preserve the corridor for existing and future transportation uses, including freight rail, passenger rail service/transit, and bicycle and pedestrian facilities. Since then, the RTC has ensured continuation of freight service, implemented recreational rail service, began construction of a bicycle and pedestrian path and completed studies on potential uses of the corridor.

This 135-year-old transportation corridor is a federally regulated freight railroad that parallels Highway 1, extending almost 32 miles from just south of the county line near Watsonville, to Davenport in north Santa Cruz County (Figure 2.4). The right-of-way is generally 50 to 60 feet wide with over 100 culverts and grade crossings, and 37 bridges and trestles, including major crossings of the Pajaro River, Highway 1, Soquel Creek, the Santa Cruz Yacht Harbor, and the San Lorenzo River. Adjacent land uses include residential, commercial, industrial, agricultural, and park land/open space.

The corridor links major activity centers as it traverses downtown Watsonville, Aptos Village, Capitola Village, and the Santa Cruz Beach area near downtown Santa Cruz. Also adjacent to the corridor are many parks and recreational facilities including Manresa State Beach, Seacliff State Beach, New Brighton State Park, Simpkins Swim Center, Santa Cruz Yacht Harbor, Natural Bridges State Park, Wilder Ranch State Park, and Nisene Marks State Park. The rail corridor enhances public access to the Monterey Bay National Marine Sanctuary at several key locations consistent with the CA Coastal Act objectives.

Preservation of the Santa Cruz Branch Rail Line

Measure D provides 8 percent of revenue, approximately $1.6 million a year, for rail infrastructure preservation and analyses to determine the future potential use of the corridor to better serve Santa Cruz County residents and visitors. In 2015, the RTC completed a rail transit feasibility study which analyzed a range of public transportation service scenarios on the SCBRL and how well each scenario advances community goals and objectives. In 2019, the RTC accepted the Unified Corridor Investment Study (UCS) which identified priority transportation investments on Highway 1, Soquel Avenue/Drive, Freedom Boulevard, and the SCBRL that maximize mobility and environmental benefits. The UCS acts as the RTC's Multimodal Corridor Plan, making projects along the 3 routes eligible for Senate Bill 1 (SB1) competitive funds, including the Solutions for Congested Corridors Program (SCCP) and Local Partnership Program (LPP). The UCS also directed RTC staff to collaborate with the Santa Cruz Metropolitan Transit District (METRO) to develop a scope of work for additional analysis of high-capacity public transit alternatives on the SCBRL.

In 2021, the RTC, in partnership with METRO and with funding from Measure D and a Caltrans transportation planning grant, completed the Transit Corridor Alternatives Analysis and Rail Network Integration Study (TCAA/RNIS) to evaluate transit investment options that provide an integrated transit network for Santa Cruz County utilizing all or part of the length of the SCBRL as a dedicated transit facility. The focus of the TCAA/RNIS was to evaluate high-capacity transit investment options and identify a locally preferred transit alternative that provides the greatest benefit to county residents, businesses, and visitors in terms of the triple bottom line goals of improving economy, equity, and the environment. In February 2021, the RTC accepted the TCAA/RNIS which selects electric passenger rail as the locally preferred alternative for the SCBRL. A 25-year draft Business Plan was prepared to serve as the guiding document for funding and implementation of electric passenger rail, however the RTC abstained from adopting a resolution accepting the Business Plan. Passenger Rail is included in this long-range plan, but primarily on the financially unconstrained list of projects, due to the lack of identified and likelihood of available funding to the region for a passenger rail project, however it does not preclude the ability to implement passenger rail in the future. Constrained funding is identified to continue the environmental and preliminary design assessment of possible future public transit on the rail corridor right-of-way.

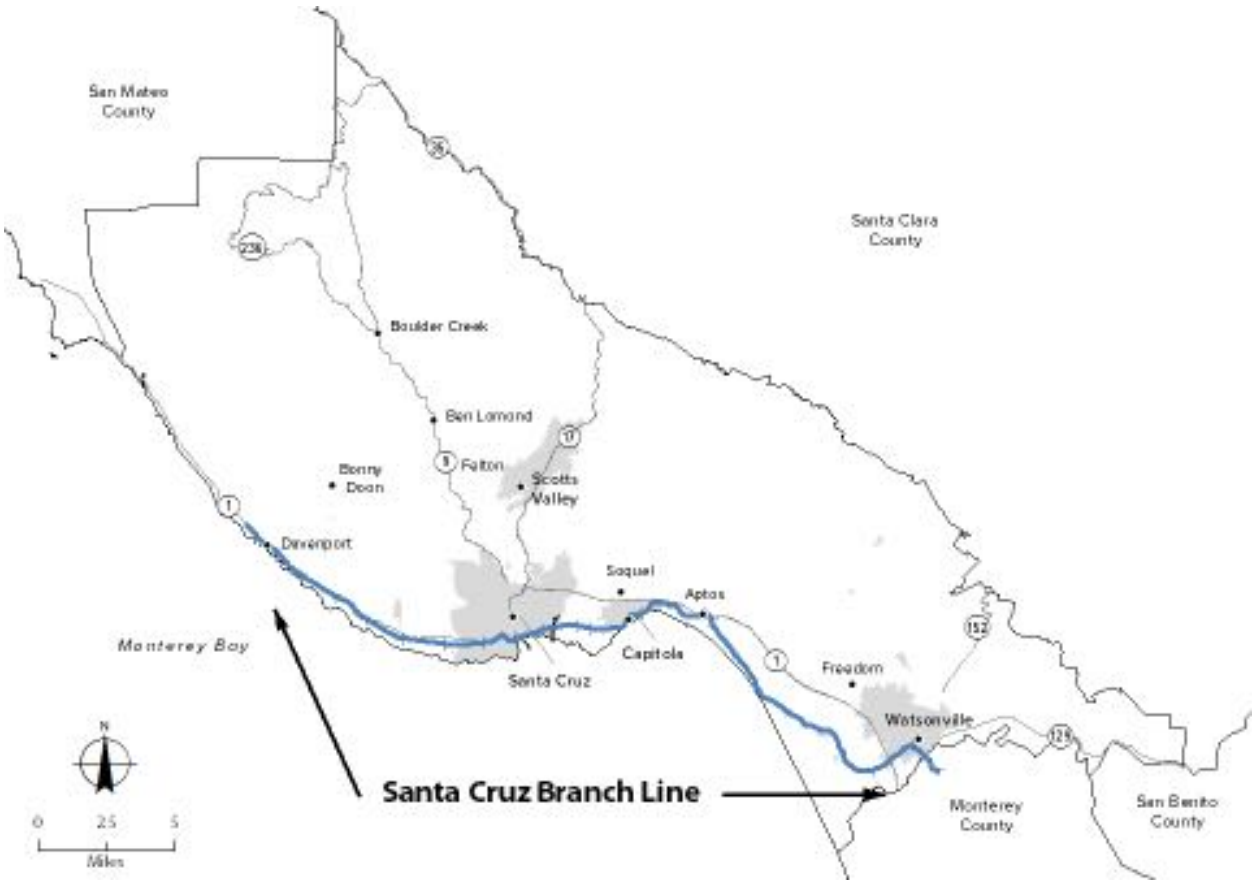


Figure 2.4 – Santa Cruz Branch Rail Line

Source: Santa Cruz County Regional Transportation Commission

Freight and Recreational Service

Although the SCBRL is owned by the RTC, the freight operator designated as the common carrier by the Surface Transportation Board (STB), owns a 20-foot-wide easement centered along the tracks and is responsible for the freight operations along the line. The STB is the federal agency that has regulatory jurisdiction over the interstate freight railroad network. An administration, coordination and license agreement (ACL) between the RTC and the rail operator outlines the responsibilities, obligations and rights of the operator and the RTC.

The initial freight operator was the Santa Cruz and Monterey Bay Railway (SC&MB) a company of Iowa Pacific Holdings. In addition, to providing freight service, SC&MB Railway implemented recreational rail service during the Christmas Holiday seasons of 2012 through 2016. The current freight operator as of July 2018 is Saint Paul and Pacific Railroad (SPPR) a company of Progressive Rail (PGR). SPPR entered into a separate agreement with Roaring Camp Railroads (Roaring Camp) to provide freight service in Watsonville and is currently serving about half a dozen active freight rail customers. Currently freight service operates from the western boundary of the City of Watsonville along West Beach Street east to the town of Pajaro connecting to the Union Pacific main line. There are no active customers north of Watsonville. Some of the goods shipped on the rail line include construction materials and agricultural products. Shipping some types of goods on the rail network is more efficient, cost effective, uses less fuel, and emits significantly less greenhouse gases. Local freight rail volumes have decreased significantly due to the COVID-19 pandemic but are starting to recover. SPPR/PGR continues to provide freight service to existing customers but has indicated that they would like to terminate their operating agreement with the RTC and reserves the right to file for abandonment at any time. If the operator was to file for abandonment, the RTC could railbank the rail line to preserve the continuous transportation right-of-way for future freight reactivation and other transportation uses.

Furthermore, in 2017, serious storm damage put the SCBRL out of service, a few miles north of Watsonville. RTC is required in the agreement with the rail operator to complete the 2017 storm damage repairs and make initial repairs to track, bridges and culverts that are needed for freight and recreational rail service beyond Watsonville. RTC has completed all storm damage repair work, but significant work remains to repair bridges, culverts and track. The RTC plans to seek reimbursement of disaster relief funds from the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency Services (CalOES) for the completed 2017 storm damage projects.

Roaring Camp is the owner of the Felton Branch Rail Line which connects to the SCBRL near the Santa Cruz Wharf and extends up the San Lorenzo Valley to Felton. Roaring Camp Railroads operates excursion and seasonal passenger rail service between Felton and Santa Cruz during the summer and during the end of the year holidays and provides freight rail service to the San Lorenzo Valley area when needed.

California State Rail Plan

The California State Rail Plan[7] (Rail Plan) establishes a long-term vision for an integrated, cohesive statewide rail system that offers efficient passenger and freight service, supports California's economy, and helps achieve critical climate goals. A statewide rail system offers a viable alternative to driving for both local and long-distance trips for all populations, including those who lack access to or cannot afford automobiles. The 2018 Rail Plan identifies short term, mid-term, and long-term planning goals for the integrated, statewide rail network. The 2022 short-term plan regional goals include a new station in Pajaro/ Watsonville and an analysis of opportunities to improve connections between Santa Cruz, Monterey and the High-Speed Rail Line at Gilroy. The 2027 mid-term plan goals include implementation planning for connecting Santa Cruz and Monterey to the statewide rail network at Gilroy and establishment of hourly service by 2040. The 2040 long-term vision supports expansion of services along the Coast Route, providing access to and from Northern and Southern California; and providing for additional through frequencies on a limited but regular schedule, supplemented by integrated express bus connections. Figure 2.5 shows the 2040 vision for the integrated, statewide rail network within northern California.

Caltrans is currently developing the 2022 California State Rail Plan[8]. The 2022 State Rail Plan is an update to the existing 2018 Rail Plan and aims to enhance rail service in the public interest and serves as a basis for federal and state rail investments in passenger and freight rail projects. More specifically, the 2022 Rail Plan seeks to revise the statewide vision by incorporating outputs from network integration activities and local/regional studies, advise priorities for state investment by updating operating and capital investments, and devising implementation strategies to coordinate across funding and operating agencies. It is anticipated that the 2022 California State Rail Plan will be published in mid-2022.

In 2019, the California Transportation Commission (CTC) established a competitive funding program consistent with the California State Rail Plan to allocate funds for short-line railroad projects and in 2020 the CTC issued a call for projects for the Short Line Railroad Improvement Program. In 2021, the RTC was awarded a grant from the CTC Short Line Railroad Improvement Program to help fund 50% of total construction costs for the Pajaro River Bridge

Rehabilitation Project along the Santa Cruz Branch Line, using Measure D rail funds and lease revenues as a funding match.

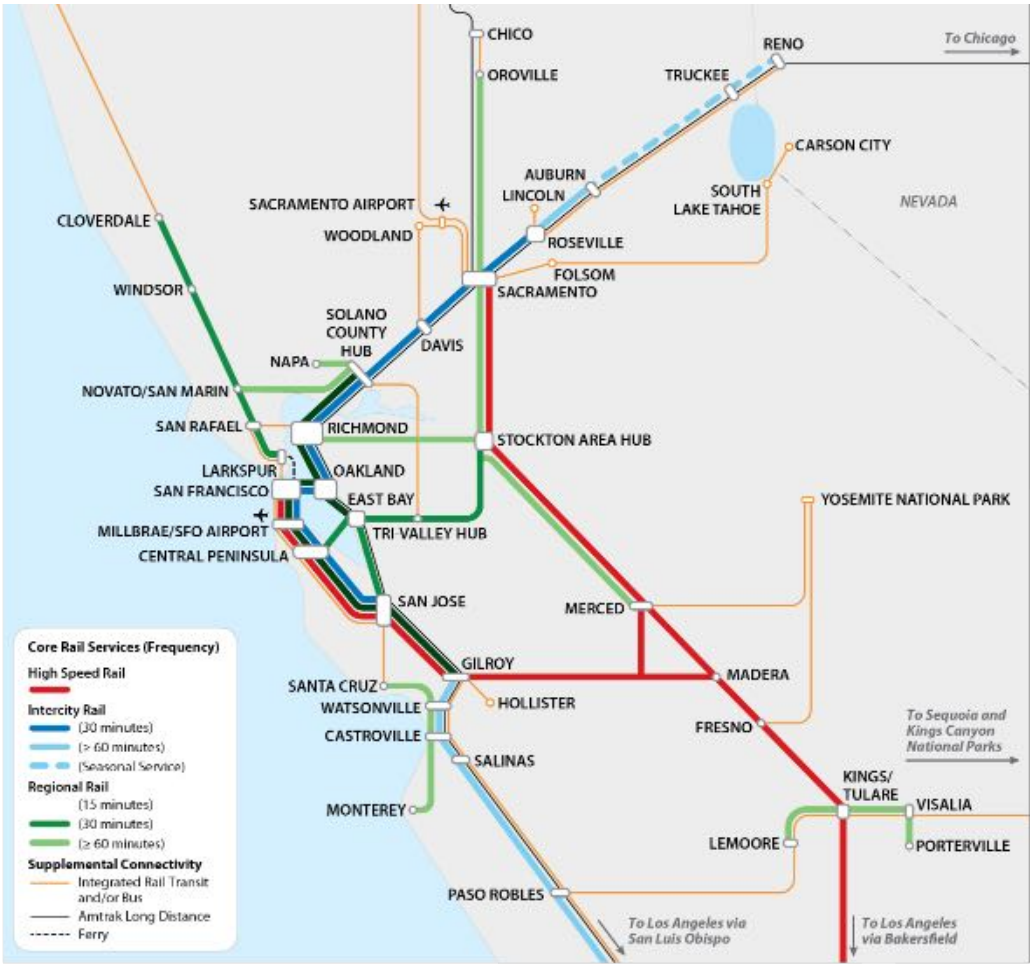


Figure 2.5 – 2040 Vision for the California State Rail Network

Source: 2018 California State Rail Plan

Photo Credit: Howard Cohen

There are four existing passenger rail services accessible by traveling to neighboring counties. Amtrak provides interstate and cross-country train connections with daily service on the Coast Starlight between Seattle, WA and Los Angeles, CA with stops in San Jose and Salinas. Caltrain provides commuter service to cities along the peninsula between San Francisco and San Jose with an extension to Gilroy. The Altamont Corridor Express (ACE) provides weekday service between Stockton and San Jose. The Capitol Corridor provides daily service between San Jose and Sacramento/Auburn. The closest access point for all four trains is the San Jose Diridon Station, which can be reached using the Highway 17 Express Bus. For south county residents, Caltrain's Gilroy or Amtrak's Salinas station may be equally close.

The Transportation Agency for Monterey County (TAMC) is actively pursuing rail service that includes local service as well as greater regional access. Regional service would entail an extension of the passenger rail service from Santa Clara County to Salinas with a stop at Pajaro Station and Castroville. Local light rail service would connect the cities of Seaside and Monterey to Castroville for connections to Pajaro Station and the San Francisco Bay Area and beyond. Figure 2.6 shows the Santa Cruz Branch Line in relation to existing and proposed new passenger rail services on the state rail corridor.

Figure 2.6 – Regional Rail Network Surrounding Santa Cruz County

Source: Santa Cruz County Regional Transportation Commission

High Speed Rail Plans

Construction of the first segment of high-speed rail is well underway. The construction of Phase 1 began in 2015 and will connect the San Francisco Bay Area to the Los Angeles Basin through the Central Valley. Phase 2 will extend to Sacramento and San Diego (Figure 2.7). The project is funded in part by Proposition 1A, a bond measure passed by California voters in 2008. According to the State, "California high-speed rail will fundamentally transform how people move around the state, spur economic growth, create a cleaner environment, and preserve agricultural lands and natural habitat – and it has already created thousands of good-paying jobs." The Phase 1 system will run from San Francisco to the Los Angeles basin in under three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations.[9]

The closest stations for Santa Cruz County residents will be in San Jose or Gilroy. Once high-speed rail service is completed, transit connectivity to these stations will be essential in order for Santa Cruz County residents to fully benefit from this new rail system. High Speed Rail will provide important transportation alternatives for travel between San Francisco and Los Angeles.

Figure 2.7 – Proposed California High Speed Rail Line

Source: California High Speed Rail Authority

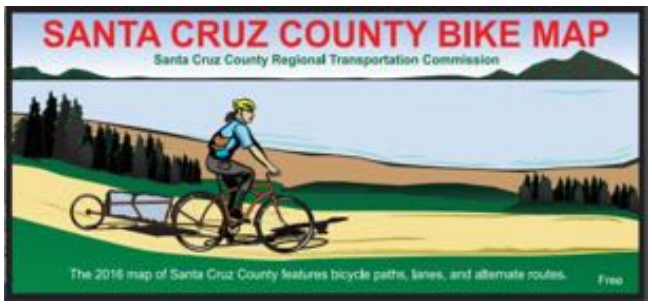
Active Transportation

Bike Network

The region has an extensive network of bike lanes and paths for commuters and recreational riders. Currently, Santa Cruz County boasts 223 miles of bikeways: 196 miles of bike lanes and 27 centerline miles of separated paths. Bike lanes can be found on most arterials and collector roads and there are an increasing number of separated bike paths and bikeways on low traffic volume neighborhood streets. Bicycle parking, including bicycle racks and lockers, are located throughout the county.

New green bike lanes installed in Watsonville
Photo Credit: Tony Nuñez/The Pajaronian

The area has an active bicycling community which promotes the provision of dedicated bicycle facilities on a variety of roadway types to accommodate the varied ability and comfort levels of people in our community. The RTC has a Bicycle Advisory Committee which reviews RTC-funded bicycle projects and programs and advises the RTC and other entities on bicycle related issues.



RTC provides free countywide bike maps.

Bicycle Resources and Programs. There are numerous resources and programs that educate people about bicycling and encourage them to bike in Santa Cruz County. One of the most popular outreach materials produced by the RTC is the Bicycle Map featuring bicycle paths, lanes, and alternate routes throughout the county. This map is available in a printed or electronic format from the RTC's website. The Bicycle Map contains information on bicycling resources and rules of the road in both English and Spanish.

In addition, there are several ongoing events promoting bicycling and bicycle safety. The RTC has been a primary funder of Ecology Action's Bicycle to Work/School events, which are held twice a year. The events include activities at schools, coffee shops and other sites around the county and draw about 13,000 participants per year. Open Streets events - which temporarily divert automobile traffic and open entire roadways for people to bike, walk, skate in a safe and

festive environment –have been occurring annually in a number of locations throughout the county.

The Community Traffic Safety Coalition and Ecology Action, both partially funded by the RTC, provide ongoing bicycle safety classes, outreach and education programs countywide.

Pedestrian Facilities

Whether walking to the bus stop, from a parking spot into work, or home from school, everyone is a pedestrian for some portion of their trip. The existing pedestrian network consists of sidewalks built by developers in conjunction with construction projects, private property owners, and by local jurisdictions as part of roadway projects. Ways in which local jurisdictions work towards expanding the pedestrian network is by constructing sidewalks and curb cuts in conjunction with new and redeveloped streets, considering pedestrian access in new designs, filling gaps in the sidewalk network, and working closely with the public to identify where existing pedestrian facilities need attention. In some areas, local jurisdictions are implementing projects to slow vehicular traffic and create more attractive and functional pedestrian facilities. In recent years, more emphasis is being placed on the benefits of "walkability." Sidewalks and pedestrian-friendly amenities – such as wide sidewalks, crosswalks, curb cuts, landscaping/ buffers and benches – are seen as beneficial additions which make communities friendly and livable.

Students walking at Watsonville High School

Despite a more recent focus on the community and personal, economic and health benefits of pedestrian travel, extensive gaps and other deficiencies in the pedestrian network still exist. The condition of a sidewalk can constitute a barrier, particularly if there are cracks, lifts, vegetation or other obstructions. Universal access standards are focused on the ease of access for pedestrian facilities, particularly for people with mobility impairments.

Additionally, property owners, not the cities and county, are responsible for maintaining sidewalks in front of their properties and are often unaware or slow to make needed repairs. Currently a significant portion of the county's pedestrian facilities are not mapped. As additional information about the existing pedestrian network is available, agencies will be able to increase the quality of these facilities, particularly near activity centers.

Identifying Needs

Bicycling. In addition to several major bicycle projects identified individually in the Regional Transportation Plan (RTP), several local jurisdictions have developed Bicycle Plans or Active Transportation Plans to guide implementation of local policies and funding to support bikeway development, maintenance and support facilities. Members of the general public, RTC's Bicycle Committee, the City of Santa Cruz's Transportation Commission, the Community Traffic Safety Coalition, and other entities continue to assist local jurisdictions with prioritizing and promoting local bicycle programs and facilities.

Pedestrian. A number of groups are working collaboratively to improve the pedestrian network. The goal of the RTC's Elderly & Disabled Transportation Advisory Committee's Pedestrian Safety Work Group is to "ensure safe and accessible pedestrian travel and access throughout the county for the benefit of all residents." The ad hoc pedestrian safety work group committee has been actively engaged in the following:

- Analyzing pedestrian facilities around priority origin and destination locations,
- Assisting in the identification/implementation of improvements to encourage greater transit use and ensure safe/accessible pedestrian travel throughout the region, and
- Conducting an outreach campaign to encourage private property owners to maintain the condition of sidewalks adjacent to their property, as required by California law.

The group also focuses on improving pedestrian safety through educating the public about the rules and typical behaviors relevant to pedestrians, bicyclists and motorists. The group has produced brochures titled "What Pedestrians Want Motorists to Know & What Motorists Want Pedestrians to Know" and "What Pedestrians and Bicyclists Want Each Other to Know."

The Community Traffic Safety Coalition enlists volunteers to complete an annual Pedestrian Safety Observation Survey. The purpose of the study is to track key pedestrian and motorist behaviors that contribute to increased risk of pedestrian injury and fatality. The last survey was completed in 2015 where over 2,800 pedestrians were observed at 18 high traffic pedestrian crossings throughout the county.

Bicycling/Pedestrian. An online interactive Hazard Report on the RTC's website provides a forum for bicyclists and pedestrians to report deficiencies in the network. Individuals can use this form to report hazards that may inhibit bike or pedestrian travel – such as rough pavement, vegetation, drainage issues, traffic signal problems, gaps in the system, and construction obstacles. Completing the form alerts local jurisdictions or the appropriate property owner of the issue.

Report sidewalk potholes using RTC's Hazard Report

Entities such as local jurisdictions, the Community Traffic Safety Coalition and Ecology Action are working on improving Safe Routes to School in response to the high numbers of parents driving their children to school. The Safe Routes to School Program brings together parents and traffic engineers at individual school sites to develop infrastructure and traffic flow improvements and recommend routes for walking and biking. In recent years, this program has developed maps indicating safe routes to school for several local elementary schools.

Caltrans is also actively planning for a multi-modal transportation network to guide the development of non-motorized transportation facilities. In 2017, Caltrans adopted the first California State Bicycle and Pedestrian Plan, *Toward an Active California*.[10] This report lays out an ambitious plan to achieve statewide goals to double walking and triple bicycling trips by 2020. The plan includes four objectives that support the goals of California Transportation Plan 2040 and aligns with the goals and policies outlined in this 2045 Regional Transportation Plan for Santa Cruz County: safety, mobility, preservation, and social equity.

Bicycle and Pedestrian Projects Underway

Monterey Bay Sanctuary Scenic Trail Network (MBSST). In late 2013, the RTC approved the Final Master Plan for the Monterey Bay Sanctuary Scenic Trail Network (MBSST). Master Plans for the trail in both Santa Cruz and Monterey Counties identify how a bicycle and pedestrian pathway will eventually arc the Monterey Bay coastline providing non-motorized coastal access for walkers, joggers, cyclists, people with mobility impairments, families, locals, and visitors. In Santa Cruz County, the 50-mile network can be constructed in segments as funding becomes available. The spine of the trail network in Santa Cruz County will run within the 32-mile rail right-of-way). Trail spurs provide a braided network with coastal access connections to schools, retail centers, residences and other destinations. Sections of the MBSST Network may be designated as part of the California Coastal Trail (CCT). The CCT is a network of public trails

that will extend the entire 1200-mile length of the California Coast and currently is more than half complete. Eighteen (18) miles of projects along the rail right-of-way have been funded in full or in part with construction to begin as soon as design, engineering and environmental permitting are completed (Figure 2.7). These projects include the north coast from Davenport to Wilder Ranch (Segment 5); the west side of Santa Cruz from Natural Bridges Dr to the Santa Cruz Wharf (Segment 7), and from the Santa Cruz Boardwalk to 17th Ave (Segments 8-9); and the City of Watsonville from Lee Rd to Walker St (Segment 18). Portions of segments 7, 8, and 18 have been constructed as of July 2021.

Figure 2.8 – Monterey Bay Sanctuary Scenic Trail Network Map

Source: Santa Cruz County Regional Transportation Commission

Wayfinding Signage. In an effort to increase bicycle ridership and improve safety, the RTC installed bicycle wayfinding signage at 303 locations throughout the county. The signs assist all

types of bicycle riders – commuters, families, recreational riders and visitors – in finding and accessing 53 major destinations throughout Santa Cruz County. This program was implemented in coordination with the Monterey Bay Sanctuary Scenic Trail Network, California Coastal Trail, Pacific Coast Route, and Caltrans signage requirements. Installations were phased beginning in 2019 and completed in October 2020.

Bicycle Wayfinding Sign

Other. Bicycling and walking is also facilitated by Safe Routes to School efforts, the UCSC Bike Trailer & Shuttle service which provides a ride up the hill to campus, and local jurisdiction's increasing incorporation of Complete Streets principals in an effort to balance and encourage all modes of transportation.

Transportation Demand Management

Transportation Demand Management is a general term for the use of strategies that result in the more efficient use of transportation resources.[11] These strategies are designed to increase the number of people using sustainable transportation options such as carpooling, bicycling, walking, telecommuting and taking transit. Since 1979, the RTC has worked with partner agencies to implement TDM strategies at a local level as well as at the regional level. Partner agencies include local jurisdictions and non-profits such as Ecology Action and Community Bridges. Regional strategies include traveler information services, carpool/vanpool matching, workplace-based commute programs, park and ride lot coordination, commute incentives, and marketing campaigns.

The RTC provides TDM services through Cruz511.org, offering dynamic ridematching, multi-modal trip planning, transit resources, and an interactive traffic map with real-time travel conditions including incident details and road or lane closures on county roads and state highways. Knowledgeable travel counselors are also available by phone or email to provide personalized trip planning and support employer commute programs.

In 2019, the City of Santa Cruz launched GO Santa Cruz, a commute incentive program for downtown employees and in 2021, the RTC expanded the program countywide. The GO Santa Cruz County program offers a variety of incentives to help commuters choose options other than driving alone to get to work or school. GO Santa Cruz County is a key part of the RTC's ongoing effort to reduce greenhouse gas emissions and play an active role in addressing climate change. The program is partially funded by voter-approved Measure D, which provides a balanced vision to improve, operate and maintain Santa Cruz County's transportation network.

Park and Ride

Park and Ride lots are strategically located pick up spots where commuters can park their cars during the work or school day to meet a carpool, vanpool, or ride the bus. There are five park and ride lots serving Santa Cruz County commuters (Figure 2.8) located along Highway 1 and Highway 17 and at METRO transit centers in Scotts Valley and Capitola. Parking is free for public use during specified hours, but overnight parking is prohibited. Local park and ride facilities are owned by public agencies or are shared-use lots by agreement with private lot owners. A user guide with additional information is provided on Cruz511.org.

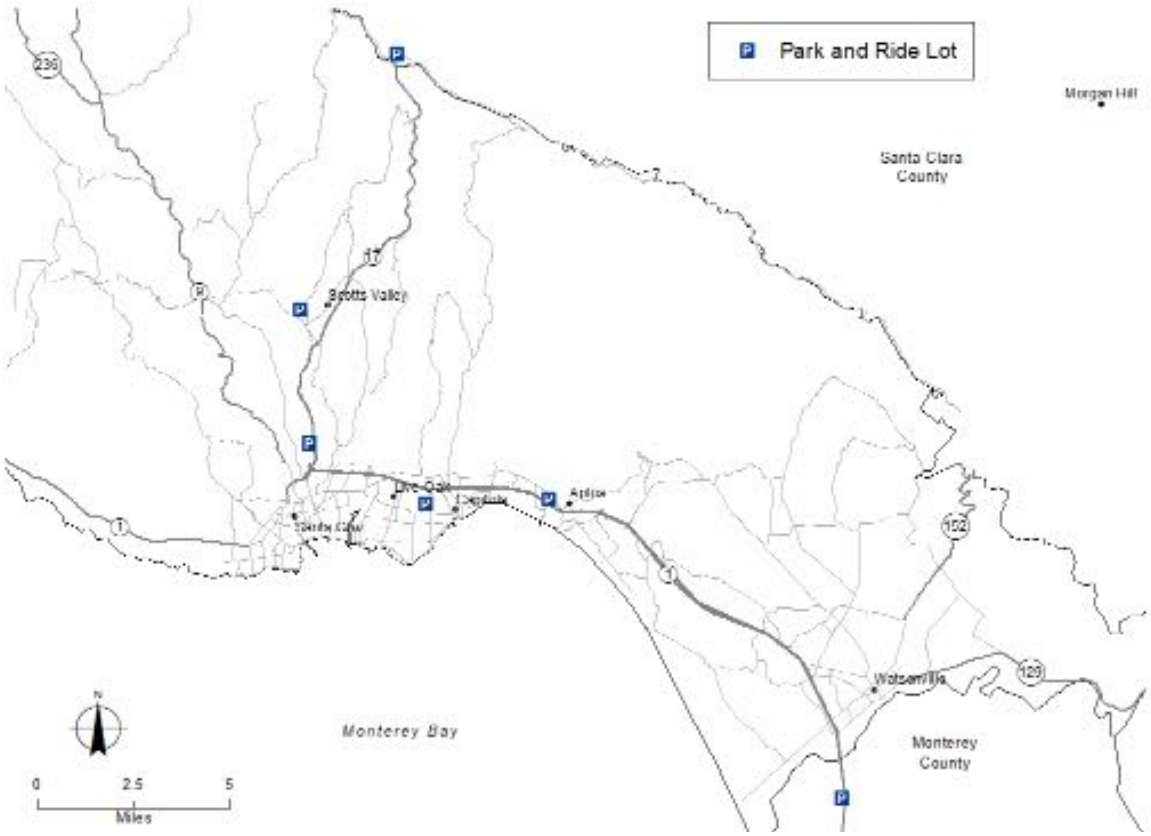


Figure 2.9 – Park and Ride Lots Serving Santa Cruz County
Source: Santa Cruz County Regional Transportation Commission

Transportation System Management

Transportation System Management (TSM) is a strategy of implementing operational projects that can enhance the efficiency of the existing transportation system. Generally, TSM techniques are designed to improve traffic flow and air quality, as well as enhance system accessibility and safety. Often, the costs associated with TSM strategies are lower in cost than constructing new facilities. Example strategies include intersection and signal improvements (e.g., signal

synchronization, high-occupancy vehicle (HOV) queue jumps and signal priority, turning lanes), incident management, auxiliary lanes, and ramp metering.

Auxiliary lane on Highway 1 at Morrissey Blvd in Santa Cruz

Intelligent Transportation Systems

Santa Cruz County's transportation system runs more efficiently and safely due to a variety of Traffic Operation System (TOS) components. Caltrans installs, operates and maintains these systems and works in cooperation with California Highway Patrol and the RTC to assure they are being used to the greatest benefit. Components include the following:

- **Changeable Message Signs (CMS)** - displays messages about roadway conditions (incidents, delays)
- **Dynamic Curve Warning Signs** - broadcasts driver speeds and cautions drivers about safe speeds
- **Closed Circuit TV (CCTV) Cameras** - displays live traffic conditions online to public and Caltrans TMC
- **Traffic Monitoring Stations** - obtains information about traffic speeds and counts
- **Traffic Management Centers (TMC)** - operators at the Oakland TMC and San Luis Obispo TMC control and operate the individual TOS components

- **QuickMap** – mobile and desktop application (http://quickmap.dot.ca.gov/) that displays real-time traffic speeds, construction zones, incidents reported to the CHP, CMS messages and CCTV images

The Traffic Operations System, which extends along Highway 1 and Highway 17, is used to detect and verify traffic incidents and disseminate traffic information to motorists so they may adjust their travel plans accordingly. This system is critical to traffic flow, since single-incident disruptions, such as crashes or construction projects, are responsible for a good portion of all freeway traffic jams. Better information and communication can improve the county's major commute thoroughfares in an economical way.

Intelligent Transportation Systems (ITS), such as the components of the Traffic Operations System, are developed using a standardized architecture. In response to increased federal emphasis on ITS, the Central Coast ITS Strategic Deployment Plan was developed in 2000 through a multi-agency partnership of Central Coast government agencies including the RTC. The Regional ITS Architecture was later developed to ensure that any intelligent transportation system element implemented in the Central Coast considered all possible links to other aspects of the transportation network, whether the connection between these elements were based on the data they required or the data that they dispersed.

For example, information disseminated through a Changeable Message Sign is directly dependent on the roadway condition data collected by the California Highway Patrol, Caltrans or others. As such, ITS Architecture ensures that investments maximize all existing technological resources and build on existing investments. This RTP is consistent with the Regional ITS Architecture to the maximum extent practicable. The 2045 RTP includes funding for continued coordination with Caltrans and the CHP on the Traffic Operations Systems for Santa Cruz County.

Photo Credit: Watsonville Municipal Airport

Aviation

The Watsonville Municipal Airport, developed in 1947, serves business and recreational users, and is the only public use airport in Santa Cruz County. The facility serves single and twin-engine aircraft and helicopters, as well as turboprop and turbine-powered business jets. Approximately 45 percent of all general aviation activities for the Monterey Bay Area are served

by the Watsonville Airport. The double-runway airport occupies 277 acres, plus has an additional 53 acres of land designated as runway protection zone. There is a helipad and fueling facilities on site. The Watsonville Municipal Airport is owned by the City of Watsonville and is a self-sustaining "enterprise operation" with a staff of thirteen full time employees.[12] The airport is home to approximately 330 aircraft and over 60,000 flight operations per year. According to the Watsonville Municipal Airport annual aviation operations count, runway operations (landings and take offs) will increase to 100,000 by the year 2025, most of which will be general aviation. There are 218 hangars and 80 tie-downs on the property to store aircraft. Other structures are primarily for maintenance, flight training, and sales.

The airport serves as the airport base for several agricultural growers that distribute fruits, berries, and vegetables. In addition to use by private citizens and businesses, the airport is also used for law enforcement (County Sheriff, California Highway Patrol, Coast Guard, and California Fish and Wildlife), medical evacuation, fire suppression and flight instruction. The Regional Airports Economic Impact Study completed by AMBAG in 2006 showed that the Watsonville Airport had a total economic impact of over $650 million dollars annually for the region.

There are also three private airstrips within the county, located in Bonny Doon, at the Monterey Bay Academy, and Las Trancas/ Big Creek (the latter two operate for private uses amounting to fewer than 10 trips per month). Large passenger airports serving the region are located in San Jose, Monterey, Oakland and San Francisco. Civil aviation helipads maintained for helicopter use include those at Watsonville Community Hospital and Dominican Hospital. There is also a helicopter pad next to Highway 17 in the Santa Cruz Mountains summit area.

Notes for Chapter 2

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