

7.4 CIRCULATION

7.4.1 Introduction

The Circulation Element is concerned with the movement of people and goods. Section 65302(b) of the Government Code requires that the Circulation Element address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities. Circulation is functionally interrelated with the land use pattern prescribed in the Community Organization and Development Element and has major implications for other elements including noise, air quality, energy, and community design. Section 65302(b) requires that a circulation element be correlated to the land use element. Furthermore, the Government Code states that “*the circulation element functions to some extent as an infrastructure plan that concerns itself with the circulation of people, goods, energy, water, sewage, storm drainage, and communications.*”

The system of streets, roads, highways, and freeways in addition to railroad and airport transport has developed in response to our needs to move freely and conveniently within and beyond community and regional boundaries. To the extent that it functions efficiently, the transportation system helps define our quality of life.

The transportation planning process in Shasta County is a complex program involving millions of dollars; the coordination of local, State, and Federal agencies; and the meshing of various planning reports, studies, goals, objectives, and policies. Each of these entities is responsible for functions essential to the system. The Circulation Element is but one part of this process. By itself, the Element cannot successfully implement nor fully respond to the needs of the County for a varied transportation network. It must be consistent with other planning documents and balance its objectives and policies with those of State and other local planning programs.

The information presented in this Element is designed to acquaint the reader with a broad overview of the transportation planning process that takes place in Shasta County. The parameters of this Element include defining the responsibility for transportation planning. Much of the information included has been derived from transportation documents prepared by the Regional Transportation Planning Agency (RTPA) and adopted by the Board of Supervisors. It is not the intent of this Element to duplicate specific information found in these documents. Rather, it is highlighted here to provide an understanding of the complexity of the transportation planning process, which not only involves Federal and State agencies, but numerous local agencies and encompasses a myriad of laws, rules, and regulations which in turn are implemented through a series of programs, plans, studies, and reports.

An interjurisdictional circulation system serves the Cities of Anderson, Redding, and Shasta Lake as well as the unincorporated portions of the County. Therefore, the need for interjurisdictional transportation planning (includes coordinated land use planning) and cooperation is important. How well local, State, and Federal agencies cooperate in creating and implementing individual as well as regional transportation plans will define the level of overall success.

7.4.2 Components of the Transportation Planning Strategy

The overall transportation planning strategy in Shasta County can be viewed as consisting of five major components:

- The Regulatory Framework (i.e., laws, rules, guidelines)
- Major Organizations (i.e., agencies, departments, boards)

- Transportation Planning Implementation Tools and Documents (i.e., Regional Transportation Plan, Transit Development Plan, Transportation Systems Management, Circulation Elements of local General Plans)
- Relationship of the Circulation System to the General Plan and Land Use Pattern
- The Transportation Network (i.e., roads, streets, highways, airports, and railroads)

Regulatory Framework

Transportation planning is heavily influenced by the regulatory framework that assigns specific legislative duties and responsibilities to various local and State agencies. A complete description of these laws, rules, and guidelines is provided in the Regional Transportation Plan.

At the local level, a myriad of County and City policies, programs, and development standards transform program objectives into reality. In many cases, tools such as local subdivision regulations and road and street improvement standards guide private (and public) development plans into finished projects. These provisions are normally granted through traditional “police power” provisions of State enabling legislation.

The following listing of legislative statutes provides the guidance necessary for the transportation planning process to function. Table C-1 lists the various Federal and State laws applying to and/or affecting the transportation planning process.

TABLE C-1 REGULATORY FRAMEWORK	
FEDERAL LAWS	
<ul style="list-style-type: none"> • Federal Clean Air Act • Federal Transit Act • Americans with Disabilities Act • Civil Rights Act • Transportation Equity Act for the 21st Century (TEA 21) 	
STATE LAWS	
<ul style="list-style-type: none"> • California Clean Air Act • Transportation Development Act (TDA) 	

Organizations and Agencies

To successfully implement the County’s multifaceted transportation program, a number of local, State, and Federal agencies participate in administering its various components. To fully appreciate the complexity associated with administering the entire transportation program, it is important to understand the hierarchy within the overall organizational framework in which actual transportation planning takes place.

Traditionally, the Circulation Element has identified the framework of the transportation network, primarily focusing on streets and roads. In this process, other significant portions of the entire transportation program have not been adequately discussed.

Table C-2 lists the organizations and agencies involved in the transportation planning process. Each of these entities is responsible for functions essential to the system. Targeted goals and implementation programs can only succeed if there is: (1) an understanding of how each agency is to function, (2) identification of expected performance criteria, and (3) ongoing coordination and cooperation gained by a free flow in information that spurs improved communication. However, the State must coordinate its plans with local government plans and the Federal government has a similar obligation.

TABLE C-2 ORGANIZATIONAL FRAMEWORK	
<p style="text-align: center;">FEDERAL AGENCIES</p> <ul style="list-style-type: none"> • Federal Highway Administration • Federal Transit Administration • Environmental Protection Agency 	
<p style="text-align: center;">STATE AGENCIES</p> <ul style="list-style-type: none"> • California Transportation Commission • California Department of Transportation (Caltrans) • California Air Resources Board 	
<p style="text-align: center;">LOCAL AGENCIES</p> <ul style="list-style-type: none"> • Shasta County Board of Supervisors • Air Pollution Control Board • Regional Transportation Planning Agency • Airport Land Use Commission • Redding Area Bus Authority • City Councils of Redding, Anderson, & Shasta Lake • City and County Planning and Public Works Agencies 	

Table C-3 identifies many of the Federal, State, and local plans that represent the most significant impacts on the transportation planning process. For more detailed information on any of the plans or programs, the specific document or program of concern should be consulted.

Transportation Planning Implementation Tools and Documents

Regional Transportation Plan (RTP) - serves as a guide for interjurisdictional circulation planning for Shasta County. The RTP must consider and incorporate, as appropriate, the transportation plans of the Cities and County as well as Caltrans. This plan was initially prepared and adopted by the Shasta County Regional Transportation Planning Agency (RTPA, formerly the Local Transportation Commission) in 1975. It is reviewed and updated by the RTPA every two years. The RTPA is composed of representatives of the three cities and the County.

The RTP was updated by the RTPA and approved in 2001. The following description provides a brief overview of key components and their relationships to the overall transportation planning process in Shasta County. Further details can be obtained by reviewing a copy of the RTP in the office of the County Department of Public Works.

The goal of the RTP is to provide for an effective, efficient, safe, balanced, and coordinated transportation system, at reasonable cost, that conserves energy, protects air quality, serves the needs of the local metropolitan area and region, and helps to implement local agencies' General Plans. The RTP discusses regional transportation issues and problems and possible solutions, and includes goals, objectives and policies for each transportation mode and area of concern. It also describes actions to be taken to implement the RTP and funding estimated to be available.

Transportation Demand Management/Transportation Systems Management - Techniques to encourage alternative modes of travel other than the single-occupant vehicle are classified as Transportation Demand Management (TDM). These techniques are used at the local level to reduce the traffic impact of new development. TDM is important since there is often not enough money to fund improvements to provide additional road capacity. Through TDM, localities need to find ways to reduce demand on the system so that the existing roadway capacity can be used most effectively.

Transportation Systems Management (TSM) is a relatively new concept in transportation planning and represents an opportunity to employ measures to reduce peak-period traffic by making more efficient use of existing transportation resources, and emphasizing ridesharing and non-vehicular options. Examples of these alternatives are flexible work hours, ridesharing, and vanpooling. In a number of California communities, the use of TSM measures have resulted in reaching acceptable levels of service and has become an important tool in land use planning in reducing the impacts of development, particularly those that occur on local road systems.

Examples of TDM/TSM are:

- Employer-sponsored programs
- Alternative work hours
- Telecommuting/teleconferencing
- Ridesharing
- Parking management and pricing
- Bicycling and walking

TABLE C-3 PROGRAM/PLAN FRAMEWORK
<p>FEDERAL PROGRAMS/PLANS</p> <ul style="list-style-type: none"> • Transportation Development Act • Transportation Improvement Plan
<p>STATE PROGRAMS/PLANS</p> <ul style="list-style-type: none"> • State Implementation Program • California Energy Plan • California Aid to Airports Plan • Transit Development Act
<p>REGIONAL TRANSPORTATION PLANS/PROGRAMS</p> <ul style="list-style-type: none"> • Regional Transportation Plan • Regional Transportation Improvement Program • Federal Transportation Improvement Program • Major Investment Studies • Interchange Study • Transit Capital Plan • Transit Development Plan • Level of Service Analysis Report • Transit Needs Assessment
<p>LOCAL PROGRAMS/PLANS</p> <ul style="list-style-type: none"> • Transportation Control Measures Plan • Northern Sacramento Valley Intercity Passenger Rail Study • County Bikeway Plan • Regional Transportation Agency Overall Work Program • Redding Municipal Airport Specific Plan • Airport Facilities Improvement Program • Subdivision Regulations • County & City General Plans (Circulation Elements) • Zoning Regulations • Air Quality Attainment Plan

Relationship of the Circulation System to the General Plan and Land Use Pattern

The most significant features of the circulation system in Shasta County are its dependence on the automobile and the location of a major multimodal (auto, truck, bus, rail, air, and pipe and transmission line) transportation corridor through the SCR Planning Area. These modes are discussed in the Transportation Network Section.

The circulation system and land use development pattern of a community are interdependent. A particular development or land use pattern will generate specific circulation requirements. The range of options available to meet these requirements will be largely determined by the existing development pattern. To use simplistic examples, the option of providing an airport to meet the need for fast freight delivery will be limited by acceptable terminal locations and by the existing development pattern. Likewise, the option to widen a roadway to increase its capacity will be limited by the land use pattern adjacent to the existing right-of-way.

Conversely, the design of a circulation system in a certain geographic area will play a major role in shaping its future development pattern. The most dramatic example of this relationship is the construction of an interstate highway through a previously undeveloped area. The exact route of the highway and the size, location, and spacing of interchanges will exert major influences on the type and intensity of future land uses.

The experience of Shasta County during the past two decades demonstrates that the development pattern of a community can substantially change in a relatively short period of time. Changes in the development pattern necessitate changes in the circulation system. However, the pre-existing development pattern can significantly limit the options available to meet these requirements, either by completely excluding them or greatly increasing their costs.

Since the General Plan prescribes a future development pattern, it also presents the opportunity to formulate a desired circulation system to serve this pattern and guide development so that this desired system may be realized with the minimum expenditure of private and public funds, dislocation of existing land uses, and adverse environmental impacts.

To accomplish this task, the proper linkage between land use planning and transportation planning must be established. Inherent in this pursuit is a need for a balance between economic growth and a functional land use pattern supported by an underlying transportation system capable of providing mobility and access options for its citizens and visitors. This conclusion is supported by a statement from Chapter 3.0 the General Plan Concept which says: "The overall thrust of development timing is to achieve a growth pattern which is provided with services in the most cost effective manner." This repeated acknowledgment that new development must be provided with timely and adequate services (including transportation) strengthens the importance of coordination between land use planning and transportation planning.

Land Use Concerns

There are a number of ways that land use development can be encouraged to occur in a manner that achieves a balance between land use and transportation planning. There is some sense of urgency to succeed in this endeavor. From an air quality perspective, the County has already been designated as a State non-attainment area for both Ozone and PM₁₀. There have been isolated instances where Federal air quality standards for ozone (primarily caused by automobiles and trucks) have been exceeded but not often enough to constitute classification as a Federal non-attainment area. The repercussions for falling into this category would subject local development to much stricter air quality measures and could deter economic development. A second consideration is associated with limited funds to construct needed road improvements including new construction and maintenance. Coupled with this factor are mandates such as the Intermodal Surface Transportation Efficiency Act (ISTEA) legislation that restricts new road construction unless there is demonstrated proof that air quality standards are not being compromised and all feasible measures have been taken to maximize the existing road capacity and reduce congestion on the transportation network. The prospect of obtaining sufficient funds to accomplish needed road construction has improved with the approval of Senate Bill (SB) 45 (1997) and the Transportation Equity Act for the 21st Century (TEA 21). The County will work with Caltrans and the Cities to improve the transportation system with a balanced investment in highways, transit, intermodal projects, and utilizing state-of-the-art technologies.

The County has the challenge of balancing the need for coordinated planning in the SCR area with the needs of three incorporated cities for urban and suburban development. An estimated 85 percent of the County's population resides in the SCR. Consequently, the bulk of trips originating or terminating in the County occur in this location. It must simultaneously accommodate rural and small community growth throughout the entire County. Any successes with planning in this environment will be dependent on how well the County plans to integrate with those of the other jurisdictions. Complicating the problem is the presence of Interstate 5 and the County being located within a regional recreation center, two significant factors that influence total trips impacting both resident lifestyles as well as the overall efficiency of the local transportation network.

The solutions to meeting the challenge exist within a web of local plans and programs evaluated against their ability to meet a number of State and Federal laws within prescribed time limits. However, there are a number of ways that the land use planning process can be changed to address these issues and contribute to improvements in the circulation system that also benefit air quality. Examples include encouragement of mixed use development to balance job/services with housing which minimizes the need for driving; encouragement of development at higher densities in appropriate areas; concentrating urban development along major routes and activity centers; encouragement of infill development; and the promotion of higher employment densities at work centers.

Relationship of the Circulation System to Noise, Air Quality, Energy, Safety, and Public Finance

The circulation system, as a vital component of land use planning, also has important implications for noise, air quality, energy consumption, public safety, and the costs of road construction and maintenance. These relationships are outlined below.

Noise

The circulation system, as it exists now and continues to evolve, increases noise levels along the transportation corridors throughout the County. Certain land uses, such as residences, schools, and hospitals are more sensitive to noise generated by motor vehicles than are other land uses. The circulation system, both as it exists now and as it will exist in the future, can be analyzed and its noise impacts measured. This permits the location of future development to avoid or mitigate these impacts, as provided for in the Noise Element.

Air Quality

The use of the circulation system is dominated by motor vehicles which consume fossil fuels and thereby generate emissions that degrade air quality. Air quality degradations caused by these emissions impact health and safety and aesthetic qualities.

The SCR Planning Area contains a major multimodal transportation corridor. This planning area also encompasses much of the extreme northern portion of the Sacramento Valley Air Basin. The Sacramento Valley Air Basin has a tendency to trap pollutants and prevent them from dissipating into the upper atmosphere. Vehicle emissions are the single largest cause of air quality degradation throughout the County. Included within this category are both vehicle trips which originate and terminate within the County and those which pass through on Interstate 5 and the State highway system.

Another important contributor to air quality degradation in the SCR Planning Area relates to suspended particulates generated by unpaved roads. Unpaved roads are major sources of particulate matter in Shasta County. The effect of unpaved road dust (and all particulates) is to raise the measured levels of total suspended particulates and reduce visibility. The Shasta County Air Quality

Management District (AQMD) estimates that about 39 percent of the inventoried particulate emissions come from unpaved roads. This is the largest single source category, far exceeding all industrial sources in the County (most industrial sources are monitored and regulated by the AQMD).

To combat this problem, the County has revised its road standards and policies to require that all new land divisions and commercial/industrial development shall be served by a paved road. Current standards require: (1) the paving of new subdivision roads, and (2) participation in an air pollution mitigation program for all new home construction where funds are deposited with Shasta County so that the funds may be borrowed to pave unpaved roads located under 1000 feet elevation. These factors are contributing to reductions in particulate emissions from these sources.

Controlling particulates and meeting air pollution standards are critical to the Shasta County Regional Transportation Plan (RTP). If the County is designated as a non-attainment area, the Regional Transportation Planning Agency (RTPA) must adopt a process to demonstrate that all transportation plans, programs, and related projects will not generate emissions that exceed thresholds established in an emissions budget designed to bring the County into conformance by a specific date. The RTP anticipates that this could lead to the potential of having Federal and/or State funding for transportation projects reduced or eliminated. This could ultimately create additional costs and delays in completing critical transportation projects. Further discussion on these and other air quality-related issues are presented in the Air Quality Element, the Shasta County Air Quality Attainment Plan, and the 2001 Shasta County Regional Transportation Plan.

Energy Consumption

The circulation system in Shasta County is dominated by the automobile. The direct costs of relying on automobiles are still relatively inexpensive. Low density land uses limit options to the automobile rather than other transportation modes. Currently, there is little incentive to explore alternatives. Because of the enormous lead time and conversion of capital resources needed to convert away from petroleum dependency, planning efforts made now to encourage alternatives to the automobile will likely provide many long-term benefits. Design concepts that benefit pedestrians can reduce the need to drive to many of the daily needs for residents. A pedestrian-friendly environment supports the use of other travel modes such as transit, ridesharing, walking, and bicycling.

A major alternative to the use of the automobile is the continuous development and expansion of the public transportation system serving the SCR Planning Area. This system uses buses that share the vehicular right-of-way with autos and trucks. The key to improving the transit system is a supporting land use or development pattern.

A land use pattern which facilitates transit has the following characteristics: (1) It locates residential development within a reasonable walking distance of a transit route at densities sufficient to generate a level of ridership which in turn will support transit service. Residential development along transit corridors within the transit service area should be at an average density of at least seven dwelling units per gross-acre. (2) It connects land uses, such as retail districts, labor intensive industries, educational centers, and medical facilities, that generate high traffic volumes and transportation system modal breaks (where a system ends, e.g., Redding Airport). The major destination points designated along the transit service area should be the preferred locations for new land uses which will generate high traffic volumes. The design and site planning of new residential uses that may be served by public transit within the transit service area should make reasonable provisions for future transit vehicle access (bus stops, looped streets, and adequate street widths). Similarly, new land uses within and adjacent to destination points should make reasonable provisions for future transit vehicle access.

The existing development pattern in the SCR does not have the above characteristics, and if current development trends continue, it will not be achieved. The result will be that any transit system that is developed will require a substantial public subsidy to support its operations. If an economically feasible transit system is to be a realistic future option in the SCR Planning Area, action should be taken now to guide development in a transit facilitating pattern.

Public Safety

The circulation system has implications for public safety in three important areas. (1) The system provides emergency vehicles with access to residences and businesses. (2) The system provides escape routes in the event of personal emergencies and areawide disasters, such as wildland fires. (3) Last and most important, the design and use of the system has major safety implications for all persons traveling within it. A system which is poorly designed in terms of network routes, road surfaces and traffic controls, and which is improperly used will not adequately provide for public safety. The Traffic Congestion Relief Program (TCRP) has been suspended due to the current state budget crisis.

Public Finance

An overview of the road maintenance problems facing Shasta County in the future is described in the 2001 Regional Transportation Plan (RTP) which states “... *most street and road systems are either deteriorating faster than funding will allow them to be maintained, or are becoming overloaded due to population growth and the resultant residential and commercial development.*”

In general, all transportation projects are funded by state and federal revenues. To that end, the level of these resources are dependent upon the scope and scale of construction in the fiscal year. State Transportation Improvement Program (STIP) funding, estimated in the 2006 RTPA at levels approaching \$10 million a year for new projects have been downward adjusted to approximately \$6 million per year.

Approximately three-quarters of the total 2003 County road budget cost of \$16.4 million was funded by State and Federal programs. The RTP indicates an annual system-wide need for maintenance and rehabilitation expenditures of \$15.8 million. Resources available account for half the expenditure amount. Therefore, the deferred maintenance shortfall continues to grow on an annual basis. At present, the RTP estimates a backlog of maintenance needs of greater than \$166 million for the region's streets and roads.

Timber receipts, traditionally a mainstay for road maintenance purposes, have dropped significantly due to the reduction in the amount of acres in Federal forests available for harvesting. The RTP further states, “. . . *the cost of new roads will be borne by developers who will be required to build them The County's budgetary limitation prevents the construction of new routes in any other manner.*”

The Financial Element of the RTP attests to the severity of the funding dilemma for local streets and roads, “*Streets and roads are deteriorating faster than they can be fixed, using the funding sources presently available. Many facilities need major reconstruction due to deterioration caused by lack of adequate maintenance.*”

An Interchange Improvement Study (IIS) was commissioned by the RTPA. The study concluded that many of these interchanges will require reconstruction to accommodate the additional growth in their vicinities. Construction costs will be borne, in part, by new development. Cost-sharing of some of these improvements is a vital concern and, therefore, should be addressed early in the initial planning stages of new land use projects.

In conjunction with the amount of roads requiring maintenance, the RTP identifies that there are 317 bridges in the County, 231 of which are eligible for Federal aid. Thirty-seven qualify for replacement. At current funding levels, these bridges are scheduled for replacement at a rate of two per year. At current funding levels, it is estimated that it will take fifty years to rehabilitate or replace those bridges in need of attention.

The Department of Public Works estimates that it will not have enough money to adequately address existing maintenance needs of the County road system. Cognizant of this fact, the County instituted a policy in 1995, whereby the County no longer accepts new subdivision roads into the maintained road system. An entity such as a Permanent Road Maintenance Division is formed to maintain these roads. The Permanent Road Maintenance Division then becomes the vehicle to provide road maintenance funds. Encouraging new growth within areas that can be serviced from existing road systems has become a necessity. Traffic impact fees are also collected with the issuance of building permits.

The situation has improved in that opportunity exists for capital improvements to the regional transportation system through the enactment of Senate Bill (SB) 45 in 1997. SB 45 makes the RTPA entirely responsible for programming and prioritizing transportation programs and projects in their area of jurisdiction. Previously, the expenditure programs developed by the RTPA were recommendations to the California Transportation Commission (CTC). The expenditure programs are now sent to the CTC for inclusion in the State Transportation Improvement Program (STIP). Under SB 45, the program adopted by the RTPA must be included in the STIP by the CTC. SB 45 spells out funding project categories eligible for funding for a broad range of transportation improvements, including not only State highways, but also grade separation, transportation system management projects, transportation demand management projects, local street and road projects, intermodal facilities, and pedestrian and bicycle facilities. This gives the RTPA project options which did not previously exist. However, the RTPA is made fiscally accountable for the cost of planning, designing, securing environmental clearances, right-of-way, and construction engineering and management which is highly scrutinized by the CTC.

Transportation Network

County Overview

The most important features of the circulation system in Shasta County are: (1) its extensive provisions for automobile travel, and (2) the location of a major multimodal (auto, truck, bus, rail, air, and pipe and transmission line) transportation corridor through the SCR area. The circulation system of Shasta County comprises several physical components, some of which may be used by more than one mode of transportation. The information provided in this section gives a glimpse of each of these modes and explains how they function as part of the overall system.

Highways and Streets

Highways and streets are the most extensive components of the County's circulation system and are used by both vehicular and nonvehicular modes of transportation. The automobile is the dominant mode of vehicular transportation, followed by trucks, buses, taxicabs, and bicycles. Nonvehicular modes of transportation include walking and horseback riding. Not all of the above modes of transportation can use the same highway or street at the same time without special provisions to avoid conflicts. Bicycle, pedestrian, and equestrian modes require the reservation of a portion of the right of way for their exclusive use. Major routes and interchanges within the South Central Region are listed in Table C-4.

TABLE C-4
MAJOR SOUTH CENTRAL REGION ROUTES AND INTERCHANGES

FEDERAL HIGHWAYS AND FREEWAYS

- Interstate 5 is the only major Federal highway in Shasta County and its intersection in Redding with other State and County roads, including State Route 299 and State Route 44, forms the backbone of the highway transportation network in the County.

Interstate 5 Interchanges

- Mountain Gate/Old Oregon Trail
- Churn Creek Bottom/Knighton Road
- North Anderson (Ox Yoke)/Riverside Avenue
- Cottonwood/Gas Point Road

STATE ROUTES (SR)

- | | | |
|----------|----------|----------|
| • SR 299 | • SR 273 | • SR 151 |
| • SR 89 | • SR 44 | • SR 36 |

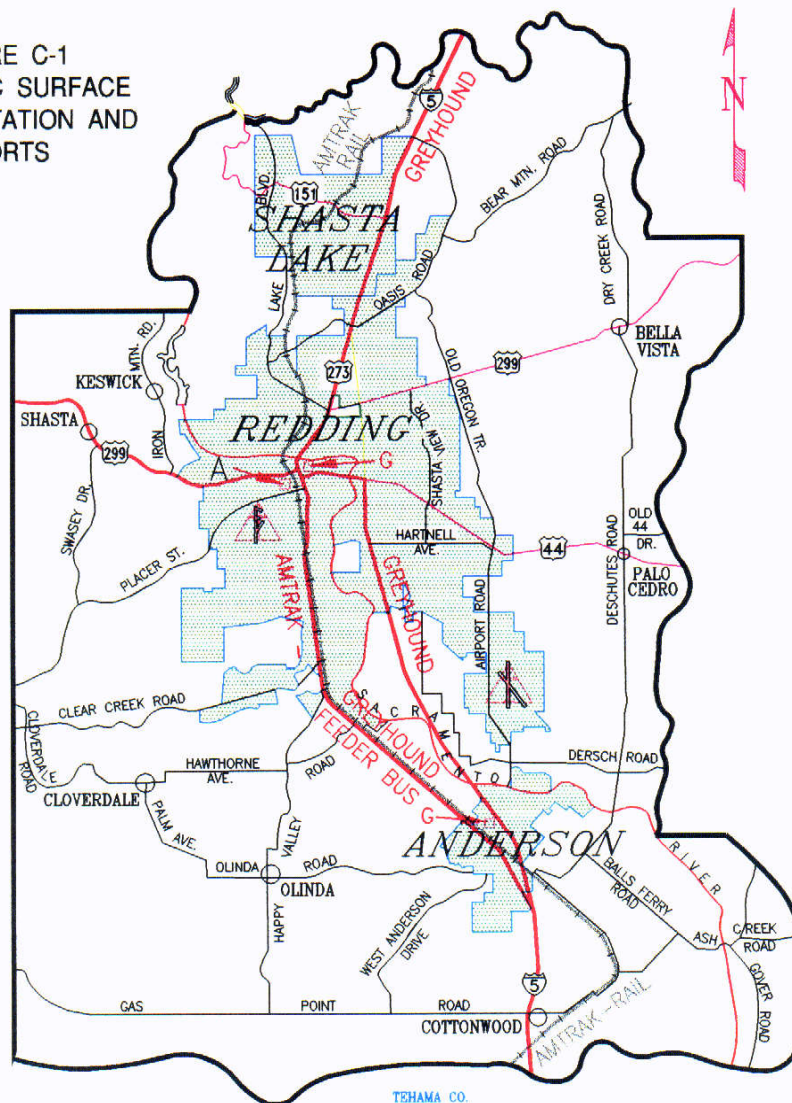
SR 44 Interchanges






- Airport Road/Old Oregon Trail
- Deschutes Road

SR 299E Interchanges

- Old Oregon Trail

FIGURE C-1
SCR PUBLIC SURFACE
TRANSPORTATION AND
AIRPORTS



EXISTING PUBLIC SURFACE TRANSPORTATION	COUNTY AIRPORTS	LEGEND
INTERREGIONAL RAIL INTERREGIONAL BUS INCORPORATED CITY TAXI SERVICE AVAILABLE FOR LOCAL BUS SERVICE SEE RABA ROUTE MAP	GENERAL AVIATION 	DEPOT AMTRAK GREYHOUND 
		 G  A  G

SOUTH CENTRAL REGION

A vital component in the overall network of the area's transportation system is the number and location of the interchanges distributed along the interstate and the local highway system. Their relative location and capacity to handle and direct traffic plays a significant role in determining how well the circulation system functions, particularly in the rural community and town center locations which they influence.

Local Transit System

Public transportation in the Redding area is provided by the Redding Area Bus Authority (RABA) which provides both fixed route and demand response transit services. The fixed route service consists of 12 routes with more than 450 individual stops. A demand response service provides curb-to-curb transportation for individuals who, because of a mobility impairment, are not able to use a regular fixed route system. RABA's transportation system links residential, industrial, commercial, and retail centers within the Planning area. Rural services consist of Express routes (commuter) to Burney. Fixed route and demand response services are provided for the City of Anderson. There are also three local taxicab companies, and several social service transportation systems serving the elderly and the disabled. School buses provide transportation for various school districts.

Bus Line Service

Greyhound Trailways bus line has six northbound and eight southbound buses passing through Shasta County each day. Anderson and Redding are the only Shasta County stops. Red Bluff is the next stop to the south, and Dunsmuir to the north. Amtrak also provides bus service to the Sacramento area with connections to the San Joaquin Train Route and the California Zephyr, which has connections as far east as Chicago, Illinois.

Railroads

Shasta County is served by two railroad lines: The Union Pacific single track main line which parallels Interstate 5, and the McCloud Railway Company, a single track short line running from McCloud to Burney. Union Pacific carries both passengers and freight, while the McCloud hauls only freight. Railroad transportation supplements and, in some instances, directly competes with transportation provided by trucks. Train movements average 24 per day within the Redding Metropolitan area. Boardings and alightings in Redding average 7,236 in the last five years. The following excerpts from the 1996 City of Redding "Metro Report" describe major rail service in the SCR area.

"Amtrak also services Redding and the surrounding region with train service. Although the Redding station is unmanned, there are two daily arrivals and departures from the Bay Area, as well as the one arrival and departure by the Coast Starlight, which carries travelers from Los Angeles to Seattle, Washington."

Redding is also served by four daily round-trip Amtrak feeder buses to the state-supported San Joaquin passenger rail service between Sacramento, Stockton, and Bakersfield and to the Capital corridor service between Sacramento, Oakland, San Francisco, and San Jose.

The development pattern contained in the Plan will likely generate increased demand for rail service. Since the railroad rights-of-way in Shasta County, including service spurs, are fixed and not likely to be expanded, it is important to ensure that land uses requiring this service now and in the future are protected and adequately served by rail access. The development pattern should also locate land uses sensitive to the noise impacts of rail transport at sufficient distances from the right-of-way. Finally, the railroad system should be integrated and compatible with other features of the circulation system and should avoid potential conflicts (e.g., at-grade crossings).

Air Travel

There are four publicly-operated airports in the County. Redding Municipal and Benton Field are owned by the City of Redding. Shasta County owns the Fall River Mills Airport and leases the Shingletown Airport. Redding Municipal provides scheduled air carrier service while charter service is available at Benton Field and Redding Municipal Airport. Two privately-owned airports, Enterprise Sky Park and Redding Sky Ranch, are no longer operating.

Redding Municipal Airport is approximately 1,702 acres in size, has a 27,000 square-foot passenger terminal which houses three airlines, three car rental agencies, a security office, a full-service restaurant, lounge, and administrative offices. It also provides for a mixture of commercial and industrial type uses, and is served by airlines from San Francisco, and Portland. It is a certificated airport for commercial airline operations. The airport has a 7,003 foot-long primary-instrument runway and a secondary non-lighted 5,062 foot-long runway. In 2002, there were an estimated 52,770 total aircraft enplanements and 55,258 operations. Approximately 164 based aircraft are located at the airport. The United States Forest Service and the California Department of Forestry and Fire Prevention operate a fire suppression base from the airport entailing approximately 24 aircraft.

The Fall River Mills Airport consists of a 3,600-foot runway, 14 based aircraft, several T-hangars, parking areas, adjacent storage units, and serves both piston-powered and turbine-powered general aviation aircraft. The airport is used for business, recreation, and emergency response. It is considered adequate for current use although improvements include a runway extension and taxiway repairs, expanded aircraft parking, expanded runway facilities, and instrument approach capabilities to serve existing and anticipated use of the airport. The RTP estimates that based aircraft may increase from 14 to 21 if current growth in the area continues. Capital improvements needed for this airport are described in the 2003 Shasta County Airport Layout Plan.

The Shingletown Airport consists of a 2,340-foot runway, two based aircraft and two T-hangars. The airport is used for business, recreation, and emergency response. Improvements needed include a new runway with lighting, aprons, and hangar areas. Capital improvements needed for this airport are described in the 1991 Shasta County Airports Master Plan. The airport has had its license suspended since November, 2002, due to trees growing in the transition zones.

The development pattern surrounding the airports should permit the future growth of the airports. The development pattern should not hinder expansion nor should any anticipated airport expansion and/or activities significantly impact or preclude the development of lands outside the airport boundaries. To this extent, the Redding Municipal Airport Specific Plan (ASP) fully addresses these issues. The land use standards and designations of the ASP are reflected in this General Plan and the General Plans of the Cities of Redding, Shasta Lake, and Anderson. This establishes the legally-required consistency between the Comprehensive Land Use Plan (CLUP) for airports and General Plans prepared by local jurisdictions. Noise and safety impacts of future airport expansion are additional land use issues and are covered extensively in the ASP. The Shasta County Airport Land Use Commission (ALUC), which consists of representatives from the Cities and County, is charged with administering airport land use plans in the vicinity of public airports.

Beltway

As a part of the General Plan Update of 1993, a future beltway was included in the Circulation Element. Although this concept was shown on the Circulation Element Map, there was no discussion provided describing its need, purpose, implementation, or funding. No prior investigation had been conducted to determine if a beltway, in fact, should be added to the County's Circulation Element.

Information provided in the RTPA explaining available County financial resources for new roadway construction suggests that development of a proposed Beltway would be a low priority and not practical at the present time from a funding standpoint. Funding from State and Federal sources distributed by RTPA are already committed through the year 2009, and no resources are allocated to either the study of a beltway or its future development. As a more practical matter, no money exists to research and develop a plan line program to protect the future right of way for a beltway. Without this critical step in place, future development would seriously jeopardize the intent of the beltway concept and, in time, render its implementation very difficult.

An alternative would seem to be the channeling of available resources to those portions of the proposed beltway that can function as links or extensions to existing arterials and collectors. For example, in the central part of the SCR, a need exists for additional east-west links that join SR 273 and Interstate 5 with Airport Road and SR 44. Given the opportunity to explore these options and with realistic expectations of future funding, this approach seems a more practical way to enhancing current and future traffic flows in the SCR area than developing a beltway system.

Bikeways

A regional Bikeway Plan was adopted by the Shasta County Regional Transportation Planning Agency in October 1984. It was prepared with the cooperation of the County and the Cities and focused primarily on the SCR area. The original plan was superseded by the 1995 Shasta County Bikeway Plan, which specifically addresses bicycle facilities for the unincorporated portions of the County, rather than utilizing a regional perspective. It was prepared in accordance with the California Streets and Highway Code in order to be eligible for Bicycle Lane Account (BLA) funds.

The Bikeway Plan also conforms with the California Bicycle Transportation Act. The overall goal of the Bikeway Plan is “to provide for a safe, effective, efficient, balanced, and coordinated bicycling system at reasonable cost that serves the needs of the people of Shasta County and supports the County General Plan.” Additionally, the Bikeway Plan contains a number of specific goals, objectives, and policies that will guide its implementation. Several of these statements are reflected in the Objectives and Policies section of this Element.

The existing bikeway network in the County is fragmented among local, Federal, and regional segments. The SCR area probably contains the most developed portions of the bikeway system. Table B-1 provides a brief description of this system. Additionally, Maps C-3 and C-4 provide a locational reference for this system. Table B-2 describes the various segments.

The role of bicycling in Shasta County should be emphasized, particularly as it might help (1) alleviate air quality problems associated with continued reliance on the automobile, and (2) minimize congestion impacts on the County’s transportation network. Investments already made in the development and implementation of bikeway improvement plans attest to both the County’s, as well as the Cities’ and Caltrans’ commitment to improving and expanding bicycling opportunities in Shasta County.

Pipe and Transmission Lines

Pacific Gas and Electric (PG&E) operates several natural gas pipelines within the County, and PG&E and the Central Valley Project maintain electric transmission lines serving hydroelectric projects throughout the County. The Pacific Power and Light Company, the City of Redding, and the City of Shasta Lake also have electrical transmission facilities in the County. Figures C-4 and C-5 show the general location of major utility corridors in the County.

Circulation Implications of the Development Pattern

The land use pattern of an area, specifically the types of uses and the density/intensity of development, will determine its circulation requirements with respect to the network of highways and roads. How well these links function is determined by the width of vehicular right-of-way as well as the standard for this right-of-way. The functional distinctions among roads are reflected in their varying standards for these key items: (1) Type of vehicular surface, paved or non-paved, (2) Width of vehicular surface, (3) Drainage improvements, and (4) Pedestrian movement and supportive improvements.

In order for County road standards to adequately respond to the circulation implications of the development pattern, the County has adopted road standards and policies. The road standards uniformly apply to all subdivisions and other discretionary development permits. They reflect functional road classifications and residential densities incorporated into the General Plan.

TABLE B-1 BIKEWAYS	
ROADWAY	DESCRIPTION
Interstate Five (I-5)	Serves SCR between Mountain Gate and Cottonwood.
California State Routes (SR)	SR 273 connects City of Redding to City of Anderson; SR 299 from Tehama County through Redding to Lassen County; SR 44 from City of Redding to Lassen County.
Old Oregon Trail	Connects SR 44 to SR 299, past Shasta College to Oasis Road to I-5 in Mountain Gate. Connects local bikeways to City of Redding, Shasta College, and City of Shasta Lake.
Happy Valley Road	Serves the Happy Valley area and West Valley High School and Anderson Union High School by connecting South Redding to Cottonwood by way of Gas Point Road and Happy Valley Road. Also, connects to I-5 and SR 273.
Deschutes Road	Connects City of Anderson to Palo Cedro, Bella Vista, and SR 299.
Placer Road	Will connect City of Redding to Branstetter Lane.
Lake Boulevard	Connects City of Redding to City of Shasta Lake, I-5, and SR 299 (Old Oregon Trail).
Source: 1995 Shasta County Bikeway Plan, Shasta County DPW	

**TABLE B-2
EXISTING BIKEWAY ROUTES IN SHASTA COUNTY**

SEGMENT	LOCATION	LENGTH	DESIGN FEATURES
Deschutes Road	Palo Cedro	1.3 mi.; 0.8 mi. of Class I bike lane; remainder is Class II.	Combination bikeway and bike path. Links schools, shopping center, and residential clusters.
Montgomery Ranch Rd.	West Redding Placer Rd. to Texas Springs	2.8 mi. of Class I bike lane.	Primarily links various portions of a large rural subdivision.
Churn Creek Road	South Redding Pacheco School to Churn Creek Estate subdivision	One mi. Class I bike lane.	Provides access between subdivisions and school.
Boyle Drive	Under Deschutes Road	0.125 mi. Class I facility	Provides local access within residential subdivision.

Note: Other bikeway facilities exist in the cities of Anderson, Redding, and Shasta Lake. Also, Caltrans has been active in the planning, development, and maintenance of various segments of bikeways which parallel one or more highways throughout the County. Readers are encouraged to review more specific information in the Shasta County Bikeway Plan.

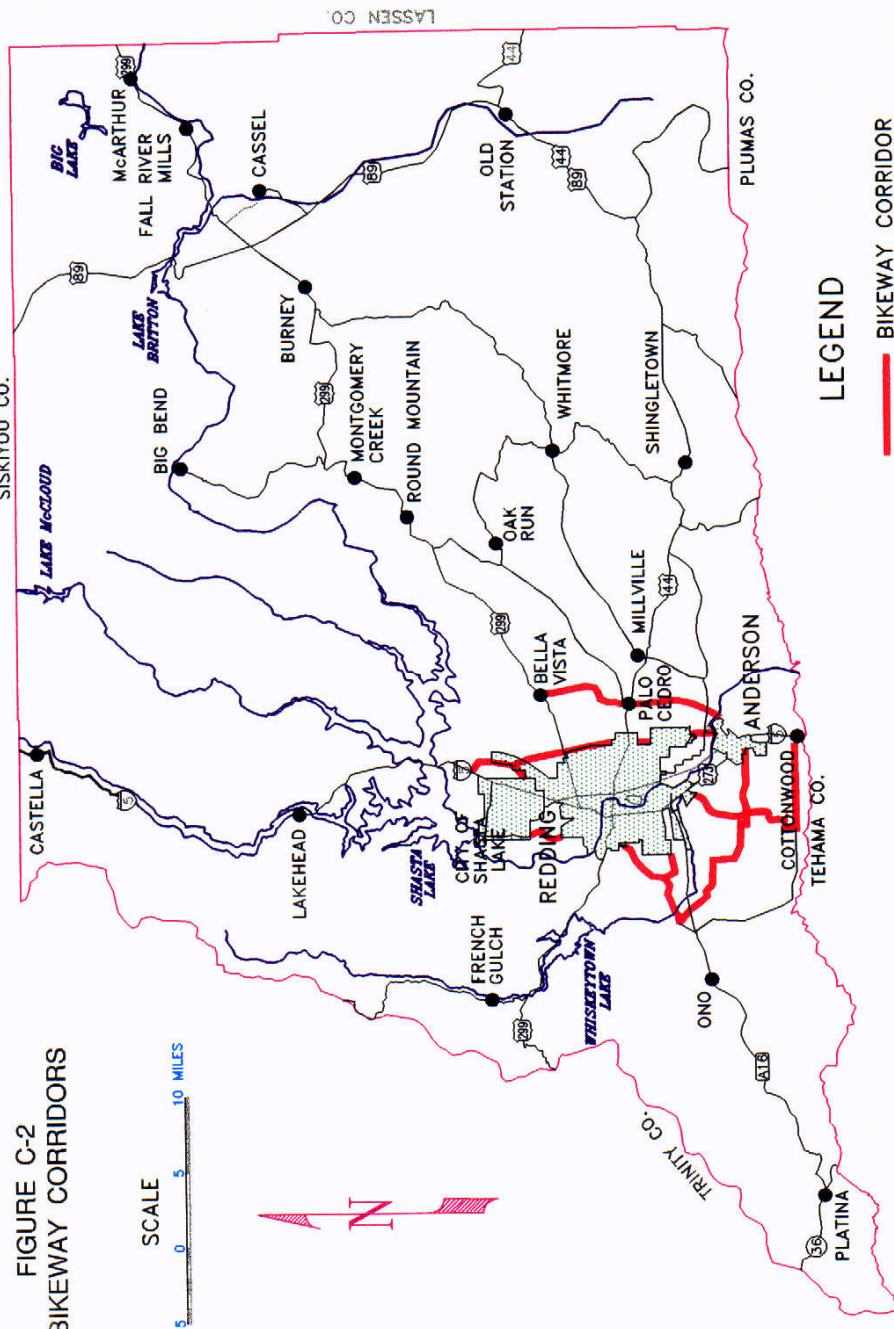


FIGURE C-2
BIKEWAY CORRIDORS

SHASTA COUNTY, CALIFORNIA

SOUTH CENTRAL REGION

**FIGURE C-3
SCR BIKEWAYS**

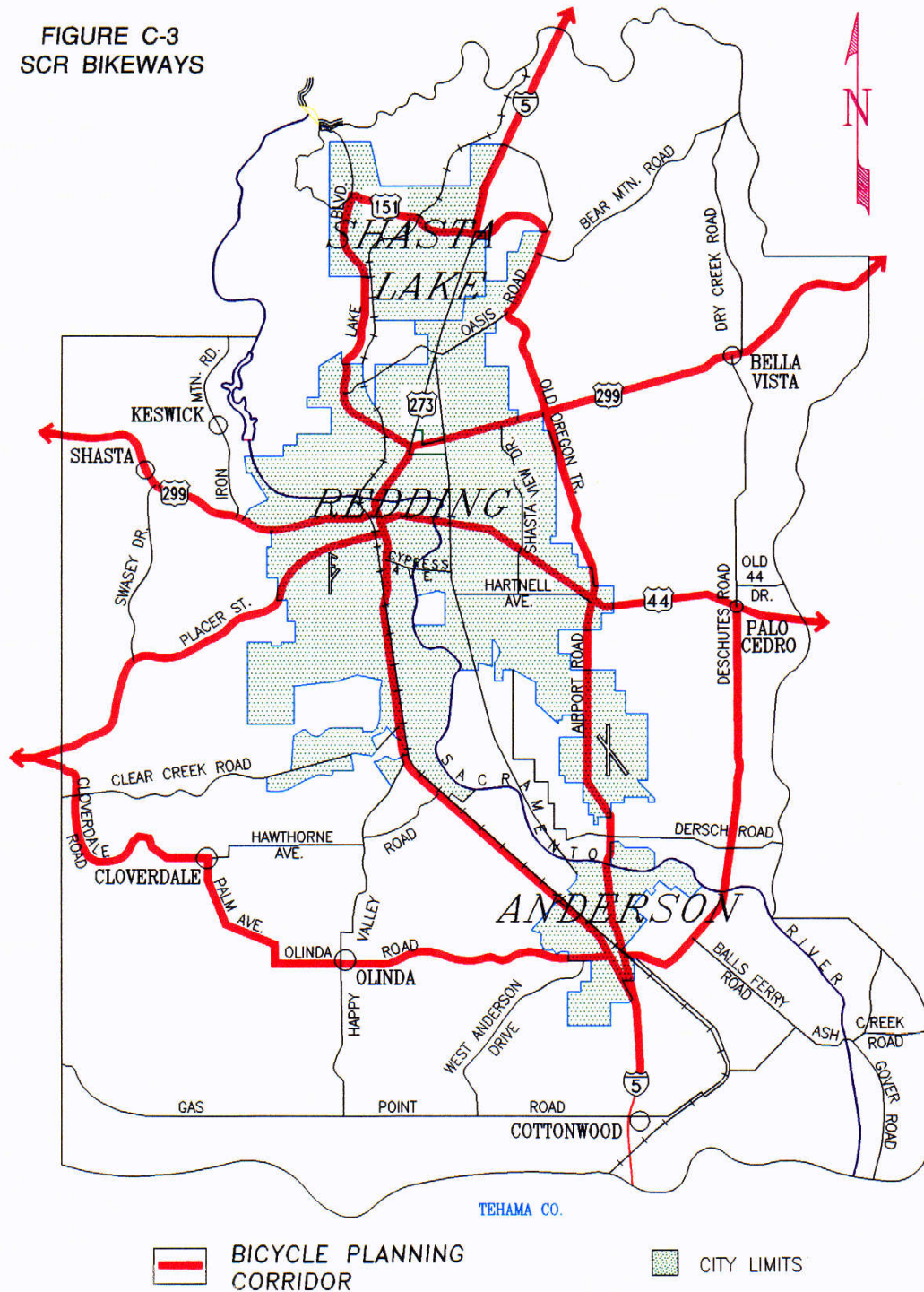
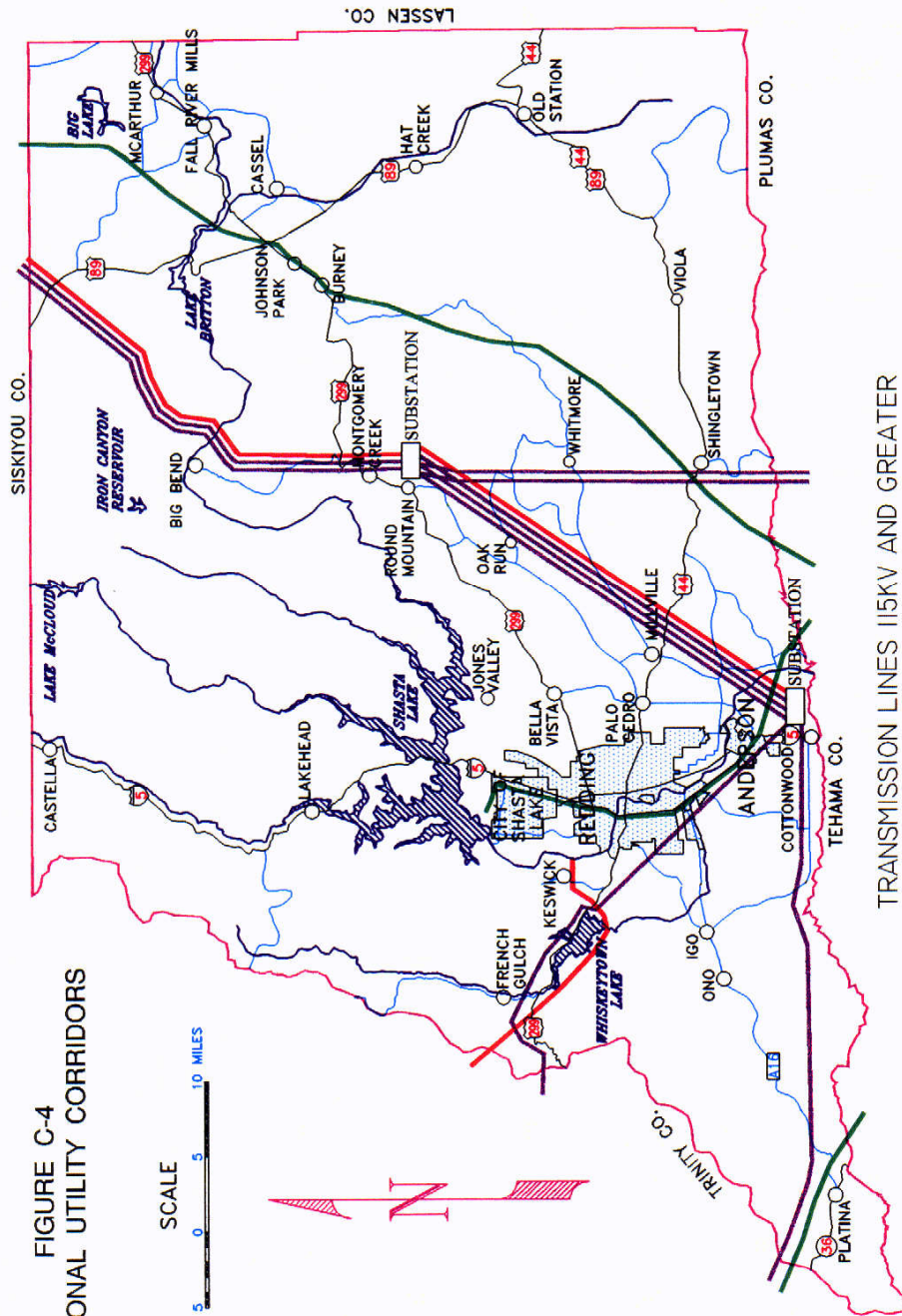


FIGURE C-4
REGIONAL UTILITY CORRIDORS

SCALE
0 5 10 MILES



TRANSMISSION LINES 115KV AND GREATER

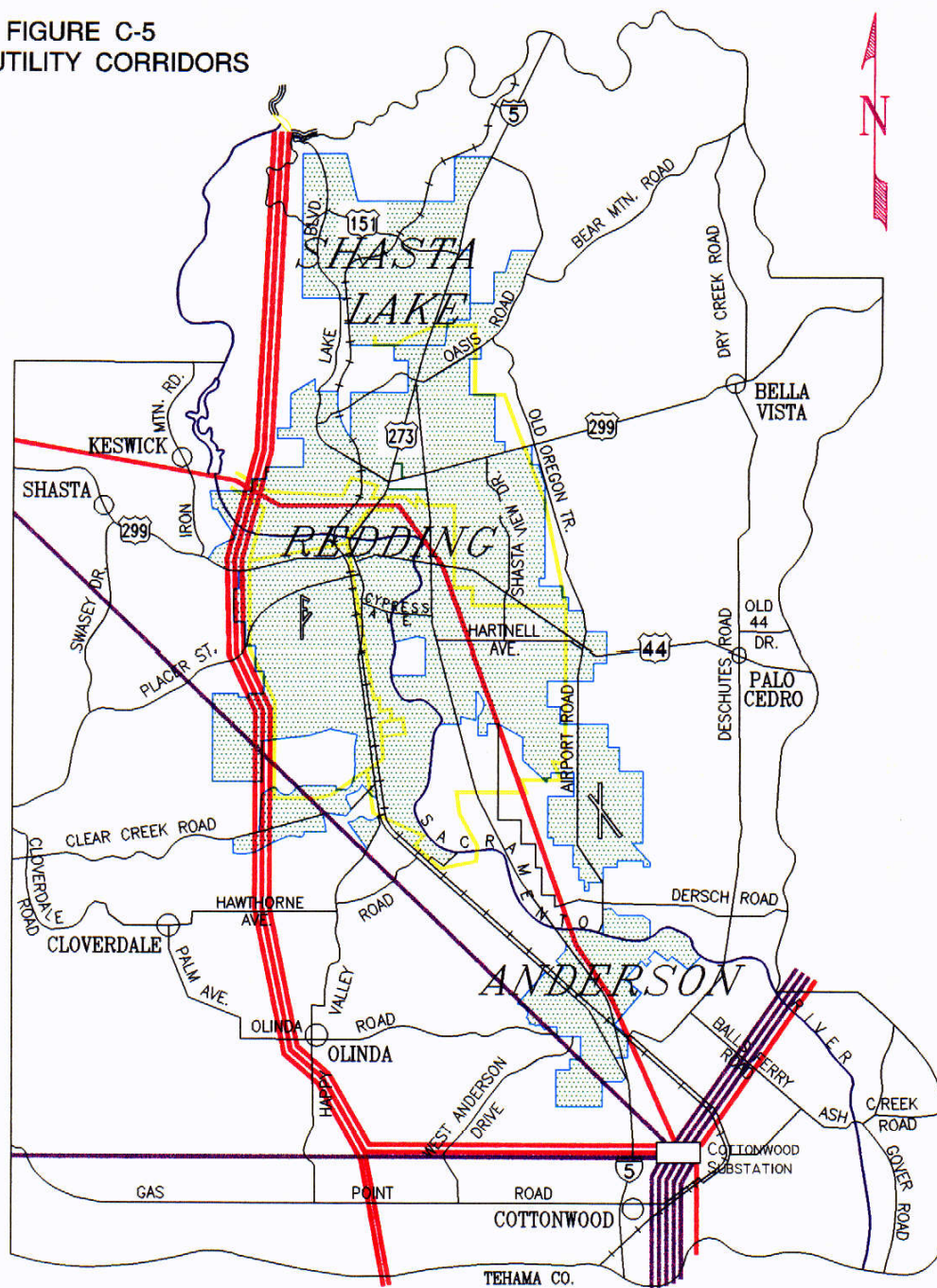
- PG&E TRANSMISSION LINE
- WAPA TRANSMISSION LINE
- PG&E GAS LINE

SOURCE: PG&E, AND WAPA '92

General Plan Revision Program: SHASTA COUNTY, CALIFORNIA

SOUTH CENTRAL REGION

FIGURE C-5
SCR UTILITY CORRIDORS



TRANSMISSION LINES 115KV AND GREATER

- PG&E
- WAPA
- CITY OF REDDING

CITY LIMITS

SOURCE: PG&E, WAPA, AND CITY OF REDDING '92

The land use pattern described in the Community Organization and Development Element of the General Plan has major implications for the highway and road networks in the SCR Planning Area, the Northeast Shasta Planning Area, and the remainder of the unincorporated area planned for urban, suburban, and rural community center development. The General Plans of Redding, Anderson, and Shasta Lake also affect the circulation patterns in the unincorporated area. In the case of Redding, its General Plan addresses a 116-square-mile planning area, of which slightly over half, or 59 square-miles, includes unincorporated lands. The street and road system which supports the land use development pattern is evaluated to determine projected traffic volumes utilizing the Shasta County Travel Demand Model.

The development pattern contained in the Plan has been analyzed according to the rate of vehicle trip generation expected from the land use pattern to determine future circulation demands expressed in terms of a functional highway and street network. Designation of the network in the Circulation Element permits the reservation of future right-of-way so it is not preempted by other land uses. The functional classification of each street network segment relates to the volume of traffic to be served along with a desired level of service which is determined primarily by the width of the vehicular right-of-way. Functional classification of street segments according to a future land use pattern enables the establishment of an ultimate right-of-way width and its reservation to serve this future pattern. In addition to right-of-way reservation, establishing the network and its functional classification allows development of an adjacent land use pattern that accounts for noise sensitivity, provides for appropriate access, and, where feasible, supports a public transit system.

In order to adequately plan for the future circulation network of streets and highways, the General Plan utilizes a functional hierarchy of road classification (refer to Table RS-1). This circulation system hierarchy is used in all circulation planning and the review of all development permits. The circulation system hierarchy is made up of the roadways which are classified as either principal arterial, arterial, collectors, subcollectors, major local streets, minor local streets, and minor streets. Principal roadways are identified on Figures C-6, C-7 and C-8 and further described in Table RS-1. Arterial and collectors are further divided into urban and rural roads. Urban roads generally require more right-of-way per lane, more lanes, and full urban improvements such as curbs, gutters, and sidewalks. All projects must be evaluated as to their conformance with this circulation network. All projects must also mitigate their impacts on the traffic system.

The Department of Public Works maintains an inventory of the County Roadways. The traffic implications of growth within the SCR area and the rest of the County are continually examined for all roads in the County as part of the development review and traffic planning processes. Figures C-6, C-7, and C-8 provide a summary of the major corridors leading from the unincorporated area into the incorporated areas. Traffic generated by growth in the outlying areas was calculated and assigned to these corridors. Detailed assessment of the impact of future development is available from the Department of Public Works and the Regional Transportation Agency. These agencies should be consulted for development requirements in conjunction with the adopted Public Works Road Standards and the RTP.

7.4.3 Goal, Objectives & Policies

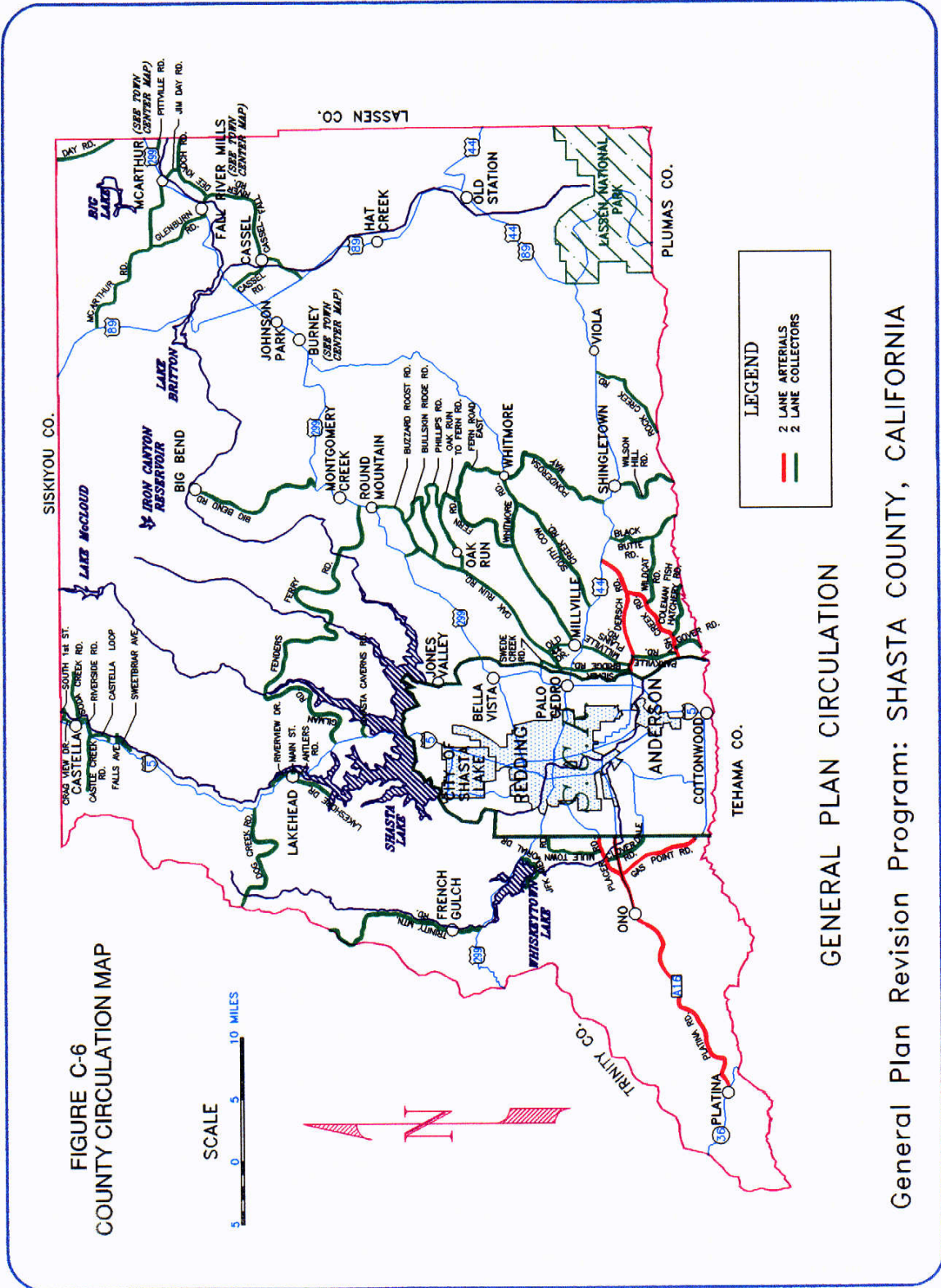
Overall County Transportation Goal

Shasta County shall strive to develop a balanced, integrated, and diversified transportation system that addresses the regional needs (both urban and rural) of its citizens for a convenient, affordable, safe, and efficient multimodal transportation system to move goods and people.

**TABLE RS-1
GENERAL PLAN FUNCTIONAL HIERARCHY OF STREET AND
HIGHWAY DESIGN STANDARDS AND RELATED POLICIES**

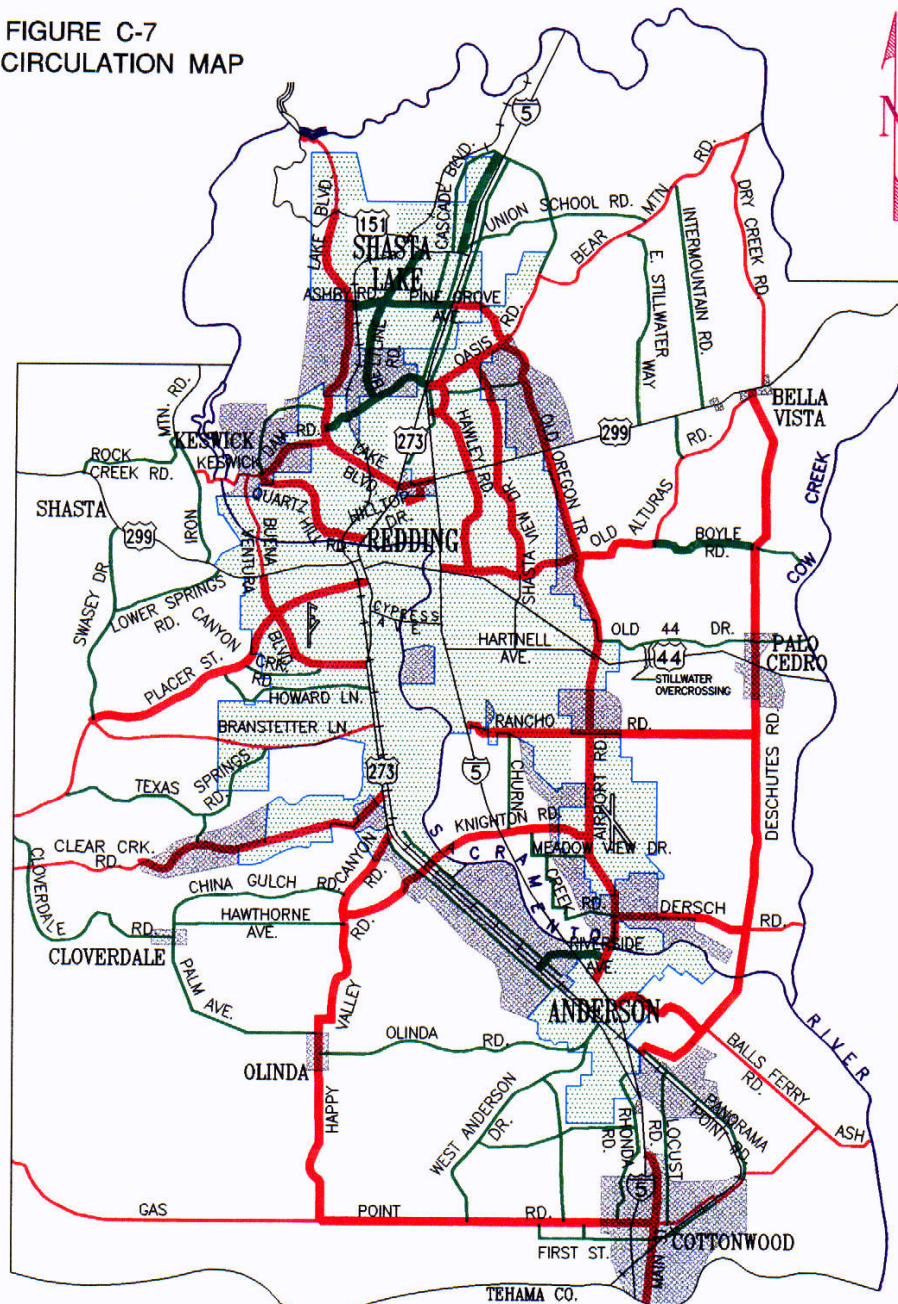
ROAD CLASSIFICATION	SERVICE FUNCTION	POLICIES
<i>PRINCIPAL ARTERIAL</i>	Provides regional, statewide and national transportation connections. All principal arterial are under Federal jurisdiction and include Federal highways as well as interstate highways.	Access from principal arterial to adjacent properties should be limited for safety and traffic efficiency. Right-of-way widths to be determined by Caltrans.
<i>ARTERIAL</i>	Provides connections between links in the highway network and connects major destinations with the highway network; access from arterial to adjoining properties should be limited for safety and traffic efficiency.	For the purpose of Section 66484 of the Subdivision Map Act, an arterial shall be considered a major thoroughfare. Arterial shall be shown on Plan maps. Curbside parking should be prohibited where feasible.
<i>COLLECTOR</i>	Accommodates traffic between principal arterial, arterial streets and/or activity centers.	For the purpose of Section 66484 of the Subdivision Map Act, a collector shall be considered a major thoroughfare. Collectors shall be shown on Plan maps. Direct access to individual residential lots should be limited where feasible to improve traffic safety and efficiency.
<i>SUBCOLLECTOR</i>	Subcollectors serve between 300 and 700 potential residences. Direct access from adjoining parcels is permitted.	Curbside parking is permitted, but should be discouraged in planned developments for reason of safety, aesthetics, and energy conservation. Subcollectors are not shown on the Plan maps.
<i>MAJOR LOCAL STREET</i>	Provides access for 50 to 300 potential residences.	Major local streets provide direct access to individual adjoining properties. Major local streets are not shown on the Plan maps.
<i>LOCAL STREET</i>	Provides access for 25 to 50 potential residences.	Local streets provide direct access to individual adjoining properties. Local streets are not shown on the Plan maps.
<i>MINOR LOCAL STREET</i>	Provides access for up to 25 potential residences.	Minor local streets are the only streets which may dead end in a cul-de-sac or court. Minor local streets are not shown on the Plan maps.
<i>MINOR STREET</i>	Other types of streets that carry very low volumes of traffic may also be utilized.	These streets are not shown on the Plan maps.

NOTES: Map Nos. C-7 and C-8 identify arterial and collectors. Arterial and collectors are further divided into urban and rural roads. Urban roads generally require more right-of-way per lane, more lanes, and full urban improvements such as curbs, gutters, and sidewalks. All development projects shall be evaluated for their compliance with the design standards for the County's circulation network and their specific criteria.



SOUTH CENTRAL REGION

FIGURE C-7
SCR CIRCULATION MAP

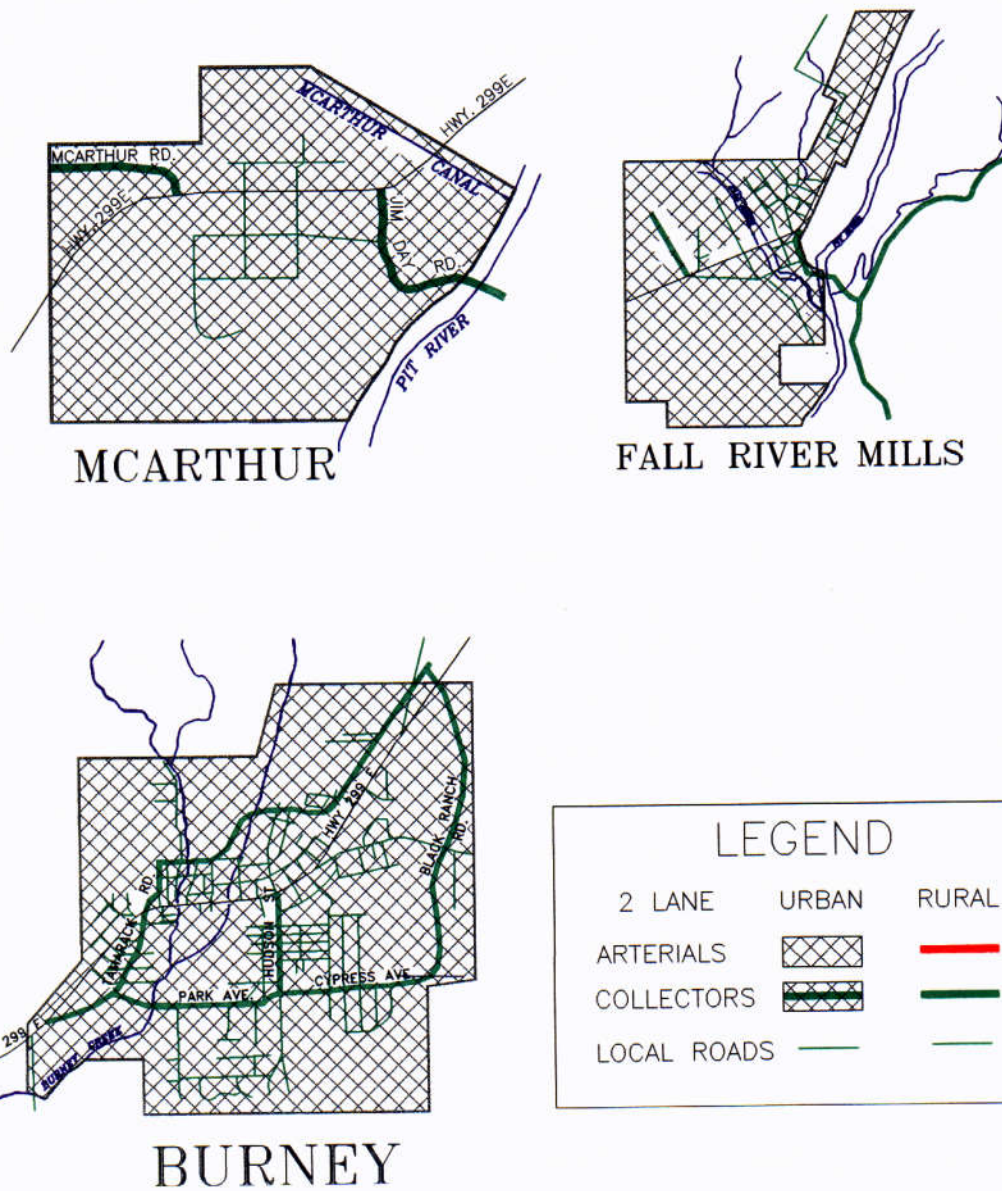


Refer to Dept. of Public
Works for full-scale maps
and road standards

URBAN	RURAL	
		4 LANE ARTERIALS
		2 LANE ARTERIALS
		4 LANE COLLECTORS
		2 LANE COLLECTORS

CITY LIMITS (URBAN)

FIGURE C-8
MOUNTAIN AREA CIRCULATION MAP



Objectives and Policies

Land Use, Automobiles, and Transit

Objective:

- C-1 Existing road capacity available within the County road system should be used to serve future development prior to constructing new County maintained roads.

Policy:

- C-1a The County should actively promote and implement a variety of travel demand reduction measures aimed at more efficient use of existing roads, bridges, and parking facilities.

Objective:

- C-2 Recognition of the private automobile as currently the primary means of personal transportation in Shasta County, combined with development of a land use pattern which accommodates and encourages alternative modes of transportation, including public transit to reduce vehicle trips, vehicle miles traveled, energy consumption, and contributes to the maintenance and improvement of the County's air quality.

Policies:

- C-2a The County should coordinate community land use planning strategies with local transit system development to achieve the highest level possible of vehicle trip reduction.
- C-2b Transportation Demand Management (TDM) strategies shall be encouraged through public education efforts for major trip generators, which provide for reduction of peak hour automobile trips through transit devices, staggering of work shifts, flextime, and TDM programs (e.g. car pool and vanpool incentives, provisions for bicycle facilities, and parking disincentives for single occupant vehicles).

Objective:

- C-3 To provide incentives to encourage land use development proposals that integrate mixed use concepts (i.e., residential, commercial, industrial, and public uses) in a compact form in or near major transit corridors as identified in the Transit Development Plan and the Regional Transportation Plan.

Policy:

- C-3a The County should develop a program and standards for transit/pedestrian-oriented techniques that promote, encourage, and allow for the mix of uses (i.e., residential of varying densities, commercial, recreation, etc.) within an acceptable walking distance of a transit stop and/or commercial area.

Objective:

- C-4 Shasta County, in conjunction with the Cities of Anderson, Redding, and Shasta Lake should strive towards the development of a land use pattern that will accommodate a future public transit system and supports the goals and policies of the County's Transit Plans.

Policies:

- C-4a Shasta County should continue to support intercity bus transportation and intermodal links with the major communities centers and any feasible rural centers.
- C-4b The design of streets as well as residential subdivisions, commercial and industrial development sites, and other developments in urban areas should (where appropriate) facilitate transit use by providing: (1) direct and paved pedestrian access to transit, and (2) bus turnouts and shelters.
- C-4c Shasta County will continue to support viable mobility options for those individuals whose access to automobile transportation is limited by age, income, illness, or disability.

Pedestrian and Bicycle Modes**Objective:**

- C-5 Recognize pedestrian and bicycle circulation as functional alternatives to the automobile in urban and suburban areas.

Policies:

- C-5a The design of urban and suburban residential developments should (where appropriate) incorporate functional internal circulation networks for pedestrians and bicyclists and, where feasible, should:
- connect to the external transportation system; and
 - link residential areas to work places, shopping, educational facilities, transit points, and recreation areas.
- C-5b New commercial site development plans, where appropriate, shall accommodate pedestrian and bicyclists by incorporating design provisions that:
- offer easy pedestrian access from street sidewalks or other pedestrian pathways, in addition to access from parking lots;
 - include attractive, functional pedestrian walkways and areas in residential, commercial, office, and industrial projects;
 - provides landscaping or other appropriate buffers between sidewalks and heavily-traveled vehicular traffic lanes; and/or
 - provides landscaped and safe pedestrian access through and from all parking lots.
- C-5c The County shall work with RTPA to implement the recommendations for development and improvement of bikeways and bicycle facilities as described in the County's adopted Bikeway Plan. New development projects should be evaluated for their consistency with the County Bikeway Plan. Where appropriate, new development should dedicate land and/or construct/install bicycle facilities.

Development Standards and Improvements

Objective:

C-6 Formulate and adopt circulation design standards that:

- are uniformly applied on a Countywide basis according to development type;
- respond to public safety and health considerations, especially vehicle and pedestrian safety, emergency access, evacuation routes, and the existing noise environments of communities;
- address all modes of transportation; and
- will not result in substantial deterioration of air quality.

Policies:

- C-6a Future road and street development including future right-of-way shall comply with the adopted County Development Standards.
- C-6b In order to adequately plan for the future circulation network regarding highways, roads, and streets, the General Plan shall use the functional hierarchy and related policies shown in Table RS-1 in its circulation planning. Arterial and collectors are further divided into urban and rural roads. Urban roads generally require more right-of-way per lane, more lanes, and full urban improvements such as curbs, gutters, and sidewalks. All projects shall be evaluated as to their conformance with this circulation network.
- C-6c New residential lots less than five acres in size in urban and/or suburban residential areas shall avoid direct access to arterial and collectors. Where feasible, such lots shall be served by an internal street system. In all other cases, maximize intersection and driveway spacing on arterial and collector streets. Where feasible, utilize shared/common driveways.
- C-6d New commercial and industrial development accessing arterial and collectors shall provide access controls for public safety by means such as limiting the location and number of driveway access points and controlling ingress and egress turning movements.
- C-6e Discretionary uses located in areas designated Mixed Use (MU), Commercial (C), or Industrial (I) shall be served by a paved road. The County shall obtain street right-of-way dedications with the approval of subdivisions, use permits, and other discretionary actions. All other non-residential discretionary uses not located in a General Plan area described above, excepting resource designations, shall ultimately be served by a paved road, unless deferred or waived, based on traffic generation factors.
- C-6f The County should pursue the development of a long-range right-of-way acquisition program or the preparation of a street Right-of-way Dedication Ordinance to facilitate obtaining needed street right-of-ways in order to enhance and protect its future road and street expansion program.
- C-6g All new land divisions shall be provided with a legally accessible road.
- C-6h Development adjacent to arterial and collectors should be designed to minimize the noise impact received from traffic. The circulation system shall also be designed with consideration given to minimizing noise impacts on adjacent development.

- C-6i Rural Residential “A” development along the north side of State Route 299E between Fall River Mills and McArthur shall be designed so that housing units utilize common collector roads located at intervals of not less than 1,000 feet.
- C-6j New development shall provide circulation improvements for emergency access by police, fire, and medical vehicles; and shall provide for escape by residents/occupants in accordance with the Fire Safety Standards.
- C-6k Shasta County shall adopt the following Level of Service (LOS) standards for considering any new roads:
- rural arterial and collectors - *LOS C*
 - urban/suburban arterial and collectors - *LOS C*
- C-6l New development which may result in exceeding LOS E on existing facilities shall demonstrate that all feasible methods of reducing travel demand have been attempted to reach LOS C. New development shall not be approved unless traffic impacts are adequately mitigated. Such mitigation may take the form of, but not limited to, the following:
- provision of capacity improvements to the specific road link to be impacted, the transit system, or any reasonable combination;
 - provision of demand reduction measures included as part of the project design or project operation or any feasible combination.

Interagency Coordination

Objective:

- C-7 To work with City, State, and Federal agencies in the development of an integrated circulation system utilizing a regional perspective.

Policies:

- C-7a Shasta County shall work with the Cities of Anderson, Shasta Lake, and Redding, with the participation of the Department of Transportation, to jointly coordinate planning within the urban and suburban areas of the SCR in order to develop a consistent land use pattern and a circulation system adequate to meet the short- and long-term needs. East-west and north-south linkages should be developed as part of this coordinated planning process to accommodate growth-related traffic. The Shasta County Regional Transportation Planning Agency shall be used as the principal agency for interjurisdictional circulation planning. The resulting circulation system should be reflected in the general plans of each jurisdiction and in the Regional Transportation Plan for Shasta County.

Railroads/Truck Traffic

Objective:

- C-8 To ensure that adequate provisions for expanding opportunities for rail transport and trucking service are accommodated in the County’s overall transportation plans.

Policies:

- C-8a Existing accessibility to rail service in the SCR and Northeast Shasta Planning Areas shall be protected by the development pattern from preemption by incompatible land uses. Opportunities for increasing accessibility to existing rail service shall be preserved by the development pattern.
- C-8b Working in conjunction with Caltrans, the County shall designate and provide signed truck routes, ensure that adequate pavement depth, lane widths, loading areas, bridge capacities, vertical height of overpasses and utility lines, and turn radii are maintained on the designated truck routes, and prohibit commercial truck traffic from non-truck routes except for deliveries.
- C-8c Adequate truck access to off-street loading areas in commercial and industrial areas shall be provided in all new development applications.

Air Quality**Objective:**

- C-9 To guide all segments of the County's transportation program in a manner that addresses, responds to, and meets State and Federal air quality standards.

Policies:

- C-9a All new roads serving new residentially-designated land divisions shall be paved to minimize air quality impacts and shall be implemented by application of the County Road Standards.
- C-9b Project proponents shall be required to implement effective measures included in the County's lists of Standard Mitigation Measures (SMM) and Best Available Mitigation Measures (BAMM) to reduce vehicle use and associated emissions related to existing and future land use development as part of the environmental review process.

Airports**Objective:**

- C-10 Shasta County, in conjunction with the RTPA; the Cities of Redding, Anderson, and Shasta Lake; and the Airport Land Use Commission, shall work cooperatively to ensure that (1) airport service is recognized as a vital part of the region's economy, (2) the goals, objectives, policies, and development standards adopted in any Specific Plan or Comprehensive Land Use Plan for any County airport are implemented and enforced, and (3) incompatible uses that could limit expansion of potential air service to Shasta County are prevented.

Policies:

- C-10a The County shall work cooperatively with the Cities to recognize the Redding Municipal Airport as a major entry point to the region.
- C-10b Shasta County shall ensure that all development projects comply with the intent of development policies and standards contained in adopted airport specific plans, facilities plans, or comprehensive land use plans for any airport in the County by restricting those land uses from the vicinity of airports which are deemed incompatible with customary airport operations.

Finance

Objective:

- C-11 To work toward developing and implementing viable options for financing new road and street construction and maintenance. Recommendations for new or expanded roads and streets in the Circulation Element shall be balanced against the timing, priority, and funding options contained in the Regional Transportation Plan and its related Transportation Improvement Plan.

Policies:

- C-11a Efforts should be made to coordinate the street and road improvements identified in the Circulation Element of the General Plan with those identified in the Regional Transportation Improvement Plan to develop an integrated long-range schedule and funding program.
- C-11b The County shall consider viable methods and refine its strategy for assessing fees on new development to address the impact of additional development on the County's transportation system. New development shall provide a prorata share of its financial impact on the County's transportation system.
- C-11c Shasta County shall encourage and support efforts by County residents to develop mechanisms to finance road improvements and maintenance and to pave unpaved roads.
- C-11d The County shall coordinate with the Cities and the State Department of Transportation to prioritize capacity increasing projects on State routes and intersections within said routes. These routes include Highway 299E to Bella Vista, Highway 44 east to Palo Cedro, and others where necessary.
- C-11e The County shall assess fees on new development to address the impact of additional development on the County's transportation system.