9  CIRCULATION, INFRASTRUCTURE, AND SERVICES

This element identifies circulation and infrastructure needs in the County. The Element provides guidance for transportation and capital facilities planning. General Plan circulation elements typically address transportation issues related to roadways, airports, and rail. State law recognizes that a circulation element can include more than the transport of people, goods, and materials on roadways, waterways, rail, and air routes. Mariposa County has decided to include the full range of circulation issues in this Element, including public and private utility systems, as well as other infrastructure and services.

The following County planning and policy documents relate to or implement the Circulation, Infrastructure, and Services Element.

Airport Land Use Plan. The Airport Land Use Plan is a document prepared by the Airport Authority (Mariposa County Department of Public Works) for airport development, improvement, and expansion of facilities. The Airport Land Use Plan contains additional restrictions and conditions on land uses in areas surrounding the Mariposa-Yosemite Airport that address noise and safety issues and supplement those of the General Plan. To obtain funding for the airport through the State, the Airport Land Use Plan must be consistent with the General Plan.

Mariposa County Bicycle, Pedestrian, and Equestrian Facilities Plan. The Mariposa County Bicycle, Pedestrian, and Equestrian Facilities Plan was presented to the public in September 2001 but has not been adopted by the Board of Supervisors. The Plan designates the locations of existing and proposed paths and trails for non-motorized travel and recommends improvement standards, classification systems, and funding mechanisms for acquisition, operation, and maintenance of the County’s trail system. The Plan also contains policies regarding public-private partnerships and coordination with property owners where trails cross, or are adjacent to, private lands.
Mariposa County Road Condition Inventory and Pavement Management System. This report identifies the conditions and signage on each road within the County. The County uses the inventory to prioritize expenditures on road maintenance, improvements, and replacement.

Regional Transportation Plan (RTP). The Regional Transportation Plan is a document prepared by the Local Transportation Commission to identify, prioritize, and plan for road construction and improvement projects. The RTP must be consistent with the General Plan. No project identified in the General Plan should be carried out until it is incorporated into the RTP. Similarly, no project identified in the RTP should be carried out if it conflicts with a policy of the General Plan.

Yosemite Area Regional Transportation System (YARTS) Transit Development Plan. YARTS provides regional transit for Mariposa County and adjacent counties focused on transportation for visitors and employees of Yosemite National Park. The Transit Development Plan provides the program for the growth, expansion, and implementation of the regional transit system.

Road Maintenance Program. The Road Maintenance Program is comprised of the policies and procedures for creating road maintenance for purposes of maintaining public roads not within the County-maintained road system. The road standards adopted for these zones of benefit must be consistent with the General Plan policies even if the roads covered by the program are not part of the County-maintained road system.

9.1 CIRCULATION, INFRASTRUCTURE AND SERVICES ISSUES, AND SUMMARY OF FINDINGS

Utilities and public services are essential for communities. Public services and utilities provide transport of water, wastewater, solid waste, emergency medical, and law enforcement services. Private utilities carry electricity, gas, and communications within the County.

Mariposa County is unique because its lands are not solely under the jurisdiction of the County. Since much of the County is federally owned, public services may be operated solely by the federal government in some areas, while other areas offer federal, state, and local services. The following issues are addressed in this Element.

- Roadways
- Transit
- Non-motorized Transportation
- Airports
- Water and Wastewater
- Solid Waste
- Schools
- Electrical and Telecommunication Services
- Emergency and Law Enforcement Services
9.1.01 ROADWAYS

Land use and circulation planning decisions must be closely coordinated for the County to achieve orderly and rational development. Circulation system service levels and improvement needs are a direct result of land use planning and development decisions that determine the location, type, and density of development.

Similarly, circulation system improvements that create capacity beyond the short-term needs of current land uses often stimulate pressures for further development. Circulation system improvements can create demands for changes in land uses that are not supported without improvements. Land use policies and development decisions affect the circulation system demands, policies, and decisions.

Mariposa County has over 700 miles of roads. The existing roadway network is made up of state, County, and private facilities (Figure 9-1). The state routes typically provide for regional and sub-regional trips in and out of the County. State routes also facilitate the movement of local traffic between the population centers of Mariposa County. County roadways provide both direct property access connecting private roadways to state routes and local circulation within larger residential areas. Private roads may serve a single parcel or clusters of parcels. Most private roads connect to County facilities, while some private roads connect directly to state facilities. A low population base, constrained funding, and sparse density contribute to the condition of some County roads.
Figure 9-1: County of Mariposa Circulation System
In addition to County maintained roads, the County has extensive road mileage in roads with public access maintained with a zone of benefit or private maintenance agreements. Other roads within the County are private roads that may or may not have shared maintenance agreements between owners or users. Historic policies on access to subdivision lots have resulted in the creation of a road system separate from the County system. This system is composed of nonexclusive easements, most of which have an irrevocable offer of dedication to the County. Current improvement standards require these easements to be improved, sometimes up to full County standards, with the level of required improvements depending upon potential intensity of use. County policy currently is to not accept these roads into the County road system. Present development policies call for private maintenance agreements by homeowner associations or the establishment of special assessment districts to maintain and/or improve the subdivision roads.

9.1.02 TRANSIT

Public and group transit in Mariposa County has traditionally focused on visitor-serving needs and on the needs of Yosemite employees. With growth and development countywide, the need for public and group transit serving local residents and workers has increased. These needs include expanded operating hours and increasing the number of stops, communities served, and the service routes to Yosemite National Park.

Mariposa County anticipates that land use and economic development trends under the General Plan will result in a need for increased visitor-oriented transit. In the past, visitor-oriented transit has focused on moving tourists from outside Mariposa County to Yosemite. During the timeframe of the General Plan, the County anticipates greater demand for visitor-oriented transit linking communities and events not associated with Yosemite.

9.1.03 NON-MOTORIZED TRANSPORTATION

An assessment of non-motorized needs is quantified in the Mariposa County Bike, Pedestrian, and Equestrian Plan (September 2001). This document provides an extensive review of these three non-motorized modes of travel, along with specific goals and objectives and recommended projects.

9.1.04 AIRPORT

The Yosemite-Mariposa Airport primarily serves Mariposa County, eastern Madera County, and visitors to Yosemite Park. The airport has no scheduled air service and most of the operations support private owners and tourism. The Airport is sometimes used as a back-up landing site for Fresno air traffic when there is poor visibility due to fog in the Central Valley. The Airport has the potential to expand its role in serving local residents and tourists and acting as a transportation hub for commercial and industrial firms.

9.1.05 WATER AND WASTEWATER

Most of Mariposa County is not within the service area of public water and wastewater treatment providers. Therefore, most development in the County must provide for its own water and wastewater treatment through on-site means or small, private communal systems.
The largest service areas of public water or wastewater systems are those of the Mariposa Public Utility District (MPUD) and the Lake Don Pedro Community Service District (LDPCSD).

MPUD provides water and sewer services to a portion of the Mariposa Town Planning Area. The existing sources of water have the potential to provide an adequate supply for the next 10 to 20 years within the Town Planning Area, depending on growth and water quality/quantity requirements. The treatment facility operates at nearly peak capacity during peak water use days; and therefore, will require expansion to serve future development. The MPUD wastewater treatment plant has the capability to serve additional development. However, portions of the collection system are in need of repair or are at capacity and need to be replaced.

The LDPCSD supplies potable water to 1,250 customer connections (October 2004) for much of the Lake Don Pedro Town Planning Area, but does not operate a wastewater facility. The water treatment plant operates at 85 to 90 percent of capacity. The LDPCSD reserves 5,160 acre-feet per year from the Merced Irrigation District (MID) from Lake McClure, but uses approximately 600 acre-feet of water, leaving an unused allocation that could serve additional connections. The Merced Irrigation District Board of Directors has never denied the request of water from LDPCSD, although LDPCSD’s water agreement with MID is a “surplus and saleable” water contract, which is not a definitive right of water. Negotiations are underway, October 2004, between LDPCSD and MID to secure a “firm” water supply agreement.

Other portions of the County are served by small public systems. Three public water systems provide domestic water to portions of the Fish Camp area through surface springs and groundwater wells. Sewage disposal in the Fish Camp area relies on individual septic tanks and underground leach field systems. Water and sewer service is provided to residents of Coulterville by the Coulterville service area. Water is drawn from a local well system. Mariposa Pines has community sewer service, while Ponderosa Basin has community water service. Wawona and El Portal have community sewer and water service. Within Yosemite National Park, 20 public water systems and five wastewater treatment plants serve the needs of visitors and park employees.

9.1.06 SOLID WASTE

The Mariposa County Department of Public Works operates solid waste disposal facilities in the County. In addition to the County landfill, there are four solid waste transfer stations and one auto dismantling station in the County. Based on current and projected rates of solid waste generation, the County estimates that the remaining life of the landfill is seven to eight years. The co-composting facility to be located at the landfill is expected to increase the useful life of the landfill to between 30 and 35 years.

9.1.07 SCHOOLS

The Mariposa County Unified School District is the primary provider of K-12 educational services in Mariposa County, although the Bass Lake Unified School District in Madera County provides K-6 education for a small number of Mariposa County children. Much of the County’s population growth is anticipated to occur in areas in which schools are already
over-enrolled, at capacity, or nearing capacity (that is, those where enrollment equals 75 percent or more of capacity). The schools primarily affected are those that serve students from Mariposa, Bootjack, Catheys Valley, and Lake Don Pedro.

Mariposa County Unified School District’s enrollment has decreased by approximately 166 K-12 students over the past three years, and 232 students over the past ten years. In October, 2001, enrollment was 2,613. In October 2002, enrollment was 2,560. By October 2003, enrollment declined four percent to 2,488. Current enrollment status, as of October 2004, recorded 2,447 students.

9.1.08 ELECTRICAL AND TELECOMMUNICATION SERVICES

Mariposa County generally has adequate utility connections to provide basic electrical and communications service to its residents, except for those living in the most remote parts of the County. Due to the County’s overall small population size and generally low density, access to high-speed Internet and wireless communications service is limited.

9.1.09 EMERGENCY AND LAW ENFORCEMENT SERVICES

Emergency response times and access in and near town planning areas is generally sufficient in Mariposa County. However, emergency medical transport, law-enforcement response times, and service levels depend on the location and distance of residents to existing facilities and the concentration of people or activities that may require these services. Remote areas of the County, particularly those located away from existing points of emergency transport services may not have adequate access to emergency services. Some properties located in or near town planning areas may have inadequate access due to the condition of private roads and driveways. Although one of the trade-offs for rural living is limited access to community services, the County strives to provide as much access to emergency services as feasible for the County’s residents.

9.2 GENERAL PLAN IMPLEMENTATION

Goal 9-1: All development shall have safe and adequate access.

Policy 9-1a: Level of Service (LOS) shall be used as a measure of capacity for major collector and arterial roads.

Implementation Measure 9-1a(I): A publicly-maintained road with an LOS of “A” through “D” shall be deemed to have adequate capacity to serve the needs of the road systems.

<table>
<thead>
<tr>
<th>Timing:</th>
<th>Ongoing review standard</th>
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<tbody>
<tr>
<td>Responsibility:</td>
<td>Mariposa County Planning Department, Public Works Department.</td>
</tr>
<tr>
<td>Fiscal Impact:</td>
<td>Ongoing review.</td>
</tr>
<tr>
<td>Consequences:</td>
<td>It establishes the traditional Level of Service—but allows LOS as low as “D,” which covers most County roads and State Highways. This requires a change in the Regional Transportation Plan.</td>
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</table>
Implementation Measure 9-1a(2): In order to facilitate provision of needed long-range (2015-2025) improvements to state highways serving Mariposa County, and particularly to those state routes where projected capacity would be less than LOS “D,” the County shall:

- Prepare and implement a program to evaluate Development Impact Fees for state highway intersection facilities needed to adequately service new growth. Such local funding would ensure the improvements are accomplished in the needed timeframe and would substantially benefit the economic development of the County.
- Maintain a close working partnership with the State to solve state highway capacity deficiencies and funding limitations.
- Monitor State activities in responding to the long-term transportation needs in the County and provide input to the state concerning the priorities for state highway improvements based on capacity below LOS standards, including timing of long-term Project Study Reports (PSR) for priority projects and their inclusion in the STIP in the needed timeframe.

Timing: Short-term
Responsibility: Mariposa County Planning Department, Public Works Department.
Fiscal Impact: Ongoing review.
Consequences: Establishes program for development impact fees.

Policy 9-1b: Road capacity shall be the basis for determining the adequacy of access for all new development within the County.

Implementation Measure 9-1b(1): The County shall define the capacity of all roads.

Timing: Short-term
Responsibility: Public Works Department.
Fiscal Impact: Planning costs.
Consequences: Improved planning.

Policy 9-1c: Roads shall have adequate capacity to serve respective road needs.

Implementation Measure 9-1c(1): The density of land for development purposes within an area shall be based on the capacity of the road divided by the average daily traffic of the permitted uses.

Timing: Ongoing review standard
Responsibility: Public Works Department.
Fiscal Impact: Planning costs.
Consequences: This action, in effect, will define densities in the Residential land use classification. Subdivisions will only be permitted to the number of lots within the capacity of the road—thus when roads are improved, the capacity increases and the number of new lots may also be increased.
Implementation Measure 9-1c(2):  A traffic study prepared by a professional appropriately licensed in the State of California shall be required if traffic calculations show that the proposed project will significantly increase traffic volumes.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department, Public Works Department.
Fiscal Impact: Ongoing review.
Consequences: This is an up-front environmental threshold.

Implementation Measure 9-1c(3):  The capacity of a county road must be assessed for its capability to meet existing and new uses when the aggregate potential development will increase the utilization of the road by more than 25%.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department, Public Works Department.
Fiscal Impact: Ongoing review.
Consequences: This is an up-front environmental threshold.

Policy 9-1d:  Road improvement requirements shall be based on road capacity.

Implementation Measure 9-1d(1):  No subdivision or discretionary project shall be approved if the traffic generated by the proposed project will exceed the capacity of the road systems which provide access from the nearest County major collector or State highway unless mitigation is required.

Timing: Ongoing review standard
Responsibility: Mariposa County Planning Department, Public Works Department.
Fiscal Impact: Ongoing review.
Consequences: This is an up-front environmental threshold.

Policy 9-1e:  Adopt comprehensive standards for all County roadways.

Implementation Measure 9-1e(1):  The County shall incorporate standards and specifications applicable to roads under County jurisdiction, which will include:

- a requirement that all roads serving road systems shall have an all-weather surface,
- all new roads shall be constructed to fire safe standards,
- all new non-County maintained roads shall be contained within mandatory road maintenance associations or zones of benefit,
- all road construction shall be inspected and approved by the Public Works Department, and
- road circulation within a system shall be designed to be interconnecting and cul-de-sac or dead-end roads shall be designed to be safe.

Timing: Short-term
Responsibility: Public Works Department.
Fiscal Impact: Staff time.
Goal 9-2: **Maintain an effective transit system.**

Policy 9-2a: Implement the County’s transit plan.

*Implementation Measure 9-2a(1):* The County shall implement the Transit Plan.
  - **Timing:** Short-term
  - **Responsibility:** Local Transportation Commission.
  - **Fiscal Impact:** Staff time.
  - **Consequences:** Ensured Plan implementation.

*Implementation Measure 9-2a(2):* Annually report on implementation of the Transit Plan.
  - **Timing:** Ongoing
  - **Responsibility:** Public Works Department.
  - **Fiscal Impact:** Staff time.
  - **Consequences:** Incorporates the transit plan into the annual report process.

*Implementation Measure 9-2a(3):* Update the transit plan concurrently with the next scheduled update of the Regional Transportation Plan.
  - **Timing:** Short-term
  - **Responsibility:** Public Works Department.
  - **Fiscal Impact:** Staff time.
  - **Consequences:** Brings transit plan in line with Circulation Element.

Goal 9-3: **Create a bicycle, pedestrian, and equestrian system for recreation and transportation use.**

Policy 9-3a: Adopt and implement the Bicycle, Pedestrian, and Equestrian Facilities Plan.

*Implementation Measure 9-3a(1):* The County should adopt and implement the Bicycle, Pedestrian, and Equestrian Facilities Plan.
  - **Timing:** Intermediate-term
  - **Responsibility:** Local Transportation Commission.
  - **Fiscal Impact:** Staff time; possible consulting cost.
  - **Consequences:** Requires this Plan to be updated; statutory requirement.

*Implementation Measure 9-3a(2):* The County shall update the Bicycle, Pedestrian and Equestrian Plan to create a comprehensive system of transportation and recreation trails.
  - **Timing:** Intermediate-term
  - **Responsibility:** Local Transportation Commission.
  - **Fiscal Impact:** Staff time; possible consulting cost.
  - **Consequences:** Pre-schedule updates.

Goal 9-4: **Maximize the Yosemite-Mariposa Airport as an economic asset.**

Policy 9-4a: Improve and expand the airport.

*Implementation Measure 9-4a(1):* The County shall continue systematic implementation of the Airport Master Plan.
Timing: Ongoing  
Responsibility: Public Works Department.  
Fiscal Impact: FAA funded program.  
Consequences: The County has an adopted airport plan, but implements it on a sporadic basis. Sometimes capital needs change, but the Plan has not been amended. Systematically establishing Plan implementation into the County’s CIP review will ensure tracking and accomplishment.

Policy 9-4b: Coordinate development permit decisions with the Airport Land Use Plan.

Implementation Measure 9-4b(1): No projects should be approved within the Airport Land Use Planning Area unless consistent with the Plan.

Timing: Ongoing review standard  
Responsibility: Mariposa County Planning Department.  
Fiscal Impact: Ongoing review.  
Consequences: Sets a project review standard.

Goal 9-5: Adequate water and wastewater services shall be provided to properties in the County.

Policy 9-5a: New projects and subdivisions should be served by basic water and wastewater infrastructure.

Implementation Measure 9-5a(1): No project shall be approved unless it is shown to have access to an approved source for wastewater treatment and disposal and a potable water supply meeting Health Department requirements.

Timing: Ongoing review standard  
Responsibility: Mariposa County Planning Department.  
Fiscal Impact: Ongoing review.  
Consequences: This requires basic infrastructure for all projects. It does not say what the wastewater treatment is to be or how water is to be provided, but establishes as standard that there be approved systems for development to occur. It also affects subdivision approval.

Goal 9-6: Provide adequate solid waste disposal.

Policy 9-6a: Increase waste disposal facility life.

Implementation Measure 9-6a(1): Design, permit, and construct a co-composting facility.

Timing: Intermediate-term  
Responsibility: Public Works Department.  
Fiscal Impact: Significant capital cost.  
Consequences: This enables the co-composting facility.

Goal 9-7: Collaborate with the Mariposa County Unified School District for facilities.

Policy 9-7a: Work with the school district on siting facilities.

Implementation Measure 9-7a(1): The Board of Supervisors shall meet periodically with the Board of Trustees for the school district to coordinate capital facility planning.
**Goal 9-8:** Coordinate private utility services to meet County economic needs.

**Policy 9-8a:** The County should share information and plans with private utilities to coordinate service delivery.

**Implementation Measure 9-8a(1):** County Staff should maintain technical and planning liaison with private utilities to ensure appropriate infrastructure accomplishing economic development goals.

**Goal 9-9:** Maintain quality emergency service delivery.
Policy 9-9a: Define acceptable service standards and create a comprehensive plan to attain and maintain service delivery.

Implementation Measure 9-9a(1): Prepare an emergency services plan.

Timing: Short-term
Responsibility: Mariposa County Sheriff, Fire Chief.
Fiscal Impact: Plan development cost.
Consequences: This policy requires that a broad and comprehensive emergency services plan be developed. The result of this plan would be establishing levels of service to be maintained (examples are patrol deputies per 1,000 population; response time for fire departments).

Implementation Measure 9-9a(2): Implement the emergency services plan.

Timing: Ongoing
Responsibility: Mariposa County Sheriff, Fire Chief.
Fiscal Impact: Capital improvement and operational costs.
Consequences: This Measure requires the Plan to be in implementation within five years.