



**CIRCULATION ELEMENT:
PROPOSED TRAILS POLICIES AND MAPS**



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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.



-RCIP Vision



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

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;
- 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.

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:

- 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)

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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

Due to the importance of the circulation and mobility systems in the County, 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 the County staff during the development of the Integrated Plan, and made recommendations relating to transportation issues for the County 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 the County's transportation systems, identify potential issues, and provide recommendations for the County 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 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 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 the 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.

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.

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.



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



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 percent 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*

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, 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

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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.

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- RCIP Vision

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 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 the 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 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 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)
- 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 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.



The General Plan policy and implementation item reference system:

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

LU 1.3:

Neighborhood
Commercial uses should be located near residential uses.

(AI 1 and AI 4):

Reference to the relevant Action Items contained in the implementation Program



Figure C- 1 Circulation Plan



County of Riverside General Plan

DRAFT Circulation Element

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Level of Service

As the County continues to grow, transportation demand management and systems management will be necessary to preserve and increase available roadway “capacity.” Level of Service (LOS) standards 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, 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 County residents to have access to a wide range of job opportunities within reasonable commute times.

Policies:

- C 2.1 Maintain the following countywide target Levels of Service:
LOS “C” along all County maintained roads and conventional state highways. As an exception, LOS “D” may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections.

LOS “E” may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities. (AI 3)
- C 2.2 Apply level of service standards to new development via a program establishing traffic study 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, plot plans, public use permits, conditional use permits, etc.) Shall identify project related traffic impacts and determine the “significance” of such impacts in compliance with CEQA. (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 standards.



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.



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.



- 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 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 Policy Area (Figure C-2). The County shall require that all new development projects demonstrate adequate transportation infrastructure capacity to accommodate the added traffic growth. The County shall coordinate with cities adjacent to the policy area to accelerate the usable revenue flow of existing funding programs, thus assuring that transportation infrastructure is in place when needed.
- C 2.7 Establish 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.



Figure C- 2 Highway 79 Policy Area



County of Riverside General Plan

DRAFT Circulation Element

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Figure C- 3 Link/Volume Capacity/Level of Service for Riverside County Roadways

Link Volume Capacities/Level of Service for Riverside County Roadways⁽¹⁾



David E. Barnhart
Director of Transportation

Roadway Classification	Number of Lanes	Maximum Two-Way Traffic Volume (ADT) ⁽²⁾		
		Service Level C	Service Level D	Service Level E
Collector	2	10,400	11,700	13,000
Secondary	4	20,700	23,300	25,900
Major	4	27,300	30,700	34,100
Arterial ⁽³⁾	2	14,400	16,200	18,000
Arterial	4	28,700	32,300	35,900
Mountain Arterial ⁽³⁾	2	12,900	14,500	16,100
Mountain Arterial	3	16,700	18,800	20,900
Mountain Arterial	4	29,800	33,500	37,200
Urban Arterial	4	28,700	32,300	35,900
Urban Arterial	6	43,100	48,500	53,900
Urban Arterial	8	57,400	64,600	71,800
Expressway	4	32,700	36,800	40,900
Expressway	6	49,000	55,200	61,300
Expressway	8	65,400	73,500	81,700
Freeway	4	61,200	68,900	76,500
Freeway	6	94,000	105,800	117,500
Freeway	8	128,400	144,500	160,500
Freeway	10	160,500	180,500	200,600
Ramp ⁽⁴⁾	1	16,000	18,000	20,000

Notes: (1) All capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.
 (2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables as defined in the Riverside County Congestion Management Program.
 (3) Two-lane roadways designated as future arterials that conform to arterial design standards for vertical and horizontal alignment are analyzed as arterials.
 (4) Ramp capacity is given as a one-way traffic volume.

Revised: March 2001



System Design, Construction and Maintenance

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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

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.

Typical cross-sections for the different functional street classifications are shown in Figure C-4. 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.

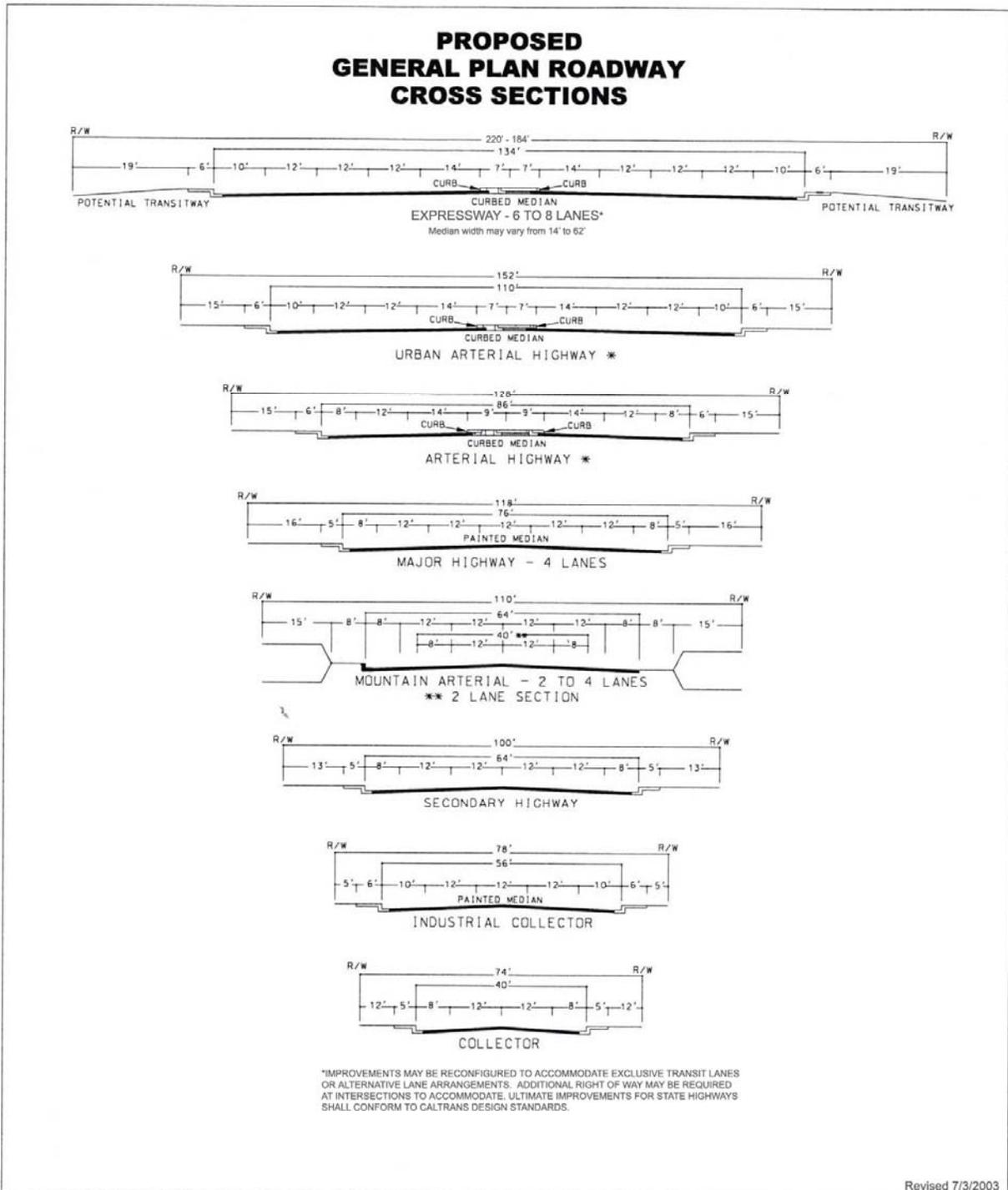


**Table C-1
Street Classification as identified in the city Transportation Department Standards
and Specifications**

Classification	Definition	Minimum Right-of-Way Width Required	Number of Lanes Required (Approximate)
<i>Freeway</i>	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
<i>Expressway</i>	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
<i>Urban Arterial</i>	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
<i>Arterial Highway</i>	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
<i>Arterial Mountain Highway</i>	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.
<i>Major Highway</i>	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
<i>Secondary Highway</i>	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
<i>Collector Street</i>	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
<i>Industrial Collector</i>	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- 4 Street Classification Cross-Sections





Policies:



- C 3.1 Design, construct, and maintain County roadways as specified in the County Road Improvement Standards and Specifications.
- 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 following lane geometrics:

**Table C-2
Highway Lane Requirements**

Classification	# of Through Lanes Along Arterial Segment	Intersection Turn Lanes Required for intersection w/secondary highway and above	
		Left	Right
Expressway	6 or 8	2	1
Urban Arterial	6	2	1
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 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 service 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 on-site 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 stand alone 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 right-of-way that are needed to establish slope stability or drainage and drainage 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, in consultation with Caltrans, will undertake a program to acquire such areas where additional right-of-way is required. (AI 44, 51)
- 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, 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.



- 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.
- 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 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 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 County Transportation Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. The County may require both the dedication and improvement of the pedestrian facilities as a condition of development approval. (AI 3)
- C 4.7 Encourage 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 Encourage, where feasible, the construction of overpasses or undercrossings where trails intersect arterials, urban arterials, expressways, or freeways.
- C 4.9 Coordinate with all transit operators to ensure that 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 is not otherwise warranted. (AI 45)
- C 4.10 Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) 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 the 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. Access points must be located a sufficient distance away from major intersections to allow for safe, efficient operation. (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 improvements on 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 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 the County's General Plan. The County 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, the Community Environmental Transportation Acceptability Process (CETAP) committee made recommendations relating to transportation issues for the County 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. 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 Beaumont/Banning to Temecula (north to south) transportation corridor (including the State Route 79 Realignment), the Moreno Valley to San Bernardino corridor (north to south), the SR-79 Realignment, and the Hemet to Corona/Lake Elsinore (east-west) corridor (Figure C-1).

The Circulation Plan shows preliminary CETAP alignments for each corridor. 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 Riverside County Transportation Commission (RCTC) and the Federal Highway



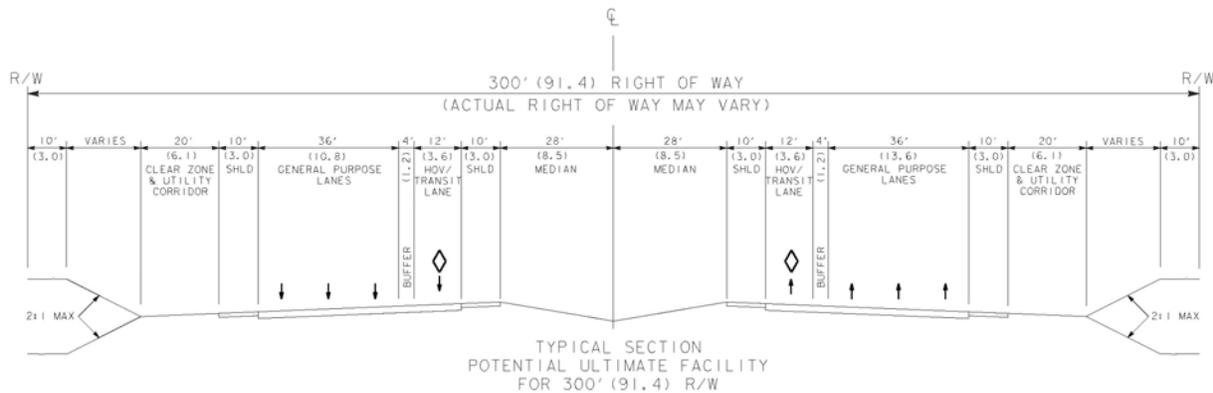
Administration. These are intended to be major transportation facilities to support mobility and economic development in western Riverside County.

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-4 depicts a conceptual representation of a typical CETAP corridor section. Precise right-of-way widths will be determined by the County. The Circulation Element Map in Figure C-1 shows potential alignments. The Hemet to Corona/Lake Elsinore corridor in the Lake Mathews area is shown following an alignment northerly of the lake, as studied in the Draft EIR/EIS for this corridor. However, the current focus of this corridor appears to be an alignment southerly of the lake. The final alignment is yet to be determined. The map also indicates locations of potential interchanges. These facilities may be constructed in phases based upon transportation demand, available funding, and Caltrans and RCTC policy.

In addition to the corridors depicted in Figure C-1, the RCTC is initiating 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. Upon completion of the MIS, the County intends to amend the General Plan to reflect the outcome of the study, if feasible.



Figure C- 5 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 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 countywide 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, the Riverside County Congestion Management Program, and the Riverside County Short- and Long-Range Transit Plans into the Circulation Element, and encourage the active participation of Caltrans in the design 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,



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.



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)

- 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 the development of a new internal East-West CETAP Corridor in conjunction with a new Orange County CETAP connection. Such corridor(s) would be constructed simultaneously to avoid further congestion on the I-15 Freeway. Or, in the alternative, the East-West Corridor, would be constructed simultaneously with major capacity enhancements on the State Route 91, between Pierce St and the Orange County line, and the capacity improvement of the 15 (north) to westbound 91 overpass.
- C 7.7 Support the analysis of the feasibility of a Pigeon Pass Road extension as part of the Moreno Valley to San Bernardino County CETAP Corridor.
- 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:
- For development under the County jurisdiction but within the sphere of influence (SOI) of a city having roadway standards different from the County, city and 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 County standards.
 - In general, for such development under 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, County standards should apply.
 - Transition areas at meeting points of roadways designed to differing city and County standards or differing functional classifications should be individually designed to facilitate satisfactory operational and safety performance. Further, the County should update the road standards to reflect the intent of this policy and standards agreed upon by the County 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. (AI 50)



System 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 over the next 20 years.

Discretionary roadway 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 of a "Transportation Improvement Program" for local road and bridge improvements and the 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 and arterial street network is critical to the provision of a viable transportation system necessary to sustain a healthy local economy. Innovative options, such as the application of "toll-way fares," should be explored as a means of controlling demand in critical corridors. Riverside County must consider these and other innovative funding mechanisms to ensure that the future transportation system is financially supported and can be adequately maintained.

Policies:

- C 8.1 Implement a circulation plan that is consistent with 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, redevelopment 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 of 5 to 7 years. The TIP will be reviewed and updated annually.
- 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 and subregional transportation improvements needed for serving new development in the unincorporated area.
- 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 Road and Bridge Benefit District fee structure for development impact fees annually to ensure that



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



capacity expansion projects are developed and constructed in a timely manner.

- C 8.8 Seek all available means to finance improvements, including state and federal grants, to ensure that a non-motorized system is implemented. (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, 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 the 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 6.4 million passengers annually, which is approximately 18,000 passengers per day. RTA also provides service to San Bernardino and Orange Counties.

SunLine Transit Agency (SunLine) provides public interest transit services for the Coachella Valley and Yucca Valley areas. The service area covers 928 square miles. SunLine operates fixed routes, serving over three million passengers annually. All of SunLine's buses are equipped with front-mounted bicycle racks, and overall the system carries over 6,000 bicycles per month.

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 the 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.
- C 9.2 Support transit operators' programs to foster transit usage.
- 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 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 car pooling, 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 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 the 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 Reserve right-of-way to accommodate for 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 Encourage the designation of exclusive transit-only lanes on freeways.
- C 11.7 Promote development of transit centers and park-n-rides for use by all transit operators, including development of multi-modal facilities.



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.

Transit Oasis and Transit Centers

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 5-minute walk, can effectively serve about 1.5 square miles with 10-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 an 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 are 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, 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.

★
A regional high speed rail system is proposed that will connect major regional activity centers and significant inter-/multi-modal transportation facilities in Los Angeles, Orange, Riverside, and San Bernardino Counties 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.

Passenger Rail System

The passenger rail system within the County is vital to the mobility of the region. This system provides movement for people within and outside of the 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 County residents and commodities. The proposed California high-speed rail system will directly serve residents and businesses in Riverside County, enabling the County to compete in the global economy.

AMTRAK

The only AMTRAK station located in Riverside County is in the City of Palm Springs. This station provides connecting AMTRAK service to points west including Los Angeles, and to points east including Tucson, Arizona, and El Paso, Texas. AMTRAK does provide bus connections to and from other Riverside County areas to the San Bernardino AMTRAK station on a daily basis.

Metrolink

Commuter rail in the southern California region has significantly grown along with the Riverside Metrolink system from 133,000 passengers in 1992 to 927,000 passengers in 1997. The Riverside Line generally runs trains from Riverside to Los Angeles. Metrolink currently has multiple stations located in Riverside County including: Pedley Station, Riverside-Downtown Station, Riverside-La Sierra Station, and West Corona Station. Long-term plans call for an extension of the Riverside Transit Corridor, in accordance with performance standards, 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, the Coachella Valley Commuter 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 planned industrial development.
- C 13.4 Construct new grade separations or reconstruct existing grade separations as necessary for the smooth flow of traffic within the County consistent with plans developed by WRCOG and CVAG.
- C 13.5 Provide additional grade crossing improvements as determined by the California Public Utilities Commission and the County. (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 the County's transportation system. To meet these needs, the County must facilitate coordination of County airport plans with aviation planning conducted by the State, the County Economic Development Agency, and local agencies related to transportation, land use, and financing. It will also be important for the 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 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 five major commercial airports in southern California used for passenger service by residents of Riverside County, including: Palm Springs International Airport, Ontario International Airport (San Bernardino County), Orange County - John Wayne Airport, Los Angeles International Airport, and Lindbergh Field (San Diego County). 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/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

Twelve public-use airports are situated within the boundaries of Riverside County, and the County owns six of these airports (Blythe, Chiriaco Summit, Desert Center, Desert Resorts Regional, French Valley, and Hemet-Ryan). Six other airports (Banning Municipal, Bermuda Dunes, Corona Municipal, Flabob, Palm Springs International, and Riverside Municipal) are owned by cities or private entities. As defined by the Riverside County Airport Land Use Commission, the influence areas of all these airports except Palm Springs International affect lands within unincorporated areas of the County. Furthermore, three other airports—Chino Airport in San Bernardino County, March Air Reserve Base, and private-use Skylark Airport—also affect unincorporated lands. Figure C-6 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 the County, airport authorities, businesses and the public to meet the County and the region's aviation needs.
- C 14.2 Apply a variety of land use planning techniques to maintain the viability of the County's airports. (See Land Use Policy LU 14.6)
- 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.



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



Figure C- 6 Airport Influence Areas



County of Riverside General Plan

DRAFT Circulation Element

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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, ~~and~~ activity areas, *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 and later expand an effective non-motorized transportation system.
- C 15.2 Seek financing to implement an effective non-motorized transportation system. This funding can include *potential sources* such ~~things~~ as state and federal grants, *County transportation funds, special assessments, developer contributions, redevelopment agency funds, parking meter revenues, and other sources*. (AI 36)
- C 15.3 Develop a trail system which connects 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-7) Regional Trail Map* in accordance with the review procedures and schedule of the General Plan, in order to *ensure assure its* compatibility with the other *elements-components* of the County General Plan, and with the similar plans of Western Riverside County Council of Governments, Coachella Valley Association of Governments, Riverside County Transportation Commission, and all jurisdictions within and abutting Riverside County.
- C 15.5 Compliance with the Americans with Disabilities Act (ADA) standards will be assured so as to make the trails system user-friendly.



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.

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 the trail is located will affect the type of use the trail gets, but all trails are open to all of these uses.

Riverside County currently has one developed trail that it 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 County trail system, resulting in a fragmented system. Providing connectivity between County trails and between 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 will prepare and adopt a Trails Development Standards Policy Manual, which will be used by the District in all trails planning, construction, and maintenance activities.

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

Class I, II, and III Bikeways – Bikeway standards are addressed in the Bikeways sub-section, below, of the Non-Motorized Transportation section of the Circulation Element. Also addressed below are Combination Class I Bikeways/Regional Trails.

Regional Trails - These are the ~~main~~ *primary long distance* trails within the 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 Parks~~ and Open Space District. ~~They are designed to eventually provide linkages between areas which could be quite distant from each other.~~ They are also designed to connect with *trails in State and Federal parks, forests, and recreational areas* ~~trails~~, 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. Regional trails will have a easement 20 feet wide and a trail width of 10 feet.*

There are two types of Regional 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 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.

"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 6' to 10' wide. Regional Open Space Trails are usually intended to be maintained by the Regional Park and Open Space District, or by public or quasi-public entities that either own the open space areas or have agreed with the County to accept related open space areas and trails 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. *Community Trails are designed for trail users preferring a soft trail surface, including equestrians, pedestrians, joggers, and mountain bikers.* Community Trails *will generally* be 8' to 10' wide, and *be sited within* ~~have an~~ easements ~~of 10 to~~ 14 feet wide. ~~and a trail width of 8 feet.~~ See Figure C-7 for *Community Trails* cross sections and details.

In addition to multipurpose recreational trails, the Riverside County Transportation Department also plans and/or implements a countywide system of bikeways. A system map may be found in Figure C-7. Policies in this section focus on the refinement of the current countywide trails plan and seek to expand implementation of the trail system.

Historic Trails – These are designated historic routes that recognize the rich history of Riverside *County*. The Historic Trails designated ~~on the~~ on the Bikeways and Trails Plan, Figure C-7, include: The Juan Bautista de Anza National Historic Trail, the Southern Immigrant Trail, the Pacific Crest Trail and the Bradshaw Trail. The Historic Trails routes designations are graphical representations of the general location of these historic routes and do not necessarily represent a planned Regional, ~~or~~ Community, *or other type of existing or planned Trail.* ~~In some cases, these trails have more detailed planning documents which describe interpretive routes for autos and/or non-motorized modes of Transportation.~~ There *generally* are Regional or Community Trail designations that *could more or less* either follow or parallel these routes, ~~thus~~ 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 National Forest and BLM Trails*~~ – ~~*Trails on the San Bernardino and Cleveland National Forests, Joshua Tree National Park, Santa Rosa and San Jacinto Mountains National Monument, the public lands managed by the Bureau of Land Management, and other national, state, and local public and quasi-public lands such as those owned by the Nature Conservancy and Wildlands Conservancy that are open to public usage*~~ ~~*National Forest and BLM Trails*~~ are also depicted on the Bikeways and Trails Plan, Figure C-7. Such trails are managed and maintained by the responsible Federal, *state, or other* agencies. While the County has no jurisdiction ~~over such trails,~~ they are shown on the County plan to indicate connectivity. ~~-, much as the trails within cities are shown.-~~

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. Trails plans shown in Design Guideline documents adopted by the County and Lifestyle Corridors are two examples of types of localized trail classifications that may be appropriate at the community-specific level.*

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



See also the Land Use Element, Circulation Section, for additional policies



with extensive local citizen input, and in close cooperation between the County and special districts that would be involved in the construction and/or maintenance of such trails.

Lifestyle Corridors, another specialty trail classification, are actually highly amenitized versions of Combination Trails, and may be appropriate for siting in local communities with very strong equestrian, bicycle, and/or other type of trail usage. These trails are designed to provide frequent, easy access from adjacent residential, equestrian-oriented, commercial, etc. neighborhoods for multiple trail functions, which usually include facilities for bicyclists (both road and mountain bicycles), equestrians, pedestrians, and where appropriate, carts and other non-licensed, personal modes of transportation. For example, lifestyle corridors are a prominent component of the trail system proposal for the Vista Santa Rosa Policy Area.

Policies:

- C 16.1 Implement the County trail system as depicted in the Bikeways and Trails Plan, Figure C-7.



Figure C- 7 Bikeways and Trails Plan
(See Separate Maps)



Figure C- 8 Trails Types Classification Details
(See Separate Detail Figures)



C 16.2 Develop a multi-purpose ~~recreational~~ trail network with support facilities which provide a linkage with regional facilities, *and require trailheads and staging areas that are equipped with adequate parking, 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 natural areas where feasible.*

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.*

- a. Require that all specific plans and other large-scale development proposals include trail networks as part of their circulation systems, and that the trails connect with other existing and planned trails, recreation areas, schools, and parks near the development proposals.*
- b. Ensure that existing and new gated communities do not preclude trails from traversing through their boundaries, and require public right-of-way easements through gated communities.*
- 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 connect with those in other neighboring city, county, federal jurisdictional areas.*

County
state, and

C 16.4 Identify all existing rights-of-way which have been obtained for trail purposes through the land development process.

- 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 16.5 Examine the use of public access utility easements for trail linkages to the regional trails system and/or other open space areas. These potential corridors include, *but are not limited to,* the rights-of-way for:

- a. water mains;*
- b. water storage project aqueducts;*
- c. irrigation canals;*
- d. flood control;*
- e. sewer lines; and*
- f. fiber optic cable lines,*



- g. gas lines,*
- h. electrical lines, and*
- i. fire roads, railroads, and bridges.*

- C 16.6 Adhere to the following trail-development guidelines when siting a trail:
- a. ~~Permit urban trails to be located in or along transportation rights-of-way in fee, utility corridors, and irrigation and flood control waterways so as to mix uses, separate traffic and noise, and provide more services at less cost in one corridor. Permit urban trails to be located outside road rights-of-way or within road rights-of-way with required additional dedicated right-of-way in fee, utility corridors, and irrigation and flood control waterways so as to mix uses, separate traffic and noise, and provide more services at less cost in one (combined functions accommodated) corridor.~~*
 - b. Secure separate rights-of-way for non-motorized trails when physically, financially and legally feasible.
 - i) Where a separate right-of-way is not feasible, maintain recreation trails within the County right-of-way.
 - c. *Develop and implement Use* 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 under foot to minimize erosion and injuries.*
 - f. When a trail is to be ~~reserved~~*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. for multi-purpose trails.*
 - f. Place all recreation trails ~~a~~*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.
 - g. Install warning signs indicating the presence of a trail at locations where regional or community trails cross public roads with high amounts of traffic. *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 at the intersections of trail crossings with public roads to ensure safe crossings by users.*
 - h. Design and construct trails that properly account for ~~Take into consideration~~ such issues as sensitive habitat areas, flooding potentials, access to neighborhoods and open space, safety, alternate land uses, and usefulness for both transportation and recreation. when designing and constructing trails.*
 - i. Coordinate with other agencies and/or organizations (such as the U.S. Fish and Wildlife Service and the Department of Transportation) to encourage the development of multi-purpose trails. Potential joint uses may include historic and environmental interpretation, access to fishing areas and other



- recreational uses, opportunities for education, and access for the disabled.
- j. Work with landowners to address concerns about privacy, liability, security, and trail maintenance. (AI 3, 35, 36, 38, 39, 40, 41, 42).
 - k. *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.*
 - l. *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.*
 - m. *Benches, fencing, water fountains, trees and shading, landscape buffers, rest stops, restrooms, and other trail-related amenities shall be provided where appropriate.*
 - n. *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.*
 - o. *Information about the County's trail system shall be provided at County parks and online in order to make the public aware of the County's trail system.*
 - p. *Trails shall not be sited along sound walls, project boundary walls, and other walls that effectively obstruct visibility beyond the edge of a trail.*
 - q. *All trail surfacing shall be appropriate to the intended array of users of the trail. Soft-surfaced trails shall have smooth, firm, slip-resistant surfacing so as to minimize foot and ankle injuries.*
 - r. *Use already available or disturbed land for trails wherever possible for new or extended trails.*
 - s. *Use pervious pavement or bio-swales along paved trails to assist in maintaining water quality.*

- C 16.7 Require the installation (where appropriate) of a simulated split rail fence with 2 to 3 rails constructed of white PVC material separating road rights of way from adjacent trail easements. (AI 3)

Bikeways

Riverside County's bikeway system is included as part of the County's circulation system *Trails and Bikeways Plan mapping*. Planned bicycle routes are shown on the Bikeways and Trails Plan, Figure C-7. The County uses three types of bike path classifications:

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, Class I Bikeways may be designed and signed to also permit carts.*

Class II - Provides a striped lane for one-way bike travel on a street or highway.



Class III – Provides signage to designate bicycle routes.

Class I Bike Path/Regional Trail (Combination Trail) - This functions as a regional connector to link all of the major bodies of water in Western Riverside County and to provide the opportunity for long-distance users to take advantage of this system for long one-way or loop type trips. This system may also take advantage of existing or planned Class I Bike Paths, Regional Trails, and/or Community Trails for several combinations of easements, connections, or links. Bicycles are also allowed on regional and community trails, which allow all types of non-motorized use. However, Class I bike paths, ~~and~~ Class II bike lanes, *and Class III signed bike routes* are designed for bicycle use only. As with non-motorized trails, a connected system of bikeways is needed to encourage this alternative transportation method among County residents.

Combination Class 1/Regional Trails

Combination Class 1 Bikeway/Regional Trails (Combination Trails) – Combination Trails include both a Class 1 Bikeway, with a 10’ to 12’ 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 1 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’ to 40’ 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 1 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 Regional Park and Open Space District, or by the Transportation Department through a Landscape and Lighting Maintenance District.

See Figure C-8 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 (Combo 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 County Design Guidelines (for communities that have them), the Riverside County Regional Park and open space Trails Standards Manual*, and other County Guidelines.
- C 17.2 Require bicycle access between proposed developments and other parts of the 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* of cities and unincorporated communities;
 - a. Provision of lanes to specific destinations such as state or county parks;
 - b. Provision for *recreational bicycle riding and* bicycle touring; and
 - c. Encouragement of bicycle commuting. *Encouragement of golf cart commuting within a community.*
 - d. *Connect bikeways to all urban transit centers and systems (bus stops and Metrolink stations).*
 - e. *provide 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.

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 ACQUISITION
- 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, in stages, to serve all trail communities, and upgrade system of linkages/destinations.*
 - c. Determine which public and/or private agencies have *existing* easements ~~or existing~~, 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*, various utility companies/districts, and Railroad companies, leverage – use roads, dirt roads, as trails routes, to foster partnerships, get the trails built and managed, etc. (*Parks Department and Transportation??*).
 - 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 **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 the County to manage and maintain the 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 **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, and/or funds/*assessments* from local, regional, State, and Federal government entities.
- 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.

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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

SCENIC CORRIDORS

Many corridors in Riverside County traverse its scenic resources. Enhancing aesthetic experiences for residents and visitors to the County has a significant role in promoting tourism, which is important to the 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 the 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-9.

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



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

Policies:

- C 19.1 Preserve scenic routes that have exceptional or unique visual features in accordance with Caltrans' Scenic Highways Plan. (AI 79)
- C 19.2 Wind turbine generators have proven to be a unique tourist attraction.



Figure C- 9 Scenic Highways

County of Riverside General Plan

DRAFT Circulation Element



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ENVIRONMENTAL CONSIDERATIONS

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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

The 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.
- 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.
- 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.*
- C 20.5 In order to protect the watershed, water supply, groundwater recharge, and wildlife values of watercourses, the County 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 the County's authority, from doing so. Where such watershed utility siting locations cannot be avoided, the impacts on watercourses shall be minimized.*
- C 20.4 Control dust and mitigate other environmental impacts during all stages of roadway construction.
- C 20.5 Protect all streets and highways located within identified blow sand areas from blowsand hazards to the extent practicable.
- C 20.6 Protect County residents from transportation generated noise hazards. Increased setbacks, walls, landscaped berms, other sound absorbing barriers, or a combination thereof shall 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 20.7 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 20.8 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 20.9 Implement the Circulation Plan in a manner consistent with federal, state, and local environmental quality standards and regulations.
- C 20.10 Review and monitor proposals for expansion of pipelines for the transport of suitable products and materials, and require mitigation of environmental impacts. In particular, require mitigation of the potential for hazardous chemical or gas leakage and explosion.
- C 20.11 Incorporate specific requirements of the General Plan Air Quality Element into transportation plans and development proposals where applicable. (AI 110)
- C 20.12 Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles. (AI 118)
- C 20.13 Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.

TRANSPORTATION SYSTEMS MANAGEMENT



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.

Transportation systems management (TSM) strategies can enhance traffic flow and reduce travel delay along the 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 are planned 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:



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

- 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.
- C 21.2 Consider the use of HOV lanes when any widening project is undertaken on urban arterials and expressways.
- C 21.3 Consider creating HOV lanes by adding additional travel lanes instead of removing existing mixed-flow traffic lanes.
- C 21.4 Give priority to TSM strategies to improve level of service, particularly in areas that are fully developed.
- C 21.5 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. (AI 117)
- C 21.6 Consider roadway expansion at public expense to relieve congestion only after the determination has been made that TSM measures will not be effective. (AI 117)
- C 21.7 Install special turning lanes whenever necessary to relieve congestion and improve safety.
- C 21.8 Install one-way streets and exclusive or reversible lanes where applicable.
- C 21.9 Encourage development of bus-only lanes and signal synchronization so that transit can help to alleviate congestion.



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.

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 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 the existing system to carry more people. TDM strategies should be consistent with South Coast Air Quality Management District (SCAQMD) and County TDM Guidelines.

Policies:

- C 22.1 Continue implementation of the 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)



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

GOODS MOVEMENT/DESIGNATED TRUCK ROUTES

The efficient movement of goods in and through Riverside County is vital to the Inland Empire's economy and improves traveler safety. The ability of the County to compete domestically and internationally on an economic basis requires an efficient and cost-effective method 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's industrial and agricultural economies depend on safe and efficient goods movement. The County 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. In addition, freight rail is an important backbone of the goods movement industry in Riverside County.

The region is faced with a serious dilemma. 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.

Truck Industry

For the State of California, approximately 76 percent of all inbound and outbound freight is shipped by truck. In addition, trucks transport 98 percent of all finished goods to the final retail and wholesale destinations, according to the California Trucking Association. Current economies dictate that trucking will be



Goods movement in the region is anticipated to grow more than 30 percent, 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.



used for the majority of surface traffic less than 800 miles, which encompasses most or all of California, Arizona, and Nevada. 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 percent 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, the scale of industrial-related truck traffic will continue to increase. It is anticipated that the region's truck volumes will increase by 40 percent through Year 2020.

Freight Rail

The Union Pacific (UP) and the Burlington Northern Santa Fe (BNSF) Railroads provide freight service in Riverside County, connecting the County with major markets within California and other destinations north and east.

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 percent of all the air cargo movement, with LAX alone accounting for 79 percent 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 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 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 convenient and economical goods movement in areas where large concentrations of truck traffic 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 Support provisions to physically separate heavily traveled rail lines from heavily traveled streets and roads. (AI 119)
- C 23.5 Create grade separations that locate arterials under or over rail lines that carry substantial amounts of freight from the ports along critical routes such as the Los Angeles-Orangethorpe-Riverside rail freight corridor. (AI 119)
- C 23.6 Address alternatives for intermodal shipment for industries affected by abandonment of rail facilities.
- C 23.7 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 23.8 Identify street and highway improvement and maintenance projects that will improve goods movements and implement projects that are economically feasible.
- C 23.9 Study commercial truck movements and operations in the County and establish truck routes away from noise-sensitive areas where feasible. (AI 43)
- C 23.10 Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and truck through-traffic to designated routes; and distribute maps of approved truck routes to County traffic officers. (AI 43)
- C 23.11 Encourage the construction of truck-only lanes where appropriate.

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 the 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:

- a. Traffic Signal Control;
- b. Freeway Management;



- c. Transit Management;
- d. Incident Management;
- e. Electronic Fare Payment;
- f. Electronic Toll Collection;
- g. Railroad Grade Crossings;
- h. Emergency Management Services; and
- i. 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.

Policies:

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

County of Riverside General Plan

DRAFT Circulation Element



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