

Circulation Element

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 - GPA No. 889, BOS RSLN 2012-018, 1/10/12
 - GPA No. 1131, BOS RSLN 2015-223, 3/10/15
 - GPA No. 856, BOS RSLN 2015-214, 9/22/15
 - GPA No. 1156, BOS RSLN 2017-001, 4/11/17
 - GPA No. 721, BOS RSLN 2017-239, 12/12/17
 - GPA No. 190002, BOS RSLN 2020-154, 07/07/20



Chapter 4

Circulation Element

Introduction

“

The transportation system in Riverside County has more than kept pace with the growth in population, employment and tourism and the demands for mobility. New and expanded transportation corridors are planned that connect growth centers at key locations throughout the County. In fact, several corridors will have built-in transit service and expansion capability to accommodate various forms of transit. Some of these corridors are now providing express bus service to MetroLink stations. It will be critical to design the corridors with a high regard for the environment, including provision of critical wildlife corridor crossings so that our open spaces can sustain habitat value.

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- RCIP Vision

Circulation Element Conceptual Framework

The circulation system of a community is vital to its prosperity. Its function is to provide for the movement of goods and people, including pedestrians, bicycles, transit, train, air, and automobile traffic flows within and through the community. Efficient traffic circulation is important to economic viability and the creation and preservation of a quality living environment.

In Riverside County, the circulation system is also intended to accommodate a pattern of concentrated growth, providing both a regional and local linkage system between unique communities. The circulation system is also multi-modal, meaning that it provides numerous alternatives to the automobile, such as transit, pedestrian systems, and bicycle facilities so that Riverside County citizens and visitors can access the region by a number of transportation options.

In compliance with state law, all city and county general plans must contain a circulation element that designates future road improvements and extensions, addresses non-motorized transportation alternatives, and identifies funding options. The Circulation Element also identifies transportation routes, terminals, and facilities. The intent of the Circulation Element is to:

- Identify the transportation needs and issues within the County, as well as regional relationships that affect the County's transportation system;
- Describe the proposed circulation system in terms of design elements, operating characteristics, and limits of operation, including current standards, guidelines, and accepted criteria for the location, design, and operation of the transportation system;
- Consider alternatives other than the single-occupant vehicle as essential in providing services and access to facilities;



A comprehensive Circulation Report, which contains detailed descriptions of circulation systems, assumptions, and studies, can be found in the Environmental Impact Report Technical Appendix.

- Establish policies that coordinate the circulation system with General Plan and area plan land use maps and provide direction for future decision-making in the realization of the Circulation Element goals; and
- Develop implementation strategies and identify funding sources to provide for the timely application of the Circulation Element goals and policies.
- Provide a plan to achieve a balanced, multimodal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the General Plan.

Riverside County recognizes the benefits of a multimodal transportation network and encourages its establishment through the General Plan. As the Circulation Element provisions for the circulation system are implemented, the multimodal transportation network as characterized and intended by the State of California’s Complete Streets Act (AB 1358) will be realized.

Public Participation/Intergovernmental Coordination

The Circulation Element was created in a public forum with input from numerous interest groups, citizens, jurisdictions, and agencies. Extensive efforts were made to involve the public, including:



Pursuant to the California Complete Streets Act, AB 1358, users of streets, roads and highways are defined to include: bicyclists, children, persons with disabilities, motorists, commercial goods movers, pedestrians, seniors, public transportation users.

- Public workshops to receive initial comments and discuss circulation and transportation issues;
- Coordination with the Southern California Association of Governments (SCAG);
- Coordination with the Riverside County Transportation Commission (RCTC), Western Riverside Council of Governments (WRCOG), and the Coachella Valley Association of Governments (CVAG);
- Coordination with advisory committees, such as Community Environmental Transportation Acceptability Process (CETAP) and General Plan Advisory Committee (GPAC); and
- Public hearings with the Planning Commission and Board of Supervisors.

Community Environmental Transportation Acceptability Process (CETAP)

Due to the importance of the circulation and mobility systems in the County of Riverside, the Community Environmental Transportation Acceptability Process (CETAP) was created as one of three planning efforts of the RCIP in addition to the Multiple Species Habitat and Conservation Plan, the Coachella Valley Multiple Species Habitat and Conservation Plan, and the General Plan. The CETAP committee served as an advisory body to Riverside County staff during the development of the Integrated Plan, and made recommendations relating to

transportation issues for the County of Riverside to consider during the General Plan development and review process. CETAP incorporated three levels of effort: identification of transportation corridors, development of the General Plan Circulation Element, and exploration of options for transit system development in the county. The members of CETAP dedicated a substantial amount of time and effort to evaluate Riverside County's transportation systems, identify potential issues, and provide recommendations for the County of Riverside to consider for inclusion in the updated General Plan. This valuable insight shaped the Circulation Element policies and will ultimately help shape the future of transportation within Riverside County.

Setting

Riverside County's transportation system is composed of numerous state highways (both freeways and arterial highways), as well as numerous county and city routes. The transit system includes public transit systems, common bus carriers, AMTRAK (intercity rail service), MetroLink (commuter rail service), and other local agency transit and paratransit services. In addition, the Riverside County transportation system includes general aviation facilities, limited passenger air service within the county, freight rail service, bicycle facilities, and other services for non-motorized forms of transportation (multipurpose trails).

As stated in the Riverside County Vision and Land Use Element, the County of Riverside is moving away from a growth pattern of random sprawl toward a pattern of concentrated growth and increased job creation. Linking areas of concentrated growth is an integrated system of mobility that includes vehicular, pedestrian, transit, equestrian, bicycle, and air transportation options. The intent of new growth patterns and the new mobility systems is to accommodate the transportation demands created by future growth and to provide mobility options that help reduce the need to utilize the automobile. The circulation system is designed to fit into the fabric of the land use patterns, including the open space systems.

In addition to the General Plan, the County of Riverside supports several transportation plans and programs that are necessary to manage current traffic demands in and plan for Riverside County's future transportation needs.

Congestion Management Program

The Riverside Congestion Management Program (CMP) is updated every two years in accordance with Proposition 111. The CMP was established in the State of California to more directly link land use, transportation, and air quality and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality.

“

New growth patterns no longer reflect a pattern of random sprawl. Rather, they follow a framework of transportation and open space corridors, with concentrations of development that fit into that framework. In other words, important open space and transportation corridors define growth areas.

Growth focus in this County is on quality, not on frustrating efforts to halt growth.

Population growth continues and is focused where it can best be accommodated.

Growth is well coordinated between cities and the County and they jointly influence periodic state and regional growth forecasts affecting Riverside County and its cities.

”

- RCIP Vision



Copies of the Congestion Management Plan can be obtained from the Riverside County Transportation Commission.

The Circulation Element describes how the future transportation system will function. This is important for congestion management, since deficiencies along the CMP system must be mitigated when they occur. The ability to address such deficiencies now, instead of when they occur, is critical. Understanding the reason for these deficiencies and identifying ways to reduce the impact of future growth and development along a critical CMP corridor will conserve scarce funding resources and help target those resources appropriately.



Proposition 111 (1990), entitled “The Traffic Congestion Relief and Spending Limitation Act of 1990,” enacted a statewide traffic congestion relief program and updated the spending limit on state and local government to better reflect the needs of a growing California population. It provided new revenues to be used to reduce traffic congestion by building state highways, local streets and roads, and public mass transit facilities. The measure enacted a 55% increase in truck weight fees and a five cent per gallon increase in the fuel tax on August 1, 1990, and an additional one cent on January 1 of each of the following four years.



Copies of the Regional Transportation Plan may be obtained from SCAG and can be downloaded from their web site at www.scag.ca.gov

Regional Transportation Plan

The Regional Transportation Plan (RTP) is a multi-modal, long-range planning document prepared by the Southern California Association of Governments (SCAG), in coordination with federal, state, and other regional, subregional, and local agencies in Southern California.

The RTP includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight, and finances. The RTP is prepared every three years and reflects the current future horizon based on a 20-year projection of needs.

The RTP’s primary use is as a regional long-range plan for federally funded transportation projects. It also serves as a comprehensive, coordinated transportation plan for all governmental jurisdictions within the region.

Each agency responsible for transportation, such as local cities, the County of Riverside, and Caltrans, has different transportation implementation responsibilities under the RTP. The RTP relies on the plans and policies governing circulation and transportation in each county to identify the region’s future multi-modal transportation system.

Issues and Policies

The Circulation Element outlines the necessary multi-modal transportation system components and provides tools to assist with development and implementation of the transportation system. The Circulation Element is structured to effectively implement the goals and policies identified by this General Plan. It also reflects citizens’ and decision makers’ desires to provide transportation mobility and quality access to existing and future residential, recreation, and employment uses as defined in the Land Use Element.

The following key policy issues were identified through extensive community and intergovernmental outreach efforts, analysis of existing conditions, and consideration of transportation objectives identified in the Riverside County Vision.

Planned Circulation Systems

Riverside County travel extends well beyond its borders. Recreational travel and freight movement reach past the Riverside County boundary and as a result, the transportation system must be capable of adequately meeting a wide range of needs. Not only does the County of Riverside need to accommodate the traffic that it generates, it also must accommodate the pass through traffic.

The intent of the General Plan Circulation Element is to establish a comprehensive multi-modal transportation system that is safe, achievable, efficient, environmentally and financially sound, accessible, and coordinated with the Land Use Element. It is important to design and implement a multi-modal transportation system that will serve projected future travel demand, minimize congestion, achieve the shortest feasible travel times and distances, and address future growth and development in Riverside County.

The Circulation Plan shown in Figure C-1 indicates those roadways that are planned to accommodate the land use plan. These will be constructed as development occurs and as funding becomes available. The County of Riverside has responsibility for the planning, construction, and maintenance of arterial highways in the unincorporated areas, except for state highways. The Circulation Plan also indicates roadways within city boundaries, but it should be noted that the County of Riverside does not have jurisdiction in the cities. The rights-of-way to be reserved for each type of facility are shown in the legend in Figure C-1. These are based on cross-section requirements presented in a later section. The cross-hatched lines in Figure C-1 show possible alternatives being examined for major new multi-modal transportation facilities in several corridor studies underway in western Riverside County. These lines show possible locations for these facilities, for informational purposes. For each of the corridor studies, typically one alignment will be selected for the preservation of right-of-way to accommodate the future construction of these facilities. It is expected that these facilities could become future freeways, with interchanges at selected locations. More information can be obtained on each of these corridor studies from the Riverside County Transportation Commission.

Policies:

- C 1.1 Design the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the Circulation Plan, Figure C-1. (AI 49)
- C 1.2 Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.
- C 1.3 Support the development of transit connections between Riverside County and regional activity centers in other counties as well as transit connections that link the community centers located throughout the county and as identified in the Land Use Element and in the individual Area Plans. (AI 26)

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Despite differences in priorities and approaches, we are engaged in community building for ourselves and our heirs based on the common ground we have forged.

”

- RCIP Vision



The General Plan policy and implementation item reference system:

LU 1.3: Identifies which element contains the Policy, in this case the Land Use Element, and the sequential number.

AI 1 and AI 4: Reference to the relevant Action Items contained in the Implementation Program found in Appendix K.

- C 1.4 Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.
- C 1.5 Evaluate the planned circulation system as needed to enhance the arterial highway network to respond to anticipated growth and mobility needs. (AI 49)
- C 1.6 Cooperate with and where appropriate lead local, regional, state, and federal agencies to establish an efficient circulation system. (AI 4, 41, 46, 50)
- C 1.7 Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.
- C 1.8 Ensure that all development applications comply with the California Complete Streets Act of 2008 as set forth in California Government Code Sections 65040.2 and 65302.

Level of Service



Level of Service

A qualitative measure describing the efficiency of traffic flow. Level of Service designations are used to describe the operating characteristics of the street system in terms of level of congestion or delay experienced by traffic.

As Riverside County continues to grow, transportation demand management and systems management will be necessary to preserve and increase available roadway capacity. Level of Service (LOS) targets are used to assess the performance of a street or highway system and the capacity of a roadway.

An important goal when planning the transportation system is to maintain acceptable levels of service along the federal and state highways and the local roadway network. To accomplish this, the California Department of Transportation (Caltrans), Riverside County Transportation Commission, the County of Riverside, and local agencies adopt minimum levels of service to determine future infrastructure needs.

Riverside County must provide and maintain a highway system with adequate capacity and acceptable levels of service to accommodate projected travel demands associated with the buildout of the Land Use Element. This can be accomplished by establishing minimum service levels for the designated street and conventional state highway system. Strategies that result in improvements to the transportation system, coupled with local job creation, will allow Riverside County residents to have access to a wide range of job opportunities within reasonable commute times.

Policies:

- C 2.1 The following minimum target levels of service have been designated for the review of development proposals in the unincorporated areas of Riverside County with respect to transportation impacts on roadways designated in the Riverside County Circulation Plan (Figure C-1) which are currently County maintained, or are intended to be accepted into the County maintained roadway system:

LOS C shall apply to all development proposals in any area of the Riverside County not located within the boundaries of an Area Plan, as well those areas located within the following Area Plans:

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REMAP, Eastern Coachella Valley, Desert Center, Palo Verde Valley, and those non-Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.

LOS D shall apply to all development proposals located within any of the following Area Plans: Eastvale, Jurupa, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, Western Coachella Valley and those Community Development Areas of the Elsinore, Lake Mathews/Woodcrest, Mead Valley and Temescal Canyon Area Plans.

LOS E may be allowed by the Board of Supervisors within designated areas where transit-oriented development and walkable communities are proposed.

Notwithstanding the forgoing minimum LOS targets, the Board of Supervisors may, on occasion by virtue of their discretionary powers, approve a project that fails to meet these LOS targets in order to balance congestion management considerations in relation to benefits, environmental impacts and costs, provided an Environmental Impact Report, or equivalent, has been completed to fully evaluate the impacts of such approval. Any such approval must incorporate all feasible mitigation measures, make specific findings to support the decision, and adopt a statement of overriding considerations. (AI 3)

- C 2.2 Require that new development prepare a traffic impact analysis as warranted by the Riverside County Traffic Impact Analysis Preparation Guidelines or as approved by the Director of Transportation. Apply level of service targets to new development per the Riverside County Traffic Impact Analysis Preparation Guidelines to evaluate traffic impacts and identify appropriate mitigation measures for new development. (AI 3)
- C 2.3 Traffic studies prepared for development entitlements (tracts, public use permits, conditional use permits, etc.) shall identify project related traffic impacts and determine the significance of such impacts in compliance with CEQA and the Riverside County Congestion Management Program Requirements. (AI 3)
- C 2.4 The direct project related traffic impacts of new development proposals shall be mitigated via conditions of approval requiring the construction of any improvements identified as necessary to meet level of service targets.
- C 2.5 The cumulative and indirect traffic impacts of development may be mitigated through the payment of various impact mitigation fees such as County of Riverside Development Impact Fees, Road and Bridge Benefit District Fees, and Transportation Uniform Mitigation Fees to the extent that these programs provide funding for the improvement of facilities impacted by development.
- C 2.6 Accelerate the construction of transportation infrastructure in the Highway 79 corridor between Temecula, Hemet, San Jacinto, and Banning. The County of Riverside shall require that all new



To achieve the true intent of community center design, Level of Service designations are typically lower (LOS E) to minimize the impacts of accommodating uncongested roadways and to maximize pedestrian use. Higher level of service designations (LOS A, B, C) require wider road widths, and as a result, would create circulation systems that are more accommodating to automobiles than pedestrians.

development projects demonstrate adequate transportation infrastructure capacity to accommodate the added traffic growth. The County of Riverside shall coordinate with cities in the Highway 79 corridor to accelerate the usable revenue flow of existing funding programs, thus expediting the development of the transportation infrastructure

- C 2.7 Maintain a program to reduce overall trip generation in the Highway 79 Policy Area (Figure C-2) by creating a trip cap on residential development within this policy area which would result in a net reduction in overall trip generation of 70,000 vehicle trip per day from that which would be anticipated from the General Plan Land Use designations as currently recommended. The policy would generally require all new residential developments proposals within the Highway 79 Policy Area to reduce trip generation proportionally, and require that residential projects demonstrate adequate transportation infrastructure capacity to accommodate the added growth.
- C 2.8 Riverside County shall coordinate with Caltrans, RCTC and adjacent local jurisdictions in conformance with the Riverside County Congestion Management Program to determine the appropriate LOS threshold for determining significance when reviewing development proposals that directly impact nearby State Highway facilities or city streets.

“
Incentives and the competitive need to “raise the bar” in creating communities of excellence commonly stimulates the development community to exceed the norms of development standards.
 ”
 - RCIP Vision

System Design, Construction and Maintenance

A well-planned, designed, constructed, and maintained street and highway system facilitates the movement of vehicles and provides safe and convenient access to surrounding developments. Riverside County’s efforts to develop a system of local, collector, and arterial roadways provide the basis for a safe and efficient transportation system.

Figure C-1 shows the future streets and highways system at build out in addition to functional classifications. The General Plan Environmental Impact Report (EIR) provides the corresponding listing of projected traffic volumes, number of travel lanes, and level of service for each street segment at buildout.

Maintenance of personal mobility, safety, convenience, and efficiency are all issues that must be considered when a system is created. Arterial roads need to be built with sufficient capacity to accommodate long-term traffic growth.

A consistent and uniform highway network that meets the needs of current and future residents can be accomplished by implementing a functional classification system for major highways, with set minimum right-of-way and design standards, and by identifying needed roadway improvements.

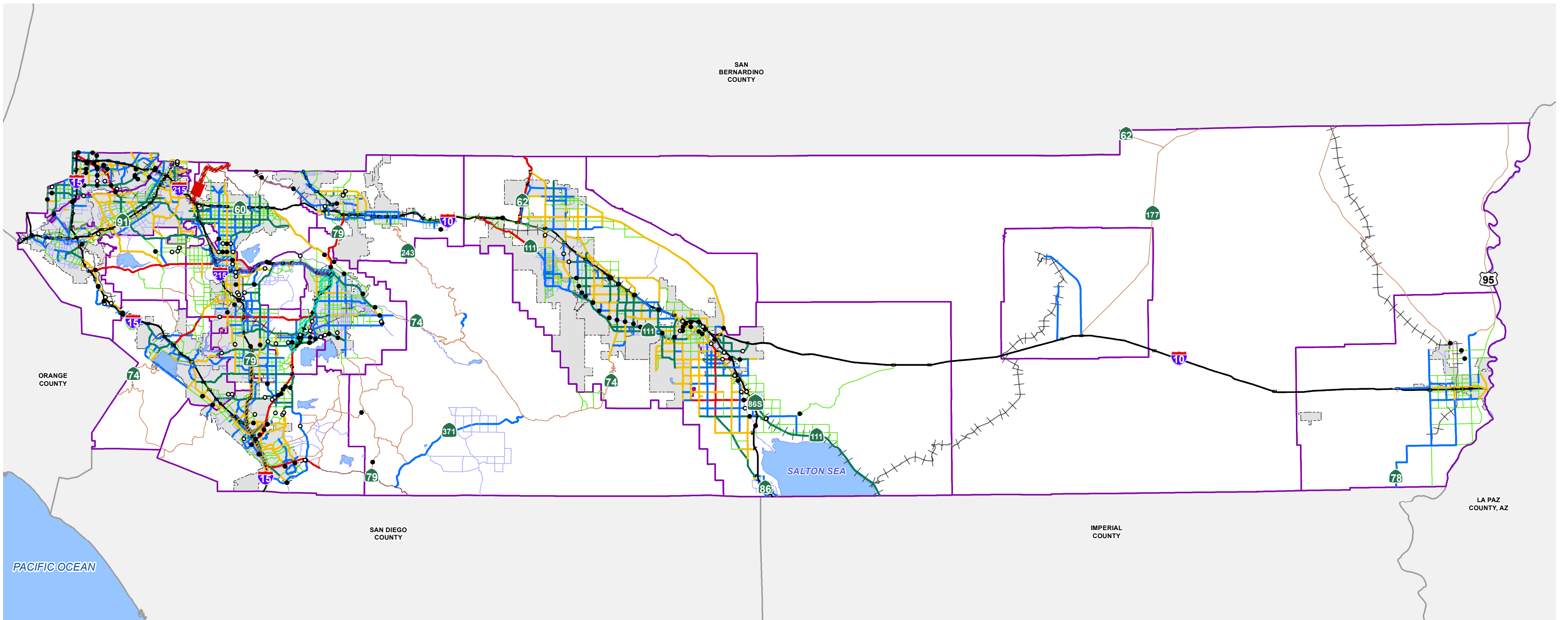
Functional Classifications

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and highways do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads.

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Typical cross-sections for the different functional street classifications are shown in Figure C-3. Note, however, that these sections represent general guidelines; the official sections used for implementation will be those contained in the latest County of Riverside Improvement Standards contained in Ordinance No. 461.

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Data Source: Riverside County Transportation

Circulation Designations

- Freeway (Variable ROW)
- Expressway (128' to 220' ROW)
- Urban Arterial (152' ROW)
- Arterial (128' ROW)

- Major (118' ROW)
- Secondary (100' ROW)
- Mountain Arterial 4 Ln (110' ROW)
- Mountain Arterial 2 Ln (110' ROW)
- Collector (74' ROW)

Interchanges

- Existing Interchange
- Proposed Interchange
- Existing Overpass/Underpass
- Proposed Overpass/Underpass

CETAP Corridors

- Moreno Valley to San Bernardino CETAP
- East-West CETAP Corridor
- Winchester to Temecula CETAP
- SR-79 Re-alignment Study Area

Bridges

- Existing Bridge
- Proposed Bridge

Railroads Amended

- Proposed Tunnel Section
- Area Plan Boundary
- City Boundary
- Waterbodies

Figure C-1

July 7, 2020

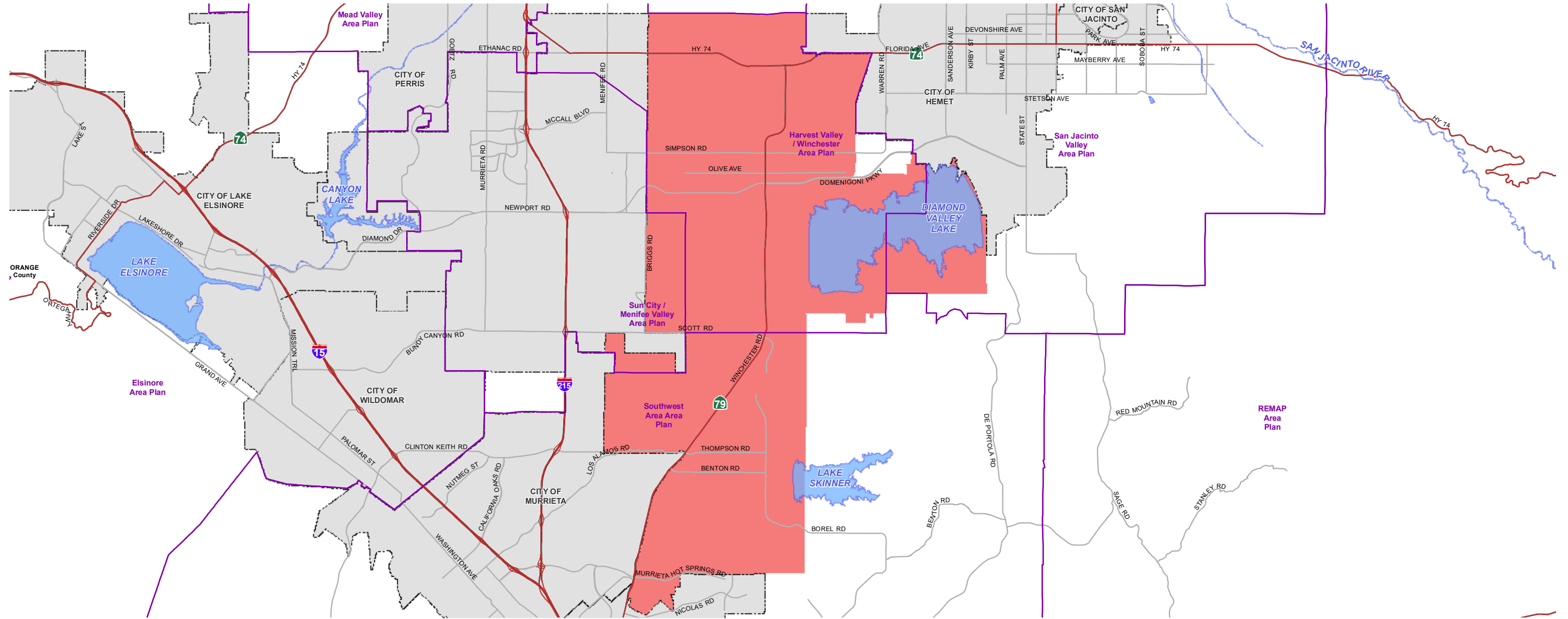
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CIRCULATION PLAN

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Data Source: Riverside County (2003)





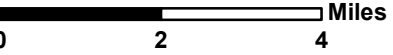
-  Highway 79 Policy Area
-  Highways
-  Area Plan Boundary
-  City Boundary
-  Waterbodies

Figure C-2

 December 8, 2015

 Miles

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HIGHWAY 79 POLICY AREA

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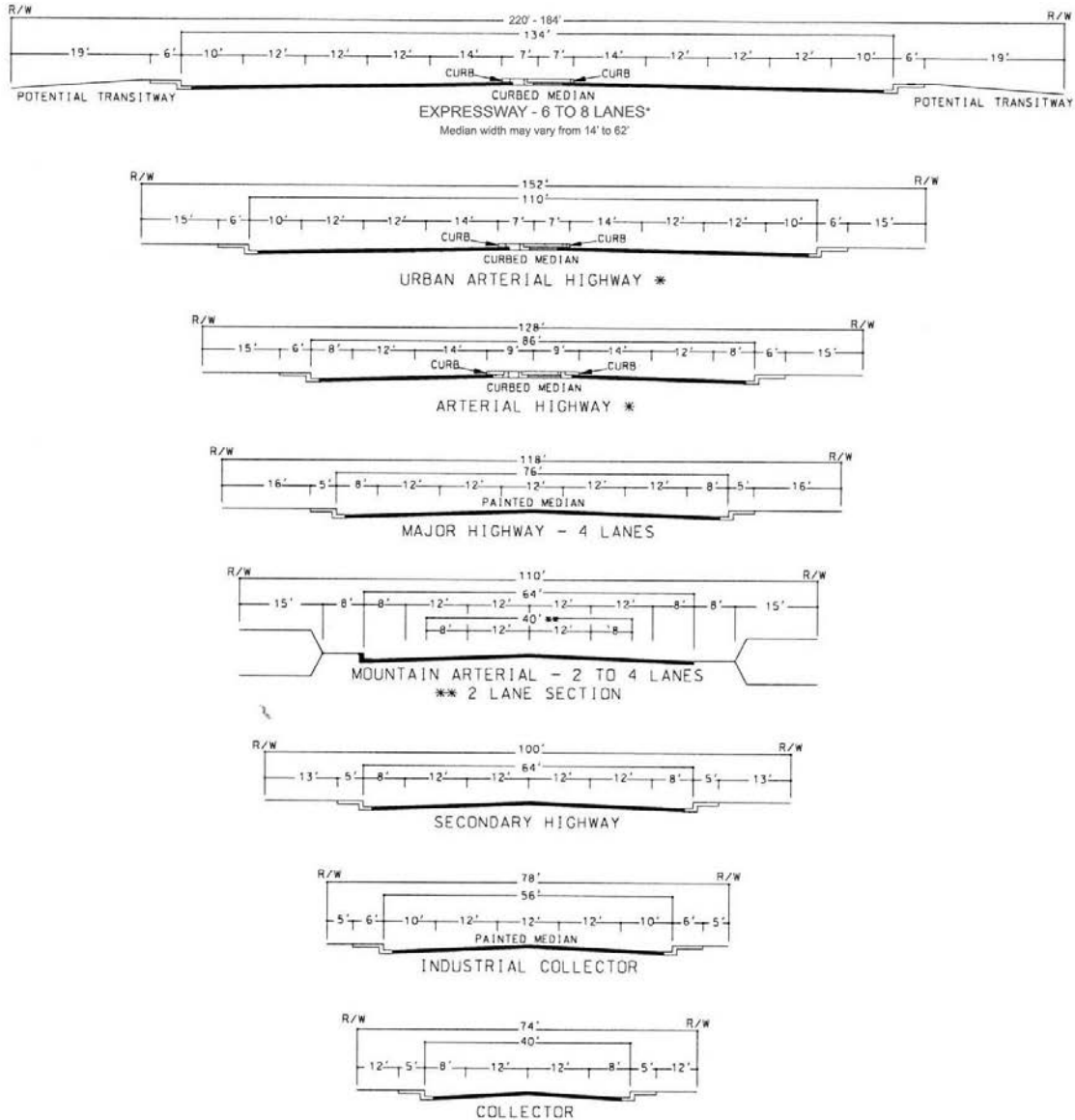
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**Table C-1
Street Classification as identified in the Riverside County Transportation Department
Standards and Specifications**

Classification	Definition	Minimum Right-of-Way Width Required	Number of Lanes Required (Approximate)
Freeway	Highway upon which the abutter's rights of access are controlled and which provides separated grades at intersecting streets.	To be determined by Caltrans	To be determined by Caltrans
Expressway	Multi-modal highway corridor for through traffic to which access from abutting property is restricted. Intersections with other streets or highways shall be limited to approximately one-half mile intervals.	220 to 184 feet	6 or 8 lanes, additional rights-of-way may be needed at intersections
Urban Arterial	Highway primarily for through traffic where anticipated traffic volumes exceed four-lane capacity. Access from other streets or highways shall be limited to approximately one-quarter mile intervals.	152 feet	6 or 8 lanes, additional rights-of-way may be required. at intersections
Arterial Highway	Divided highway primarily for through traffic to which access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately one-quarter mile intervals.	128 feet	4 or 6 lanes, additional right of way may be required at intersections
Mountain Arterial Highway	Highway intended to serve through traffic in mountainous areas zoned for low density residential development. Access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately 330-foot intervals.	110 feet	2 to 4 lanes, additional right-of-way may be required at intersections.
Major Highway	Highway intended to serve property zoned for major industrial and commercial uses, or to serve through traffic. Intersections with other streets or highways may be limited to approximately 660-foot intervals.	118 feet	4 lanes, additional rights-of-way may be required at intersections
Secondary Highway	Highway intended to serve through traffic along longer routes between major traffic generating areas or to serve property zoned for multiple residential, secondary industrial or commercial uses. Intersections with other streets and highways may be limited to 330-foot intervals.	100 feet	4 lanes, generally no turn lanes, and additional right-of-way may be required at intersections
Collector Street	Street intended to serve intensive residential land use, multiple-family dwellings, or to convey traffic through an area to roads of equal or similar classification or higher. It may also serve as a cul-de-sac in industrial or commercial use areas but shall not exceed 660 feet in length when so used.	74 feet	2 lanes
Industrial Collector	A circulatory street with a continuous left-turn lane with at least one end connecting to a road of equal or greater classification.	78 feet	2 lanes

Figure C-3 Street Classification Cross-Sections

**GENERAL PLAN ROADWAY
CROSS SECTIONS**



*IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE. ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

Revised 7/3/2003

Policies:

- C 3.1 Design, construct, and maintain Riverside County roadways as specified in the Riverside County Road Improvement Standards and Specifications. The standards shown in Figure C-4 may be modified by Specific Plans, Community Guidelines, or as approved by the Director of Transportation if alternative roadway standards are desirable to improve sustainability for the area.
- C 3.2 Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.
- C 3.3 Implement design guidelines that identify intersection improvements consistent with the lane geometrics in Table C-2 unless additional lanes are needed to maintain consistency with Policy C 2.2. Where roadway classifications change on a continuous alignment, the standards of the higher classification will normally be transitioned on a portion of the roadway that has the lower classification, particularly where the change takes place at roadway intersections. This may result in additional right of way or lanes being required above the standards shown in Figure C-4 for the segment with the lower classification to accommodate the transition.

**Table C-2
Highway Lane Requirements**

Classification	# of Through Lanes Along Arterial Segment	Intersection Turn Lanes Recommended for Intersection w/ secondary highway and above	
		Left	Right
Expressway	6 or 8	2 or 3	1 or 2
Urban Arterial	6	2 or 3	1 or 2
Arterial Highway	4 or 6 ¹	2	1
Major Highway	4	2	1
Secondary Highway	4	1	1
Collector Highways	2	N/A	N/A

¹ Six lanes may be required for designated arterial highways as indicated in a listing maintained by TLMA.

- C 3.4 Allow roundabouts or other innovative design solutions such as triple left turn lanes, continuous flow intersections, or other capacity improvements, when a thorough traffic impact assessment has been conducted demonstrating that such an intersection design alternative would manage traffic flow, and improve safety, if it is physically and economically feasible.
- C 3.5 Require all major subdivisions to provide adequate collector road networks designed to feed traffic onto General Plan designated highways.
- C 3.6 Require private developers to be primarily responsible for the improvement of streets and highways that serve as access to developing commercial, industrial, and residential areas. These may include road construction or widening, installation of turning lanes and traffic signals, and the improvement of any drainage facility or other auxiliary facility necessary for the safe and efficient movement of traffic or the protection of road facilities.
- C 3.7 Design interior collector street systems for commercial and industrial subdivisions to accommodate the movement of heavy trucks.
- C 3.8 Restrict heavy duty truck through-traffic in residential and community center areas and plan land uses so that trucks do not need to traverse these areas.

- C 3.9 Design off-street loading facilities for all new commercial and industrial developments so that they do not face surrounding roadways or residential neighborhoods. Truck backing and maneuvering to access loading areas shall not be permitted on the public road system, except when specifically permitted by the Transportation Department.
- C 3.10 Require private and public land developments to provide all onsite auxiliary facility improvements necessary to mitigate any development-generated circulation impacts. A review of each proposed land development project shall be undertaken to identify project impacts to the circulation system and its auxiliary facilities. The Transportation Department may require developers and/or subdividers to provide traffic impact studies prepared by qualified professionals to identify the impacts of a development.
- C 3.11 Generally locate commercial and industrial land uses so that they take driveway access from General Plan roadways with a classification of Secondary Highway or greater, consistent with design criteria limiting the number of such commercial access points and encouraging shared access. Exceptions to the requirement for access to a Secondary Highway or greater would be considered for isolated convenience commercial uses, such as standalone convenience stores or gas stations at an isolated off ramp in a remote area. Industrial park type developments may be provided individual parcel access via an internal network of Industrial Collector streets.
- C 3.12 Improve highways serving as arterials through mountainous and rural areas to adequately meet travel demands and safety requirements while minimizing the need for excessive cut and fill.
- C 3.13 Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.
- C 3.14 Design curves and grades to permit safe movement of vehicular traffic at the road's design speed. Design speed should be consistent with and complement the character of the adjacent area.
- C 3.15 Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.
- C 3.16 Dedicate necessary rights-of-way as part of the land division and land use review processes.
- C 3.17 Ensure dedications are made, where necessary, for additional rights-of-way or easements outside the road rights-of-way that are needed to establish slope stability, or drainage and related structures. These dedications shall be made by land dividers or developers to the responsible agency during the land division and land use review process. (AI 44, 51, 52)
- C 3.18 Align right-of-way dedications with existing dedications along adjacent parcels and maintain widths consistent with the ultimate design standard of the road, including required turning lanes. (AI 51)
- C 3.19 Coordinate with Caltrans to identify and protect ultimate freeway rights-of-way, including those for exclusive use by transit and those necessary for interchange expansion. Ultimate right-of-way needs shall be based upon build out traffic forecasts, with facilities sized to provide the appropriate level of service per state highway planning criteria. The County of Riverside, in consultation with Caltrans, will undertake a program to acquire such areas where additional right-of-way is required. (AI 44, 51)

Chapter 4 **Circulation Element**

- C 3.20 Determine location of General Plan road rights of way and levels of road improvements needed based primarily upon land uses and travel demand.
- C 3.21 Consider granting a reduction in improvement requirements for land divisions involving parcels greater than 20 acres in size and designated as agriculture on the General Plan Land Use map.
- C 3.22 Limit through-traffic movements to General Plan designated roads. Provisions shall be made for highways capable of carrying high volumes of through-traffic between major trip generators.
- C 3.23 Consider the utilization of traffic-calming techniques in the design of new community local street and road systems and within existing communities where such techniques will improve safety and manage traffic flow through sensitive neighborhoods.
- C 3.24 Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, secondary access, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.
- C 3.25 Restrict on-street parking to reduce traffic congestion and improve safety in appropriate locations such as General Plan roadways.
- C 3.26 Plan off-street parking facilities to support and enhance the concept of walkable and transit-oriented communities.
- C 3.27 Evaluate proposed highway extensions or widening projects for potential noise impacts on existing and future land uses in the area. Require that the effects of truck mix, speed limits, and ultimate motor vehicle volumes on noise levels are also explored during the environmental process. (AI 49)
- C 3.28 Reduce transportation noise through proper roadway design and coordination of truck and vehicle routing.
- C 3.29 Include noise mitigation measures in the design of new roadway projects in the County of Riverside.
- C 3.30 Design roadways to accommodate wildlife crossings whenever feasible and necessary.
- C 3.31 Through the development review process, identify existing dirt roads serving residential areas which may be impacted by traffic from new developments, and design new developments such that new traffic is discouraged from using existing dirt roads. When this is unavoidable, require that new developments participate in the improvement of the affected dirt roads.
- C 3.32 Support ongoing efforts to identify funding and improve existing dirt roads throughout the County of Riverside.
- C 3.33 Assure all-weather, paved access to all developing areas.

Pedestrian Facilities

Pedestrian facilities include sidewalks, walkways, bridges, crosswalks, signals, illumination, and benches, among other items. These facilities are an important part of the Riverside County non-motorized transportation network. Pedestrian facilities provide a vital link between many other modes of travel and can make up a considerable portion of short-range trips made in the community. Where such facilities exist, people will be much more likely to make shorter trips by walking rather than by vehicle. Pedestrian facilities also provide a vital link for commuters who use other transportation facilities such as rail, bus, and park-n-rides. Without adequate pedestrian facilities, many commuters may be forced to utilize an automobile because of difficult or unsafe conditions that exist at their origin or destination.

Pedestrian facilities within the immediate vicinity of schools and recreational facilities are important components of the non-motorized transportation system. Such facilities, typically in the form of sidewalks, are provided where they are appropriate and enhance the safety of those who choose to walk to and from their destination.

Pedestrian facilities may be warranted when any one or combination of the following conditions is present: any type of residential development; any type of activity center; any type of commercial center; downtown business districts; any type or combination of parks and recreation facilities; along or near transit routes and/or facilities; any type of business or office center; and, along or near any type of watercourse or body.

For the most part, sidewalks are installed in most urban environments when the roadway frontage is developed. Because development occurs in stages, numerous missing links can occur in the sidewalk system. Eventually these are filled in, but this can take many years.

Policies:

- C 4.1 Provide facilities for the safe movement of pedestrians within developments, as specified in the Riverside County Ordinances Regulating the Division of Land of the County of Riverside.
- C 4.2 Maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.
- C 4.3 Assure and facilitate pedestrian access from developments to existing and future transit routes and terminal facilities through project design. (AI 26, 45)
- C 4.4 Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.
- C 4.5 Collaborate with local communities to ensure that school children have adequate transportation routes available, such as a local pedestrian or bike path, or local bus service.
- C 4.6 Consult the Riverside County Transportation Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. The County of Riverside may require both the dedication and improvement of the pedestrian facilities as a condition of development approval. (AI 3)

- C 4.7 Make reasonable accommodation for safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.
- C 4.8 Coordinate with all transit operators to ensure that ADA compliant pedestrian facilities are provided along and/or near all transit routes, whenever feasible. New land developments may be required to provide pedestrian facilities due to existing or future planned transit routes even if demand for pedestrian facility may not be otherwise warranted. (AI 45)
- C 4.9 Review all existing roadways without pedestrian facilities when they are considered for improvements to determine if new pedestrian facilities are warranted. New roadways should also be assessed for pedestrian facilities. (AI 49)

Transportation System Landscaping

Landscaping can play an important role in the aesthetics and noise mitigation of transportation routes. Landscaping softens the otherwise harsh visual impacts that a roadway can create and can be used as a buffer to protect noise sensitive areas such as residential properties.

Policies:

- C 5.1 Encourage Caltrans to install and maintain landscaping and other mitigation elements along freeways and highways, especially when they are adjacent to existing residential or other noise sensitive uses.
- C 5.2 Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.
- C 5.3 Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping.

System Access

Access connections (driveways, local streets, and private roads) to Riverside County's roadway system must be planned, constructed, and maintained in a manner that is consistent with the basic mobility and safety needs of the street classification to which access is being provided. For instance, streets intended to carry large volumes of traffic at high speeds should have minimal access points to reduce vehicular conflicts. Access points that are carefully located on a property can reduce the levels of conflict that can result from pedestrian and motorized traffic. The uniform application of access standards for the street and highway system will contribute to the successful operation of the system.

Policies:

- C 6.1 Provide dedicated and recorded public access to all parcels of land, except as provided for under the statutes of the State of California.
- C 6.2 Require all-weather access to all new development.

- C 6.3 Limit access points and intersections of streets and highways based upon the road's General Plan classification and function. Require that access points be located so that they comply with Riverside County's minimum intersection spacing standards. Under special circumstances the Transportation Department may consider exceptions to this requirement. (AI 3)
- C 6.4 Discourage parcel access points taken directly off General Plan designated highways. Access may be permitted off of General Plan designated highways only if no local streets are present.
- C 6.5 Provide common access via shared driveways and/or reciprocal access easements whenever access must be taken directly off a General Plan designated highway. Parcels on opposite sides of a highway shall have access points located directly opposite each other, whenever possible, to allow for future street intersections and increased safety.
- C 6.6 Consider access implications associated with adjacent development and circulation plans, and promote efficient and safe access for airport facilities.
- C 6.7 Require that the automobile and truck access of commercial and industrial land uses abutting residential parcels be located at the maximum practical distance from the nearest residential parcels to minimize noise impacts. (AI 105)

Local Agency and Property Owner Coordination

One of the major transportation goals of this General Plan is to provide a circulation (arterial highway) plan that is integrated with that of adjacent jurisdictions and with the development of land in the unincorporated area. To accomplish this goal, the County of Riverside must maintain a high level of inter-governmental and property owner coordination and citizen participation in the circulation and transportation planning process, and work with other agencies to assure that regional transportation plans are consistent with Riverside County's General Plan. The County of Riverside recognizes that the land use/transportation connection is a key part of the development process and that it will serve to reduce the number of vehicle trips compared to earlier patterns of development.

WRCOG/CVAG Transportation Plans

The Western Riverside Council of Governments (WRCOG) prepared a non-motorized transportation plan that assesses the need for non-motorized transportation facilities and programs. The Coachella Valley Association of Governments (CVAG) prepared a transportation element to collect, in one document, the existing conditions and needs, policies, standards, and recommendations on regional bicycle, trail and pedestrian facilities in Coachella Valley. Both of these documents can be used when developing non-motorized transportation systems within Riverside County.

CETAP Corridors

As part of their advisory role to the County of Riverside, the Community Environmental Transportation Acceptability Process (CETAP) committee made recommendations relating to transportation issues for the County of Riverside to consider during the General Plan development and review process. CETAP incorporated three levels of effort: identification of transportation corridors, development of the General Plan Circulation Element, and exploration of options for transit system development in Riverside County. Three corridors are being examined in western Riverside County for the preservation of right-of-way for future multi-modal transportation facilities.

These include the Moreno Valley to San Bernardino corridor (north to south), the Hemet to Corona/Lake Elsinore corridor (east-west), and the Winchester to Temecula corridor (north to south) (Figure C-1).

The Circulation Plan shows preliminary CETAP alignments for each corridor under study by the Riverside County Transportation Commission (RCTC) as of 2011. These facilities are intended to address the mobility needs for both people and goods, with the potential for incorporating the needs for highways, transit, and utilities. The expectation is that each of these alignments will be further evaluated, based on environmental impact studies being performed by RCTC and the Federal Highway Administration. These are intended to be major transportation facilities to support mobility and economic development in western Riverside County.

The General Plan Circulation Element seeks to preserve the right-of-way for these facilities so that they can be constructed at some point in the future. The required right-of-way will be approximately 300 feet in width, with lesser or greater amounts possibly required in some areas, based on topography. Figure C-5 depicts a conceptual representation of a typical CETAP corridor section. Precise right-of-way widths will be determined by the County of Riverside and RCTC. The Circulation Element Map in Figure C-1 shows potential alignments.

The Hemet to Corona/Lake Elsinore corridor was refocused by RCTC in 2009 to actively study and design alignments connecting Interstate 215 easterly to State Highway 79. The refocused alignment is also called the Mid County Parkway. Figure C-1 has been updated to reflect the alignments under study for the Mid County Parkway. As part of the refocusing action, RCTC removed from consideration all alignments within the westerly portion of the Hemet to Corona/Lake Elsinore corridor connecting Interstate 215 to Interstate 15 and this portion of the corridor is not being actively studied as of 2011. Nonetheless, the westerly portion of the Hemet to Corona/Lake Elsinore Corridor is still anticipated to be needed in the future and has been retained by RCTC in its Regional Transportation Plan for the area generally bounded by Lake Mathews and the City of Riverside to the north and State Highway 74 to the south so that future east/west transportation improvements connecting Interstate 215 and Interstate 15 are not precluded.

While the Moreno Valley to San Bernardino corridor alignment shown on Figure C-1 is considered part of RCTC's CETAP concept for this corridor, it is not being actively pursued as of 2011. Possible extensions and improvements to Pigeon Pass Road and Reche Canyon Road into San Bernardino County are also considered components of the CETAP concept for the Moreno Valley to San Bernardino corridor by RCTC, and the County of Riverside will participate in evaluating these facilities as funding becomes available.

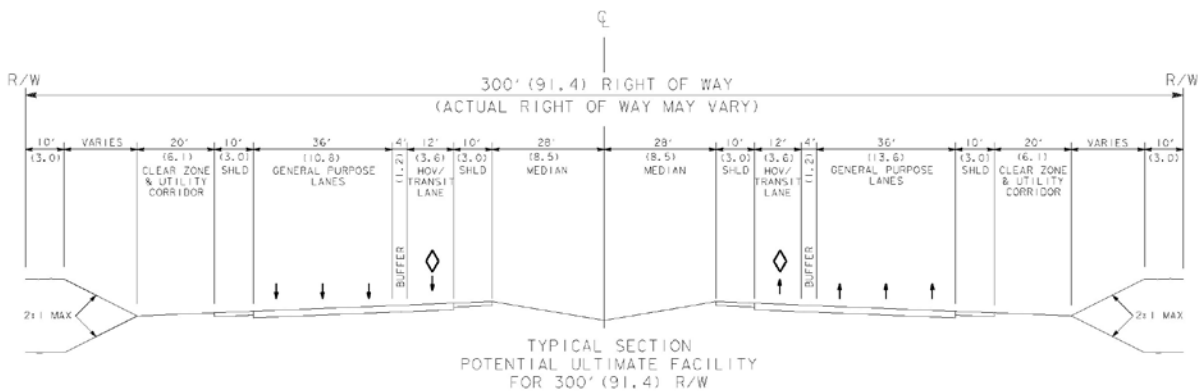
The Winchester to Temecula corridor shown on Figure C-1 will primarily expand the existing Interstate 15 and Interstate 215 freeways with additional lanes. Also an extension of Date Street will connect the Interstate 15 freeway and Winchester Road within the City of Temecula will provide additional traffic capacity that will aid in relieving congestion on the southerly portion of Winchester Road.

Although RCTC does not include the SR-79 Realignment as a CETAP corridor, this facility is part of RCTC's transportation plans and represents a significant facility for the expansion of north/south travel in the Hemet/San Jacinto area. This project will realign State Route 79 between Domenigoni Parkway and Gilman Springs Road. A preliminary alignment and study area that reflects the alternatives under review by RCTC as of 2011 has been identified on Figure C-1 to promote the preservation of right-of-way for this facility.

Figure C-1 also indicates locations of potential interchanges associated with the CETAP corridors and the SR-79 Realignment. These facilities may be constructed in phases based upon transportation demand, available funding, and Caltrans and RCTC policy.

In addition to the corridors and study areas depicted in Figure C-1, the RCTC completed a joint Major Investment Study (MIS) with the Orange County Transportation Authority (OCTA) for a Riverside County to Orange County corridor. This corridor has been identified as a mitigation measure for traffic impacts identified in the Draft EIR for this General Plan. The MIS identified a Locally Preferred Strategy (LPS) that was adopted by the RCTC and the OCTA. The Executive Summary of the Final Report for the MIS LPS listed the following components which are also depicted on Exhibit 7 of the MIS (Appendix O). An update is provided for each component as of mid-2015:

- “Establish Riverside Freeway (State Route 91) from the Costa Mesa Freeway (State Route 55) to Corona Freeway (Interstate 15) as a priority for improving transportation between Riverside and Orange counties. Emphasize Riverside Freeway (State Route 91) improvements between the Foothill/Eastern Transportation Corridor (State Route 241) and the Corona Freeway (Interstate 15) first, followed by improvements between Costa Mesa Freeway (State Route 55) and the Foothill/Eastern Transportation Corridor (State Route 241).” A series of projects have been completed or are under construction along this corridor.
- “Continue to work with the Foothill/Eastern Transportation Corridor Agency to develop a mutually acceptable plan to improve the connection between the Foothill/Eastern Transportation Corridor (State Route 241) and Riverside Freeway (State Route 91) corridors and accelerate capacity improvements on Eastern Toll Road (State Route 133) , Foothill/Eastern Transportation Corridor (State Route 241), and Eastern Toll Road (State Route 261) to optimize utilization of the toll roads to improve transportation between Riverside and Orange counties.” The Transportation Corridor Agencies are currently working to develop a plan to improve the connection between SR 241 and the SR 91 Express Lane.
- “Continue to evaluate costs and impacts to Corridor A in the Riverside Freeway (State Route 91) right of way through a future preliminary engineering process in cooperation with other agencies.”
- “Continue to study the technical feasibility of the Corridor B concept, (Irvine/Corona Expressway, also known as Orange County CETAP connection) including cooperation with ... other interested agencies.”
- Corridors A & B both remain in the Regional Transportation Plan and Strategic Plan for consideration as long term future projects.
- “Continue work with the Cal-Nevada Super Speed Train Commission on Anaheim to Ontario Maglev alignments in the Santa Ana Canyon or alternate corridors as appropriate.” As of 2015 this project appears to be on hold.
- “Eliminate Strategic Alternative 1B (Corridor A with the Costa Mesa Freeway [State Route 55] widening) from further analysis due to high number of residential right of way impacts adjacent to the Costa Mesa Freeway (State Route 55).”
- “Eliminate from further analysis the Ortega Highway (State Route 74) widening and realignment concept due to high cost and environmental impacts, and direct staff to focus on Ortega Highway (State Route 74) operational improvements.”

Figure C-4 Conceptual CETAP Transportation Corridor Cross-Section

Property Owner Coordination

If a property owner proposes to develop property within the path of or adjacent to one of the alignments, the Riverside County Transportation Department will notify the applicant at an early stage so that coordination can occur. Discussions will be held with the property owner/applicant to identify the current status of that particular alignment and the extent to which property needs to be reserved for the alignment or potential interchanges. An assessment of the potential desire for designing the development around the right-of-way, potential dedication of property, and/or acquisition of property will be discussed with the property owner. The County of Riverside may, depending upon the specific circumstances, require dedication of up to the full width of the right-of-way for designated corridors.

Policies:

- C 7.1 Work with incorporated cities to mitigate the cumulative impacts of incorporated and unincorporated development on the transportation system. (AI 2, 49, 50, 53)
- C 7.2 Work with property owners to reserve right-of-way for potential CETAP corridors through site design, dedication, and land acquisition, as appropriate. (AI 3, 10, 52, 54)
- C 7.3 Incorporate the Regional Transportation Plan of the Southern California Association of Governments (SCAG) and the Riverside County Congestion Management Program into the Circulation Element, and, with the active participation of Caltrans, work to expedite the design and implementation of state highway capital improvement projects. (AI 49, 50, 51)
- C 7.4 Coordinate with transportation planning, programming and implementation agencies such as Caltrans, Riverside County Transportation Commission, Western Riverside Council of Governments, Coachella Valley Association of Governments, and the cities of Riverside County on various studies relating to freeway, high occupancy vehicle/high occupancy toll lanes, and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated circulation system. (AI 50)



A **high-occupancy vehicle** (or HOV) is a vehicle that can carry two or more persons. Examples include buses, vans and carpools.

A **high-occupancy vehicle lane** (or HOV lane) is an exclusive road or travel lane limited to buses, vanpools and carpools on freeways, highways and city arterial streets.

A **high-occupancy toll** (or HOT) is a toll or increased toll charge imposed upon vehicles which have less than the specified number of required passengers for a particular road or highway.

- C 7.5 Partner with government agencies and authorities to provide for improvements and alternative transportation corridors to Orange County. (AI 50)
- C 7.6 Support major capacity enhancements on State Route 91, between the counties of Riverside and Orange.
- C 7.7 Support the analysis of the feasibility of developing Pigeon Pass Road and Reche Canyon Road as four-lane facilities to link the Moreno Valley area and San Bernardino County.
- C 7.8 Collaborate with all incorporated cities and all adjacent counties to implement and integrate right-of-way requirements and improvement standards for General Plan roads that cross jurisdictional boundaries. Detailed procedures have been developed and include the following:
- a. For development under Riverside County jurisdiction but within the sphere of influence (SOI) of a city having roadway standards different from Riverside County, city and Riverside County staff will cooperate and agree on a reasonable choice of design standards for the particular circumstances involved, and negotiate logical transitions from city to Riverside County standards.
 - b. In general, for such development under Riverside County jurisdiction but within the SOI of an incorporated jurisdiction, city standards should apply if the staffs concur that annexation to the City will logically occur in the short to intermediate range future. Where annexation seems doubtful into the long-term future, Riverside County standards should apply.
 - c. Transition areas at meeting points of roadways designed to differing city and Riverside County standards or differing functional classifications should be individually designed to facilitate satisfactory operational and safety performance. Further, Riverside County should update the road standards to reflect the intent of this policy and standards agreed upon by the County of Riverside and other local agencies. (AI 4, 50)
- C 7.9 Review development applications in cooperation with RCTC and as appropriate, to identify the precise location of CETAP corridors and act to preserve such areas from any permanent encroachments, pending dedication or acquisition. Coordinate with RCTC to evaluate and update the CETAP corridors periodically as conditions warrant. (AI 50)
- C 7.10 Support the analysis of the feasibility of developing Cajalco Expressway and Ethanac Expressway as Intra-County corridors to support the intent of the East-West Hemet to Corona/Lake Elsinore CETAP Corridor.

- C 7.11 Prioritize the improvement of Cajalco Expressway. Coordinate and work with RCTC, WRCOG, and the Cities of Riverside, Corona, Perris, Moreno Valley, San Jacinto, and Hemet to develop a phasing plan for Cajalco Expressway and the Mid County Parkway that ensures equity in the funding and capacity improvements on each project.
- C7.12 Coordinate and work with RCTC, WRCOG, and the Cities of Lake Elsinore, Menifee and Perris to develop a phasing plan for Ethanac Expressway.

System Funding and Financing

One of the most important considerations to achieve a viable multi-modal transportation system is financing. Funding priorities must be developed and innovative financing must be designed to ensure that the transportation system is implemented.

Discretionary transportation improvement funds should be allocated to enhance mobility and promote convenient, safe, and efficient transport of people, goods and materials. This can be accomplished through continued development and implementation of a “Transportation Improvement Program” for multi-modal improvements and Riverside County’s participation in voter-approved local tax measures and Regional Transportation Plans that meet state and federal guidelines. Investment in, preservation of and expansion of the existing freeway, arterial street, public transit, rail, and non-motorized transportation network is critical to the provision of a viable multi-modal transportation system necessary to sustain a healthy local economy. Innovative options, such as the application of tolls and user fees should be explored as a means of managing demand in congested corridors. Riverside County must consider these and other innovative financing mechanisms to ensure that the future transportation system is financially supported and can be adequately maintained. Such innovative financing is being utilized on State Route 91 and Interstate 15.

Policies:

- C 8.1 Implement a circulation plan that is consistent with funding and financing capabilities. (AI 53)
- C 8.2 Distribute the costs of transportation system improvements equitably among those who will benefit.
- C 8.3 Use annexations, development agreements, revenue-sharing agreements, tax allocation agreements and the CEQA process as tools to ensure that new development pays a fair share of costs to provide local and regional transportation improvements and to mitigate cumulative traffic impacts.
- C 8.4 Prepare a multi-year Transportation Improvement Program (TIP) that establishes improvement priorities and scheduling for transportation project construction over a period consistent with state and federal requirements.
- C 8.5 Participate in the establishment of regional traffic mitigation fees and/or road and bridge benefits districts to be assessed on new development. The fees shall cover a reasonable share of the costs of providing local, regional and subregional transportation improvements needed for serving new development in the unincorporated area.



Local improvements are defined as those improvements to streets within the impact area of new development.

- C 8.6 Encourage the use of public improvement financing mechanisms, and equitably distribute the costs of road improvements among all those who benefit from the road improvements, including current roadway users.
- C 8.7 Review and update the County of Riverside Road and Bridge Benefit District fee structure and development impact fees periodically to ensure that capacity expansion projects are developed and constructed in a timely manner.
- C 8.8 Seek all available means to fund improvements, including state and federal grants, to offset the local cost of system improvements where appropriate. (AI 53)

Public Transportation System

Riverside County understands the need to promote development of a safe, efficient, and economical community, intercommunity and countywide public transportation system. Due to the interrelationship of urban and rural activities (employment, housing and services), and the low average density of existing land uses, the private automobile is the dominant mode of travel within Riverside County. As the population grows, Riverside County roads will become increasingly congested by the automobile. As a result, it is important to encourage increased ridership on public transit systems and increased use of alternative modes of transportation, including bicycles and walking. The public transit system alternatives for Riverside County include: fixed route public transit systems, common bus carriers, AMTRAK (intercity rail service), Metrolink (commuter rail service), and other local agency transit and paratransit services.

Earlier in the Circulation Element, it was discussed that Riverside County is moving away from random growth patterns. Concentrated growth and increased job creation will require a regional and local linkage system between communities in the county. The public transportation system can facilitate those linkages, and help to shape future growth patterns.

Inter and Intra-County/Subregional Systems

The Riverside Transit Agency (RTA) operates fixed bus routes providing public transit service throughout a 2,500-square-mile area of western Riverside County. RTA’s fixed routes have been designed to establish transportation connections between all cities and unincorporated communities in western Riverside County. RTA currently operates full-size buses, mini-buses, vans, and trolleys. The system carries approximately 7.9 million passengers annually, with an average of 26,535 passengers on weekdays and 10,764 on weekend days. RTA also provides service to the counties of San Bernardino and Orange.

SunLine Transit Agency (SunLine) provides public interest transit services for the Coachella Valley and Yucca Valley areas. The service area covers 1,120 square miles. SunLine operates fixed routes, serving over 3.6 million passengers annually. All of SunLine’s buses are equipped with front-mounted bicycle racks.

SunLine also operates the SunDial System, which provides curb-to-curb demand responsive (dial-a-ride) service for members of the community requiring such assistance.

Community Systems

In addition to fixed route and demand-responsive services provided by RTA and SunLine, specialized public transportation services are also available through services operated by four municipal operators - the cities of Riverside, Corona, Banning, and Beaumont. Additionally, the Riverside County Transportation Commission supports a number of specialized transportation programs, including shared-ride car and vanpool services, social service dial-a-ride, and specialized services for seniors and persons with disabilities.

Common Carriers

Greyhound Bus Lines provides private transportation services that link the principal population centers of Riverside County with other regions. This includes east-west service connecting Blythe, Indio, Palm Springs, Banning/Beaumont, and Riverside (via San Bernardino). The service continues westward to downtown Los Angeles. North-south service connects Riverside with Temecula, continuing southward to San Diego.

Policies:

- C 9.1 Support all operator efforts to maximize revenue sources for short and long range transit needs that utilize all funding mechanisms available including federal grants, state enabling legislation, and farebox revenue. This can be accomplished through the Riverside County Transportation Commission (RCTC) and development of the Short and Long Range Transit Plans by the Riverside Transit Agency (RTA) and SunLine Transit.
- C 9.2 Support the expansion and enhancement of Metrolink service and transit operators' programs to increase transit usage to implement Bus Rapid Transit (BRT) services, and to make other express and local bus service improvements.
- C 9.3 Encourage the development of a mass multi-modal transit system with reduced noise characteristics.
- C 9.4 Encourage local and regional public transit providers to ensure the equipment they use and operate does not generate excessive noise impacts on the community. (AI 105)
- C 9.5 Properly maintain transit lines and encourage operational restrictions (e.g. hours of operation, speed limits) at times that will reduce adverse noise impacts in residential areas and other noise sensitive areas.

Paratransit Service

The County of Riverside supports reliable, efficient, and effective paratransit service by encouraging development of service systems that satisfy the transit needs of the elderly and physically handicapped. Paratransit services are transportation services such as carpooling, van pooling, taxi service, and dial-a-ride programs.

Policy:

- C 10.1 Support programs developed by transit agencies/operators to provide paratransit service. (AI 50)

Fixed Route Transit Service

The County of Riverside supports fixed-route, scheduled bus services that have convenient access to major population, economic, institutional, recreation, community, and activity centers. Fixed route transit services include urban and suburban rail, and bus systems. These services operate on regular schedules along a designated route, and can be used as additional transportation alternatives within Riverside County. Congested roadways will increase as the population increases; therefore, it is important to continue to develop and enhance transit services to encourage the transit use as an alternative to the automobile.

Policies:

- C 11.1 Where appropriate, reserve right-of-way to accommodate designated transit service. (AI 3, 52)
- C 11.2 Incorporate the potential for public transit service in the design of developments that are identified as major trip attractions (i.e., community centers, tourist and employment centers), as indicated in ordinances regulating the division of land of the County of Riverside.
- C 11.3 Design the physical layout of arterial and collector highways to facilitate bus operations. Locations of bus turn outs and other design features should be considered.
- C 11.4 Offer incentives to new development to encourage it to locate in a transit-oriented area such as a community center or along a designated transit corridor near a station. (AI 9)
- C 11.5 Accommodate transit through higher densities, innovative design, and right-of-way dedication.
- C 11.6 Promote development of transit centers and park-n-rides for use by all transit operators, including development of multi-modal facilities.

Transit Oasis and Transit Centers



The Transit Oasis concept, description, and policies are currently under review and consideration by the County. This section is subject to change at the time the Transit Oasis concept and locations are finalized and/or approved.

The issue of mobility in the future of Riverside County is integral to the issues of quality of life and economic competitiveness. The ability to efficiently maneuver within and outside of Riverside County is hindered by a number of factors, including sprawl, congestion, the lack of travel options, and a dependency on a single form of transportation, such as the automobile. The County of Riverside is working closely with RCTC, transit agencies, and local governments to establish efficient transit connections among areas of activity and concentrated development.

The Transit Oasis is a unique mobility concept that can be particularly effective in Riverside County and provide a viable option to the automobile. The Transit Oasis is a system that can provide transit service to concentrations of employment, community activity, and residences while maintaining reasonable travel times and just as importantly, be built and operated at a reasonable cost. Equally as important, the Transit Oasis is designed to operate within the moderate intensities of development that are prevalent in Riverside County.

The concept of the Transit Oasis is to provide an integrated system of local serving, rubber-tired transit that is linked with regional transportation opportunities. In this manner, convenient options to travel are provided. In

the Transit Oasis, the transit vehicles would be given prioritization on roadways so they could operate at consistently high frequencies and regular intervals. A one-way loop, with stops within a five-minute walk, can effectively serve about 1.5 square miles with ten-minute frequencies of service and require only a single vehicle and a single lane right-of-way. The Transit Oasis would be used by existing transit operators.

The intent of the project is the integration of the Transit Oasis into the predominately suburban lifestyle of Riverside County. To operate efficiently, this system should be located in areas of concentrated development, and areas of high activity. As envisioned, the Transit Oasis is a fundamental part of the community that is designed to fit with the density, scale, pedestrian friendly atmosphere, and safe environment of each neighborhood or community center. Community centers provide the type of concentrated development patterns, residential densities, and employment intensities that are necessary to allow the Transit Oasis concept to become a reality. In essence, the Transit Oasis provides an amenity and identity that help to reinforce an area or community center as the focus of the community.

The establishment of Transit Centers is an important component of the Transit Oasis system. The Transit Center serves as the main station location on the regional backbone system which is fed by the Transit Oasis. The Transit Center is a part of the Transit Oasis system, but it is the focal point that acts as the interface between the local collector service and the regional express service. Transit Centers contribute to the success of the transportation system by providing hubs of activity that can be linked together by the Transit Oasis system.

Policies:

- C 12.1 Support the development and implementation of the Transit Oasis concept in conjunction with RCTC, local transit operators, and cities. (AI 50)
- C 12.2 Support the development of high-speed transit linkages, bus rapid transit (BRT) or express routes, between community centers and other major nodes of activity. (AI 26)
- C 12.3 Establish a system of transit priority treatments or dedicated travel lanes to facilitate movement by the Transit Oasis vehicles within community centers and other major nodes of activity, where feasible.
- C 12.4 Comply with, to the extent possible, performance standards and guidelines for the development of Transit Oasis established by the Riverside Transit Agency and the Riverside County Transportation Commission. These guidelines should be crafted to integrate each Transit Oasis with the quality, character, and scale of the community centers and/or surrounding development.
- C 12.5 Support the development of Transit Oasis by the Riverside County Transportation Commission utilizing the following guidelines:
 - a. Locate Transit Oasis in community centers, areas of concentrated development, and areas of high activity.
 - b. Integrate the Transit Oasis with the quality, design, and character of surrounding development.
 - c. Provide transit stops within a 5-minute walk (approximately 0.2 miles) of major activity areas.
 - d. Provide convenient and safe pedestrian access to and from transit stops.

- e. Provide adequate off-street parking in appropriate locations.
- f. Link each Transit Oasis with the available regional transportation system
- g. Design the local Transit Oasis in such a manner that access to the regional transportation system is provided at approximately 10-minute intervals.

C 12.6 Support development of transit centers in community centers, including the dedication of land, where possible.

Passenger Rail System

The passenger rail system within Riverside County is vital to the mobility of the region. This system provides movement for people within and outside of Riverside County's jurisdiction. Riverside County will continue to support operation of passenger and freight rail systems that offer efficient, safe, convenient, and economical transport of Riverside County residents and commodities. The proposed California high-speed rail system will directly serve residents and businesses in Riverside County, enabling the County of Riverside to compete in the global economy.



A regional high speed rail system is proposed that will connect major regional activity centers and significant inter-/multi-modal transportation facilities in the counties of Los Angeles, Orange, Riverside, and San Bernardino by the year 2020. This system would also provide connection to the San Diego region and connect with the proposed high-speed rail system in Northern California. On July 21, 1999, the California High Speed Rail Authority adopted a plan for an inland route for the system.

AMTRAK

Along rail routes between the West Coast and points east, AMTRAK serves Riverside County at two train stations plus several locations where AMTRAK provides bus links to train stations. In the Coachella Valley, the Palm Springs AMTRAK station provides access to AMTRAK's Texas Eagle and Sunset Limited Services, which provide connections to points west including Los Angeles and to points east including Tucson, Arizona and El Paso, Texas. The downtown Riverside Metrolink/AMTRAK station serves the western portion of Riverside County as a stop along AMTRAK's Southwest Chief Service. The Southwest Chief provides connections to Los Angeles and points east including Flagstaff, Albuquerque, St. Louis, and Chicago.

The California State Rail Plan includes a new AMTRAK route between Los Angeles and Indio. Caltrans, RCTC, and the Federal Railroad Administration (FRA) are partnering to create a service development plan for Los Angeles-Indio service.

Metrolink

The Metrolink system provides commuter rail service from Riverside to Los Angeles and Orange County with stops at destinations in between. One route also connects Riverside to San Bernardino. Metrolink generally runs two routes from Riverside to Los Angeles: Riverside Line and 91 Line. The Inland Empire-Orange County Line is the Metrolink route that connects Riverside to Orange County. These three Metrolink Lines had a ridership total of approximately 2.9 million passengers between July 2010 and June 2011.

Metrolink currently has multiple stations located in Riverside County including: Pedley Station, Riverside-Downtown Station, Riverside-La Sierra Station, North Main Corona Station, and West Corona Station. Metrolink

commuter rail service will be extended by the construction of the Perris Valley Line (PVL). PVL is a 24-mile extension that will connect the Downtown Riverside Metrolink Station with a new South Perris station. Additionally, there will be three other new stations located at Hunter Park Area, Moreno Valley/March Field, and Perris. The Environmental Impact Report for the PVL, which will extend service to Perris, was certified by Riverside County Transportation Commission (RCTC) on July 25, 2011. began in 2012 with service expected to begin by 2016. The long-term vision for passenger rail service calls for an extension from the South Perris station, along the San Jacinto branch line to the City of Hemet.

Policies:

- C 13.1 Support continued development and implementation of the Riverside County Transportation Commission Rail Program including new rail lines and stations, the proposed California High Speed Rail System with at least two (2) stations in Riverside County, Coachella Valley San Geronio Pass Intercity Rail Service, and the proposed Intercity Rail Corridor between Calexico and Los Angeles.
- C 13.2 Support continued improvements to AMTRAK and Metrolink rail passenger service within Riverside County and throughout the southern California region.
- C 13.3 Support implementation of the San Jacinto Branch Line to serve passenger uses.
- C 13.4 Construct new grade separations or reconstruct existing grade separations as necessary for the smooth flow of traffic within Riverside County consistent with plans developed by RCTC, WRCOG and CVAG.
- C 13.5 Provide additional railroad grade crossing improvements as determined by the California Public Utilities Commission and the County of Riverside. (AI 119)
- C 13.6 Reserve, where warranted, the future use of abandoned rail right-of-way for alternative transportation purposes so that an integrated and mutually supportive set of transportation projects may be defined for Riverside County.
- C 13.7 Dedicate right-of-way and land for future transit centers in community centers and/or major activity areas (high concentrations of employment and residential uses) and in areas that minimize noise impacts on surrounding residential and sensitive land uses.
- C 13.8 Work to reduce conflicts between rail and other modes of transportation, particularly the highway system.

Aviation System

The provision of general aviation facilities and services that meet the needs of the residents of Riverside County is an important component of Riverside County's transportation system. To meet these needs, Riverside County must facilitate coordination of Riverside County airport plans with aviation planning conducted by the State, the Riverside County Economic Development Agency, and local agencies related to transportation, land use, and financing. It will also be important for Riverside County to provide civilian airport facilities for general aviation and emergency purposes, and to protect airports from encroachment of future development within areas that would be subject to extreme noise from aircraft as defined in the Noise Element. Airports used by Riverside County residents and businesses are tied into the regional air transportation system. These airports must continue to operate efficiently and provide convenient transportation to accommodate future traveling needs and the movement of goods.

“

Airports serving the County are tied into the regional air transportation system and operate as an efficient and convenient transportation mode to accommodate the traveling needs of the people and move selected goods quickly in the highly competitive international marketplace.

”

- RCIP Vision

Regional Aviation Facilities

There are seven major commercial airports in Southern California used for passenger service by residents of Riverside County, including: Los Angeles International Airport, San Diego International Airport, Ontario International Airport (San Bernardino County), Palm Springs International Airport (Riverside County), John Wayne Airport (Orange County), Bob Hope Airport (Burbank), and Long Beach Airport. Of these, only Palm Springs International Airport is located in Riverside County. In addition to the regional air passenger airport facilities, the March Inland Port/Joint Air Reserve Base is located in Riverside County along Interstate 215 near Perris. This airport provides regional air cargo service and also continues to function as the Air Reserve Base in Riverside County.

Local Aviation Facilities



Please see the **Land Use Element** and the **Noise Element** for additional policies related to Airports.

In addition to Palm Springs International Airport and March Air Reserve Base/Inland Port Airport, eleven additional public-use airports within the boundaries of Riverside County are available for general aviation activities. The County of Riverside owns five of these airports (Blythe, Chiriaco Summit, Jacqueline Cochran Regional, French Valley, and Hemet-Ryan). Three other airports are owned by cities (Banning, Corona and Riverside Municipal Airports) While three (Bermuda Dunes, Flabob and Perris Valley) are privately owned, as of 2009, the airport influence areas of each of these airports (plus Chino Airport in San Bernardino County included lands within unincorporated areas of the County of Riverside although, with the incorporation of the cities of Eastvale and Jurupa Valley, the airport influence areas of Chino Airport,

Flabob Airport and Riverside Municipal Airport no longer include unincorporated areas. Figure C-5 identifies the Airport Influence Areas for each of the airports affecting land within unincorporated Riverside County. For more details, refer to the appropriate Area Plan's Airport Influence Area section for the airport in question.

Policies:

- C 14.1 Promote coordinated long-range planning between Riverside County airport authorities, businesses and the public to meet the County of Riverside and the region’s aviation needs.
- C 14.2 Apply a variety of land use planning techniques to maintain the viability of Riverside County’s airports.
- C 14.3 Encourage the use of noise-reducing flight procedures for airplanes and helicopters, such as maintaining flight altitudes or using flight patterns that avoid noise-sensitive neighborhoods to the extent permitted by Federal Aviation Administration regulations.

Non-motorized Transportation

A well-planned and built trail system can provide for an improved quality of life for Riverside County residents by providing a recreational amenity and by providing a viable alternative to the automobile. Ideally, this system would connect community centers, residential neighborhoods, recreational amenities, employment centers, schools, shopping areas, public spaces, and public transit. Providing a safe user environment can encourage utilization of trails within commercial, office, and residential areas. Use of trails within recreation and natural open-space areas can be encouraged through proper signage and publicity.

Policies:

- C 15.1 Implement a two-tiered system of trails, and later expand it into an effective non-motorized transportation system.
- C 15.2 Seek financing to implement an effective non-motorized transportation system. This funding can include such potential sources as state and federal grants, Riverside County transportation funds, “in-lieu” fees, special assessments, parking meter revenues, other public and non-profit organization funds, developer contributions, and other sources. (AI 36)
- C 15.3 Develop a trail system which connects Riverside County parks and recreation areas while providing links to open space areas, equestrian communities, local municipalities, and regional recreational facilities (including other regional trail systems), and ensure that the system contains a variety of trail loops of varying classifications and degrees of difficulty and length.
- C 15.4 Periodically review and update the Trails and Bikeways Plan (Figure C-6) in accordance with the review procedures and schedule of the General Plan, in order to ensure its compatibility with the other components of the Riverside County General Plan, and with the similar plans of agencies such as Western Riverside County Council of Governments (WRCOG), Coachella Valley Association of Governments



A **parkway** is located in, along, or adjacent to a stream’s floodplain. Ordinarily it extends the length of the stream but may be broken into segments. Road and trailside parks are part of a parkway.

Regional Trails are designed to connect parks and provide linkage opportunities between open space areas and regional recreation areas.

Community Trails create linkages similar to region trails, but are local serving.

(CVAG), Riverside County Transportation Commission(RCTC), Regional Conservation Authority, Riverside County Habitat Conservation Agency and all jurisdictions within and abutting Riverside County. This shall include consistency with the WRCOG and CVAG non-motorized planning documents.

- C 15.5 Compliance with the Americans with Disabilities Act (ADA) standards will be assured so as to make trails user-friendly, as much as reasonably feasible.
- C 15.6 Provide, where feasible, the construction of overpasses or undercrossings where trails intersect arterials, urban arterials, expressways, or freeways.

Multipurpose Recreational Trails

The trails proposed for Riverside County are designed to serve several different groups. They are intended for the use of equestrians, hikers, joggers, non-motorized bikers, as well as the casual walker. Depending on where a trail is located and how it is designed and constructed will affect the type of use the trail gets, but most trails are open to a variety of these uses.

Riverside County currently has one developed trail that the Riverside County Regional Park and Open Space District maintains, the Santa Ana River Trail. The Santa Ana River Trail is part of a planned regional trail extending across multiple jurisdictions from the Pacific Ocean in Orange County to the San Bernardino Mountains in San Bernardino County. Some communities have trails which are built and are maintained by another entity such as a homeowners' association, a community service area, or a local park and recreation district. These trails lack connectivity to other parts of the Riverside County trail system, resulting in a fragmented system. Providing connectivity between Riverside County trails and between Riverside County trails and state and federal trails, historic trails, and trails in other jurisdictions, will be instrumental in creating a usable trail system.

The Riverside County Regional Park and Open Space District has prepared and adopted a Trails Development Standards Policy Manual, which is anticipated to be used in all trails planning, construction, and maintenance activities.

Riverside County has several types of recreational trails and in addition, several sub-classifications, and other categories of trails, as described below:

Regional Trails - These are the primary long distance trails within Riverside County, and are usually designed to provide linkages between communities, regional parks, and open space areas. They are generally maintained and operated by the Riverside County Regional Park and Open Space District. They are also designed to connect with trails in state and federal parks, forests, and recreational areas as well as trails within cities and other jurisdictions. Regional trails are designed to serve users needing soft trail surfaces, including equestrians, pedestrians, joggers, and mountain bikers.

There are two types of Regional Trails- Regional Urban and Rural Trails and Regional Open Space Trails. "Regional Urban and Rural Trails" are the first type, and they primarily connect communities, parks, and open space areas. They are built with 10' to 12' wide unpaved soft surfaces, and are generally sited within 20' wide (width may be permitted to vary) easements. Regional Urban and Rural Trails are usually intended to be maintained by the Riverside County Regional Park and Open Space District, by the Transportation Department through Lighting and Landscape Maintenance Districts, or by other entities subject to approval by the County of Riverside.

“Regional Open Space Trails” are intended for both open space areas associated with private developments and for publicly and quasi-publicly managed open space areas, where it is necessary to minimize both the impacts of human usage on the landscape and the level of trail maintenance required. These are generally existing trails, but some new trails may be built. These trails have 2’ to 4’ wide unpaved surfaces, within easements that are typically 10’ wide. Regional Open Space Trails are usually intended to be maintained by the Riverside County Regional Park and Open Space District, or by public or quasi-public entities that either already own the open space areas that contain or would contain the trails, or have agreed with the County of Riverside to accept open space areas and trails within them for maintenance.

(See Figure C-7 for Regional Trails cross sections and details.)

Community Trails - These trails are designed to link areas of a community to the regional trail system and to link areas of a community with each other. Such trails are typically maintained and operated by a local parks and recreation district or other governmental entities empowered and funded to maintain trails. Community Trails are designed for trail users preferring a soft trail surface, including equestrians, pedestrians, joggers, and mountain bikers. Community Trails will be sited within easements or portions of road right-of-ways (ROWS) of up to 14 feet wide.

(See Figure C-7 for Community Trails cross sections and details.)

The Riverside County Regional Park and Open Space District does not build and maintain regional trails. Rather, the Park District reviews private development proposals and conditions said proposals to ensure that community trail linkages are built. Occasionally the Park District may accept and temporarily hold trail easements until a local entity accepts responsibility for them.

Historic Trails - These trails are designated historic routes that recognize the rich history of Riverside County. The Historic Trails designated on the Bikeways and Trails Plan, Figure C-6, include: The Juan Bautista de Anza National Historic Trail, the Southern Immigrant Trail, the Pacific Crest National Scenic Trail, the California Riding and Hiking Trail, and the Bradshaw Route. The Historic Trails routes designations are graphical representations of the general location of these historic routes and do not necessarily represent a planned Regional, Community, or other type of existing or planned Trail. Regional or Community Trail designations that could more or less either follow or parallel these routes, providing opportunities to recognize the historic significance of these routes and affording the prospect of developing interpretive centers and signage.

Non-County Public Lands Trails - Trails within the San Bernardino and Cleveland National Forests, Joshua Tree National Park, Santa Rosa and San Jacinto Mountains National Monument, public lands managed by the Bureau of Land Management, lands owned by the County of Riverside, the Western Riverside County Regional Conservation Authority, the Riverside County Habitat Conservation Agency, and other national, state, and local public or private lands such as those owned by the Nature Conservancy, Riverside Land Conservancy, and The Wildlands Conservancy, that are open to public usage, also depicted on the Bikeways and Trails Plan, Figure C-6. Such trails are managed and maintained by the responsible - federal, state, or other agencies. While the County of Riverside has no jurisdiction over such trails, they are shown on the Riverside County plan to indicate connectivity. Other Types of Trail Classifications: In order to accommodate local community needs, some variances in purpose or design standards for certain local trails may be appropriate. Trail plans shown in Design Guidelines documents adopted by the County of Riverside are types of localized trail classifications that may be appropriate at the community-specific level.

Design Guidelines have been developed for several of Riverside County’s communities, and more may be adopted in the future. The Mecca, Thermal, Vista Santa Rosa, Bermuda Dunes, Desert Edge, Lakeview/Nuevo, and

Temecula Valley Wine Country Design Guidelines each contain some trail development standards that are different from countywide trail standards, and that are unique to those communities. These customized Design Guideline trail standards were prepared with extensive local citizen input, and in close cooperation between the County of Riverside and special districts that would be involved in the construction and/or maintenance of such trails.

Other, major trail corridors may have different types of designations along their routes through Riverside County. For example, the Santa Ana River Trail contains components designated as Class I Bikeway, Regional Trail, and Combination Trail in its course along the Santa Ana River, for the most part along both sides of the river, connecting Riverside County to the Orange and San Bernardino Counties.

Policies:

C 16.1 Implement the Riverside County trail system as depicted in the Bikeways and Trails Plan, Figure C-6. (AI 3, 33)

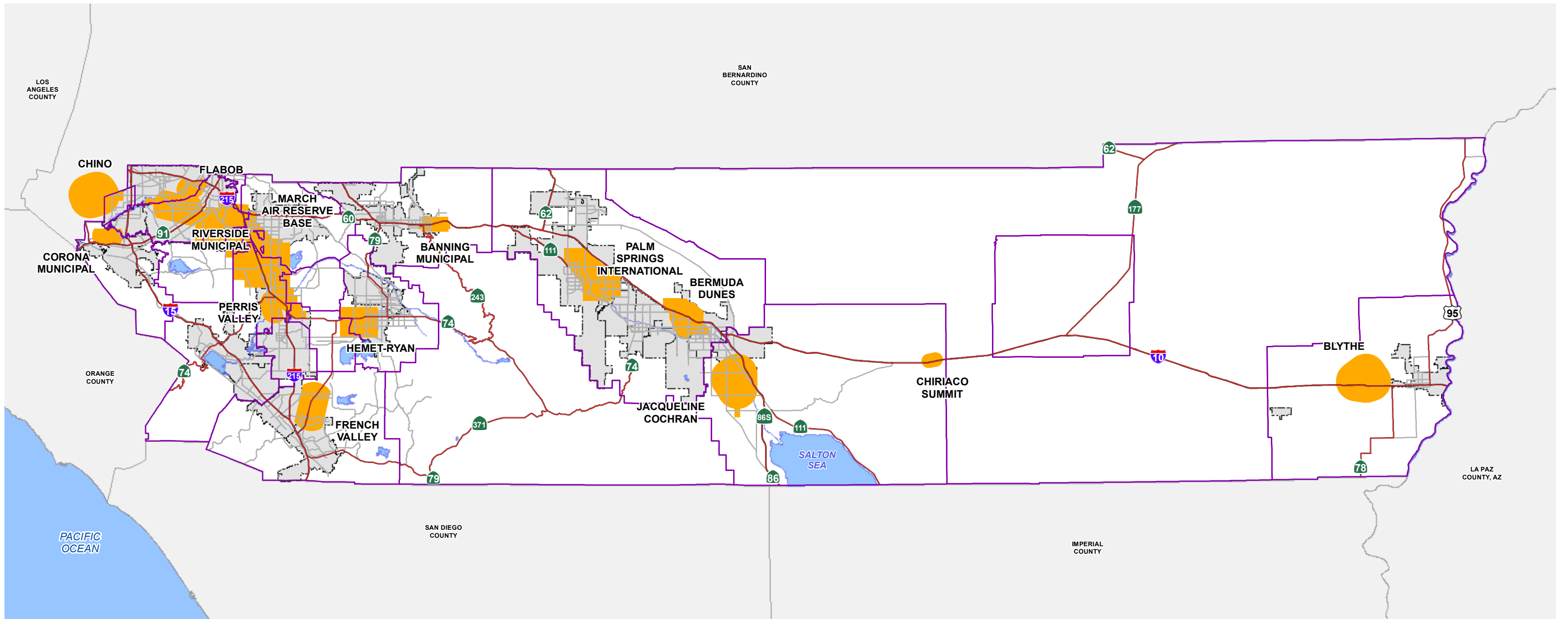
C 16.2 Develop a multi-purpose trail network with support facilities which provide a linkage with regional facilities, and require trailheads and staging areas that are equipped with adequate parking, equestrian trailer parking (as appropriate), bicycle parking, restrooms, informative signage, interpretive displays, maps, and rules of appropriate usage and conduct on trails accessed from such facilities. (AI 35)

C 16.3 Require that trail alignments either provide access to or link scenic corridors, schools, parks, bus stops, transit terminals, park and ride commuter lots, and other areas of concentrated public activity, where feasible.

C 16.4 Require that all development proposals located along a planned trail or trails provide access to, dedicate trail easements or right-of-way, and construct their fair share portion of the trails system. Evaluate the locations of existing and proposed trails within and adjacent to each development proposal and ensure that the appropriate easements are established to preserve planned trail alignments and trail heads. (AI 3, 33)

- a. Require that all specific plans and other large-scale development proposals include trail networks as part of their circulation systems.
- b. Ensure that new gated communities, and where feasible, existing gated communities, do not preclude trails accessible to the general public from traversing through their boundaries.
- c. Provide buffers between streets and trails, and between adjacent residences and trails.
- d. Make use of already available or already disturbed land where possible for trail alignments.
- e. Require that existing and proposed trails within Riverside County connect with those in other neighboring city, county, state, and federal jurisdictional areas.





Data Source: Riverside County ALUC (2010)

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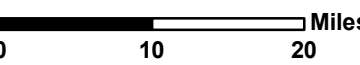
-  Airport Influence Areas
-  Highways
-  Area Plan Boundary
-  City Boundary

Figure C-5

 December 8, 2015

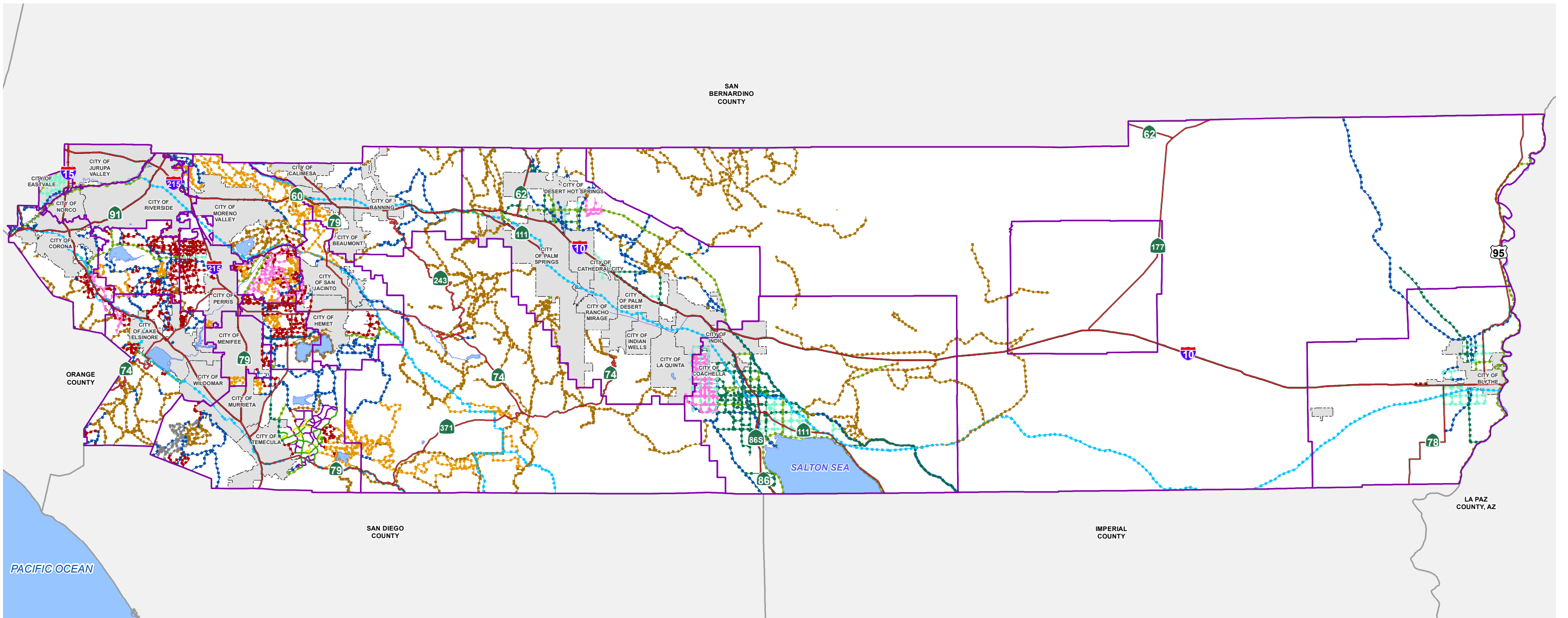
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AIRPORT INFLUENCE AREAS

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Data Source: Riverside County Parks

- Wine Country Connector Trails
- Regional Open Space Trail
- Wine Country Roadside Trail
- Regional Trail: Urban/Suburban
- Community Trail
- Combination Trail (Regional Trail/Class I Bike Path)
- Class I Bike Path
- Class II Bike Path
- Regional Trail: Open Space
- Design Guidelines Trail
- Historic Trail (Southern Immigrant Trail, Juan Bautista De Anza National Historic Trail)
- Non-County Trail (Public and Quasi-Public Lands)
- Private Trail
- Highways
- Area Plan Boundary
- City Boundary
- Waterbodies

Figure C-7

Note: Trails shown in non-county jurisdictions for informational/coordination purposes only. The descriptions for the Wine Country Connector, Regional Open Space and Wine Country Roadside Trails are located within the Southwest Area Plan.

October 24, 2017

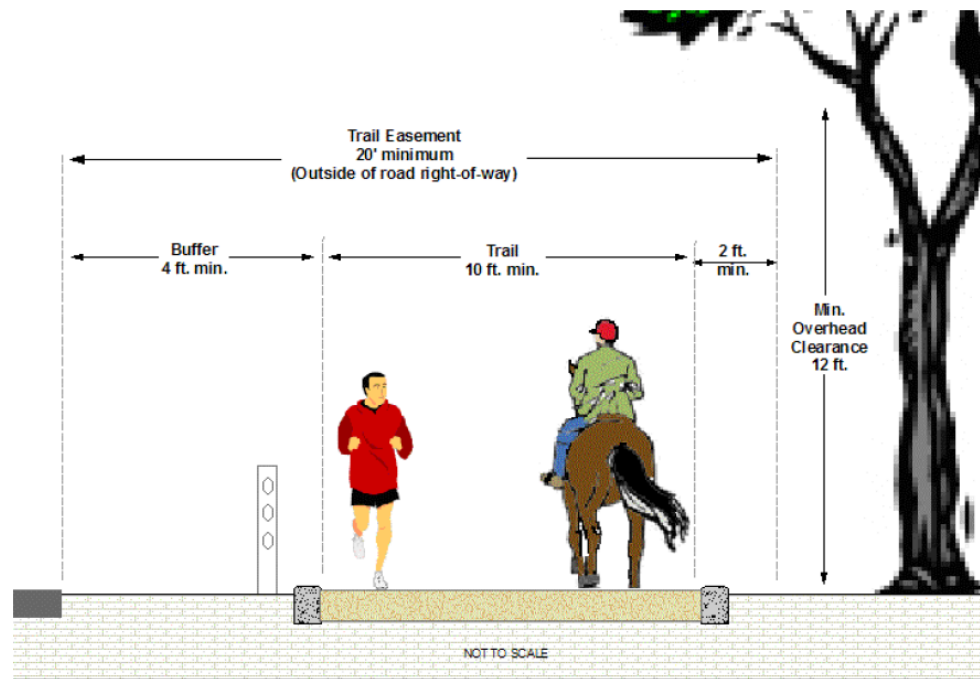
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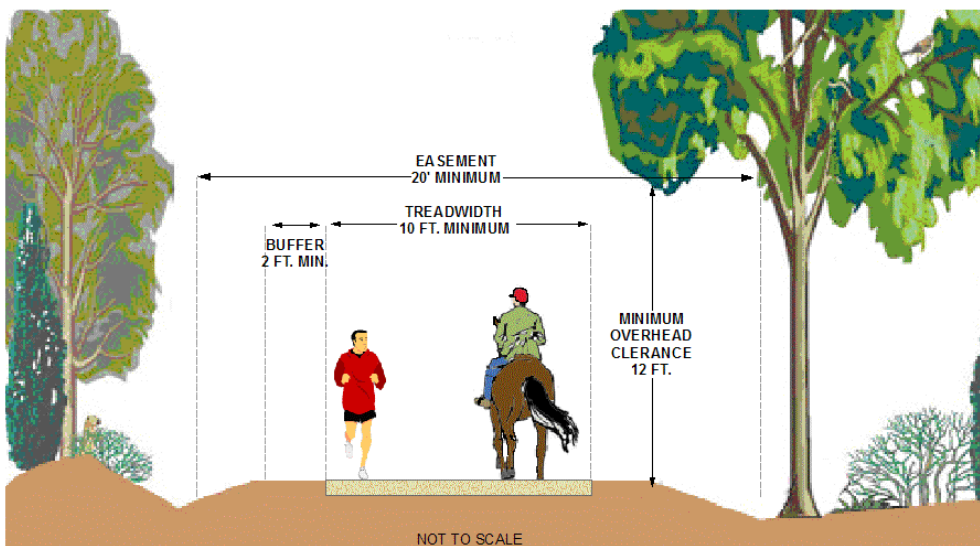
RIVERSIDE COUNTY TRAILS AND BIKEWAY SYSTEM

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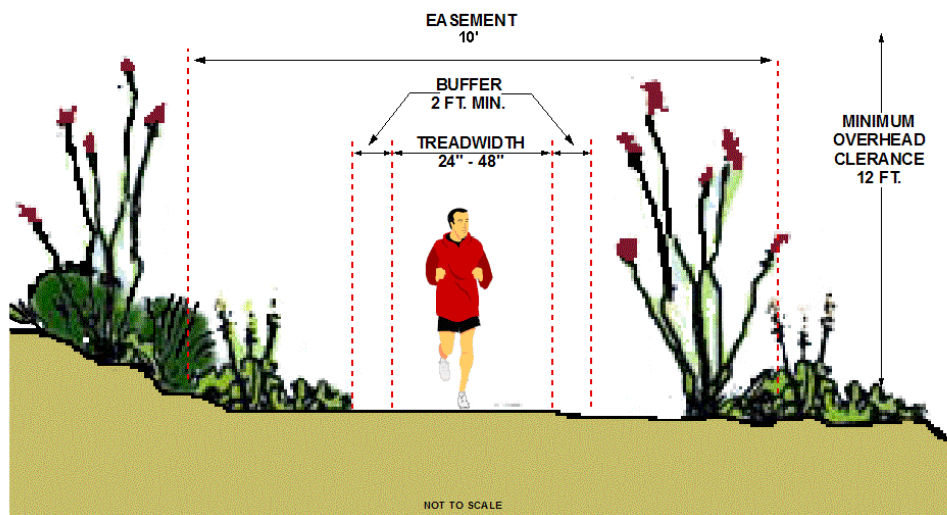
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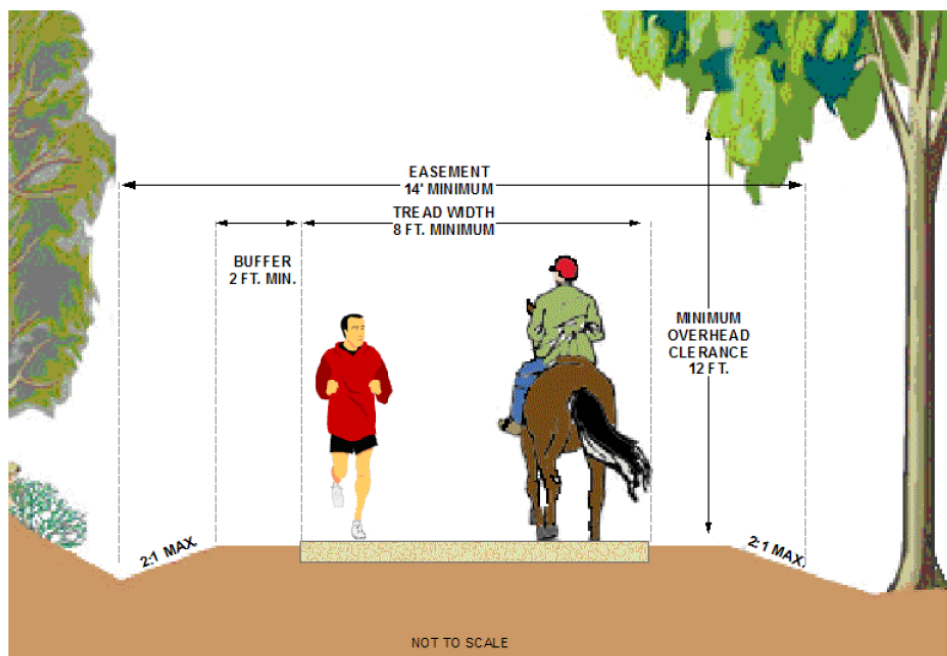
REGIONAL TRAILS – IN URBAN AREAS



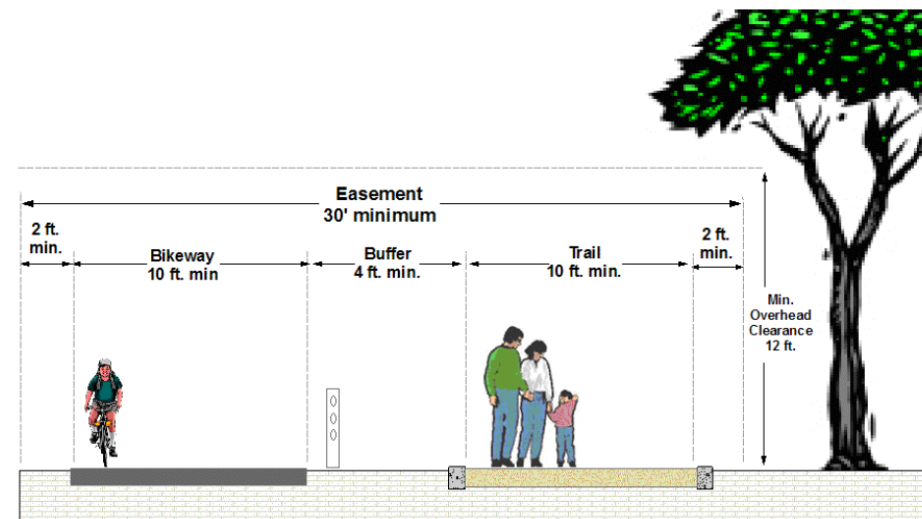
REGIONAL TRAILS – IN RURAL AREAS



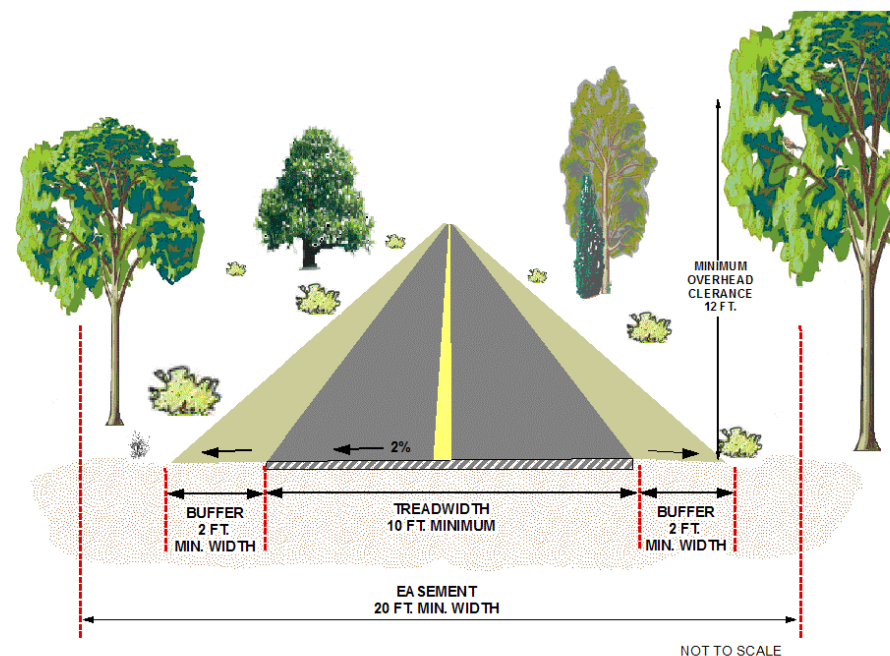
REGIONAL TRAILS – IN OPEN-SPACE AREAS



COMMUNITY TRAIL



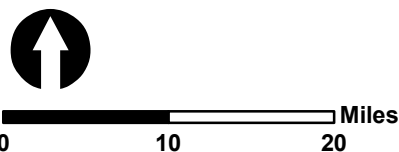
CLASS I BIKEWAY/REGIONAL TRAIL – URBAN AREAS



CLASS I BIKEWAY

Data Source: Riverside County Transportation (2012)

Figure C-7



Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.



TRAIL TYPES CLASSIFICATION DETAILS

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- C 16.5 Identify all existing rights-of-way which have been obtained for trail purposes through the land development process. (AI 34)
- a. Once the above task has been accomplished, analyze the existing rights of-way and determine the most expedient method for connecting the parts.
- C 16.6 Examine the use of public access utility easements for trail linkages to the regional trails system and/or other open space areas, as feasible. These potential corridors include, but are not limited to, the rights-of-way for: (AI 35, 36, 42)
- a. water mains;
 - b. water storage project aqueducts;
 - c. irrigation canals;
 - d. flood control;
 - e. sewer lines;
 - f. fiber optic cable lines,
 - g. gas lines,
 - h. electrical lines, and
 - i. fire roads, railroads, and bridges.
- C 16.7 Adhere to the following trail-development guidelines when siting a trail: (AI 3, 35, 36, 38, 39, 40, 41, 42).
- a. Require, where feasible, trails in urban areas to be located either outside of road rights-of-way or within road rights-of-way with the additional dedication right-of-way or easements in fee title to the County of Riverside requiring dual use of utility corridors, irrigation and flood control channels so as to mix uses, separate traffic and noise, and provide more trail services at less cost.
 - b. Secure separate rights-of-way for non-motorized trails when physically, financially and legally feasible. Where a separate right-of-way is not feasible, maintain recreation trails within the County of Riverside or Flood Control right-of-way, where feasible.
 - c. Develop and implement trail design standards which will minimize maintenance due to erosion or vandalism.
 - d. Maximize visibility and physical access to trails from streets and other public lands.
 - e. Provide a trail surface material that is firm and unyielding to minimize erosion and injuries.

- f. When a trail is to be obtained through the development approval process, base the precise trail alignments on the physical characteristics of the property, assuring connectivity through adjoining properties.
- g. Consider the use of abandoned rail lines as multipurpose rail-trails corridors through the “Rails-to-Trails” program.
- h. Place all recreation trails safe distances from the edges of active aggregate mining operations and separate them by physical barriers, such as fences, berms, and/or other effective separation measures. Avoid placing a trail where it will cross an active mined materials haul route.
- i. Install warning signs indicating the presence of a trail at locations where regional or community trails cross public roads. Design and build trail crossings at intersections with proper signs, signals, pavement markings, crossing islands, and curb extensions to ensure safe crossings by users. Install trail crossing signs signal lights (as appropriate) at the intersections of trail crossings with public roads to ensure safe crossings by users.
- j. Design and construct trails that properly account for such issues as sensitive habitat areas, cultural resources, flooding potential, access to neighborhoods and open space, safety, alternate land uses, and usefulness for both transportation and recreation.
- k. Coordinate with other agencies and/or organizations (such as the U.S. Fish and Wildlife Service, National Park Service, Bureau of Land Management, U. S. Army Corp of Engineers, U. S. Bureau of Reclamation, and the California Department of Transportation) to encourage the development of multi-purpose trails. Potential joint uses may include historic, cultural resources, and environmental interpretation, access to fishing areas and other recreational uses, opportunities for education, and access for the disabled.
- l. Work with landowners to address concerns about privacy, liability, security, and trail maintenance.
- m. Regional Urban, Regional Rural, and Regional Open Space trails should be designed so as to be compatible with the community contexts in which the trails are being sited.
- n. Driveway crossings by trails should be designed and surfaced in a manner compatible with multipurpose trails usage. Except for local, neighborhood-serving trails that are not intended as primary community linkages, select routes for trails that minimize driveway crossings.
- o. Benches, fencing, water fountains, trees and shading, landscape buffers, rest stops, restrooms, and other trail-related amenities shall be provided where appropriate.
- p. All trails along roadways shall be appropriately signed to identify safety hazards, and shall incorporate equestrian crossing signals, mileage markers, and other safety features, as appropriate.
- q. Information about Riverside County’s trail system shall be provided at the Riverside County Park and Open Space District and online in order to make the public aware of Riverside County’s trail system.

- r. Trails shall not be sited along sound walls, project boundary walls, and other walls that effectively obstruct visibility beyond the edge of a trail.
- s. All trail surfacing shall be appropriate to an array of users of the trail. Soft-surfaced trails shall have smooth, firm, slip-resistant surfacing so as to minimize foot and ankle injuries.
- t. Use already available or disturbed land for trails wherever possible for new or extended trails.
- u. Use pervious pavement or bio-swales along paved trails to assist in maintaining water quality.
- v. Coordinate with local Native American tribes for any proposed trails under the mandates of “SB18” Traditional Tribal Places Law.

- C16.8 Require the installation (where appropriate and pursuant to County of Riverside standards) of the appropriate styles of fencing along trail alignments that separate trails from road right-of-ways (ROWs), or where trails are located within road ROWs, that provide adequate separation from road traffic, in order to adequately provide for public safety. Examples of such fence types include simulated wood post and rail fencing constructed of PVC material, wood round post and rail, and wood-textured concrete post and rail fencing. (AI 3)
- C 16.9 Coordinate with cities, adjacent counties and affected state or federal land management entities regarding regional trails that cross over or terminate at jurisdictional boundaries. Ensure that adequate consideration is given to how the trail is addressed once it leaves the jurisdiction of Riverside County.

Bikeways

Riverside County’s bikeway system is included as part of the County of Riverside’s circulation system Trails and Bikeways Plan mapping. Planned bicycle routes are shown on the Bikeways and Trails Plan, Figure C7. The County of Riverside uses three types of bike path classifications, as classified by CalTrans Bikeway Planning and Design Standards 1000:

Class I - Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow minimized. The right-of-way for Class I Bikeways may be substantial, separated from roadways by landscaped strips or other barriers. In some cases, where appropriate, Class I Bikeways may be designed and signed to also permit golf carts.

Class II - Class II Bikeways, or bike lanes, are intended for preferential use by bicycles, and are provided for within the paved areas of roadways. Bike lane pavement striping and other markings, and bikeway signs are intended to promote an orderly flow of traffic by establishing demarcations between lanes designated for bicycles and lanes designated for motor vehicles. Bike lanes are one-way facilities that follow the flow of motor vehicle movement.

Class III - Class III Bikeways, or bike routes, are intended to provide continuity within the bikeways system, usually by connecting discontinuous segments of Class I and Class II Bikeways. Bike routes are shared facilities, either with motor vehicles on roads or with pedestrians on sidewalks, and bicycle usage of the facilities is considered secondary. Bike routes are not marked on pavement but are supported by signs.

Combination Class I Bikeway / Regional Trails

Combination Class I Bikeway/Regional Trails (Combination Trails) function as regional connectors linking together the urban and rural communities and major water bodies and Regional parks in Riverside County and provide opportunities for long-distance users to take advantage of this system for long one-way or loop-type trips. This system also links together existing and planned Class I Bikeways, Regional Trails, and other types of trails to enhance Riverside County residents' access to the trail system.

Combination Class I Bikeway/Regional Trails (Combination Trails) include both a Class I Bikeway, with a 20' wide paved surface, marked for two-way traffic, for use primarily by bicyclists and pedestrians, and a Regional Urban and Rural Trail, with a 10' – 12' wide soft surface, for use primarily by equestrians and pedestrians, located either in tandem on one side of a street, river, or other major linear feature, or in "split" fashion, with one function (Class I Bikeway) of the Combination Trail located on one side of the street or other linear geographical feature, and the other type (Regional Urban or Rural Trail) located on the other side of the street or linear feature.

Combination Trails generally require 30' wide easements where both components of the trails are situated in tandem on one side of a street or linear feature. Where the trail components are split along a street or other linear feature, the easements required will generally be the same as for Class I Bikeways (generally 20' wide) and Regional Urban and Rural Trails (generally 20' wide) when built separately. Unless maintained by a County Service Area (CSA) or a special parks district, Combination Trails are usually maintained by the Riverside County Regional Park and Open Space District, or by the Transportation Department through a Landscape and Lighting Maintenance District.

(See Figure C-7 for Combination Trails cross-sections and details.)

Policies:

- C 17.1 Develop Class I Bike Paths, Class II Bike Lanes and Class I Bike Paths/Regional Trails (Combination Trails) as shown in the Trails Plan (Figure C-7), to the design standards as outlined in the California Department of Transportation Highway Design Manual, adopted Riverside County Design Guidelines (for communities that have them), the Riverside County Regional Park and Open Space Trails Standards Manual, and other Riverside County Guidelines. (AI 34, 41)
- C 17.2 Require bicycle access between proposed developments and other parts of the Riverside County trail system through dedication of easements and construction of bicycle access ways.
- C 17.3 Ensure that the bikeway system incorporates the following:
- a. Interconnection throughout and between cities and unincorporated communities.
 - b. Appropriate lanes to specific destinations such as state or county parks.
 - c. Appropriate opportunities for recreational bicycle riding and bicycle touring.
 - d. Opportunities for bicycle commuting and golf cart commuting within a community, as appropriate for the terrain, traffic levels and proximity to surrounding destinations.
 - e. Bikeways connecting to all urban transit centers and systems (bus stops and Metrolink stations) in the vicinity.

- f. Bicycle parking at transit stops and park-and-ride lots.

C 17.4 Ensure that alternative modes of motorized transportation, such as buses, trains, taxi cabs, etc., plan and provide for transportation of recreational and commuting bicyclists and bicycles on public transportation systems. Coordinate with all transit operators to ensure that bicycle facilities are provided along and/or near all transit routes, whenever feasible. New land developments shall be required to provide bicycle facilities to existing or future planned transit routes.

Acquisition, Maintenance, and Funding of Multipurpose Trails and Bikeways

The implementation of a usable trail network in Riverside County will require a combination of several strategies including land acquisition, trail maintenance, and funding for trails. The following policies identify actions which will enable the County to facilitate the creation and upkeep of these valuable facilities.

Policies:

C 18.1 TRAIL ACQUISITION (AI 33)

- a. Promote public/private partnerships for trail acquisition.
- b. Seek ways to build a trail system affordably, and seek partners in doing so within a reasonable time frame, possibly in stages, to serve all trail communities, and upgrade the system of linkages/destinations.
- c. Determine which public and/or private agencies have existing easements or unused rights-of-way, which potentially could be incorporated as trail linkages throughout Riverside County. Such agencies may include the Riverside County Flood Control and Water Conservation District, regional and local parks districts and transportation agencies, cities, federal or state land management entities, various utility companies/districts, and railroad companies. Use roads, dirt roads, and other easements as trails routes. Foster partnerships which serve to facilitate the siting, building, and managing of trails.
- d. Evaluate the potential use of private-landowner tax credits for acquiring necessary trail easements and/or rights-of-way. A system such as this would allow a landowner to dedicate an easement for trail purposes in exchange for having that portion of the property assessed as open-space instead of a higher land-use category.
- e. Seek to connect existing cul-de-sacs to each other, and to trail networks. In rare occasions, this may entail purchasing homes at the ends of streets, constructing the connections, and reselling the homes.
- f. Wherever possible and to the extent consistent with overall trail system objectives, use trail designs and locations that minimize construction and maintenance costs.

C 18.2 TRAIL MANAGEMENT AND MAINTENANCE

- a. Implement maintenance options such as the use of volunteers, associations, or private landowner maintenance agreements, and/or adopt-a-trail programs sponsored by various groups,

- b. Implement methods to discourage unauthorized use of trails by motorized vehicles, which may cause trail deterioration, create an unsafe environment, and/or disrupt the enjoyment of the trails by legitimate trail users. These methods may include the installation of gates and motorcycle barriers, posting signs prohibiting unauthorized activities, or implementing educational programs to encourage the proper use of trails.
- c. Research the potential for, and consider establishing a countywide trail management entity that will facilitate the acquisition of adequate funds for trail maintenance.
- d. Research the potential for, and consider establishing a separate agency within Riverside County to manage and maintain Riverside County's trails system.
- e. Use trail designs that remove or limit injury/safety liability concerns.
- f. Use trail designs that minimize trail maintenance costs.

C 18.3

TRAIL FUNDING

- a. Solicit all possible sources of funding to plan, acquire, and construct recreational trails. Sources can include, but not be limited to, development mitigation fees, private foundation grants funds or assessments from local, regional, state, or federal government entities. (AI 36, 37)
- b. Persuade local communities to finance their own community trail systems through the use of special tax assessment districts. If applicable, these districts should also provide adequate regulation for the keeping of horses.

Scenic Corridors

Many corridors in Riverside County traverse its scenic resources. Enhancing aesthetic experiences for residents and visitors to Riverside County has a significant role in promoting tourism, which is important to Riverside County's overall economic future. Due to the visual significance of some of these areas, several roadways have been officially recognized as either State or County designated or eligible scenic highways. Enhancement and preservation of Riverside County's scenic resources will require careful application of scenic highway standards along Official Scenic Routes. The roadways designated as Scenic Highways are depicted in Figure C-8.

“
The development of scenic highways will not only add to the pleasure of the residents of this State, but will also play an important role in encouraging the growth of the recreation and tourist industries upon which the economy of many areas of this State depend.
 ”

-The California Scenic Highway Program (SB1463), adopted 1963

Policies that seek to protect and maintain resources along scenic highways are incorporated into this section. Also refer to policies outlined in the Multi-purpose Open Space Element and Land Use Element, Scenic Corridors section.

Policies:

C 19.1 Preserve scenic routes that have exceptional or unique visual features in accordance with Caltrans' Scenic Highways Plan. (AI 79)

Environmental Considerations

Riverside County's transportation system must be planned, designed, constructed, operated, and maintained in a manner that retains a high level of environmental quality. Transportation system improvements should be implemented to minimize disturbance of the natural environment and other sensitive environmental features covered under California Environmental Quality Act (CEQA) and the National Environmental Protection Act (NEPA) guidelines.

Policies:

- C 20.1 Ensure preservation of trees identified as superior examples of native vegetation within road rights-of-way through development proposals review process. Where the County of Riverside deems preservation to be infeasible, relocation and/or replacement shall be evaluated by a qualified arborist to ensure that impacts are mitigated.
- C 20.2 Provide all roadways located within identified flood areas with adequate flood control measures.
- C 20.3 Locate roadways outside identified flood plains whenever possible. (AI 60)
- C 20.4 New crossings of watercourses by local roads shall occur at the minimum frequency necessary to provide for adequate neighborhood and community circulation and fire protection. Wherever feasible, new crossings shall occur using bridging systems that pass over entire watercourses and associated floodplains and riparian vegetation in single spans. Dip or culvert crossings shall be avoided, but, where their use is unavoidable, they shall be designed to minimize impacts on watercourses. (AI 60)
- C 20.5 In order to protect the watershed, water supply, groundwater recharge, and wildlife values of watercourses, the County of Riverside will avoid siting utility infrastructure and associated grading, fire clearance, and other disturbances within or adjacent to watercourses, if there are feasible alternatives available, and discourage special districts and other governmental jurisdictions outside of Riverside County's authority, from doing so. Where such watershed utility siting locations cannot be avoided, the impacts on watercourses shall be minimized. (AI 60)
- C 20.6 Control dust and mitigate other environmental impacts during all stages of roadway construction.
- C 20.7 Protect all streets and highways located within identified blow sand areas from blowsand hazards to the extent practicable.
- C 20.8 Protect Riverside County residents from transportation generated noise hazards. Increased setbacks, walls, landscaped berms, other sound absorbing barriers, or a combination thereof shall



For additional policies related to Scenic Corridors, refer to the Scenic Corridors Sections of the Multipurpose Open Space Element and Land Use Element.



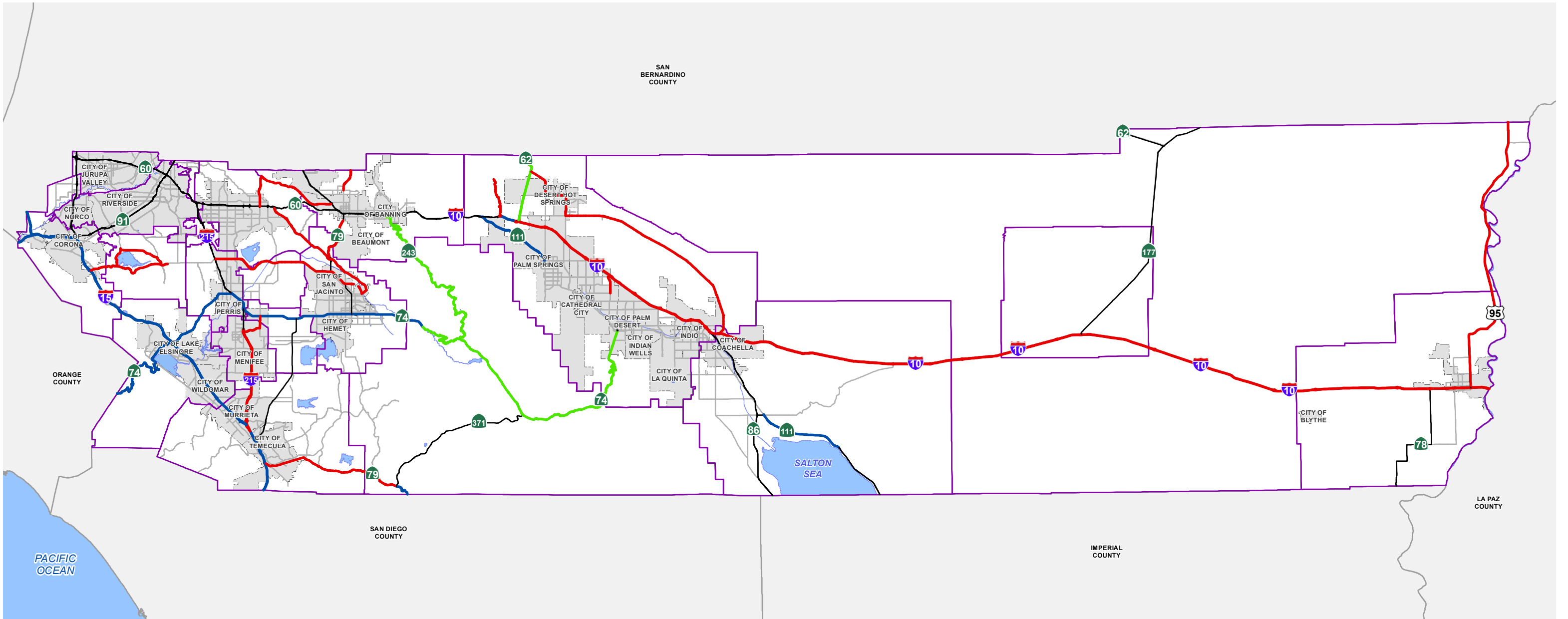
We are proud of the distinctive identities that our communities now possess and cherish the sense of place that results from them. We want this sense of place and distinctiveness maintained and enhanced in our planning and development activities.



- RCIP Vision

be provided along freeways, expressways, and four-lane highways in order to protect adjacent noise-sensitive land uses from traffic-generated noise impacts. Additionally, noise generators such as commercial, manufacturing, and/or industrial activities shall use these techniques to mitigate exterior noise levels to no more than 60 decibels. (AI 107)

- C 20.9 Incorporate specific requirements of the Western Riverside County Multiple Species Habitat Conservation Plan and the Coachella Valley Multiple Species Habitat Conservation Plan into transportation plans and development proposals.
- C 20.10 Avoid, where practicable, disturbance of existing communities and biotic resource areas when identifying alignments for new roadways, or for improvements to existing roadways and other transportation system improvements.
- C 20.11 Implement the Circulation Plan in a manner consistent with federal, state, and local environmental quality standards and regulations.
- C 20.12 Review proposals for expansion of pipelines for the transport of suitable products and materials. Any project proponent of such a pipeline shall mitigate impacts, particularly the potential for hazardous chemical or gas leakage and explosion, in accordance with local, state and federal regulations.
- C 20.13 Incorporate specific requirements of the General Plan Air Quality Element into transportation plans and development proposals where applicable. (AI 110)
- C 20.14 Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles. (AI 118)
- C 20.15 Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.



Data Source: Riverside County (2013)/Cal Trans (2013)

Path: \\agency\img\gis\Projects\Planning\Circulation\Element\060\060_MZ_ScenicHighways.mxd

- State Designated
- State Eligible
- County Eligible
- Not Designated
- Area Plan Boundary
- City Boundary
- Waterbodies

Figure C-8

December 8, 2015

Miles

Disclaimer: Maps and data are to be used for reference purposes only. Map features are approximate, and are not necessarily accurate to surveying or engineering standards. The County of Riverside makes no warranty or guarantee as to the content (the source is often third party), accuracy, timeliness, or completeness of any of the data provided, and assumes no legal responsibility for the information contained on this map. Any use of this product with respect to accuracy and precision shall be the sole responsibility of the user.



SCENIC HIGHWAYS

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Transportation Systems Management

Transportation systems management (TSM) strategies can enhance traffic flow and reduce travel delay along the Riverside County roadway system. A more efficient use of the road network can be implemented by the utilization of TSM strategies such as: computerized traffic signals, metered freeway ramps, and one-way streets. Priority should be given to TSM strategies that improve level of service, especially in areas that are currently fully developed, before more costs and capacity increasing strategies are used.

High Occupancy Vehicle (HOV) lanes are a significant part of the southern California region's strategy to provide incentives for carpooling. HOV lanes were installed along State Route 91 as part of the Measure A program and also along Interstate 215/State Route 60 through Box Springs. To facilitate further increases in carpooling, the SCAG 2001 Regional Transportation Plan (RTP) identifies new carpool lanes along Interstate 15 from the San Bernardino County Line to State Route 91; on Interstate 10 from Interstate 15 to Riverside County; on Interstate 215 from Interstate 15 to State Route 30, from Interstate 10 to Ramona Expressway, and from Nuevo Road Exit south to Interstate 15; and on State Route 71 from the San Bernardino County line to State Route 91.

Policies:

- C 21.1 Encourage the installation and use of HOV lanes. Such lanes should be continuous, linking major population centers with employment centers. If HOV lanes are used, consider making them available for mixed flow traffic during non-peak periods where warranted and feasible. Consider and implement, where feasible and needed, direct HOV connections between freeways and arterial to freeway exclusive HOV ingress/egress ramps.
- C 21.2 Consider creating HOV lanes by adding additional travel lanes instead of removing existing mixed-flow traffic lanes.
- C 21.3 Give priority to TSM strategies to improve level of service, particularly in areas that are fully developed.
- C 21.4 Construct and improve traffic signals at appropriate intersections. Whenever possible, traffic signals should be spaced and operated as part of coordinated systems to optimize traffic operation and reduce congestion. (AI 117)
- C 21.5 Consider roadway expansion at public expense to relieve congestion only after the determination has been made that TSM measures will not be effective.
- C 21.6 Install special turning lanes whenever necessary to relieve congestion and improve safety.



Transportation Systems Management (TSM)

addresses the problems caused by additional development, an increased number of vehicular trips, or a deficiency in transportation capacity. TSM strategies are characterized by their low cost and quick implementation timeframe, and focus on utilizing the existing highway and transit systems more efficiently rather than expanding them.



Look in the **Air Quality Element** for additional policies related to Transportation Systems management.

- C 21.7 Encourage development of bus-only lanes and signal synchronization so that transit can help to alleviate congestion. (AI 117)



Transportation Demand Management (TDM) - Low-cost ways to reduce demand by automobiles on transportation systems, such as programs to promote telecommuting, flextime and ridesharing.

Non-attainment pollutants are pollutants that do not meet a desired or required level of performance as defined through federal and state standards.



Look in the **Air Quality Element** for additional policies related to Transportation Demand Management.

Transportation Demand Management

Transportation demand management (TDM) strategies reduce dependence on the single-occupant vehicle, increase the ability of the existing transportation system to carry more people, and enhance mobility along congested corridors. A reduction in peak hour trips, overall roadway congestion, and a decrease in non-attainment pollutants can be achieved through the implementation of TDM strategies. Examples of these strategies include: telecommuting, flexible work hours, and electronic commerce that enables people to work and shop from home. According to the Southern California Association of Governments (SCAG), vanpools will become more prevalent for short-to-medium range commute trips, and will supplement the traditional long-distance usage. Park-n-ride facilities and carpooling will also continue to be a significant link between highway and transit modes.

In the last decade, the region’s number of trips and amount of travel have grown at a much faster rate than the population growth. TDM strategies are designed to counter this trend. The region cannot build its way out of congestion; it has neither the financial resources nor the willingness to bear the environmental impacts of such a strategy. TDM is one of the many approaches that will be used to maintain mobility and access as the region continues to grow and prosper.

The County of Riverside has established TDM Guidelines to reduce single occupant motor vehicle trips during peak hours and modify the vehicular demand for travel to increase the ability of existing systems to carry more people. TDM strategies should be consistent with South Coast Air Quality Management District (SCAQMD) and Riverside County TDM guidelines.

Policies:

- C 22.1 Continue implementation of Riverside County’s TDM Design Guidelines. (AI 47)
- C 22.2 Coordinate with Caltrans, the Riverside County Transportation Commission, transit agencies and other responsible agencies to identify the need for additional park-n-ride facilities along major commuter travel corridors and at major activity centers. (AI 47, 48)

Goods Movement

The safe and efficient movement of goods in and through Riverside County is vital to the Inland Empire's economy. The ability of Riverside County to compete domestically and internationally on an economic basis requires reliable and cost-effective infrastructure for distributing and receiving products. This can be accomplished through planning, design, construction, and maintenance of the regional and local street and highway system.

The County of Riverside is responsible for maintaining an extensive network of low-volume rural roads in sparsely settled areas to service goods movement and the agricultural industry. Large trucks are the primary means of transporting such goods and are essential to the intra-regional distribution of consumer products. The County is also responsible for a network of heavily impacted roads in urbanized areas that carry truck traffic to logistics facilities and rail yards that serve as hubs for distributing goods outside of Riverside County to national and international markets. These facilities' operations are linked strongly to Ports of Los Angeles and Long Beach. Land scarcity near the Ports and the Inland Empire's strategic location on major interstate highways and rail lines are expected to make Riverside County an attractive area for continued growth of logistics facilities and related growth in truck volumes.

In general, according to the Riverside County Transportation Commission, 77% of freight in Riverside County is pass-by freight destined for areas beyond Riverside County. Of this pass-by freight, 65% is by rail and 35% is by truck.

Present and proposed levels of investments suggest a future in which the majority of transportation facilities will be severely congested for much of the day. Given the shortage of funds available for both operations and maintenance as well as for new capital projects, and the growing conflict between people and goods for the use of highways, airports, and rail lines, the region will be hard pressed to maintain existing levels of mobility for goods movement. Along with these challenges, come potential opportunities to generate new employment in the logistics sector. Key to Riverside County's future is working collaboratively with this important sector of the regional economy to support policies that support economic growth while maintaining quality of life in a responsible manner.

Truck Industry

For the State of California, approximately 76% of all inbound and outbound freight is shipped by truck. In addition, trucks transport 98% of all finished goods to the final retail and wholesale destinations, according to the California Trucking Association. Current economies dictate that trucking will be used for the majority of surface traffic less than 800 miles, which encompasses most or all of California, Arizona, and Nevada. Over 78% of all California communities depend exclusively on trucks to move their goods. Although Riverside County generates a significant amount of truck traffic from agricultural and industrial uses, it also serves as a pass-through for truck traffic that ultimately serves other areas inside and outside of California.

Trucks comprise at least 15% of the daily traffic volume on some of the primary goods movement corridors in Riverside County, such as Interstate 15 from Temecula to Ontario, State Route 60 westward from Interstate 215, and Interstate 10 in the Coachella Valley and San Geronio Pass areas. As healthy industrial growth is expected within the County of Riverside, the scale of industrial-related truck traffic will continue to increase. The Federal



Goods movement in the region is anticipated to grow more than 30%, from 431 million tons to more than 564 million tons in the next 20 years, as a result of both population growth and the growth in international trade. This will approximately double present volumes through the ports and airports.

highway Administration (FHWA) has designated these routes as part of the Primary Freight network (PFN) for the United States.

Freight Rail

Freight rail is an important backbone of goods movement in and through Riverside County.

The Union Pacific (UP) and the Burlington Northern Santa Fe (BNSF) Railroads provide freight service in and through Riverside County, connecting Riverside County with major markets within California and other destinations north and east. The federal government has recognized these routes as the “Alameda Corridor East.” The Ports of Los Angeles and Long Beach are the primary drivers of rail traffic moving through Riverside County.

Riverside County has more than 40 at-grade road-rail crossings. In 2012, these crossings resulted in 603 daily hours of vehicle delay on local roads throughout the county, 46 accidents, and 7.23 tons of carbon monoxide emissions. Construction of grade separations by the County of Riverside and cities in recent years has helped alleviate some of these impacts, although more such projects remain under development and unfunded.

Air Cargo

Air cargo is the fastest growing method of transporting goods in and out of the southern California region, and is expected to continue to increase at a faster rate than passenger air service. The Los Angeles (LAX) and Ontario International Airports are the major cargo handling airports in Southern California. Both of these airports handle about 96% of all the air cargo movement, with LAX alone accounting for 79% of the air cargo traffic. Trucking, rail, and air cargo operations in this area make it one of the larger multi-modal freight management and distribution complexes in the nation. Land development is occurring in support of these functions, extending into the Mira Loma and Norco areas of Riverside County.

The March Joint Air Reserve Base is currently a joint use status land use. The Air Reserve Base will gradually reduce the military use of this facility and begin to increase the amount of goods and cargo that can be accommodated at this site. As the amount of goods transported into this area via the March Joint Air Reserve Base increases, so does the potential to establish viable land uses that can make use of this facility. This area can be used to accommodate the increased growth in goods movement, with the potential to become a passenger airport.

Policies:

- C 23.1 Implement street and highway projects to provide safe, sustainable, and economical goods movement in areas where large concentrations of truck traffic exist or are anticipated to exist. (AI 43)
- C 23.2 Implement roadway standards, where practicable, to accommodate large trucks where extensive truck travel involving regional movement of bulk goods is anticipated.
- C 23.3 Support continued operation of the regional freight rail system, which offers safe, convenient, and economical transport of commodities.
- C 23.4 Create grade separations that locate roads under or over rail lines that carry substantial amounts of freight to and from the ports along critical routes on the BNSF and UP mainlines. (AI 119)

- C 23.5 Address alternatives for industries affected by abandonment of rail facilities.
- C 23.6 Encourage the efficient movement of goods by rail through development of efficient intermodal freight facilities and a shift of a portion of the goods previously moved by trucks onto the rail freight system.
- C 23.7 Identify economically feasible street and highway improvement and maintenance projects that will improve goods movements.
- C 23.8 Restrict truck through-traffic in residential areas and on streets with specific facilities that have high density of people/users; through planning and design of developments, direct truck traffic to major transportation corridors. (AI 43)
- C 23.9 Encourage the construction of truck-only lanes, climbing lanes or turnouts where appropriate.
- C 23.10 Pursue recognition of County roads that carry a substantial volume of freight to be included in state, federal, and regional freight plans and network designations.
- C 23.11 Collaborate with private industry and local, regional, and state government partners on the development and implementation of plans, policies, programs to mitigate safety, environmental, and congestion-related impacts of projects whose primary purpose is the movement of goods, such as distribution centers.
- C 23.12 For goods movement projects resulting in countywide cross-jurisdictional traffic impacts, seek to implement appropriate mitigation measures in whichever jurisdiction impacts occur.
- C 23.13 Collaborate with private industry and local, regional and state government partners to identify strategies to increase employment and educational opportunities for Riverside County residents related to goods movement projects.
- C 23.14 The County should develop best practices and standards for design of distribution facilities and supporting infrastructure to promote environmental sustainability, safety, long-term maintenance cost reductions, and general quality of life.

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) are utilized to improve the safety and performance of the surface transportation system using new technology in detection, communication, computing, and traffic control. These systems increase the efficiency and safety of the regional transportation system and can be applied to arterials, freeways, transit, trucks, and private vehicles. Further, traveler information is critical in order to lessen the impacts of accidents and other special events in the region, which ultimately may reduce delay and congestion.

The Inland Empire ITS Strategic Plan was approved by the Riverside County Transportation Commission (RCTC) in 1997. The Strategic Plan contains a list of goals and policies to be followed by responsible agencies within Riverside County to achieve a viable ITS infrastructure that improves mobility and enhances safety within the region. Nine core ITS components have been identified by RCTC that are needed to deploy a comprehensive set of ITS services throughout the metropolitan areas. These components are:

- Traffic Signal Control;
- Freeway Management;
- Transit Management;
- Incident Management;
- Electronic Fare Payment;
- Electronic Toll Collection;
- Railroad Grade Crossings;
- Emergency Management Services; and
- Regional Multimodal Traveler Information.

Policy:

- C 24.1 Encourage the integration of Intelligent Transportation Systems (ITS) consistent with the principles and recommendations referenced in the Inland Empire ITS Strategic Plan as the transportation system is implemented. (AI 117)

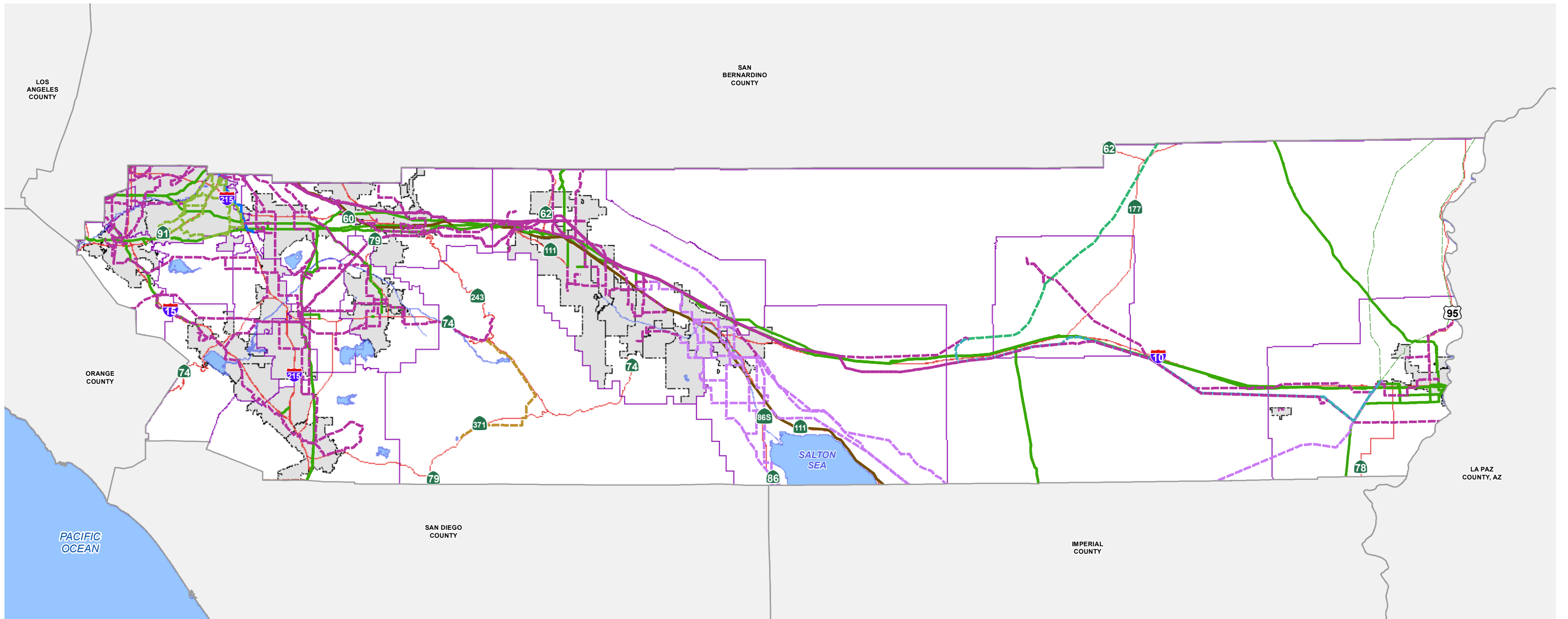
Major Utility Corridors

The Circulation Element not only addresses circulation issues related to transportation, it also discusses circulation in relation to utilities. The major conveyance lines for water, natural gas and electricity transmission systems form a substantial network of corridors crossing Riverside County. Major electrical and natural gas lines are shown on Figure C-9.

Policies:

- C 25.1 Promote and encourage efficient provisions of utilities such as water, wastewater, and electricity that support Riverside County's Land Use Element at buildout.
- C 25.2 Locate new and relocated utilities underground when possible and feasible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public. (AI 32)

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Data Source: California Energy Commission (2013)

Electrical Transmission Lines

- ANZA
- APUD
- BLYTHE ENERGY
- BVES
- IID
- LADWP

Gas Products

- MWD
- RPU
- SCE
- SDG&E
- WAPA
- Crude Oil
- Multi-Products
- Natural Gas
- Unleaded Gasoline

- Highways
- Area Plan Boundary
- City Boundary

Required State Disclaimer:

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Figure C-9

December 8, 2015

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MAJOR ELECTRICAL AND NATURAL GAS LINES

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