

# CIRCULATION ELEMENT

The purpose of the Circulation Element is to establish transportation goals and policies, and to establish specific implementation measures to assure that the transportation system in Calaveras County has adequately addressed the planned growth for the County through the year 2010. The element is divided into two parts. Part 1 addresses the road system. Part 2 addresses the balance of the transportation system (public transit, bicycle, pedestrian and equestrian traffic, scenic highways, airports, railroads, and pipelines).

## 1.1 Legal Authority

The Circulation Element is prepared pursuant to Section 65302(b) of the California Government Code. The Circulation Element is required to address the location and extent of existing and planned transportation routes, terminals, and other local public utilities and facilities. It is further required to be consistent with the other elements of the General Plan, accommodating future travel demand and contributing to, rather than inhibiting, the attainment of desired land use patterns in the Land Use Element.

## 1.2 Relationship to Other Elements

The law emphasizes that the Circulation Element be coordinated with the Land Use Element. The transportation plan, policy, and implementation measures established by utilizing the same projections of future population and economic activity as does the Land Use Element, by using the same geographic distribution of future population and economic activity as expressed in the Land Use Element map, and by designing the transportation plans and policies to contribute to the achievement of the planned land-use pattern.

## Part 1: ROAD SYSTEM

The road system consists of the State Highways, County Roads, and private roads used for motor vehicle traffic. Part 1 addresses those aspects of existing and planned road networks, including road maintenance and improvements.

## 2.0 Introduction

Projected increases in population will result in increased demand on roads within the County. To maintain the road system's adequacy due to such growth, policies relating to road classifications and levels of service are correlated with population density and land uses set forth in the Community Development Element.

## 2.1 Definitions

The following definitions apply to this Part:

- A) Average Daily Traffic: The number of vehicles, actual, estimated, or projected, traveling a road segment per day.

- B) Committed Average Daily Traffic: Current average daily traffic plus projected future traffic based on existing undeveloped parcels on a road or road segment.
- C) Community Area: Any Community Plan Area, Specific Plan Area, Special Plan Area, Mixed Use/Master Project Area, Community Center, or Residential Center.
- D) Degradation of LOS: Occurs when the level of service is reduced or affected due to actual or projected traffic impacts.
- E) Road Improvement Mitigation (RIM) Fees: Fees charged by the County for road improvements to offset cumulative impacts caused by land development. The amount of fees charged corresponds to the need for improvements attributable to a particular development. The monies are not used for general maintenance, but for design studies, engineering, and actual improvements.
- F) Level of Service (LOS): A term used to denote the ease with which traffic moves along a road at a consistent speed. It is a measure of convenience, not a measure of safety. Levels of service are divided into categories "A" through "F", and then for County roads, into speed limits to allow consideration for terrain, traffic flow, and road purpose. When determining LOS in community areas, consideration must also be given to routine delays associated with traffic control devices, crosswalks, turning, parking and generally higher density land uses. LOS categories are presented in the following table:

**TABLE III-1**

<u>Level</u>	<u>Traffic Condition</u>
LOS "A"	Free flow conditions; Low volumes; High operating speed; Uninterrupted flow; No restriction on maneuverability; Drivers maintain desired speeds; Little or no delays.
LOS "B"	Stable flow condition; Operating speeds beginning to be restricted.
LOS "C"	Stable flow but speed and maneuverability restricted by higher traffic volumes.
LOS "D"	Approaching unstable flow; Low speeds.
LOS "E"	Lower operating speeds; Volume at or near capacity; Unstable flow.
LOS "F"	Forced flow conditions; Low speeds; Volumes above capacity; Stoppages for long periods because of congestion.

- G) Project Specific Improvements: Improvement requirement imposed that applies specifically to the project being considered, based on the project's traffic generation,

its base zoning district, and the condition of the road affected by the project. The purpose of project specific improvements is to promote safe ingress and egress and to ensure that the project's specific impact to the road system is mitigated.

- H) Proportional Share of Traffic: The percentage of a category of traffic volume used to divide the responsibility for financing the overall improvement of the road. The four traffic categories are presented in the following Table:

**TABLE III-2**

Intercounty traffic --	traffic traveling through the County to points beyond the County.
Intracounty traffic --	the movement of traffic from one point to another point within the County.
Destination traffic --	traffic traveling from another County to a specific location within this County.
Local traffic --	neighborhood traffic that uses the road as the starting or ending point for residential purposes within the same community.

- I) Road Basin, Road Region: The areas served by a road or network of roads.
- J) Road Ordinance: The ordinance adopted by the Board of Supervisors to implement the Circulation Element.
- K) Service Classifications: To differentiate between roads located inside and outside community areas, the County divides all State- and County roads into two categories, Regional Roads and Community Roads. Roads within each category are classified to reflect traffic associated with present and future land use.

Regional Roads: Regional roads are public and private roads which are located outside Community Plan areas, Specific Plan areas, Community Centers Residential Centers, Mixed Use/Master Project Area and Special Plan areas unless the Special Plan indicates otherwise. The service classifications for regional roads are:

a) Major Arterials: Major arterials are multi-lane freeways which handle high volumes of traffic. There are no major arterials in Calaveras County, and based on land use projections to the year 2010, currently it is not projected there will be a need for major arterials in the County.

b) Minor Arterials: Minor arterials are roads which connect community areas and traffic destination centers (such as recreational facilities and resources) and provide corridors to move traffic into and through the County. All State Highways in the County are currently minor arterials.

c) Major Collectors: Major collectors are roads which move traffic from one community to the next. Major collectors move traffic from minor arterials into and out of community areas.

d) Minor Collectors: Minor collectors move traffic from traffic generators (such as residential areas) to major collectors or minor arterials. Minor collectors are generally located within residential areas where they connect a number of local roads to a major collector.

e) Local Roads: Local roads typically serve low-volume traffic generators located directly on the road.

f) Commercial Roads: Commercial roads are roads serving commercial development or properties.

g) Industrial Roads: Industrial roads are roads serving industrial development or properties.

f) Cul-de-Sac: Cul-de-Sac roads are roads that have only one point of access.

h) Minimum Service Roads: Minimum Service Roads are general access roads built to the County's minimum design standards.

i) Emergency Access Roads: Emergency Access Roads are roads which provide an alternate means of ingress and egress for emergency vehicles and evacuation.

Community Roads: Community roads are public and private roads located within a Community Plan Area, Specific Plan Area, Special Plan Area, Mixed Use/Master Project Area, Community Center, or Residential Center. The service classifications for community roads are:

a) Through Roads: The primary roads on which traffic moves into and out of a community area. A route through a community area may be considered a through road, even though a change of road is needed to complete the trip through the community area. Such a series of roads or road segments is a "through route". Outside of community areas, through roads transform into minor arterials or major or minor collectors.

b) Connector Roads: Connector roads move traffic within a community area onto a through road. Outside of community areas, connector roads transform into minor collectors.

c) Residential Roads: A residential road connects primarily single-family residential areas to connectors or through roads.

d) Commercial Roads: Commercial roads are roads serving commercial development or properties.

e) Industrial Roads: Industrial roads are roads serving industrial development or properties.

f) Cul-de-Sac: Cul-de-Sac roads are roads that have only one point of access.

g) Minimum Service Roads: Minimum Service Roads are general access roads built to the County's minimum design standards.

g) Emergency Access Roads: Emergency Access Roads are roads which provide an alternate means of ingress and egress for emergency vehicles and evacuation.

### **3.0 Public and Private Roads, New Construction, Access**

A public road is one which is dedicated and established for public use. Public roads in Calaveras County include highways in the State-maintained system; roads accepted into the County-maintained system; roads maintained by a County Service Area or Community Services District; and roads used by the public, but for which no public agency has the responsibility of maintenance.

A private road is one which is not dedicated for general public usage. The County does not maintain private roads. There are private roads that are the subject of formal maintenance agreements and private roads for which no maintenance agreements exist.

There are several locations in the County where new County-maintained roads may be needed in the future. The locations of the new roads are shown on Transportation Maps 3 and 4, and in Community, Special and Specific Plans, and Mixed Use/Master Project areas. New roads are anticipated to be financed primarily by those developing or subdividing property in the area.

New roads identified in Community, Special or Specific Plans, Mixed Use/Master Project areas, and the General Plan, must be constructed as new development occurs. Depending on the area, and committed capacity of roads, a developer may be required to construct the entire road, or merely contribute a proportional share of the cost.

In order to maintain a smooth flow of traffic within community areas, alternate access points should be identified along roads. Alternate access points may consist of shared driveways, frontage roads, or other road access to reduce the number of encroachments onto public and private roads.

### **GENERAL PLAN RECOMMENDATIONS**

Goal III-1: Identify a system of classification and new road placement consistent with the existing road system, to reflect areas suitable for land development.

Policy III-1A: Classify existing State highways and County roads using the service classifications set forth in the definitions.

Transportation Plan Map 1

Transportation Plan Map 2

Transportation Plan Map 3



Transportation Plan Map 4

Implementation Measure III-1A-1: Use Transportation Plan Maps 1 and 2 to identify service classifications for existing roads.

Policy III-1B: As development and land use patterns occur, identify locations for proposed new roads and improvements, and incorporate them into the General Plan.

Implementation Measure III-1B-1: Use Transportation Plan Maps 3 (Figure 9 from the 1996 Regional Transportation Plan) and 4 to identify proposed new roads and improvements.

Policy III-1C: Identify areas of the County in which alternate access policies shall be adopted.

Implementation Measure III-1C-1: Adopt alternative access policies for specific areas as the need is determined.

Goal III-2: Create and maintain a road system to serve the County's needs.

Policy III-2A: Require that access to new development and to newly created parcels meet County standards under any applicable Community Plan, Specific Plan, Special Plan, or Mixed Use/Master Project area, and the County Road Ordinance, Chapter 12.02 of County Code.

Implementation Measure III-2A-1: Continue to enforce the standards of the County Road Ordinance, Chapter 12.02 of County Code.

Policy III-2B: Consider acceptance of new roads into the County-maintained system only when such roads are built to County standards and have a general public benefit.

Implementation Measure III-2B-1: Accept new roads into the County-maintained road system only when the roads serve a general public area, have a logical through connection, serve a general public purpose, and have a level of service of A, B, or C.

Policy III-2C: Require that private roads be constructed to standards adequate to meet the needs of the parcels they serve.

Implementation Measure III-2C-1: Utilize road standards from the County Road Ordinance (Chapter 12.02 of County Code) for new residential, commercial, multiple family residential, recreation-oriented commercial, and industrial development.

## **4.0. State Highways**

### **4.1 State Highways**

Calaveras County has four State highways, all of which are classified as minor arterials.

**Highway 4** - Highway 4, the Ebbetts Pass Highway, serves the south county connecting from Stanislaus and San Joaquin to Alpine Counties. Highway 4 is a trans-Sierra route.

**Highway 12** - This east-west route connects San Joaquin County with San Andreas at Highway 49.

**Highway 26** - The trans-county west-east route serving the north county is Highway 26, connecting San Joaquin County via Valley Springs, Mokelumne Hill, and West Point to Amador County. The most easterly portion connects West Point to Amador County near Pioneer.

**Highway 49** - Highway 49 is the only north-south route. It traverses central Calaveras County and connects Amador in the north and Tuolumne in the south.

## **4.2 State Highway Improvements**

Caltrans is required by State law to conduct long-term State Highway System planning. Long-term planning includes analyzing existing and future travel conditions for each segment of a given route, establishing concept levels of service, identifying deficiencies, and proposing capacity-increasing improvements necessary to maintain adequate levels of service. The System Management Plan for District 10 approved in 1989 by Caltrans, is the State's long range planning and policy tool to guide decisions related to managing and improving the State Highway System within the District.

State funding is inadequate to make all capacity improvements throughout the State desired by Caltrans, and by regional and local government. Therefore, it is necessary to prioritize capacity improvement projects.

The highway system is broken into three general groups for planning purposes by Caltrans (District 10 System Management Plan, 1989). These groups prioritize the highway network by importance in the movement of people and goods and are as follows:

- 1) Major Routes. Major routes are heavily traveled inter-regional connections. These routes and route segments are classified as principal arterials. They are generally constructed to freeway and expressway standards.
- 2) Routes of Regional Importance. Routes of regional importance provide a network between smaller communities and rural areas. They also serve as connections to and between major routes. They are generally constructed as conventional highways, with stretches of expressway at spot locations.
- 3) Secondary Routes. Secondary routes are routes of lesser importance to the highway system. They are used primarily for local trips and have relatively low daily traffic usage.

In Calaveras County, there are no major routes. Caltrans has identified State Routes 4, 12, and 49 as routes of regional importance, and State Route 26 as a secondary route.

### **4.3 Scheduling Improvements**

State planning for highways is accomplished through several planning processes that identify capacity improvement projects as they are needed. The California Transportation Commission is charged with maintaining the State Transportation Improvement Plan (STIP) biennially. The STIP is a list of projects selected from the Regional Transportation Plans (RTPs) and Caltrans. Only after inclusion in the STIP is a specific date established for improvement projects to be undertaken. If a local jurisdiction determines that specific improvements to a State highway are important local priorities, a funding contribution from the local agency can expedite inclusion of the project in the biennial STIP.

The Calaveras County Local Transportation Commission prepares the Regional Transportation Plan that identifies and prioritizes regional road improvement projects needed in Calaveras County. The improvement projects are based upon a County-wide traffic model and traffic forecasts. The RTP identifies capacity improvement needs for the State highways, and insufficient State funding to complete all the desired improvements.

A Precise Plan for State Route 26 was prepared by Caltrans and endorsed by the Board of Supervisors in June of 1996. The Precise Plan illustrates the ultimate highway centerline by realigning the existing route to meet minimum standards, and the identification of potential shorter projects with the total length of realigning and upgrading. The plan also includes the setting of approximate right-of-way boundaries to aid the county in establishing minimum developer setbacks.

#### **Levels of Service (LOS)**

Caltrans determines existing level of service (LOS) for all State highways and also establishes "concept levels of service" for each segment of all State highways. The concept LOS is the minimum acceptable service the highway should provide the traveling public. The concept LOS establishes the goal of service adequacy, and the threshold below which a route is in need of improvement. Caltrans indicates not all segments of a route must be brought up to the concept LOS over the 20-year planning period, but significant progress must be made in order for the concept levels of service to be considered reasonable and achievable.

Factors Caltrans uses in establishing concept LOS for a route are terrain, surrounding land use, travel characteristics, relative importance of the route, relationship to other routes, urban and rural characteristics, functional classification, importance to the economy, public's perceived need, safety, and cost of improvement. The County recognizes that not all segments of the State Highway will always be maintained at the Caltrans concept LOS as pointed out by the Regional Transportation Plan, the base document utilized by the EIR analysis, but maintains the concept LOS as the ultimate goal.

The approved 1989 System Management Plan specifies the following concept LOS for State Routes in Calaveras County:

Table III-3  
**Concept LOS**

SR 4	C
SR 12	C
SR 26 West Calaveras County boundary to west intersection with SR 12	D
West intersection with SR 12 to east intersection with SR 12	C
East intersection with SR 12 to end	Maintain only
SR 49	C

**Project Specific Improvements**

Traffic generated by new development may impact the existing LOS on the State highway as it passes a project or at the intersection of a project's access to the State highway. Therefore, a developer may be required, as part of project approval, to make project specific improvements in order to maintain existing State highway LOS at the project's connection with the State Highway. Project specific improvements include, but are not limited to, left turn lanes, acceleration/ deceleration lanes, adequate encroachment width and onsite stacking distance, or traffic control signals.

**General Improvements**

General improvements, or capacity improvements, include, but are not limited to, changes in width, alignment, right of way, passing and auxiliary lanes, or similar construction to improve the LOS and achieve or maintain the concept LOS of a State highway. These improvements benefit the general public as well as developers.

State highway improvement and maintenance are the responsibility of the State. State funding is inadequate to make all capacity improvements desired by Caltrans. Therefore, it may become necessary for a local contribution to be made toward the cost of desired improvements to State highways in Calaveras County, in order to accomplish desired improvements.

Funding for general improvements on State highways, made necessary by new development, may be provided by a road improvement mitigation fee. The funds generated by road improvement mitigation fees are deposited in a trust fund for each State highway or State highway segment impacted by a development project. The amount of the road improvement mitigation fee for a project is based on traffic generated by the project and the 20 year projected development potential in the project vicinity.

A developer may be required both to pay a road improvement mitigation fee into the State highway trust fund and to make project specific improvements on a State highway serving a project. If a project specific improvement is also identified as a necessary general improvement, the costs of the project specific improvement will be subtracted from the road improvement mitigation fee. No payment will be required where project specific improvements exceed road improvement mitigation fee totals.

### **GENERAL PLAN RECOMMENDATIONS**

Goal III-3: Secure funding for State highway improvements needed to keep pace with increased development to provide for the public safety.

Policy III-3A: Establish short and long term goals for State highway improvements identified in the County Regional Transportation Plan.

Implementation Measure III-3A-1: The County will identify and transmit to the Local Transportation Commission for inclusion in the Regional Transportation Plan State highway improvements necessary to prevent capacity deficiencies and to provide adequate levels of service on State highways in Calaveras County.

Policy III-3B : Advance the priority status of improvement projects on State highways in Calaveras County.

Implementation Measure III-3B-1: Urge the California Transportation Commission to include priority State highway improvements in Calaveras County in the biennial State Transportation Improvement Plan.

Implementation Measure III-3B-2 : As appropriate, the Board of Supervisors may use the following funding mechanisms, individually or in combination, to pay for circulation and/or improvement projects:

- 1) State and Federal transportation funding;
- 2) Local sales tax increases as allowed by State law;
- 3) Road improvement mitigation fees;
- 4) Special Assessment Districts for improvement projects;
- 5) Dedication of land or other transportation improvements by developers; and
- 6) Other appropriate funding mechanisms.

Goal III-4: Provide and maintain a State highway system with capacity to serve projected State highway traffic at acceptable levels of service.

Policy III-4A: Utilize Caltrans' concept levels of service as guidelines for establishing acceptable levels of service on State highways and to determine improvements to be required of new development.

Implementation Measure III-4A-1: As appropriate, require traffic analysis for new development that may result in the degradation of a State highway below the concept level of service or that may otherwise have a significant impact on the State highway serving the development. Traffic analysis includes identification of all State highway impacts of the project and potential mitigation measures to avoid degradation of levels of service.

Policy III-4B: Consult with Caltrans for recommendations whether new development necessitates general improvements and/or project specific improvements to maintain the existing service level on any affected State highway.

Implementation Measure III-4B-1: At the time of permit approval, require developers to fund or construct project specific improvements necessary to maintain the existing level of service on State highways impacted by their development projects.

Implementation Measure III-4B-2: Address potential impacts of State highway safety deficiencies as part of project approval.

Implementation Measure III-4B-3: At the time of permit approval, require mitigation for new development impacting State highway segments currently below the concept level of service. Means of mitigation include, but are not limited to dedication of land for right-of-way, construction of general improvements, and proportionate contribution to funding general improvements.

Implementation Measure III-4B-4 : Utilize the Precise Plan for State Route 26 prepared by Caltrans when reviewing development projects for setback requirements.

Goal III-5 : Offset cumulative impacts to State highways caused by land development.

Policy III-5A: Apportion the mitigation required of new development for general improvements on an equitable basis, based on the projected cumulative impact for a 20 year horizon.

Implementation Measure III-5A-1: Establish a program of proportional road improvement mitigation fees for State highway general improvement projects.

Implementation Measure III-5A-2 : If a developer funds a general improvement beyond the appropriate proportional share, the County may permit execution of an agreement with the Board of Supervisors for reimbursement to the developer from future development.

## **5.0 County Roads**

The County road system has 13 major collectors and over 100 minor collectors. County roads serve varied purposes and carry different types of traffic.

Regional county roads are assessed in the Regional Transportation Plan (RTP) prepared by the Calaveras County Local Transportation Commission (LTC). Both the General Plan and Regional Transportation Plan provide a blueprint for county road improvement scheduling. The Local Transportation Commission may also add to the projected schedule of road improvements when found to be in the public interest.

The Regional Transportation Plan utilizes travel forecasting, general terrain, and Average Daily Traffic thresholds to determine level of service. However, for the purpose of calculating level of service on county roads, the County includes the reduced average speed due to specific terrain and design of roads based on field investigation. Therefore the more detailed County assessment may result in lower levels of service for county roads than the RTP determined level of service. The road improvement mitigation fees for county roads will be based on the County's more detailed analysis. A list of the most recently determined levels of service for County roads is attached in the Circulation Element Appendix.

### **5.1 Development Impacts**

When a proposed project needing discretionary approval is considered by the Planning Commission, or when a commercial, industrial or multi-family residential building permit is sought, a project's proportional impact on county roads is assessed, and road improvement requirements for the project are determined.

The traffic volume generated by a proposed project must be considered in relation to maintaining the existing level of service, as determined by the County, on an affected county road as it passes the project site or intersects with the project access road. The ability to access a development project is a benefit to the project proponent. The cost of maintaining or improving the existing level of service is the responsibility of the proponent.

#### **Project Specific Improvements**

Project specific improvements may include construction of a left turn pocket, acceleration/deceleration lane, encroachment improvements, or installation of traffic control signals.



When a development project is evaluated for its effects on county roads, the location of project-specific improvements is examined in relation to identified general improvements and the cumulative effect of development in the project vicinity. If a general improvement to the county road would or could incorporate the required project-specific improvements, the County may consider contributing to the cost of the improvement, if it is a high priority improvement in the Regional Transportation Plan and serves a general public purpose.

### General Improvements

General improvements may include road widening, improving sight distance, maintaining level of service, or complete realignment. General improvements benefit the public at large in addition to a particular project, so the cost is shared among those benefitting. Improving a road to appropriate standards requires consideration of both attaining a required level of service and meeting engineering requirements for the appropriate functional service classifications.

### Financing County Road Improvements

Road improvement financing is available from a number of sources. Table III-4 shows sources of annual road revenues. County road improvement projects are prioritized and scheduled through the LTC and the County.

Revenue Fund	91/92 Actual	92/93 Actual	93/94 Actual	94/95 Estimated	95/96 Estimated
Property taxes	\$422,918	\$310,842	\$310,041	\$343,922	\$343,922
Licenses and permits	69,854	44,223	36,052	35,500	35,500
Court fines	49,759	37,537	29,535	30,000	30,000
Interest	96,799	71,863	51,890	52,000	52,000
State sources	2,411,632	2,403,836	2,455,178	2,630,456	2,730,576
Local sources	272,564	343,413	389,059	585,284	374,410
Subtotal	3,343,526	3,211,714	3,271,755	3,677,162	3,566,408
Federal non-restricted	826,238	189,331	502,849	189,130	189,130
Federal restricted	7,685	342,115	255,304	1,488,359	1,234,883
Total	\$4,177,449	\$3,743,160	\$4,029,909	\$5,354,359	\$4,990,421

## GENERAL PLAN RECOMMENDATIONS

Goal III-6 : Maintain and improve existing levels of service of county roads.

Policy III-6A: Coordinate road improvement requirements between the County, LTC, and development.

Implementation Measure III-6A-1: Enforce the design standards of the Road Ordinance, Chapter 12.02 of County Code.

Implementation Measure III-6A-2: Include measures to maintain or improve levels of service on county roads in connection with subdivision approvals, and commercial, multi-family residential, and industrial design and building permits.

Implementation Measure III-6A-3: Amend the Regional Transportation Plan to include county road improvements identified in the General Plan.

Goal III-7: Provide for financing of project-specific and general improvements to county roads.

Policy III-7A: Develop road improvement mitigation fees on an equitable, proportional basis.

Implementation Measure III-7A-1: Regularly review existing county roads, including the cost of general improvements, existing level of service, traffic volume and remaining capacity.

Implementation Measure III-7A-2: Assess development its proportional shares of county road improvement mitigation based on the development's proportional impact to and use of the following types of road usage:

- Intercounty traffic
- Intracounty traffic
- Destination traffic
- Local traffic

Implementation Measure III-7A-3: Adopt a road improvement mitigation fee Ordinance to help finance general improvements to County roads.

Policy III-7B: Review proposed development projects to determine whether they warrant project-specific improvements to county roads to maintain level of service at the subject property.

Implementation Measure III-7B-1: Require project-specific improvements, including but not limited to, left turn pockets, escape lanes, acceleration/deceleration lanes, improved encroachments, and traffic control devices, the costs of which are to be borne by the project proponent and which may exceed beyond the project's frontage in order to facilitate the necessary improvement.

Policy III-7C: Ensure monies are collected to upgrade county roads to the standards of their respective functional service classifications.

Implementation Measure III-7C-1: Require developers seeking discretionary approval of a project or construction of new multifamily residential, commercial, or industrial development on parcels served by regional county roads at level of service A, B or C to contribute as needed to the road improvement mitigation fund for both the road region and the road serving the subject property.

Implementation Measure III-7C-2: When a project is proposed to be located in a road region which includes county roads at level of service D, E or F on which traffic generated by the project will logically travel, allow the developer the following road improvement options:

- Defer project consideration until the county road is upgraded to level of service A, B or C;
- Construct at developer expense all onsite and offsite improvements necessary to upgrade all county roads impacted by the project to service level A, B or C;
- Form an improvement district with other property owners in the area to share the cost of upgrading impacted county roads to service level A, B or C.

Implementation Measure III-7C-3: If a developer funds the cost of upgrading a county road to service level A, B or C, permit execution of an agreement to reimburse the developer for expenses beyond the required proportional share or improvements; reimbursement may come from fees collected from future developers or future building permits issued in the road region.

## **6.0 Private Roads**

Private roads in the County range from fully paved sections meeting County road design standards to tire ruts through a field. Many private roads which were adequate at the time of original construction are now inadequate due to lack of maintenance combined with increased use. Others which were constructed adequately for the original purposes of the road, are now overburdened by increased use.

Standards for private road improvements are established by the County in the Road Ordinance. Many existing private roads have no means of maintenance, unless an agreement is made among all road users.

When development is proposed on a private road, the County becomes involved to ensure that the private road provides adequate access to the proposed project. Development on a private road may also impact the public road to which it connects. The level of service on the public road must not be degraded as a result of private road development. The proponent is responsible for the full cost of the required private road improvement that is needed to accommodate the proposed project.

## GENERAL PLAN RECOMMENDATIONS

Goal III-8: Ensure that all new parcels have adequate legal access.

Policy III-8A: Approve no subdivision or parcel map unless there is legal access to the subject property.

Implementation Measure III-8A-1: Enforce the provisions of the County Road Ordinance, Chapter 12.02 of County Code, for all new divisions of land.

Implementation Measure III-8A-2: Require that private roads are developed to the standards of the County Road Ordinance, Chapter 12.02 of County Code.

Goal III-9: Provide for future maintenance of private roads.

Implementation Measure III-9-1: Require all subdivisions proposing to use private roads as legal access to form mandatory road maintenance entities which provide for assessments and enforceable collections.

### 7.0 Road Maintenance

County and state maintained roads receive funding for general road maintenance. Non-county maintained public roads and private roads do not qualify for public funding. There are a number of means by which the non-publicly maintained roads can accumulate funds for maintenance:

- **Informal associations**, in which property owners provide road maintenance on a purely voluntary basis, when they feel it necessary.
- **Homeowner associations**, generally formed with recordation of a subdivision map and deed restrictions (CC&R's); many newer associations are likely to include mandatory provisions for the collection of annual assessments.
- **County Service Areas (CSA's)** are County administered special districts formed and operated by the Board of Supervisors under the County Service Area Law (Government Code section 25210.1 *et seq.*); when CSA's are established for road maintenance purposes, assessments are collected in the same manner as property taxes.
- **Community Services Districts (CSD's)** are special districts established pursuant to the Community Services District Law (Government Code section 61000 *et seq.*), and are governed by an independent board of directors elected by registered voters in the District; if a CSD is established for road improvement and maintenance, assessments are collected in the same manner as property taxes.

- **Community Facilities Districts (CFD's)** are special districts established and operated by the Board of Supervisors under the Mello-Roos Community Facilities District Act of 1982 (Government Code section 53311 *et seq.*).

The following table lists the CSA's, CSD's, and CFD's in the County.

<b>TABLE III-2 ROAD MAINTENANCE AGENCIES</b>	
County Service Areas	
#1 Rancho Calaveras #2 Bar XX #4 Diamond XX #5 Campo Seco Estates	#8 Spring Hills #10 El Rancho Loma Serena #12 Golden Hills
Community Services Districts	
Appaloosa Road Circle XX Copper Cove Rocky Road Lynn Park Acres	Mountain Ranch Subdivision Saddle Creek Three Cent Flat Wallace
Community Facilities District	
#1 Hathaway Pines	

Although the Board of Supervisors disfavor the creation of new County Service Areas due to the significant County staff time spent in their administration and the frequent lack of consensus among property owners within CSA's as to road maintenance priorities, the Board recognizes that there are circumstances under which the formation of a new County Service Area may be appropriate.

Any district formation must follow action by the Local Agency Formation Commission (LAFCO).

### **GENERAL PLAN RECOMMENDATIONS**

Goal III-10: Provide for the formation of special districts for road maintenance and other infrastructure improvements.

Policy III-10A: Consider available forms of mandatory road maintenance financing.

Implementation Measure III-10A-1: Establish criteria for determining when one method of road maintenance financing is to be preferred over others.

Policy III-10B: Encourage the formation of Community Services Districts in areas where there are or will be an adequate number of registered voters to properly operate the district.

Policy III-10C: Consider the formation of County Service Areas or Community Facilities Districts for areas with too few registered voters to properly operate the district, or where the proposed area consists of urban scale development.

Implementation Measure III-10C-1: Allow formation of new County Service Areas only when all of the following criteria are met:

- The project consists of non-residential or non-resource development or consists of residential development with approved density of at least three dwelling units per acre;
- The infrastructure for services to be incorporated in the CSA is constructed to county maintained or utility-required standards;
- The minimum annual maintenance assessment equals the estimated costs of ongoing facility or infrastructure maintenance and contains an automatic escalation clause to cover estimated inflation rates for services to be provided;
- The proposal is approved by the Local Agency Formation Commission (LAFCO);
- The project proponent demonstrates that financing for initial facilities and infrastructure construction has been approved by the entity providing funds.

## **8.0 Other Road Issues**

### **8.1 Road Encroachments**

A road encroachment is the intersection between a public road and a private road or driveway. On state highways, encroachments are regulated by Caltrans. On county roads, encroachments are administered by the Department of Public Works based on standards in the County Road Ordinance. On private roads, unless regulations are established by a special district, there are no standards for encroachments.

Failure to maintain or properly construct any regularly used encroachment may result in damage to the road surface caused by storm water drainage or breakdown of the pavement edge. Substandard encroachments may also cause problems for snow removal operations, and may pose safety problems.

### **8.2 Snow Removal**

A substantial portion of the County lies above the 3000 foot elevation, which is considered the "normal" snow line. Caltrans provides clearing operations on the state highways. On county roads, responsibility for snow removal normally rests with the Department of Public Works. Because of the volume of snow and high costs of removal, the County does not remove snow from public roads above the 5000 foot elevation, with the exception of a few roads in Big Trees Village. The County also does not remove snow from dirt or gravel roads.

### 8.3 Mining and Timber Production

Two major resource industries in the County are mining and timber production. Because those industries must operate where mining and timber resources are located, operations tend to be located on lands in isolated areas with substandard public or private roads.

The Mining Use Permit approval process for mineral extraction operations provides an opportunity to examine project-specific impacts to roads. Methods of offsetting potential road impacts include assessment of weight fees on haul vehicles using a per ton/mile formula, as well as requiring improvements to encroachments or to substandard roads. The periodic nature of mineral extraction projects and their actual road impacts need to be considered so that the burden of road mitigation placed on mining projects does not exceed actual impacts.

Timber production in Calaveras County takes place primarily on national forest lands or on private lands within the Timber Production Zone. Timber producers and harvesters pay special use taxes based on actual production. The yield tax on private timber lands accrues to the County General Fund, whereas the timber tax from harvesting timber on National Forest lands is divided equally between schools and the County Road Fund.

#### GENERAL PLAN RECOMMENDATIONS

Goal III-11: Assure adequate development standards for encroachments on public and private roads.

Policy III-11A: Require that encroachments be completed before use or occupancy of any development encroaching onto public roads.

Implementation Measure III-11A-1: Enforce provisions of the County Road Ordinance, Chapters 12.02 and 12.08 of County Code and Zoning Code, Title 17 of County Code, relating to encroachments on public roads and roads within special districts.

Goal III-12: Provide for adequate snow removal operations.

Policy III-12A: Review development proposed above the 3000 foot elevation for adequate room onsite to store snow removed from roads and parking areas.

Implementation Measure III-12A-1: Enforce Zoning Code provisions requiring areas for snow storage above 3000 feet.

Implementation Measure III-12A-2: Enforce Zoning Code provisions governing off-street parking so that vehicles do not interfere with snow removal operations.

Goal III-13: Provide for road maintenance agreements by mineral extraction operations.

Policy III-13A: Determine weight and volume impacts on County roads from mining vehicle usage.

Implementation Measure III-13A-1: Prepare a standard agreement to mitigate mining impacts on roads.

## **Part 2. TRANSPORTATION SYSTEM**

In addition to roads, the transportation system includes scenic highways, public transit, airports, railways, pipelines, and bicycle, pedestrian and equestrian routes.

### **1.0 Scenic Highways**

#### **1.1 State Scenic Highways**

State Route 4, the Ebbetts Pass Highway, from Arnold Byway in the Arnold Community Plan Area to U. S. 395/Highway 89 in Alpine County, is an official State Scenic Highway. California designates official scenic highways in all areas of the State, recognizable by the familiar blue sign with the California Poppy on it. Normally, the state designation is generated by the local jurisdiction implementing planning actions to protect and enhance the scenic appearance of the corridor.

State law permits and encourages local management of land use, including density and intensity of development, design review and regulation of offsite outdoor advertising (billboards) in state scenic highway corridors.

#### **1.2 Locally Designated Scenic Highways**

A number of state highway segments in Calaveras County are County designated scenic highways. While not currently recognized as such by the State, inclusion in the General Plan is an initial step toward state recognition.

**Highway 4.** Between the Stanislaus County line and Angels Camp, Highway 4 offers a number of long stretches with open vistas. Most significant is the vista of the San Joaquin Valley which may be observed by west bound traffic just west of Diamond XX near Copperopolis. East bound traffic at this location has a vista of the Salt Spring Valley and Copperopolis townsite.

Between Angels Camp and Murphys, there are views of the upper foothills nestled against a back drop of the high Sierra. Complimenting the vistas are nearby meadows and hills.



**Highway 49.** Three segments of the highway have notable scenic qualities. The segment between Mokelumne Hill and San Andreas provides a view of Chili Gulch. The segment between San Andreas and Angels Camp offers a vista that is framed by the Hog Back Range and the upper foothills. Between Angels Camp and New Melones Reservoir, the view is primarily of the Reservoir.

## GENERAL PLAN RECOMMENDATIONS

Goal III-14: Preserve and enhance the natural and historic character of scenic highway corridors in Calaveras County.

Policy III-14A: Support identified scenic highway segments in the County on state highways for inclusion in the State Scenic Highway program.

Implementation Measure III-14A-1: Request that Caltrans conduct scenic highway corridor studies of designated areas on Highways 4 and 49.

### 2.0 Public Transit

Public transit in Calaveras County is currently provided by private operators for intracounty and intercounty service. The Central Sierra Stagecoach, Inc. provides exclusively intracounty service. Calaveras Transit Company provides intercounty service combined with intracounty stops. Other means of mass transit include car and van pools.

Central Sierra Stagecoach, Inc. operates passenger coaches primarily used to transport the general public and senior citizens to and from San Andreas or Angels Camp from outlying rural areas. Fares are supplemented by state and local transportation funds.

#### 2.1 Car and Van Pools

The majority of Calaveras County's population resides in the Ebbetts Pass and Valley Springs areas. The major portion of the County's employment is centered in San Andreas and Angels Camp. Many commuters within the County have formed car pools. There are also van pools in the County, generally serving commuters living in Calaveras County and working in Stockton, Lodi, or Sacramento.

There is a need for "Park and Ride" lots to be located in areas where commuters gather for car and van pools. Caltrans has identified locations for Park and Ride facilities in its "Report on the Status of Park and Ride Facilities" (Stockton: Caltrans District 10, September 1986).

## GENERAL PLAN RECOMMENDATIONS

Goal III-15: Develop and maintain affordable public and private transportation, as needed, especially for disabled residents and others with specialized transportation needs.

Policy III-15A: Review and coordinate transit service in the County to reduce duplicate services and avoid conflict among transit providers.

Implementation Measure III-15A-1: Monitor the County Transportation System for service and cost effectiveness, and adjust routes and schedules accordingly.

Policy III-15B: Encourage the use of public transit, as well as ride sharing, car pools and van pools.

Implementation Measure III-15B-1: Improve public awareness of transit systems and services with media and other promotion.

Implementation Measure III-15B-2: Apply for mass transit grants to expand transit services and offset the costs of public promotion.

Implementation Measure III-15B-3: Investigate through Regional Transportation Plan review the establishment of formal ride share programs.

Implementation Measure III-15B-4: Designate appropriate "Park and Ride" facilities.

### 3.0 Airports

#### 3.1 Private Airfields

There are a number of individually owned and operated airstrips in the County. They generally serve a large ranch or parcel and are used by the individual owner and guests. The individual airstrip generally is used on a limited basis.

Private airstrips may also be proposed as part of a planned subdivision for use by the property owners. Because subdivision airstrips have the potential for much greater use, compatibility with nearby land uses becomes a more significant issue.

## 3.2 Public Airports

There is presently one public airport in Calaveras County located between Angels Camp and San Andreas on Highway 49. Calaveras County/Maury Rasmussen Field was dedicated in 1982, and is financially self supporting. The airport has an initial runway length of 3600 feet, and will accommodate the single engine and small twin engine aircraft expected to use the facility on a routine basis. Light executive jet aircraft can be accommodated on the present runway on a limited basis.

There are plans to expand the runway to 4200 feet, which would allow larger twin engine and medium sized jet aircraft to utilize the airport.

There are hangar and tie-down facilities for approximately 100 aircraft at the field, with room to accommodate approximately 200 aircraft in the future.

An Airport Land Use Plan was adopted in 1992, and incorporated into the General Plan as the Airport Special Plan. The Plan addresses issues regarding safety to persons on the ground, safety to occupants in the aircraft, noise, and land use. For specific policies relating to these issues, refer to the Land Use Element, the Airport Special Plan, the Safety Element, and Noise Element.

### GENERAL PLAN RECOMMENDATIONS

Goal III-16: Protect residents from significant noise and hazards from new private airports.

Policy III-16A: Permit airports when safe and compatible with neighboring land uses.

Implementation Measure III-16A-1: Limit individual private airports to rural areas of the County.

Implementation Measure III-16A-2: Limit subdivision airports to projects which are designed from initiation to include a private airport.

Policy III-16B : Require conditional use permits for all airports.

Implementation Measure III-16B-1: Require that proposed individual private airports meet the following criteria:

- Not within an existing residential subdivision; and
- Compatible with adjoining existing and potential land uses; and
- Compliance with the Airport Special Plan; and
- Compliance with County noise and safety policies; and
- Compliance with the standards of the Airport Overflight and Noise Impact Area Zone and Airport Height Limitation Zone.

Implementation Measure III-16B-2: Require that proposed subdivision airports provide adequate building sites and buffers meeting the requirements of the Airport Approach Zone and Airport Height Limitation Zone, and are compatible with nearby land uses.

Implementation Measure III-16B-3: Utilize the provisions of the Airport Approach Zone and Airport Height Limitation Zone in the County Zoning Code.

Goal III-17: Enhance, maintain and improve the Calaveras County Airport.

Policy III-17A: Prevent new land uses and zoning surrounding the County Airport from creating future land use conflicts.

Implementation Measure III-17A-1: Implement land use, zoning and development policies of the Airport Special Plan.

## **4.0 Railroads**

Railroad activity in Calaveras County is limited to future operations on the San Andreas branch of the Southern Pacific Railroad, the Kentucky House Branch. This line runs from Lodi in San Joaquin County to San Andreas, through the Prime Industrial Corridor as identified in the Land Use Element. Before closure of the Calaveras Cement Plant in San Andreas (1984), the freight train operated three times per week, round trip, from Lodi to the cement facility.

Southern Pacific Railroad Company filed and received approval of a request for abandonment of the branch with the Interstate Commerce Commission (ICC). While the approval was granted, Southern Pacific has not yet consummated the abandonment, and there is still the potential to preserve the corridor. The future of any railroad operations in Calaveras County are currently unknown, but if resumed in the near future, are likely to remain as freight transportation.

Refer to the Noise Element for noise policies relating to this line.

### **GENERAL PLAN RECOMMENDATIONS**

Goal III-18 : Retain the Kentucky House Branch Line as a rail transportation corridor.

Policy III-18A: Encourage the maintenance of the Kentucky House Branch Line as a viable means of freight or passenger transportation.

Implementation Measure III-18A-1: Review any future development near the rail line for appropriate setbacks and buffers.

Implementation Measure III-18A-2: Review the existing land uses and parcel sizes adjacent to the railroad right-of-way and establish appropriate setback requirements and building insulation standards.

## 5.0 Pipelines

Pipelines constitute an essential means of transporting certain commodities for long distances. Only a few products and materials are transported by pipeline in Calaveras County.

Products	Owner
Irrigation and drinking water	Various districts and City of Angels
Natural Gas	Pacific Gas and Electric
Sewage	Various Districts <i>and City of Angels</i>
Water for power generation	P G & E, Northern California Power Authority, East Bay MUD, and other districts

A large part of the County's domestic water resources are transported via pipelines.

The natural gas pipeline in Calaveras County was originally installed to serve the Cement Plant. Since that time, branch lines have been constructed to serve San Andreas and a few smaller communities near the pipeline.

Sewage disposal by pipeline is limited to the densely populated areas of the County.

Water for power generation is transported in flumes, tunnels and high pressure steel penstocks to power houses located on major rivers or streams. Most of the power generated is transported by high voltage power line to urbanized areas outside of the County.

### GENERAL PLAN RECOMMENDATIONS

Goal III-19: Promote the continued and expanded use of pipelines for the transport of suitable products and materials.

Policy III-19A: Permit pipelines in public rights of way under established conditions.

Implementation Measure III-19A-1: Review encroachment permit procedures and designate specific portions of rights of way for the installation of pipelines.

## 6.0 Bicycle, Pedestrian and Equestrian Travel

Calaveras County adopted a "Bike Plan" in September 1980. The Plan includes goals, policies and implementation measures which specifically address bicycle travel as an integral part of the transportation system.

The local Bike Plan includes a portion of the state-wide network as well as complimentary local routes. Portions of the local system of bicycle-pedestrian pathways (generally widened roadway shoulders) have been constructed. A portion of the state-wide system along State Highway 49 has been developed with widened shoulders.

The special needs of students, particularly in the Arnold, Murphys and San Andreas areas are addressed in the Bike Plan.

Equestrian travel provides recreation to many residents and visitors to the County. Given the predominant rural character of the County, most equestrian travel occurs on private lands.

Trail enthusiasts are trying to develop a permanent trail access along the Mokelumne River in Calaveras County. The proposed Mokelumne Coast to Crest Trail, has been included in the Open Space Element.

### GENERAL PLAN RECOMMENDATIONS

Goal III-20: Provide safe areas for bicycles, pedestrians and equestrians on existing and proposed roads.

Policy III-20A: Design improvements of transportation facilities with primary consideration to providing for the safety of school children and local residents on existing and proposed facilities.

Implementation Measure III-20A-1: Utilize all available federal, state and local funding for construction and maintenance of non-motorized transportation facilities.

Implementation Measure III-20A-2: Implement the priority projects in the 1980 Calaveras County Bike Plan as funding allows.