

## Chapter 2

# CIRCULATION ELEMENT

An efficient, integrated transportation system is essential to maintaining the quality of life and facilitating the economic growth of the County of Stanislaus. Over the past few decades, the County has been able to sustain its growth without extensive expansion of County roads and State Highways because sufficient capacity has been available on the existing system to absorb the traffic generated by new growth. However, over the past few years, the rate of traffic growth in the County has started to exceed the available transportation system capacity in some areas of the County, particularly in and around the more urbanized areas. In addition, roughly one-fifth of the workers living in Stanislaus County commute to jobs outside the county each day placing greater demand on freeways, county roads and bridges that provide access to adjacent counties.

Since 1970, the annual rate of growth of the total population of Stanislaus County has ranged from 2.2% to 4.4% (*StanCOG spreadsheet, 2004*). Although some growth has been in unincorporated towns, most of this growth has occurred within the incorporated cities of Stanislaus County. Consequently, the County must plan for new urban and rural roads to be built as part of development proposals and expansion of existing roads to connect major traffic generators (i.e., incorporated cities). These roads will facilitate inter-city traffic movement between the cities and between neighboring counties.

Goods movement will also increase with an expanded population and economic base. The large urbanized areas require millions of tons of goods each year to maintain their economic activities. Transport of agricultural commodities has long been an important function in the Stanislaus County area. Stanislaus County is an important food processing region for the State, nation and the world. Poultry, dairy, and vegetable products are processed and distributed throughout the world from here every day. Goods movement is the result of production activities within and outside of the region, and movement takes place within a complex system of routes, modes, terminals, and warehouse facilities.

Stanislaus County is principally an agricultural region which produces and specializes in a number of products. Nearly 80% of the County's land is devoted to agricultural production, compared to 25% in the State as a whole (*California Department of Conservation, 2002; Department of Finance*). However, in the case of Stanislaus County, when raw materials are bulky, perishable, and of relatively low value, it is natural that processing will occur nearest to the place where the raw material is produced, not only to reduce the bulk, but to raise the value in order to be able to sustain transportation costs. With agricultural processing occurring throughout the County, in many of its towns and in the cities, transportation and circulation are key factors in determining the health of the County's economy.

The State has also recognized the importance of the agricultural goods movement in Central Valley areas such as Stanislaus County. The State's Goods Movement Action Plan identifies four high priority gateway regions in California that are necessary to support the continued growth of the California economy. The Central Valley region, which includes Route 99 and Interstate 5 and other important east-west corridors that traverse Stanislaus County, is one of these high priority regions. Traffic congestion and operational conflicts between trucks and passenger vehicles have been identified as key issues that need to be addressed to maintain an efficient goods movement network in the Central Valley.

Agriculture and manufacturing depend on an efficient, rapid, and economical transportation system to move supplies and final products. Continued allocation, improvement, and maintenance programs will ensure a circulation system vital to the County's economy.

## **PURPOSE**

The Circulation Element of the General Plan identifies goals, policies and implementation measures that ensure compatibility between land use, infrastructure and transportation modes. The information gathered that gives rise to this element is provided in Chapter 2 of the "Stanislaus County General Plan - Support Documentation."

The Circulation Element of the County General Plan depicts corridors for public mobility and access which are planned to meet the needs of the existing and anticipated population of Stanislaus County. The adoption of this Circulation Element by the Board of Supervisors of Stanislaus County complies with California Government Code Section 65302(b), which requires each county and city to prepare, as part of their general plan, a circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan.

The Stanislaus County Circulation Element serves to: (1) provide a system of roads throughout the County which reflects land use needs; and (2) support a broad range of transportation modes. Development of these facilities is based on the needs generated by future land use and represents the anticipated needs of each area when fully developed to the uses and densities proposed by the General Plan. Increased demand for circulation facilities is based on the need of an increased number of people to move about and the increased need to move goods from place to place.

Stanislaus County maintains more than 1,500 miles of roadways within the unincorporated area (*Stanislaus County Public Works, 2004*). These roads provide access to individual parcels and serve as major corridors between urban areas. The mobility of those without automobiles is effectively restrained and, as the population grows, increased traffic could adversely affect air quality. The lower the residential density, the less likely that public transit systems can be supported. This element recognizes that the auto is and will be in the future the overwhelming transportation choice for most of the populace. This element also incorporates strategies intended to encourage land uses that support public transit and other transportation modes that will contribute to improved air quality in the future.

## **CONSISTENCY WITH THE REGIONAL TRANSPORTATION PLANS AND LOCAL GENERAL PLANS**

Efficient transportation systems cannot be created without forging effective linkages between the internal transportation network (which is the responsibility of the County and the cities) and the external transportation network (which is the responsibility of other local, State and federal entities). By incorporating policies, standards, and implementation measures to ensure consistency with the external systems, the County can play an important role in building a regional transportation system that provides seamless integration between internal and external systems thereby facilitating the movement of both people and goods. This element incorporates recommendations from each of the cities' general plans, the Caltrans Transportation Corridor Reports, and the Regional Transportation Plan developed by the Stanislaus Council of Governments (StanCOG) to develop the specific recommendations contained in this chapter. The final recommendations of this chapter have been extensively reviewed by each jurisdiction, Caltrans, and StanCOG for consistency and compatibility.

## **LEVEL OF SERVICE**

Level of service (LOS) is a standard measure of traffic service along a roadway or at an intersection. It ranges from A to F, with LOS A being best and LOS F being worst. Figure 2-1 provides illustrations of Level of Service conditions for two types of roadway situations commonly found in Stanislaus County (i.e., two-lane highways and unsignalized intersections at four-way stops). In very general terms, LOS A, B and C indicate conditions where traffic can move relatively freely. LOS D describes conditions where delay is more noticeable and average travel speeds are more unstable. LOS E indicates significant delays and average travel speeds vary greatly and are unpredictable; traffic volumes are generally at or close to capacity. Finally, LOS F characterizes traffic flow at very slow speeds (stop-and-go) and significant delays with queuing at unsignalized intersections; in effect, traffic demand on the roadway exceeds the roadway's capacity. As a matter of policy, Stanislaus County strives to maintain LOS C or better on all roadways. When measuring levels of service, Stanislaus County uses the criteria established in the Highway Capacity Manual published and updated by the Transportation Research Board.

## **TRAFFIC ANALYSIS**







To confirm the need for transportation improvements identified in the Circulation Element, a forecast of traffic volumes and Level of Service is prepared based upon the level of growth anticipated by the year 2030, the planning horizon for the General Plan. The forecast is based on the latest population, housing and employment projections prepared by StanCOG, the agency designated by the State to prepare these forecasts. These forecasts were adjusted to reflect additional growth anticipated by the cities or the County since the adoption of the StanCOG forecast. The traffic study is provided in Chapter 2 of the "Stanislaus County General Plan - Support Documentation" and its recommendations have been incorporated into this element.

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Figure 2-1 Level of Service

## LEVELS OF SERVICE







for Two-Lane Highways

Level of Service	Flow Conditions	Operating Speed (mph)	Technical Descriptions
<b>A</b>		55+	Highest quality of service. Free traffic flow with few restrictions on maneuverability or speed. <b>No delays</b>
<b>B</b>		50	Stable traffic flow. Speed becoming slightly restricted. Low restriction on maneuverability. <b>No delays</b>
<b>C</b>		45	Stable traffic flow, but less freedom to select speed, change lanes or pass. <b>Minimal delays</b>
<b>D</b>		40	Traffic flow becoming unstable. Speeds subject to sudden change. Passing is difficult. <b>Minimal delays</b>
<b>E</b>		35	Unstable traffic flow. Speeds change quickly and maneuverability is low. <b>Significant delays</b>
<b>F</b>			Heavily congested traffic. Demand exceeds capacity and speeds vary greatly. <b>Considerable delays</b>

Source: 2000 HCM, Exhibit 20-2, LOS Criteria for Two-Lane Highways in Class 1

## LEVELS OF SERVICE

Unsignalized Intersections  
Four Way Stop

Level of Service	Flow Conditions	Delay per Vehicle (seconds)	Technical Descriptions
<b>A</b>		<10	<b>Very short delays</b>
<b>B</b>		10-15	<b>Short delays</b>
<b>C</b>		16-25	<b>Minimal delays</b>
<b>D</b>		26-35	<b>Minimal delays</b>
<b>E</b>		36-50	<b>Significant delays</b>
<b>F</b>		>50	<b>Considerable delays</b>

Source: 2000 HCM, Exhibit 17-22, Level of Service Criteria for AW/SC Intersections

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## STREETS AND ROADS

### Road Classifications

A hierarchy of adequately sized roads will be required to provide access to facilitate the movement of people and goods throughout the County, provide access to future development within the unincorporated area and between cities, and maintain acceptable levels of service. The General Plan Circulation Diagram depicted in Figure 2-2 identifies the functional classification of key routes and distinguishes between existing and proposed future roads. The classifications as well as their required design and access standards are defined in the following index of road classifications (State Highways, and special circumstances and exceptions to these standards are noted in *italics*):

- A. Freeway. The function of a Freeway is to provide for the safe and efficient movement of large volumes of interregional, inter-city, and urban traffic at high-speeds. Freeways have no direct land service function. Access is restricted to roads via interchanges, and typically to Expressways and Majors. Parking is not permitted on freeways. Freeways in Stanislaus County are typically planned, constructed, and operated by Caltrans.

*Interstate 5 and State Route 99 are the only Freeways that traverse Stanislaus County. Caltrans has prepared a feasibility study to expand State Route 99 to eight lanes through the county. Right-of-way and building setback requirements for these facilities are determined by Caltrans.*

- B. Expressway. The function of an Expressway is to move high volumes of people and goods between urban areas within the county at higher speeds depending upon the level of access control. Direct access to abutting property is specified within the standard for each expressway class. Expressways serve a similar function to that of Freeways - the fast and safe movement of people and goods within the county - and provide access to the interregional freeway system. On-street parking is not permitted on Expressways except under very special and rare circumstances where the Department of Public Works has determined that traffic flow and safety conditions allow on-street parking. The design features of Expressways are determined by the level of access control and the number of lanes designated for each expressway route segment (see Figure 2-3):

- (1) A "Class A" Expressway is a fully access-controlled road with grade separated interchanges at intervals of approximately one mile at other Expressway, Major, or Local roads. The typical right-of-way is 110 or 135 feet (4 or 6 lanes, respectively).

*State Route 120 (Oakdale Bypass from Valley Home Rd. to its eastern junction at State Route 108) is planned to be a Class A Expressway within the right-of-way planned and approved by Caltrans.*

- (2) A "Class B" Expressway is a partially access-controlled road with traffic-controlled intersections at Major roads and other Expressways. Collectors and Locals are permitted right-in, right-out access only at 1/4- to 1/2-mile intervals. The typical right-of-way is 110 or 135 feet (4 or 6 lanes, respectively). On limited rights-of-way, Class B Expressways may be 100 feet for four lanes and 124 for six lanes.

*State Route 219 (Kiernan Avenue between State Route 99 and State Route 108 (McHenry Blvd.) is planned to be a Class B Expressway. Caltrans has adopted an Official Plan Line for construction of the ultimate 6-lane facility.*

*State Route 132 from State Route 99 west to the San Joaquin County line is planned to be constructed along a new alignment as a Class B Expressway unless otherwise determined by Caltrans. Caltrans has adopted Project Study Reports for construction of the interim facilities.*

- (3) A “Class C” Expressway is a limited access-controlled road with traffic-controlled intersections at Majors and other Expressways. Intersections at Collectors and Locals may or may not be controlled by a traffic signal. The typical right-of-way is 110 or 135 feet (4 or 6 lanes, respectively). On limited rights-of-way, Class C Expressways may be 100 feet for four lanes and 124 for six lanes.

*Some State Highways that lie in the unincorporated area outside the spheres of influence of the cities and the community of La Grange (State Routes 4, 33, 120 except the Oakdale Bypass, and 132 along its existing Maze Blvd. alignment and east of Modesto) are planned to be Class C Expressways, unless otherwise determined by Caltrans.*

*Santa Fe Avenue, outside of the communities of Empire and Denair, and the City of Hughson, is planned to be an 4-lane Class C Expressway within an 85-foot right-of-way measured from the railroad right-of-way.*

- C. Major. The function of a Major road is to carry moderate- to high-volume traffic to and from collectors to other Majors, Expressways, and Freeways with a secondary function of land access. Majors located within areas zoned for heavy or light industrial or that are expected to carry large or heavy trucks shall be constructed to Industrial Major standards. Limited direct access is provided to abutting property. On-street parking will be permitted only where the Department of Public Works has determined that traffic flow and safety conditions allow on-street parking. The typical right-of-way is 110 feet (up to 6 lanes, ultimately). On limited rights-of-way, Majors may be 100 feet.

*State Routes 108 and 165 from State Route 99 to the Merced County line are planned to be Majors and State Route 33 within the cities of Patterson and Newman is planned to be an 80-foot Major, unless otherwise determined by Caltrans.*

*Santa Fe Avenue, within the communities of Empire and Denair, and within the City of Hughson, is planned to be an 85-foot Major measured from the railroad right-of-way.*

- D. Collector. Collectors serve a dual function by providing both access to abutting property and movement of moderate volumes of people and goods for medium length trips. Collectors serve as transition facilities, carrying traffic from lower to higher level roads. Most Collectors are two-lane roads with a typical right-of-way of 60 feet. On-street parking will be permitted only where the Department of Public Works has determined that traffic flow and safety conditions allow on-street parking. In urban residential subdivisions, roads not shown on the General Plan Circulation Diagram or as an Official Plan Line that will serve more than 50 dwelling units, when the maximum density and full extent of the development is considered, shall be deemed Collectors. In some instances, the Department of Public

Works may determine that project design features dictate that a road serving as few as 20 urban dwelling units be deemed a Collector. Under certain circumstances, 80 feet of right-of-way may be required to provide additional capacity to provide two additional through lanes to accommodate projected traffic demand, to facilitate the movement of large trucks, or to improve safety due to limited visibility or other safety hazards. Table 2-1 lists the 80-foot Collectors.

- E. Local. Local roads serve as land access facilities in the agricultural areas of the County by providing both direct access to abutting property and movement of small volumes of people and goods for medium length trips. Locals are two-lane roads with a typical right-of-way of 60 feet to safely accommodate drainage, utilities, and other physical improvements that may be located within the public right-of-way. In agricultural areas of the county, roads not shown on the General Plan Circulation Diagram or as an Official Plan Line shall be considered Locals. This classification also includes cul-de-sac and dead-end roads in agricultural areas of the county.
- F. Minor. Minor roads serve as land access facilities in the urban and industrial areas of the County by providing both access to abutting property and movement of small volumes of people and goods for short trips. In urban subdivisions, roads not shown on the General Plan Circulation Diagram or as an Official Plan Line, which will serve no more than 50 dwelling units, when the neighborhood is fully developed, shall be deemed Minors unless otherwise designated by the Department of Public Works. Minor roads are two-lane roads with a typical right-of-way of 50 feet. Minors located within areas zoned for heavy or light industrial or which are expected to carry large or heavy trucks shall be constructed to Industrial Minor standards with a typical right-of-way of 70 feet. This classification also includes cul-de-sac and dead-end roads in urban and industrial areas of the County.
- G. Private. Private roads serve as land access facilities and are not maintained by the County. Two types of Private roads are permitted in the County. These roads are generally not shown on the General Plan Circulation Diagram.

Agricultural access easements, providing access to parcels 20 acres or more, are included primarily to conform to state-mandated standards for private access roads in the State Responsibility Area as designated by the California Department of Forestry and Fire Protection. New roads under this category shall not exceed a 12% slope nor be less than 30 feet in width.

Private roads may also be approved by the Planning Commission or Board of Supervisors as an exception to the Subdivision Ordinance to provide access to parcels in an urban or planned development when it is determined that such a request serves a public purpose and that future divisions of land requiring road access to or through the development would not occur due to topographic features, physical barriers, existing development, and other physical constraints of the development and the adjacent lands. If approved, these roads shall be constructed to the same standards as County-maintained roads or other standard approved by the Department of Public Works.

Within the Spheres of Influence of any city, roadway improvements, dedications, building setbacks, and road reservations shall meet the development standards of the city consistent with the Spheres of Influence Policy in the Land Use Element of the General Plan, except in those areas subject to an individual city/county agreement. These requirements may change from time-to-time through

the adoption or revision of local land use plans or standards. To ensure consistency with a city's development standards, additional right-of-way may be required for each of the roadway classifications described above. Where design and access requirements of a city differ from those established by the County, development shall be required to meet the standards of the city. The County will consult with the city prior to the construction of transportation improvements within its sphere of influence to ensure consistency with the standards of that city.

### **Dedication Requirements**

When land is subdivided or otherwise divided into smaller parcels in Stanislaus County, or when buildings are constructed, existing zoning and subdivision regulations provide for the dedication of land for eventual public road use within or adjacent to the development. It is required that sufficient land be dedicated to provide the width necessary for the ultimate road right-of-way based on the road classification of specific street plans. This dedication is based on the presumption that development will intensify use of the property and of the streets which provide access thereto. Findings must be made by the Planning Commission and the Board of Supervisors supporting this presumption when a subdivision application is being considered.

Funds for the acquisition of road right-of-way are derived from several sources. Typical of these sources is Highway Users Tax Funds, transportation funds from sales tax, fines, bonds, the County General Fund, and earned interest. Since these funds are used for maintenance and replacement, as well as for the acquisition of right-of-ways, any money utilized for the acquisition of road right-of-ways in new developments will decrease the amount of money available for the maintenance and construction of the County road system elsewhere. Road right-of-way acquisition policies in new developments encompass the possibility of further development beyond these particular pieces of property and usually require the provision of road right-of-ways through the property to adjoining property in order to provide access in the future. Policy One of Goal One addresses dedication requirements.

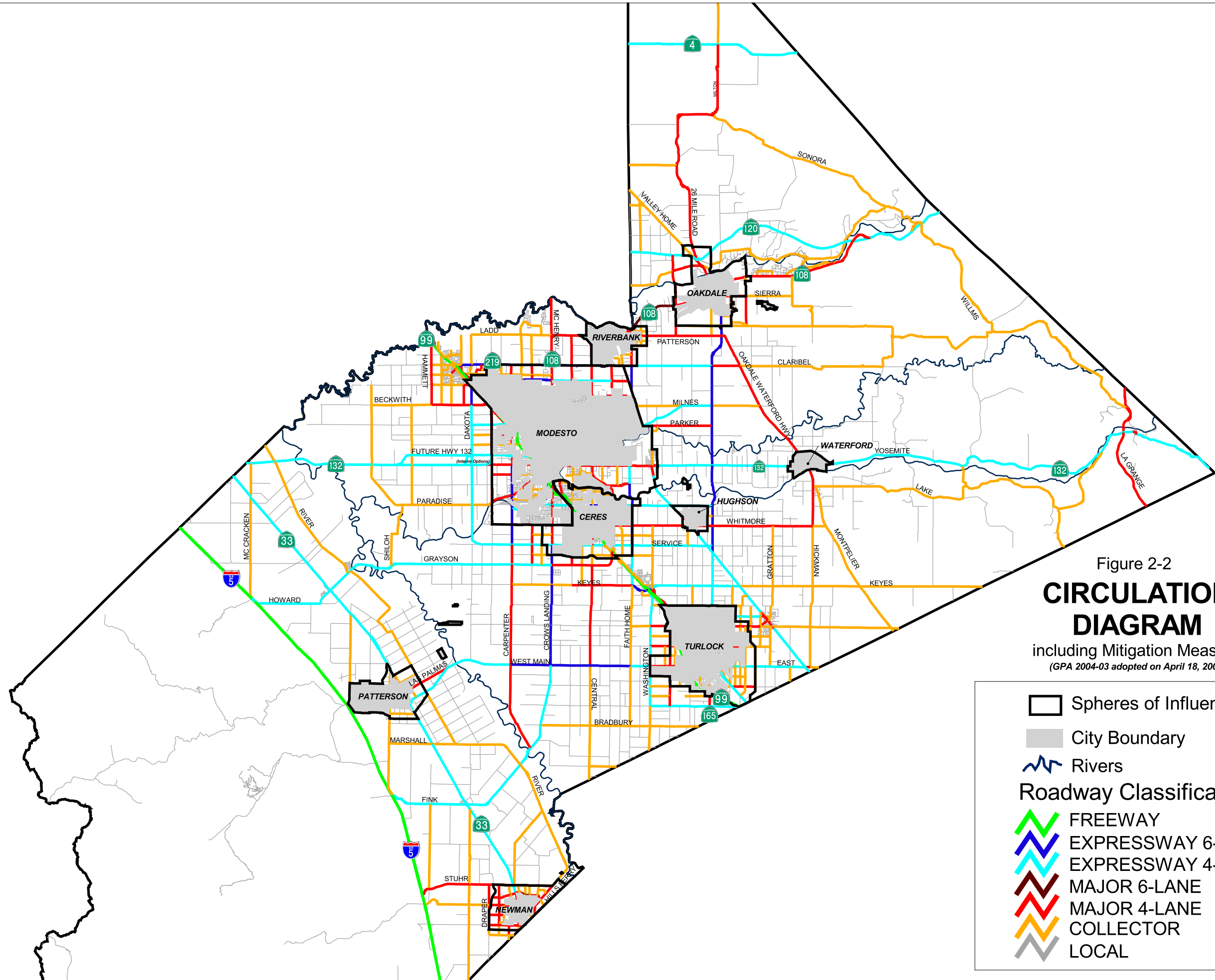


Figure 2-2  
**CIRCULATION  
 DIAGRAM**  
 including Mitigation Measures  
 (GPA 2004-03 adopted on April 18, 2006)

Spheres of Influence  
 City Boundary  
 Rivers  
**Roadway Classification**  
 FREEWAY  
 EXPRESSWAY 6-LANE  
 EXPRESSWAY 4-LANE  
 MAJOR 6-LANE  
 MAJOR 4-LANE  
 COLLECTOR  
 LOCAL

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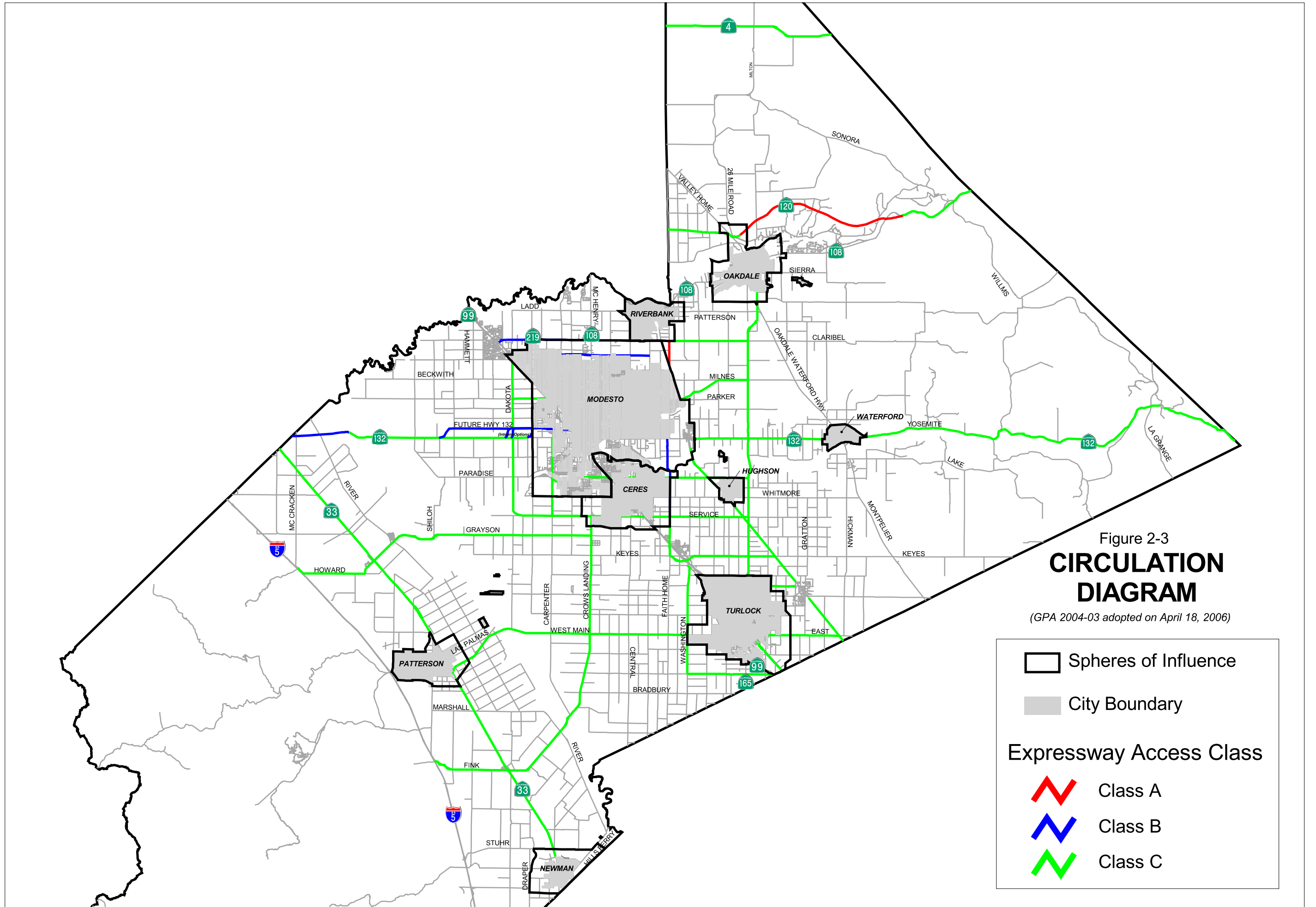







Figure 2-3  
**CIRCULATION  
 DIAGRAM**

(GPA 2004-03 adopted on April 18, 2006)

	Spheres of Influence
	City Boundary
<b>Expressway Access Class</b>	
	Class A
	Class B
	Class C

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**Table 2-1**  
**Collector Routes Requiring at Least 80' of Right-of-Way\***

The following designated collector routes require at least 80' of right-of-way either because of hilly terrains or greater than average anticipated traffic flows:

1. Claribel Road: Oakdale-Waterford Highway to Tim Bell Road.
2. Cooperstown Road: Warnerville Road to La Grange Road.
3. Crabtree Road: Highway 132 to Warnerville Road.
4. Del Puerto Canyon Road: Interstate 5 to Santa Clara County.
5. Dunton Road: Milton Road to Highway 4.
6. Eastman Road: 26 Mile Road to 28 Mile Road.
7. Emery Road: Warnerville Road to Fogarty Road.
8. Fogarty Road: Wamble Road to Emery Road.
9. Frankenheimer Road: 28 Mile Road to Sonora Road.
10. Hawkins Road: Lake Road to Keyes Road.
11. Hazeldean Road: Highway 132 to Tim Bell Road.
12. Hickman Road: East Avenue to Whitmore Avenue.
13. Kennedy Road: Highway 108/120 to Sonora Road.
14. Keyes Road: Santa Fe Avenue to Merced County Line.
15. Lake Road: Hickman Road to Highway 132.
16. Lancaster Road: Orange Blossom Road to Highway 108/120.
17. Milnes Road: Claus to Oakdale-Waterford Highway.
18. Milton Road: Highway 4 to Calaveras County Line.
19. Orange Blossom Road: Highway 108/120 to Sonora Road.
20. River Road: San Joaquin County Line to Highway 120.
21. Rock River Road: Willms Road to Tuolumne County Line.
22. Rodden Road: Highway 120 to Orange Blossom Road.
23. Sisk Road: Kiernan Avenue north to end.
24. Sonora Road: Milton Road to Highway 108/120.
25. Tim Bell Road: Lone Oak Road to Warnerville Road.
26. Twenty Eight Mile Road: Rodden Road to Sonora Road.
27. Wamble Road: Fogarty Road to Orange Blossom Road.
28. Warnerville Road: Albers Road to Cooperstown Road.
29. Willms Road: Cooperstown Road to Highway 108/120.

\* This list only contains those Collector roads that require 80 feet of right-of-way. All other Collector routes are depicted in the Circulation Diagram depicted in Figure 2-2.

## **Recommended Approach Lanes**

Additional lanes may be necessary at intersections to accommodate traffic making left-and right-turns. The recommended approach lane design at each intersection along these roadways is represented in Table 2-2. Precise intersection geometrics can be found in the Stanislaus County Department of Public Works Standards and Specifications. These geometrics will be used when establishing building setbacks and dedication requirements for development projects located in and around intersections, and may be modified in specific cases where the traffic impact analysis shows that additional approach lanes are needed to accommodate projected traffic.

## **Official Plan Lines**

Official Plan Lines have been prepared for a number of roads in the County and adopted by the Board of Supervisors. Adoption of Official Plan Lines shows the intent of the County to widen these streets to a specified width along a specified alignment or build a new road at some future time. Official Plan Lines are often used when it is undesirable or impractical to widen a road by requiring legal dedication on both sides of the existing center line. Official Plan Lines are established to prevent any unnecessary removal of buildings or important natural features when the County is ready to build the road. Once adopted, building activity is prohibited inside the established setback lines although existing buildings may remain.

Identified ultimate road widths and alignments for the eventual widening or construction of a road have the important advantage of minimizing the cost to the County in the future. If new structures are permitted to be constructed in the proposed right-of-way, the County will be obligated to purchase portions of buildings and land lying within the proposed street line. It is also hoped that the disruption and dislocation of privately- owned improvements would also be minimized to reduce impacts on property owners. Adoption of Official Plan Lines or identification of ultimate street width requires foresight because the entire process of developing a transportation corridor is a slow one. A number of years may elapse before the last building, or even a majority of the buildings, are set back to the adopted line. Building setbacks may cause hardships to the first buildings that are required to be set back of the new line because they appear to be placed at the back of a parcel with old buildings projecting in front of them on both sides.

The process of adopting an Official Plan Line entails extensive technical studies and public outreach including a traffic analysis, environmental analysis, and detailed engineering studies to determine potential alignments and work with the affected property owners and the public to determine an appropriate alignment for each roadway. The Official Plan Lines adopted by the Board of Supervisors are listed in the Table 2-3. Some portions of these roads have been annexed into the spheres of influence or jurisdictional boundaries of the cities; therefore, city standards now apply to in those areas. This element includes proposed streets and roads that are necessary to support development planned within the cities' general plans. Generally, these streets and roads will be planned, developed and constructed upon annexation to the city. If, however, a city develops an Official Plan Line for any of these roadways, the city may also wish to submit that Official Plan Line to the County for adoption to ensure it is applied to new development within the sphere of influence.

**Table 2-2  
RECOMMENDED APPROACH LANES**

Facility Type	Intersecting Road	Left	Through	Right
Expressway	Expressway	2	2 or 3	1
	Major*	2	2 or 3	1
	Collector*	1	2 or 3	1
	Local*	1	2 or 3	1
	Minor/Private			
Major	Expressway*	2	2 or 3	1
	Major	2	2 or 3	1
	Collector	1	2 or 3	1
	Local	1	2 or 3	1
	Minor/Private			
Collector	Expressway*	1	1 or 2	1
	Major	1	1 or 2	1
	Collector	1	1 or 2	1
	Local	1	1 or 2	1
	Minor/Private	0	1 or 2	0
Local	Expressway*	1	1 or 2	1
	Major	1	1 or 2	1
	Collector	1	1 or 2	1
	Local	1	1 or 2	1
	Minor/Private	1	1 or 2	1
Minor/Private	Expressway			
	Major			
	Collector	0	1	0
	Local	0	1	0
	Minor/Private	0	1	0

*\* When permitted, based on access policy for Expressway Class.*

**Table 2-3  
ADOPTED PLAN LINES**

<b>NAME</b>	<b>FROM</b>	<b>TO</b>
26 Mile Road	Dodds Road	Sonora Road
Blue Gum Avenue	Morse Road	North Ninth Street
Briggsmore Avenue	State Route 99	Claus Road
Carpenter Road	Crows Landing Road	Whitmore Avenue
Claus Road	State Route 132	State Route 108
Coffee Road	Orangeburg Avenue	Sylvan Road
Coffee Road	Sylvan Road	Patterson Road
Crane Road	Patterson Road	West F Street
Crows Landing	State Route 99	Whitmore Avenue
Crows Landing	Whitmore Avenue	West Main Street
Fink Road	Interstate 5	State Route 33
Fulkerth Avenue	State Route 99	Golden State Boulevard
Hatch Road	Carpenter Road	Crows Landing Road
Hatch Road	State Route 99	Mitchell Road
Hawkeye Road	State Route 99	Berkeley Avenue
Howard Road	Interstate 5	State Route 33
McHenry-Ladd-Patterson Intersection		
Mc Henry Avenue	Briggsmore Avenue	Stanislaus River
Monte Vista Avenue	State Route 99	Berkeley Avenue
Monte Vista Avenue	State Route 99	Golden State Boulevard
North Olive Avenue	Canal Drive	Monte Vista Avenue
Oakdale Road	Scenic Drive	Patterson Road
Orange Blossom Road	Rodden Road	Knights Ferry
Paradise Road	Sutter Avenue	Dunning Lane
Pelandale-Claratina	Dale Road	Claus Road
Roselle Avenue	Briggsmore Avenue	Floyd Avenue
Scenic Drive	Modesto City Limit	Claus Road
Sperry Road	Interstate 5	State Route 33
Standiford-Sylvan	State Route 99	Claus Road
Stearns Road	State Route 108	Oakhurst Drive
Stuhr Road	Interstate 5	State Route 33
Sylvan-Standiford Avenue	State Route 99	Claus Road
Yosemite Boulevard	Modesto City Limit	Waterford City Limit
Zeering Road	State Route 99	Hawthorne Street

## Study Areas

Prior to adopting an Official Plan Line, focused traffic, engineering and environmental studies may be conducted to determine the appropriate alignment and right-of-way requirements for major transportation improvements. These studies are particularly useful when a new road is required or special circumstances, such as limited sight visibility or hilly terrain, warrant a more detailed traffic operations analysis to determine the appropriate design and alignment for the future facility. These studies will require extensive involvement by the cities, other public agencies, and the public, to determine the appropriate design and alignment of each facility. Eight special study areas have been identified as shown in Table 2-4.

**Table 2-4  
SPECIAL STUDY AREAS**

<b>STUDY AREA</b>	<b>DESCRIPTION</b>	<b>FROM</b>	<b>TO</b>	<b>SOURCE</b>
1	Las Palmas Bypass	Patterson	San Joaquin River	StanCOG/Patterson
2	Southeast Turlock Interchange	Turlock	Merced County Line	Turlock
3	Washington Road Extension	Turlock	Keyes	Turlock
4	Dakota Avenue/Service Road (Tuolumne River Crossing)	Paradise Road	Service Road	Modesto/Ceres
5	North County Transportation Corridor	State Route 99	East of Oakdale	StanCOG
6	Briggsmore Avenue Extension	Briggsmore Avenue	Milnes Road	StanCOG/Modesto
7	State Route 132 Realignment and Widening	East of Empire	San Joaquin County Line	StanCOG
8	Claus/Garner/Faith Home Expressway	Modesto	Keyes	StanCOG
9	SR-99/Kiernan Avenue	Salida		County Project Study Report
10	SR-99/Hammitt Road	Salida		County Project Study Report

***Las Palmas Bypass:*** The Las Palmas Bypass (or Orange Avenue Extension) would provide a new connection from Sperry Road in Patterson to Las Palmas Avenue just west of the San Joaquin River. This project is planned to alleviate congestion along the Las Palmas corridor as proposed in the City of Patterson General Plan.

**Southeast Turlock Interchange:** The Southeast Turlock interchange is a study funded by a special federal grant to the City of Turlock and County of Merced. A joint planning study is underway to examine the potential realignment of State Route 165 to provide a bypass for the community of Hilmar that would connect to a new State Route 99 interchange in the southeast Turlock area which is required to support future planned development in the City of Turlock General Plan.

**Washington Road Extension:** The Washington Road Extension would examine the possibility of extending the proposed expressway along Washington Road in the Turlock area to connect at the State Route 99 interchange at Keyes Road, rather than at the Taylor Road interchange. The purpose of the new connection is to reduce conflicts between large trucks and passenger vehicles.

**Dakota Avenue/Service Road River Crossing:** To implement the expressway system proposed in the general plans of the cities of Modesto and Ceres an Official Plan Line will need to be adopted for the north-south expressway proposed along the Dakota Avenue alignment crossing the Tuolumne River and connecting to Service Road in the Ceres area.

**North County Transportation Corridor:** The North County Transportation Corridor is a concept to construct an expressway from State Route 99 in the Salida area to a point east of Oakdale, perhaps at the same location that the new State Route 120 (otherwise known as the Oakdale Bypass) would connect to existing State Route 108/120. StanCOG has initiated a planning effort that will examine potential alignments and facility types within approximately one mile of the Kiernan Avenue and Claribel Road corridors through the Modesto, Riverbank and Oakdale areas.

**Briggsmore Avenue Extension:** To implement the expressway system proposed in the City of Modesto General Plan, an extension of the Briggsmore Avenue expressway is planned from east of Claus Road along an alignment parallel and extending from MID Lateral No. 3 to Milnes Road.

**State Route 132 Realignment and Widening:** Realignment, widening, and operational improvements along the State Route 132 corridor from Empire to the San Joaquin County Line have been planned for many years. A federal grant has been secured to investigate ways to connect the portion of State Route 132 east of State Route 99 to its new proposed alignment south of, and parallel to, Kansas Avenue west of State Route 99. Project Study Reports have been prepared by Caltrans for the construction of an expressway west of State Route 99 to Interstate 580.

**Claus/Garner/Faith Home Expressway:** The general plans of the cities of Modesto and Ceres plan for the construction of an expressway and new Tuolumne River crossing along the Claus Road, Garner road, and Faith Home Road corridors from north Modesto to Keyes Road in the Keyes area. A Project Study Report was initiated by StanCOG to develop an Official Plan Line for the route, to resolve internal circulation issues within the Beard Industrial Tract, and determine the best engineering solution to cross the Tuolumne River in this area.

**State Route 99/Kiernan Avenue Interchange:** The County has initiated a Project Study Report to determine potential improvements required to support implementation of the Salida Community Plan.

**State Route 99/Hammett Road Interchange:** The County has initiated a Project Study Report to determine potential improvements required to support implementation of the Salida Community Plan.

## **Scenic Highways**

Section 65302(h) of the Government Code requires the general plan to include a Scenic Highways Element for the development, establishment, and protection of scenic highways pursuant to the provision of the Streets and Highways Code. Interstate 5 is the only officially designated State Scenic Highway in Stanislaus County. Standards for official designation of scenic highway rest on the analysis, planning, and protection of the scenic corridor through which the highway traverses. Although the emphasis of the scenic highway is on the designation of state highway routes as scenic routes, this does not preclude local agencies from developing and adopting local scenic designations on County routes. The Scenic Highway designation is an overlay and not a separate street classification. The scenic highway designation maintains areas which are in their natural or undeveloped condition. The State of California has designated various state highways as having natural scenic beauty worthy of preservation. This highway designation involves land use controls within the corridor to maintain the natural beauty of the area.

### **Highway 99 Visual Enhancement Efforts**

While the primary function of the County's transportation network is to move people and goods from one place to another, each time someone travels on Stanislaus County's roads, they see a view of the community, whether it is from the window of a car, truck, bus or train, or from the seat of a bicycle. Whether for business or pleasure, these images gathered while traveling through the community affect perceptions and feelings about the community. A collaborative effort led by the Great Valley Center is raising awareness about ways communities can enhance the visual quality of major transportation corridors, in particular the Highway 99 corridor, and key gateways into communities located along major transportation corridors. To facilitate implementation of this effort, Caltrans adopted a master plan that provides examples of the types of improvements that can be made on Highway 99 that will not only improve the appearance of the corridor but meet State Highway design standards. The Stanislaus Council of Governments initiated a master planning effort for the Highway 99 corridor involving the cities of Turlock, Ceres, and Modesto, and the County of Stanislaus. These planning efforts provide suggestions and strategies on how transportation improvement projects, as well as development projects located on or within the view shed of the Highway 99 corridor, can be designed to improve the attractiveness of the corridor and help promote economic development, encourage tourism, highlight our natural resources, and generally improve the quality of the life in the county.

## **BICYCLE AND PEDESTRIAN**

Stanislaus County offers excellent conditions for bicycle and pedestrian transportation. The County is generally flat, has a temperate climate, and major destinations are within an easy ride of most residences. According to the 2000 Census, approximately 3.1% of the workers reported that they rode a bike or walked to work regularly. Relatively few marked bicycle facilities have been constructed in the County. In agricultural areas, the County provides adequate striping and paving in accordance with Caltrans and AASHTO standards to safely accommodate bicycle travel whenever a roadway is widened, and, where adequate right-of-way exists, whenever a roadway is resurfaced, restored, or rehabilitated on all routes except Minor roads. Marked and/or signed bicycle lanes and paths are provided in accordance with the Regional Bicycle Action Plan adopted by StanCOG, the adopted Community Plans for the urban areas of the County, and the general plans of the cities within the spheres of influence.

## **PUBLIC TRANSIT**

Public transportation systems are being called upon to provide more services, serve more people and businesses, and satisfy more needs than ever before. Rising fuel costs, more stringent air quality regulations, and economic affordability are making transit a more attractive alternative for both commuters and local government. At the same time, public transit is being asked to deliver services more efficiently by reducing costs and to operate more effectively by targeting resources where people use them. Transit ridership continues to increase steadily, but accounts for only about one percent of the commute trips each day. Development patterns in the County, characterized by low housing densities and dispersed business centers, continue to make the Stanislaus area difficult to access and serve by public transit.

The Stanislaus County Public Works Transit Division is the administrator for the County's intercity public transportation system, called Stanislaus Regional Transit or StaRT. StaRT provides service to sixteen (16) cities and communities in Stanislaus County and the city of Gustine in Merced County. StaRT operates fixed route, deviated fixed route, curb-to-curb dial-a-ride transportation services and provides non-emergency medical transportation to Bay area medical facilities. The Division has Memorandums of Understanding with three cities, Newman, Patterson and Waterford, to operate dial-a-ride services for their respective cities.

Being the intercity operator, StaRT has connectivity with local transit operators and has transfer points within various cities, including Turlock, Ceres, Modesto, Riverbank and Oakdale. This enables County residents to connect between intracity and intercity transit so they can travel throughout the County. Transit services are supported through the construction and operation of bus maintenance facilities, shelters, benches and stop signs.

Various planning activities are conducted by the County to ensure that transit services are provided in an efficient and effective manner. In October 2000, the County adopted a long-range transit plan that projects the long-term transit needs of the county and presents a vision for StaRT service. The County also prepares short-range transit plans covering a five-year period to look at improving coordination between operators and future transportation services to the University of California at Merced, Stanislaus County business parks and other locations within the County. The plan will also look at future capital purchases, including additional buses and transfer stations within key cities.

## **RAIL SERVICE**

### **Passenger**

As an increasing number of commuters travel outside the County to jobs located in the Bay Area and Sacramento, the role of passenger rail service is changing. Traditionally, passenger rail service has met the travel needs of the recreational traveler. As time goes on, however, passenger rail is beginning to take on more importance as a commuter transportation option. The success of the Altamont Commuter Express from San Joaquin County to San Jose, funded largely through the passage of their half-cent sales tax, presents an alternative vision for the future role of passenger rail service in Stanislaus County.

Presently, Stanislaus County has access to three passenger rail services - the Bay Area Rapid Transit system (BART), the Altamont-Commuter Express (ACE), and Amtrak. BART service can be accessed by traveling by car to the Dublin-Pleasanton station or taking the Modesto Area

Express (MAX) BART Express bus. ACE service can be accessed by traveling by car to the Lathrop/Manteca station or by taking inter-city bus service offered by the MAX ACE Express service. Depending on the destination, Amtrak service may be accessed locally at the Amtrak station on Parker Road or by traveling to stations located in the City of Stockton.

In 2001, the County commissioned a study to examine potential alternatives to extend the ACE service to Stanislaus County. The study concluded that, with roughly fifteen percent (15%) of the passengers on ACE trains residing in Stanislaus County, passenger rail could work but would require a considerable infrastructure investment. The recommendations of this study should be reviewed and considered in future planning efforts.

In 2003, the Bay Area Rapid Transit District (BART) began studying the feasibility of extending some type of service to connect Walnut Creek with Pleasanton, then eastward along the Interstate 580 corridor perhaps as far east as Tracy. Four different options are being considered using three different technologies, including light diesel multiple units, heavy diesel multiple units and bus rapid transit.

High speed rail continues to be explored by the California High Speed Rail Authority as an alternative to driving and flying across the State. If implemented, this system would forever change the way people travel between cities and counties in California by offering an alternative to driving or flying. Studies suggest that roughly eighteen percent (18%) of the riders would come from the Central Valley.

### **Freight**

Railroad operations in Stanislaus County include high speed mainline operations on the Burlington Northern and Santa Fe (BNSF) Railway and Union Pacific Railroad (UPRR) and low speed mainline and switching operations on the BNSF Railway, UPRR, Sierra Railroad, California Northern Railroad, Modesto and Empire Traction Company Railroad, and Tidewater Southern Railroad.

**Union Pacific Railroad (UPRR):** The UPRR in Stanislaus County includes operations on the main line which passes through Salida, Modesto, Ceres, Keyes, and Turlock. The UPRR also operates on the ***California Northern Railroad*** line located on the west side of the county, which passes through Westley, Patterson, Crows Landing, and Newman.

**Burlington Northern and Santa Fe (BNSF) Railway:** Operations on the BNSF Railway in Stanislaus County occur on the mainline which runs through Riverbank, Hughson, Empire, and Denair, and on a branch line which connects the mainline at Riverbank with the Sierra Railroad in Oakdale.

**Sierra Railroad:** The Sierra Railroad operates between Oakdale and Standard, and includes both freight and passenger trains. Freight trains are operated by Union Pacific and Burlington Northern Santa Fe and usually operate roughly three times per week. Passenger trips travel between Oakdale and the eastern Stanislaus County Line and include entertainment style railroad travel approximately three to five times per week with most trips occurring Thursday through Sunday.

**Modesto and Empire Traction (M&ET) Company Railroad:** The Modesto and Empire Traction Company is a short-line railroad which connects switching operations between the Union Pacific Railroad in Modesto and the Burlington Northern Santa Fe Railway in Empire. Train lengths can vary from one locomotive with four cars to up to several locomotives with 60 cars.

### **Tidewater Southern Railroad**

The Tidewater Southern Railroad is a branch line operation of the Union Pacific Railroad. The line runs in a general north-south route through Stanislaus County, from the City of Stockton to North Modesto and from the City of Turlock to South Modesto. The portion of the line from just south of Bangs Avenue through Modesto to Bonniefair was abandoned in 2000 and sections were removed or paved over in 2003. North of Bangs Road, operations typically occur three days per week on Tuesday, Thursday and Saturday. However, service may be operated more or less frequently depending on demand.

**Intermodal Transfer Facilities:** Intermodal service is provided in the Beard Industrial District by the Valley Lift intermodal facility.

## **AVIATION**

Air facilities in Stanislaus County serve a number of needs, including scheduled commercial air passenger service, recreational flights, military operations, agricultural crop dusting services, cargo services and private business flights. There are five major facilities of concern for circulation and transportation purposes: (1) Modesto City-County Airport (Harry Sham Field); (2) Oakdale Municipal Airport; (3) Turlock Airpark; (4) Crows Landing Air Facility; and (5) Patterson Airport. The Modesto-Stanislaus County Airport is currently the only airport that provides regularly scheduled air passenger service. The remaining air fields in the County are either private, not open to the public, or used purely for agricultural purposes.

Air freight service is characterized by fast shipment of small bulk items or high value items over long distances at higher cost. For these reasons, air service does not account for a significant proportion of the tonnage of goods moved into and out of the region. A significant feature of air movement is its dependability and very short in-transit time. In many new businesses seeking to open new markets, and in businesses dealing in high value items, air shipment is an important means of providing rapid access to distant manufacturing facilities, and thereby eliminating large inventory requirements. In such cases, air shipment makes it possible to establish supply lines quickly and lowers the cost of maintaining inventory significantly. This offsets the higher cost of air service.

In 2004, the County acquired title to 1,528 acres of federal land formerly occupied by the Crows Landing Naval Air Station. The Crows Landing Air Facility served as an auxiliary landing field for the Moffett Air Field in Santa Clara County until 1991 when the Defense Base Realignment and Closure Commission voted to close the base. The property was transferred from the Navy to the National Space and Aeronautics Administration (NASA) in 1994. NASA continued to conduct aviation research and flight testing until 1997. Through special federal legislation, approved by Congress in 1999, NASA transferred the facility to the County for the expressed purpose of fostering economic development. These economic development opportunities have been explored by the County since 1989 with the adoption of the Stanislaus County Economic Strategic Plan.

In 2001, the County adopted a Reuse Plan for the Crows Landing Air Facility that identified two distinct phases for development of the former base. Phase 1 would allow occasional fly-by's, touch-and-go training, and other aviation exercises, along with agricultural crop production and ongoing environmental remediation activities required to transfer the remainder of the property to the County. Phase 2 would allow the development of General Aviation airport through an aviation permit application that must be approved by the Aeronautics Division of the California Department of Transportation.

## AIR QUALITY

Stanislaus County falls within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The attainment status in Stanislaus County for major criteria air pollutants are summarized in Table 2-5.

**Table 2-5  
San Joaquin Valley Air Quality Attainment Status**

<b>Major Criteria Air Pollutant</b>	<b>State Designations</b>	<b>Federal Designation/ Classification</b>
Ozone (O <sub>3</sub> ): 1 hour	Nonattainment	Nonattainment/Extreme
Ozone (O <sub>3</sub> ): 8 hour ( <i>federal only</i> )	-----	Nonattainment/Serious
Particulate Matter-- finer than 10 microns (PM <sub>10</sub> )	Nonattainment	Nonattainment/Serious
Particulate matter --finer than 2.5 microns (PM <sub>2.5</sub> )	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment or Unclassified
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment or Unclassified
All others	Attainment or Unclassified	Attainment or Unclassified

An air quality analysis of the improvements contained within this Circulation Element is provided in Chapter 2 of the "Stanislaus County General Plan - Support Documentation." The federal Clean Air Act and federal transportation conformity rule require each transportation improvement program to demonstrate conformance with the federal air quality attainment plans. This analysis demonstrates that the regional emissions generated by the Circulation Element are consistent with the assumptions built into those air quality attainment demonstrations. The County is committed to implementing transportation control measures that reduce emissions generated by on-road and off-road mobile sources. These control measures are adopted by resolution of the Board of Supervisors from time-to-time. Examples of the types of adopted control measures are expansion of public transit systems, transit incentives, adaptive signal timing, internet education, and transit amenities such as bus pullouts and bike racks on buses.

## IMPLEMENTATION PROGRAMS

The goals, policies, and implementation measures of the Circulation Element are carried out through a variety of implementation programs. Implementation programs fall into two broad categories, those related to new development and those related to the construction of improvements on the system. Major transportation improvements are funded from a variety of State, federal and local revenue sources.

### **Implementation Programs Applicable to New Development**

#### ***Zoning Ordinance***

The Zoning Ordinance establishes structure setbacks from roadways for all zoning districts in the County. All structures are required to be set back in conformance with Official Plan Lines, where applicable. Special setback requirements for certain roadways are also identified. Vision clearance areas are required at intersections to ensure that no obstruction is placed, built, parked or allowed to grow such that it blocks the view of a motor vehicle driver.

## ***Subdivision Ordinance***

The Subdivision Ordinance establishes design standards for minimum right-of-way road widths, intersection geometrics, road grades, part-width streets, access and curb, gutter and sidewalk. Procedures for establishing fees for the construction of bridges and major thoroughfares, authorized under Government Code Section 66484, are also provided in the Subdivision Ordinance.

## ***Standards and Specifications***

The Standards and Specifications Manual establishes the standards for all work performed within the public right-of-way, including roadway pavement sections, road cross sections, driveway access, sidewalks, bicycle facilities, and bus turnouts, and certain on-site improvements, such as parking.

## ***Traffic Impact Studies***

Traffic impact studies are performed to determine the impact that a proposed development proposal could have on the transportation system. These studies help to determine the significance of the impact, the nexus between the proposed development and the need for a transportation improvement, the type of improvement required, and, in some cases, the contribution that the development project needs to make toward the transportation improvement. Accepted traffic engineering principles are applied in preparing these reports. For impacts on State Highways, Caltrans has adopted formal procedures for performing these studies, called the "Guide for the Preparation of Traffic Impact Studies." The Caltrans procedures are to be followed whenever it is determined that the Caltrans traffic generation thresholds have been exceeded.

## **Improvement Programs**

### ***Funding***

Funding for improvements to the county's transportation system is generated primarily through State and federal gasoline and diesel fuel taxes paid at the pump by the driving public. These funds are returned to counties and cities throughout the State of California through a variety of State, federal and local programs. Local governments directly receive roughly one-third of the funding from these sources. The remaining funds are distributed either by Caltrans or the Stanislaus Council of Governments, the regional transportation planning agency for Stanislaus County. An increasingly important source of funding comes from public facility fees, dedications, and improvements required from new development. Consideration is being given to the enactment of a half-cent sales tax to fund transportation improvements. This sales tax would be collected countywide and administered by a transportation authority, an agency designated by the cities and County of Stanislaus.

### ***Capital Improvement Program***

Each year the County prepares a multi-year, prioritized list of capital projects in its Capital Improvement Program. This list includes those transportation improvement projects that are required to meet the needs of the County in the short- and long-term. The program is reviewed annually for consistency with the General Plan as required under Section 65103(c) of the Government Code. The Capital Improvement Program identifies major projects, exceeding \$100,000 in cost, that are being implemented by the County and divides those projects into prioritized groups based on funding availability and on the planning status of each project. Projects included in the Capital Improvement Program are funded by a combination of State, federal, and local sources, including development fees collected through the Public Facility Fee program. Modifications to the Plan are made annually as a normal part of the County's budgeting process and do not require amendment of the General Plan.

## GOALS, POLICIES AND IMPLEMENTATION MEASURES

### GOAL ONE

Provide a system of roads and roads throughout the County that meets land use needs.

### POLICY ONE

Development will be permitted only when facilities for circulation exist, or will exist as part of the development, to adequately handle increased traffic.

### IMPLEMENTATION MEASURES

1. Future road rights-of-ways shall be protected from development through the adoption and implementation of Official Plan Lines, where necessary (see Table 2-3). The County shall utilize Official Plan Lines provided by cities for roadways that fall within the cities' sphere of influence.  
**Responsible Departments: Public Works, Planning**
2. Dedication and improvement of right-of-way to conform to the Official Plan Line or ultimate right-of-way line shall be required as a condition of development. Generally, this is accomplished through administration of the Subdivision Ordinance and Building Code requirements.  
**Responsible Departments: Public Works, Planning**
3. Developers will construct or pay the cost of new roads necessary to serve the development and to mitigate impacts to the existing roads caused by the development.  
**Responsible Department: Chief Executive Office, Public Works**
4. The County shall ensure that new development pays its fair share of the costs of circulation improvements through a combination of public facility fees, traffic impact fees, and other funding mechanisms. The total cost of required improvements shall be paid for by new development.  
**Responsible Departments: Chief Executive Office, Public Works**
5. The circulation systems of development proposals shall be reviewed to ensure no adverse effects to adjoining land.  
**Responsible Departments: Public Works, Planning**
6. To identify the potential impacts of new development on traffic service levels, the County shall require the preparation of a traffic impact study at the sole expense of the developer for developments determined to be large enough to have a potentially significant impact on traffic. As appropriate, the study may be required to follow the Caltrans' "Guide for the Preparation of Traffic Impact Studies" and/or other procedures specified by the Department of Public Works.  
**Responsible Departments: Public Works, Planning**

7. The County will require that newly created parcels will either have frontage on a County-maintained road or access will be provided as required by County Code.  
**Responsible Departments: Public Works, Planning**
8. Unless a Subdivision Ordinance exception is granted, no public or private road shall be altered in such a way that would create a cul-de-sac or dead end street longer than 500 feet.  
**Responsible Departments: Public Works, Planning**
9. Access to Expressways and Majors shall be provided in accordance with the road classification definition, except that all existing driveway access and parking approved by the County may remain until otherwise determined by the Department of Public Works. As development occurs, one driveway with right-in, right-out access only may be provided to an original parcel created, or vested, prior to the adoption of a corridor-specific resolution (such as Resolution 2002-507 for the State Route 219 from SR 99 to SR 108 adopted on June 25, 2002) or the Focused General Plan Amendment, GPA 2004-03 (April 18, 2006) after the Department of Public Works determines that no acceptable alternative access can be provided and that providing access would not adversely impact traffic safety.  
**Responsible Departments: Public Works, Planning**
10. The County will consider the recommendations of the State Route 99 Task Force to enhance the visual attractiveness of the State Route 99 and major gateways into the County in developing its standards for new development.  
**Responsible Departments: Planning, Public Works**
11. The Subdivision Ordinance, Zoning Ordinance, and County Standards and Specifications shall be modified to conform with the definitions and requirements of this element by March 2007.  
**Responsible Departments: Planning, Public Works**

## **POLICY TWO**

Circulation systems shall be designed and maintained to promote safety and minimize traffic congestion.

## **IMPLEMENTATION MEASURES**

1. The County shall maintain LOS C or better for all County roadways and intersections, except, within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. The County may adopt either a higher or lower level of service standard for roadways and intersections within urban areas such as Community Plan areas, but in no case shall the adopted LOS fall below LOS D.  
**Responsible Departments: Public Works, Planning**
2. The County will annually review and update its transportation funding mechanisms and, as necessary, adjust its traffic impact fee in compliance with Section 66000 of the Government Code to ensure that adequate funds are collected from local, State, and federal sources to implement improvements required to maintain the County's level of service standard on all County roads. Within six (6) months of adopting the Focused General Plan Update (April 18, 2006), the County shall prepare cost estimates for the State Highway projects identified in this Circulation Element.  
**Responsible Departments: Chief Executive Office, Public Works**

3. The County will work with StanCOG and the cities to monitor the performance of the County's circulation system and implement improvements as required by the State-mandated Congestion Management Program.  
**Responsible Departments: Public Works, Planning**
4. The County will work with StanCOG and the cities to identify and secure funding for improvements to the regional and local circulation system.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
5. The County shall evaluate the circulation system and recommend amendments a minimum of once every five years.  
**Responsible Departments: Public Works, Planning**
6. The County will work with staff of the nine cities, StanCOG and Caltrans to establish more coordinated standards and routes for Expressways, Majors, and Collectors that cross jurisdictional lines.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
7. Within the spheres of influence of any city, roadway improvements, dedications, building setbacks, and road reservations shall meet the development standards of the city consistent with the Spheres of Influence Policy in the Land Use Element of the General Plan, except in those areas subject to an individual city/county agreement. These requirements may change from time-to-time through the adoption or revision of local land use plans or standards. To ensure consistency with a city's development standards, additional right-of-way may be required to meet the standards of that city. Where design and access requirements of a city differ from those established by the County, development shall be required to meet the standards of the city. The County will consult with the city prior to the construction of transportation improvements within the sphere of influence to ensure consistency with the standards of that city.  
**Responsible Departments: Public Works, Planning**
8. Private roads in areas of the County protected by the California Department of Forestry and Fire Protection shall be designed consistent with the standards of that agency, the local fire protection district and the Department of Public Works.  
**Responsible Departments: Public Works, Consolidated Fire, Planning**
9. Street and road standards proposed in any new development that differ from those established in the latest County's Standards and Specifications shall be approved by the Department of Public Works, and shall comply with nationally recognized standards, such as the Institute of Transportation Engineers, the American Association of State Highway and Transportation Officials, or Transportation Research Board, or other standard approved by the Department of Public Works that is based upon adequate research and testing.  
**Responsible Department: Public Works**
10. Traffic control devices (e.g., traffic signals), traffic calming, and other transportation system management techniques shall be utilized to control the flow of traffic, improve traffic safety, and minimize delays.  
**Responsible Department: Public Works**

## **POLICY THREE**

The County's Capital Improvement Program (CIP) shall be consistent with the General Plan. Section 65103(c) of the California Government Code states that the Capital Improvement Program shall be periodically reviewed. This review ensures that capital improvements are coordinated with land use policies stated in the General Plan.

### **IMPLEMENTATION MEASURES**

1. The CIP shall be reviewed annually by the Planning Commission for conformity with the General Plan.  
**Responsible Departments: Public Works, Chief Executive Office**
2. The Department of Public Works shall prepare and present a report on public works projects in the County at least once a year, consistent with Section 65401 of the Government Code.  
**Responsible Department: Public Works, Chief Executive Office**
3. Roadway, bicycle, pedestrian and transit improvements shall be included in the Capital Improvement Program, as appropriate, to implement the policies of this element.  
**Responsible Department: Public Works, Chief Executive Office**

## **POLICY FOUR**

The circulation system shall provide for roads in all classifications (Freeway, Expressway, Major, Collector, Local, Minor and Private) as necessary to provide access to all parts of the County and shall be expanded or improved to provide acceptable levels of service based on anticipated land use.

### **IMPLEMENTATION MEASURES**

1. As required by the Stanislaus County Congestion Management Program (CMP), the County will require applicants for proposed General Plan amendments that would generate 1,000 or more average daily vehicle trips to analyze their potential impacts on the designated CMP system of state highways and principal arterials.  
**Responsible Departments: Planning, Public Works**
2. As required by the Stanislaus County Congestion Management Program (CMP) and the city-county agreements, the County will work with StanCOG to prepare an annual cumulative traffic impact analysis of all general plan amendments approved by the cities and the County, focusing on potential impacts on the designated CMP system of State Highways and principal arterials. This analysis shall be used to amend the County's Public Facility Fee to meet the adopted level of service standard, as appropriate.  
**Responsible Departments: Chief Executive Office, Planning, Public Works**  
**Responsible Agency: StanCOG**
3. The County shall develop procedures for conducting traffic impact studies consistent with those adopted by Caltrans and the Stanislaus Council of Governments.  
**Responsible Department: Public Works**

## POLICY FIVE

Transportation requirements of commercial and industrial development shall be considered in all planning, design, construction, and improvements.

### IMPLEMENTATION MEASURES

1. Roads constructed in zoning districts that allow industrial and commercial uses shall be designed and constructed to accommodate truck traffic. The minimum roadway in commercial zones shall be a 60-foot Collector and a 70-foot Minor Industrial shall be the minimum required right-of-way width in industrial zones.  
**Responsible Department: Public Works**
2. Prior to approving new industrial and commercial development, provisions will be made to ensure that roadways providing primary access to these developments from Interstate and State Highways are designed and constructed to the standards necessary to accommodate truck traffic.  
**Responsible Department: Public Works**
3. Industrial and commercial development shall be planned so that truck access through residential areas is avoided.  
**Responsible Departments: Planning, Public Works**
4. Specific Plans as defined in Government Code Section 65450 through 65457 shall be encouraged.  
**Responsible Department: Planning**
5. Off-street truck parking standards shall be developed to ensure that adequate off-street parking is provided in new or expanding industrial and commercial development. Commercial developments serving travelers on Highway 99, Interstate 5 or other routes carrying substantial truck traffic shall be required to include sufficient truck parking in their off-street parking plans and encouraged to provide facilities to accommodate long-term truck parking. Zoning Ordinance provisions for Off-Street Parking Requirements and the Standards and Specifications Manual shall be amended, as necessary, by March 2007 to require truck parking as appropriate in new commercial and industrial developments.  
**Responsible Departments: Planning, Public Works**
6. On-street truck parking shall be discouraged where such parking restricts adequate sight distances, detracts from the visual aesthetics of the area, or poses a potential hazard to motorists, bicyclists, or pedestrians.  
**Responsible Departments: Public Works, Planning**

## GOAL TWO

Provide a safe, comprehensive, and coordinated transportation system that includes a broad range of transportation modes.

### POLICY SIX

The County shall strive to reduce motor vehicle emissions and vehicle trips by encouraging the use of alternatives to the single occupant vehicle.

### IMPLEMENTATION MEASURES

1. The use of alternative modes of transportation will continue to be encouraged by participating in programs to promote walking, bicycling, ridesharing, and transit use for commuting and recreation.  
**Responsible Departments: Transit Manager/Public Works, Planning**
2. The County will continue to work with StanCOG, Caltrans, and the cities to identify and secure funding for the development and improvement of bikeways, pedestrian pathways, park-and-ride facilities, transit systems, and other alternatives to the single-occupant vehicle.  
**Responsible Departments: Chief Executive Office, Transit Manager/Public Works**
3. Facilities to support the use of, and transfer between, alternative modes of transportation (i.e., pedestrian, rideshare, bicycle, bus and train) shall be provided in new development.  
**Responsible Departments: Public Works, Planning**
4. A trip reduction and travel demand ordinance shall be developed to promote the use of alternative modes and ensure that adequate facilities are provided in new development to support the use of alternatives to the single-occupant vehicle. This ordinance may be combined with pedestrian-oriented (POD) and/or transit-oriented design (TOD) guidelines specified under Policies Seven and Eight.  
**Responsible Departments: Planning, Transit Manager/Public Works**
5. The County will continue to work with the Stanislaus Council of Governments and the San Joaquin Valley Air Pollution Control District to develop and implement transportation control measures to improve air quality through reduction in vehicle trips and vehicle miles of travel.  
**Responsible Departments: Chief Executive Office, Transit Manager/Public Works, Planning**
6. Developers will construct or pay the cost of new pedestrian pathways, bikeways, rideshare facilities, transit amenities, and other improvements necessary to serve the development and to mitigate impacts to the existing circulation system caused by the development.  
**Responsible Departments: Transit Manager/Public Works, Planning**

7. The County shall convert to clean fuels fleet vehicles when possible and pursue special grants and funding sources to facilitate this conversion.  
**Responsible Departments: Transit Manager/Public Works**

## **POLICY SEVEN**

Bikeways and pedestrian facilities shall be designed to provide reasonable access from residential areas to major bicycle and pedestrian traffic destinations such as schools, recreation and transportation facilities, centers of employment, and shopping areas.

## **IMPLEMENTATION MEASURES**

1. Bikeways shall be considered and implemented in accordance with the StanCOG Regional Bicycle Action Plan and adopted Community Plans or Specific Plans when constructing or improving the roadway system in the unincorporated area outside the spheres of influence of the cities.  
**Responsible Departments: Public Works, Planning**
2. Within the sphere of influence of a city, bikeways and pedestrian facilities and amenities shall be provided in accordance with the applicable city's general plan and development standards.  
**Responsible Departments: Public Works, Planning**
3. Facilities to safely move, and support the use of, bicycles, pedestrians, transit and ridesharing shall be considered and implemented in all new development and roadway construction.  
**Responsible Departments: Public Works, Planning**
4. Class I bicycle and multi-use paths, such as the "Highway 108 Scenic Corridor Multi-Purpose Trail Plan," shall be considered to provide connectivity between major origins-destinations or to major recreational areas when on-road provisions for bicycle traffic cannot be accommodated or no alternative roadway alignment provides adequate connectivity.  
**Responsible Departments: Public Works, Planning**
5. In conjunction with the next comprehensive update of the General Plan, the County shall consider incorporating a bicycle master plan as a component of the Circulation Element.  
**Responsible Departments: Planning, Public Works**
6. To safely accommodate bicycle traffic, adequate pavement shoulder and/or striping shall be planned and implemented for Expressways, Major, and Collector roads, and, in agricultural areas, on Local roads when constructing new roadways or implementing major rehabilitation projects in accordance with the County Standards and Specifications, the Caltrans Highway Design Manual, or other nationally recognized standard.  
**Responsible Departments: Public Works, Planning**
7. Whenever a roadway is resurfaced or restored, adequate pavement shoulder and/or striping will be considered to safely accommodate bicycle travel in accordance with the County Standards and Specifications, the Caltrans Highway Design Manual, or other nationally recognized standard, where adequate right-of-way exists.  
**Responsible Departments: Public Works, Planning**

8. Federal funds, special grants, and other sources of funding shall be pursued for the development and improvement of bikeways and pedestrian pathways.  
**Responsible Departments: Public Works**
9. Pedestrian-oriented design (POD) guidelines shall be prepared which will include the identification of areas and/or projects to which POD guidelines shall apply. POD guidelines shall identify strategies for creating communities that increase the convenience, safety and comfort of people walking and bicycling. POD guidelines may be combined with transit-oriented design (TOD) guidelines specified under Policy Eight.  
**Responsible Departments: Planning, Public Works**

## **POLICY EIGHT**

Promote public transit as a viable transportation choice.

### **IMPLEMENTATION MEASURES**

1. Continue to operate an inter-city transit system and cooperate with other agencies and cities to provide public transit serving Stanislaus County.  
**Responsible Departments: Transit Manager/Public Works**
2. Where appropriate, new development shall include provisions for connecting to or expansion of existing and/or planned public transit systems.  
**Responsible Departments: Transit Manager/Public Works, Planning**
3. Ensure that provisions are made in proposed development for access to current and future public transit services. In particular, continuous segments of walls or fences should not impede pedestrian access to collectors, major, or expressways with transit service.  
**Responsible Departments: Planning, Public Works**
4. Where appropriate, new development projects shall include bus turnouts and shelters and/or park-and-ride lots.  
**Responsible Departments: Transit Manager/Public Works, Planning**
5. Transit-oriented design (TOD) shall be prepared that include the identification of areas and/or projects to which TOD guidelines shall apply. TOD guidelines shall identify strategies for creating communities that increase the convenience, safety and comfort of people using public transit. TOD guidelines may be combined with POD guidelines specified under Policy Seven.  
**Responsible Departments: Planning, Transit Manager/Public Works**
6. Financing mechanisms shall be investigated to recover the cost of providing transit service and infrastructure to support new development.  
**Responsible Departments: Transit Manager/Public Works, Planning**

## GOAL THREE

Maintain a balanced and efficient transportation system that facilitates inter-city and interregional travel and goods movement.

### POLICY NINE

The County shall promote the development of inter-city and interregional transportation facilities that more efficiently moves goods and freight within and through the region.

### IMPLEMENTATION MEASURES

1. The County will coordinate with the Stanislaus Council of Governments (StanCOG), Caltrans, and other appropriate agencies in the implementation of the Regional Transportation Plan, including the development of a system of State Highways and expressways to allow more efficient people and goods movement.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
2. The County will continue to work with Caltrans, StanCOG, and other agencies to investigate ways to provide increased inter-city and interregional passenger rail service to Stanislaus County.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
3. The County shall continue to encourage and support the development of high-security, off-street parking for trucks.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
4. The County shall investigate the need for new or expanded grade-separated railroad crossings and river crossings for high volume routes and expressways.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
5. The County will continue to support the development of public use airports consistent with the airport master plans developed for the Oakdale Municipal Airport and the Modesto City-County Airport.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
6. Consistent with the 1989 Economic Strategic Plan and the 2001 Reuse Plan, the County will continue to plan the development of the Crows Landing Air Facility including the development of General Aviation air service and associated business park and industrial development.  
**Responsible Departments: Chief Executive Office, Public Works, Planning**
7. The County will coordinate and participate with the San Joaquin Valley Partnership, the Stanislaus Council of Governments, and Caltrans to evaluate the possibility of designating the San Joaquin Valley portion of State Route 99 as part of the Federal Interstate System.  
**Responsible Departments: Chief Executive Office, Public Works**

## **POLICY TEN**

The Airport Land Use Commission Plan and County Airport Regulations (Chapter 17 of the County Code) shall be updated as necessary, maintained and enforced.

### **IMPLEMENTATION MEASURE**

1. Continue to implement the strategies identified under Policy Twelve of the Safety Element.  
***Responsible Departments: Planning, Airport Land Use Commission***