

5

TRANSPORTATION ELEMENT

Transportation is a fundamental part of our daily lives. The diversity and availability of transportation options, the conditions in which they exist, and how we ultimately choose to travel—to jobs, schools, homes, healthcare providers, stores, and leisure activities—have major implications for quality of life, public health, climate resilience, sustainability, and the environment.

Contra Costa County has excellent regional access by road, passenger and freight rail, water, and air. The county includes dense urban neighborhoods served by local and express bus service, sprawling suburbs connected to the Bay Area's larger employment centers by Bay Area Rapid Transit (BART) and major freeways, and rural and agricultural communities served by a network of two-lane highways and roads. Multi-use trails found throughout the county serve pedestrians, cyclists, and micromobility. Reducing the need for single-occupant vehicle trips, improving travel times for transit and carpools, and providing multiple connections and options for travel between neighborhoods and destinations in Contra Costa County are key considerations for the future. Closing gaps in the multi-use trail network, improving the pedestrian realm, expanding transit access, and extending the range of efficient, safe, and easy options for getting around will enhance the quality of life for all community members. This Element focuses on providing people with a variety of high-quality transportation options, strengthening transportation connections to the rest of the Bay Area and beyond, and improving transportation within communities.

The Transportation Element sets forth goals and policies describing the overall mobility program for the county and identifies the general location of

existing and proposed major transportation routes, terminals, and facilities, as required by the California Government Code. The Transportation Element is divided into the following seven sections that address the needs of the Contra Costa community:

- The **Coordinated Planning** section includes policy guidance to support the County's role in regional transportation projects that involve other agencies locally and across the Bay Area.
- The **Safe and Sustainable Transportation** section includes policy guidance to improve safety for all roadway users and reduce greenhouse gas (GHG) emissions and other environmental harms through expanded opportunities for active transportation, public transit, and zero-emission vehicles (ZEVs).
- The **Multimodal Roadway Network** section defines roadway classifications and includes policy guidance to enhance mobility and connectivity for all roadway users.
- The **Active Transportation** section defines bikeway types and includes policy guidance to expand opportunities for active transportation, which includes walking, biking, or other rolling forms of travel that support active lifestyles and health.
- The **Goods Movement** section includes policy guidance to support rail, port, and truck facilities that bolster the economy, while reducing GHG emissions and protecting public health and safety.



- The **Air Mobility** section includes policy guidance to provide safe and viable general and commercial aviation in the county.
- The **Transportation Element Performance Measures** describe how the County will track its progress in achieving some of the major objectives expressed in this Element.

This General Plan highlights policies and actions that address four major themes that serve as a framework for the Plan. For the reader's ease, policies and actions related to these themes are identified throughout the General Plan using the following icons. The policies and actions related to each theme are also compiled in Appendix A. See Chapter 1 for more information about each theme.



Community Health



Environmental Justice



Economic Development



Sustainability

COORDINATED PLANNING

Contra Costa County is part of a regional transportation network. Residents and workers have access to a variety of transportation options for intra-county and regional travel.

The Contra Costa Transportation Authority (CCTA) serves as the Congestion Management Agency (CMA) for the county and distributes sales tax revenue to the County, cities, and transit agencies for projects and programs like freeway improvements, local road maintenance, public transit enhancements, and Safe Routes to School. CCTA prepares and implements the Countywide Transportation Plan (CTP) and its associated voter-approved Expenditure Plan to guide development of the future transportation system in Contra Costa County.

To distribute transportation funding equitably and appropriately, CCTA divides the county into five subregions, each administered by a Regional Transportation Planning Committee. Unincorporated Contra Costa County is spread among all five subregions:

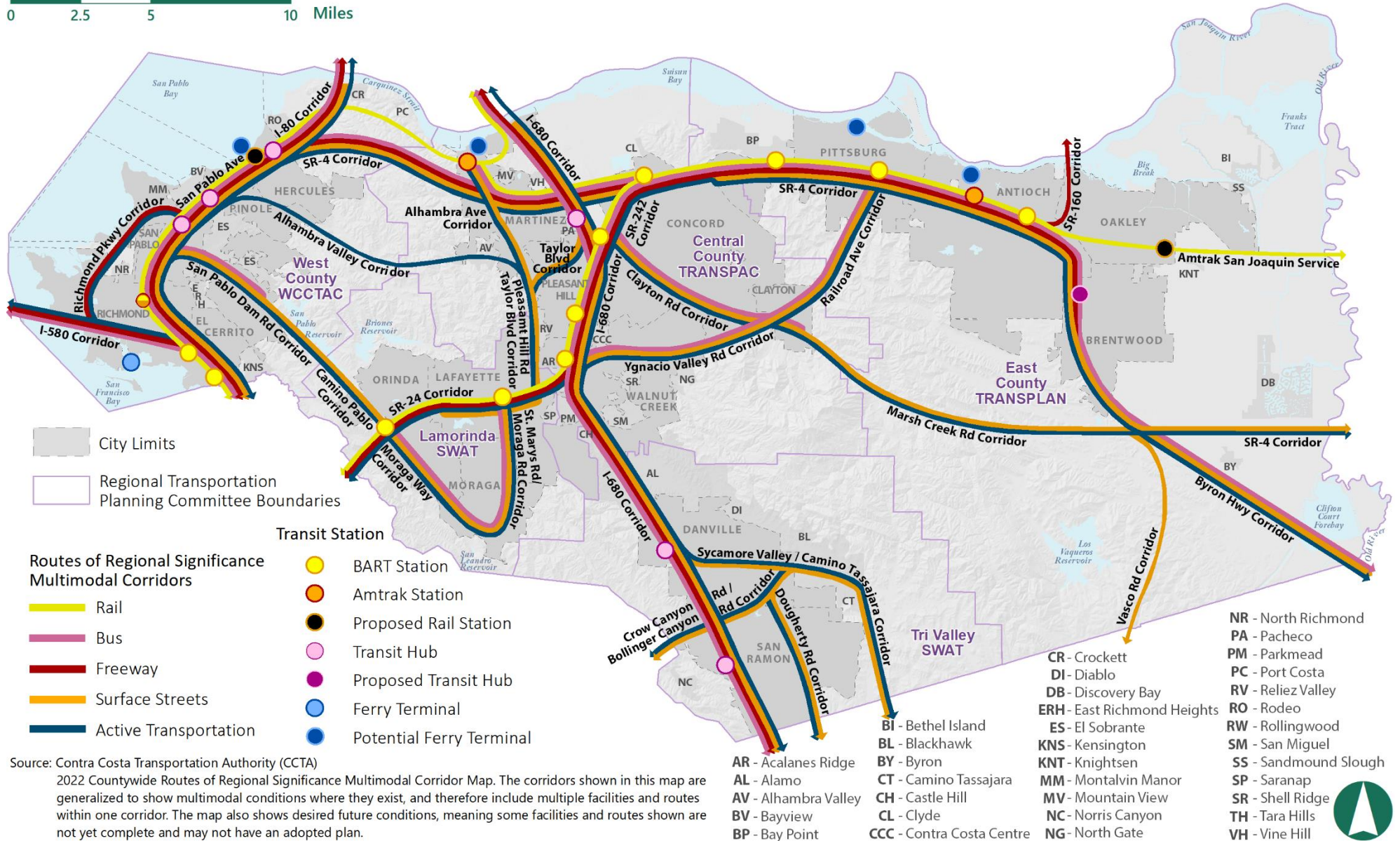
- The **West County** subregion is administered by the West Contra Costa Transportation Advisory Committee (WCCTAC).
- The **Central County** subregion is administered by the Transportation Partnership and Cooperation Committee (TRANSPAC).
- The **Lamorinda** and **Tri Valley** subregions are administered by the Southwest Area Transportation Committee (SWAT).
- The **East County** subregion is administered by the TRANSPAN Committee.

Due to the county's diverse physical and demographic landscape, each subregion is governed by an Action Plan tailored to address its distinct transportation needs. The Action Plans and CTP also set quantifiable Regional Transportation Objectives (RTOs) to meet goals on Routes of Regional Significance, which are shown in Figure TR-1. Over time, the County implements projects and programs in the unincorporated areas to improve the transportation network and ultimately contribute to achieving the RTOs.

For the larger Bay Area region, the Association of Bay Area Governments (ABAG)/Metropolitan Transportation Commission (MTC) coordinate transportation planning and financing and administer regional plans that promote sustainable growth, including the Regional Transportation Plan/Sustainable Communities Strategy, known as Plan Bay Area 2050, and guide funding and policy decisions for the region.

FIGURE TR-1 ROUTES OF REGIONAL SIGNIFICANCE

0 2.5 5 10 Miles



Source: Contra Costa Transportation Authority (CCTA)
 2022 Countywide Routes of Regional Significance Multimodal Corridor Map. The corridors shown in this map are generalized to show multimodal conditions where they exist, and therefore include multiple facilities and routes within one corridor. The map also shows desired future conditions, meaning some facilities and routes shown are not yet complete and may not have an adopted plan.



Goal TR-1

Transportation facilities and services that are planned, funded, built, and maintained in a coordinated, cooperative, and effective manner.

Policies

TR-P1.1

Maintain an inclusive and orderly approach to interagency, interdepartmental, and stakeholder coordination on long-range capital planning and the design of specific transportation projects, including consultation with affected community and stakeholder organizations and appropriate commissions and committees.

TR-P1.2



Coordinate planning, construction, and maintenance of streets, transit infrastructure, non-motorized rights-of-way and associated facilities, the countywide bicycle network, and Pedestrian Priority Areas with neighboring jurisdictions and CCTA.*

TR-P1.3



Partner with cities, CCTA, and the San Francisco Bay Area Water Emergency Transportation Authority (WETA) to plan and implement ferry service that benefits unincorporated county residents.

TR-P1.4

Work with project applicants and property owners to establish community facilities districts or other funding mechanisms to pay for construction, operation, and maintenance of new transportation infrastructure and programs without creating an undue financial burden on existing residents, businesses, or the County. Consider that new, innovative infrastructure may cost more to maintain than facilities installed in the past, and that the increase in ongoing maintenance costs is a potential reason to deny a development application.

TR-P1.5

Pursue federal, State, and regional funding to augment locally generated funds to construct and maintain transportation infrastructure.

Actions

TR-A1.1



Coordinate with Caltrans, neighboring jurisdictions, CCTA, and the Regional Transportation Planning Committees to plan, design, and implement Complete Streets concepts on Routes of Regional Significance.

TR-A1.2

Partner with CCTA, neighboring and regional agencies, and stakeholders to explore and implement options for transportation system funding, including assessment districts, county service areas, impact fees, tax revenue, and other funding sources.

TR-A1.3

Continue updating the County's Area of Benefit impact fee programs as a mechanism to collect fair-share contributions from new development and fund needed transportation improvements.

See the Public Facilities and Services Element for policies and actions related to general infrastructure and infrastructure funding.

SAFE AND SUSTAINABLE TRANSPORTATION

We all use some form of transportation to reach our daily destinations. The mode of transportation people choose is affected by convenience, cost, comfort, perceived safety, travel time, and availability of options such as transit and bikeways.

Since World War II, the transportation system in Contra Costa County has been focused on the automobile. The Public Works Department spends the majority of gasoline tax revenue on road maintenance primarily to ensure safe passage for cars. However, roadways that originally were designed to move cars as efficiently as possible can be redesigned to encourage walking, biking, and micromobility by making them safer and more comfortable through the provision of sidewalks, crosswalks, protected bike lanes, lighting, and shade. In addition, there is a range of public transit available that expands transportation options, including two BART lines, Amtrak's Capitol Corridor and San Joaquin routes, local and express buses operated by several transit agencies, and ferry service (see Figure TR-2).

The County plays an active role in promoting safe and sustainable transportation. Its Transportation Demand Management (TDM) program encourages developers to devise creative and effective ways to reduce car

trips and associated impacts from new development. The County also maintains the Transportation Analysis Guidelines that establish a uniform approach to preparing traffic analyses and ensuring that County decisions support State, regional, and local goals, such as reducing vehicle miles traveled (VMT) and improving safety for pedestrians, cyclists, and other vulnerable users. Through these and other approaches, the County also aims to reduce air pollution and GHG emissions from the transportation sector.



Separated and protected bicycle facilities increase the usage and safety of bicycles as a mode of transport, helping to shift trips away from automobiles.



FIGURE TR-2 PASSENGER RAIL AND FERRY SERVICES

0 2.5 5 10 Miles



Despite efforts to reduce vehicle trips, cars are and will continue to be the dominant mode choice for years to come. This section promotes sustainability by supporting ZEVs. In 1990, the State initiated efforts to promote transitioning to ZEVs, and regulations have been strengthened over the years as technology has evolved to enable greater emissions reductions. The County is preparing for a future with ZEVs through the Contra Costa Electric Vehicle (EV) Readiness Blueprint, which identifies the best locations for EV charging infrastructure, provides local agencies with guidance to encourage EVs, addresses maintenance of EVs and charging infrastructure, and identifies areas where energy distribution improvements are needed to support charging infrastructure.

To support safety on our roadways, the County adopted the Vision Zero Action Plan in 2022, which recognizes that fatalities and major injuries on roadways are preventable. Vision Zero is founded on the five elements of a Safe System Approach: safe road users, safe vehicles, safe speeds, safe roads, and post-crash care. The County supports programs and physical improvements aimed at reducing deaths on our roadway network to zero. To monitor progress, the Vision Zero Plan commits the County to ongoing tracking of collision data. Figure TR-3 shows corridors with high incidence of serious collisions between pedestrians, bicyclists, and automobiles.

Managing transportation safely and sustainably into the future will mean operating within available funding levels while positioning Contra Costa County to take advantage of current and future innovations. Such innovations could include alternative fuels, car sharing, micromobility, private transportation network services, autonomous vehicle technology, and other advances still to come. Through all of this, the County will need to ensure its actions and practices support its safety, equity, and sustainability goals.



The Pleasant Hill/Contra Costa Centre BART station provides an alternative to commuting by car.

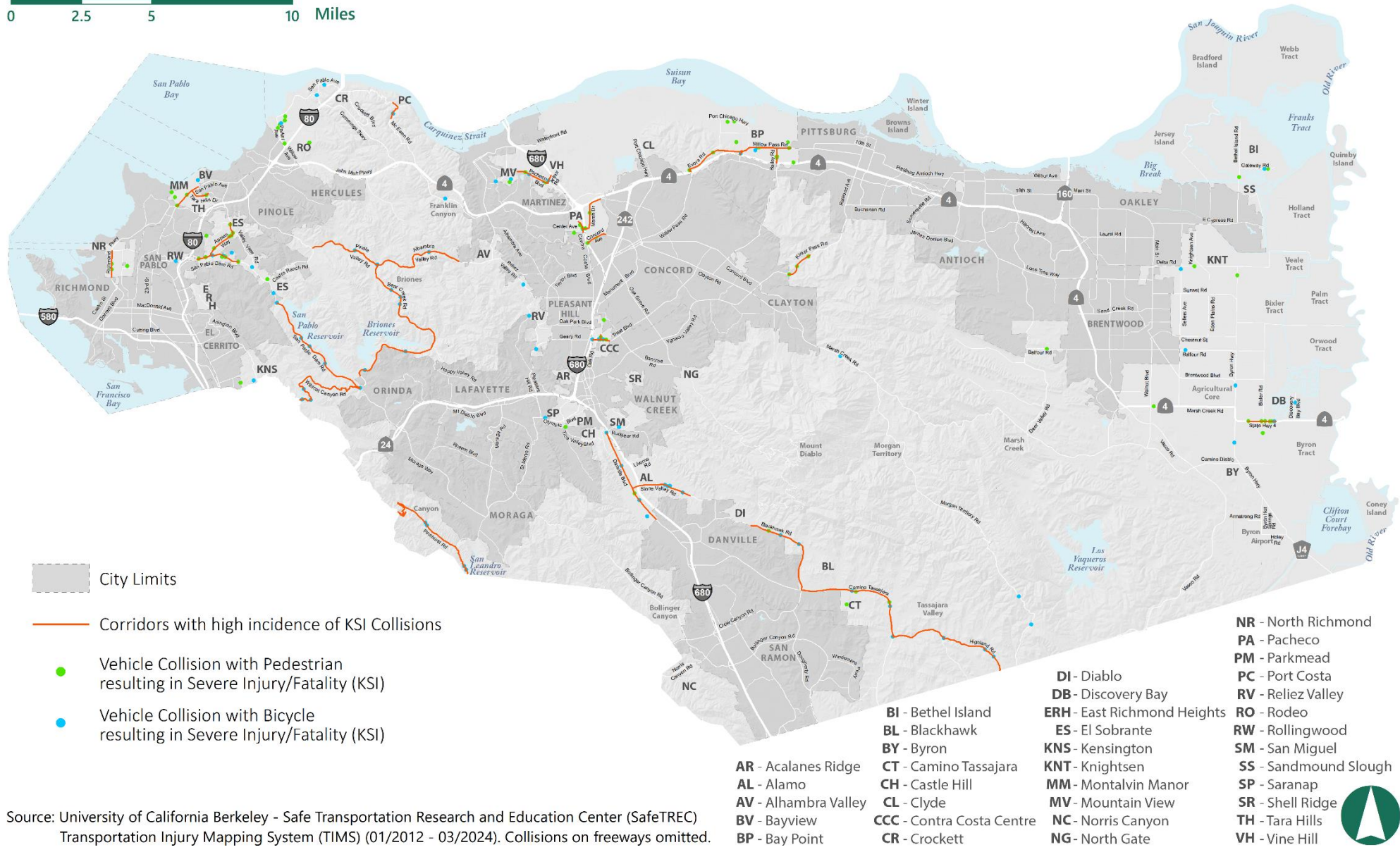
Goal TR-2

A transportation system that promotes active transportation, supports effective and equitable provision of transit services, and reduces GHGs and other environmental harm.



FIGURE TR-3 CORRIDORS WITH HIGH INCIDENCE OF PEDESTRIAN, BICYCLE, AND AUTOMOBILE COLLISIONS

0 2.5 5 10 Miles



Source: University of California Berkeley - Safe Transportation Research and Education Center (SafeTREC) Transportation Injury Mapping System (TIMS) (01/2012 - 03/2024). Collisions on freeways omitted.



Policies

TR-P2.1



In addition to any required California Environmental Quality Act (CEQA) review, evaluate the traffic operations effects of proposed projects in accordance with the County's Transportation Analysis Guidelines and other appropriate policy supplements and transportation plans, and best practices. When operational deficiencies are identified, the treatments to address those deficiencies should first prioritize reducing the project's vehicular trips and collision risks, and may secondarily consider adding vehicular capacity so long as the safety and movement of active modes are not compromised. Exceptions to the level of service (LOS) operational standards presented in the Transportation Analysis Guidelines may be granted if the treatments necessary to address operational deficiencies would conflict with other priorities in this General Plan and if the project is otherwise consistent with this Plan.

TR-P2.2



Prioritize expansion of bicycle, micromobility, and pedestrian infrastructure (e.g., Class IV separated bikeways) to address the significant latent demand for these active transportation modes.

TR-P2.3



Ensure emerging transportation technologies and travel options, such as autonomous and ZEVs and transportation network companies, support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

TR-P2.4



Reduce single-occupant vehicle usage and VMT by significantly enhancing the availability and safety of other travel modes through infrastructure investment, policy support (Vision Zero, TDM Ordinance, and other best practices), and support for public transit.*

TR-P2.5

Ensure new highways constructed outside the Urban Limit Line are not growth-inducing through land-use controls, access limitations, and other appropriate measures.

TR-P2.6

Partner with the Contra Costa Transportation Authority (CCTA) and California Department of Transportation (Caltrans) to better manage traffic operations on the State highway system in Contra Costa County through the application of ramp metering, construction of high-occupancy toll (HOT)/Express or other managed lanes, and other capacity-management techniques.

TR-P2.7



Leverage the County's position as a major employer to demonstrate leadership in enhancing workforce commute options.

TR-P2.8



Support improvement and expansion of passenger and commuter rail service countywide, with emphasis on transformative projects such as the Hercules Intermodal Transit Center and BART extensions in the I-80 corridor toward Crockett and SR 4 corridor toward Brentwood.



TR-P2.9  

Support public transit and encourage transit use by advocating for increased funding with enhanced governance, high-frequency service, and expansion of first-mile/last-mile programs.

TR-P2.10  

Enhance multimodal access to all transit stops, prioritizing stops which serve vulnerable and mobility-impaired populations.

TR-P2.11  

Support transitioning all on-road vehicles, including personal vehicles and business, government, and public transit fleets, to electric power from renewable sources or other emission-free fuels.

TR-P2.12  

Continue to improve ZEV charging/fueling infrastructure within new development and public rights-of-way, incorporating new technologies whenever possible.

TR-P2.13  

Require designs for new parking facilities to incorporate ZEV charging/fueling infrastructure and maximize opportunities for adaptive reuse.*

Actions

TR-A2.1 

Develop and promote mobility alternatives to single-occupancy vehicles, including but not limited to public transit, micromobility, carbon-free rideshare strategies, and nonmotorized modes.

TR-A2.2 

Review and update County Ordinance Code Chapter 82-32 – Transportation Demand Management and the County’s Transportation Demand Management Guidelines at least once every five years to incorporate current best practices.

TR-A2.3

Update the Contra Costa County Transportation Analysis Guidelines on an as-needed basis.

TR-A2.4  

Implement programs to encourage transit use, bicycling, walking, telecommuting, and use of alternative vehicle fuels by County employees.

TR-A2.5  

Conduct a survey to identify gaps in public transit and the active transportation network within one mile of County offices and facilities, and pursue funding for projects and programs that will fill those gaps and improve the availability of alternative transportation options for County employees.


TR-A2.6

Partner with transit agencies and CCTA to develop “Safe Routes to Transit” guidance that could be applied in new development areas and existing neighborhoods.

TR-A2.7

Partner with transit providers, cities, and CCTA to develop a countywide transit stop program that takes a holistic approach to transit stop planning and construction. Encourage the program to address right-of-way adequacy (i.e., sufficient space for bus pullouts and amenities), amenities (e.g., shelters, seating, bicycle racks and lockers), and improvements around stops to increase accessibility (e.g., curb ramps, sidewalk widening).

TR-A2.8

Work with transit agencies to provide convenient ways for residents to report transit shelters and other amenities (e.g., lighting, seating) that are in disrepair. Encourage and promote reporting countywide, especially in Impacted Communities.

TR-A2.9

Pursue funding and other resources to implement the Accessible Transportation Services Strategic Plan and similar plans and initiatives that expand the hours of operation, operational boundaries, convenience, and quality of accessible transit to improve mobility for seniors, people with disabilities, and other vulnerable populations.

TR-A2.10

Support establishment of a Bay Area-wide transit fare equity program that includes free or means-based transit passes for qualifying residents of Impacted Communities.

TR-A2.11

Coordinate with CCTA and other local and regional agencies to implement the Contra Costa Electric Vehicle Readiness Blueprint and related policies and apply best practices in ZEV charging/fueling infrastructure requirements.

TR-A2.12

Update the County Ordinance Code as necessary to support advances in ZEV charging/fueling infrastructure.

TR-A2.13

Advocate for legislation requiring micromobility and other transportation technology providers to accept responsibility for and mitigate the unique physical, operational, and financial impacts of their services, such as abandoned mobility devices, upon local jurisdictions.

See also the Health and Safety Element for policies and actions related to GHG emissions, air quality, and parking lot shading.



Goal TR-3

A transportation system that protects human life.

Policies

TR-P3.1



Pursue the priorities identified in the County's Vision Zero and other safety programs, through prioritization of safety projects and incorporation of safety considerations into all transportation planning efforts.

TR-P3.2



Minimize conflicts between vehicles and people who walk, bike, or use micromobility through careful site planning, paying particular attention to driveway locations and internal pedestrian circulation, and prioritizing safety for active modes of travel.

TR-P3.3



Provide or require new projects to install energy-efficient street lighting to improve public safety and comfort in urbanized areas. Prioritize installation in Impacted Communities, particularly at parks, transit stops, alleyways, bike and pedestrian paths, trails, and other high-need areas, consistent with community preferences.

Actions

TR-A3.1



Maintain a Vision Zero Working Group to regularly review collision data and evaluate the effectiveness of Vision Zero and other safety strategies.

TR-A3.2



Identify and address neighborhood-specific issues and needs in Impacted Communities, prioritizing installation of sidewalks, enhanced crosswalks, street lighting, street trees, bicycling infrastructure, transit stop amenities, traffic calming, and other safety and comfort improvements, especially in residential areas and near schools, libraries, and recreational facilities. Explore innovative methods to ensure these facilities are maintained. Engage school districts, neighborhood groups, and the local Safe Routes to School Program in implementing this action.

TR-A3.3

Coordinate with the California Public Utilities Commission and railroads to design and implement projects that address safety concerns and conflicts from at-grade rail crossings.

See the Health and Safety Element for policies and actions related to evacuation.

MULTIMODAL ROADWAY NETWORK

The local transportation system needs to serve all users and modes of transportation, with a focus on safety, accessibility, and convenient, efficient travel between origins and destinations in Contra Costa County. Enhancing mobility and connectivity for transit, bicycles, and pedestrians will also help reduce traffic congestion and pollution and promote public health.

As interest in safe and sustainable transportation systems has grown, communities throughout California have been changing the transportation planning paradigm from a vehicle-centered exercise to a Complete Streets approach, in which all travel modes are accommodated in a balanced way based on the particular street's location, land use context, and function within the circulation network. In 2016, Contra Costa County adopted its Complete Streets Policy that includes Complete Streets principles and implementation guidelines. The policy focuses on context-sensitive planning, the importance of considering user diversity (i.e., different user abilities and modes of travel), and a holistic approach that expects all involved County departments and all projects to include a Complete Streets focus.

Roadway classifications help define the function of various street types in the transportation network, based on the level of traffic volume that can be served. Classifying roadways allows the County to monitor performance and plan for improvements needed to accommodate changes in traffic, as well as pedestrian and bicycle volumes over the life of this General Plan. Classifications are also necessary to ensure the County is eligible for roadway maintenance and improvement funding.

This General Plan defines the County's roadway network based on traditional categories recognized by regional, State, and federal transportation agencies. The roadway classifications included in the roadway network are described below and shown on Figure TR-4.

- **Freeways** are high-speed facilities that move inter-city or regional traffic. Freeways that provide regional access to, from, and within Contra Costa County include Interstate (I-) 80, I-680, I-580, State Route (SR) 4, SR 24, SR 242, and SR 160.
- **Arterials** are relatively high-volume facilities that connect the regional roadway network to the local roadway network. Limited access is provided to abutting parcels in many cases. Arterial streets generally

serve between 10,000 and 40,000 vehicles per day; some minor arterials serve fewer than 10,000 vehicles per day. Most intersections along arterials are signalized, often with a coordinated and interconnected signal system. Some of the primary arterials in Contra Costa County include Richmond Parkway, San Pablo Avenue, San Pablo Dam Road, Kirker Pass Road, Danville Boulevard/San Ramon Valley Boulevard, Camino Tassajara, Vasco Road, and Byron Highway.

- **Collectors** connect residential and local-serving commercial areas with the arterial system. Collector streets serve as principal traffic arteries within residential and commercial areas. These streets typically carry up to 10,000 vehicles per day, although some collectors may carry more vehicle traffic for short segments as they convey traffic between arterial streets and local residential streets. Collectors are often important segments of bikeway networks.
- **Local roads** provide circulation within neighborhoods and between adjacent land uses. They are typically low-speed, low-volume streets with design features that discourage through traffic to be more compatible with residential needs.



San Pablo Dam Road in El Sobrante is classified as an arterial.



The roadway network in the southeastern part of the county will be significantly expanded with the planned SR 239 project, which will provide a direct connection between SR 4 and the I-580/I-205 corridor in Alameda and San Joaquin Counties. Although SR 239 has been a legislatively designated route since 1959, development of the facility didn't begin gaining momentum until 2005, with the County receiving several federal earmarks. As of Fall 2023 the project is in design and environmental review. SR 239 is a large, multiphase project that is anticipated to take some time to build out. The Vasco Road - Byron Highway Connector, which among other things would enhance access to Byron Airport, is being planned as the first phase.

The County plans for roadway improvements and maintenance through the Capital Road Improvement and Preservation Program (CRIPP), which is updated every two years to identify the status, estimated cost, funding source, and schedule for roadway projects anticipated over the next seven years. Similar to the Zoning Code, the CRIPP must be consistent with the General Plan. California Government Code Section 65401 requires portions of capital improvement plans and programs such as the CRIPP to be reviewed annually for General Plan consistency. This review is conducted by the County's Transportation, Water, and Infrastructure Committee, a subcommittee of the Board of Supervisors.

Goal TR-4

A roadway network that accommodates multimodal travel options for all county residents, businesses, and visitors, regardless of age, ability, race, culture, or economic status.

Policies

TR-P1.1



Plan, design, and maintain improvement projects involving County roadways in accordance with the County's adopted Complete Streets Policy, other applicable policies (e.g., Vision Zero and other safety initiatives), planning documents such as the County ATP and CCTA Countywide Bicycle and Pedestrian Plan, and best practices (e.g., Caltrans, American Association of State and Highway Transportation Officials, and National Association of City Transportation Officials guidance).*

TR-P1.2



Require transportation infrastructure serving new development to be designed using best practices, contemplating existing and planned land uses, roadways, bicycle and pedestrian facilities, transit facilities, and connections to adjoining areas.*

TR-P1.3



Create connections between unincorporated communities and neighborhoods and adjacent jurisdictions to improve multimodal access to local destinations, such as schools, parks, shopping, health services, and workplaces.

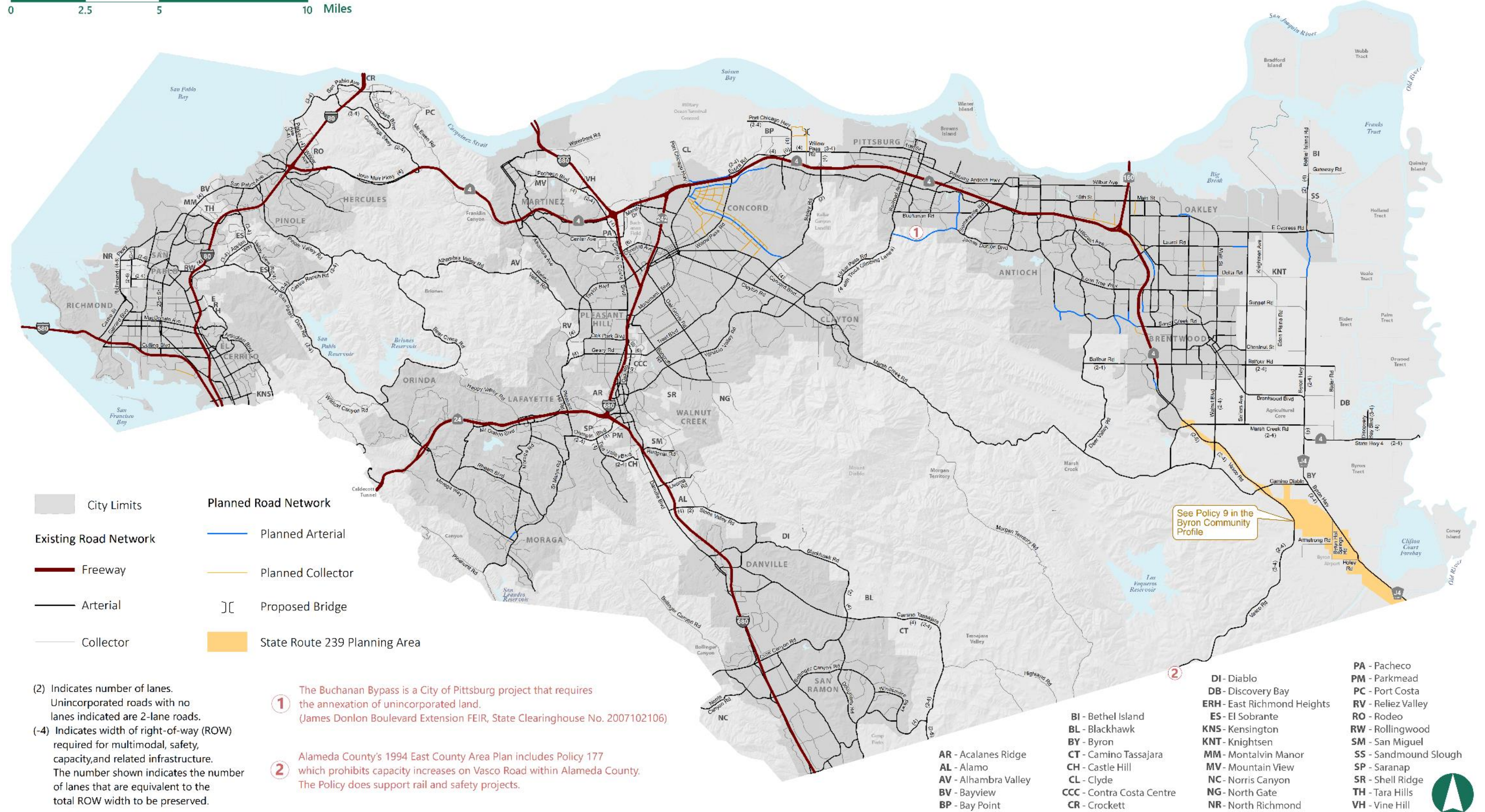
TR-P1.4



Manage access points along arterial and collector roadways to minimize the number of new driveway or street-type intersections. Consolidate existing street and driveway intersections to limit conflict points as opportunities arise.

FIGURE TR-4 ROADWAY CLASSIFICATIONS

0 2.5 5 10 Miles



(2) Indicates number of lanes. Unincorporated roads with no lanes indicated are 2-lane roads.
 (-4) Indicates width of right-of-way (ROW) required for multimodal, safety, capacity, and related infrastructure. The number shown indicates the number of lanes that are equivalent to the total ROW width to be preserved.

1 The Buchanan Bypass is a City of Pittsburg project that requires the annexation of unincorporated land. (James Donlon Boulevard Extension FEIR, State Clearinghouse No. 2007102106)
 2 Alameda County's 1994 East County Area Plan includes Policy 177 which prohibits capacity increases on Vasco Road within Alameda County. The Policy does support rail and safety projects.

- AR - Acalanes Ridge
- AL - Alamo
- AV - Alhambra Valley
- BV - Bayview
- BP - Bay Point
- BI - Bethel Island
- BL - Blackhawk
- BY - Byron
- CT - Camino Tassajara
- CH - Castle Hill
- CL - Clyde
- CCC - Contra Costa Centre
- CR - Crockett
- DI - Diablo
- DB - Discovery Bay
- ERH - East Richmond Heights
- ES - El Sobrante
- KNS - Kensington
- KNT - Knightsen
- MM - Montalvin Manor
- MV - Mountain View
- NC - Norris Canyon
- NG - North Gate
- NR - North Richmond
- PA - Pacheco
- PM - Parkmead
- PC - Port Costa
- RV - Reliez Valley
- RO - Rodeo
- RW - Rollingwood
- SM - San Miguel
- SS - Sandmound Slough
- SP - Saranap
- SR - Shell Ridge
- TH - Tara Hills
- VH - Vine Hill



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TR-P1.5

Require installation of, or provide, wayfinding signage (accessible to persons who are vision impaired) to aid navigation where necessary or desirable.

TR-P1.6



Enhance streetscapes in nonresidential areas, making them more pedestrian-friendly and inviting by reducing setback and off-street parking requirements and augmenting traffic-calming measures.

TR-P1.7



Encourage walkability and safety by streamlining implementation of traffic-calming measures through the Neighborhood Traffic Management Program.

TR-P1.8

Minimize speeding through residential neighborhoods by implementing appropriate roadway design standard, traffic-calming, and other holistic solutions, as well as enforcement.

TR-P1.9

Protect residential neighborhoods from outside or cut-through traffic by implementing appropriate design solutions aimed at keeping through traffic on arterials and collectors.

TR-P1.10



Design roadway infrastructure, including traffic-calming and Complete Streets features, to accommodate emergency response vehicles while maintaining the safety of vulnerable road users.*

Actions

TR-A1.1

Review the County Standard Plans at least once every five years for relevance and applicability and update as necessary to reflect best practices in context sensitivity, Complete Streets, travel safety, and environmental sustainability.

TR-A1.2

Ensure that the CRIPP:

- (a) Reflects current and best transportation planning practices.
- (b) Implements adopted transportation and land development policies.
- (c) Complies with public review requirements.
- (d) Presents planned transportation system improvements with an implementation schedule.

TR-A1.3



Develop guidance for managing curb space in ways that are sensitive to the land use context, with considerations for active transportation use, users with limited mobility, transportation network companies, outdoor dining, freight deliveries, parking, and other curb uses that may emerge.



ACTIVE TRANSPORTATION

Active transportation modes – i.e., walking, biking, micromobility, and other rolling forms of travel – support active lifestyles, which in turn support community health. Neighborhoods with safe and convenient walking and biking connections to parks, jobs, and schools provide residents with a healthier alternative to driving.

The pedestrian network generally consists of sidewalks and multiuse trails. Sidewalks are provided in many neighborhoods, especially those developed since the 1960s, and commercial areas, but there are gaps throughout the network and older neighborhoods sometimes have no sidewalks at all. The bicycle network, which is shown on Figure TR-5 and includes a range of bikeway types, is less developed countywide. These networks are inclusive of “rolling” transportation, in which people may use a wheelchair, skate, ride a scooter, or push a stroller. Geographic barriers such as waterways, railways, and freeways pose challenges to pedestrian and bicycle/rolling circulation and connectivity. Expanding the pedestrian and bicycle network will enhance opportunities for active transportation and reduce dependency on the car. In 2022 the County adopted its Active Transportation Plan (ATP), which serves as a roadmap to enhancing active transportation safety and mode share by providing a comprehensive look at the County’s active transportation needs and opportunities. The ATP outlines investments in new bicycle facilities, upgraded crossings, enhanced trail connections, and improved walkways.

Adopted by CCTA in 2018, the Contra Costa Countywide Bicycle and Pedestrian Plan (CBPP) identifies a network of “low-stress” routes that are comfortable for most pedestrians or bicyclists. Once developed, this network will allow people of all ages and abilities to connect across the county by

walking or bicycling. Future bicycle connections planned by the CBPP are shown on Figure TR-5. The CBPP also identifies Pedestrian Priority Areas, shown on Figure TR-6, which are places where greater numbers of people are expected to walk and safety issues are most acute, indicating a need to prioritize investments in pedestrian improvements like walkways, curb ramps, and intersection improvements.

With support from MTC, CCTA has also prepared Community-Based Transportation Plans (CBTPs) covering the unincorporated communities of North Richmond, Tara Hills, Bayview, Rollingwood, and Bay Point that intend to improve mobility and safety for low-income and underserved residents. Each CBTP recommends a series of projects and programs aimed at expanding active transportation options, increasing the quality of public transit services, and providing safe non-motorized routes between peoples’ homes and local schools.



The Robert I. Schroder Overcrossing along the Iron Horse Trail is part of an important non-motorized regional connection between Pleasanton and Concord.

Local bikeways are classified based on traditional categories recognized by federal, State, and regional transportation agencies. Each bikeway class is intended to provide bicyclists with safe and convenient riding conditions. Different bikeway designs offer various levels of separation from traffic based on traffic volume, speed, and other factors. There are four types:

- **Class I bikeways (bike paths)** provide completely separate facilities from automobiles and are designated for the exclusive use of bicyclists and pedestrians with minimal cross-flow automobile traffic. In Contra Costa County, these types of paths are often along creeks, canals, utility corridors, and former rail lines. Class I bikeways are often used for recreational and commute trips.
- **Class II bikeways (bike lanes)** provide designated street space for bicyclists, typically adjacent to the outer vehicle travel lanes. Bike lanes include special lane markings, pavement legends, and signage. Bike lanes may be enhanced with painted buffers between vehicle lanes and parking, and green paint along the bike lane or at conflict zones (such as driveways or intersections).
- **Class III bikeways (bike routes)** provide enhanced conditions for bicyclists through signage, striping, and traffic-calming treatments, and provide continuity to a bikeway network. Bike routes are typically designated along gaps between bike paths or bike lanes, or along low-volume, low-speed streets. Bicycle boulevards provide further enhancements to bike routes by encouraging slow speeds and discouraging non-local vehicle traffic, often through use of traffic-calming features. Bicycle boulevards can also feature special wayfinding signage to nearby destinations or other bikeways.

- **Class IV bikeways (separated or protected bikeways)**, also referred to as cycle tracks, are bikeways for the exclusive use of bicycles, which are physically separated from vehicle traffic with a vertical element. Types of separation may include grade separation, plastic delineator posts, concrete dividers, or on-street parking.



Pedestrian infrastructure such as signals, sidewalks, and crosswalks enhance safety.

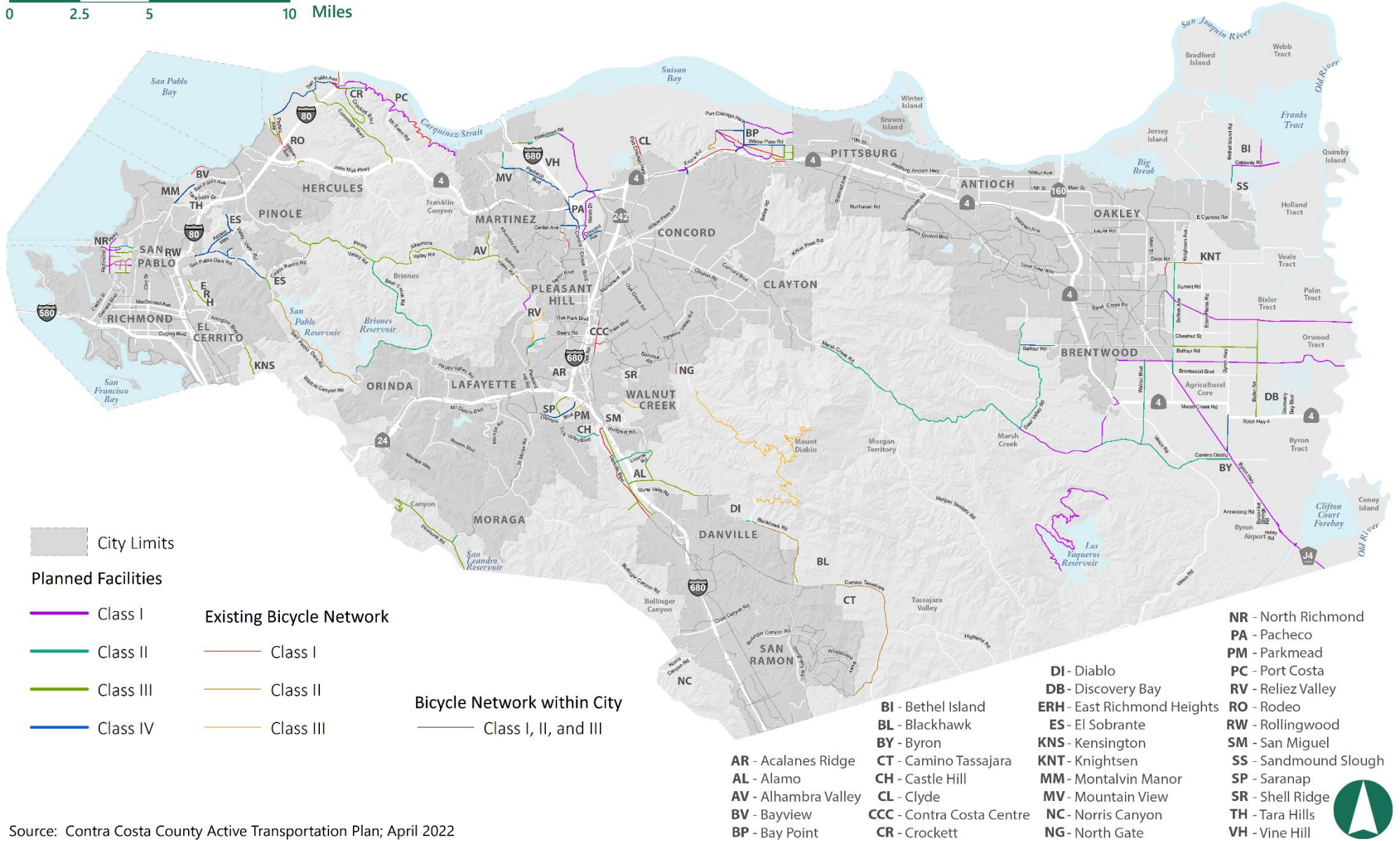
Goal TR-5

Support people who walk, bike, roll, or use mobility devices by creating safe, equitable, connected, and comfortable facilities for all ages and abilities.



FIGURE TR-5 EXISTING AND PLANNED BICYCLE NETWORK

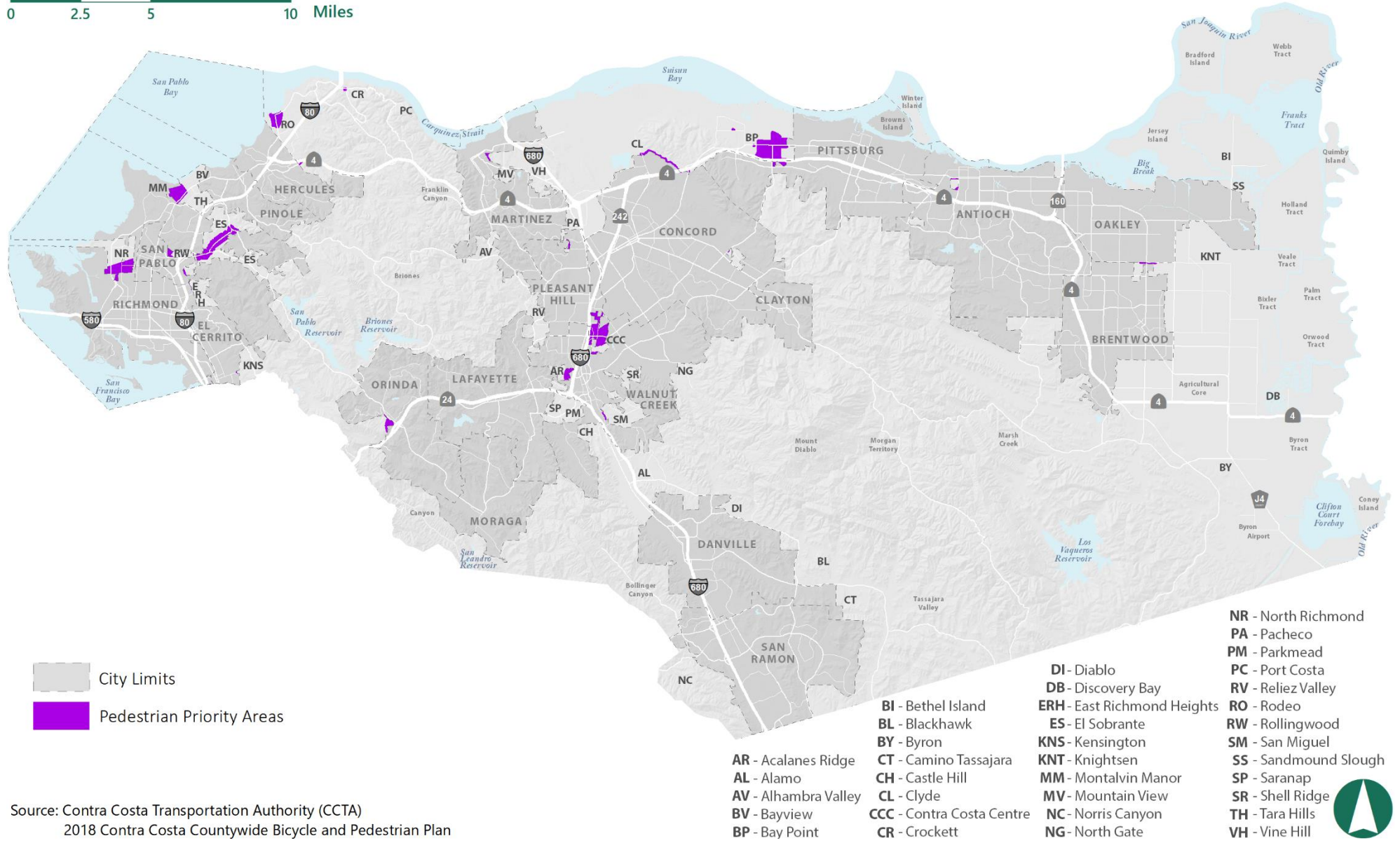
0 2.5 5 10 Miles



Source: Contra Costa County Active Transportation Plan; April 2022

FIGURE TR-6 PEDESTRIAN PRIORITY AREAS

0 2.5 5 10 Miles



Source: Contra Costa Transportation Authority (CCTA)
2018 Contra Costa Countywide Bicycle and Pedestrian Plan



Policies

TR-P2.1



Plan, design, construct, and maintain facilities for walking, bicycling, and rolling to serve people of all ages, abilities, and income levels, including children, seniors, families, and people with limited mobility.

TR-P2.2



Coordinate with Caltrans to provide safe and comfortable highway interchange crossings for people of all ages and abilities who walk, bike, or use micromobility.

TR-P2.3



Prioritize construction of capital improvement projects identified in the County's ATP.

TR-P2.4

Ensure that fee programs include active transportation facilities, and require new development to contribute funds, right-of-way, and/or provide active transportation facilities themselves.*

TR-P2.5



Maintain pedestrian and active transportation facilities to the same standard as roads and other transportation infrastructure, including repair and cleanup of all bikeway types and shared-use pathways.

TR-P2.6

Support use of temporary, quick-build, demonstration, and pilot pedestrian and bicycle improvements to test their effectiveness and promote active transportation strategies to the public.

TR-P2.7



Encourage walking, bicycling, and micromobility as the travel modes of choice for short to medium-length trips, such as trips to schools, parks, transit stops, local shopping areas, and neighborhood services.

TR-P2.8



Partner with neighboring jurisdictions, transit agencies, community members, and business organizations to plan and construct sustainable streets in business and commercial areas. Consider forming community facilities districts or business improvement districts to help fund and maintain improvements.

TR-P2.9



Consider proposals for temporary and permanent reorientation of public space towards increased outdoor activity, such as walking, bicycling, rolling, dining, and other social uses.

TR-P2.10



Support micromobility options such as bike-, e-bike-, and e-scooter-share.



TR-P2.11  

Require generous parking for bicycles and other mobility devices at key destinations, such as shopping centers, parks, schools, employment centers, transit stations, and multiple-family housing. This parking should be conveniently located near entrances, include charging infrastructure, and accommodate cargo bikes when appropriate for the land use.

Actions

TR-A2.1  

Partner with CCTA and neighboring jurisdictions to build out the countywide bicycle and pedestrian network, prioritizing completion of the Low-Stress Countywide Bicycle Network and pedestrian safety improvement projects in the County's Pedestrian Priority Areas, as described in the Countywide Bicycle and Pedestrian Plan.

TR-A2.2  

Construct innovative bicycle and pedestrian facilities, including Class IV separated and protected bikeways, bicycle superhighways, and other low-stress facility types, as described in the Countywide Bicycle and Pedestrian Plan and in contemporary, best-practice transportation planning and engineering guidance. Use contextually appropriate green infrastructure and landscaping to separate vehicular lanes from bicycle and pedestrian facilities whenever feasible.

TR-A2.3  

Partner with CCTA, neighboring jurisdictions, and transit agencies to implement the Richmond Area and Pittsburg/Bay Point CBTPs.

TR-A2.4  

Review the scoring formula for active transportation projects at least once every five years to ensure continued prioritization of projects in Impacted Communities.

TR-A2.5 

Partner with the cities, EBRPD, and CCTA to develop uniform guidance to manage active micromobility services.

TR-A2.6  

Evaluate the feasibility and appropriateness of the following when updating the ATP and CRIPP:

- (a) Installing bikeways along all segments of Routes of Regional Significance within the County's jurisdiction.
- (b) Restriping arterials and collectors to include bikeways whenever major maintenance occurs.
- (c) Installing bikeways and sidewalks along arterials and collectors to the limits of adjacent jurisdictions.
- (d) Installing bicycle detection systems, bicycle signals, bicycle boxes, and pavement markings at new and retrofitted traffic signals.
- (e) Installing crosswalks at all legs of signalized intersections.



See the *Public Facilities and Services Element* for additional policies and actions related to the countywide trail network.

GOODS MOVEMENT

Industry and commercial enterprises in Contra Costa County are served by a goods movement system that includes rail, port, truck, and air facilities. As shown on Figure TR-7, all freeways in the county are designated as State truck routes. I-80 and I-680 are the principal north-south corridors and connect to neighboring industrial hubs, while SR 4 is the principal east-west transportation corridor serving the industrial areas of the 55-mile Northern Waterfront. Two major transcontinental railroads, Burlington Northern Santa Fe (BNSF) and Union Pacific Railroad (UPRR), follow the county's western and northern shorelines, connecting the Northern Waterfront to the rest of the county, and serving ports and major rail facilities in Oakland and Richmond. The Port of Richmond, within the Richmond city limits, is a deep-water port that connects the county to markets regionally and farther afield. Deep-water shipping channels along the Northern Waterfront connect to the Ports of Sacramento and Stockton. Finally, Buchanan Field Airport in Concord is capable of handling small cargo aircraft.

While goods movement is an essential component of daily life and the economy, it can cause severe health and quality of life impacts for residents who are exposed to air pollution, noise, and the potential for accidents from nearby trains, ships, trucks, and planes. In Contra Costa County, heavy-duty truck emissions at industrial facilities and on local roads and freeways is a significant contributor to health disparities, especially in Impacted

Communities. Given these and other concerns, goods movement is heavily regulated by federal and State agencies, including the California Air Resources Board, which restricts idling times for heavy-duty trucks to minimize localized air pollution.



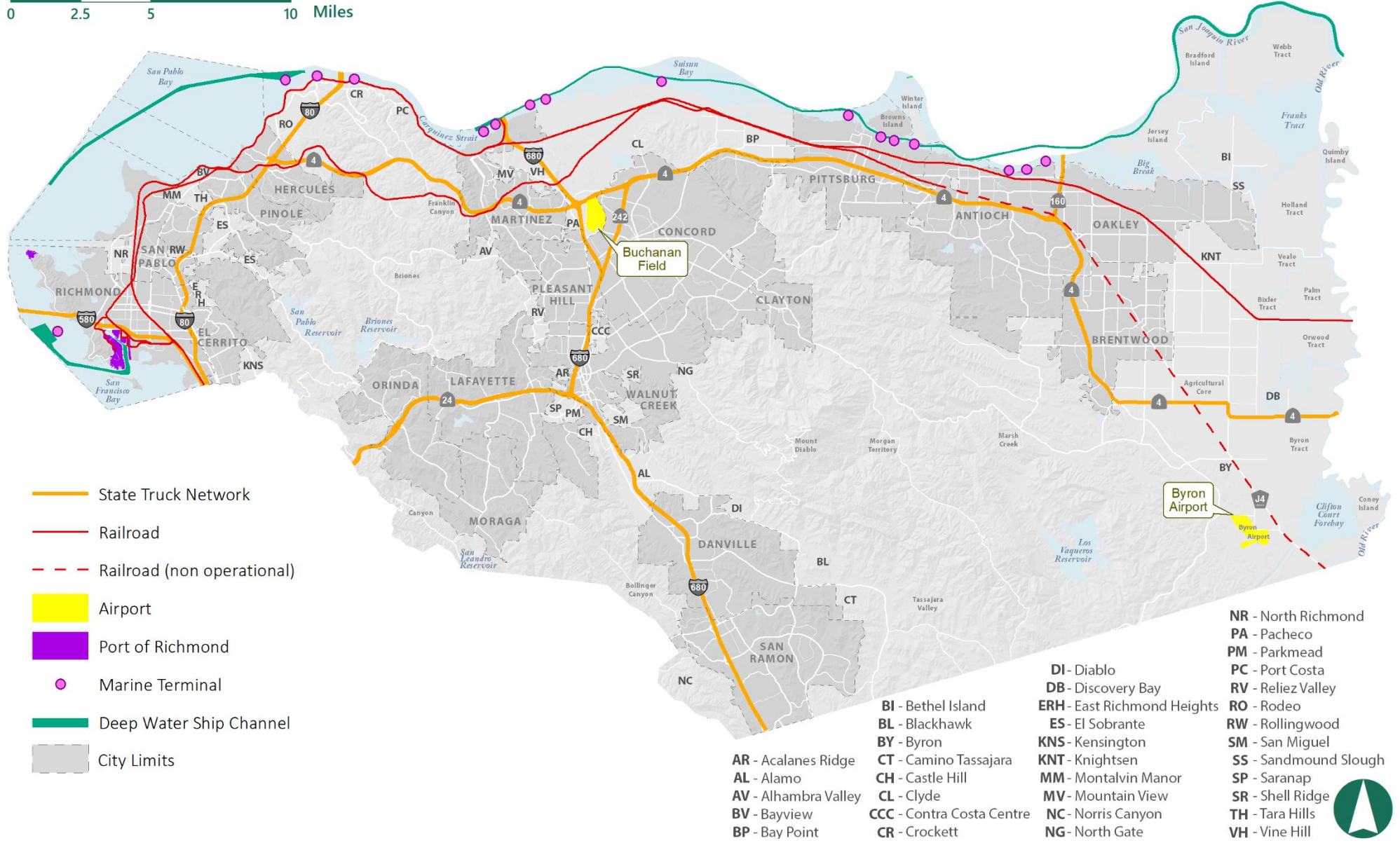
Contra Costa County is part of the global shipping economy through various local ports, marine terminals, and railroads.

Goal TR-6

Safe and efficient movement of goods consistent with the County's goals to reduce emissions, protect public safety, and support economic development, local access, and circulation.

FIGURE TR-7 GOODS MOVEMENT FACILITIES

0 2.5 5 10 Miles





Policies

TR-P3.1



Partner with neighboring jurisdictions, CCTA, and the MTC to manage regional movement of goods through unincorporated areas, minimizing impacts on residents and other sensitive receptors.

TR-P3.2



Support roadway improvements that facilitate regional goods movement, such as construction of SR 239 and the Vasco Road-Byron Highway Connector near Byron, and replacement of the Old River Bridge near Discovery Bay.

TR-P3.3



Work with ABAG/MTC to improve resilience, speed, and reliability of goods movement through expansion of smaller ports-of-entry which will increase redundancy, thereby limiting exposure to disruptive events at larger congested ports.

TR-P3.4



Use all available policy tools to ensure that trucks use designated truck routes.

TR-P3.5



Work with railroads to preserve non-operational contiguous railroad rights-of-way, and highly encourage construction of grade-separated railroad crossings along active lines to support current and future rail operations and ensure the long-term viability of these rail corridors. When no longer in

operation, maintain options for future use of the corridors for trails or other public purposes.

TR-P3.6



Support development of short-line railroad infrastructure and operations in industrial areas to facilitate rail access to Class I railroad lines, attract potential businesses seeking rail-served properties, ease traffic congestion caused by goods movement on regional highways, and reduce GHG emissions.

TR-P3.7



Support deepening and ongoing maintenance of the deep-water ship channels between San Francisco Bay and Stockton and continued deep-water access to the county's Northern Waterfront.

TR-P3.8



Support continued operation, maintenance, and further development of ports and terminals consistent with federal, State, and County environmental policies and economic priorities.

Actions

TR-A3.1



Develop a program to establish and maintain truck routes, with the goal of minimizing impacts on residents and other sensitive receptors. This program will provide engineering and policy solutions to divert trucks from Impacted Communities and establish criteria for designating weight limits on certain routes and installing physical barriers and signage.



TR-A3.2

Facilitate enforcement of idling restrictions by promoting community-based reporting to enforcement agencies.

TR-A3.3

Amend County Ordinance Code Title 9 – Subdivisions to require new multiple-family residential, commercial, and mixed-use developments to designate areas adequate for package and goods deliveries and passenger loading and unloading.

TR-A3.4

Develop regulations responding to technological advancements in freight movement, such as autonomous vehicles, robotics, and drone deliveries, while supporting the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

See the Health and Safety Element for policies and actions related to protecting the transportation network, including rail, from sea level rise.

AIR MOBILITY

Contra Costa County has two public County-owned airports: Buchanan Field Airport near Concord and Byron Airport, south of Byron. Buchanan Field Airport provides general aviation, recreation, emergency response, law enforcement, passenger, cargo, and charter services. The airport is surrounded by urban development, which limits its potential for expansion. Byron Airport serves general aviation functions and is a popular base for skydivers, gliders, and other recreational flight activities. Byron Airport also serves as a testing ground for new aviation technologies.

Airports influence surrounding land uses for up to three miles from the runways, affecting unincorporated and incorporated areas. To protect public safety and the long-term operations of the airports, the County's Airport Land Use Commission adopted the Airport Land Use Compatibility Plan (ALUCP), which regulates the location of land uses near both airports through the designation of Airport Land Use Compatibility Zones (see Figure TR-8). Specifically, the ALUCP seeks to protect the public from adverse effects of aircraft noise, ensure people and facilities are not concentrated in areas susceptible to aircraft accidents, and ensure no structures or activities adversely affect navigable airspace.

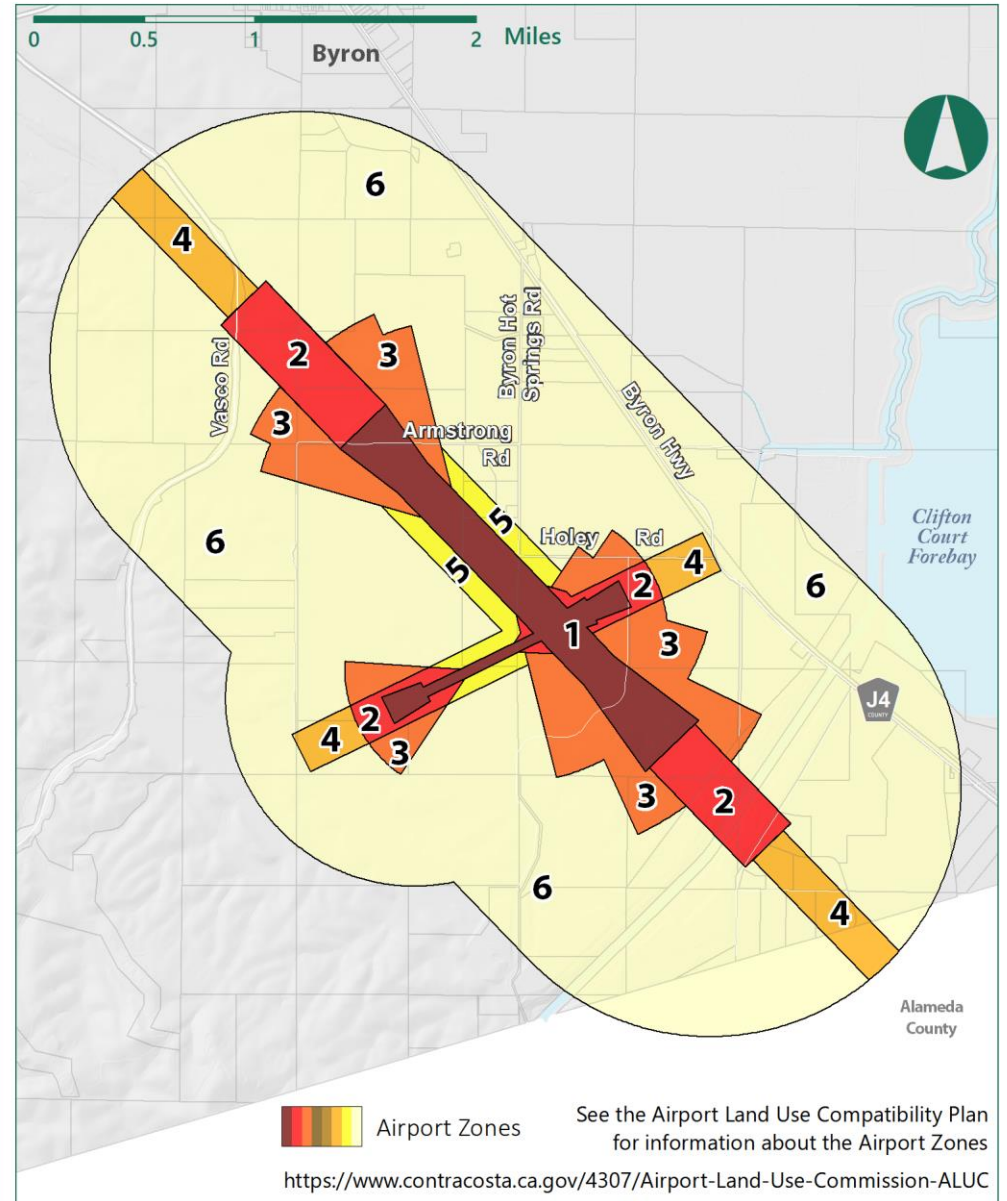
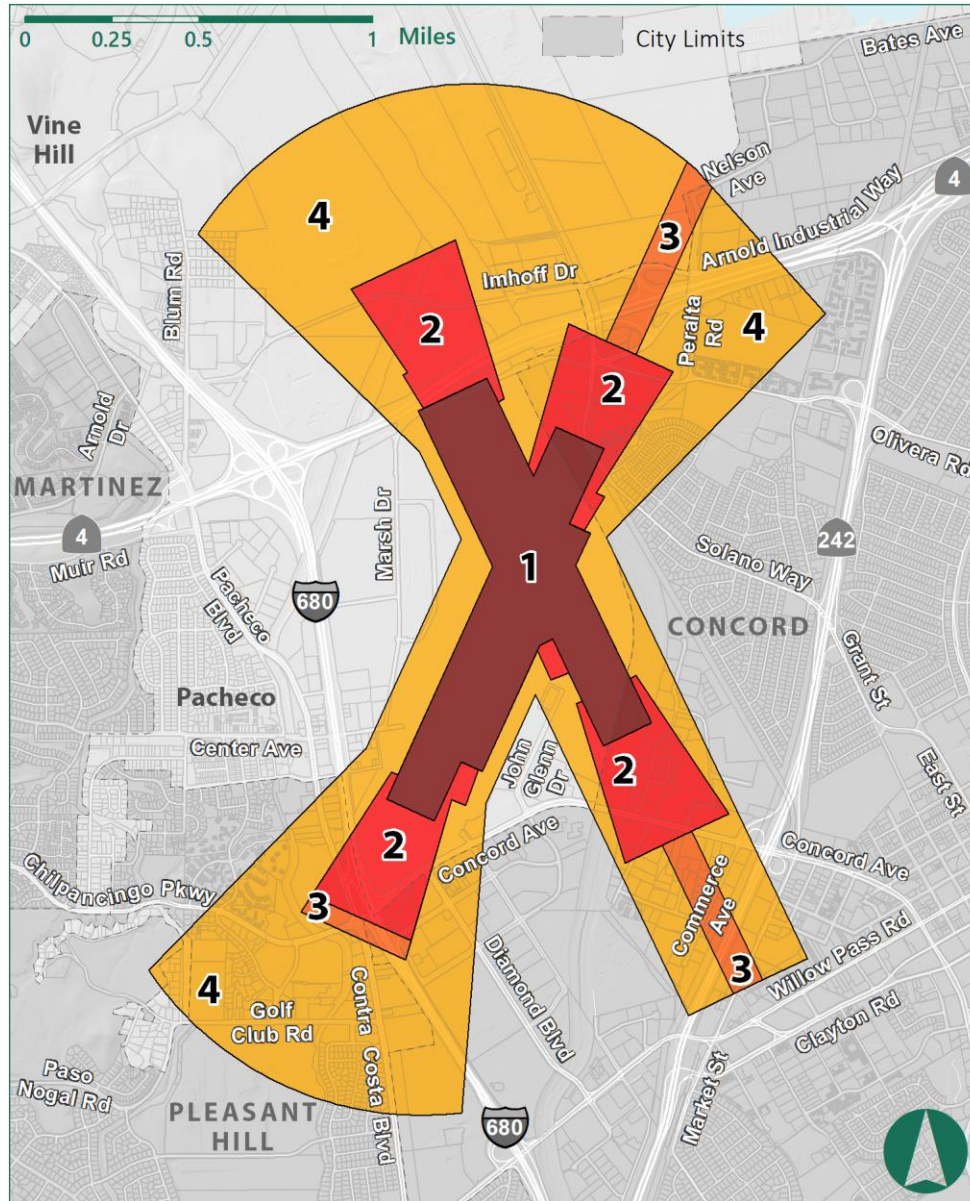
Emerging technologies will influence future air mobility, including vertical takeoff and landing aircraft that can expand air mobility options for people and cargo to places that had previously lacked air access. Such aircraft can be served by vertiports that are specifically designed for this technology and take up smaller spaces than traditional airports.




Buchanan Field is one of two general aviation airports in Contra Costa County.



FIGURE TR-8 BUCHANAN FIELD AIRPORT AND BYRON AIRPORT COMPATIBILITY ZONES



 Airport Zones See the Airport Land Use Compatibility Plan for information about the Airport Zones
<https://www.contracosta.ca.gov/4307/Airport-Land-Use-Commission-ALUC>

Goal TR-7

Safe and viable general and commercial aviation activities in Contra Costa County.

Policies

TR-P4.1



Partner with other agencies to obtain funding for planning, development, improvement, operation, and maintenance of general and commercial aviation facilities.

TR-P4.2



Work with the Federal Aviation Administration and aviation operators to minimize conflicts with residential areas and other sensitive receptors.

TR-P4.3



Regulate the location of private airfields and heliports to protect public safety and minimize impacts on nearby residents and sensitive receptors.*

TR-P4.4



Protect the County's airports from encroachment by incompatible uses and minimize the public's exposure to safety hazards and excessive noise by ensuring that all future development within each Airport Influence Area is consistent with the Contra Costa County ALUCP.*

TR-P4.5



Partner with the cities of Concord and Pleasant Hill in making land use decisions that support Buchanan Field Airport's ongoing viability while protecting public safety, consistent with the Airport Master Plan and ALUCP.

TR-P4.6



Enhance Byron Airport's viability by protecting it from incompatible urban encroachment, such as large-scale residential development, and providing infrastructure that supports existing and planned airport activities, consistent with the Airport Master Plan and ALUCP.

TR-P4.7



Embrace emerging aviation-related technologies, such as drones, electric-powered aviation, and vertical takeoff and landing aircraft, to promote economic development and support the County's goals for reducing emissions, adapting to climate change, improving public safety, and increasing equitable mobility.

Actions

TR-A4.1



Update the ALUCP every 5 to 10 years to maintain consistency with applicable federal and State requirements, regional plans, and this General Plan, and to achieve the County's goals for Buchanan Field Airport and Byron Airport.



TR-A4.2

Switch to sale of unleaded aviation gasoline at County-owned airports as soon as there is a commercially viable and safe drop-in replacement for leaded fuel.

TRANSPORTATION ELEMENT PERFORMANCE MEASURES

To track progress in achieving the major goals of this Element, every five years, the County will collect data to assess its performance against the following measures. Progress will be tracked relative to the prior performance review and the baseline year of 2024. Based on the findings from the five-year review, the County may adjust policies, actions, or the approach to implementing them to improve performance, as needed.

- Reduced per-capita VMT.
- Reduced single-occupant vehicle mode share.
- Increased bicycle and pedestrian trips.
- Reduced average commute time for county residents.
- Increased ZEV charging and fueling infrastructure.
- Reduced number of roadway collisions involving fatalities and serious injuries.