

# MADERA COUNTY 2011 REGIONAL TRANSPORTATION PLAN



COUNTY OF MADERA  
CITY OF MADERA  
CITY OF CHOWCHILLA

Adopted  
July 21, 2010



# ACRONYMS

<b>AB</b>	Assembly Bill	<b>NEPA</b>	National Environmental Protection Act
<b>ADA</b>	Americans with Disabilities Act	<b>OPB</b>	Operations Program and Budget
<b>AQMP</b>	Air Quality Maintenance Plan	<b>OWP</b>	Overall Work Program
<b>AVO</b>	Average Vehicle Occupancy	<b>PAC</b>	Policy Advisory Committee
<b>AWP</b>	Annual Work Program	<b>PDT</b>	Project Development Team
<b>BLA</b>	Bicycle Lane Account	<b>PM-10</b>	Particulate Matter (less than 10 microns)
<b>CALTRANS</b>	California Department of Transportation	<b>REMOVE</b>	Reduced Motor Vehicle Emissions
<b>CAG</b>	County Association of Governments	<b>RIP</b>	Regional Improvement Program
<b>CATX</b>	Chowchilla Area Transit Express	<b>RPA</b>	Regional Planning Agency
<b>CEQA</b>	California Environmental Quality Act	<b>RTIP</b>	Regional Transportation Improvement Program
<b>CIP</b>	Capital Improvement Plan	<b>RTP</b>	Regional Transportation Plan
<b>CMA</b>	Congestion Management Agency	<b>RTPA</b>	Regional Transportation Planning Agency
<b>CMP</b>	Congestion Management Program	<b>SAFETEA-LU</b>	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
<b>COFCG</b>	Council of Fresno County Governments	<b>SB</b>	Senate Bill
<b>COG</b>	Council of Governments	<b>SIP</b>	State Implementation Plan
<b>CO SIP</b>	Carbon Monoxide State Implementation Plan	<b>SJVTPA</b>	San Joaquin Valley Transportation Planning Agencies
<b>CTC</b>	California Transportation Commission	<b>SJVAPCD</b>	San Joaquin Valley Air Pollution Control District
<b>CTSA</b>	Consolidated Transportation Services Agencies	<b>SHOPP</b>	State Highway Operation and Protection Program
<b>DBE</b>	Disadvantaged Business Enterprises	<b>SMSA</b>	Standard Metropolitan Statistical Area
<b>DOA</b>	Division of Aeronautics	<b>SRTDP</b>	Short Range Transit Development Plan
<b>EIR</b>	Environmental Impact Report	<b>SSTAC</b>	Social Service Transportation Advisory Council
<b>EIS</b>	Environmental Impact Statement	<b>STA</b>	State Transit Assistance
<b>EMC</b>	Eastern Madera County	<b>STIP</b>	State Transportation Improvement Program
<b>EPA</b>	Environmental Protection Agency	<b>TAC</b>	Technical Advisory Committee
<b>FAA</b>	Federal Aviation Administration	<b>TAZ</b>	Traffic Analysis Zones
<b>FCMA</b>	Fresno-Clovis Metropolitan Area	<b>TCI</b>	Transit Capital Improvement
<b>FHWA</b>	Federal Highway Administration	<b>TCM</b>	Transportation Control Measures
<b>FTA</b>	Federal Transit Administration	<b>TDA</b>	Transportation Development Act
<b>FTIP</b>	Federal Transportation Improvement Program	<b>TDP</b>	Transit Development Plan
<b>GIS</b>	Geographic Information System	<b>TEA</b>	Transportation Enhancement Activities Program
<b>HPMS</b>	Highway Performance Monitoring System	<b>TIP</b>	Transportation Improvement Program
<b>IIP</b>	Interregional Improvement Program	<b>TSME</b>	Transportation Systems Management Element
<b>IPG</b>	Intermodal Planning Group	<b>TAB</b>	Transit Advisory Board
<b>IPR</b>	Initial Project Reports	<b>TAC</b>	Transportation Advisory Committee
<b>ISTEA</b>	Intermodal Surface Transportation Efficiency Act	<b>VMT</b>	Vehicle Miles Traveled
<b>ITIP</b>	Interregional Transportation Improvement Program	<b>VW-GIS</b>	Valley-wide Geographic Information System
<b>LTF</b>	Local Transportation Fund	<b>YARTS</b>	Yosemite Area Regional Transportation Strategy
<b>MAX</b>	Madera Area Express	<b>YATI</b>	Yosemite Area Transportation Information
<b>MCAA</b>	Madera Community Action Agency		
<b>MCTA</b>	Madera County Transportation Authority		
<b>MCTC</b>	Madera County Transportation Commission		
<b>MicroDTIM</b>	Direct Travel Impact Model (PC Version)		
<b>MINUTP</b>	Traffic Simulation Model		
<b>MOU</b>	Memorandum Of Understanding		
<b>MPO</b>	Metropolitan Planning Organization		



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# **I. EXECUTIVE SUMMARY**

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## **INTRODUCTION**

### **Background**

The Madera County Regional Transportation Plan (RTP) was previously prepared by VRPA Technologies, Inc and Madera County Transportation Commission (MCTC) staff and approved by the MCTC Policy Board in May 2007. MCTC is now required to update the RTP to reflect the transportation system through Fiscal Year (FY) 2035. The RTP ensures that the County's transportation system and implementation policies/programs through FY 2035 will safely and efficiently accommodate growth envisioned in the Land Use Elements of the Cities of Chowchilla and Madera and Madera County. Recent recommendations included in special studies related to transportation and circulation were also reviewed and incorporated into this document where appropriate.

### **Project Location and Description**

Madera County is located in California's San Joaquin Central Valley (reference Exhibit 2-1). Encompassing 2,147 square miles, the County is situated in the geographic center of the State of California along State Route (SR) 99, approximately 18 miles north of Fresno. Generally, the County can be divided into three broad geographic regions – the valley area on the west; the foothills between Madera Canal and the 3,500 foot elevation contour; and the mountains from the 3,500 foot contour to the crest of the Sierra Nevada Mountains.

The 2011 RTP is a planning guide that contains transportation policy and projects for the next 25 years (to FY 2035). The Plan includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight and finances. The RTP must be revised at least every four years, since the County is designated as non-attainment for federal air quality standards.

The RTP's primary use is as a regional long-range plan for federally funded transportation projects, and it also serves as a comprehensive, coordinated transportation plan for all the governmental jurisdictions within the region. Different jurisdictions, including Caltrans, the County of Madera, and the Cities of Madera and Chowchilla, have different transportation implementation responsibilities under the plan.

The process to approve the 2011 RTP included assessing Madera County's transportation needs, identifying projects to address the needs, evaluating the projects considering the benefit vs. cost and other performance objectives, addressing air quality conformity requirements, conducting public hearings on the 2011 RTP by MCTC, certification of a subsequent Environmental Impact Report (EIR), and approval of a resolution passed by MCTC approving the RTP Update. Public involvement was encouraged throughout the RTP development process.

## REGIONAL TRANSPORTATION PLAN ORGANIZATION

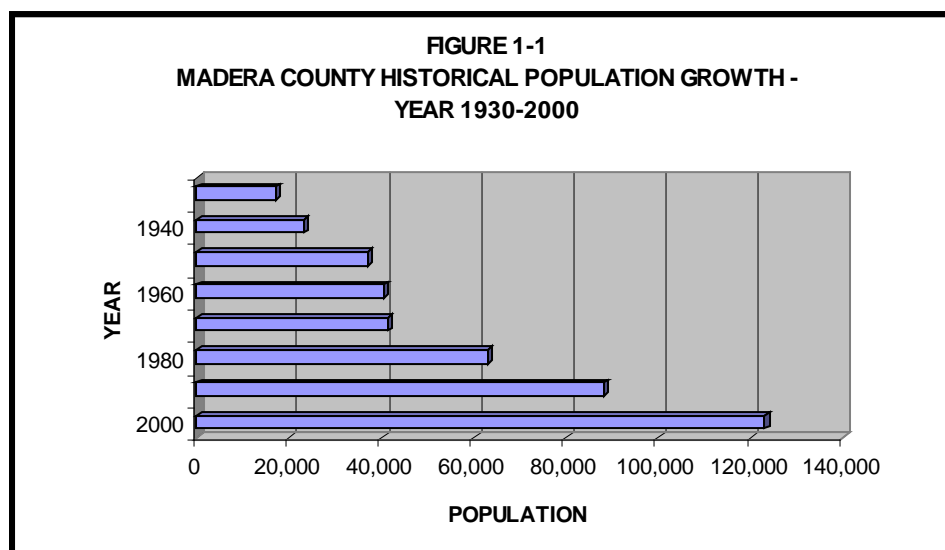
The Regional Transportation Plan is organized into eight chapters:

Chapter I	Executive Summary
Chapter II	Regional Setting and Planning Assumptions
Chapter III	Policy Element
Chapter IV	Action Element
Chapter V	Financial Element
Chapter VI	Blueprint Planning
Chapter VII	Environmental Considerations and Supplemental Information
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## SOCIOECONOMIC CHARACTERISTICS – MADERA COUNTY

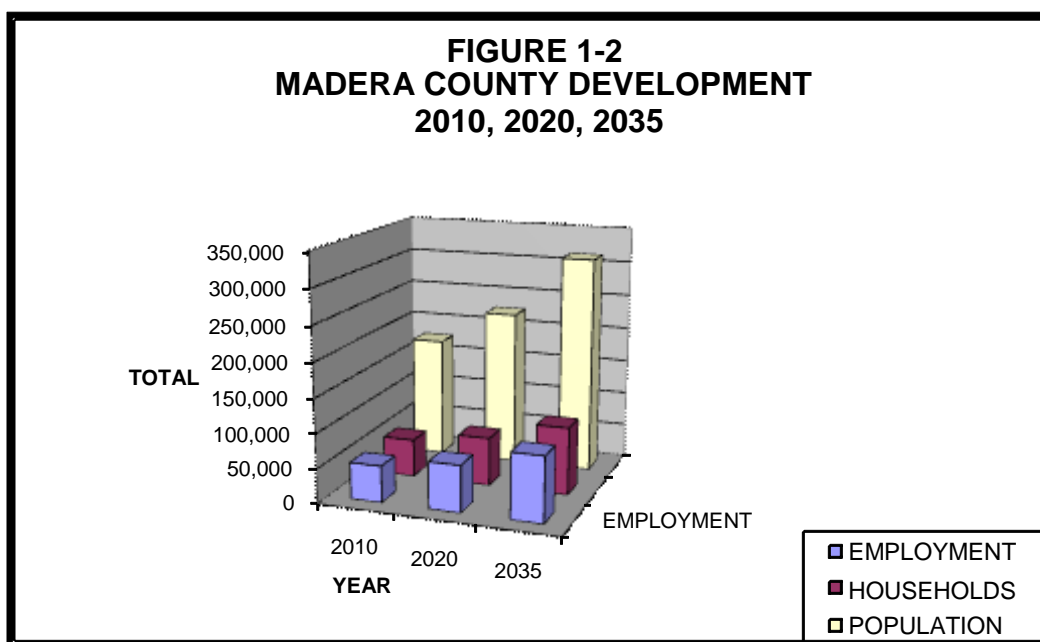
### Current Population and Employment

Historical demographic trends and projections of both population and employment are essential to development of the RTP. The population estimates and projections that are referenced in Tables 2-1 through 2-4 in Chapter II and Figures 1-1 below were identified from U.S. Bureau of the Census, California Department of Finance (DOF), California Employment Development Department (EDD), Central California Futures Institute, or from other data and are consistent with assumptions used in the Madera County Regional Traffic Model.



## Future Population and Employment Projections

Population and employment projections for Madera County are presented in Figure 1-2 below and in Table 2-4 in Chapter II of this RTP. These projections are provided for Years 2010, 2020, and 2035. The projections of population, households and employment were allocated to the broad geographic areas presented in the table and further allocated to 300 traffic analysis zones (TAZs) as part of the Madera County Regional Traffic Model process. Based upon the information presented in Chapter II of this RTP, the population in Madera County is expected to increase by 154% between Year 2000 and 2035, households are expected to increase by 146% between Year 2000 and 2035, and employment will increase by 96% between 2000 and 2035.



## EXISTING TRANSPORTATION SYSTEM

### Highways and Arterials

Regional access to Madera County is provided by six state highways -- State Routes (SR) 41, 49, 99, 145, 152 and 233, with SR 41 and SR 99 carrying the bulk of North-South travel (reference Exhibit 2-2 in Chapter II). Madera County's street network generally consists of a series of freeways, expressways, arterials, and collectors including: Roads 4, 9, 16, 23, 26, 36, 200, 223, 274, 400, 415, 600, Avenues 7, 7 ½, 9, 12, 14, 18 ½, 21, and 26, and Firebaugh and Children's Boulevards.

### Regionally Significant Roads System

MCTC, in conjunction with its member agencies and Caltrans, has developed the "Regionally Significant Road System" for transportation modeling purposes based on the FHWA Functional Classifications System of Streets and Highways. In general, the classification systems used by

local agencies coincide with the FHWA Functional Classification System. However, design standards and geometrics for particular streets within local jurisdictions, are subject to specific design criteria of the local agency. There is a significant distinction between the Regionally Significant Road System and the Countywide Network. Regionally significant projects are statutorily required to be treated separately for air quality reasons.

Results of the existing Year 2000 level of service (LOS) segment analysis along the RTP Regionally Significant Roads System are reflected in Exhibits 2-4A (Madera County) and 2-5B (Cities of Madera and Chowchilla) in Chapter II, and are further described in Appendix B. Results of the LOS analysis indicate that five (5) segments along the Regionally Significant Road System are currently operating at LOS "D" through "F" for State Routes and LOS "E" or "F" for local streets and roads (reference Appendix B). Tables 2-10 and 2-11 in Chapter III identify the deficient segments and mitigation required to improve the existing deficient segments to the Caltrans' Minimum LOS of "C" or to the local agencies' Minimum LOS of "D" for local streets and roads.

The resultant list of existing deficient facilities along the Regionally Significant Roads System and other important facilities provides an opportunity for MCTC, Caltrans, and local agencies to focus on projects that will improve the overall LOS of the regional network in the future.

## **Existing Mass Transportation**

Public transit in Madera County includes Madera Area Express fixed route and Dial-a-Ride, Madera County Connection, Chowchilla Area Transit Express, specialized social service transportation services, Greyhound, and taxi service. Public transportation is provided by fixed-route and demand-response transit systems, as described below.

### **◆ City of Madera**

The City of Madera and its environs are served by a number of public and private transportation providers. The City operates Madera Area Express (MAX), a fixed-route system and Dial-A-Ride, a general public demand-responsive system. Both services are operated under contract with First Transit. Dial-A-Ride is a general public system primarily serving the elderly and people with disabilities.

### **◆ City of Chowchilla**

The City of Chowchilla operates Chowchilla Area Transit Express (CATX), a general public, demand-responsive service. CATX service was initiated in 1995 and incorporated the senior bus program. The County of Madera funds CATX service for unincorporated portions of the service area.

### **◆ County of Madera**

The County of Madera operates the Madera County Connection (MCC), a general public, intercity fixed-route system. The MCC was initiated in 2001 as a demonstration service to provide transportation for children aged 0-5 and families to Children's Hospital Central

California. It has since expanded to provide service to all major communities in Madera County.

◆ **Social Service Transportation**

Six social service agencies provide transportation in Madera County (reference Table 2-12 in Chapter II). These agencies largely provide service to their clients and to specific sites.

◆ **Private Providers**

Several private carriers provide inter-city services, including Greyhound and Amtrak. Greyhound operates seven days a week from the City of Madera's Downtown Intermodal Center on North "E" Street.

◆ **Passenger Rail Service**

Madera County is served by the Burlington Northern Santa Fe (BNSF) and the Union Pacific (UP) Railroads. Amtrak operates seven days a week with twelve daily stops in Madera along the BNSF Railroad alignment. The station is located on Avenue 15½ and Road 29. The nearest stop to the north is Merced and to the south, Fresno. The City of Madera opened its Intermodal Station in November 1994. This facility provides space for the Dial-A-Ride operation, the Madera fixed route system, and Greyhound intercity services. A new Amtrak station located on Road 26 north of Madera is scheduled to begin construction in 2010.

## **Aviation**

The City of Madera owns and operates the Madera County Municipal Airport, which provides aviation services to approximately 120 fixed-base aircraft. The City of Chowchilla operates the Chowchilla Municipal Airport with 34 fixed-base aircraft. Table 2-13 and Figures 2-13 in Chapter II provide the total operations per year for each of these airport facilities. Both airports are depicted in Exhibit 2-2 in Chapter II. Fresno Yosemite International Airport (FAT) in Fresno County is the primary passenger airport facility in the region.

## **Non-Motorized Systems**

The Cities of Chowchilla and Madera, and Madera County continue to be involved in implementing bicycle lanes. The City of Madera annually reserves a portion of its Local Transportation Fund (LTF) proceeds for the construction of bicycle and pedestrian facilities. These funds are used in conjunction with funds from the REMOVE, CMAQ, and State Bicycle Transportation Account programs to implement elements of the Madera County 2004 Bicycle Transportation Plan.

## **Goods Movement**

Goods movement in Madera County is primarily provided by trucking and freight rail services. The trucking industry includes common carrier, private carrier, contract carrier, dryage and owner-operator services, which handle both line-haul and pick-up and delivery services. A

number of trucking facilities are located in Madera County including the public highway system, truck terminal facilities, freight forwarders, truck stops, and maintenance facilities. These facilities are especially concentrated along SR 99.

## **Transportation Demand Management**

Transportation demand management (TDM) programs in Madera County primarily consist of the voluntary rideshare program, the park & ride facilities program, and the alternative fuels program.

## **Intelligent Transportation Systems**

The use of new technologies [Intelligent Transportation Systems (ITS)] will allow maximum use of the transportation infrastructure including streets and highways and transit. Further, the need for traveler information is critical in order to lessen the impacts of accidents and other events in the region. Real-time traveler information can make traveling in Madera County more enjoyable and reduce delay and congestion. According to information provided through the ongoing San Joaquin Valley ITS Study, there are a number of ITS strategies that are being considered including surveillance and red-light running equipment at high accident locations in Madera, emergency vehicle dispatching systems in rural areas of the County, traveler information, restructuring and optimization of rural demand-responsive transit service, and analysis tools including geographic information systems (GIS).

## **RTP GOALS AND OBJECTIVES**

The overall goal of the 2011 Regional Transportation Plan (RTP) Update is to promote the development of a coordinated multimodal transportation system that is integrated with our land resource management strategies and air quality goals. This vision has not changed between the 2001 version of the plan and the 2011 update. The vision of where we want to be through Fiscal Year 2035 will help public and private decision-makers make informed choices on transportation and land use matters.

This Policy Element directly reflects the legislative, planning, financial and institutional history that has shaped the region's transportation system. The Policy Element is intended to frame and drive actions that will affect the direction and nature of transportation, and its impact on Madera County. This can be accomplished by either reinforcing positive opportunities and trends already in place, or stimulating change in a new direction to achieve certain outcomes. The goals for the 2011 RTP are provided below and are combined with objectives in Chapter III.

GOAL #1: Promote Affordable, Accessible and Viable Public and Private Transportation Systems Responsive to Current and Future Users.

GOAL #2: Retain and Increase Economic Activity and Competitiveness through Improved Transportation Systems, Including Intelligent Transportation Systems (ITS).

GOAL #3: Enhance Transportation System Coordination, Efficiency, and Intermodal Connectivity.



- GOAL #4: Maintain a Safe and Reliable Transportation System in a State of Good Repair.
- GOAL #5: Encourage the Coordination of Land Use Decisions and Transportation Systems.
- GOAL #6: Improve the Quality of the Natural and Human Environment through the Implementation of Effective Transportation Systems, Including Intelligent Transportation Systems (ITS).
- GOAL #7: Maximize Funding to Maintain and Improve the Transportation Network.

## **FUTURE TRANSPORTATION SYSTEM**

The transportation plan must not only address existing deficiencies, but also anticipate problems over the twenty-five year time frame. Even though there is no shortage of present problems in the region, we are required to look at the future, to see what transportation needs will be, and to create ways to meet those needs. Chapter IV discusses the various components of the transportation system that will serve population and employment in Madera County to Fiscal Year 2035, as well as identify the travel trends and the changing demands of the multi-modal transportation system. Chapter IV focuses on transportation system accomplishments, needs, and actions required to relieve existing deficiencies. In addition, Chapter IV provides recommendations for studies and projects that seek ways to satisfy future unmet transportation needs.

Travel to and from Madera County extends well beyond its borders. Vehicular commuting is not the only type of travel that links this Region with others. Freight movement extends well past the borders of Madera County, into adjoining Regions, other states, and even to other countries. Non-work trips for recreational travel and personal business also reach past the Madera County boundary. As a result, the transportation system must be capable of adequately meeting a wide range of needs. But there are often different ways of meeting these needs, some of which are more or less efficient than others, and some of which are more or less expensive than others.

To assess the needs in the Region, a review of future travel characteristics projected for FY 2035, and how the individual components of the system can meet future needs are provided in Chapter IV. The systems analyzed include:

- ◆ Highways and Arterials;
- ◆ Mass Transportation;
- ◆ Aviation;
- ◆ Non-Motorized Travel;
- ◆ Goods Movement;
- ◆ Transportation Demand Management; and
- ◆ Intelligent Transportation Systems (ITS).

These systems are discussed separately, but must operate as interdependent systems. The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) has required that regions recognize that

the transportation system is a system of interdependent parts. This interdependency can be characterized as having physical, fiscal, and behavioral dimensions.

Individual components of the regional transportation system [highways and arterials, mass transportation, non-motorized transportation systems, aviation systems, goods movement, transportation demand management, and Intelligent Transportation Systems (ITS)] are addressed in the following section. These systems comprise the Region's multimodal transportation system and identify the ways in which they will meet future demand and needs.

## **Projected 2035 Travel Characteristics**

The Regionally Significant Road System is reflected in Exhibit 2-2 in Chapter II. As stated in Chapter II, these facilities are consistent with the Functional Classification System developed by the Federal Highway Administration (FHWA). These facilities, along with other major streets and highways, are included in the Madera County Regional Traffic Model network for the Year 2035. The traffic model has recently been revised to reflect expected growth and development within the County as projected by the State Department of Finance (DOF) and derived by the Madera County Transportation Commission (MCTC) and other local agency staff. In addition, the street and highway network was revised to accurately reflect the required improvements in the County needed to accommodate traffic to the year 2035. Use of the highway and arterial system in the year 2035 is reflected in Exhibits 4-1A and 4-1B in Chapter IV. The results show Average Daily Traffic (ADT) along the major streets and highways within the Region.

The future year (2035) socioeconomic data forecasts used to generate trips along the street and highway network are reflected in Table 2-4 in Chapter II. The forecast of traffic generated by the projected population, housing and employment indicates that total vehicle trips will increase by about 177%. This is attributed to continued use of major transportation corridors in the Region. Furthermore, vehicle miles of travel (VMT) in 2035 are forecast to increase by approximately 176%, far greater than the increase in highway vehicle trips and the increase in population. Much of this increase in VMT is due to longer distance trips. Vehicle hours of travel (VHT) are forecast to grow by 354%, evidence of growing system-wide congestion.

Under a "No-Build" scenario, if additional street and highway projects are not identified beyond those included in the current STIP/FTIP, the street and road system is projected to experience significant congestion by the year 2035, given the expected increase in population, housing and employment referenced in Chapter II. Specifically, a significant number of segments along the Regionally Significant Road System would experience major (LOS) deficiencies resulting from implementation of a No Build scenario. These impacts are considered to be significant given the amount of average daily traffic that is projected by 2035. Significant delay and congestion well beyond the traffic capacity of these segments would be realized resulting in significant environmental and economic impacts. Segments projected to fall to LOS "D", "E" or "F" along the State highway system or to LOS "E" or "F" along the local street and highway system under this projected alternative are identified in Exhibits 4-2A and 4-2B in Chapter IV and further described in Appendix B, Tables B-2 and B-3.

In addition to street and highway impacts, major impacts upon other modes of transportation would also be realized. Without implementation of planned mass transportation, aviation, non-motorized, and goods movement improvements, the transportation/circulation system would be

severely impacted. These impacts would further reduce the ability of Madera County and the associated Air Basin to meet air quality standards and improve levels of congestion and delay.

A major objective of this RTP is to identify a transportation strategy that will improve mobility between 2011 and 2035, while at the same time reducing the negative environmental impacts of travel.

## **Highways and Arterials**

It is assumed that the regional highway system will continue to carry the vast majority of person-trip travel and will be an important part of the freight movement system. Streets and highways also will be the same routes for buses, and carpools and vanpools, resulting in a highway network that is an integral part of the public transit system. The street and highway system will also serve the needs of tourist travel and recreational travel.

Because the highway system must continue to provide reasonable service throughout the plan period, it is essential to keep it well maintained. It is also important to plan for capacity increases only where future traffic will exceed capacity and where highway expansion is determined to be the best solution. The functional classification system will be an important guide for road improvements. It will be important for the Region and the State to identify those arterials that are of strategic importance for commerce, tourism, and commuter travel.

From a traffic service perspective, the purpose of these strategic highways will need to be tailored to their location in the Region. In both the urban and rural areas of Madera County, this type of system will, for the most part, be comprised of existing routes with available opportunity for expansion. There should also be improvements to relieve bottlenecks at intersections and efforts made to allow passing opportunities around slow-moving vehicles in the mountain areas of the County. This will particularly help with goods movement. The ability to receive and send deliveries in a timely fashion is essential if the area is to remain competitive. It is therefore, important to plan for trucks carrying a variety of cargo (manufactured goods, raw materials and fuels) to have direct and safe access to the Region's principal highways and arterials.

### **Highway and Arterial Performance**

To assess highway and arterial needs, MCTC developed a process to evaluate candidate capacity-increasing and rehabilitation/safety projects considering performance-based measures and level of service (LOS) analysis. A description of each type of process is provided below.

#### ***Performance Measurement***

The RTP Guidelines identify the requirements for “performance-based” planning. The RTP Steering Committee reviewed the requirements and directed staff to prepare an analysis of the following performance measures for both capacity-increasing and rehabilitation projects, and to identify the criteria that should be applied to evaluate performance of the transportation system.

- Mobility / Accessibility;
- Reliability;

- Cost-effectiveness;
- Sustainability;
- Economic Well Being;
- Environmental Quality and Environmental Justice;
- Safety and Security;
- Equity; and
- Customer Satisfaction.

Once a full range of candidate regional highway and arterial projects was identified for the 2007 RTP Update by Caltrans and each of the local agencies, an analysis framework consisting of measurable criteria was developed to establish project priorities before the projects are modeled. Emphasis was given to identifying key differences between the candidate projects by mode and the tradeoffs that need to be weighed in the decision-making process. Over 100 candidate regional transportation capacity-increasing projects and over 190 rehabilitation/safety projects have been identified and were evaluated by the RTP Steering Committee.

The performance evaluation process was applied to identify the appropriate candidate RTP projects for funding in this RTP. Almost all of the candidate projects have been identified for funding except where funding constraints exist. The list of recommended RTP capacity increasing and rehabilitation projects are included and further described in Chapter IV.

### **Capacity-Increasing Street and Highway Project Needs and Actions**

New freeway and other street and highway capacity-increasing improvement projects have the greatest potential for causing significant adverse environmental effects versus other modes of transportation. This RTP proposes the widening or modification of existing streets and highways, changes to the designation of regional streets and highways, and new interchange facilities along new or existing freeways. Other projects include signalization improvements (new signals, signal modifications, and signal synchronization). Based upon the results of the performance evaluation process described above, a list of candidate capacity-increasing street and highway projects proposed to be implemented by the year 2035 was prepared and is reflected in Table 4-4 and depicted in Exhibit 4-3A and 4-3B in Chapter IV.

Referencing Table 4-4 in Chapter IV, this RTP contains over \$1.18 billion in capacity-increasing highway and arterial improvement projects. This figure includes all lane widenings, interchange improvements, new signals, and signal coordination systems adjusted to Year of Expenditure dollars. Approximately \$853 million has been allocated for State Highway improvements along SR 41, SR 99 and SR 145. In addition, new or improved interchange projects are planned along SR 41, SR 99 and SR 145. These projects are intended to relieve bottlenecks during peak use, to close gaps, and to increase capacity along congested freeways, such as SR 41 and SR 99, which provide access to major population and employment opportunities within the San Joaquin Valley.

The following needs are described to identify why the projects referenced in Table 4-4 in Chapter IV are necessary and how the projects will help meet regional transportation needs over the life of the Plan.

### ◆ **Level of Service Analysis**

To identify potential impacts of the planned street and highway system, the level of service (LOS) for each major facility was measured. Minimum LOS for purposes of the RTP is LOS "D" for local street and road facilities and LOS "C" for State Routes. The LOS analysis was conducted consistent with the analysis applied to estimate current LOS described in Chapter II of this RTP. For segments along the future RTP system, 2035 average daily traffic (ADT), estimated by the MCTC Regional Traffic Model, was applied (reference Exhibits 4-1A and 4-1B in Chapter IV). Results of the 2011 RTP LOS analysis indicate whether or not planned improvements contained in the Financial Element (Chapter V) will meet minimum LOS policies.

Results of the LOS analysis for the RTP indicate that some facilities will fall deficient between 2005 and 2035 (reference Appendix B). A list of these deficient facilities is provided in Table 4-5 in Chapter IV. Exhibits 4-4A and 4-4B also provide a graphic display of the resulting deficient levels of service in the Year 2035. Improvement projects to improve these deficient levels of service would include lane widening and other operational improvements; however the projects are not included in the 2011 RTP "financially-constrained" program.

It will be important over time for agencies to consider partnering with Caltrans to fund improvements on State routes with LOS deficiencies. These improvement projects are projects that are beyond the funding capability of the RTP or are financially unconstrained.

### **Major Corridor Deficiencies/Needs/Actions**

The two major deficiencies identified in the LOS analysis for Year 2035 with RTP projects include SR 41 north of the San Joaquin River to the Mariposa County Line, SR 99 between the San Joaquin River and the Merced County Line, and SR 145 from the Fresno County Line to SR 41. These deficiencies/needs, together with other issues described below, set the stage for a set of actions that will be carried out by MCTC and the affected local agencies and Caltrans over the next twenty-five years. Other issues such as the east-west corridor, emergency access in the mountain communities, preparation of the SR 65 Route Concept Report, land use coordination, private development improvements, and ramp metering are also provided in Chapter IV.

### **Street and Highway Rehabilitation/Safety Project Needs and Actions**

In addition to LOS deficiencies, Caltrans and local agencies are also facing the difficult task of maintaining regional streets and highways with inadequate funding. With increased congestion expected in the future, the typical road will require some maintenance every five to ten years, and major rehabilitation every ten to 20 years. If rehabilitation and maintenance activities are not implemented, County residents will continue to experience increased accident rates and reduced systemwide efficiency.

### ◆ **Enhanced Rehabilitation and Safety Improvements**

With the current backlog of highway and arterial maintenance and the pavement deterioration that goes with an aging roadway system, costs will increase dramatically

through the RTP horizon year to keep the highway system operational. The Plan identifies additional funds principally for arterials that minimize roadway and bridge decay. Recent studies have also identified the increased cost to users as under-maintained roadways degrade tires and shock absorbers, creating wear and tear on engines and connections throughout the vehicle. Providing additional funding to improve pavement conditions before roadbed deterioration requires full rehabilitation would result in substantial maintenance savings to the Region. Preliminary analysis indicates that the benefits of an investment in proper ongoing maintenance would pay dividends of more than triple the cost. The funding estimates for this 2011 RTP call for \$150.6 million in investments for rehabilitation and safety projects (reference Table 4-6 in Chapter IV) and \$223.3 million in operations and maintenance.

◆ **Projected Operation and Maintenance Costs**

There is currently an estimated 2,157 lane miles of streets and highways in the Madera County region, including 1,514 lanes miles on the regionally significant road network. Projected costs to maintain the Madera County streets and highway system over the next 25 years are estimated at \$223.3 million.

## **Mass Transportation**

Mass transportation is a transportation mode that moves large numbers of people from one destination to another. It provides an economical means of travel that reduces single-occupancy vehicle trips, improves air quality, and enhances the overall quality of life. Mass transportation in Madera County consists of public transit services provided by both the public and private sectors and Amtrak passenger rail service.

### **Mass Transportation Needs and Actions**

Madera County has made significant progress in addressing many public transit needs throughout the Region. MCTC's "Unmet Transit Needs" process has determined that transit services within the Madera County are meeting the reasonable transit needs of the public. These transit systems provide vital transportation services while reducing single-occupancy vehicle trips, improving air quality, and enhancing the overall quality of life for residents throughout the County. Table 4-7 in Chapter IV provides a listing of planned transit improvements over the 25-year timeframe of the Plan totaling \$107.8 million.

Mass transportation services, however, must respond effectively in the context of projected growth and development throughout Madera County and as the population and character of the Region evolves. There will be many short-term and long-term mass transportation needs and actions that should be addressed through a coordinated and collaborative process, as highlighted in Chapter IV.

## **Aviation**

Increased air service demand will occur in Madera County. This projected demand will increase the need for airport improvements. A number of these improvements are identified in the RTP

including land acquisition for future improvements, runway and taxiway renovations and extensions, etc. These improvements have been identified to address aviation system needs described in *the Regional Aviation System Plan* prepared by MCTC in June 1994. A list of needs and actions related to the regional aviation system is provided in Chapter IV.

## **Non-Motorized Systems**

MCTC recognizes that increased bicycling, walking and equestrian activities can reduce traffic congestion, air and noise pollution and fuel consumption. As a result, these modes effectively contribute to the quality of life in the Region. Bicycle travel has emerged as an increasingly popular form of recreation in the Region. Commuting to work has also increased in the urbanized areas of Madera County. Bicycles are essentially pollution-free, use no fossil fuels, are quiet, and take up very little space either in operation or in storage. Bicycling is of interest to the individual because it promotes health, is enjoyable and inexpensive, and, in the congested of the County, bicycling can be the fastest way of getting to work or to any destination, especially during the peak periods.

### **Non-Motorized System Needs and Actions**

The Cities of Chowchilla and Madera and Madera County have prepared bicycle plans. Exhibits 4-5 through 4-7 in Chapter IV identify the planned routes for bike lanes and paths. The plans stress the importance of making the road system compatible for bicycle and pedestrian transportation. In addition, the State of California has been working to improve and promote on-street bicycle commuting to urban cores and to support bicycle access to transit and passenger rail modes.

The Madera County 2004 Regional Bicycle Transportation Plan addresses the needs of both commuting and recreational cyclists throughout the county, identifies safe and convenient routes to key locations throughout the county, and suggests needed improvements and additions to the bikeway routes and facilities. MCTC staff will focus on the implementation program of the plan.

The Madera County 2004 Regional Bicycle Transportation Plan will serve as the basis for future investment in bicycle and pedestrian infrastructure. The plan identifies development priorities, funding sources, and grant opportunities.

#### **◆ *Bicycle and Trail Improvements***

To enable the vision of non-motorized linkages to activity centers within the Region, the local agencies have requested approximately \$21.3 million for non-motorized projects in the 2011 RTP (reference Table 4-9 in Chapter IV).

#### **◆ *Pedestrian Improvements***

There are several strategies that will serve to improve conditions for existing pedestrians and to induce others to join them. Proposed pedestrian improvements are also listed in Table 4-9 in Chapter IV.

In general, all new roadway projects and all reconstruction projects should be constructed so as to provide increased safety and mobility for all users, including people who walk and bicycle.

## **Goods Movement**

Goods movement in Madera County is primarily made along the network of highways and railroads. After many years of decline due to increased competition from trucks, rail freight is reasserting itself as an important component of the transportation system. While cartage by truck will remain an important component of a competitive and multimodal freight network, an efficient, high capacity freight rail system is also essential to ensure the seamless movement of goods between Madera County and markets and manufacturers in the north, south and east. While local freight distribution within the San Joaquin Valley, including Madera County, will continue to be handled mostly by trucks, railroads will serve some industries along the railroad lines. Improvements made to rail rights-of-way, generally for passenger travel, should also help the freight railroads by allowing faster, smoother travel.

### **Goods Movement Needs and Actions**

Improvements to the regional goods movement transportation, terminal, and intermodal transfer facilities will require a combination of traditional public sector and private sector funding. For instance, introduction of new and more powerful but lower-polluting railroad locomotives, main line track capacity, and railyard operational improvements are the responsibility of the private freight railroads. Most roadway and traffic signaling improvements used by trucks are provided by the public sector and financed by fuel taxes, other user fees, and private development. Still other improvements to transportation infrastructure serving airports may be funded using a mix of airport revenues, other public funds, and privately generated capital.

Development of a modern, efficient goods movement system for the Region is a cooperative venture, including all of the freight modal providers, airport operators, the federal, State, and local governments, and many other parties. While air cargo operations at the Chowchilla and Madera Municipal Airports is desirable, the feasibility of transporting goods by air is questionable. According to *the Regional Aviation System Plan* for Madera County prepared by MCTC in June 1994, most of the products from agribusiness are transported by truck or by train. In addition to those actions contained in Appendix G of this RTP, the following actions are also recommended to address improvements in the area of rail-highway grade crossings and goods movement modeling.

#### **◆ Grade Separation Improvements**

Regional rail freight movements often conflict with highway commuter and goods movement traffic. With the anticipated increase in truck and train movements, substantial additional delay for passenger vehicles and trucks can be expected at grade crossings. To avoid these delays, grade separations carrying arterials under or over rail lines carrying substantial amounts of freight is recommended along critical routes such as SR 99 near SR 152 and near Avenue 16. In order to support rail/highway grade crossing conflicts, MCTC intends to support the local agencies' in obtaining funds for grade crossing studies, support the construction of grade separations where streets and highways cross regional rail lines, and recognize the need for additional funding for grade crossing improvement projects to relieve



truck and other highway congestion because current program funding needs exceed available public and private funding.

## **Transportation Demand Management**

Transportation demand management (TDM) is the all-inclusive term given to a variety of measures used to improve the efficiency of the existing transportation system by managing travel demand. Travel behavior may be influenced by mode, reliability, frequency, route, time, and costs, support programs/facilities and education. TDM strategies encourage the use of alternatives to the single occupant vehicle such as carpools, vanpools, bus, rail, bikes, and walking. Alternative work hour programs such as compressed work week programs, flextime, and telecommuting (teleworking) are also TDM strategies as are parking management tactics such as preferential parking for carpools and parking pricing.

## **Intelligent Transportation Systems**

In addition to traditional lane widening and signal system improvements, the need to further enhance the capacity of the existing and future system using ITS will be important. ITS represents a means of applying new technological breakthroughs in detection, communications, computing and control technologies to improve safety and performance of the surface transportation system. This can be done by using the technologies to manage the transportation system to respond to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles. ITS includes Advanced Traffic Management Systems (ATMS), Advanced Vehicle Control Systems (AVCS) and Commercial Vehicle Operations (CVO).

### **Intelligent Transportation Systems Needs and Actions**

The *San Joaquin Valley Strategic Deployment Plan*, a collaborate effort between the eight Valley counties and Caltrans, was completed in 2001. The plan includes specific strategies and implementation program for ITS applications in Madera County. Chapter III and Appendix G provide additional detail regarding ITS opportunities in Madera County and throughout the Valley.

MCTC continues to participate in the deployment of 511 traveler information technology in the San Joaquin Valley.

## **Other Projects**

In addition to projects identified in the mode categories described above, a number of additional projects that do not necessarily fit into any one category or mode are described in Table 4-10. These projects total \$63.9 million and include such items as Project Study Reports (PSRs), right-of-way (ROW) acquisition, traffic signal projects, transportation control measures (TCMs), and the conversion of Madera County gasoline-powered fleet vehicles to CNG.

## **Conclusion**

The preceding discussion of the components of the regional transportation system helps to frame the choices that must be made in this plan. The system is mature and will require regular investments to preserve its capabilities, but there will be opportunities to improve efficiency through the use of new technology and increased TDM strategies. Other additions, such as bikeways and increased transit use, will assume greater importance in the future system. Clearly, each mode has an important role to play in the current and future system. The overall vision for the Transportation Plan is to identify investments and projects that can support a multimodal system.

## **FINANCING THE REGIONAL SYSTEM**

Chapter V provides a long-range view of proposed transportation projects within Madera County and how they will be funded. This plan is required to be “financially constrained” reflecting those projects that can be funded based on projected revenues rather than a “wish list” of projects. The challenge posed by this plan is how to sustain and develop an effective transportation infrastructure in Madera County as it experiences dynamic economic and demographic change over the next twenty-five years and limited transportation revenues.

The focus of this section is to project the realistic implementation of planned transportation projects within a financially-constrained scenario. Projections of potential federal, State, and local funding are included along with projected costs of proposed transportation projects through 2035 based upon the goals and objectives referenced in Chapter III and the analysis of needs identified in Chapter IV. A comprehensive overview of existing and potential sources of transportation funding also is provided in Appendix E of this plan. This section was developed based on significant collaborative efforts with Madera County jurisdictions to best reflect desired projects by region. Technical plans and studies and General Plan Elements for jurisdictions within Madera County also support this effort to implement the various transportation modes.

### **Projected Revenues**

A realistic revenue projection is required to determine how many proposed projects can be fully funded through 2035. Traditional or historical transportation funds are available through a variety of sources. Many funds, however, are restricted in their use. Revenues that historically have been constant and reliable are reflected through 2035 for all modes.

As reflected in Table 1-1, the cumulative transportation revenues for all modes are projected at \$746.5 million by 2020 and \$1,006.3 million by 2035 for a total of \$1,752.8 million over the next 25 years.

**TABLE 1-1**  
**Revenues by Mode**  
**(\$ Million)**

<b>MODE</b>	<b>FY 2011-20</b>	<b>FY 2021-35</b>	<b>TOTAL</b>
Streets & Roads	\$685.4	\$875.2	\$1,560.6
Public Transit	\$38.1	\$69.8	\$107.9
Other*	\$23.0	\$61.2	\$84.2
<b>Total</b>	<b>\$746.5</b>	<b>\$1,006.3</b>	<b>\$1,752.8</b>

\* "Other" includes non-motorized (bicycle and pedestrian), alternative-fuel vehicle projects, etc.

Local funds will be the greatest source of transportation funding for Madera County at \$953.3 million or 54% of total revenues, as shown on Table 1-2. Federal funds will be the second greatest at \$681.1 million or 39% of total revenues, while State funds are projected at \$118.4 million or 7% of total revenues.

**TABLE 1-2**  
**Revenues by Source of Funding**  
**2011 - 2035**  
**(\$ Millions)**

<b>Project Type</b>	<b>Federal</b>	<b>State</b>	<b>Local</b>	<b>Total</b>
Streets & Roads	\$546.3	\$110.3	\$904.0	\$1,560.6
Public Transit	\$60.4	\$8.0	\$39.5	\$107.9
Other	\$74.4	\$0.0	\$9.8	\$84.2
<b>Total</b>	<b>\$681.1</b>	<b>\$118.4</b>	<b>\$953.3</b>	<b>\$1,752.8</b>
<b>% of Total</b>	<b>39%</b>	<b>7%</b>	<b>54%</b>	<b>100%</b>

## Projected Expenditures

Table 1-3 reflects projected expenditures by transportation mode through 2035. As shown, total expenditures in Year of Expenditure dollars through 2035 for streets and roads are projected at \$1,560.6 million or 89% of total expenditures, public transit at \$107.9 million or 6% of total expenditures, and other projects at \$84.2 million or 5% of total expenditures.

**TABLE 1-3**  
**Transportation Expenditures by Mode**  
**2011 – 2035**  
**(\$ Million)**

<b>MODE</b>	<b>FY 2011-20</b>	<b>FY 2021-35</b>	<b>TOTAL</b>
Streets & Roads – Rehab & Safety	\$511.4	\$675.3	\$1,165.3
Streets & Roads – Capacity Increasing	\$109.6	\$41.0	\$152.8
Streets & Roads – Operations/Mtn.	\$64.4	\$158.9	\$242.5
Subtotal: Streets & Roads	\$685.5	\$875.2	\$1,560.6
Public Transit – Operating	\$31.4	\$52.1	\$83.5
Public Transit – Capital	\$6.7	\$17.7	\$24.4
Subtotal: Public Transit	\$38.1	\$69.8	\$107.9
Other*	\$23.0	\$61.2	\$84.2
<b>Total</b>	<b>\$746.5</b>	<b>\$1,006.3</b>	<b>\$1,752.8</b>

\* "Other" includes non-motorized (bicycle and pedestrian), aviation, alternative-fuel vehicle projects, etc.

## Financially Constrained Plan

Consistent with requirements for a financially constrained plan, this 2011 RTP maintains and enhances the existing transportation system by funding an array of multi-modal projects planned throughout Madera County. Projects submitted by each jurisdiction within the County were developed under a constrained scenario and therefore are fully funded under this plan.

As shown on Table 1-4, this plan identifies projected Countywide 25-year transportation revenues of \$1,752.8 million based on historical funding sources. Total expenditures over that same period are estimated at \$1,752.8 million resulting in a surplus of \$0.0 million in revenues.

**TABLE 1-4**  
**Summary of Countywide Revenues and Expenditures**  
**2011 – 2035**  
**(\$ Millions)**

<b>Project Type</b>	<b>Revenues</b>	<b>Expenditures</b>	<b>Balance</b>
Streets & Roads	\$1560.6	\$1560.6	\$0.0
Public Transportation	\$107.9	\$107.9	\$0.0
Other	\$84.2	\$84.2	\$0.0
<b>Total</b>	<b>\$1,752.8</b>	<b>\$1,752.8</b>	<b>\$0.0</b>

## Measure T Impacts

The 2004 RTP Project Prioritization Study identified \$550 million in unfunded capacity increasing projects in Madera County. These projects are need to correct LOS deficiencies forecasted in 2030 by the MCTC Travel Model. The 20-year Measure T Expenditure Plan (approved by the voters in November 2006) provides an estimated \$210 million. Although Measure T revenues are not sufficient enough to close the funding gap, local sales tax dollars are key to the ability to leverage other federal and state dollars.

This revenue shortfall signifies the challenges that lie ahead through 2030 to meet the projected growth and increased demands on Madera County's transportation network. The potential revenue shortfalls also point to the need for efficient and timely project implementation to maximize forecasted revenue and to be well positioned to receive potential future federal and State funds. Clearly, the goal of achieving a fully implemented regional transportation plan that will vastly improve the quality of life in Madera County will be a significant challenge without the infusion of increased revenues from existing and other new sources.

## **Unconstrained Projects**

Table 5-6 in Chapter V provides a list of those projects that cannot be funded within the twenty-five year timeframe of the RTP. MCTC, Caltrans, and the local agencies should work cooperatively to identify appropriate funding sources to consider programming the projects.

## **BLUEPRINT PLANNING**

The San Joaquin Valley Regional Blueprint planning process, begun in 2006 as a joint effort by the eight Valley MPOs, provides an initial framework for implementation of land use planning measures that can produce substantive reductions in GHG emissions. This chapter includes a summary of the Blueprint planning process in Madera County and offers solutions to improve the quality of life in the region for future generations. Further discussion of the Regional Blueprint process and ongoing implementation efforts can be found in Appendix G.

In September 2006, Governor Arnold Schwarzenegger signed into law AB 32, the California Global Warming Solutions Act of 2006. This landmark legislation establishes a statewide greenhouse gas (GHG) emissions cap for 2020, based on 1990 emissions levels. Two years later, the Governor signed SB 375, which implements the reduction requirements of AB 32 by establishing emissions-reduction goals around which regions can plan.

Although the planning requirements for SB 375, including the development of a Sustainable Communities Strategy (SCS) to meet state-established GHG reduction targets, will not take effect until the next planned update of the RTP in 2014, MCTC staff has already developed a comprehensive strategy for the implementation of smart growth planning over the next 40 years. Chapter VI includes an extensive discussion of the Blueprint efforts already undertaken in Madera County and offers several alternative scenarios for future growth.

## **ENVIRONMENTAL COMPLIANCE**

As mandated by State law, a Program Environmental Impact report (PEIR) has been prepared pursuant to Section 15163 of the California Environmental Quality Act (CEQA). The intent of the PEIR is to serve as CEQA compliance for the RTP and:

- ◆ identifies the significant effects of the updated 2011 RTP on the environment and indicate the manner in which those significant effects can be mitigated or avoided;

- ◆ identifies unavoidable adverse impacts that cannot be mitigated; and
- ◆ identifies alternatives.

In this regard, the PEIR is an informational document, the purpose of which is to inform public agency decision-makers and the general public of the significant environmental effects (both beneficial and adverse) of the proposed 2011 RTP. Chapter VII provides additional documentation of the environmental review process.

## **PUBLIC PARTICIPATION**

Because the RTP plays such a major role in establishing goals and objectives and guides development of infrastructure improvements, it was important that the update was conducted in the public forum and input was solicited from public groups. Extensive efforts were made to accomplish this, as exemplified by the following coordination:

### **2001 RTP Update**

- ◆ Public workshops to introduce the RTP and environmental review process were held in the City of Madera and in the mountain community of Oakhurst on January 9<sup>th</sup> and 10<sup>th</sup>, 2001. During the meetings, attendees were informed about the RTP Update process and schedule. Attendees had an opportunity to ask questions and provide comments on the preliminary set of goals and objectives and transportation needs that felt should be addressed as part of the RTP Update process;
- ◆ Attendees were invited to the monthly RTP Steering Committee meetings;
- ◆ MCTC staff and the consultant made a presentation to the North Fork Rancheria of Mono Indians Tribal Council on April 24, 2001. The presentation focused on the RTP Update process, schedule, and status. Staff will also seek input from the Picayunne Rancheria and will inform the RTP Steering Committee of their findings;
- ◆ Representatives of the North Fork Rancheria of Mono Indians and the Picayunne Rancheria were included as members of the RTP Steering Committee to insure that their issues were considered throughout the RTP development process;
- ◆ The San Joaquin Valley Air Pollution Control District (SJVAPCD) was also included as a member of the RTP Steering Committee. In addition, MCTC staff have coordinated with other RTPAs within the Valley and with the SJVAPCD to identify air quality conformity requirements/issues and to develop the Conformity Finding which will be distributed separate from this RTP; and
- ◆ The public was invited to another set of public workshops were publicly noticed and held on May 21 and 22, 2001 in Madera and in Oakhurst to review the Draft RTP and the Draft EIR;
- ◆ Presentations were made to each local agency in the County (Cities of Chowchilla and Madera and Madera County) to review the Draft RTP and Draft EIR and to receive input

from the agencies and the public. These meetings were held in July 2001 during the 45-day review period; and

- ◆ The MCTC Board took action regarding the 2001 RTP, Final EIR and the Air Quality Conformity Finding on October 17, 2001.

## **2004 RTP Update**

With the 2004 RTP update, MCTC has undergone a proactive approach to public participation. MCTC staff conducted six public workshops informing the public and soliciting input on the 2004 Regional Transportation Plan (RTP), including one specific workshop dedicated to environmental justice principles and low-income and minority populations.

- ◆ *A Spanish language interpreter was present at workshops conducted in areas with significant Spanish speaking populations, such as the City of Madera.*
- ◆ Two workshops were held in the City of Madera, along with workshops in Oakhurst, North Fork, Madera Ranchos, and the City of Chowchilla.
- ◆ To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:30 and 8:30 p.m. to make attendance more accessible.
- ◆ Flyers for the RTP workshops were made available in both Spanish and English and were posted, distributed and mailed to residents and businesses throughout the county. Information on the workshops was also made available in MCTC's quarterly newsletter, "Go Madera".
- ◆ 2004 also marks the first year of the MCTC Public Participation Plan (PPP). The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access.
- ◆ As an additional measure to increase public awareness of transportation issues within Madera County, MCTC has recently expanded its newsletter and mass mailing list by 50%. Over 100 new businesses, organizations and individuals have been added, including a significant number of religious-based groups.
- ◆ The MCTC Board took action regarding the 2004 RTP and the Air Quality Conformity Finding on July 21, 2004.

## **2007 RTP Update**

The 2007 RTP update public participation was primarily obtained through the development and public education campaign of the Madera County Measure T Investment Plan which began in late 2005 and early 2006. The Measure T Investment Plan was developed by a steering

committee that was representative of the stakeholder groups within Madera County. The Investment Plan funding programs and projects were refined through two scientific public opinion polls relating to the transportation needs of individual communities within Madera County. An Environmental Impact Report (EIR) for the Measure T Investment Plan and RTP was prepared and distributed to the appropriate regulatory agencies for consultation and comment. MCTC then engaged the public through a comprehensive public information campaign that included meeting with community organizations, interest groups, service clubs, etc that provided access to and input from over 1000 persons. A sample of the groups that participated is given below. The public information campaign also utilized the media outlets of television, radio, and direct mail to convey to the public the benefits of the Measure T Investment Plan and of the comprehensive transportation needs of Madera County through the year 2030. Madera County voters responded, validated, and legitimized MCTC's Regional Transportation Planning efforts by approving the Measure T Investment Plan by 73% of the vote. The Measure T Investment plan is the basis for the RTP Update and is thoroughly incorporated into the plan. In addition three 2007 RTP public workshops were held in development of the RTP update.

### **Measure T/RTP Update Presentations – Over 1000 People attended**

Madera Kiwanis Club  
Madera County Coalition  
Yosemite Gateway Realtors Association  
Madera Hispanic Chamber of Commerce  
Pan American Club  
American Legion Post #11  
Madera County Democratic Club (North Fork)  
VFW Post #1981  
Mexican-American Senior Citizens Club  
Association of Mexican American Educators  
Madera Farm Bureau  
NAACP Branch #1084  
CELSOC  
Madera Breakfast Lions Club  
Madera County Democratic Club (Madera)  
Madera Coalition for Community Justice  
Madera Taxpayers Assoc  
Madera High Twelve Club #646  
Yosemite Lakes Park Owners Association  
Latinas Unidas  
Knights of Columbus, St. Joseph Marelllo Council #364  
Sierra Senior Society  
Madera Sunrise Rotary  
Oakhurst Democratic Club  
Board of Trustees of Madera Community Hospital



Madera County Historical Society  
Greater Madera County Industrial Association  
Madera High School PTA-North Campus  
Oakhurst Sunrise Rotary  
Madera Mountain Chamber Area

- ◆ Public workshops were held in the City of Madera; Oakhurst; and the City of Chowchilla.
- ◆ A Spanish language interpreter was present at workshops conducted in areas with significant Spanish speaking populations, such as the City of Madera.
- ◆ To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:00 and 8:30 p.m. to make attendance more accessible.
- ◆ Flyers for the RTP workshops were made available in both Spanish and English and were posted, distributed and mailed to residents and businesses throughout the county. Information on the workshops was also made available on MCTC's website.
- ◆ The MCTC Public Participation Plan (PPP), consistent with SAFETEA-LU requirements and developed in consultation with federal, state, and local agency partners, guided the public participation program of the 2007 RTP Update. The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access.
- ◆ The MCTC Board took action regarding the 2007 RTP, Final EIR and the Air Quality Conformity Finding on May 23, 2007.

## **2011 RTP Update**

The 2011 RTP public participation program built on the success of previous public outreach campaigns to ensure widespread dissemination of information to a geographically and socially diverse population. Since the last RTP update, MCTC staff has continued to engage the public through workshops, public meetings, and presentations at service clubs and professional organizations. Educating the public about the regional transportation planning process and opportunities for continued public participation and input remains a priority for MCTC.

During the past year, MCTC joined with seven other Valley MPOs in the San Joaquin Valley Tribal EJ Collaborative Grant Project (see Appendix G). This Caltrans-sponsored grant has facilitated increased collaboration between MPO staff and the leadership of local, federally-recognized and unrecognized tribal governments. Through this process, MCTC staff has been able to increase awareness of long-range planning projects in the County, including the Regional Blueprint and the RTP.

A Notice of Preparation (NOP) for the 2011 RTP Environmental Impact Report (EIR) was prepared and distributed to the appropriate regulatory agencies for consultation and comment. Responding to comments received during the NOP review period, MCTC conducted a meeting with the superintendants of several local school districts, a stakeholder group that has not traditionally participated in the RTP planning process.

Public workshops were held in the City of Madera, Oakhurst, and the City of Chowchilla after an extensive public outreach campaign including newspaper advertisements, email invitations, and a notice on the MCTC website. To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:00 and 8:30 p.m. to make attendance more accessible.

The MCTC Public Participation Plan (PPP), consistent with SAFETEA-LU requirements and developed in consultation with federal, state, and local agency partners, guided the public participation program of the 2011 RTP Update. The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access.

## PERFORMANCE MONITORING

As the Regional Transportation Planning Agency (RTPA) for Madera County, the Madera County Transportation Commission (MCTC) monitors local and other regional transportation plans, projects and programs for consistency with regional plans. This monitoring process is conducted through the following processes as described in Chapter VIII:

- ◆ Regional Transportation Improvement Program (RTIP) / Federal Transportation Improvement Program (FTIP);
- ◆ Air Quality Conformity
- ◆ Other Regional Transportation Monitoring such as the Highway Performance Monitoring System (HPMS) and a traffic monitoring report;
- ◆ Triennial Performance Audit for Transit; and
- ◆ Benchmarking using performance-based measures to identify and monitor the performance of the transportation system.

## **II. REGIONAL SETTING AND PLANNING ASSUMPTIONS**

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### **INTRODUCTION**

#### **Background**

The Madera County Regional Transportation Plan (RTP) was previously prepared by VRPA Technologies, Inc and Madera County Transportation Commission (MCTC) staff and approved by the MCTC Policy Board in May 2007. MCTC is now required to update the RTP to reflect the transportation system through Fiscal Year (FY) 2035. The RTP ensures that the County's transportation system and implementation policies/programs through FY 2035 will safely and efficiently accommodate growth envisioned in the Land Use Elements of the Cities of Chowchilla and Madera and Madera County. Recent recommendations included in special studies related to transportation and circulation were also reviewed and incorporated into this document where appropriate.

#### **Project Location and Description**

Madera County is located in California's San Joaquin Central Valley (reference Exhibit 2-1). Encompassing 2,147 square miles, the County is situated in the geographic center of the State of California along State Route (SR) 99, approximately 18 miles north of Fresno. The County has an average altitude of 265 feet ranging from 180 to 13,000 ft above sea level. The San Joaquin River forms the south and west boundaries with Fresno County. To the north, the Fresno River forms a portion of the boundary with Merced County. Mariposa County forms the remainder of the northern boundary. The crest of the Sierra Nevada Mountains forms the eastern boundary with Mono County. Generally, the County can be divided into three broad geographic regions – the valley area on the west; the foothills between Madera Canal and the 3,500 foot elevation contour; and the mountains from the 3,500 foot contour to the crest of the Sierra Nevada Mountains.

The valley area is generally flat and ranges in elevation from 45 to 1,000 feet. This area contains approximately two-thirds of the County's population and includes the cities of Chowchilla and Madera, as well as the unincorporated communities of Fairmead, Madera Ranchos, and Bonadelle Ranchos. A well-developed agricultural economic base characterizes this area.

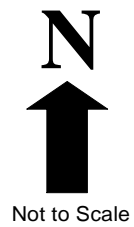
The foothill area contains the remaining one-third of the County population residing in the unincorporated communities of Oakhurst, Ahwahnee, North Fork, Coarsegold, Raymond and Yosemite Lakes Park.

The agricultural base in this area is primarily grazing. Much of the area's employment base is involved in the tourist-related services with a significant commuter component going to Fresno, Madera and other valley employment and service centers.

# California County Map Exhibit 2-1



Madera County  
2011 Regional Transportation  
Plan (RTP)



The mountain area is essentially uninhabited with most of the land located in the Sierra National Forest, Yosemite National Park, Devils Postpile National Monument, and the Ansel Adams and John Muir Wilderness Areas. Historically, the national forest area has supported a strong lumber-based economy; however, this has been seriously curtailed by recent environmental actions.

## **SOCIOECONOMIC CHARACTERISTICS**

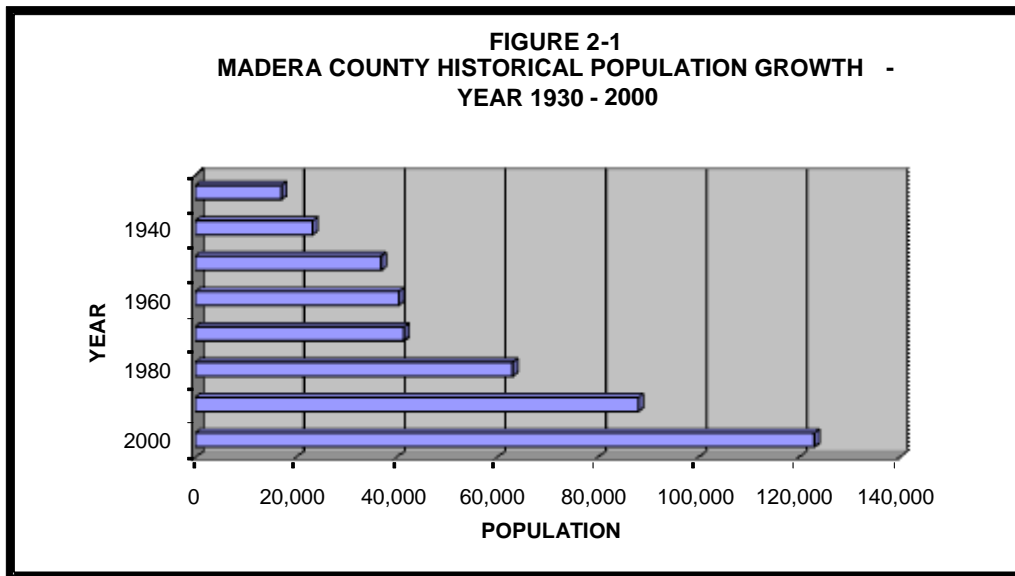
### **Current Population and Employment**

Historical demographic trends and projections of both population and employment are essential to development of the RTP. The population estimates and projections that are referenced in Tables 2-1 through 2-4 and Figures 2-1 through 2-4 were identified from U.S. Bureau of the Census, California Department of Finance (DOF), California Employment Development Department (EDD), Central California Futures Institute, or from other data and are consistent with assumptions used in the Madera County Regional Traffic Model.

**TABLE 2-1**  
**Madera County Historical Population Growth –**  
**Year 1930 - 2000**

<b>YEAR</b>	<b>POPULATION</b>	<b>% INCREASE</b>	<b>AVERAGE ANNUAL INCREASE</b>
1930	17,164		
1940	23,314	35.8	3.1
1950	36,964	58.5	4.7
1960	40,468	9.5	0.9
1970	41,519	2.6	0.2
1980	63,116	52.0	4.3
1990	88,090	39.6	3.4
2000	123,109	39.8	4.0

*Source: U.S. Bureau of the Census*

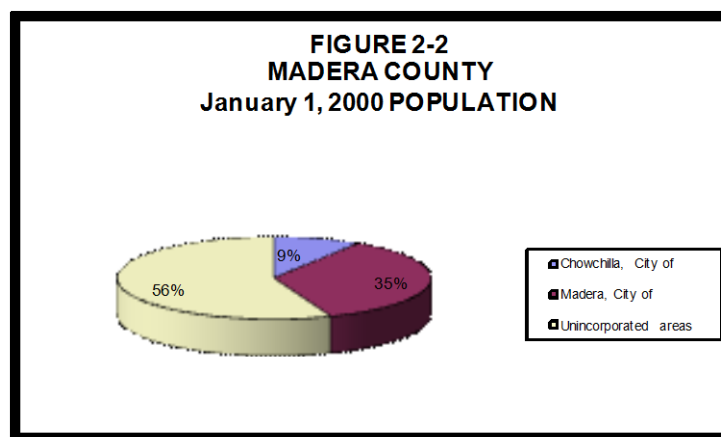


**TABLE 2-2  
January 1, 2000 Population & Households**

AREA OF MADERA COUNTY	2000 POPULATION	2000 HOUSEHOLDS
Chowchilla, City of	11,127	2,700
Madera, City of	43,207	12,600
Unincorporated areas	68,775	24,400
<b>Total Madera County Population</b>	<b>123,109</b>	<b>39,700</b>

*Source: California Department of Finance*

Based on data from the US Economic Census, the California DOF, the California EDD, and input from MCTC and Madera County staff, Table 2-3 and Figure 2-3 provide information on employment by major industrial category.



**TABLE 2-3**  
**Employment and Madera County Residents**  
**By Industry Category - 2000**

<b>INDUSTRY</b>	<b>NUMBER</b>	<b>%</b>
Farming	11,900	30.6
Construction & Mining	1,500	3.9
Manufacturing	3,300	8.5
Transportation & Public Utilities	1,000	2.6
Wholesale & Retail Trade	5,600	14.4
Finance, Insurance & Real Estate	600	1.5
Services	7,600	19.6
Federal Government	400	1.1
State Government	1,900	4.9
Local Government	5,000	12.9
TOTAL:	38,800	100.0
<b>Total Civilian Employment:</b>	<b>48,100</b>	
<b>Civilian Labor Force:</b>	<b>54,600</b>	
<b>Civilian Unemployment:</b>	<b>6,500</b>	
<b>Civilian Unemployment Rate:</b>	<b>11.8%</b>	

Source: State of California Employment Development Department

### **Other Current Socioeconomic Factors**

In addition to population, households, and employment, it is important to understand the other socioeconomic factors that help identify the uniqueness of Madera County including household median income, age characteristics, and ethnicity. According to the State Department of Finance, the median household income in 2000 was \$37,600, which was relatively similar to other Central Valley counties. In 1998, according to information published by the U.S. Census Bureau, 53% of the population in Madera County was male and 47% was female, 33% was under the age of twenty, 54% were between the ages of twenty and 65 and 13% of the population was 65 years of age or older. In addition, 51% of the population was white, 41% was Hispanic, 4% was African-American, 2% was American Indian, Eskimo, or Aleut, and 2% was Asian or Pacific Islander.

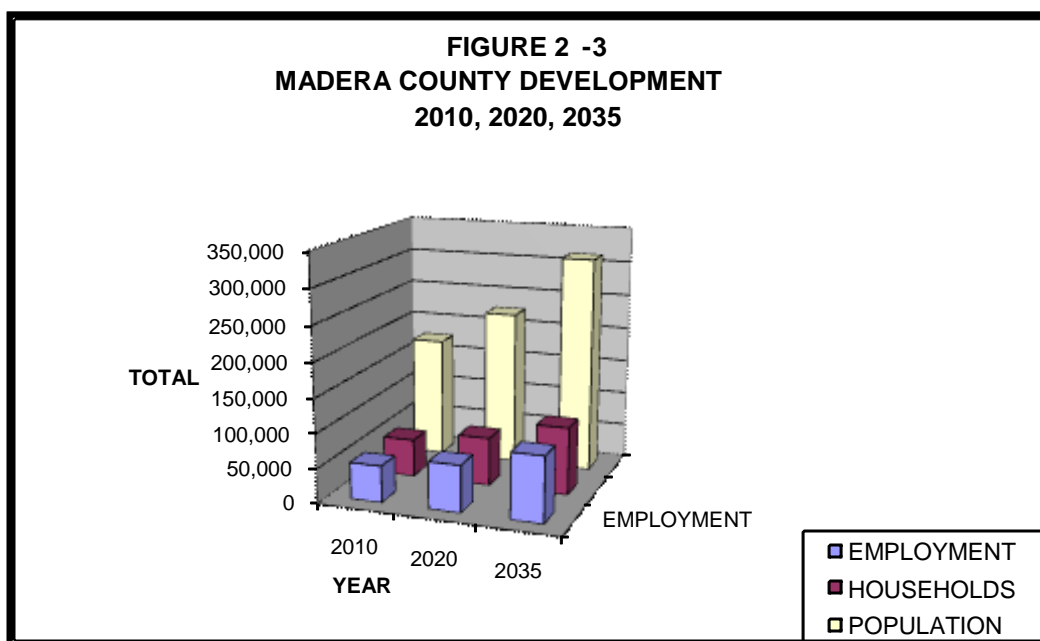
### **Future Population and Employment Projections**

Population and employment projections for Madera County are presented in Table 2-4 and Figure 2-3. These projections are provided for Years 2010, 2020, and 2035. The projections of population, households and employment were allocated to the broad geographic areas presented in the table and further allocated to 300 traffic analysis zones (TAZs) as part of the Madera County Regional Traffic Model process.

**TABLE 2-4**  
**Madera County Development Projections**  
**2010, 2020 and 2035**

Analysis Area	2010 Pop.	2010 Households	2010 Employ.	2020 Pop.	2020 Households	2020 Employ.	2035 Pop.	2035 Households	2035 Employ.
Rural Area	8,479	2,645	2,463	10,873	3,391	3,155	15,167	4,731	4,402
Mountain Area	57,337	17,884	13,218	73,521	22,932	16,947	102,555	31,989	23,640
Madera Ranchos Area	17,059	5,321	5,969	21,875	6,823	7,654	30,513	9,518	10,676
Chowchilla	15,117	4,715	4,593	19,384	6,047	5,889	27,039	8,434	8,215
Madera	77,139	24,061	26,583	98,914	30,853	34,086	137,975	43,037	47,548
<b>Total</b>	<b>175,131</b>	<b>54,626</b>	<b>52,826</b>	<b>224,567</b>	<b>70,046</b>	<b>67,731</b>	<b>313,250</b>	<b>97,707</b>	<b>94,480</b>

Source: MCTC Regional Traffic Model Socioeconomic Profile, January 20, 2010



Based upon the information presented in Tables 2-1, 2-3, and 2-4, and Figures 2-1, 2-2 and 2-3, the population in Madera County is expected to increase by 154% between Year 2000 and 2035, households are expected to increase by 146% between Year 2000 and 2035, and employment will increase by 96% between 2000 and 2035.

## EXISTING TRANSPORTATION SYSTEM

### Highways and Arterials

Regional access to Madera County is provided by six state highways -- State Routes (SR) 41, 49, 99, 145, 152 and 233, with SR 41 and SR 99 carrying the bulk of North-South travel (reference Exhibit 3-2). Madera County's street network generally consists of a series of freeways, expressways, arterials, and collectors including: Roads 4, 9, 16, 23, 26, 36, 200, 223,



274, 400, 415, 600, Avenues 7, 7 ½, 9, 12, 14, 18 ½, 21, and 26, and Firebaugh and Children's Boulevards.

The City of Chowchilla is located in north-central Madera County along the west side of SR 99, straddling SR 233 (Robertson Boulevard). The City of Madera is located in central Madera County and straddles both sides of SR 99 and SR 145 (Madera, Gateway and Yosemite Avenues). Other major arterials in the City of Madera include: Avenue 12, Avenue 14 (Howard Road and Olive Avenue), Cleveland Avenue, Road 23, and other sections of Gateway Drive.

In addition, SR 41 provides access to the communities of Coarsegold and Oakhurst, leading into the Sierra Nevada Mountains towards Yosemite National Park. SR 49 branches off of SR 41 in Oakhurst providing access to the community of Ahwahnee. Each of these major streets and highways, in addition to others depicted on Exhibit 3-2, are part of the Madera County Regionally Significant Road System.

### **Regionally Significant Roads System**

MCTC, in conjunction with its member agencies and Caltrans, has developed the "Regionally Significant Road System" for transportation modeling purposes based on the FHWA Functional Classifications System of Streets and Highways. In general, the classification systems used by local agencies coincide with the FHWA Functional Classification System. However, design standards and geometrics for particular streets within local jurisdictions, are subject to specific design criteria of the local agency.

There is a significant distinction between the Regionally Significant Road System and the Countywide Network. Regionally significant projects are statutorily required to be treated separately for air quality reasons.

### ***Functional Classification System***

Functional classification is the process by which streets and highways are grouped into classes according to the type of service they are intended to provide. Fundamental to this process is the recognition that individual streets and roads do not serve travel independently in any major way. Functional classifications define the channelization process by defining the area that a particular road or street should service through a highway network. Table 2-5 defines the functional classes in urban areas and Table 2-6 defines functional classes in rural areas.

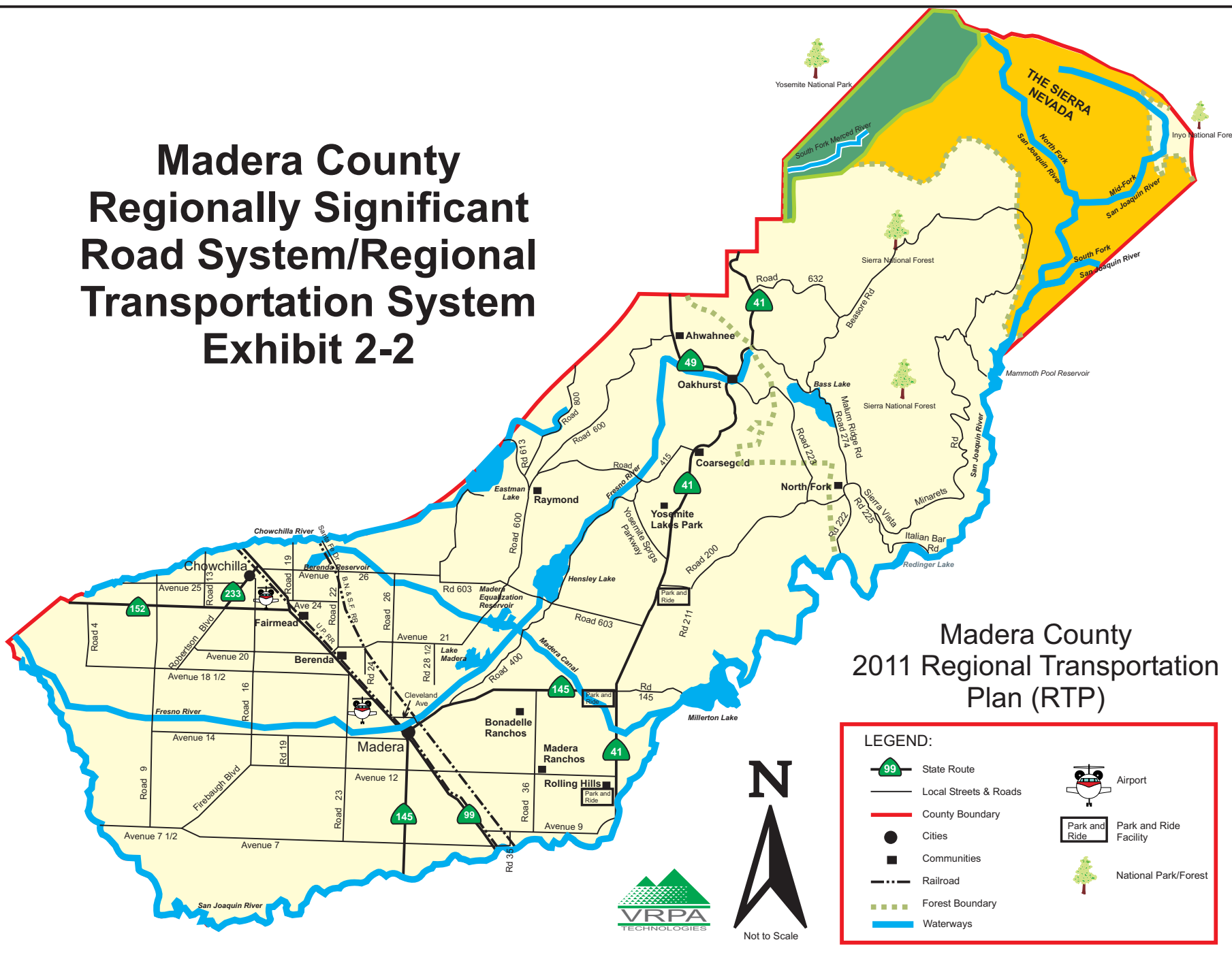
### ***Inventory***

Currently there are standards for road facilities falling into five functional classifications:

**Freeways** provide high speed, through traffic movement on limited access, continuous routes. This class of facility provides connections to other regional highways and carries high traffic volumes at maximum legal speeds. Access is strictly controlled and conforms to state standards for rural freeways with interchanges spaced at two mile or greater distances. There is no direct access provided to adjacent properties. Freeways are typically developed within a 180 to 200 foot right-of-way.












# Madera County Regionally Significant Road System/Regional Transportation System Exhibit 2-2

Page 2-8



Madera County  
2011 Regional Transportation  
Plan (RTP)

**LEGEND:**

-  State Route
-  Local Streets & Roads
-  County Boundary
-  Cities
-  Communities
-  Railroad
-  Forest Boundary
-  Waterways
-  Airport
-  Park and Ride Facility
-  National Park/Forest



Not to Scale

**TABLE 2-5**  
**Urban Functional Classification System-Definitions**

<b>CLASSIFICATION</b>	<b>PRIMARY FUNCTION</b>	<b>DIRECT LAND ACCESS</b>	<b>SPEED LIMIT</b>	<b>PARKING</b>
Fwy/Exprwy	Traffic Movement	None	45-65	Prohibited
Primary Arterial	Traffic Movement/ Land Access	Limited	35-45	Prohibited
Secondary Arterial	Traffic Movement/ Land Access	Restricted	30-35	Generally Prohibited
Collector	Distribute Traffic Between Local Streets & Arterials	Safety Controls, Limited Regulation	25-30	Limited
Local	Land Access	Safety Controls Only	25	Permitted

**TABLE 2-6**  
**Rural Functional Classification System-Definitions**

<b>CLASSIFICATION</b>	<b>PRIMARY FUNCTION</b>	<b>DIRECT LAND ACCESS*</b>	<b>SPEED LIMIT**</b>	<b>PARKING***</b>
Fwy/Exprwy	Traffic Movement	Safety Controls	55-70	Prohibited
Arterial	Traffic Movement/ Land Access	Safety Controls	55	Permitted
Collector	Distribute Traffic Between Local Streets & Arterials	Safety Controls	55	Permitted
Local	Land Access	Safety Controls	55	Permitted

\* Access to arterials is generally limited or restricted if it provides access to a land subdivision or an industrial, commercial or multi-family use. Access is granted on a controlled basis to parcels fronting on expressways where there is not a frontage road or access to another road; \*\* All County roads have a 55 mph operating speed unless otherwise indicated; \*\*\* Parking is permitted on all County roads unless otherwise indicated.

- ◆ **Expressways** - very similar in function to freeways with the primary difference found in points of access. Expressways provide limited access via at grade intersections with arterial streets, which are usually spaced one mile intervals. Expressways are developed as four lane divided facilities within a 100 to 120 foot right-of-way.

- ◆ **Arterials** - primary purpose is to provide mobility. Arterials are designed to carry through traffic on continuous routes and to connect major traffic generators, freeways, and other arterials. Access is allowed under specific conditions and in conformance with local standards. Urban arterials are designed to accommodate four travel lanes and can be either divided or undivided. Rural arterials are generally two lane facilities, which serve to connect rural communities to urbanized areas or freeways. Arterials are developed within a 100 foot right-of-way.
- ◆ **Collectors** - primary purpose is to provide access to local land uses. Collectors provide for internal traffic movement and connect local roads to higher level facilities such as arterials. Urban collectors may be four lanes but are usually two lane facilities within an 80 foot right-of-way. Rural collectors are two lanes constructed within an 80 foot right-of-way.
- ◆ **Local Roads** - provide direct access to adjoining properties and connect with collector and arterial roads. Local roads are developed as two lane facilities within a 60 foot right-of-way.

This hierarchy of classifications is a general guide to the major elements of the circulation system. Many times a street will serve several functions providing both mobility and access. Street width does not always correspond to streets regional function. This is especially true in the rural areas where rights of way and pavement width on major regional routes can be considerably less than ideal standards.

### **State Highways**

Parts of seven state highways pass through Madera County, including one unconstructed route:

- ◆ **State Route 99** - a four-lane freeway from the Fresno County Line to Avenue 21 and from SR 152 to the Merced County Line. The segment between Avenue 21 and SR 152 was recently widened to a six-lane freeway. SR 99 is the primary inter-regional corridor within the San Joaquin Valley. It provides a critical linkage for shipment of agricultural goods to markets outside of the Valley; provides for through traffic between major metropolitan areas of California; and during the summer months has significant recreational access function.
- ◆ **State Route 41** – a four-lane freeway between the Fresno County Line and Avenue 10 and extends in a north/south direction through eastern Madera County to the Mariposa County Line as a two-lane highway. SR 41 has regional and national importance as an access to Yosemite National Park and the recreational areas of the east county. With residential growth in the SR 41 corridor, most notably in the Oakhurst, Coarsegold, Yosemite Lakes, and the Ranchos area, this route is becoming increasingly important as a commuter link to the Fresno-Clovis Metropolitan Area (FCMA).
- ◆ **State Route 49** – a two-lane highway in eastern Madera County extending 9 miles north and west from its intersection with SR 41 in Oakhurst. This facility provides local circulation within the general Oakhurst/Ahwahnee area and regional access to the California “Gold Country” and Yosemite National Park.
- ◆ **State Route 145** – a two- and four-lane highway extending north/south from the Fresno

County Line to the City of Madera, then east/west to its intersection with SR 41, SR 145 provides a secondary access to Yosemite National Park via SR 41, and provides an important linkage to both SR 99 and Interstate 5 for farm to market shipping.

- ◆ **State Route 152** – a four-lane divided expressway extending east/west from the Merced County Line to SR 99. There is an additional fifteen miles of planned roadway extending east from SR 99 to unconstructed SR 65. SR 152 is a primary access route from the central San Joaquin Valley to Monterey and Santa Clara Counties. It is an important agricultural, commercial, and recreational access route.
- ◆ **State Route 233** – a two- and four-lane highway extending four miles northeasterly from its intersection with SR 152 to the interchange with SR 99. This route serves primarily to provide for northbound traffic movement from SR 152 and SR 99 as well as local access to Chowchilla.
- ◆ **State Route 65** – a legislatively designated, unconstructed north-south highway paralleling SR 99 along the Sierra Nevada foothills. This route would ultimately provide additional highway capacity along the eastern side of the San Joaquin Valley to meet increased travel demand. Caltrans District 6 is currently conducting a corridor study for future implementation of SR 65.

### **Level of Service Analysis**

Level of Service (LOS) standards are used to quantitatively assess the Regionally Significant System's performance. To determine the type and number of transportation projects to accommodate Madera County's expected growth, LOS was assessed along the existing Regionally Significant Roads System.

According to the 1997 Highway Capacity Manual (HCM), LOS is categorized by two parameters of traffic, uninterrupted and interrupted flow. Uninterrupted flow facilities do not have fixed elements such as traffic signals that cause interruptions in traffic flow. Interrupted flow facilities have fixed elements that cause an interruption in the flow of traffic such as stop signs, signalized intersections, and arterial roads<sup>1</sup>. The difference between uninterrupted flow and interrupted LOS is defined in the following Tables 2-7 and 2-8, and more specifically in Table 2-9.

According to goals and objectives described in Chapter III of the 2011 RTP, Policy Element, the goal is to maintain acceptable levels of service along the highways, streets and roads network. For purposes of this environmental analysis, a minimum LOS of "D" was assumed along local streets and roads. Caltrans minimum LOS for the State routes is LOS "C". To determine the existing LOS for each segment along the Regionally Significant Roads System and other facilities where current traffic volumes were available, segment LOS was estimated using the Modified HCM-Based LOS Tables (Florida Tables). The Tables consider capacity of individual segments based on numerous roadway variables (freeway design speed, signalized intersections per mile, number of lanes, saturation flow, etc.). These variables were identified and applied in the Tables to reflect existing traffic LOS conditions in Madera County.

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<sup>1</sup> Transportation Research Board, 1997

The variables are consistent with HCM variables referenced in Table 2-9. A complete description of the Modified Tables and the variables applied to calculate segment LOS is included in Appendix A.

**TABLE 2-7**  
**Uninterrupted Traffic Flow Facilities LOS**  
**(1997 Highway Capacity Manual)**

**LOS A** represents free flow. Individual vehicles are virtually unaffected by the presence of others in the traffic stream.

**LOS B** is in the range of stable flow, but the presence of other vehicles in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.

**LOS C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual vehicles becomes significantly affected by interactions with other vehicles in the traffic stream.

**LOS D** is a crowded segment of roadway with a large number of vehicles restricting mobility and a stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.

**LOS E** represents operating conditions at or near the level capacity. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.

**LOS F** is used to define forced or breakdown flow (stop-and-go gridlock). This condition exists when the amount of traffic approaches a point where the amount of traffic exceeds the amount that can travel to a destination. Operations within the queues are characterized by stop and go waves, and they are extremely unstable.

Average Daily Traffic (ADT) counts used to calculate the LOS are illustrated in Exhibits 2-3A (Madera County) and 2-3B (Cities of Madera and Chowchilla). Results of the LOS segment analysis along the RTP Regionally Significant Roads System are reflected in Exhibits 2-4A (Madera County) and 2-5B (Cities of Madera and Chowchilla), and are further described in Appendix B. Results of the LOS analysis indicate that five (5) segments along the Regionally Significant Road System are currently operating at LOS "D" through "F" for State Routes and LOS "E" or "F" for local streets and roads (reference Appendix B). Tables 2-10 and 2-11 identify the deficient segments and mitigation required to improve the existing deficient segments to the Caltrans' Minimum LOS of "C" or to the local agencies' Minimum LOS of "D" for local streets and roads.

The resultant list of existing deficient facilities along the Regionally Significant Roads System and other important facilities provides an opportunity for MCTC, Caltrans, and local agencies to focus on projects that will improve the overall LOS of the regional network in the future.

**TABLE 2-8**  
**Interrupted Traffic Flow Facilities LOS**  
**(1997 Highway Capacity Manual)**

**LOS A** describes operations with average intersection stopped delay of five seconds or less (how long a driver must wait at a signal before the vehicle can begin moving again).

**LOS B** describes operations with average intersection stopped delay in the range of 5.1 to 15.0 seconds per vehicle, and with reasonably unimpeded operations between intersections.

**LOS C** describes operations with higher average stopped delays at intersections (in the range of 15.1 to 25.0 seconds per vehicle). The stable operations between locations may be more restricted due to the ability to maneuver and change lanes at mid-block locations can be more restrictive than LOS B. Further, the longer queues and/or adverse signal coordination may contribute to lower average speeds.

**LOS D** describes operations where the influence of delay is more noticeable (25.1 to 40.0 seconds per vehicle). Intersection stopped delay is longer and the range of travel speeds are about 40 percent below the free flow speed. This is caused by inappropriate signal timing, high volumes, and some combinations of these.

**LOS E** is characterized by significant approach stopped delay (40.1 to 60.0 seconds per vehicle), and average travel speeds of one-third the free flow speed or lower. These conditions are generally considered to represent the capacity of the intersection or arterial.

**LOS F** characterizes arterial flow at extremely low speeds, with high intersection stopped delay (greater than 60 seconds per vehicle). Poor progression, long cycle lengths, and high traffic demand volumes may be a major contributing factor to this condition. Traffic may be characterized by frequent stop-and-go conditions.

**TABLE 2-9  
Level Of Service Criteria**

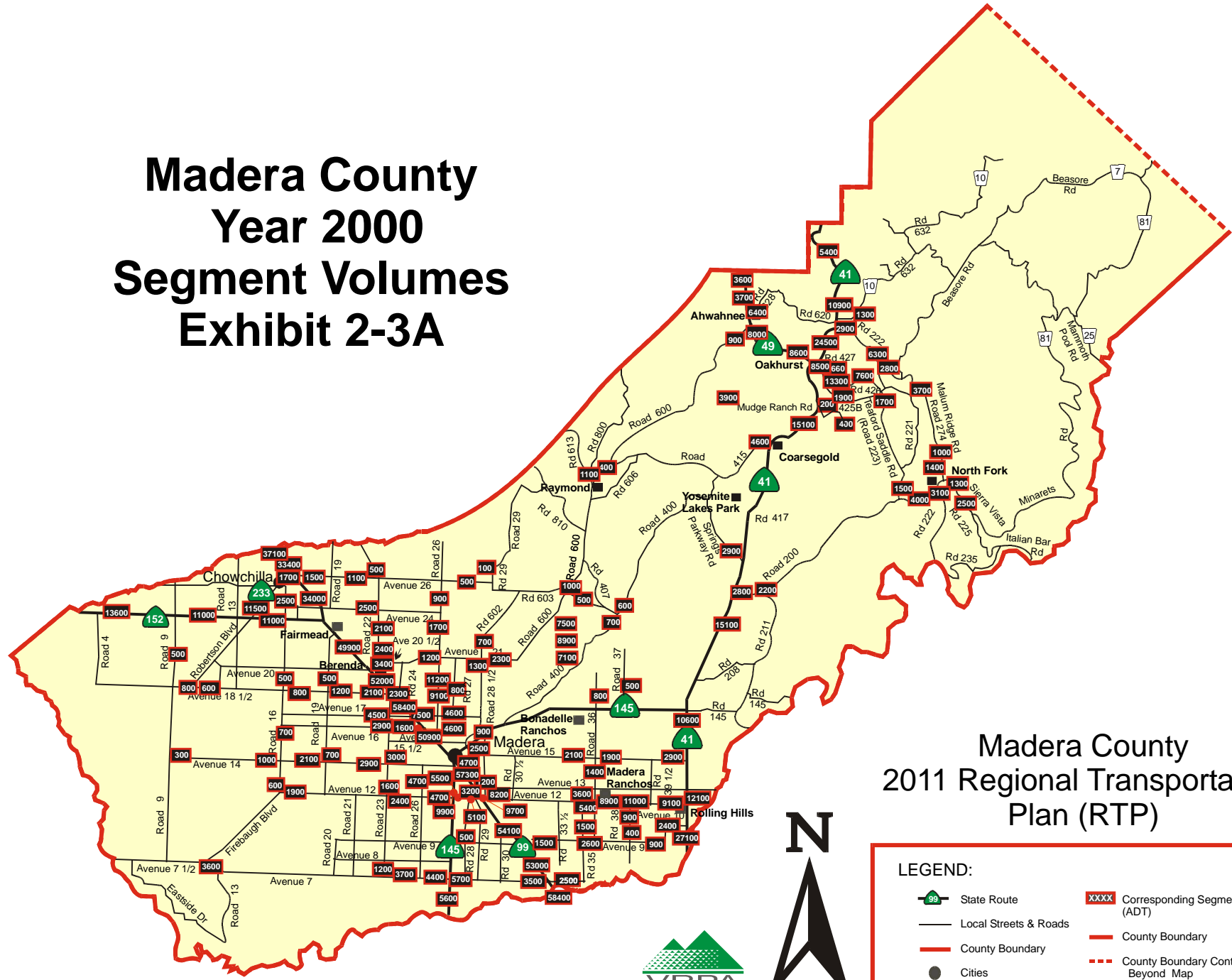
LOS	DENSITY (PC/MI/LN) 1	UNINTERRUPTED FLOW			INTERRUPTED FLOW				
		70 mph FREEWAY DESIGN SPEED			URBAN AND SUBURBAN ARTERIAL 2 AND 4 LANES SIGNALIZED				
		SPEED D (MPH)	V/C	MSF 2 (PC/H/L) 3	SPEED (MPH) 4	V/C	DELAY (SEC)	TYPICAL ARTERIAL ADT 5	
								2 LANE	4 LANE
A	<=10	>=70	0.00 - <0.29	700	>=35	<=0.60	<=10	5,000	18,000
B	<=16	>=70	<=0.47	1,120	>=28	<=0.70	<=20	8,000	21,000
C	<=24	>=68	<=0.68	1,632	>=22	<=0.80	<=35	10,000	24,000
D	<=32	>=64	<=0.85	2,048	>=17	<=0.90	<=55	12,000	27,000
E	<=45	>=53	<=1.00	2,400	>=13	<1.00	<=80	13,000	30,000
F	>45	<53	>1.00		<13	>1.00	>80		

Source: 1997 Highway Capacity Manual

1. PC/MI/LN: passenger cars per mile per lane
2. PC/H/L): passenger cars per hour per lane
3. MSF: maximum service flow rate per lane under ideal conditions. [cj (capacity under ideal conditions) \* v/c = MSF]
4. Speed Values are shown for principal arterials under typical suburban design.
5. ADT: average daily traffic. These figures are affected by an intersection's degree of access control, the type of roadway, grades, design, geometrics, percent truck traffic, etc.










# Madera County Year 2000 Segment Volumes Exhibit 2-3A



## Madera County 2011 Regional Transportation Plan (RTP)

**LEGEND:**

-  State Route
-  Local Streets & Roads
-  County Boundary
-  Cities
-  Communities
-  Corresponding Segment Volume (ADT)
-  County Boundary Continues Beyond Map



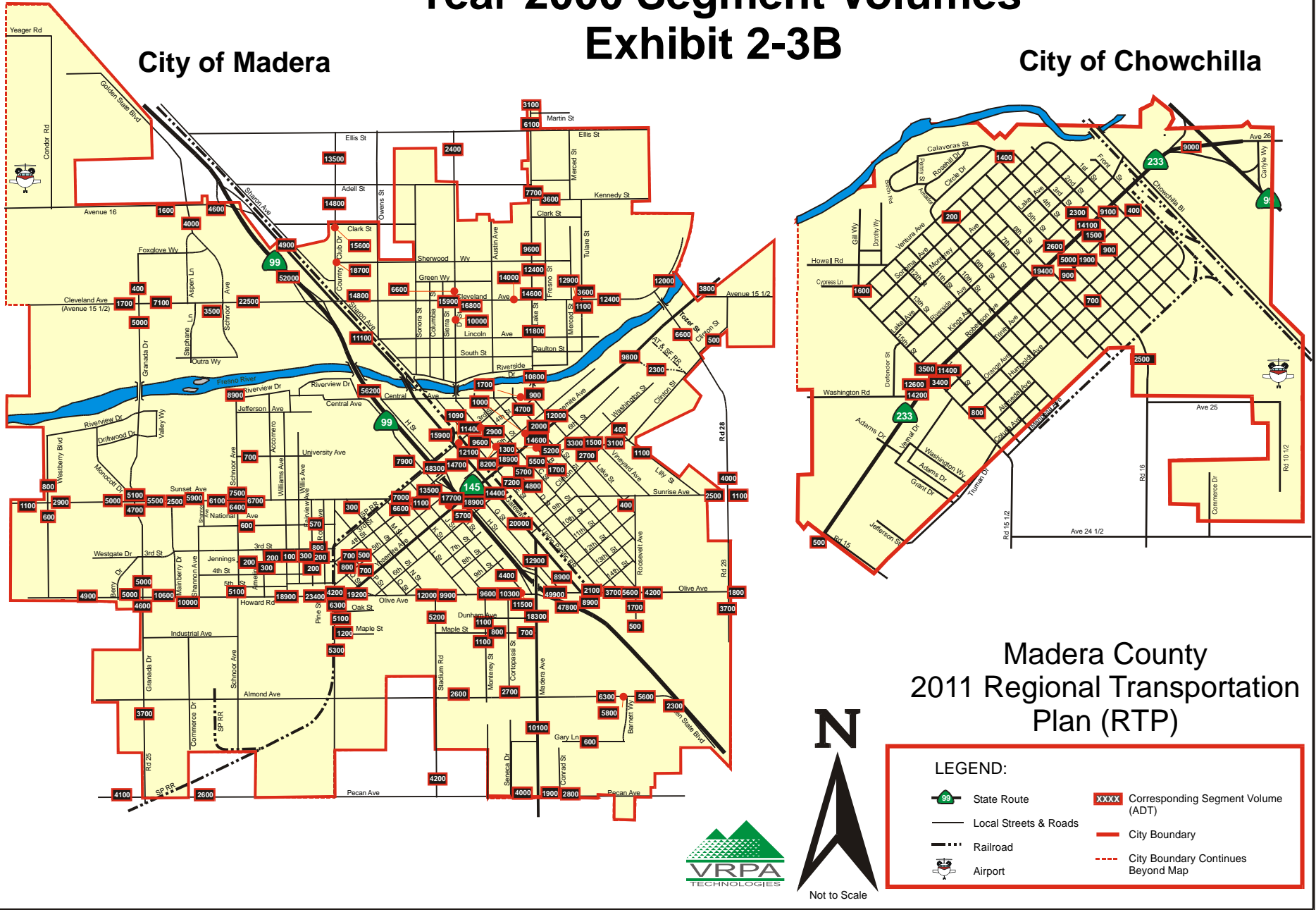
Not to Scale

# Year 2000 Segment Volumes

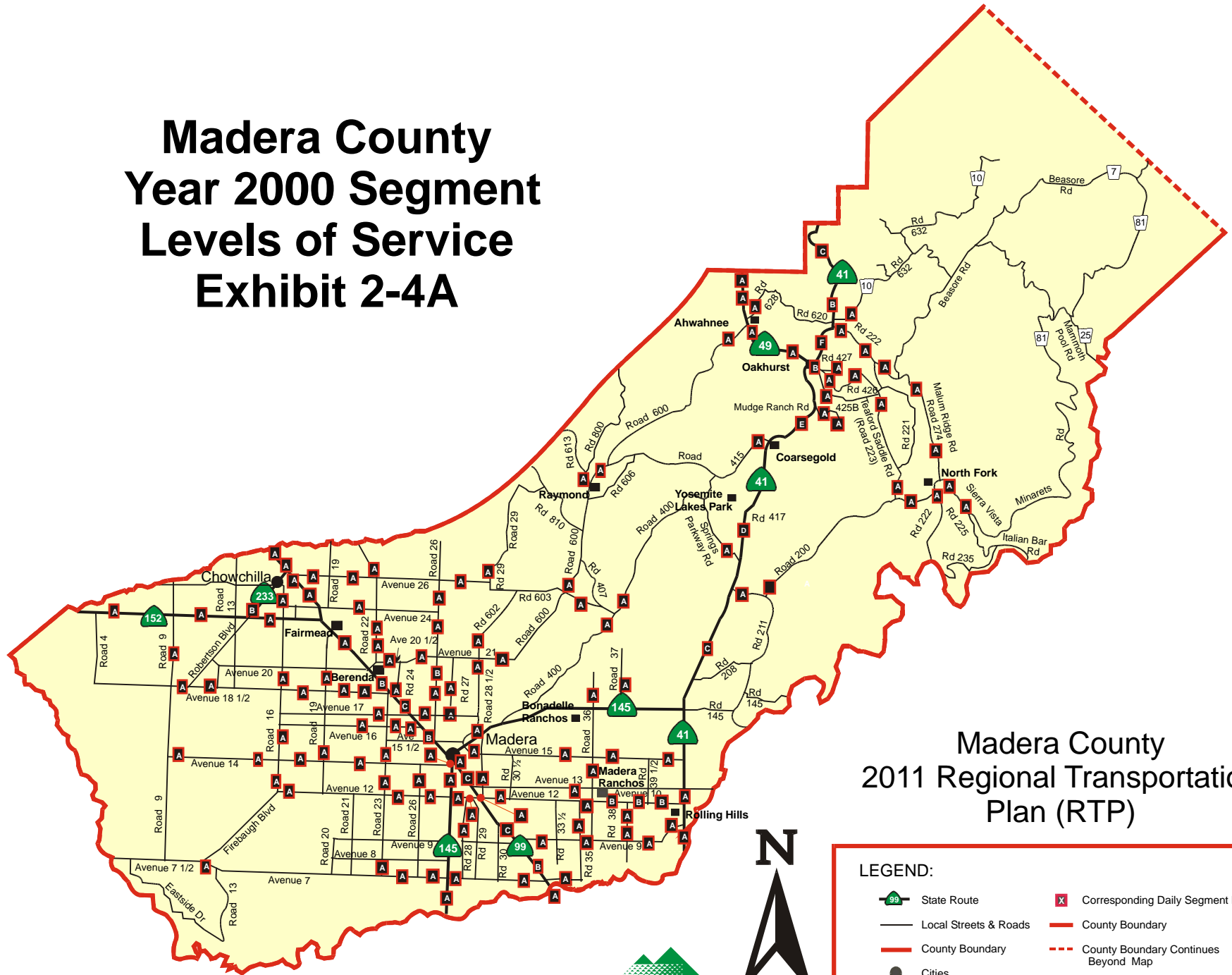
## Exhibit 2-3B

City of Madera

City of Chowchilla










# Madera County Year 2000 Segment Levels of Service Exhibit 2-4A



## Madera County 2011 Regional Transportation Plan (RTP)

### LEGEND:

-  State Route
-  Corresponding Daily Segment LOS
-  Local Streets & Roads
-  County Boundary
-  County Boundary Continues Beyond Map
-  Cities
-  Communities

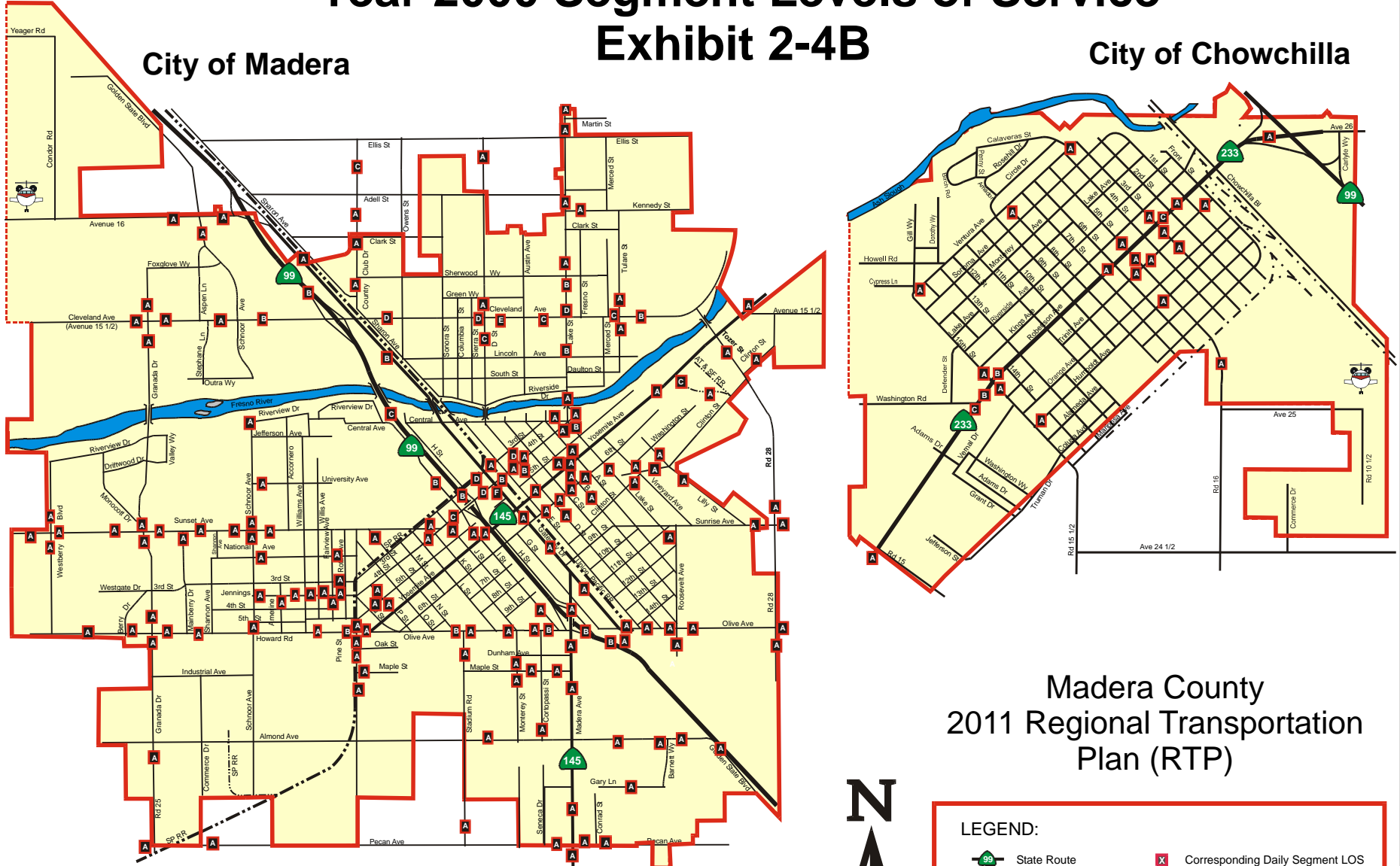


# Year 2000 Segment Levels of Service

## Exhibit 2-4B








City of Madera

City of Chowchilla



Madera County  
2011 Regional Transportation  
Plan (RTP)

**LEGEND:**

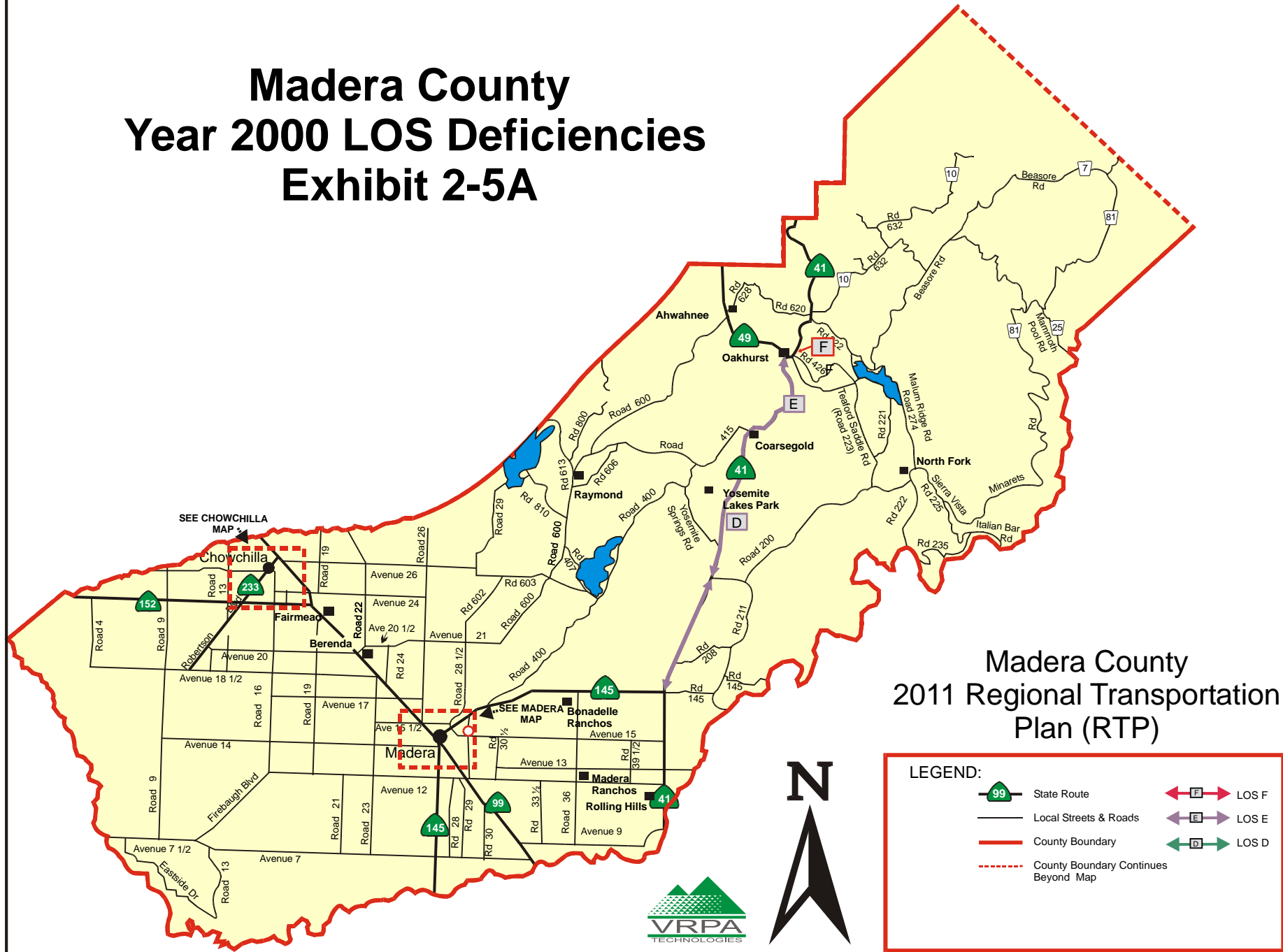
-  State Route
-  Corresponding Daily Segment LOS
-  Local Streets & Roads
-  City Boundary
-  Railroad
-  City Boundary Continues Beyond Map
-  Airport



Not to Scale



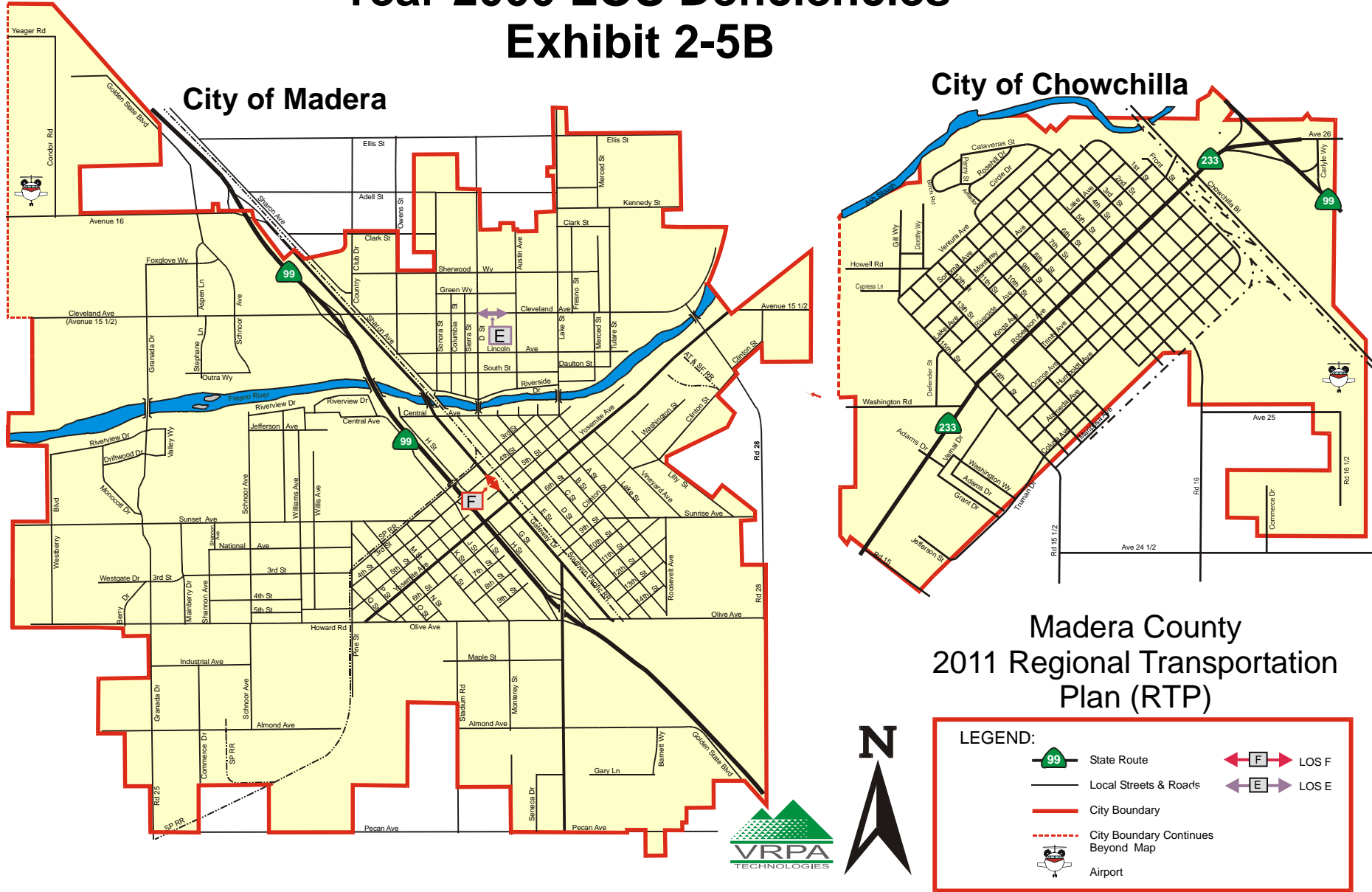
# Madera County Year 2000 LOS Deficiencies Exhibit 2-5A



Madera County  
2011 Regional Transportation  
Plan (RTP)



# Madera County Year 2000 LOS Deficiencies Exhibit 2-5B



Madera County  
2011 Regional Transportation  
Plan (RTP)

**LEGEND:**

	State Route		LOS F
	Local Streets & Roads		LOS E
	City Boundary		
	City Boundary Continues Beyond Map		
	Airport		



**TABLE 2-10**  
**Year 2000 Existing Deficient Segments**

	ROADWAY SEGMENT	LIMITS	JURISDICTION	FACILITY TYPE	# OF LANES	ADT	LOS
1	CLEVELAND	D St/Nebraska Ave	City of Madera	Arterial	2	16800	E
2	GATEWAY DR.	4th St/6th St	City of Madera	Arterial	2	18900	F
3	SR 41	Rd. 200 to Rd 415	Madera County	Mnt Arterial	2	9400	D
4	SR 41	Rd. 415 to SR 49	Madera County	Mnt Arterial	2	14600	E

**TABLE 2-11**  
**Year 2001 Deficient Roadway Segments With**  
**Required Mitigation**  
**and Resultant Levels of Service**

ROADWAY SEGMENT	LIMITS	WITHIN CITY/COUNTY	# OF EXISTING LANES	EXISTING LOS	REQUIRED MITIGATION	LOS WITH MITIG.
Cleveland	D St/Nebraska Ave	City of Madera	2	E	From 2 lanes to 4 lanes	A
Gateway Dr.	4 <sup>th</sup> St/6 <sup>th</sup> St	City of Madera	2	F	From 2 lanes to 4 lanes	A
SR 41	Rd. 200 to SR 415	Madera County	2	D	From 2 lanes to 4 lanes	A
SR 41	Rd. 415 to SR 49	Madera County	2	E	From 2 lanes to 4 lanes	A
SR 41	SR 49/Road 426	Madera County	2	F	From 2 lanes to 4 lanes	B

## Existing Public Transportation

Public transit in Madera County includes Madera Area Express fixed route and Dial-a-Ride, Madera County Connection, Chowchilla Area Transit Express, specialized social service transportation services, Greyhound, and taxi service. Public transportation is provided by fixed-route and demand-response transit systems, as described below.

### ◆ City of Madera

The City of Madera and its environs are served by a number of public and private transportation providers. The City operates the Madera Area Express (MAX) fixed-route system and Dial-A-Ride, a general public demand-responsive system. Both services are operated under contract with First Transit. The fixed-route system is operated weekdays

from 7:00 a.m. to 6:30 p.m., Saturdays from 9:00 a.m. to 4:00 p.m., and Sundays from 8:30 a.m. to 2:30 p.m. Service operates primarily within the City limits, as shown in Exhibit 2-6. The system utilizes four lift-equipped vehicles and transports over 100,000 riders annually.

The most recent expansion of MAX service occurred in February 2009 when the Jobs, Education and Training (JET) Express service was added to the City's transit system. The JET Express provides three daily round-trips between the City of Madera and the Madera Community College Center on two different routes.

Dial-A-Ride is a general public system primarily serving the elderly and people with disabilities. The Service operates weekdays from 7:00 a.m. to 6:30 p.m., Saturdays from 9:00 a.m. to 4:00 p.m. and Sundays from 8:30 a.m. to 2:30 p.m. The system operates within the Madera urban area covering a five-mile radius from the downtown area, as depicted on Exhibit 2-7, and transports 35,000 riders annually. The service is operated with a fleet of five vehicles. This service is funded jointly by the City and County.

◆ **City of Chowchilla**

The City of Chowchilla operates Chowchilla Area Transit Express (CATX), a general public, demand-responsive service. CATX service was initiated in 1995 and incorporated the senior bus program. The County of Madera funds CATX service for unincorporated portions of the service area.

As shown in Exhibit 2-8, the CATX service area encompasses the City and contiguous unincorporated areas, including Fairmead. Service is provided with two vehicles on weekdays from 8:00 a.m. to 3:30 p.m. and transports 30,000 riders annually.

◆ **County of Madera**

The County of Madera operates the Madera County Connection (MCC), a general public, intercity fixed-route system. The MCC was initiated in 2001 as a demonstration service to provide transportation for children aged 0-5 and families to Children's Hospital Central California. It has since expanded to provide service to all major communities in Madera County.

As shown in Exhibit 2-9, MCC provides access to the communities of Madera, Chowchilla, Fairmead, La Vina, Ripperdan, Eastin Arcola, Ranchos, Coarsegold, Oakhurst, and North Fork. The service operates 5 days a week from 6:00 a.m. to 8:00 p.m. and transports 10,000 riders annually.

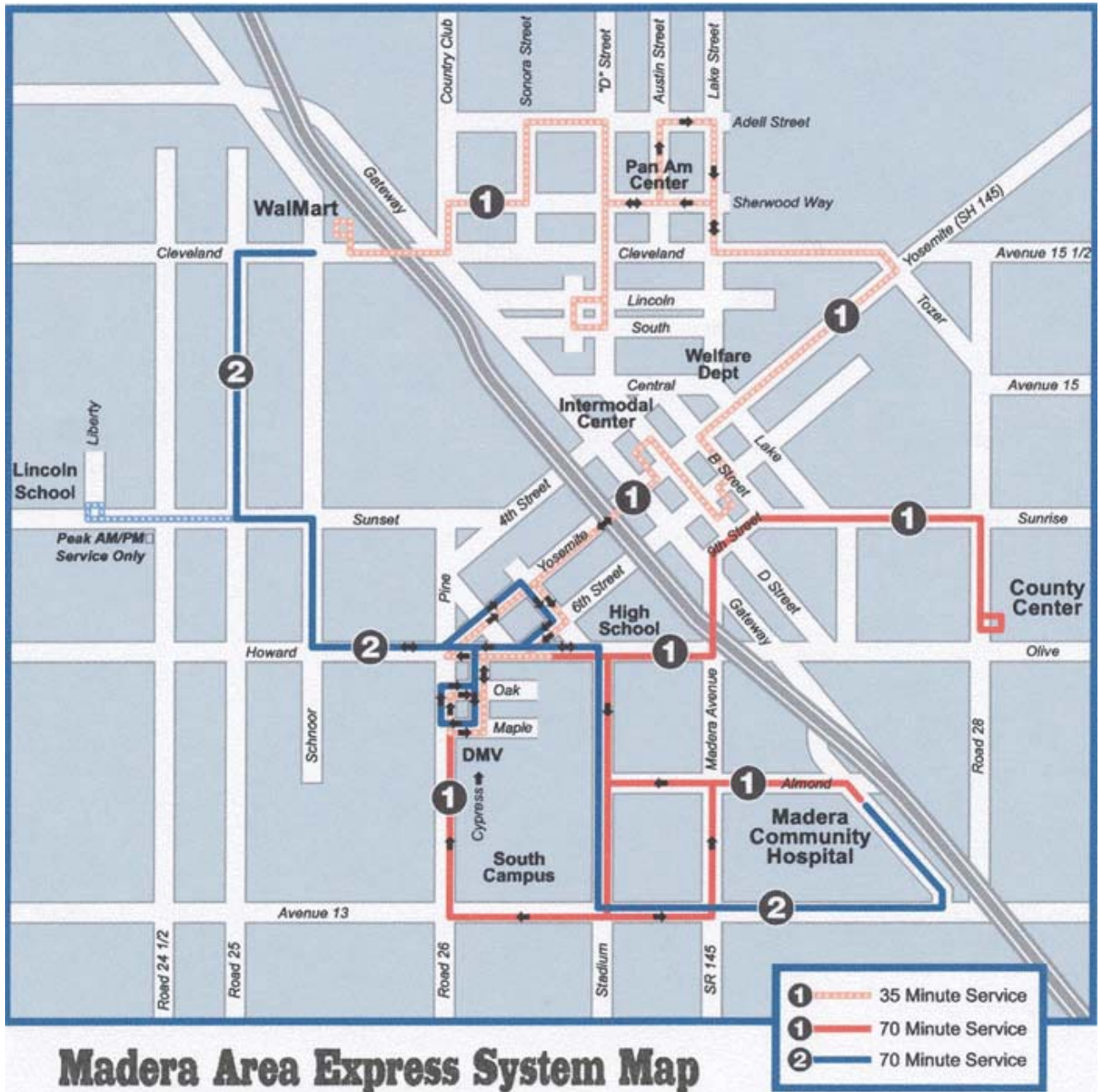
## **Social Service Transportation**

Six social service agencies provide transportation in Madera County (reference Table 2-12). These agencies largely provide service to their clients and to specific sites.

In 2007, MCTC developed an updated Human-Services Public Transit Coordinated Transportation Plan pursuant to the requirements of SAFETEA-LU. The 2011 RTP is consistent with the narrative and recommendations included in the Coordinated Plan.



# Madera Area Express System Exhibit 2-6



**Madera Area Express System Map**

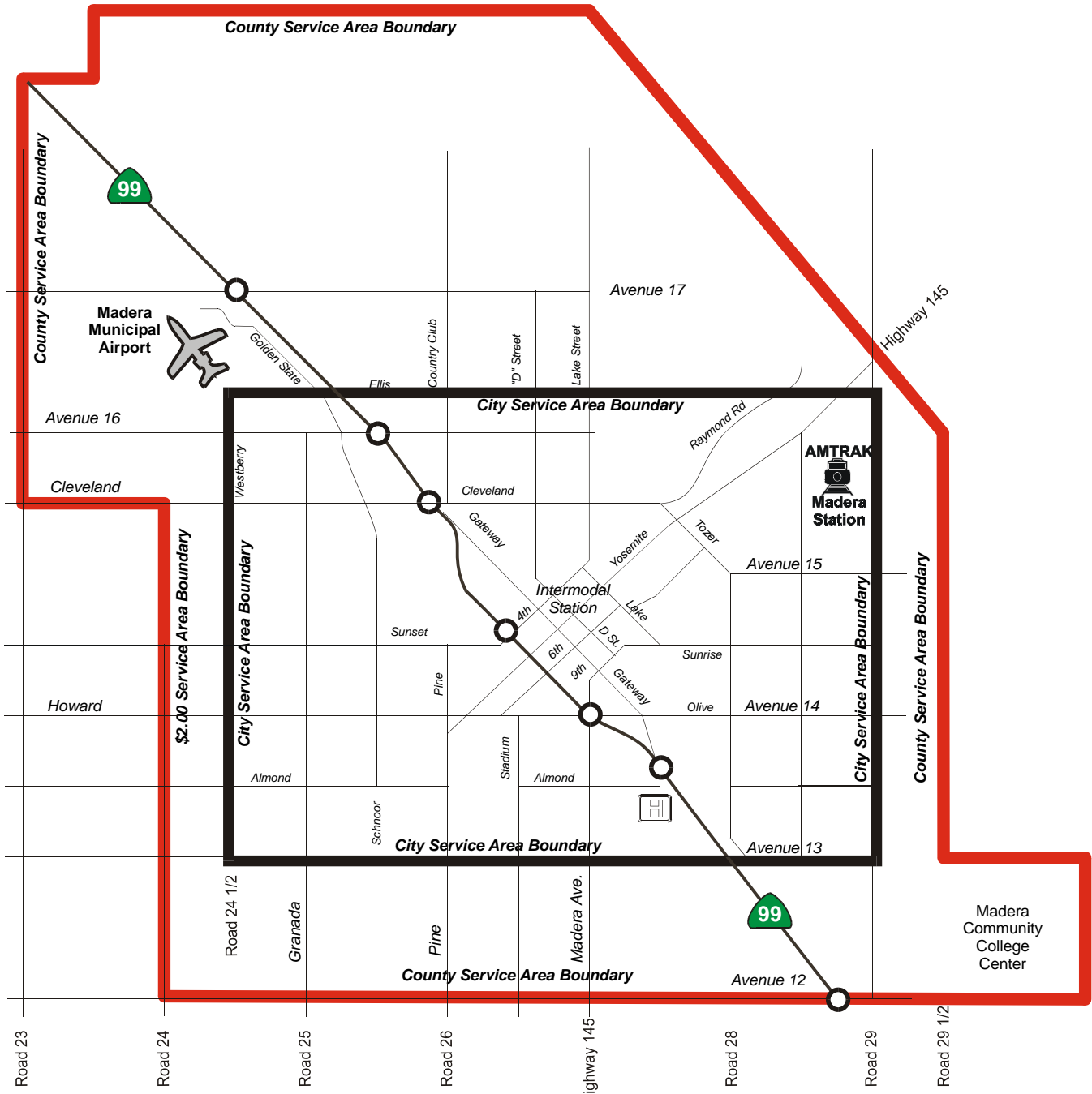
Madera County  
2011 Regional Transportation  
Plan (RTP)



**LEGEND:**

State Route	35 Minute Service
Local Streets & Roads	70 Minute Service
	70 Minute Service




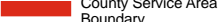
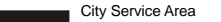
# City of Madera Dial-A-Ride Service Area Exhibit 2-7



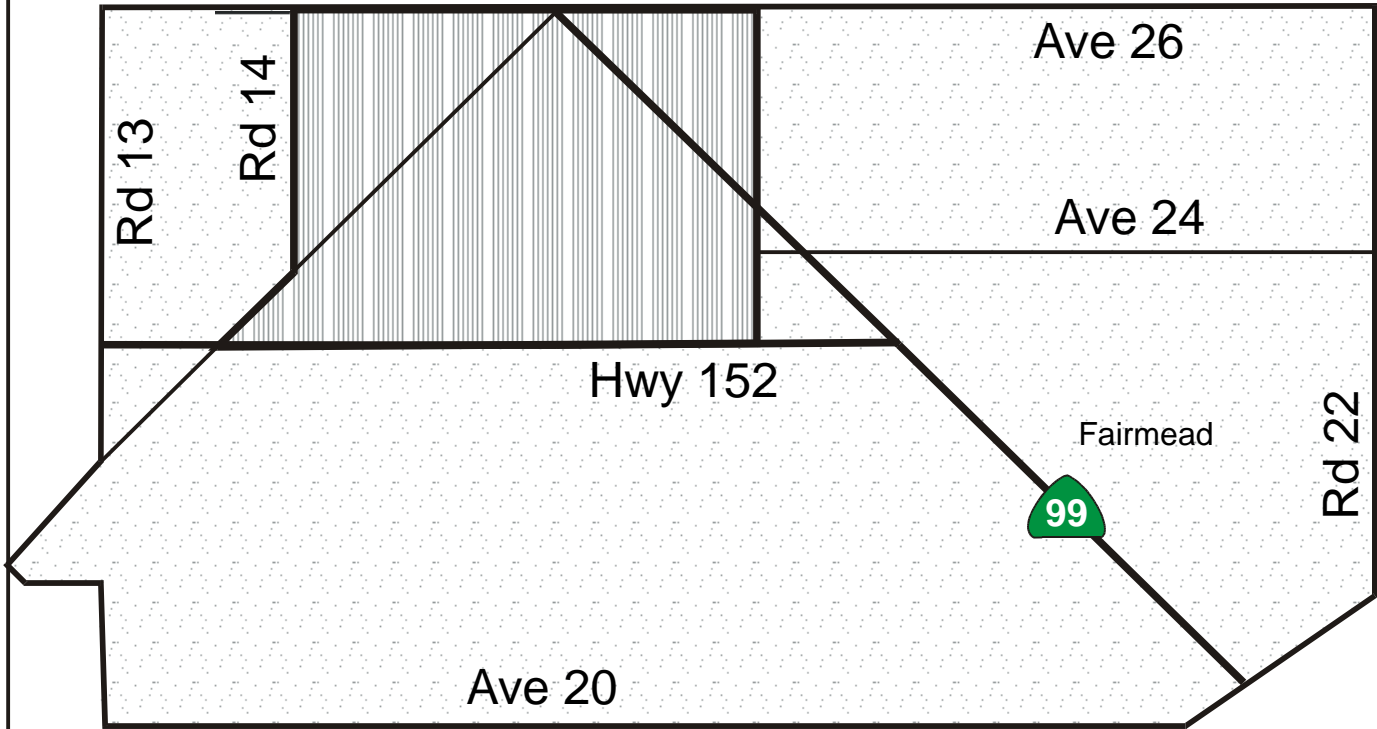
Madera County  
2011 Regional Transportation  
Plan (RTP)



**LEGEND:**

-  State Route
-  Local Streets & Roads
-  County Boundary
-  County Service Area Boundary
-  City Service Area Boundary

# Chowchilla Area Transit Express (CATX) Service Area Exhibit 2-8



Madera County  
2011 Regional Transportation  
Plan (RTP)

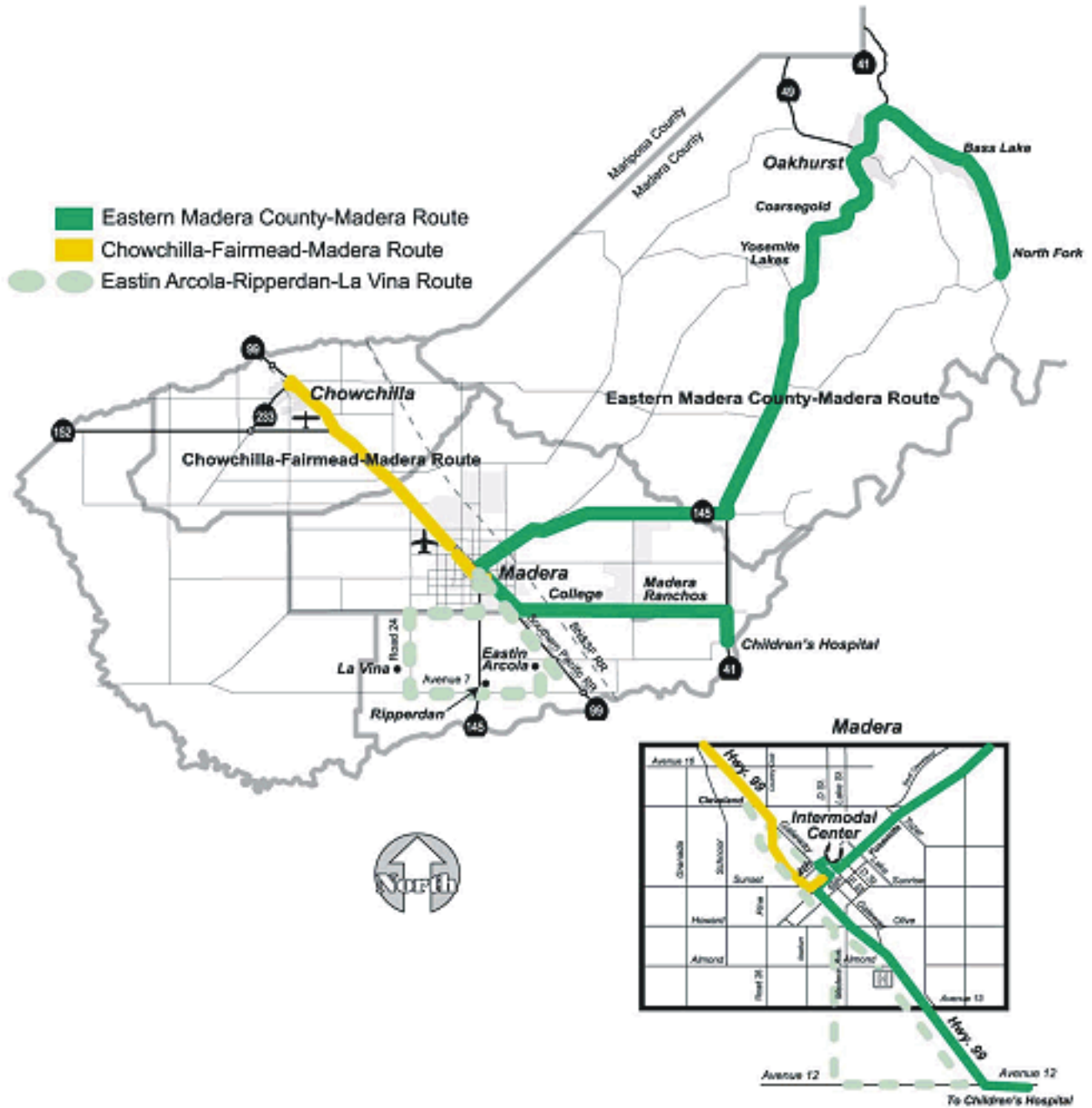


**LEGEND:**

<ul style="list-style-type: none"> <li> State Route</li> <li> Local Streets &amp; Roads</li> </ul>	<ul style="list-style-type: none"> <li> Zone 1</li> <li> Zone 2</li> </ul>
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# MADERA COUNTY CONNECTION SYSTEM

## Exhibit 2-9



Madera County  
2011 Regional Transportation  
Plan (RTP)



Not to Scale

**TABLE 2-12**  
**Social Service Transportation Providers in Madera County**

SOCIAL SERVICE AGENCY	TRANSPORTATION PROVIDED
Heartland Opportunity Center	<ul style="list-style-type: none"> <li>• Demand-response service</li> <li>• Weekdays from 8 a.m. to 4 p.m.</li> <li>• Serves people with disabilities over 18 years old</li> </ul>
Community Action Partnership of Madera County – Senior Bus & Escort Services	<ul style="list-style-type: none"> <li>• Demand-response services</li> <li>• Weekdays from 8 a.m. to 5 p.m.</li> <li>• Escort Service serves Eastern Madera County residents</li> <li>• Senior bus serves Seniors and those with disabilities</li> </ul>
Community Action Partnership of Madera County – Head Start	<ul style="list-style-type: none"> <li>• Fixed-route transportation to schools</li> <li>• Weekdays from 6 a.m. to 5 p.m.</li> <li>• Serves Head Start students</li> </ul>
Pacific Family Health, Inc.	<ul style="list-style-type: none"> <li>• Demand-response service</li> <li>• Monday thru Saturday from 5 a.m. to 9 p.m.</li> <li>• Serves dialysis patients</li> </ul>
Madera County Behavioral Health	<ul style="list-style-type: none"> <li>• Service as needed to and from the Madera Counseling Center in the greater Chowchilla, Madera, and Oakhurst communities</li> <li>• Weekdays from 8 a.m. to 5 p.m.</li> <li>• Counseling Center clients</li> </ul>
American Cancer Society	<ul style="list-style-type: none"> <li>• Volunteer driver program using private vehicles</li> <li>• Serves ambulatory cancer patients</li> </ul>

### Private Providers

Several private carriers provide inter-city services, including Greyhound and Amtrak. Greyhound operates seven days a week from the City of Madera’s Downtown Intermodal Center on North “E” Street.

A private taxicab operator provides service in Madera County seven days a week, 24 hours a day. This operator is based at the Downtown Intermodal Center.

In addition to those private transit services listed above, other private medical transit services are available within the County.

### Passenger Rail/Support Facilities

Madera County is served by the Burlington Northern Santa Fe (BNSF) and the Union Pacific (UP) Railroads. Amtrak operates seven days a week with twelve daily stops in Madera along the BNSF Railroad alignment. The station is located on Avenue 15½ and Road 29. The nearest stop to the north is Merced and to the south, Fresno.

Amtrak services are provided on the Burlington Northern & Santa Fe tracks located east of Madera. The *San Joaquin* Amtrak route provides passenger rail service to Oakland and Bakersfield four times a day and Sacramento twice a day. Amtrak also provides thruway bus service from various rail stations along the San Joaquin route to cities that are not accessible by rail, such as Los Angeles, San Francisco and San Jose. A new Amtrak station located on Road 26 north of Madera is scheduled to begin construction in 2010.

## Aviation

The City of Madera owns and operates the Madera County Municipal Airport, which provides aviation services to approximately 120 fixed-base operators. The City of Chowchilla operates the Chowchilla Municipal Airport with 34 fixed-base operators. Table 2-13 provides the total operations per year for each of these airport facilities. Fresno Yosemite International Airport (FAT) in Fresno County is the primary passenger airport facility in the region. Both airports are depicted in Exhibit 2-2.

**TABLE 2-13**  
**Madera County Airport Operations**

<b>AIRPORT</b>	<b>LANDINGS/ TAKE-OFFS/YEAR</b>
Madera Municipal	50,000
Chowchilla Municipal	5,500
<b>TOTAL</b>	<b>55,500</b>

## Non-Motorized Systems

The Cities of Chowchilla and Madera, and Madera County continue to be involved in implementing bicycle facilities. The City of Madera annually reserves a portion of its Local Transportation Fund (LTF) proceeds for the construction of bicycle and pedestrian facilities. These funds are used in conjunction with funds from the REMOVE, CMAQ, and State Bicycle Transportation Account programs to implement elements of the Madera County 2004 Regional Bicycle Transportation Plan.

## Goods Movement

Goods movement in Madera County is primarily provided by trucking and freight rail services. The trucking industry includes common carrier, private carrier, contract carrier, drayage and owner-operator services, which handle both line-haul and pick-up and delivery services. A number of trucking facilities are located in Madera County including the public highway system, truck terminal facilities, freight forwarders, truck stops, and maintenance facilities. These facilities are especially concentrated along SR 99.

## **Transportation Demand Management**

Transportation demand management (TDM) programs in Madera County primarily consist of the voluntary rideshare program, the park & ride facilities program, and the alternative fuels program. Details regarding these TDM programs are provided below.

### **Voluntary Rideshare Program**

Central Valley Rideshare is a program provided by Council of Fresno County Governments (Fresno COG) and services Fresno, Kings, Madera, and a portion of Tulare counties. The program provides computerized matching, employer outreach and marketing.

#### **◆ Park & Ride Facilities**

There are currently three Caltrans owned/maintained Park & Ride lots along the SR 41 corridor (reference Exhibit 2-2):

- ❑ at the intersection with Road 200;
- ❑ at the intersection of SR 41 and SR 145; and
- ❑ at the intersection of SR 41 and Avenue 10.

#### **◆ Alternative Fuels Program**

The Cities, County of Madera, and Madera Unified School District are installing CNG fueling facilities and have some 9 alternative fuels projects focused on the purchase of CNG-fueled vehicles (passenger cars, trucks, dump trucks, utility vehicles, etc) for City and County operations. The County and Cities continue to explore the feasibility of installing a centralized CNG fueling facility as the first step in implementing an alternative fuels program to include City, County and school district vehicles.

## **Intelligent Transportation Systems**

In addition to planning for specific modes of transportation that will serve the needs of existing and future residents, the integration of advanced transportation technologies is also important. The use of new technologies [Intelligent Transportation Systems (ITS)] will allow maximum use of the transportation infrastructure including streets and highways and transit. Further, the need for traveler information is critical in order to lessen the impacts of accidents and other events in the region. Real-time traveler information can make traveling in Madera County more enjoyable and reduce delay and congestion. According to information provided through the ongoing San Joaquin Valley ITS Study, there are a number of ITS strategies that are being considered including surveillance and red-light running equipment at high accident locations in Madera, emergency vehicle dispatching systems in rural areas of the County, traveler information, restructuring and optimization of rural demand-responsive transit service, and analysis tools including geographic information systems (GIS).

## PLAN DEVELOPMENT

### Overview

The 2011 RTP is a planning guide that contains transportation policy and projects for the next 25 years (to FY 2035). The Plan includes programs and policies for congestion management, transit, bicycles and pedestrians, roadways, freight and finances. The RTP must be revised at least every four years, since the County is designated as non-attainment for federal air quality standards.

The RTP's primary use is as a regional long-range plan for federally funded transportation projects, and it also serves as a comprehensive, coordinated transportation plan for all the governmental jurisdictions within the region. Different jurisdictions have different transportation implementation responsibilities under the plan. These include Caltrans, the County of Madera, and the Cities of Chowchilla and Madera.

### Process

The process to approve the 2011 RTP included assessing Madera County's transportation needs, identifying projects to address the needs, evaluating the projects considering the benefit vs. cost and other performance objectives, addressing air quality conformity requirements, conducting public hearings on the 2011 RTP by MCTC, certification of the RTP EIR by MCTC, and approval of a resolution passed by MCTC approving the RTP Update. Public involvement was encouraged throughout the RTP development process.

### Authority and Purpose

Regional transportation plans (RTPs) are planning documents developed by Regional Transportation Planning Agencies (RTPAs) and Metropolitan Planning Organizations (MPOs) in cooperation with Caltrans and other stakeholders. They are required to be developed as per State Legislation, Government Code Section 65080 et seq., of Chapter 2.5 and federal legislation, U.S. Code, Title 23, Sections 134 and 135 et seq.

The plans are developed to provide a clear vision of the regional transportation goals and objectives. In addition, RTPs have many specific functions including:

- ◆ providing an assessment of the current modes of transportation and the potential for new travel options within the region;
- ◆ predicting the future needs for travel and goods movement;
- ◆ identification and documentation of specific actions necessary to address the region's mobility and accessibility needs;
- ◆ identification of guidance and documentation of public policy decisions by local, regional, state and federal officials regarding transportation expenditures and financing;
- ◆ identification of needed transportation improvements;



- ◆ promotion of consistency between the California Transportation Plan, the RTP, and other transportation plans developed by the cities, the County, districts, private organizations, tribal governments, and State and federal agencies in responding to statewide and interregional transportation issues and needs;
- ◆ providing a forum for 1) participation and cooperation and (2) to facilitate partnerships that reconcile transportation issues, which transcend regional boundaries; and
- ◆ involving the public, federal, State and local agencies, as well as local elected officials, early in the transportation planning process to facilitate discussions and decisions on the social, economic, air quality and environmental issues related to transportation.

## Requirements

The RTP consists of various elements referenced in federal statutes and in the State RTP Guidelines including the:

- ◆ San Joaquin Valley Regional Transportation Overview (included to document and facilitate coordination of interregional transportation planning and air quality attainment);
- ◆ Regional Setting and Planning Assumptions (describes the purpose of the RTP process, transportation planning in Madera County, the contents of the Plan itself, a comprehensive overview of the Region including growth and development, planning forecasts and assumptions, and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requirements);
- ◆ Policy Element (provides a comprehensive listing of goals, objectives, and strategies that address the short- and long-term mobility and accessibility needs and planning requirements for the County);
- ◆ Action Element – Analysis (provides a comprehensive assessment of needs and issues considering the goals and objectives contained in the Policy Element, describes the air quality conformity requirements and issues, includes a multimodal element addressing the needs and issues, inventory, accomplishments, and an assessment of future demand for all modes of transportation including highways and arterials, mass transportation, aviation, non-motorized systems, goods movement, TDM, and ITS needs and analysis. The Element also contains the actions necessary to support the goals and objectives referenced in the Policy Element and in the needs assessment);
- ◆ Financial Element (provides a thorough assessment of project costs and revenue assumptions for each mode of transportation. The RTP Financial Element must be financially constrained in accordance with air quality conformity requirements. As such, this Element must ensure that projects, which are needed to enhance mobility and accessibility throughout the County, are also financed within the timeframe of the Plan (FY 2035) and reduce air emissions consistent with reduction targets. This section would also include a description of unmet transportation

needs, maintenance and operation needs, and the potential for new financing strategies/sources of funding to address revenue shortfalls, if applicable);

- ◆ Environmental Considerations and Supplemental Information (these sections reference important findings of the air quality conformity process, the EIR document and process, additional supportive information necessary to provide a complete and thorough understanding of the planning and environmental review process. In addition, the public involvement and community outreach program for the Project is included);
- ◆ Performance Monitoring Program (provides a description of the various monitoring programs that will be used by MCTC to monitor the performance of the regional transportation system); and
- ◆ Appendices (includes the technical and other appendices detailing the methodologies applied, a glossary of terms, and other supportive information).

## **Scope**

Upon approval, the RTP serves as the region's main policy tool designating future road improvements and extensions, addresses non-motorized, transit, rail, and aviation transportation needs, and identifies funding strategies. The intent of the RTP is to:

- ◆ identify the transportation needs and issues within the County, including regional relationships that affect the Region's transportation system;
- ◆ describe the proposed traffic circulation system in terms of classification, location, cost and need;
- ◆ consider as essential, alternatives other than the single occupant vehicle in providing services and access to facilities;
- ◆ support policies that coordinate the circulation system with planned land uses and provide direction for future decision-making in the realization of the RTP goals and objectives; and
- ◆ develop implementation strategies and identify funding sources to provide for the timely implementation of the RTP's recommendations.

## **Relationship to Other Plans and Programs**

The 2011 RTP, in conjunction with General Plan Circulation Elements adopted by the Cities of Chowchilla and Madera and Madera County, designates the location and scale of existing and proposed transportation systems. Transportation improvements shown in the RTP are generalized and are not intended to show specific alignments. When required for efficient circulation, specific alignments will be determined through further environmental and engineering studies.

## **III. POLICY ELEMENT**

---

### **INTRODUCTION**

The overall goal of the 2011 Regional Transportation Plan (RTP) Update is to promote the development of a coordinated multimodal transportation system that is integrated with our land resource management strategies and air quality goals. This vision has not changed between the 2001 version of the plan and the 2011 update. The vision of where we want to be through Fiscal Year 2035 will help public and private decision-makers make informed choices on transportation and land use matters.

This Policy Element directly reflects the legislative, planning, financial and institutional history that has shaped the region's transportation system. The Policy Element is intended to frame and drive actions that will affect the direction and nature of transportation, and its impact on Madera County. This can be accomplished by either reinforcing positive opportunities and trends already in place, or stimulating change in a new direction to achieve certain outcomes.

The transportation strategy focuses on maintaining and improving the existing system and establishing a balanced set of transportation improvements. The challenge is to develop a transportation system that provides efficient choices, improves access to opportunities and preserves the existing infrastructure. It should also support regional and local land resource management strategies and contribute to the region's attainment of national air quality standards. The plan must balance the needs of the urban and rural areas, enhance the region's competitiveness, and minimize negative social and environmental impacts.

It is important that municipalities, counties and the State participate together with the private sector and the general public, in the development of our regional goal so that a desirable quality of life is reflected in the RTP. These same public officials will be developing policies and taking actions at the local level to support the regional goals and objectives.

During development of this Policy Element, the Madera County Transportation Commission (MCTC) RTP Steering Committee considered the seven planning factors reflected in the Safe, Accountable, Flexible, Efficient Transportation Equity Act – Legacy for Users (SAFETEA-LU) legislation, Title VI, environmental justice concerns, and system safety. SAFETEA-LU presents an opportunity to express and carry out a new transportation vision for the Madera region in this and succeeding RTPs. This vision should build on the current system, working to make it comprehensive and fully integrated, and emphasizing the need for a balanced range of transportation options comprised of many modes, including auto, transit, nonmotorized, rail, truck, and air. This system also supports each of these modes and the implementation of Intelligent Transportation Systems (ITS) by enhancing the transportation system through efficient use of resources and promoting public-private partnerships.

In the twenty-five years covered by this Plan, MCTC will seek to carry out this vision of a balanced and affordable transportation system that sustains the economic vitality of the region.

## GOALS AND OBJECTIVES

It is important to remember that goals and objectives will at times compete with one another. The framework presented by the goals and objectives should be viewed by the public as a set of guidelines against which the RTP can be assessed. While individual projects contribute to the ability of the RTP to meet these goals and objectives, and the project level information is useful in reviewing the projects, they should not be used to rank the projects against one another. The projects, policies, and systems together create the RTP.

Development of the RTP goals and objectives was a key step during preparation of the plan. The RTP Steering Committee developed the set of goals and objectives based on an extensive review and consideration of their vision of the regional transportation system over the next twenty-five years, and input from the public. The results of that outreach effort provided the Steering Committee with additional information needed to refine the goals and objectives. The final version of the goals and objectives therefore, reflects the incorporation of the outreach results in the Committee's deliberations.

This Plan advocates seven goals that have been based on the information provided in federal and State legislation, as well as plans, guidelines, and recommendations developed by State and regional agencies. The goals are broad policy statements that describe the purpose of the plan. The objectives establish specific actions that support the goals. Together, the goals and objectives provide the policy framework for transportation decision-making. Additional detail focusing on implementation strategies is provided in the Action Element for each mode of transportation.

The 2011 RTP goals and objectives described below, are also structured to address requirements in the RTP Guidelines related to the inclusion of "performance based measures or criteria" in the development and implementation of the RTP.

### Multimodal Transportation System

#### GOAL #1: Promote Affordable, Accessible and Viable Public and Private Transportation Systems Responsive to Current and Future Users

*Objectives:*

1. Provide people of the region with the transportation mobility options necessary to carry out essential daily activities and support equitable access to the region's opportunities.
2. Improve and maintain the transportation network to relieve localized congestion and reduce safety problems.
3. Promote and conduct effective regular dialogue with users or potential users to help guide investment decisions and maintain and improve the effectiveness of the transportation system.

#### GOAL #2: Retain and Increase Economic Activity and Competitiveness through Improved Transportation Systems, Including Intelligent Transportation Systems (ITS)

*Objectives:*

1. Build a sustainable economic future where people, goods and traveler information move freely but also retain the valued features of our urban, suburban and rural areas.
2. Reduce the cost of doing business in the region by providing for the efficient movement of goods, people and information.

**GOAL #3: Enhance Transportation System Coordination, Efficiency, and Intermodal Connectivity**

*Objectives:*

1. Strive to create a fully “seamless” intermodal transportation system by addressing critical linkages between modes, including public transit.
2. Embrace promising transportation and information technologies (Intelligent Transportation Systems) that serve to interconnect systems and provide information to travelers.
3. Coordinate land use decisions and transportation systems with other affected agencies.

**GOAL #4: Maintain a Safe and Reliable Transportation System in a State of Good Repair**

*Objectives:*

1. Maintain, repair and rehabilitate, to extent feasibly possible, the existing regional transportation system.
2. While attending to backlog repair and maintenance needs, undertake transportation investments that best sustain the future economic viability and performance.
3. Improve safety and remove hazards for the region’s travelers and travel modes.

**GOAL #5: Encourage the Coordination of Land Use Decisions and Transportation Systems**

*Objectives:*

1. Promote sustainable community design that supports transit use and increases nonmotorized transportation while still meeting the mobility needs of residents and employees.
2. Support goals contained in city and county general plans that strive to enhance urban and community centers, promote the environmentally sensitive use of lands in Madera County, revitalize distressed areas, and ensure that new growth areas are planned in a well-balanced manner.

**GOAL #6: Improve the Quality of the Natural and Human Environment through the Implementation of Effective Transportation Systems, Including Intelligent Transportation Systems (ITS)**

*Objectives:*

1. Make transportation decisions that are compatible with air quality conformity objectives and the sustainable preservation of key regional ecosystems.
2. Fulfill national mandates for environmentally sensitive planning, including the development of attractive alternatives to single-occupant driving and support for walking and bicycling.
3. Support cooperative interagency and public-private environmental conservation efforts.
4. Avoid disproportionately high adverse environmental impacts upon low-income individuals, the elderly, persons with disabilities or minority populations.

## Transportation Financing

### GOAL #7: Maximize Funding to Maintain and Improve the Transportation Network

*Objectives:*

1. Assess the effectiveness of existing financing mechanisms to meet the region's transportation needs.
2. Develop appropriate funding mechanisms to finance significant regional facilities.
3. Encourage the use of developer-funded strategies to finance growth-related capacity needs.

## 2004 RTP PROJECT PRIORITIZATION STUDY

In 2003, the MCTC Policy Board directed staff to initiate a RTP capacity increasing project prioritization study. VRPA Technologies, Inc was retained to develop a technical prioritization methodology utilizing objective criteria and analysis that results in an open, fair, and consistent RTP project prioritization policy. The project team consisted of the consultant, the MCTC Technical Advisory Committee (TAC), and MCTC Staff. The project team met several times from November 2003 through May 2004 to consult on the methodology and project scoring criteria. A series of five public workshops were held in spring 2004 to solicit input on local community priorities. In addition, presentations were made to the individual local agency city councils and board to obtain recommendations from those bodies to the MCTC Policy Board. The purposes of the prioritization study are as follows:

- ◆ Identify the most critical capacity increasing street and highway projects in the region.
- ◆ Maximize the efficiency of the transportation funding resources available to Madera County.
- ◆ Enable MCTC to immediately address, capture, and leverage other potential State and Federal funding for regional projects.
- ◆ Establish a consistent and fair regional project prioritization process with local agency assistance.

## Methodology

The project team developed a defensible prioritization process based primarily on the Madera County 2030 Traffic Model and upon evaluation criteria that focused on a benefit/cost ratio determined for each project. It is important to note that State Route 99 was not included in the study as Caltrans has identified the corridor as a "High Emphasis Focus Route" and is committed to the expansion of lane capacity through the Interregional Transportation Improvement Program (ITIP). Also, several projects that were programmed in the STIP and Measure "A" programs were not included as they are considered funded priorities. The financial constraints of the study are the Madera County regional shares of the State Transportation Improvement Program (STIP) and local developer mitigation and road impact fees.

The 2030 housing and employment assumptions used in the traffic model are consistent with the general plans of Madera County and were developed in consultation with the local planning departments. The 2030 land use assumptions were run against the existing year 2004 transportation network to determine the LOS E and LOS F deficient street and highways. Exhibit 3-1 displays the deficient roadways forecasted for 2030 by the Madera County Traffic Model. Consistent with the forecasted deficiencies a list of 87 capacity increasing improvement projects totaling \$697.4 million was developed. Developer Mitigation and County Road Impact Fees associated with the projects were identified at \$137.4 million, leaving a total balance of \$560 million needed to complete the projects by 2030. However, MCTC financial forecasts show only \$93.5 million dollars available for capacity increasing projects by 2030 through Madera County regional shares of the STIP. The improvement projects were evaluated (scored) based upon the following criteria:

- ◆ Benefit/Cost
- ◆ Ability to improve deficient level of service
- ◆ Existing level of service conditions
- ◆ Extent of environmental sensitivity/effect on project delivery
- ◆ Extent that the street or highway volume exceeds the capacity of the facility

The local agencies were allowed to nominate projects to improve system deficiencies that are not detectable by the traffic model such as geometric deficiencies in the network. Each local agency was also asked to prioritize the projects in their respective jurisdictions. A regional prioritized list of projects was then developed considering:

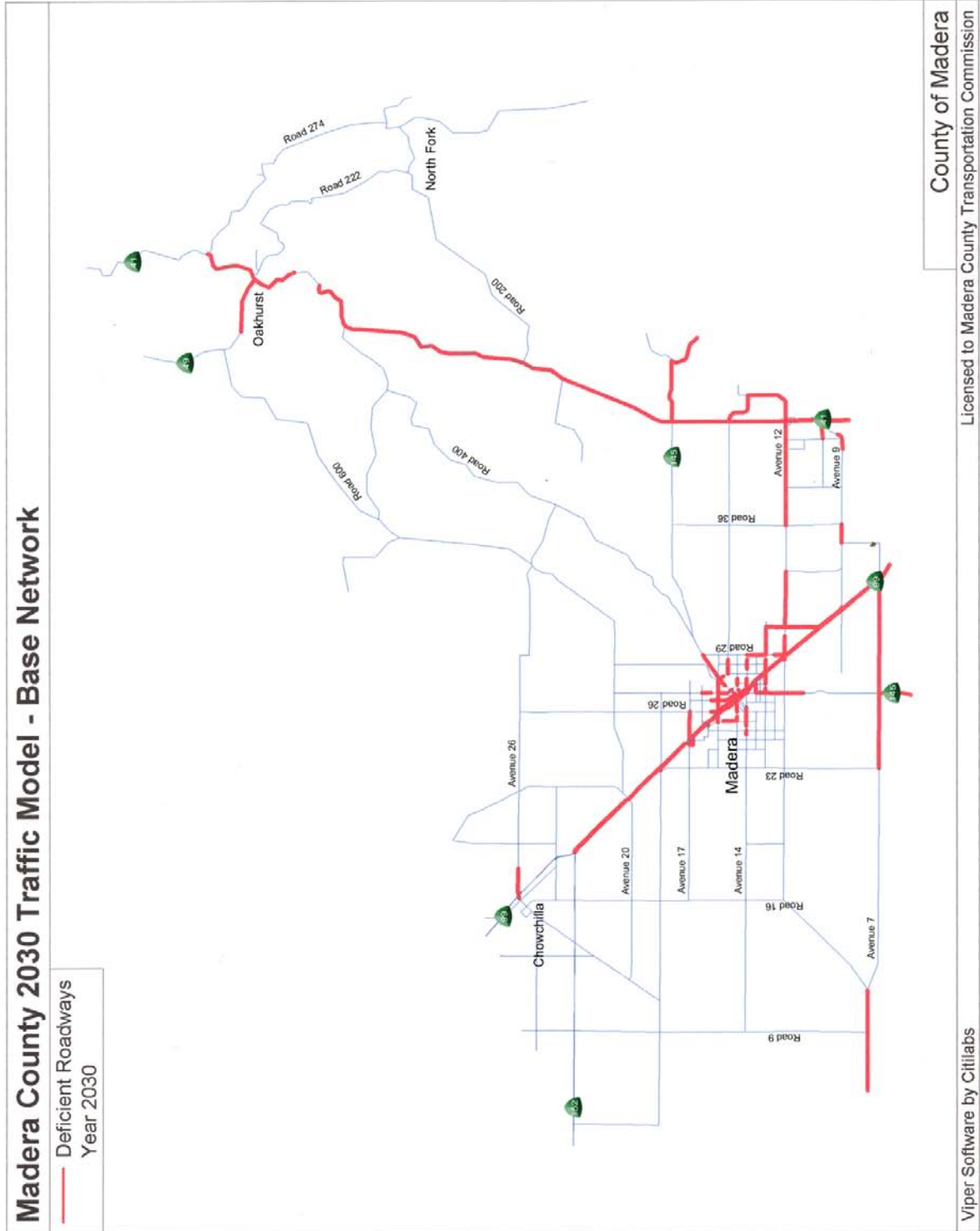
- ◆ Evaluation point score
- ◆ Agency Staff priority
- ◆ Project connectivity/consistency

### Prioritization Study Recommendations and Conclusion

Local Agency Staff requested that a portion of regional STIP dollars be utilized for local street and road rehabilitation projects and submitted a list of projects totaling \$36.9 million dollars for consideration by the MCTC Policy Board. Rehabilitation projects are eligible for STIP dollars under the current STIP Guidelines.

MCTC Staff's recommended that 100% of the regional share of STIP monies be used exclusively for capacity increasing projects, specifically the projects identified in the Regional Project Prioritization Study. There are several other funding sources available for rehabilitation projects including: RSTP; LTF; and Prop. 42. Rehabilitation projects rank low on the California Transportation Commission's (CTC) priorities and are not competitive statewide.

### Exhibit 3-1 Madera County Deficient Roadways - 2030





The MCTC Policy Board was asked to consider three options for adoption of a prioritization policy for the 2004 RTP. The prioritization policy options were as follows:

- ◆ **Option A:** Regional Prioritized Projects - 100% Capacity Increasing Projects
- ◆ **Option B:** Regional Prioritized Projects - 60% Capacity Increasing Projects / 40% Rehabilitation Projects
- ◆ **Option C:** Agency Prioritized Projects - 60% Capacity Increasing Projects / 40% Rehabilitation Projects

In May 2004, the MCTC Policy Board chose Option B thereby identifying the Regional Project Priorities for Madera County. The Policy Board also demonstrated a commitment to funding rehabilitation projects through the STIP. The implementation of the RTP Project Prioritization Study will allow MCTC to capture potential funding sources as they materialize through the political process in a more effective manner. Regional planning, programming, and monitoring of projects will be enhanced a prioritization methodology that identifies the most important transportation improvement projects needed and allocates resources based upon the most cost effective solutions.

The 2004 RTP Project Prioritization Study directly influenced the list of projects considered for funding in the Measure T Investment Plan and will continue to inform the MCTC planning process for the 20-year life of the ½-cent sales tax measure.

## **2011 RTP POLICY – MEASURE T INVESTMENT PLAN**

The Measure T Investment Plan was approved by 73% of voters in November 2006. Measure T is projected to generate approximately \$213 million in transportation revenues over the 20-year life of the measure. The Regional Transportation Program allocates 26% of revenues to the Tier 1 list of capacity increasing projects. This project list was developed from the 2004 RTP Project Prioritization Study.

The Tier 1 list identifies priority projects totaling \$283 million, of which \$161.8 million is funded through STIP/Measure T revenues and \$121.3 million through Impact fees and/or other local funds. The Measure T Investment Plan allocates 100% of Madera County regional STIP funding toward the Tier 1 Regional Program at a 2 to 1 ratio with Measure T funding. The Investment Plan also requires a minimum 20% developer impact fee contribution to the Tier projects and program.

Table 3-1 lists the projects included in the Regional Streets and Highways program in the Measure T Investment Plan. Projects are listed in general priority order, however projects will advance based upon project delivery readiness; leveraging of State and Federal funds; and upon the availability of impact fees/other local funds.

TABLE 3-1

20-YEAR MEASURE 1/2 CENT TRANSPORTATION SALES TAX							
1. Regional Streets and Highways Program							
Candidate Capacity Increasing Projects and Recommended Priorities							
Approved by the Steering Committee on March 16, 2006 and approved by local agencies in June 2006							
Map #	Route	Limits	Description	Cost <sup>1</sup>	Other Funds (at least 20%) <sup>2</sup>	Measure + STIP/TE (Cost Minus Other Funds) <sup>3</sup>	Balance of Measure & STIP/TE <sup>4</sup> \$164,354,000
<b>TIER 1 PROJECTS<sup>5</sup></b>							
1A	SR 41	Between SR 145 and Road 200	Construct passing lanes	\$30,560,000	\$6,112,000	\$24,448,000	\$139,906,000
1B	SR 145 <sup>7</sup>	At SR 99	Reconstruct/widen interchange	\$6,800,000	\$6,800,000	\$0	\$139,906,000
1C	4th Street	At SR 99	Reconstruct/widen interchange	\$11,000,000	\$2,200,000	\$8,800,000	\$131,106,000
1D	Ave 12 <sup>8,9</sup>	At SR 99	Reconstruct/widen interchange	\$39,292,000	\$19,646,000	\$19,646,000	\$111,460,000
1E	SR 41 <sup>9</sup>	Ave 10 to Ave 12 w/interchange at Ave 12	Extend freeway/build interchange	\$46,400,000	\$23,200,000	\$23,200,000	\$88,260,000
1F	SR 233 <sup>9,10</sup>	At SR 99	Reconstruct/widen interchange	\$35,000,000	\$25,000,000	\$10,000,000	\$78,260,000
1G	Ellis/Avenue 16	Granada to Road 26 & new SR99 Overcrossing	Reconstruct street & Construct overcrossing	\$25,447,665	\$12,723,833	\$12,723,833	\$65,536,168
1H	Gateway Ave	Cleveland to Yosemite	Reconstruct/widen from 2 to 4 lanes	\$3,200,000	\$640,000	\$2,560,000	\$62,976,168
1I	Gateway (SR 145)	Yosemite to SR 99	Reconstruct/widen from 2 to 4 lanes	\$2,800,000	\$560,000	\$2,240,000	\$60,736,168
1J	Cleveland	Schnoor to SR 99	Reconstruct/widen from 4 to 6 lanes	\$3,400,000	\$680,000	\$2,720,000	\$58,016,168
1K	SR 41	Road 420 to SR 49 (South of Oakhurst)	Widen from 2 to 4 lanes	\$22,900,000	\$4,580,000	\$18,320,000	\$39,696,168
1L	AVE. 12 <sup>9</sup>	Road 38 to SR 41	2 to 4 lanes	\$21,239,169	\$10,619,585	\$10,619,585	\$29,076,583
1M	Rd 29	Olive to Ave 13	2 to 4 lanes	\$4,857,311	\$1,943,000	\$2,914,311	\$26,162,272
1N	4th	SR 99 to Lake	Reconstruct/widen from 2 to 4 lanes w/RR Xing	\$1,800,000	\$360,000	\$1,440,000	\$24,722,272
1O	Ave 12	SR 99 to Road 32	2 to 4 lanes	\$12,200,000	\$2,440,000	\$9,760,000	\$14,962,272
1P	Rd 29 <sup>11</sup>	Ave 12 to Ave 13	2 to 4 lanes and realignment	\$9,567,994	\$3,828,057	\$5,739,937	\$9,222,335
1Q	Gateway	At SR 99	Reconstruct/widen interchange	\$6,650,000	\$0	\$6,650,000	\$2,572,335
				<b>\$283,114,139</b>	<b>\$121,332,474</b>	<b>\$161,781,665</b>	
<b>TIER 2 PROJECTS (if funding available)<sup>6</sup></b>							
2A	Cleveland	Tozer to Lake	Restripe to 4 lanes	\$280,000	\$280,000	\$0	\$0
2B	Children's Blvd	SR 41 NB Ramps to Peck Blvd.	6 to 8 lanes	\$3,800,795	\$3,800,795	\$0	\$0
2C	Ave 12	SR 41 to North Rio Mesa Blvd	2 to 6 lanes	\$2,451,208	\$2,451,208	\$0	\$0
2D	Airport	Ave 17 to Yeager	Restripe to 4 lanes	\$270,000	\$270,000	\$0	\$0
2E	Children's Blvd	Road 401/2 to Peck Blvd	2/4 to 6 lanes	\$2,280,000	\$2,280,000	\$0	\$0
2F	Cleveland	Lake to Rd. 26 (Country Club Dr.)	Restripe to 4 lanes	\$30,000	\$30,000	\$0	\$0
2G	Schnoor	Trevor to Sunset	Pavement rehab & restripe to 4 lanes	\$830,000	\$830,000	\$0	\$0
2H	Yeager	Airport to Falcon	Pavement rehab & restripe to 4 lanes	\$270,000	\$270,000	\$0	\$0
2I	Ave 10	Road 401/2 to SR 41	2 to 4 lanes	\$4,336,462	\$4,336,462	\$0	\$0
2J	Peck	At Children's Blvd	2 to 6 lanes	\$2,933,441	\$2,933,441	\$0	\$0
2K	Rd 30 1/2	Ave 12 to Ave 13	2 to 4 lanes	\$4,830,687	\$4,830,687	\$0	\$0
2L	Sunset/4th	RR Xing/K to SR 99	Reconstruct/widen from 2 to 4 lanes w/RR Xing	\$1,600,000	\$320,000	\$1,280,000	\$0
2M	Lake	4th to Cleveland	Reconstruct/widen from 2 to 4 lanes	\$1,600,000	\$320,000	\$1,280,000	\$0
2N	Sunrise	B Street to Road 28	Reconstruct/widen from 2 to 4 lanes	\$1,600,000	\$320,000	\$1,280,000	\$0
2O	SR 41	NB On Ramp/SR 41 @ Children's Blvd	1 to 2 lanes	\$20,200,000	\$20,200,000	\$0	\$0
2P	SR 41	Madera County Ln to Ave 10	4 to 6 lanes	\$4,700,000	\$4,700,000	\$0	\$0
2Q	Cleveland	Rd 26 to SR 99	Reconstruct/widen from 4 to 6 lanes w/RR Xing	\$8,300,000	\$1,660,000	\$6,640,000	\$0
2R	Fig tree Overpass	Over SR 99	Overpass	\$10,800,000	\$10,800,000	\$0	\$0
2S	Ave 26	SR 99 to Coronado	Widen to 4 lanes	\$5,400,000	\$5,400,000	\$0	\$0
				<b>\$76,512,593</b>	<b>\$66,032,593</b>	<b>\$10,480,000</b>	
				<b>\$359,626,732</b>	<b>\$187,365,067</b>	<b>\$172,261,665</b>	

\*1 Costs derived from County Road Impact Fee Program Update estimates, City of Madera or Chowchilla estimates, or from Caltrans estimates increased by 5% per year for 17 years.  
Other funds identified for the project (local or developer funds). Assumes a minimum of 20% developer funding. SR 99 at Ave 12 Interchange, SR 99 at SR 233 Interchange, SR 41 @ Avenue 12, and Ellis Street Overcrossing projects assume major funding from development or other funds with between \$10 and \$15 Million from Measure/STIP/TE as indicated in Tier 1. The City of Chowchilla identified the amount requested from Measure/STIP/TE funding.

\*2 Remaining project costs to be addressed using Measure/STIP/TE funding.  
Measure portion of funding availability (of the \$164.4 Million) is \$55.4 Million from Table 1 - Measure Regional Streets & Highways Program for Tier 1 projects. STIP/TE portion of available funding is assumed to be 100% of total STIP/TE to be available to Madera County and was calculated using the following formula: Total STIP/TE for 20 years beginning July 1, 2007 through June 30, 2027 is estimated by MCTC to be \$102.12 Million.

\*3 Tier 1 projects will be delivered during the life of the Measure based upon current MCTC staff assumptions. The projects will require at least 20% of the total cost from Traffic Impact Fee Programs and other funding. The minimum 20% from Traffic Impact Fees would apply to the total cost of all projects within a jurisdiction, not to individual projects. Tier 2 projects will be moved into Tier 1 as funding from other funding sources (including at least 20% from Traffic Impact Fee Program) is available to augment Measure funds.

\*4 Measure funds are intended to "leverage" additional funds to finance the project. The minimum 20% from Traffic Impact Fees would apply to the total cost of all projects within a jurisdiction, not to individual projects.

\*5 MCTC staff has indicated that the funding for the project has been secured from funds in addition to the available STIP/TE funds applied in this table.

\*6 Assumes the least costly alternative (\$18 million) from the Ave. 12 / SR 99 Interchange Project Study Report (PSR) plus inflated costs.

\*7 Actual local funds to be exacted from new development beyond those funds identified in the column "Other Funds" will replace the amount of "Other Funds" referenced and assumed in this Table.

\*8 Measure Steering Committee requested that a project should be added in the City of Chowchilla. The City nominated improvements at the SR 99/SR 233 Interchange.

\*9 This project is critical to the operation and improvement of the Ave 12 / SR 99 Interchange project.

## Regional Priorities of the Measure T Investment Plan

### **1. COMMUTE CORRIDORS/FARM TO MARKET PROGRAM (Regional Transportation Program) - \$108.6 million or 51%.**

The Plan authorizes major new projects to:

- Improve freeway interchanges
- Add additional lanes
- Increase safety as determined by the local jurisdictions
- Improve and reconstruct major commute corridors

These projects provide for the movement of goods, services, and people throughout the County. Major highlights of this Program include the following:

- **\$55.4 million** (approximately 26% of the Measure) is directed to fund capacity increasing projects and to leverage federal and State funding.
- **\$53.2 million** (approximately 25% of the Measure) is available for rehabilitation, reconstruction and maintenance of sections of regional streets and highways.

Funds can be used for all phases of project development and implementation. This funding program requires new growth and development within the County and each of the cities to contribute to street and highway project costs through local mandatory Traffic Impact Fee (TIF) programs.

Funds collected by the local agencies through the TIF programs will provide at least 20% of the funds needed to deliver Tier 1 Projects over the Measure funding period (2007 through 2027). Specific Regional Transportation Program highlights and implementing guidelines are also described in Appendix B of the Investment Plan and in Section 4 of the Measure T Strategic Plan.

### **3. SAFE ROUTES TO SCHOOLS AND JOBS PROGRAM (Local Transportation Program) - \$93.7million or 44%.**

The goal is to improve each individual city's and the County's local transportation systems. Several funding programs are included:

- **\$46.3 million** (approximately 21.75%) has been guaranteed to each city and the County to meet scheduled maintenance needs and to rehabilitate the aging transportation system.
- Another **\$46.3 million** of "flexible" funding is provided to the local agencies for any transportation project they feel is warranted including:
  - Fill potholes
  - Repave streets
  - County Maintenance District Area improvements
  - Add additional lanes to existing streets and roads
  - Improve sidewalks
  - Traffic control devices to enhance student and public safety

- Enhance public transit
- Construct bicycle and pedestrian projects and improvements
- Separate street traffic from rail traffic
- Just over **\$1.0 million** (approximately 0.5%) is provided to fund local agencies for the ADA Compliance Program including curb cuts and ramps to remove barriers, as well as other special transportation services.

Funds can be used for all phases of project development and implementation. Specific Local Transportation Program highlights and implementing guidelines are described in Appendix B of the Investment Plan and in Section 4 of the Strategic Plan.

### **3. TRANSIT ENHANCEMENT PROGRAM (Public Transportation Program) - \$4.3 million or 2%.**

The goal of this program is to expand or enhance public transit programs that address the transit dependent population and have a demonstrated ability to get people out of their cars and improve air quality. To accomplish this important goal:

- **\$4.258 million** (2% of Measure funding) is provided to the three (3) transit agencies within the County based upon service area population. Madera County would receive **\$2.25 million** or 1.06% of Measure funds, the City of Chowchilla would receive **\$0.24 million** or 0.11%, and the City of Madera would receive **\$1.4 million** or 0.66%. The transit agencies would use the funds to address major new expansions of the express, local and feeder bus services including additional:
  - Routes
  - Buses (including low emission)
  - Night and weekend service
  - Bus shelters and other capital improvements
  - Safer access to public transit services
  - Car pools
- The remaining **\$355,000** (0.17% of Measure funding) is directed to ADA, Seniors and Paratransit programs to improve mobility for seniors and people with disabilities.

Specific Transit Enhancement Program highlights and implementing guidelines are also described in Appendix B of the Investment Plan and in Section 4 of the Strategic Plan.

### **4. ENVIRONMENTAL ENHANCEMENT PROGRAM - \$4.3 million or 2%.**

This program's goal is to improve air quality and the environment through four (4) important programs:

- Environmental Mitigation
- Air Quality (including road paving to limit PM<sub>10</sub> and PM<sub>2.5</sub> emissions)
- Bicycle/Pedestrian Facilities
- Car/Van Pools

The linkage between air quality, environmental mitigation and transportation is stressed and consequently, the local agency may direct the funds to the four (4) categories listed above, as they desire. Specific Environmental Enhancement Program highlights and implementing

guidelines are described in Appendix B of the Investment Plan and in Section 4 of the Strategic Plan.

**5. ADMINISTRATION AND PLANNING PROGRAM - \$2.15 million or 1%.**

Measure funding is provided to the Authority to:

- Prepare Investment Plan updates
- Develop allocation program requirements
- Administer and conduct specified activities identified in the other four (4) programs described above

Specific Administration / Planning Program highlights and implementing guidelines are described in Appendix B of the Investment Plan and in Section 4 of the Strategic Plan.

## **RTP ELEMENT CONSISTENCY**

Chapters IV and V (Action and Financial Elements) provide a list of actions needed to address the goals and objectives listed above. These actions have been compared to the goals and objectives in Table 3-2. Table 3-2 clearly identifies that the RTP's actions address the stated goals and objectives resulting in an achievable vision for the region.

**TABLE 3-2**  
**MCTC 2011 REGIONAL TRANSPORTATION PLAN**  
**Relationship of Goals and Objectives to Actions**

GOALS/OBJECTIVES	Highways and Arterials			Regional Transit			Aviation		Non-Motorized		Goods Movement		TDM		ITS		Land Use - Transportation			
	Mixed Flow Projects	Arterial Improvements	O&M	Transit Services	Passenger Rail	Institutional Actions	Airport Expansion	Airport Maintenance	Non-Motorized Facilities	Non-Motorized Incentives	RR Grade Crossings	Main Line Productivity	Carpool Coordination	Park & Ride Improvements	ITS Improvements	Incentives for Livable Communities	Jobs/Housing Balance	Environmental Justice	Activity Center Access	
<b>1. Viable Transportation System</b>	X	X		X	X		X		X			X	X	X	X	X		X	X	
(1) Provide Mobility Options	X	X		X	X		X		X				X	X		X		X	X	
(2) Improve/Maintain Transportation System			X			X	X		X	X	X				X			X		
(3) Coordinate Institutional Decisions						X			X				X			X		X	X	
<b>2. Retain/Increase Economic Activity</b>	X	X		X	X		X		X		X	X				X	X	X	X	
(1) Build/Sustain Economic Future	X	X		X	X		X		X		X	X				X	X	X	X	
(2) Reduce Costs by Providing Efficient Movement	X	X		X	X		X		X		X	X				X	X	X	X	
<b>3. Enhance Transportation System Coord./Efficiency/Connectivity</b>	X	X		X	X		X		X		X		X	X	X	X			X	
(1) Create a Seamless Intermodal System	X	X		X	X		X		X		X		X	X	X	X			X	
(2) Enhance Information/Information Technology															X				X	
<b>4. Maintain a Safe/Reliable Transp. System</b>			X			X		X		X		X							X	
(1) Maint/Rehab/Repair the Exist. Transp. System			X			X		X		X		X							X	
(2) Undertake Invest. To Sustain Fut. Econ. Viability			X			X		X		X		X							X	
(3) Improve Safety/Remove Hazards			X			X		X		X	X	X			X				X	
<b>5. Encourage Coordination of Land Use Decisions</b>				X		X			X	X							X	X	X	X
(1) Promote Sustain. Community Design																X	X	X	X	
(2) Support Goals in City/Co. Gen. Plans	X	X		X	X		X		X		X		X	X	X	X	X	X	X	
<b>6. Improve the Quality of the Natural Envir.</b>	X	X		X			X		X		X		X	X	X	X	X	X	X	
(1) Make Transp. Decisions Compat. W/AQ Conformity				X		X			X	X			X	X		X	X	X	X	
(2) Fulfill National Mandates				X		X			X	X			X	X		X	X	X	X	
(3) Support Interagency Cooperation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
(4) Avoid Adverse Environmental Impacts	X	X		X	X		X		X		X				X	X	X	X	X	
<b>7. Max. Fund. To Maintain/Improve the Transp. System</b>	X	X	X	X	X	X	X	X	X	X	X		X	X					X	
(1) Assess Effect. Of Exist. Fund. Sources	X	X	X	X	X	X	X	X	X	X	X		X	X					X	
(2) Develop Approp. Fund. Mechanisms	X	X	X	X	X	X	X	X	X	X	X		X	X					X	
(3) Encourage Developer-Fund. Strategies	X	X		X					X							X	X	X	X	

## **IV. ACTION ELEMENT**

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### **INTRODUCTION**

The transportation plan must not only address existing deficiencies, but also anticipate problems over the twenty-five year time frame. Even though there is no shortage of present problems in the region, we are required to look at the future, to see what transportation needs will be, and to create ways to meet those needs. This chapter discusses the various components of the transportation system that will serve population and employment in Madera County to fiscal year 2035, as well as identify the travel trends and the changing demands of the multi-modal transportation system. This chapter focuses on transportation system accomplishments, needs, and actions required to relieve existing deficiencies. In addition, this Chapter provides recommendations for studies and projects that seek ways to satisfy future unmet transportation needs.

Travel to and from Madera County extends well beyond its borders. Vehicular commuting is not the only type of travel that links this Region with others. Freight movement extends well past the borders of Madera County, into adjoining Regions, other states, and even to other countries. Non-work trips for recreational travel and personal business also reach past the Madera County boundary. As a result, the transportation system must be capable of adequately meeting a wide range of needs. But there are often different ways of meeting these needs, some of which are more or less efficient than others, and some of which are more or less expensive than others.

To assess the needs in the Region, a review of future travel characteristics projected for FY 2035, and how the individual components of the system can meet future needs are provided in this Chapter. The systems analyzed include:

- ◆ Highways and Arterials;
- ◆ Mass Transportation;
- ◆ Aviation;
- ◆ Non-Motorized Travel;
- ◆ Goods Movement;
- ◆ Transportation Demand Management; and
- ◆ Intelligent Transportation Systems (ITS).

These systems are discussed separately, but must operate as interdependent systems. SAFETEA-LU has required that regions recognize that the transportation system is a system of interdependent parts. This interdependency can be characterized as having physical, fiscal, and behavioral dimensions.

## PROJECTED 2035 TRAVEL CHARACTERISTICS

The Regionally Significant Road System is reflected in Exhibit 2-2. As stated in Chapter II, these facilities are consistent with the Functional Classification System developed by the Federal Highway Administration (FHWA). These facilities, along with other major streets and highways, are included in the Madera County Regional Traffic Model network for the Year 2035. The traffic model has recently been revised to reflect expected growth and development within the County as projected by the State Department of Finance (DOF) and derived by the Madera County Transportation Commission (MCTC) and other local agency staff. In addition, the street and highway network was revised to accurately reflect the required improvements in the County needed to accommodate traffic to the year 2035. Use of the highway and arterial system in the year 2035 is reflected in Exhibits 4-1A and 4-1B. The results show Average Daily Traffic (ADT) along the major streets and highways within the Region.

The future year (2035) socioeconomic data forecasts used to generate trips along the street and highway network are reflected in Table 2-4. The forecast of traffic generated by the projected population, housing and employment indicates that total vehicle trips will increase by about 177%. This is attributed to continued use of major transportation corridors in the Region. Furthermore, vehicle miles of travel (VMT) in 2035 are forecast to increase by approximately 176%, far greater than the increase in highway vehicle trips and the increase in population. Much of this increase in VMT is due to longer distance trips. Vehicle hours of travel (VHT) are forecast to grow by 354%, evidence of growing system-wide congestion.

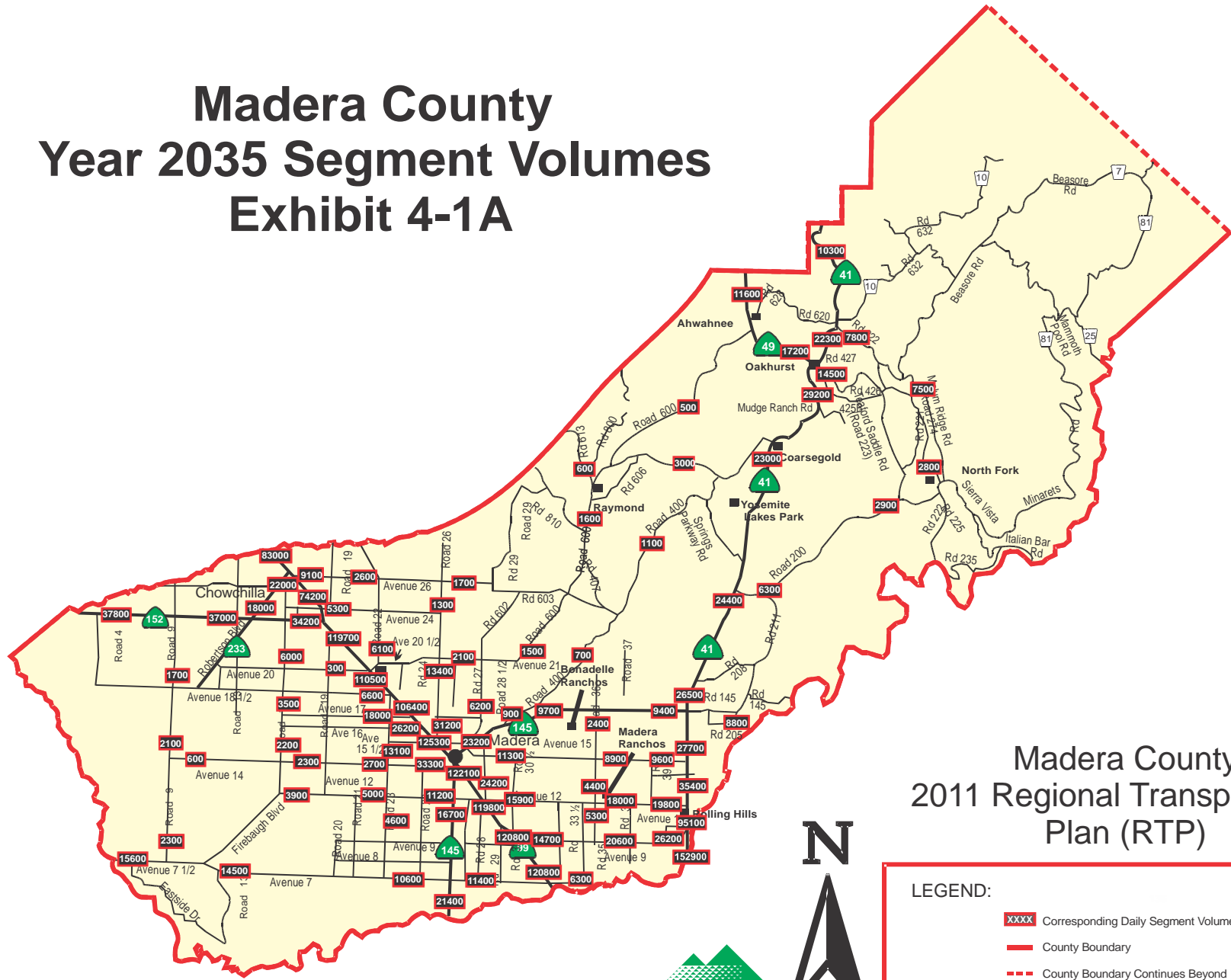
Under a “No-Build” scenario, if additional street and highway projects are not identified beyond those included in the current STIP/FTIP, the street and road system is projected to experience significant congestion by the year 2035, given the expected increase in population, housing and employment referenced in Chapter II. Specifically, a significant number of segments along the Regionally Significant Road System would experience major (LOS) deficiencies resulting from implementation of a No Build scenario. These impacts are considered to be significant given the amount of average daily traffic that is projected by 2035. Significant delay and congestion well beyond the traffic capacity of these segments would be realized resulting in significant environmental and economic impacts. Segments projected to fall to LOS “D”, “E” or “F” along the State highway system or to LOS “E” or “F” along the local street and highway system under this projected alternative are identified in Exhibits 4-2A and 4-2B and further described in Appendix B, Tables B-2 and B-3.

In addition to street and highway impacts, major impacts upon other modes of transportation would also be realized. Without implementation of planned mass transportation, aviation, non-motorized, and goods movement improvements, the transportation/circulation system would be severely impacted. These impacts would further reduce the ability of Madera County and the associated Air Basin to meet air quality standards and improve levels of congestion and delay.

A major objective of this RTP is to identify a transportation strategy that will improve mobility between 2011 and 2035, while at the same time reducing the negative environmental impacts of travel.



# Madera County Year 2035 Segment Volumes Exhibit 4-1A



Madera County  
2011 Regional Transportation  
Plan (RTP)

**LEGEND:**

- XXXX Corresponding Daily Segment Volume
- County Boundary
- County Boundary Continues Beyond Map



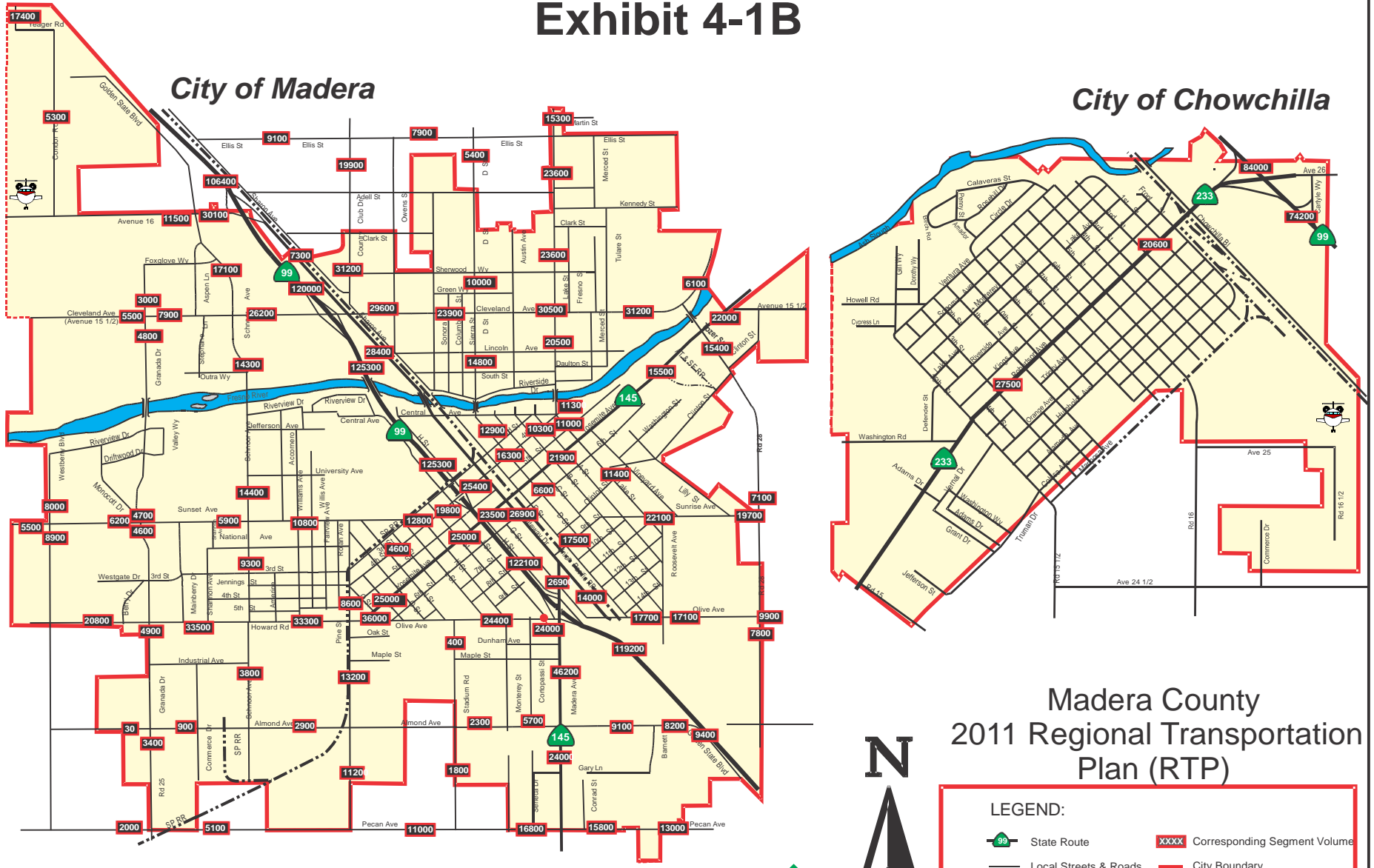
Not to Scale

# Year 2035 Segment Volumes

## Exhibit 4-1B

City of Madera

City of Chowchilla



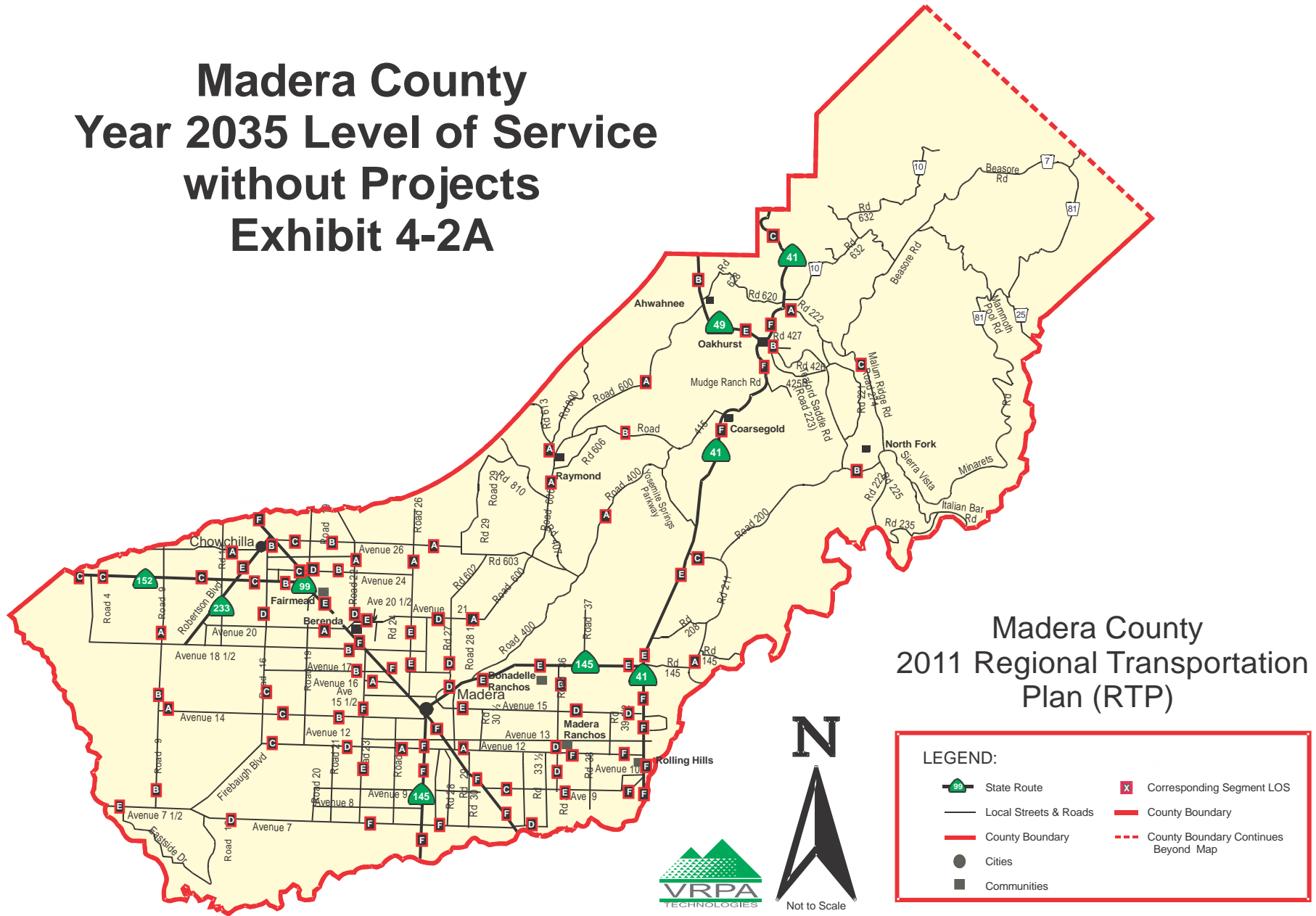
Madera County  
2011 Regional Transportation  
Plan (RTP)

**LEGEND:**

- State Route
- Corresponding Segment Volume
- Local Streets & Roads
- City Boundary
- Railroad
- City Boundary Continues Beyond Map
- Airport



# Madera County Year 2035 Level of Service without Projects Exhibit 4-2A

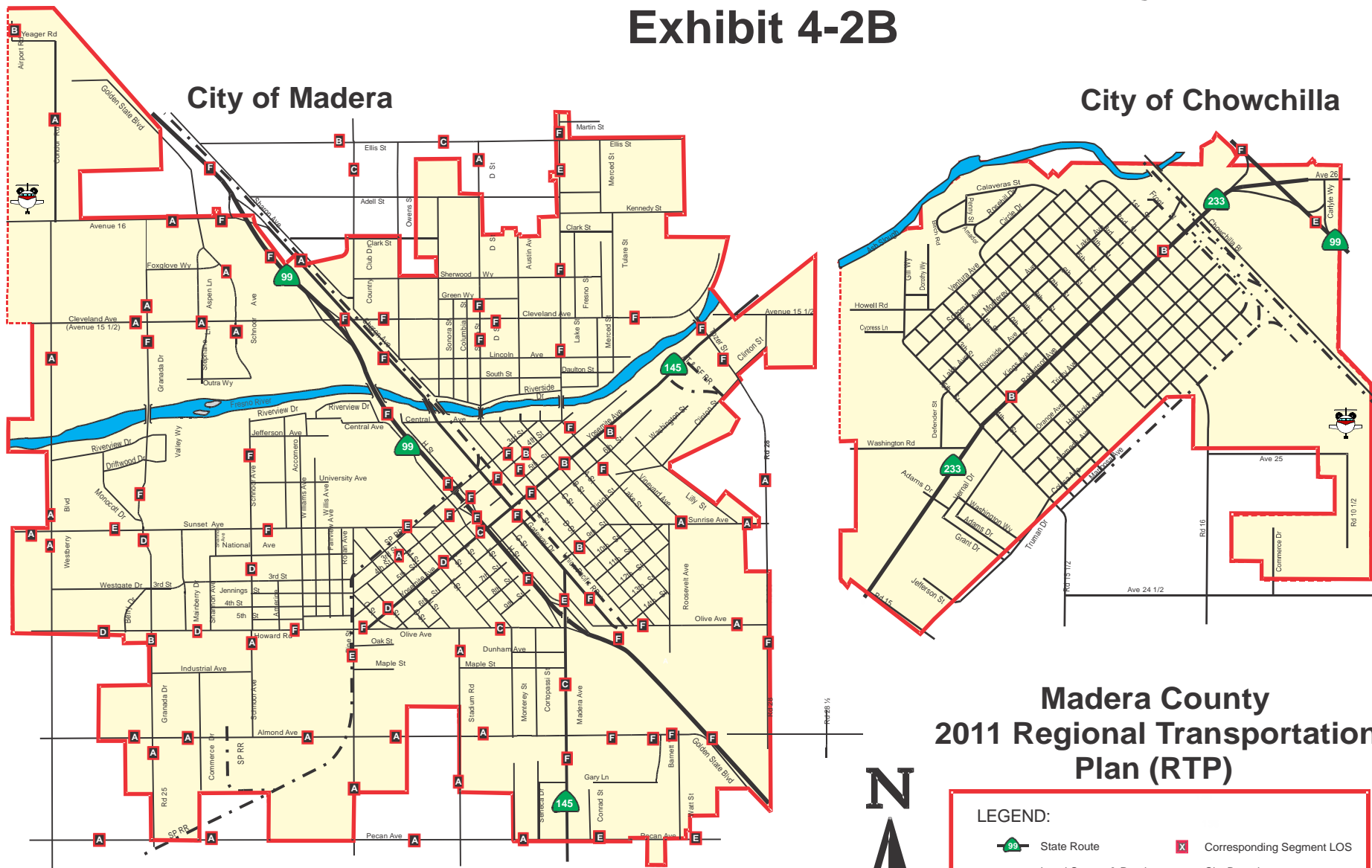


# Year 2035 Level of Service without Projects

## Exhibit 4-2B

City of Madera

City of Chowchilla



### Madera County 2011 Regional Transportation Plan (RTP)

**LEGEND:**

- State Route
- Corresponding Segment LOS
- Local Streets & Roads
- City Boundary
- Railroad
- Airport



Not to Scale

## **RTP SYSTEM ACCOMPLISHMENTS, NEEDS AND ACTIONS**

Individual components of the regional transportation system, including highways and arterials, mass transportation, non-motorized transportation systems, aviation systems, goods movement, transportation demand management, and Intelligent Transportation Systems (ITS), are addressed in the following section. These systems comprise the Region's multimodal transportation system and identify the ways in which they will meet future demand and needs.

### **Highways and Arterials**

It is assumed that the regional highway system will continue to carry the vast majority of person-trip travel and will be an important part of the freight movement system. Streets and highways also will be the same routes for buses, and carpools and vanpools, resulting in a highway network that is an integral part of the public transit system. The street and highway system will also serve the needs of tourist travel and recreational travel.

Because the highway system must continue to provide reasonable service throughout the plan period, it is essential to keep it well maintained. It is also important to plan for capacity increases only where future traffic will exceed capacity and where highway expansion is determined to be the best solution. The functional classification system will be an important guide for road improvements. It will be important for the Region and the State to identify those arterials that are of strategic importance for commerce, tourism, and commuter travel.

From a traffic service perspective, the purpose of these strategic highways will need to be tailored to their location in the Region. In both the urban and rural areas of Madera County, this type of system will, for the most part, be comprised of existing routes with available opportunity for expansion. There should also be improvements to relieve bottlenecks at intersections and efforts made to allow passing opportunities around slow-moving vehicles in the mountain areas of the County. This will particularly help with goods movement. The ability to receive and send deliveries in a timely fashion is essential if the area is to remain competitive. It is therefore, important to plan for trucks carrying a variety of cargo (manufactured goods, raw materials and fuels) to have direct and safe access to the Region's principal highways and arterials.

### **Highway and Arterial Accomplishments**

Since approval of the 1994 RTP, a number of major street and highway projects have been implemented. These improvements have improved mobility in the County and have increased safety. The following list is not comprehensive, but provides a listing of the major improvements that should be recognized in this RTP.

#### **◆ City of Chowchilla**

- 5<sup>th</sup> Street asphalt overlay;
- 3<sup>rd</sup> Street asphalt overlay;
- 15<sup>th</sup> Street asphalt overlay;
- Ventura Avenue asphalt overlay;
- a traffic signal was installed at Robertson/SR 233 and 15<sup>th</sup> Street; and

- the SR 99 and SR 233 interchange was improved including the widening of the UP Railroad crossing and improvements to SR 233.
- ◆ **City of Madera** – various street improvements including:
  - Cleveland – Schnoor to SR 99;
  - Cleveland/Gateway Intersection;
  - Cleveland @ SR 99 Overcrossing;
  - “D” Street – Olive to 9<sup>th</sup>;
  - “D” Street – Yosemite to Central;
  - Howard – City Limits to Granada;
  - Lake – Green to Ellis: widen to four lanes;
  - Pine – Almond to Howard;
  - Schnoor Bridge at the Fresno River;
  - Olive – Q Street to I Street: widen to four lanes;
  - Gateway – SR 99 Overcrossing;
  - Sunrise – “B” Street to Road 28; and
  - Almond – Schnoor to Pine: new two lane collector.
- ◆ **County of Madera** – various road and highway improvements including:
  - Avenue 12 – Road 24 to SR 99;
  - Road 222 – Cheppo Saddle;
  - Road 26 – City Limits to Avenue 17;
  - Road 426 – SR 41 to Road 427;
  - SR 41 – County Line to Avenue 12; and
  - SR 49 at Goldside.
- ◆ **Caltrans** – various road and highway improvements including:
  - SR 41 - Fresno County Line to Ave. 10: 4-lane freeway;
  - SR 41 – Fresno County Line to Avenue 12: freeway extension;
  - SR 41 – North of Rd. 200: widen;
  - SR 41 – various locations: signals;
  - SR 49 – South of Rd. 600: widen and channelize;
  - SR 99 – Fresno County Line to South of Avenue 12: resurface existing highway;
  - SR 99 – South of Cleveland: widen ramp, rehabilitation;
  - SR 99 – Fairmead Project: widen to 6 lanes;
  - SR 99 – SR 145: widen interchange;
  - SR 145 – Fresno County Line to Ave 12: rehabilitation;
  - SR 145 – various location: install signals; and
  - SR 152 – within Madera County: highway rehabilitation.

## **Highway and Arterial Performance**

To assess highway and arterial needs, MCTC developed a process to evaluate candidate capacity-increasing and rehabilitation/safety projects considering performance-based measures and level of service (LOS) analysis. A description of each type of process is provided below.

## ***Performance Measurement***

The RTP Guidelines identify the requirements for “performance-based” planning. The specific requirements contained in the RTP Guidelines are provided below and are referenced on pages 14 through 16 of the Guidelines. The RTP Steering Committee reviewed the requirements and directed staff to prepare Table 4-1 to highlight the performance measures for both capacity-increasing and rehabilitation projects, identify the criteria that should be applied to evaluate performance of the transportation system.

## **RTP Guidelines**

According to the RTP Guidelines, each RTPA should define a set of “program level” transportation system performance measures that reflect the goals and objectives adopted in the RTP. These performance measures are used to evaluate and select plan alternatives. Government Code Section 14530.1(b)(5) requires more detailed project specific “objective criteria for measuring system performance and the cost effectiveness of candidate projects” in the STIP Guidelines. The program level performance measures in the RTP set the context for judging the effectiveness of the RTIP, as a program, in furthering the goals and objectives of the RTP, while the STIP Guidelines address performance measurements of specific projects.

Caltrans is considering system performance measurements for interregional planning and the setting of State planning and programming priorities. The State performance measures will focus on interregional trips between, into and through the Regions. Caltrans will coordinate its performance measure activity with the RTPAs.

The California Transportation Plan, Transportation System Performance Measures Report (August 1998) identifies the following, “desired outcomes” for the transportation system, which **may** be addressed in each region’s RTP:

- ◆ Mobility / Accessibility;
- ◆ Reliability;
- ◆ Cost-effectiveness;
- ◆ Sustainability;
- ◆ Economic Well Being;
- ◆ Environmental Quality;
- ◆ Safety and Security;
- ◆ Equity; and
- ◆ Customer Satisfaction.

Once a full range of candidate regional highway and arterial projects was identified for the 2004 RTP Update by Caltrans and each of the local agencies, an analysis framework consisting of measurable criteria was developed to establish project priorities before the projects are modeled. Emphasis was given to identifying key differences between the candidate projects by mode and the tradeoffs that need to be weighed in the decision-making process. Over 100 candidate regional transportation capacity-increasing projects and over 190 rehabilitation/safety projects have been identified and were evaluated by the RTP Steering Committee.

To evaluate the street and highway projects, the Steering Committee developed quantification and qualification evaluation criteria focusing on project objectives or benefits (reference Table 4-2 for capacity-increasing projects and Table 4-3 for rehabilitation/safety projects). Consideration of evaluation criteria is a critical component of the 2011 RTP Update process.

## **Evaluation Criteria**

One important “quantitative” evaluation criteria required to evaluate regional capacity-increasing projects includes Cost Benefit/Usage.

- **Cost Benefit/Usage** – compares the benefit of the project to actual cost.

Each rehabilitation/safety and capacity increasing project was evaluated using the Project Evaluation Methodology (reference Tables 4-2 and 4-3). Model output adjusted to reflect Year 2035 volumes was then used to identify daily traffic applied in the equations.

In addition to the quantitative evaluation criteria described above, a list of “qualitative” and “performance-based” criteria was prepared considering important data/information that should be considered during the initial project prioritization process. The criteria are “qualitative” because they are based upon expert or subjective judgement to evaluate the measures.

The qualitative and performance-based criteria consider relevant and recent issues of concern to residents and decision makers in Madera County, i.e.: a desire to improve air quality, improve travel speed, and improve safety along major regional routes. They also address performance-based measures contained in the RTP Guidelines. Tables 4-2 and 4-3 provide guidance on the assignment of “2”, “1”, and “0” scores to individual projects. This guidance has been formulated so that the assignment process can be as quantifiable as possible.

## **Relative Weighting (Prioritization) of Quantitative and Qualitative Criteria**

### **Capacity Increasing Improvement Projects**

Appendix C provides results of the evaluation process for the candidate capacity-increasing projects to be included in the 2011 RTP. The specific methodology applied to rank the projects is as follows:

- ◆ score the projects considering the relative weighting of Quantitative Criteria A and B (Cost Benefit/Usage and Design Standards/Improve Safety). The process involved adding the resultant “2” and “1” scores of Criteria A and B and multiplying the result by 2 [(Cost Benefit/Traffic Usage + Travel Time Savings) x 2];
- ◆ sum the scores from the other qualitative criteria (Qualitative Criteria C through I); and
- ◆ sum the results of the two processes described above (reference Appendix C).



**TABLE 4-1  
Madera County 2011 RTP  
Performance Measures**

APPLICABLE TO:				
Rehabilitation/Safety Projects?	Capacity Increasing Projects?	PERFORMANCE INDICATORS	EVALUATION CRITERIA	OBJECTIVE/BENEFIT
No	Yes	<p><b><u>Mobility – Accessibility – Customer Satisfaction</u></b> The need for improved access to the transportation system and the safe, convenient and economical movement of people and goods. The application of transportation and land use measures that minimize travel time and cost.</p>	Improvement in Travel Time and Speed	Reduced travel time and improved access to the transportation system. Improved access to work and other services.
Yes	Yes	<p><b><u>Environmental Quality</u></b> The transportation system should address the needs of land use development, include appropriate maintenance efforts, and reduce impacts on the environment.</p>	Improved AQ Emissions Extent of Other Environmental Impacts	Meet the Air Plan Emission Budget/Address Environmental Impacts
No	Yes	<p><b><u>Reliability</u></b> The transportation system should meet the minimum LOS standard to the extent feasibly possible.</p>	Highway LOS	Achieve Minimum LOS
Yes	Yes	<p><b><u>Safety and Security</u></b> The transportation system should be safe by reducing accidents, deaths and injuries to the extent possible. The transportation system should be monitored to the extent possible to identify potential safety issues.</p>	Meet design standards Improve safety	Reduced fatalities, injuries and accidents.
Yes	Yes	<p><b><u>Equity/Environmental Justice – Economic Well-Being</u></b> Transportation investments and impacts should be distributed among all ethnic, age, and income groups.</p>	Create a Balance in Transportation Investments by Income Group, Ethnicity and Age.	Equitable distribution of benefits.
No	Yes	<p><b><u>Equity/Geographic Equity</u></b> Transportation system improvements shall be geographically equitable within the County.</p>	Transportation Investments Serve Major Employment Areas (City of Madera, City of Chowchilla, Valley Rural Area, Foothill Rural Area)	Equitable distribution of benefits.
Yes	Yes	<p><b><u>Sustainability</u></b> Preservation of the transportation system and the environment in a condition, which will meet the needs of the present without compromising the ability of future generations to meet their mobility needs.</p>	Project Maintenance is Funded Over Time	Projects will be maintained over time.
Yes	Yes	<p><b><u>Cost-Effectiveness</u></b> Benefits VS Cost considering:</p> <p><input type="checkbox"/> Operations <input type="checkbox"/> Maintenance <input type="checkbox"/> Safety</p>	Benefit/Cost Ratio	Optimize return on transportation investments

**TABLE 4-2**  
**REGIONAL PROJECT EVALUATION**  
**Capacity Increasing Projects**  
**Application of Quantitative & Qualitative Evaluation Criteria**

- A. Cost benefit/usage: (considers Year 2030 traffic and other modal improvements)**  
2 Has a Cost/Benefit Ratio of 1.0 or higher.  
0 Has a Cost/Benefit Ratio less than 1.0.  
*A cost/benefit ratio of 1.0 establishes a cost effective improvement project.*
- B. The Project Meets Roadway Design Standards and/or Improves Safety**  
2 Will meet design standards and improve safety.  
1 Will improve safety only.  
*Address safety improvements along facilities.*
- C. Improves the facility LOS**  
2 Facility (or Adjacent Regional Facility) at LOS "F".  
1 Facility (or Adjacent Regional Facility) at LOS "E".  
0 Facility (or Adjacent Regional Facility) at LOS "A" through "D".  
*Improves existing congestion and delay at the most critical locations.*
- D. Project would improve travel time and speed: (considers Year 2030 travel characteristics)**  
2 Significant travel time savings.  
1 Some travel time savings.  
0 No or insignificant travel time savings expected.  
*Various types of projects (different classifications, improvement type) would have varying savings in travel time.*
- E. Improves Air Quality**  
2 Reduces ROG, Nox, PM10, and/or CO emissions.  
1 Emission neutral.  
0 Increases emissions.  
*Reduces nonattainment air emissions.*
- F. Is environmentally sensitive**  
2 No significant impact on the Environment.  
1 Minimal impact on the Environment.  
0 Significant impact on the Environment.  
*The project has the ability to be implemented without significant mitigation costs and environmental assessment.*
- G. The project creates a balance in transportation investment by income, ethnicity, or age**  
2 Yes  
0 No  
*Improves the economic well-being of the adjacent area.*
- H. Serves a major employment area(s) (improves the economic well-being)**  
2 Directly serves an Employment Center in One of the Four Subareas.  
1 Indirectly serves an Employment Center in One of the Four Subareas.  
0 Does not directly or indirectly serve an Employment Center in One of the Four Subareas.  
*Improves the economic well-being of the adjacent area.*
- I. Project maintenance is funded over time**  
2 Yes  
0 No  
*Insures that the project can be sustained over time.*

**TABLE 4-3**  
**Regional Project Evaluation**  
**Rehabilitation/Safety Projects**  
**Application of Quantitative & Qualitative Evaluation Criteria**

- A. Cost Benefit/Usage: (considers Year 2030 traffic and other modal improvements)**  
2   `  
0   Has a Cost/Benefit Ratio less than 1.0.  
*A cost/benefit ratio of 1.0 establishes a cost effective improvement project.*
- B. The Project Meets Roadway Design Standards and/or Improves Safety**  
2   Meets design standards and improves safety.  
1   Improves safety.  
*Address safety improvements along facilities.*
- C. Improves Air Quality**  
2   Reduces ROG, Nox, PM10, and/or CO emissions.  
1   Emission neutral.  
0   Increases emissions.  
*Reduces nonattainment air emissions.*
- D. Is Environmentally Sensitive**  
2   No significant impact on the Environment.  
1   Minimal impact on the Environment.  
0   Significant impact on the Environment.  
*The project has the ability to be implemented without significant mitigation costs and environmental assessment.*
- E. The Project Creates a Balance in Transportation Investment by Income, Ethnicity, or Age**  
2   Yes  
0   No  
*Improves the economic well-being of the adjacent area.*
- F. Project Maintenance is Funded Over Time**  
2   Yes  
0   No  
*Ensures that the project can be sustained over time.*

**KEY TO RATINGS: [2] Very Positive; [1] Positive or Negative; [0] Not Positive or Not Applicable.**

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### Rehabilitation/Safety Improvement Projects

Appendix D provides results of the evaluation process for the candidate rehabilitation/safety projects to be included in the 2011 RTP. The specific methodology used to rank the projects is as follows:

- ◆ score the projects considering the relative weighting of Quantitative Criteria A and B (Cost Benefit/Usage and Design Standards/Improve Safety). The process will involve adding the resultant “2” and “1” scores of Criteria A and B and multiplying the result by 2 [(Cost Benefit/Traffic Usage + Travel Time Savings) x 2];
- ◆ sum the scores from the other qualitative criteria (Qualitative Criteria C through F); and

- ◆ Sum the results of the two processes described above (reference Appendix D).

The performance evaluation process was applied to identify the appropriate candidate RTP projects for funding in this RTP. Almost all of the candidate projects have been identified for funding except where funding constraints exist. The list of recommended RTP capacity increasing and rehabilitation projects are included and further described in the following sections of this Chapter.

### **Capacity-Increasing Street and Highway Project Needs and Actions**

New freeway and other street and highway capacity-increasing improvement projects have the greatest potential for causing significant adverse environmental effects versus other modes of transportation. This RTP proposes the widening or modification of existing streets and highways, changes to the designation of regional streets and highways, and new interchange facilities along new or existing freeways. Other projects include signalization improvements (new signals, signal modifications, and signal synchronization). Based upon the results of the performance evaluation process described above, a list of candidate capacity-increasing street and highway projects proposed to be implemented by the year 2035 was prepared and is reflected in Table 4-4 and depicted in Exhibit 4-3A and 4-3B.

Referencing Table 4-4, this RTP contains over \$1.18 billion in capacity-increasing highway and arterial improvement projects. This figure includes all lane widenings, interchange improvements, new signals, and signal coordination systems adjusted to Year of Expenditure dollars. Approximately \$853 million has been allocated for State Highway improvements along SR 41, SR 99 and SR 145. In addition, new or improved interchange projects are planned along SR 41, SR 99 and SR 145. These projects are intended to relieve bottlenecks during peak use, to close gaps, and to increase capacity along congested freeways, such as SR 41 and SR 99, which provide access to major population and employment opportunities within the San Joaquin Valley.

Strategic capacity improvements can be combined with improved management of the regional freeway system and peak period travel demand reduction strategies to effectively meet the Region's travel needs. The Region needs innovative capacity enhancements, but as always, innovations must meet a benefit-cost test.

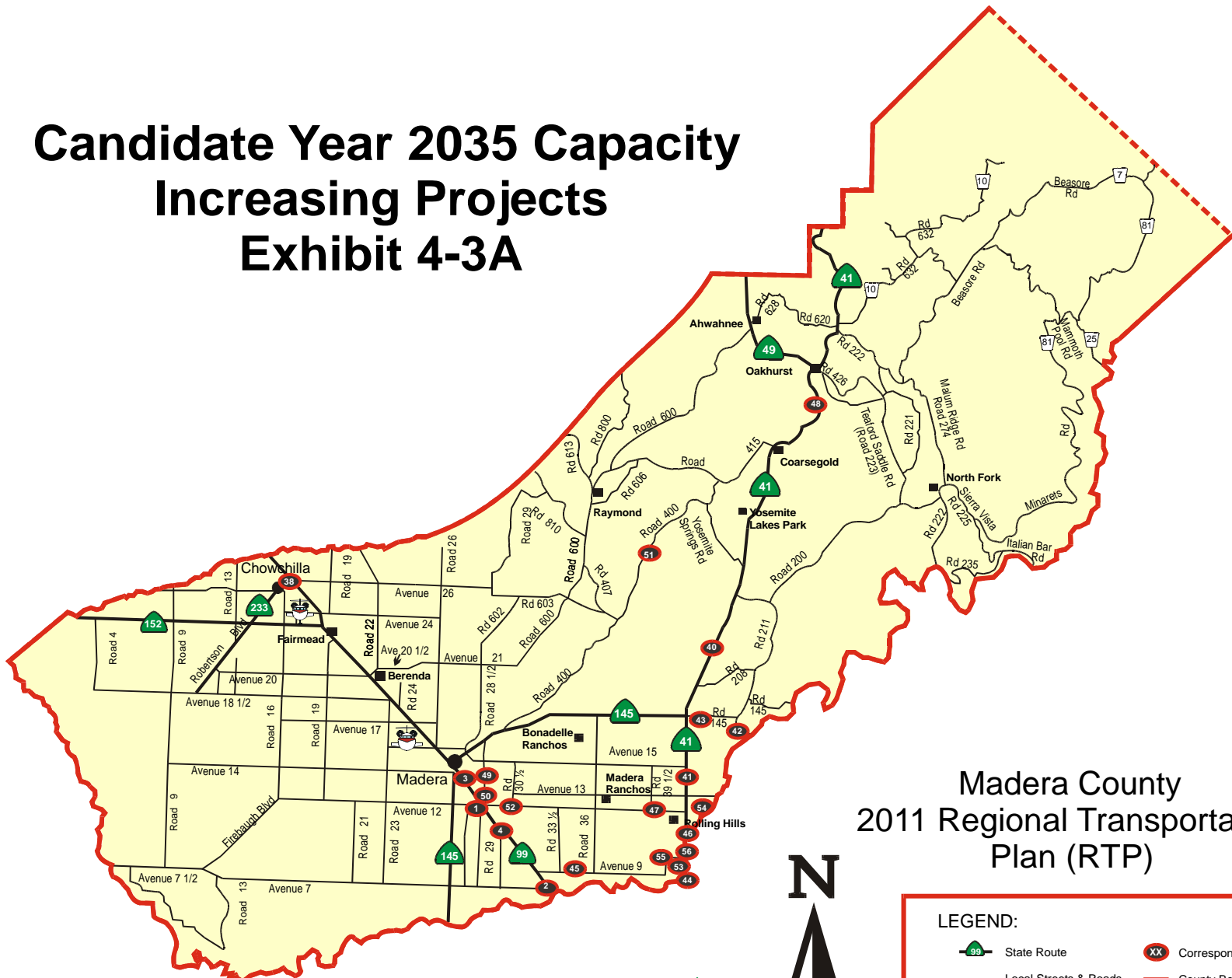
For implementation purposes, it is understood that Caltrans and the local agencies have the discretion to program projects from Table 4-4 considering the availability of funding. While funding timeframes have been identified in Table 4-4, the years shown are only estimates of when funding may become available and programmed for a certain project.

The following needs are described to identify why the projects referenced in Table 4-4 are necessary and how the projects will help meet regional transportation needs over the life of the Plan.

**Table 4-4  
Constrained Candidate Capacity Increasing Projects for Inclusion in the  
Madera County 2011 Regional Transportation Plan**

Agency Identifier	Map ID Number	Route	Project Limits	Project Description	Estimated Cost	Funding Year	Open to Traffic Year	Conformity Analysis Year	Funding Source
<b>CALTRANS CANDIDATE PROJECTS - 2011 RTP PROJECT LIST (CT RTP)</b>									
CTRTP	1	99	On Route 99 from .5 miles south of Avenue 12 overcrossing to .5 miles north of Avenue 12 overcrossing. PM R7.1 - R7.9	Reconstruct Ave 12 Interchange	\$68,000,000	2011-12	2015	2017	99 Bond/Meas T/IF
CTRTP	2	99	In Fresno & Madera Counties, From 0.2 miles south of Grantland Ave UC to 0.6 miles north of Avenue 7	Widen 4-Lane Fwy to 6-Lane Fwy	\$54,000,000	2012-13	2016	2017	ITIP/99 Bond
CTRTP	3	99	Ave 12 to Ave 17	4-Lane Freeway to 6-Lane Freeway	\$91,010,666	2018	2022	2023	ITIP
CTRTP	4	99	Ave 7 to Ave 12	4-Lane Freeway to 6-Lane Freeway	\$160,571,129	2022	2026	2035	ITIP
<b>Subtotal:</b>					\$373,581,795				
<b>CITY OF MADERA CANDIDATE STREET AND ROAD PROJECT LIST (MADCITY)</b>									
MADCITY	5	ELLIS AVE - Phase 1	Granada to w/o SR99	New 4-lane Road Connection replacing Avenue 16 from Granada to SR 99	\$5,020,000	2010	2010	2011	Prop 1B/IF/Dev
MADCITY	6	ELLIS AVE - Phase 2	w/o SR 99 to e/o Road 26	Recon street and new SR 99 OC at Ellis	\$14,755,000	2010	2011	2011	Meas T
MADCITY	7	SR 99	In MAD CO From 0.6Mi S/OF 4TH Street to 0.2Mi N/OF 4TH Street OC PM 10.4 - 11.2	Fourth Street/SR 99 Interchange Improvements	\$7,000,000	2011	2012	2012	RTIP/Meas T
MADCITY	8	4TH	Gateway to Lake	2 to 4 lanes w/ RR xing	\$3,300,000	2011	2012	2012	Meas T/IF
MADCITY	9	OLIVE	Gateway to Roosevelt	2 to 4 lanes	\$2,121,800	2013	2014	2014	Meas T/IF
MADCITY	10	LAKE	4th to Cleveland	2 to 4 lanes	\$2,028,730	2016	2016	2017	Meas T-Tier 2
MADCITY	11	SCHNOOR	Trevor to Sunset	Overlay & Restripe to 4 lanes	\$1,106,886	2018	2018	2020	Meas T
MADCITY	12	CLEVELAND	Sharon to Tozer	Restripe to 4 lanes	\$491,950	2018	2018	2020	Meas T
MADCITY	13	WESTBERRY	at Fresno River	New 4 Lane Bridge	\$12,298,739	2018	2018	2020	IF/Dev
MADCITY	14	AIRPORT	Ave 17 to Yeager	Restripe to 4 lanes	\$391,432	2020	2020	2020	Meas T
MADCITY	15	YEAGER	Airport to Falcon	Overlay and Restripe to 4 lanes	\$391,432	2020	2020	2020	Meas T
MADCITY	16	ELLIS	Road 26 to Lake	2 to 4 lanes	\$3,914,320	2020	2020	2020	IF
MADCITY	17	SR 145	SR99 to Yosemite	Widen 2 to 4 Lanes	\$5,536,935	2022	2022	2023	RTIP/Meas T/IF
MADCITY	18	Granada	at Fresno River	Widen Structure from 2 to 4 lanes	\$3,664,205	2023	2024	2025	Meas T/IF
MADCITY	19	Sharon Blvd	Ellis to Avenue 17	New 4 Lane Roadway	\$8,554,565	2023	2023	2023	IF/Dev
MADCITY	20	CLEVELAND	Schnoor to SR 99	4 to 6 lanes	\$4,847,587	2023	2023	2023	RTIP/Meas T/IF
MADCITY	21	GATEWAY	Yosemite to Cleveland	Widen to 4 Lanes	\$14,257,609	2023	2024	2025	RTIP/Meas T/IF
MADCITY	22	ELLIS	Road 26 to Krohn	2 to 4 lanes	\$5,874,135	2024	2024	2025	Meas T/IF
MADCITY	23	Avenue 17	SR99 Interchange	Interchange Improvements/Widen Structure	\$56,685,401	2024	2025	2025	Meas T/IF/Dev
MADCITY	24	Westberry	Cleveland to Ave. 16	2 to 4 Lanes	\$2,716,787	2024	2024	2025	IF/Dev
MADCITY	25	D Street	Clark to Adell	2 to 4 Lanes	\$701,085	2026	2026	2035	Meas T/IF/Dev
MADCITY	26	Howard	Westberry to Granada	2 to 4 lanes	\$4,673,902	2026	2026	2035	IF/Dev/Meas T
MADCITY	27	Pecan	Golden State to Stadium	2 to 4 lanes	\$4,673,902	2026	2026	2035	Meas T/IF
MADCITY	28	Tozer/Road28	Avenue 13 to Knox	2 to 4 lanes	\$1,869,561	2026	2026	2035	Meas T/IF/Dev
MADCITY	29	SUNRISE	B Street to Road 28	2 to 4 lanes	\$2,892,483	2028	2028	2035	RTIP/Meas T/IF
MADCITY	30	Storey Road	SR145 to City Limit	2 to 4 lanes	\$2,396,629	2028	2028	2035	Meas T/IF
MADCITY	31	CLEVELAND	Road 26 to SR 99	4 to 6 lanes & Interchange Improvements	\$54,988,588	2029	2030	2035	Meas T-Tier 2/IF
MADCITY	32	Pine	Almond Ave to Pecan Ave	2 to 4 lanes	\$1,911,322	2030	2030	2035	IF
MADCITY	33	Stadium	Pecan to Maple	Upgrade 2 to 4 lanes	\$1,209,919	2030	2030	2035	IF
MADCITY	34	Madera Ave (SR145)	SR99 Interchange	4 to 6 Through Lanes	\$29,634,252	2030	2032	2035	IF
MADCITY	35	4th Street	SR99 Interchange	4 to 6 Through Lanes	\$29,318,621	2030	2032	2035	IF
<b>Subtotal:</b>					\$284,207,779				
<b>CITY OF CHOWCHILLA - CANDIDATE STREET AND ROAD PROJECT LISTING (CHOWCITY)</b>									
CHOWCITY	36	ROBERTSON	15th Street to Palm Pkwy	Restripe 2 to 4 Lanes	\$1,078,229	2017	2017	2017	SHOPP/Meas T
CHOWCITY	37	FIG TREE	SR 99 Overcrossing	2 Lane OC to Chowchilla Blvd	\$13,282,638	2018	2020	2020	IF
CHOWCITY	38	99	SR 233 Interchange	Reconstruct Interchange	\$49,832,419	2022	2024	2025	RTIP/Meas T/IF
CHOWCITY	39	AVENUE 26	SR 99 to Coronado	Widen to 4 Lanes	\$9,468,933	2030	2032	2035	IF
<b>Subtotal:</b>					\$73,662,219				
<b>COUNTY OF MADERA STREET AND ROAD PROJECT LISTING (MADCO)</b>									
MADCO	40	41	On Route 41 Between 0.3 Mile North of Road 208 and 2.2 Mile North Of Road 208	Construct Passing Lanes	\$30,388,738	2015	2016	2017	Various
MADCO	41	SR 41	Ave 12 to SR 145	Widen to 4 Lanes	\$19,516,785	2017	2019	2020	Meas T/IF
MADCO	42	Rd 206	Madera County Line to Rd 145	Widen to 4 Lanes	\$18,204,521	2017	2019	2020	IF
MADCO	43	Rd 145	Rd 206 to SR 41	Widen to 4 Lanes	\$15,185,957	2017	2019	2020	IF
MADCO	44	SR 41	Madera County Line to Ave 10	Widen to 6 lanes	\$5,780,407	2018	2020	2020	RTIP/Meas T/IF
MADCO	45	Ave 9	SR 99 to Rd 40 1/2	Widen to 4 Lanes	\$41,257,349	2018	2020	2020	RTIP/Meas T/IF
MADCO	46	SR 41	Ave 10 to Ave 12	4 lane freeway & IC @ Ave 12	\$100,858,967	2020	2022	2023	RTIP/Meas T/IF
MADCO	47	Ave 12	Rd 38 to SR 41	Widen to 4 lanes	\$31,279,768	2024	2026	2035	Meas T/IF
MADCO	48	SR 41	Road 420 to SR 49 South of Oakhurst	Widen to 4 Lanes	\$36,747,777	2027	2029	2035	RTIP/Meas T/IF
MADCO	49	Rd 29	Olive to Ave 13	Widen to 4 lanes	\$8,098,953	2028	2030	2035	Meas T/IF
MADCO	50	Rd 29	Ave 12 to Ave 13	Widen to 4 lanes	\$16,343,357	2029	2031	2035	Meas T/IF
MADCO	51	Rd 400	Hensley Lake entrance to Lilly Mtn Rd	Reconstruct roadway & Widen	\$36,276,533	2030	2032	2035	IF
MADCO	52	Ave 12	SR 99 to Rd 32	Widen to 4 lanes	\$31,065,113	2031	2033	2035	RTIP/Meas T/IF
MADCO	53	CHILDREN'S	SR 41 NB ramps to Peck Blvd	Widen to 8 lanes	\$7,281,193	2033	2035	2035	IF
MADCO	54	AVE 12	SR 41 to North Rio Mesa Blvd	Widen to 6 Lanes	\$4,790,259	2033	2035	2035	IF
MADCO	55	AVE 10	Road 401/2 to SR 41	Widen to 4 Lanes	\$8,430,855	2033	2035	2035	IF
MADCO	56	SR 41	NB on ramp/SR 41 @ Children's Blvd	Widen to 2 lanes	\$38,705,289	2033	2035	2035	IF
<b>Subtotal:</b>					\$450,211,822				
<b>TOTAL:</b>					\$1,181,663,615				

# Candidate Year 2035 Capacity Increasing Projects Exhibit 4-3A



Madera County  
2011 Regional Transportation  
Plan (RTP)



**LEGEND:**

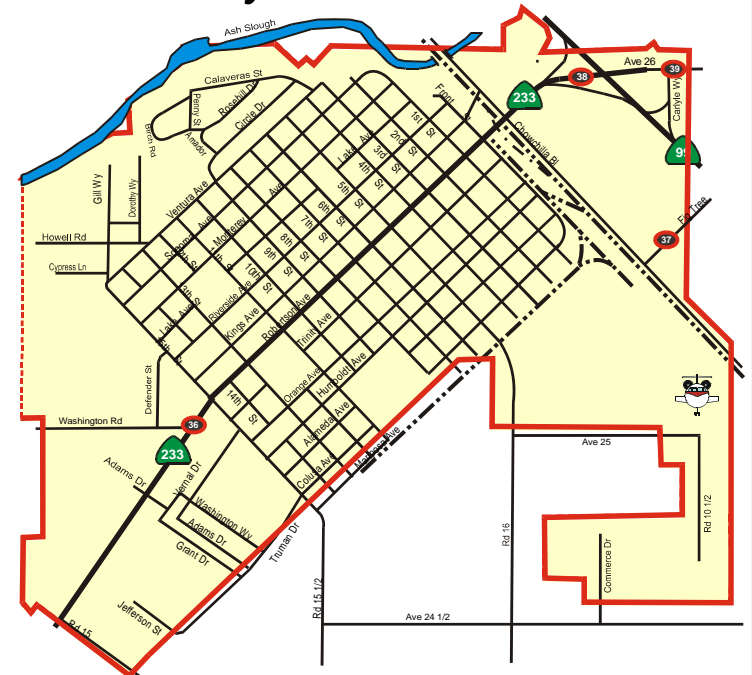
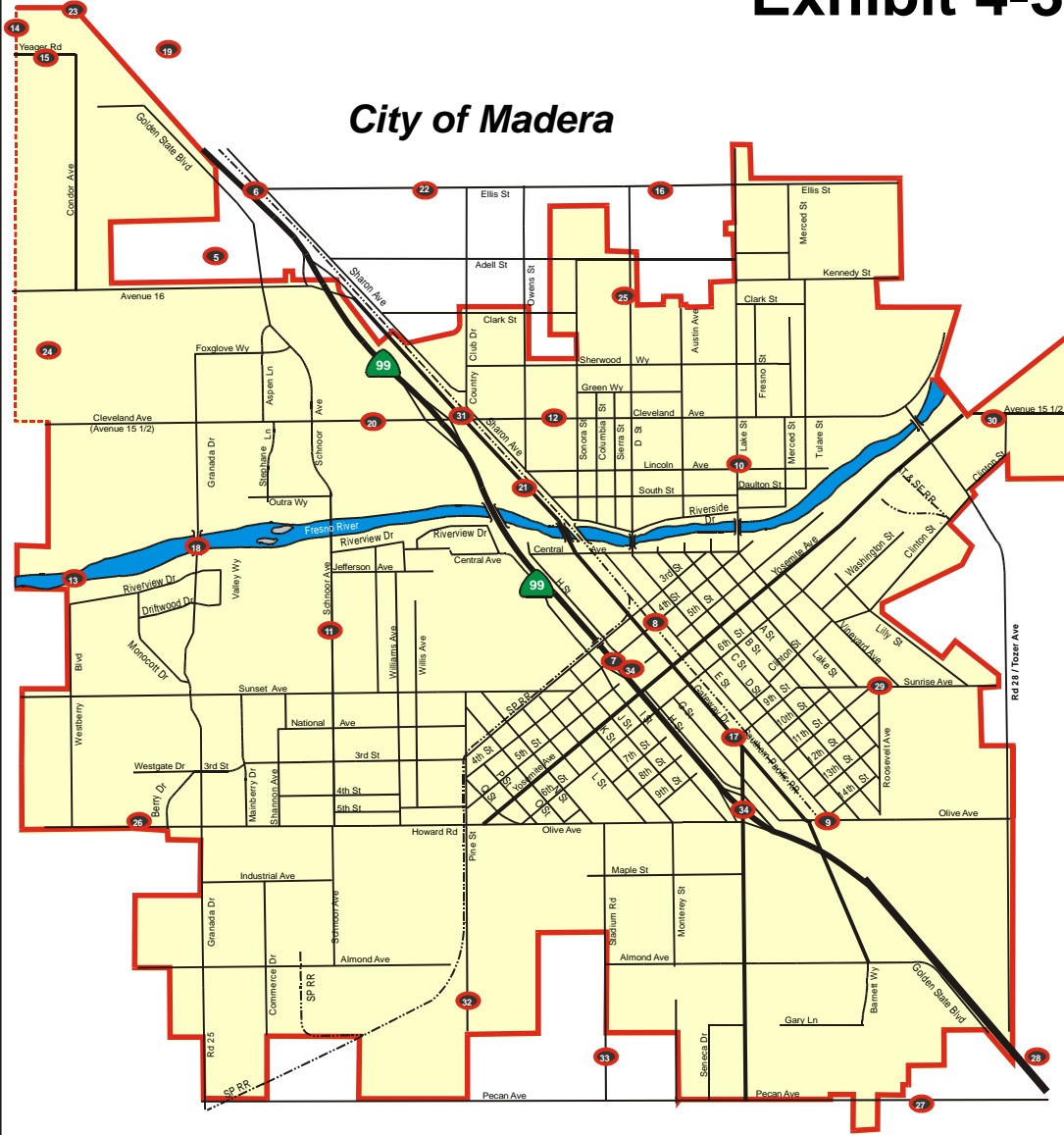
State Route	Corresponding Project #
Local Streets & Roads	County Boundary
Cities	County Boundary Continues Beyond Map
Communities	

# Candidate Year 2035 Capacity Increasing Projects

## Exhibit 4-3B

### City of Madera

### City of Chowchilla



### Madera County 2011 Regional Transportation Plan (RTP)

**LEGEND:**

-  State Route
-  Corresponding Project #
-  Local Streets & Roads
-  County Boundary
-  Cities
-  County Boundary Continues Beyond Map
-  Communities



Not to Scale

### ◆ **Level of Service Analysis**

To identify potential impacts of the planned street and highway system, the level of service (LOS) for each major facility was measured. Minimum LOS for purposes of the RTP is LOS "D" for local street and road facilities and LOS "C" for State Routes. The LOS analysis was conducted consistent with the analysis applied to estimate current LOS described in Chapter II of this RTP. For segments along the future RTP system, 2035 average daily traffic (ADT), estimated by the MCTC Regional Traffic Model, was applied (reference Exhibits 4-1A and 4-1B). Results of the 2011 RTP LOS analysis indicate whether or not planned improvements contained in the Financial Element (Chapter V) will meet minimum LOS policies.

Results of the LOS analysis for the RTP indicate that some facilities will fall deficient between 2011 and 2035 (reference Appendix B). A list of these deficient facilities is provided in Table 4-5. Exhibits 4-4A and 4-4B also provide a graphic display of the resulting deficient levels of service in the Year 2035. Improvement projects to improve these deficient levels of service would include lane widening and other operational improvements; however the projects are not included in the 2011 RTP "financially-constrained" program.

It will be important over time for agencies to consider partnering with Caltrans to fund improvements on State routes with LOS deficiencies. These improvement projects are projects that are beyond the funding capability of the RTP or are financially unconstrained.

### **Major Corridor Deficiencies/Needs/Actions**

The two major deficiencies identified in the LOS analysis for Year 2035 with RTP projects include SR 41 north of the San Joaquin River, and SR 99 between the San Joaquin River and the Merced County Line. These deficiencies/needs, together with other issues described below set the stage for a set of actions that will be carried out by MCTC and the affected local agencies and Caltrans over the next twenty-five years.

- ◆ **SR 99** – The deficiencies along SR 99 are considered an "inter-regional" issue or problem. The need for an 8-lane facility along SR 99 between Madera and Fresno County is primarily caused by the highway's position as the preeminent travel corridor for commuting, recreation, and goods movement purposes in the San Joaquin Valley. In addition, planned residential, industrial and commercial development is anticipated in this corridor. Continued development of the State Center Community College campus on Avenue 12 will generate additional regional scale travel.

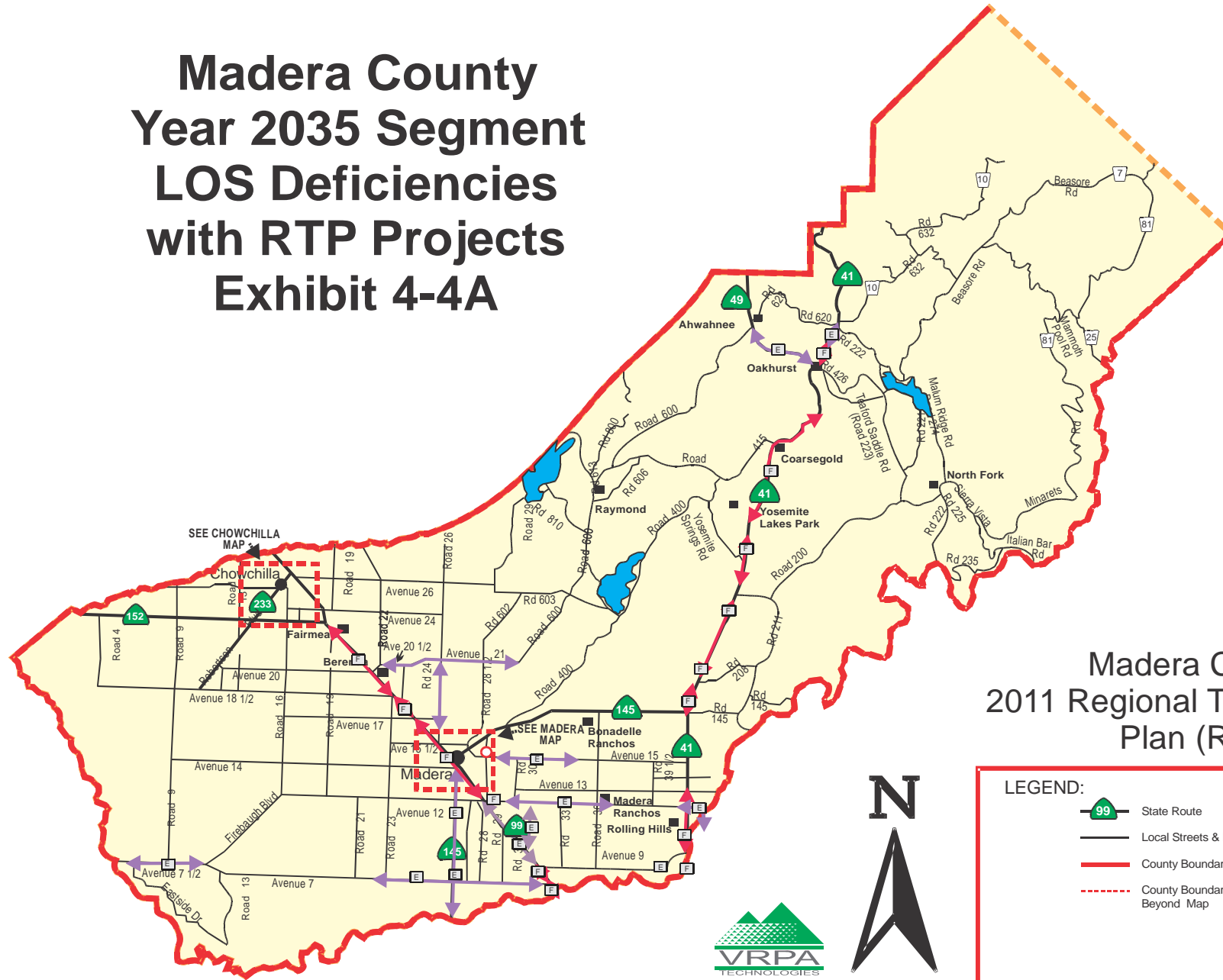
To address the LOS deficiencies along this corridor, MCTC will coordinate with Caltrans, District 06 and other representatives of the other seven Valley Transportation Planning Agencies to identify alternative strategies that will address travel demand along the corridor.



**TABLE 4-5**  
**Year 2035 Segment Level of Service Deficiencies With**  
**2011 RTP Capacity Increasing Projects**

Roadway Segment		Limits	Within City/County	Facility Type	# of Lanes	Year of ADT 2030	LOS
1	AVE 7	Road 21/SR 145	Madera County	Rur. Hwy.	2	14000	E
2	AVE 7 1/2	Madera County Ln/Ave 7	Madera County	Rur. Hwy.	2	16000	E
3	AVE 9	Road 40 1/2/Children's Blvd	Madera County	Rur. Hwy.	2	25000	F
4	AVE 12	Road 32/Road 38	Madera County	Rur. Hwy.	2	18000	E
5	AVE 12	SR 99/Road 30	Madera County	Urb. Art.	4	32000	F
6	AVE 13	Golden State Blvd/Rd 30 1/2	Madera County	Urb. Art.	2	19000	F
7	AVE 16	Schnoor Ave/SR 99	City of Madera	Urb. Art.	2	30000	F
8	AVE 14	Rd 28/Rd 29	Madera County	Urb. Art.	2	10000	F
9	AVE 15	Rd 28/Rd 29	Madera County	Urb. Art.	2	15000	E
10	AVE 15	Rd 29/Rd 36	Madera County	Rur. Hwy.	2	12000	E
11	AVE 17	Rd 23/Sharon	Madera County	Urb. Art.	2	18000	F
12	AVE 20 1/2	SR 99/Rd 26	Madera County	Rur. Hwy.	2	18000	F
13	CLEVELAND	SR 99/Country Club	City of Madera	Urb. Art.	6	61000	F
14	CLEVELAND	Country Club/D St	City of Madera	Urb. Art.	4	30000	E
15	CLEVELAND	Lake/Tozer	City of Madera	Urb. Art.	4	31000	E
16	D STREET	4th St/Adell St	City of Madera	Urb. Art.	2	14000	F
17	GATEWAY	SR 145/Fresno River	City of Madera	Urb. Art.	4	34000	F
18	HOWARD	Mainberry/Yosemite Ave	City of Madera	Urb. Art.	4	36000	F
19	ROAD 23	Ave 17/Ave 18 1/2	Madera County	Rur. Hwy.	2	15000	E
20	ROAD 26	Cleveland Ave/Ellis St	City of Madera	Urb. Art.	4	31000	F
21	ROAD 26	Ave 17/Ave 21	Madera County	Rur. Hwy.	2	16000	E
22	ROAD 27	Ellis St/Ave 17	Madera County	Rur. Hwy.	2	15000	F
23	ROAD 27	Ave 17/Ave 18 1/2	Madera County	Rur. Hwy.	2	11000	E
24	ROAD 29	Ave 14/Ave 15	Madera County	Rur. Hwy.	2	16000	F
25	ROAD 30 1/2	Ave 9/Ave 12	Madera County	Rur. Hwy.	2	14000	E
26	ROAD 30 1/2	Ave 12/Ave 13	Madera County	Rur. Hwy.	2	17000	F
27	SR 41	Madera County Ln/Ave 10	Madera County	Freeway	6	150000	F
28	SR 41	Ave 10/Ave 12	Madera County	Freeway	4	100000	F
29	SR 41	SR 145/Rd 200	Madera County	Mnt Arterial	2	26000	F
30	SR 41	Rd 200/Rd 415	Madera County	Mnt Arterial	2	25000	F
31	SR 41	Rd 415/Rd 420	Madera County	Mnt Arterial	2	28000	F
32	SR 41	SR 49/Road 222	Madera County	Mnt Arterial	2	35000	F
33	SR 49	SR 41/Rd 600	Madera County	Mnt Arterial	2	17000	E
34	SR 99	Madera County Ln/Ave 7	Madera County	Freeway	6	135000	F
35	SR 99	Ave 7/Ave 9	Madera County	Freeway	6	121000	F
36	SR 99	Ave 9/Ave 12	Madera County	Freeway	6	121000	F
37	SR 99	Ave12/SR 145	Madera County	Freeway	6	130000	F
38	SR 99	SR 145/4th St	City of Madera	Freeway	6	122000	F
39	SR 99	4th St/Cleveland Ave	City of Madera	Freeway	6	125000	F
40	SR 99	Cleveland Ave/Ave 16	City of Madera	Freeway	6	119000	F
41	SR 99	Ave 16/Ave17	City of Madera	Freeway	6	107000	D
42	SR 99	Ave 17/Ave 18 1/2	Madera County	Freeway	4	106000	F
43	SR 99	Ave 18 1/2/Ave 20	Madera County	Freeway	4	110000	F
44	SR 99	Ave 20/SR 152	Madera County	Freeway	6	120000	F
45	SR 99	SR 152/Ave 24	Madera County	Freeway	4	81000	F
46	SR 99	Ave 24/SR 233	City of Chowchilla	Freeway	4	74000	E
47	SR 99	SR 233/Madera County Ln	Madera County	Freeway	4	88000	F
48	SR 145	Road 29/SR 41	Madera County	Rur. Hwy.	2	10000	D
49	SR 145	Tozer/Road 29	City of Madera	Urb. Art.	2	20000	E
50	SR 145	Ave 12/ Ave 13 1/2	Madera County	Rur. Hwy.	4	26000	F
51	SR 145	Madera County Ln/Ave 12	Madera County	Rur. Hwy.	2	21000	E
52	SR 233	Ave 23 1/2/Palm Pkwy	Madera County	Rur. Hwy.	2	14000	E
53	SUNSET	Schnoor/4th Street	City of Madera	Urb. Art.	2	13000	F

# Madera County Year 2035 Segment LOS Deficiencies with RTP Projects Exhibit 4-4A



## Madera County 2011 Regional Transportation Plan (RTP)

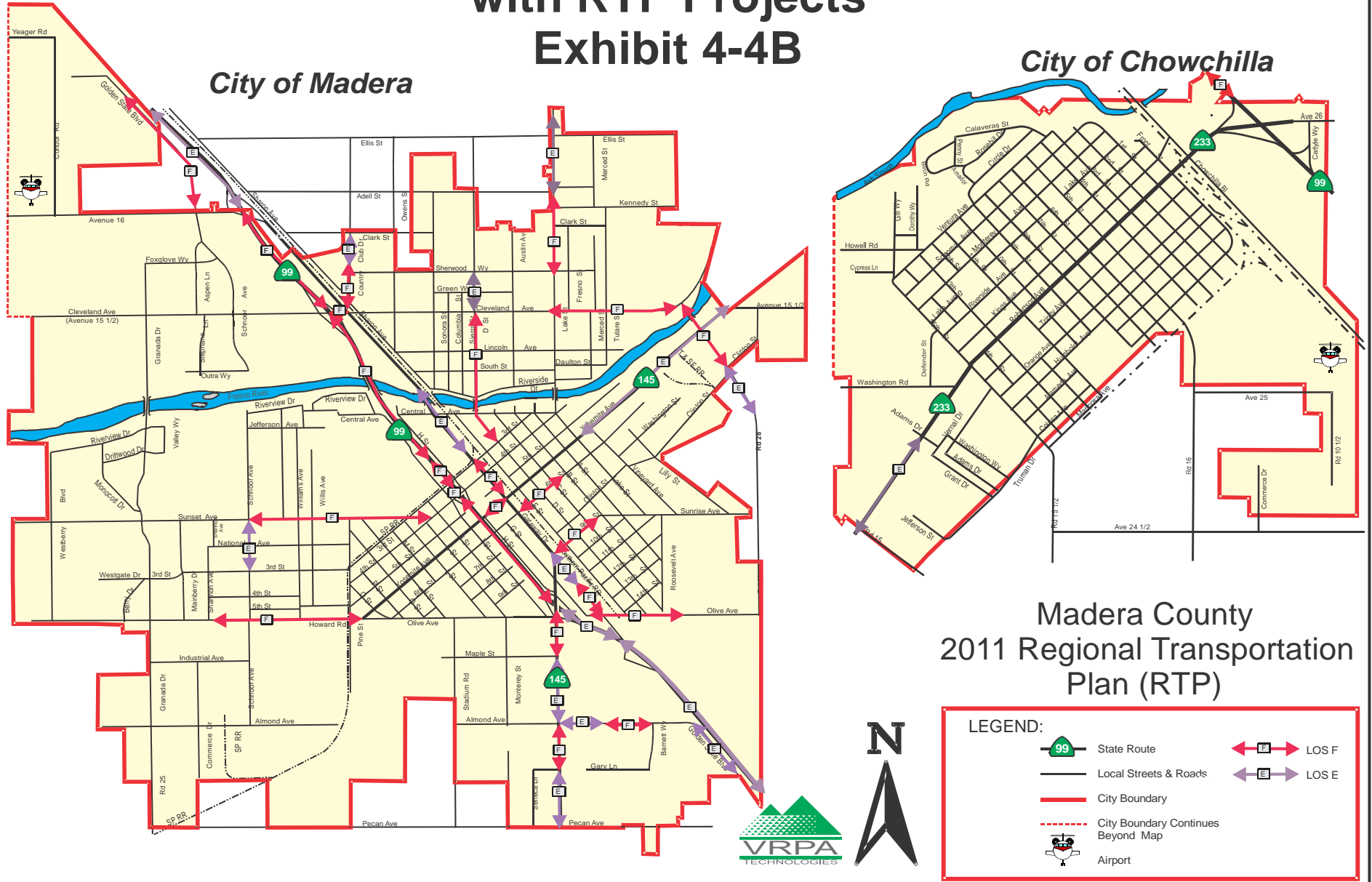
**LEGEND:**

- State Route
- Local Streets & Roads
- County Boundary
- County Boundary Continues Beyond Map
- LOS F
- LOS E

# Madera County Year 2035 Segment LOS Deficiencies with RTP Projects Exhibit 4-4B

**City of Madera**

**City of Chowchilla**



**Madera County  
2011 Regional Transportation  
Plan (RTP)**

- ◆ **SR 41 Fresno County Line to SR 145** – The severe deficiency along SR 41 between the San Joaquin River and Avenue 10 is in response to planned growth and development in southeastern Madera County. Caltrans and Madera County have been working together to address congestion along this segment with construction of a 4-lane freeway, which opened in 1999. Further, the County of Madera has adopted a new Road Impact Fee program to address appropriate improvements along the SR 41 corridor. The SR 41 bridge over the San Joaquin River can only accommodate 6 lanes (3 in each direction) and still meet federal design standards. As a result, the LOS deficiency cannot be mitigated without continued coordination between the affected agencies. This coordination, and the identification of potential solutions, cannot be accomplished during this RTP Update process. It is this process, however, that must identify the issues that need to be resolved. Even with the financially constrained projects included in this RTP, the segment between the Madera County Line and Ave 12 will require lane widening and/or the identification of alternate routes of travel to relieve the projected LOS deficiencies.
- ◆ **North SR 41 Corridor** – The level of service will continue to deteriorate north of SR 145 to the Madera/Mariposa County Line (LOS D, E and F); however, funding realities dictate that improvements will be limited to necessary operational improvements and limited development of passing lanes.
- ◆ **City of Madera Circulation Needs** – maintaining east/west mobility across the Freeway 99/Union Pacific (UP) Railroad corridor is a continuing problem. Madera has developed and is implementing an effective program with projects on Cleveland Avenue, Avenue 16/Ellis Avenue, and at SR 99/4<sup>th</sup> Street including the widening of 4<sup>th</sup> Street to 4-lanes. The need to study the relocation of SR 145 (Yosemite Avenue) in Madera should also be a priority given the deficiencies along the corridor and the inability to increase capacity given the right-of-way constraints.
- ◆ **Local Facilities**

Urban arterial, rural highway, and mountain arterial streets and roads within Madera County carry a majority of all traffic and account for a vast majority of the County's roadway system. As it becomes more difficult to add lanes to the SR 41 and SR 99 freeway systems, maximizing the capacity of the Region's arterials will become a priority.

Referencing Table 4-4 and Exhibit 4-3A and 4-3B, numerous arterial improvements within each subarea of the County are planned, including lane widening on Avenues 9, 12, 13 and 16, Roads 29, 145, 206, 400 and others, and other major facilities such as Ellis, Lake, Gateway, Cleveland and additional facilities in the Cities of Madera and Chowchilla.

Finally, in addition to lane widening, interchange enhancements, and arterial widening projects, a number of new traffic signals and signal coordination systems are planned within the County including those at Avenue 7 and SR 145, Avenue 9 and SR 99, Avenue 9 and Road 30 ½, and Road 36 and Avenue 15.

In addition to the SR 41 Fee Program, the County of Madera has revised its Countywide Local Transportation Impact Fee program. The purpose of this update is three-fold:

- to address revised growth projections;

- to identify projected transportation needs and costs; and
- to update the fee schedule to insure that transportation needs are addressed over time.

◆ **Other Issues/Actions**

➤ **East/West Corridor**

Traffic modeling indicates that the San Joaquin River crossing and segments of SR 41 (north to south) will experience levels of service that surpass the maximum allowable LOS of “C”. This demand may be accommodated by the Caltrans project along SR 65 currently under study (reference detail below). This RTP indicates that with the candidate projects in this RTP that add lanes to SR 145, and Avenues 9 and 12, will accommodate projected east-west traffic demand. Fresno COG is addressing travel demand in both counties with studies including the Herndon Avenue Specific Study and the Fresno-Madera County East/West Corridor Study. Phase 1 of the East-West Study has been completed and identified four corridor alternatives to be further evaluated as part of Phase 2. Phase 2 is focusing on an evaluation of bridge crossing along the San Joaquin River between the SR 41 San Joaquin River Bridge and Rank Island to the north.

Madera County is currently monitoring East/West Corridor Phase 2 meetings since the alternatives under consideration involve expansion of facilities within Madera County. The need for communication between Fresno agencies and Madera County regarding east/west circulation is recognized and continues through participation in the East/West Corridor Study, as well as through the many collaborative working groups referenced in this RTP. It is through involvement in these transportation planning groups and in special studies that MCTC ensures a comprehensive, coordinated transportation planning process.

It should be noted that east-west travel will be an issue in Madera County even if additional access over the San Joaquin River is not provided. As a result, adequate right-of-way along east-west routes in southeastern Madera County should be reserved for future widening to the extent possible.

➤ **Emergency Access in Mountain Communities**

To address the issue of emergency access in the mountain communities of Madera County, the County prepared a study, which recommended projects to improve emergency access in the Oakhurst and a few other areas. The study was presented to the Board of Supervisors; however, direction was never given to implement the recommendations.

To address the issue of emergency access, the County:

- ❑ requires new development to have two points of access;
- ❑ has established a maximum cul-de-sac length; and
- ❑ implements projects to improve access as funds are available.

It should be noted that there are many public right-of-way roads in the mountain areas that are not on the County maintained list of roads. They were built prior to when the design requirements listed above were established. The County has limited funding sources that can address these roads that are not on their list to maintain.

➤ **SR 65 Route Concept Report Study**

Caltrans is currently in the process of preparing a Route Concept Report (RCR) study to identify the needs for SR 65 along the eastern portion of the Central San Joaquin Valley as an alternative means of accommodating north-south travel demand. SR 65 currently begins in Kern County and ends in Tulare County at its intersection with SR 198. The RCR is considering the extension of this facility north through Fresno and into Madera County where it would ultimately connect to SR 99.

➤ **Land Use Coordination**

Over the next twenty-five years, it will be important for MCTC and its member agencies (the cities and the County) to coordinate with responsible agencies (federal, State, and other local agencies, including those in other counties) to insure that issues regarding the impact of growth and development on the transportation system that connects the counties can be defined and addressed. It is important to note that MCTC is involved in various groups that insure effective communication and coordination with other Valley counties on issues related to land use, air quality, and transportation. These groups include the Valley Councils of Government (COG) Directors' Association, the Valley Modelers Group, and others. In addition, the eight San Joaquin Valley counties have already implemented an aggressive program of coordinated Valleywide planning. In September of 1992, the eight Valley Regional Transportation Planning Agencies (RTPAs), including MCTC, entered into a memorandum of understanding (MOU) to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved upon an already close working relationship between the eight Valley RTPAs and the representatives of the California Department of Transportation (Caltrans), California Air Resources Board, State Office of Planning and Research, San Joaquin Valley Air Pollution Control District (SJVAPCD), and the Federal Highway Administration.

➤ **Private Development Improvements**

Several street and road improvements listed in Table 4-4 will be financed through local development contributions as conditions of approval. Additional improvements to address LOS deficiencies identified in Table 4-5 will be necessary and are assumed to be addressed through private funding as new development in the respective plan areas takes place.

➤ **Ramp Metering**

Caltrans, through its correspondence with the County Road Department, has indicated that it intends to meter all on-ramps to State routes in such a manner as to mimic traffic patterns in the Year 2000. Caltrans' primary concern is to maintain the best operating condition on the mainline highways. The use of ramp meters, according to Caltrans, helps to improve the flow of traffic on the mainline. There is concern however, that while improving the mainline freeways within Madera County, significant back-up or queuing of traffic will occur on the local streets and roads that connect to the freeway system. Further coordination between Caltrans and affected local agencies should be provided regarding operations of the potential use of ramp meters along the State freeway system in Madera County.

## **Street and Highway Rehabilitation/Safety Project Needs and Actions**

In addition to LOS deficiencies, Caltrans and local agencies are also facing the difficult task of maintaining regional streets and highways with inadequate funding. With increased congestion expected in the future, the typical road will require some maintenance every five to ten years, and major rehabilitation every ten to 20 years. If rehabilitation and maintenance activities are not implemented, county residents will continue to experience increased accident rates and reduced system-wide efficiency.

◆ **Enhanced Rehabilitation and Safety Improvements**

With the current backlog of highway and arterial maintenance and the pavement deterioration that goes with an aging roadway system, costs will increase dramatically through the RTP horizon year to keep the highway system operational. The Plan identifies additional funds principally for arterials that minimize roadway and bridge decay. Recent studies have also identified the increased cost to users as under-maintained roadways degrade tires and shock absorbers, creating wear and tear on engines and connections throughout the vehicle. Providing additional funding to improve pavement conditions before roadbed deterioration requires full rehabilitation would result in substantial maintenance savings to the Region. Preliminary analysis indicates that the benefits of an investment in proper ongoing maintenance would pay dividends of more than triple the cost. The funding estimates for this 2011 RTP call for \$150.6 million in investments for rehabilitation and safety projects (reference Table 4-6) and \$223.3 million for operations and maintenance.

A variety of federal, state, and local funds are used for maintaining the existing transportation network. Approximately 20 percent of Regional Surface Transportation Program (RSTP) funds received by MCTC are allocated to ongoing maintenance of the County road network. Seventy percent of funds collected under Measure T, Madera County's half-cent transportation sales tax program, are designated for maintenance and rehabilitation of existing roads.

**TABLE 4-6**  
**Candidate Rehabilitation/Safety Projects for Inclusion in the**  
**Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost	Funding Year	Funding Source
<b>CALTRANS CANDIDATE PROJECTS - 10 YEAR SHOPP PROJECT LIST (CTSHOPP)</b>							
CTSHOPP	1	152	R0/R15.6	Replace Slab, Dowel & Grind	\$4,620,000	2010	Maintenance
CTSHOPP	2	99	R1.4/7.3	Pavement Preservation	\$1,770,000	2011	Maintenance
CTSHOPP	3	41	R0/R3.23	Seal Joints	\$130,000	2012	Maintenance
CTSHOPP	4	49	.8/9.28	Pavement Preservation	\$5,080,000	2012	Maintenance
CTSHOPP	5	41	35.3/40.9	Pavement Preservation	\$1,970,000	2013	Maintenance
CTSHOPP	6	99	23.1/26.8	ACOL - CAPM	\$1,110,000	2014	SHOPP
CTSHOPP	7	99	22.7/29.4	ACOL - CAPM	\$770,000	2014	SHOPP
CTSHOPP	8	99	9.5/13.0	ACOL/Rehab	\$37,394,000	2014	SHOPP
CTSHOPP	9	99	23.77	Upgrade Bridge Rail	\$180,000	2015	SHOPP
CTSHOPP	10	99	R14.6	Upgrade Bridge Rail	\$80,000	2015	SHOPP
CTSHOPP	11	145	R 0.0-6.8	ACOL-Rehab	\$16,690,000	2016	SHOPP
CTSHOPP	12	152	4.45	Upgrade Bridge Rail	\$70,000	2016	SHOPP
CTSHOPP	13	233	3.87	Upgrade Bridge Rail	\$190,000	2016	SHOPP
Subtotal:					\$70,054,000		
<b>CITY OF MADERA CANDIDATE STREET AND ROAD PROJECTS</b>							
MADCITY	1	Cleveland	Sharon to Raymond	Reconstruct	\$210,000	2011-15	Measure T
MADCITY	2	"D" Street	9th to Yosemite	Rehabilitate & Overlay	\$115,000	2011-15	Measure T
MADCITY	3	Pine	Howard - 4th	Reconstruct 2-Lane Collector	\$200,000	2011-15	Measure T
MADCITY	4	4th	Pine - SR 99	Reconstruct 2-Lane Collector	\$750,000	2011-15	Measure T
MADCITY	5	Yosemite	'Q' - Gateway	Rehabilitate Pavement	\$450,000	2011-15	Measure T
MADCITY	6	Almond	Commerce to Schnoor	Rehabilitate & Overlay	\$120,000	2011-15	Measure T
MADCITY	7	"I" Street	4th to 9th	Reconstruct 2-Lane Collector	\$270,000	2011-15	Measure T
MADCITY	8	Various	Local Streets	Overlay	\$1,800,000	2011-15	Measure T
MADCITY	9	Sherwood	County Club to Sonora	Rehabilitate & Overlay	\$200,000	2011-15	Measure T
MADCITY	10	'D' Street	Cleveland to Adell	Rehabilitate & Overlay	\$637,601	2016-20	Measure T
MADCITY	11	Central	'D' - Lake	Rehabilitate & Overlay	\$695,564	2016-20	Measure T
MADCITY	12	Almond	Monterey - SR 145	Reconstruct 2-Lane Collector	\$324,597	2016-20	Measure T
MADCITY	13	Golden St	Pecan to Almond	Rehabilitate & Overlay	\$289,819	2016-20	Measure T
MADCITY	14	'H' Street	4th to Central	Rehabilitate & Overlay	\$289,819	2016-20	Measure T
MADCITY	15	Central	'H' - 'D'	Reconstruct 2-Lane Collector	\$537,567	2021-25	Measure T
MADCITY	16	Vineyard	Clinton to Yosemite	Rehabilitate & Overlay	\$174,709	2021-25	Measure T
MADCITY	17	Merced	Kennedy - Adell	Reconstruct 2-Lane Collector	\$67,196	2021-25	Measure T
MADCITY	18	Kennedy	Merced - Tulare	Reconstruct 2-Lane Collector	\$1,075,133	2021-25	Measure T
MADCITY	19	"D" Street	Adell to Ellis	Reconstruct 2-Lane Collector	\$403,175	2021-25	Measure T
MADCITY	20	Owens Street	Sherwood to Ellis	Reconstruct 2-Lane Collector	\$1,090,577	2026-30	Measure T
MADCITY	21	Clark Street	Sharon to Owens	Reconstruct 2-Lane Collector	\$934,780	2026-30	Measure T
MADCITY	22	Various	To Be Determined	Regional Recon/Rehab	\$3,317,568	2011-2020	Measure T/RSTP/LTF
MADCITY	23	Various	To Be Determined	Regional Recon/Rehab	\$7,168,069	2021-2035	Measure T/RSTP/LTF
MADCITY	24	Various	To Be Determined	Rehab/Maint/Operations	\$29,858,115	2011-2020	Measure T/RSTP/LTF
MADCITY	25	Various	To Be Determined	Rehab/Maint/Operations	\$64,512,621	2021-2035	Measure T/RSTP/LTF
Subtotal:					\$115,491,910		



**TABLE 4-6**  
**Candidate Rehabilitation/Safety Projects for Inclusion in the**  
**Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost	Funding Year	Funding Source
<b>CITY OF CHOWCHILLA - CANDIDATE STREET AND ROAD PROJECT LISTING (CHOWCITY)</b>							
CHOWCITY	1	Ventura	3rd St to 4th St, 4th St to 9th St	Overlay, Reconstruct	\$230,000	2011-15	Measure T
CHOWCITY	2	1st Street	Riverside/Kings Alley to 3rd St	Overlay, curb, gutter, sw	\$235,000	2011-15	Measure A
CHOWCITY	3	8th Street	Robertson to Humboldt	Reconstruct/Overlay	\$235,000	2011-15	Measure A
CHOWCITY	4	Washington	Washington/Robertson Blvd	Reconstruct, curb, gutter, sw	\$420,000	2011-15	Measure A
CHOWCITY	5	Colusa	Front to 5th	Reconstruct	\$60,000	2011-15	Measure A
CHOWCITY	6	Road 16	Ave 25 to Basin	Drainage Improvements	\$430,000	2011-15	Measure T
CHOWCITY	7	Various	Area bounded by 15th Street, Robertson, Mariposa Avenue, and Front Street	Storm Drain system serving Entire roadway network in sw quadrant of city	\$600,000	2011-15	Measure T
CHOWCITY	8	Humboldt Ave. 13th Street	3rd St to 6th St	Reconstruct	\$345,000	2011-15	Measure T
CHOWCITY	9	City Streets	3rd, 5th, 15th, & Ventura	Overlay, curb,gutter, sw	\$465,000	2011-15	Measure A
CHOWCITY	10	Humboldt Ave. 13th Street	6th St to 12th	Reconstruct	\$852,066	2016-20	Measure T
CHOWCITY	11	Humboldt Ave. 13th Street	12th to 13th	Reconstruct	\$141,431	2016-20	Measure T
CHOWCITY	12	Humboldt Ave. 13th Street	13th St to 15th St Mariposa Ave to Orange Ave	Reconstruct 2-Lane Collector incl. curb, gutter,sw, ramps etc.	\$1,083,197	2021-25	Measure T
CHOWCITY	13	13th Street	Orange Ave to Kings Ave	Majoriity Reconstruct 2-Lane Collector incl. curb, gutter,sw, ramps etc./Part Overlay	\$421,990	2021-25	Measure T
CHOWCITY	14	13th Street Monterey Ave	Kings Ave to Ventura Ave 3rd St to 4th St	Majoriity Reconstruct 2-Lane Collector incl. curb, gutter,sw, ramps etc./Part Overlay	\$1,099,925	2026-30	Measure T
CHOWCITY	15	Monterey Ave	4th St to 7th St	Reconstruct 2-Lane Collector incl. curb, gutter,sw, ramps etc.	\$515,687	2026-30	Measure T
CHOWCITY	16	Monterey Ave	7th St to 12th St	Reconstruct 2-Lane Collector incl. curb, gutter,sw, ramps etc.	\$1,090,577	2026-30	Measure T
CHOWCITY	17	Monterey Ave	12th St. to 15th St	Reconstruct	\$680,832	2026-30	Measure T
CHOWCITY	18	Various	To Be Determined	Regional Recon/Rehab	\$326,799	2011-2020	Measure T/RSTP/LTF
CHOWCITY	19	Various	To Be Determined	Regional Recon/Rehab	\$910,113	2021-2035	Measure T/RSTP/LTF
CHOWCITY	20	Various	To Be Determined	Rehab/Maint/Operations	\$2,941,192	2011-2020	Measure T/RSTP/LTF
CHOWCITY	21	Various	To Be Determined	Rehab/Maint/Operations	\$8,191,016	2021-2035	Measure T/RSTP/LTF
<b>Subtotal:</b>					<b>\$21,274,825</b>		
<b>COUNTY OF MADERA STREET AND ROAD PROJECT LISTING (MADCO)</b>							
MADCO	1	Road 200	Ladd Creek to Finegold Creek	Reconstruct	\$12,000,000	2011-15	Measure A/SLPP
MADCO	2	Rd 29	Ave 12 - Ave 14	PE/Realign & Reconstruct	\$5,790,000	2011-15	Measure T
MADCO	3	Ave 7 1/2	"Y" Ave 12 - Firebaugh	Overlay	\$1,391,129	2016-20	Measure T
MADCO	4	Ave 18 1/2	Rd 22 - Golden State	PE/Reconstruct 2 lanes	\$724,546	2016-20	Measure T
MADCO	5	Rd 16	Ave 12 - Ave 18 1/2	Overlay	\$1,565,020	2016-20	Measure T
MADCO	6	Robertson Blvd.	SR 152 - Ave 18 1/2	Overlay	\$579,637	2016-20	Measure T
MADCO	7	Ave 12	Rd 16 - Rd 23	PE & Reconstruct 2 Lns	\$10,751,331	2021-25	Measure T
MADCO	8	Ave 9	SR 99 - Rd 40 1/2	Overlay	\$1,557,967	2026-30	Measure T
MADCO	9	Rd 26	Ave 18 - Ave 19	PE/Reconstruct 2 lanes/widen	\$1,869,561	2026-30	Measure T
MADCO	10	Various	To Be Determined	Regional Recon/Rehab	\$3,516,137	2011-2020	Measure T/RSTP/LTF
MADCO	11	Various	To Be Determined	Regional Recon/Rehab	\$9,576,879	2021-2035	Measure T/RSTP/LTF
MADCO	12	Various	To Be Determined	Rehab/Maint/Operations	\$31,645,230	2011-2020	Measure T/RSTP/LTF
MADCO	13	Various	To Be Determined	Rehab/Maint/Operations	\$86,191,907	2021-2035	Measure T/RSTP/LTF
<b>Subtotal:</b>					<b>\$167,159,343</b>		
<b>TOTAL:</b>					<b>\$373,980,078</b>		

◆ **Projected Operation and Maintenance Costs**

There is currently an estimated 2,157 lane miles of streets and highways in the Madera County region, including 1,514 lanes miles on the regionally significant road network.

In FY 2007/08, the California Statewide Local Streets and Roads Needs Assessment was conducted by the California State Association of Counties (CSAC), League of California Cities (League), and the County Engineers Association of California (CEAC). The results of the study provided pavement conditions and funding needs for Madera County, including an assessment of the overall County road network. Using the pavement condition index (PCI) as a metric to rate the quality of the pavement area, the study determined a statewide average PCI of 68 on a scale of 0 (failed) to 100 (excellent). In Madera County, the average PCI rating of 48 indicates “poor” pavement conditions.

The Assessment also included a 10-year estimate of pavement funding needs for Madera County of approximately \$933 million. The 25-year estimate of available revenues for maintenance and rehabilitation activities is \$373.9 million, indicating a total funding shortfall of \$559.1 million. MCTC will continue to seek leveraging opportunities through the Measure T local sales tax program in an effort to maximize and prioritize available funding for local road maintenance and operations.

## **Mass Transportation**

Mass transportation is a transportation mode that moves large numbers of people from one destination to another. It provides an economical means of travel that reduces single-occupancy vehicle trips, improves air quality, and enhances the overall quality of life. Mass transportation in Madera County consists of public transit services provided by both the public and private sectors and Amtrak passenger rail service. The Mass Transportation Action Element provides an overview of the following:

- ◆ mass transportation accomplishments; and
- ◆ mass transportation needs and issues.

## **Mass Transportation Accomplishments**

Significant progress has been made over the past four years to improve public transportation services for residents throughout Madera County. Transit improvements have been and continue to be addressed through a structured planning process coordinated through the MCTC. Most recently, major fixed-route and demand-responsive service changes within the City of Madera and its environs have evolved through a series of in-depth assessments of transit needs. These studies, combined with MCTC’s commitment to ensure unmet transit needs are effectively addressed, have resulted in the following service improvements and planning analyses, as summarized below.

- ◆ The *Madera County Transit Needs Assessment* was developed by Nelson/Nygaard Consulting Associates in 1995 to identify and evaluate the extent of public transit needs throughout Madera County. The study recommended increasing Madera Dial-A-Ride service

hours, introducing a fixed-route service in the City of Madera, inter-city service linking Madera and Chowchilla, and introducing transit service in Eastern Madera County for the elderly and people with disabilities. Based on recommendations of this study, the City of Madera decided to implement fixed-route transit system as a demonstration project in FY1998-99 with continued Dial-A-Ride service.

- ◆ The *Fixed-Route Feasibility Study* was completed in May 1996 by Nelson/Nygaard Consulting Associates to examine the feasibility of fixed-route service in the Madera urban area. The study found that fixed-route service designed to link residential areas with commercial centers, social service agencies, schools, and medical facilities would be feasible in Madera and recommended initiation of fixed-route service in FY1998-99.
- ◆ The Madera County *Strategic Implementation Plan* was completed in May 2007 by Moore & Associates. The plan offers several recommendations for improved efficiency on the Madera County Connection and identifies long-term opportunities for transit system expansion in the County.

#### ***Implementation of City of Madera Fixed-Route Service***

- ◆ The City of Madera Fixed-Route Implementation Plan was completed in July 1997 by Moy and Associates, in close coordination with the City of Madera and MCTC staff. It provided the City of Madera with specific guidance to implement a fixed-route service beginning in FY1998-99. The MCTC Social Service Transit Advisory Council (SSTAC), City of Madera Transit Advisory Board (TAB), and the Madera County Economic Development Commission also were involved in developing the Plan. The proposed fixed-route system was developed through extensive local planning, evaluation, coordination, and public outreach efforts.

#### ***Implementation of Chowchilla Area Transit Express Demand-Response Service***

- ◆ The City of Chowchilla initiated demand-response service, Chowchilla Area Transit Express (CATX), in 1995. This service is designed to meet the needs of Chowchilla and its surrounding unincorporated areas, including the community of Fairmead.

#### ***Implementation of Inter-City Public Transportation Service***

- ◆ The County of Madera received a grant from the Madera County Children & Families Commission to implement two inter-city fixed-routes on a one-year demonstration basis beginning in July 2001. One route will operate to and from Eastern Madera County to Downtown Madera while the other will operate from the City of Chowchilla to Downtown Madera. Both routes also will provide service to the Madera Community College, Madera Ranchos, and Valley Children's Hospital where connections can be made with Fresno Area Express.
- ◆ The County of Madera has entered into a contract with the Fresno County Rural Transit Agency (FCRTA) to provide inter-city demand-response service to the community of East Acres beginning in July 2001. This service will provide transportation primarily for seniors in East Acres to access the City of Firebaugh Senior Center.

- ◆ The Yosemite Area Regional Transportation Strategy (YARTS) was formed in 1992 in an effort to reduce the dependence on single-family vehicles and improve transportation service within the Yosemite Region with a bus service. Madera County was on the Management Board until April 1999 when it withdrew from further participation in the YARTS planning efforts. The YARTS Management Board consists of Mariposa County, Merced County, and Mono County. The mission is to provide a positive alternative choice for access to Yosemite National Park for visitors, employees, and residents. YARTS initiated service in the summer of 2000.

### ***San Joaquin Valley Express Transit Study***

- ◆ In 2008, Merced County Association of Governments retained Nelson/Nygaard to prepare a San Joaquin Valley Express Transit Study. Drawing on applicable case studies, statewide traffic model data, and input from local stakeholders, the study identified several potential options for expanded commuter-oriented public transit service in the Valley. The study recommends the prioritization and promotion of vanpool opportunities on the Madera-Fresno commute corridor.

### ***Evaluation of Short-Range County-Wide Transportation Needs***

- ◆ The Madera County Short-Range Transit Development Plan was updated in 2009. This plan provides an overview of the status of existing public transit services and identifies issues and concerns, operational and capital strategies and approaches for consideration over the next five years, and proposed funding of existing and new transit services.

### ***Human-Services Public Transit Coordinated Transportation Plan***

- ◆ The Coordinated Plan was adopted by MCTC in April 2007 in response to requirements established by SAFETEA-LU. This document outlines existing public and private social service transportation systems within Madera County and offers strategies for improvement of transportation service through increased coordination and consolidation.

### ***Evaluation of Unmet Transit Needs within Madera County***

- ◆ In FY2000-01, the MCTC Social Services Transportation Advisory Council (SSTAC) recommended that Madera County undertake a study of Eastern Madera County senior transit needs to determine the feasibility of expanding services. The "Eastern Madera County Senior Transportation Needs Study" found a need to intensively market existing services to increase ridership prior to implementing Senior Bus and Escort Program service improvements.
- ◆ The Transportation Needs of Madera Commuters and Welfare-to-Work Participants study was completed by Moy & Associates in July 1999. The purpose of the study was to determine the extent and character of commuter transportation needs as well as the needs of those participating in welfare-to-work programs. The study found that the majority of general commuters in the County study area commute by car and is satisfied with their mode of transportation. Nearly half of welfare-to-work participants, however, do not have their own means of transportation and expressed an overwhelming desire to use public transportation if available. A general conclusion was that future planning for potential new services, whether new or expanded fixed-route services, shuttle services or carpooling

programs, must consider that no one solution will satisfy the diverse transportation needs of both groups.

- ◆ The Unmet Transit Needs within Madera County are evaluated annually through the MCTC's Social Services Transportation Advisory Council (SSTAC). Requests, comments, and testimony are formally documented in the fourth quarter of each fiscal year and closely considered in the development of transit services.

### ***Evaluation of Passenger Rail Needs***

- ◆ The relocation of the Amtrak station has been evaluated by the MCTC and its member agencies to determine the potential for improving and/or relocating the station now located in northeast Madera on Avenue 15 ½ and Road 29. The primary goal is to increase visibility, access, and security of the station to encourage higher usage to ensure continuation of Amtrak service to the community. Relocation of the station to north Madera at Road 26 will continue to be a viable alternative and can be implemented in the short-term without waiting for the long-term decisions on high-speed rail alignments. Madera County recently signed agreements with Caltrans, Amtrak, and the BNSF railway to begin construction.
- ◆ MCTC and the County of Madera are participating in the California High Speed Rail Authority's implementation of a high-speed rail system from Southern California to the Bay Area via the San Joaquin Valley. This system would be designed to accommodate rail speeds up to 220 miles per hour. Of significant importance is the discussion of alternative alignments for high-speed rail in the Central Valley. The High Speed Rail Authority identified a preferred high-speed rail corridor along SR 99; however, no specific alignment has been identified.

## **Mass Transportation Needs and Actions**

Madera County has made significant progress in addressing many public transit needs throughout the Region. MCTC's "Unmet Transit Needs" process has determined that transit services within the Madera County are meeting the reasonable transit needs of the public. These transit systems provide vital transportation services while reducing single-occupancy vehicle trips, improving air quality, and enhancing the overall quality of life for residents throughout the County. Table 4-7 provides a listing of planned transit improvements over the 25 year timeframe of the Plan totaling \$107.8 million.

Mass transportation services, however, must respond effectively in the context of projected growth and development throughout Madera County and as the population and character of the Region evolves. The level of public transit services should reflect the County's demand for mobility, typically related to population growth, population densities, age and income characteristics, accessibility to key origins and destinations, trip lengths, design and condition of streets and highways, etc. Madera County's projected population growth over the next twenty years, combined with the poverty levels and numbers of transit-dependent residents, undoubtedly will increase demand for transit services.

TABLE 4-7

Candidate Transit Projects for Inclusion in the Madera County 2011 Regional Transportation Plan

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost	Funding Year	Funding Source
CHOWCITY	1	Transit Capital	CATX	Enhancements to CATX Maintenance Facility	\$152,224	2011	Prop 1B-PTMISEA
CHOWCITY	2	Transit Operating	CATX	Operating Assistance	\$328,000	2011	5311/LTF
CHOWCITY	3	Transit Operating	CATX	Operating Assistance	\$337,000	2012	5311/LTF
CHOWCITY	4	Transit Operating	CATX	Operating Assistance	\$346,000	2013	5311/LTF
CHOWCITY	5	Transit Operating	CATX	Operating Assistance	\$355,000	2014	5311/LTF
CHOWCITY	6	Transit Capital	CATX	One (1) Bus	\$80,000	2014	Prop 1B-PTMISEA
CHOWCITY	7	Transit Capital	CATX	Replacement Bus	\$67,000	2015	CMAQ/LTF
CHOWCITY	8	Transit Operating	Chowchilla-Merced	Operating Assistance	\$62,000	2015	CMAQ/LTF
CHOWCITY	9	Transit Capital	CATX	One (1) Bus	\$85,000	2016	Prop 1B-PTMISEA
CHOWCITY	10	Transit Capital	CATX	One (1) Bus	\$97,442	2017	Prop 1B-PTMISEA
MADCITY	11	Transit Capital	MAX/DAR	New Transit Facility	\$2,160,711	2014	Prop 1B-PTMISEA
MADCITY	12	Transit Operating	MAX Jet Express	Operating Assistance	\$66,000	2011	5316
MADCITY	13	Transit Operating	MAX Jet Express	Operating Assistance	\$4,000	2011	5317
MADCITY	14	Transit Operating	DAR	Operating Assistance	\$726,000	2011	5307/LTF
MADCITY	15	Transit Operating	MAX	Operating Assistance	\$830,000	2011	5307/LTF
MADCITY	16	Transit Operating	Intermodal Center	Operating Assistance	\$70,000	2011	5307/LTF
MADCITY	17	Transit Operating	DAR	Operating Assistance	\$742,000	2012	5307/LTF
MADCITY	18	Transit Operating	MAX	Operating Assistance	\$846,000	2012	5307/LTF
MADCITY	19	Transit Operating	Intermodal Center	Operating Assistance	\$70,000	2012	5307/LTF
MADCITY	20	Transit Operating	DAR	Operating Assistance	\$756,056	2013	5307/LTF
MADCITY	21	Transit Operating	MAX	Operating Assistance	\$862,000	2013	5307/LTF
MADCITY	22	Transit Operating	Intermodal Center	Operating Assistance	\$70,000	2013	5307/LTF
MADCITY	23	Transit Operating	DAR	Operating Assistance	\$772,000	2014	5307/LTF
MADCITY	24	Transit Operating	MAX	Operating Assistance	\$880,000	2014	5307/LTF
MADCITY	25	Transit Operating	Intermodal Center	Operating Assistance	\$70,000	2014	5307/LTF
MADCITY	26	Transit Operating	DAR	Operating Assistance	\$786,602	2015	5307/LTF
MADCITY	27	Transit Operating	MAX	Operating Assistance	\$897,694	2015	5307/LTF
MADCITY	28	Transit Operating	Intermodal Center	Operating Assistance	\$69,000	2015	5307/LTF
MADCO	29	Transit Operating	MCC	Operating Assistance	\$462,000	2011	5311/LTF
MADCO	30	Transit Capital	MCC	Bus Bike Racks	\$15,000	2011	Prop 1B-PTMISEA
MADCO	31	Transit Capital	MCC	Bus Facility Improvements	\$400,861	2011	Prop 1B-PTMISEA
MADCO	32	Transit Operating	MCC	Operating Assistance	\$462,000	2012	5311/LTF
MADCO	33	Transit Capital	MCC	Park and Ride Lot	\$410,000	2012	Prop 1B-PTMISEA
MADCO	34	Transit Capital	Senior Bus	One (1) Bus	\$100,000	2012	Prop 1B-PTMISEA
MADCO	35	Transit Capital	MCC	Park and Ride Lot	\$415,000	2013	Prop 1B-PTMISEA
MADCO	36	Transit Operating	MCC	Operating Assistance	\$462,000	2013	5311/LTF
MADCO	37	Transit Capital	MCC	Four (4) Buses	\$500,000	2014	Prop 1B-PTMISEA
MADCO	38	Transit Operating	MCC	Operating Assistance	\$462,000	2014	5311/LTF
MADCO	39	Transit Capital	Escort Van	One (1) Van	\$70,000	2015	Prop 1B-PTMISEA
MADCO	40	Amtrak Station	Madera City	Amtrak Station Expansion	\$1,256,169	2017	Prop 1B-PTMISEA
	41	Transit	Various	Transit Operating	\$19,660,298	2011-2020	FTA/Local
	42	Transit	Various	Transit Capital	\$810,000	2011-2020	Prop 1B-CTAF
	43	Transit	Various	Transit Operating	\$52,094,831	2021-2035	FTA/Local
	44	Transit	Various	Transit Capital	\$17,746,163	2021-2035	FTA/Local
TOTAL:					\$107,761,827		

Effective public relations, marketing and outreach activities are an integral part of ensuring successful transit operations and heightening public awareness of transit services. Marketing should be conducted on an on-going basis. Marketing activities are now conducted by Madera County transit systems on a system-by-system basis. While these marketing efforts are designed to educate the public on available transit services and to encourage increased transit usage, achieving major modifications in travel behavior will continue to be a significant challenge that cannot be reached through public relations alone.

This effort will require the convergence of many factors, including those related to population densities, population characteristics, congestion, gas pricing, road conditions, etc.

The RTP projects a 15 percent increase in funding for transit service improvements every five years through FY 2035, above and beyond projected capital improvements. Long-term commitments will evolve through the planning development process. Given the shortfall in funds for all transportation improvements identified in the RTP, local government bodies must continue to prioritize projects based on valid criteria, combined with major community input and collaboration. If there is a significant shift in public sentiment for transit services, the transit planning process must prioritize improvements and identify funding sources. This process, ultimately, will lead to increased levels of transit services, as warranted.

There will be many short-term and long-term mass transportation needs and actions that should be addressed through a coordinated and collaborative process, as highlighted below:

***Public Transit***

- ◆ Expanding and improving fixed-route services (i.e., MAX) as demand increases commensurate with growth in the Region, including a larger service area, increased number of routes, increased days and hours of operations, and improved route frequencies.
- ◆ Expanding and improving demand-response services (i.e., Madera Dial-A-Ride and CATX).
- ◆ Addressing inter-city transit needs, including those in Eastern Madera County, Chowchilla/Fairmead, and other rural areas of the County.
- ◆ Addressing inter-county transit needs; i.e., transportation access to Fresno County and Merced County transit services.
- ◆ Coordinating with social service agencies to identify and address client needs.
- ◆ Evaluating transportation needs of youth and seniors with poor or no access to public transit in all areas of the County.
- ◆ Coordinating with educational and employment sites and other key generators that would benefit from public transportation services.
- ◆ Remaining in compliance with ADA requirements.
- ◆ Identifying sufficient operating and capital funding.

- ◆ Facilitating transit interface with other transit properties, park-and-ride lots, and other transportation modes, including passenger rail, bicycling, carpooling, etc.
- ◆ Promoting the continuation of the Madera County Connection fixed-route pilot project in Eastern Madera County and the Chowchilla/Fairmead area based on acceptable performance indicators.
- ◆ Identifying ancillary transit facilities and passenger amenities.
- ◆ Providing transit information on the Internet.
- ◆ Monitoring of existing transit services for maximum efficiency and effectiveness.
- ◆ Monitoring of and being positioned to implement affordable new transit technologies, including alternative fuels, computerized dispatching, automatic vehicle locating equipment, etc.
- ◆ Developing effective outreach and targeted marketing; i.e., marketing to the general population, social service clients, health care providers, employers, etc.; developing a County-wide transportation internet web-site reflecting mass transportation services.
- ◆ Participating in the annual Unmet Transit Needs process and ensuring adequate allocation of funding based on reasonable needs.

### ***Inter-City Rail***

- ◆ Evaluating Amtrak station improvements/relocation.
- ◆ Monitoring and coordination of rail consolidation issues with Fresno County.
- ◆ Participating in high-speed rail planning.

### ***Funding***

- ◆ Maintaining existing mass transportation services as cost effectively as possible while meeting the demand for new services and identification of sufficient future funding.

### **Aviation**

Increased air service demand will occur in Madera County. This projected demand will increase the need for airport improvements. A number of these improvements are identified in the RTP including land acquisition for future improvements, runway and taxiway renovations and extensions, etc. These improvements have been identified to address aviation system needs described in *the Regional Aviation System Plan* prepared by MCTC in June 1994.



## **Aviation System Needs and Actions**

- ◆ Implement the following list of improvement projects identified from the cities' Airport Master Plans:

**TABLE 4-8**  
**Airport Master Plan Improvement Projects**  
**City of Madera**

<b>ELIGIBLE IMPROVEMENTS</b>	<b>COST/PROGRAM YEAR</b>
Install Taxiway Edge Lights, Install RELIS R/W 12	\$855,588 / 2010
Extend General Aviation Apron and Utilities, Phase IIB	\$619,110 / 2012
T-Hangar Development Area Phase I, Collector Taxiway, T-Hangar Taxiway	\$387,553 / 2013
Extend GA Apron Development 201,000 sf, Phase III	\$1,757,716 / 2014
Reconstruct 160,000 sf of General Aviation Apron, Phase 1	\$1,665,113 / 2015
Reconstruct 46,250 sf of General Aviation, Apron, Phase II	\$447,925 / 2016
Extend Runway 12-30 850 Feet, Extend Taxiway P 1,250 Feet	\$2,337,000 / 2018
T-Hangar Development Area Phase II, Collector Taxiway	\$286,283 / 2020

**MADERA TOTAL: \$8,356,288**

**City of Chowchilla**

<b>ELIGIBLE IMPROVEMENTS</b>	<b>COST/PROGRAM YEAR</b>
Upgrade existing runway lighting system, convert/upgrade existing VASI system with a PAPI system, upgrade runway signage, Misc. erosion control misc. paving	\$80,000 / 2011/2012
Displaced Threshold, Taxiway Improvements	\$433,600 / 2013-2016
RWY Erosion Control Misc. Paving & Drainage System Phase1	\$520,200 / 2016-2020
Fuel Station Aviation & Jet Fuel	\$420,600 / Future

**CHOWCHILLA TOTAL: \$1,454,400**

**CUMULATIVE TOTAL: \$9,810,688**

- ◆ Continue to seek funding of airport projects.
- ◆ Maintain and improve existing airport facilities. Review and revise the Airport Master Plans.
- ◆ Provide for the interface of airport systems planning with other transportation networks to insure a balanced, multi-modal system.
- ◆ Support development of the City of Madera and City of Chowchilla airports per actions outlined in their respective Master Plans.
- ◆ Support land use policies and special projects aimed at mitigating structural, noise and other

environmental limitations associated with the Region's airports.

- ◆ Pursue sophisticated approach and landing systems for the Madera Municipal Airport.
- ◆ Support expansion of capital improvement funds and sources for rural airports.
- ◆ Both the City of Madera and the City of Chowchilla are taking action to avoid noise conflicts concerning their respective airports.
- ◆ Local airport managers in Madera County consider the current regulations adequate for ensuring a safe aviation environment. The Division of Aeronautics inspects all public airports in the Madera Region on a yearly basis.

### ***Airport Land Use Commission***

The purpose of an Airport Land Use Commission (ALUC) is to provide for the orderly development of public airports and to ensure compatible land uses in the vicinity of airports. The ALUC consists of seven members, representing each of the Cities, County and Airports within the County. The Madera County ALUC meets on as needed basis, generally to review the airport master plans, general plans developed by the cities and proposed land use changes within two miles of the airports.

To ensure compatible land uses in Madera County, the Madera County ALUC has developed the *Madera County Comprehensive Airport Land Use Plan*. This plan consists of:

- ◆ policies which guide height restriction, safety, noise, and other land use considerations;
- ◆ individual airport compatibility maps;
- ◆ plan implementation procedures; and
- ◆ other information.

### ***Forecasts***

Based on the forecasts for airport operations, none of the airports in the County will exceed operation capacity over the next 25 years.

### **Non-Motorized Systems**

MCTC recognizes that increased bicycling, walking and equestrian activities can reduce traffic congestion, air and noise pollution and fuel consumption. As a result, these modes effectively contribute to the quality of life in the Region. Bicycle travel has emerged as an increasingly popular form of recreation in the Region. Commuting to work has also increased in the urbanized areas of Madera County. Bicycles are essentially pollution-free, use no fossil fuels, are quiet, and take up very little space either in operation or in storage. Bicycling is of interest to the individual because it promotes health, is enjoyable and inexpensive, and, in the congested

of the County, bicycling can be the fastest way of getting to work or to any destination, especially during the peak periods.

These same advantages can be said for those who travel by walking. Bicycle and pedestrian mode disadvantages include almost no protection in case of collision, limited carrying capacity, increased travel time for longer trips, and direct exposure to inclement weather, especially during fog in the winter and high temperatures in the summer months.

It is particularly important to improve bicycle and pedestrian access to intermodal facilities (rail stations and transit centers). Using non-motorized forms of transportation reduce engine cold starts and short vehicle trips, which contribute significantly to air pollution. The provision of new or improved access to such facilities could be made by bicycle or pedestrian modes and replace short automobile trips. To increase the bicycle mode share, in particular, significant publicity and marketing efforts are necessary, as well as a new approach by transportation agencies to planning facilities for both bicyclists and pedestrians. This approach increases attention to these modes and focuses on intermodal connections.

## **Non-Motorized System Accomplishments**

### **◆ City of Chowchilla**

- Bicycle Route Signing along 3<sup>rd</sup>, 5<sup>th</sup>, and 11<sup>th</sup> Streets.
- Bicycle Lanes along Kings Avenue and Trinity Avenue.
- Sidewalks adjacent to Wilson, Stevens, and Fuller Grammar Schools.
- Sidewalk along Ventura Avenue.
- Chowchilla River Trail.

### **◆ City of Madera**

- Various Sidewalk Improvements.
- Vern McCollough Fresno River Trail.

### **◆ County of Madera**

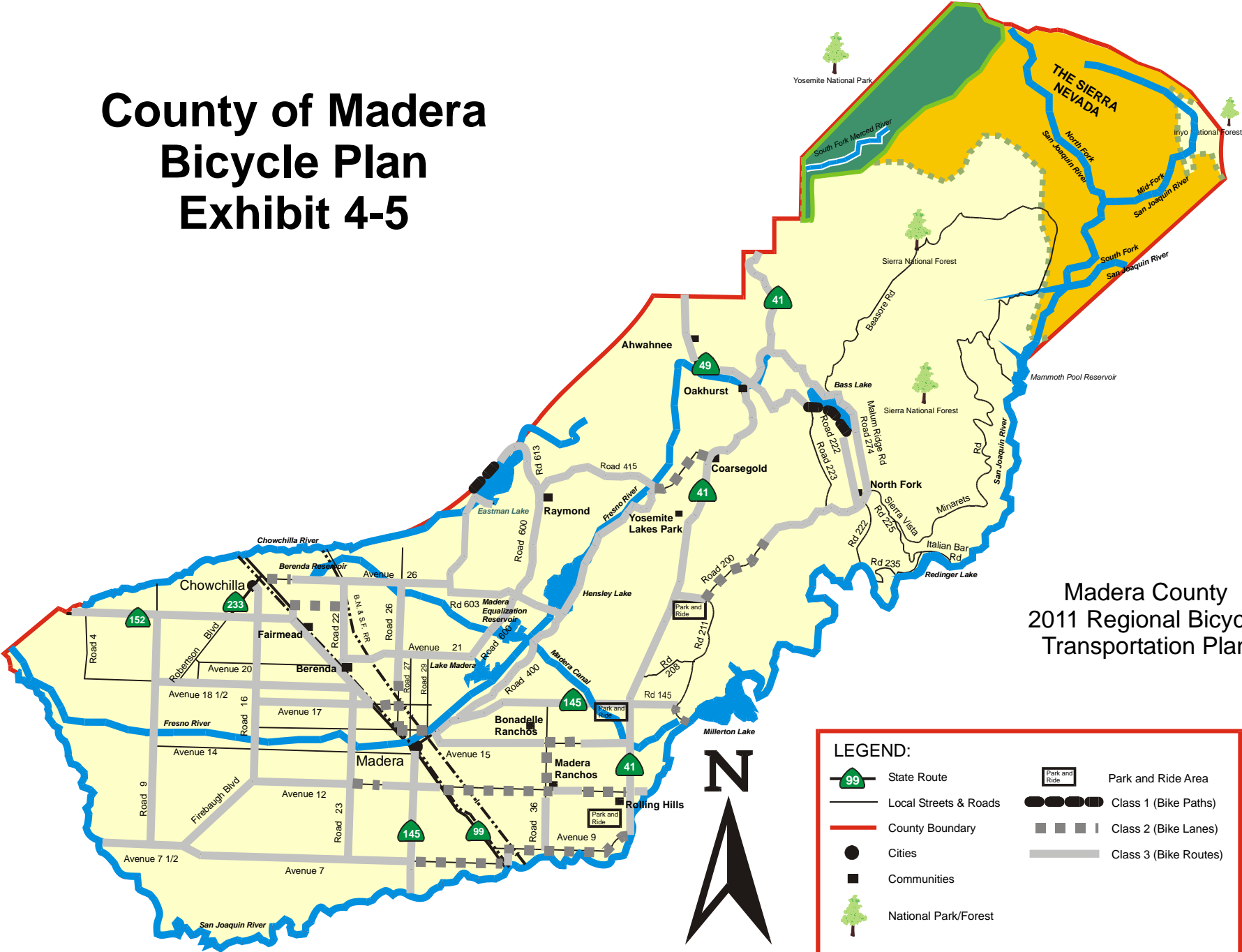
- Bikeway Improvements along Road 426 and 427 near Yosemite High School.
- Bikeway Improvements along Road 36 1/2 between Kensington and Avenue 13.

## **Non-Motorized System Needs and Actions**

The Cities of Chowchilla and Madera and Madera County have prepared bicycle plans. Exhibits 4-5 through 4-7 identify the planned routes for bike lanes and paths. The plans stress the importance of making the road system compatible for bicycle and pedestrian transportation. In addition, the State of California has been working to improve and promote on-street bicycle commuting to urban cores and to support bicycle access to transit and passenger rail modes.

# County of Madera Bicycle Plan Exhibit 4-5

Page 4-38



Madera County  
2011 Regional Bicycle  
Transportation Plan

**LEGEND:**

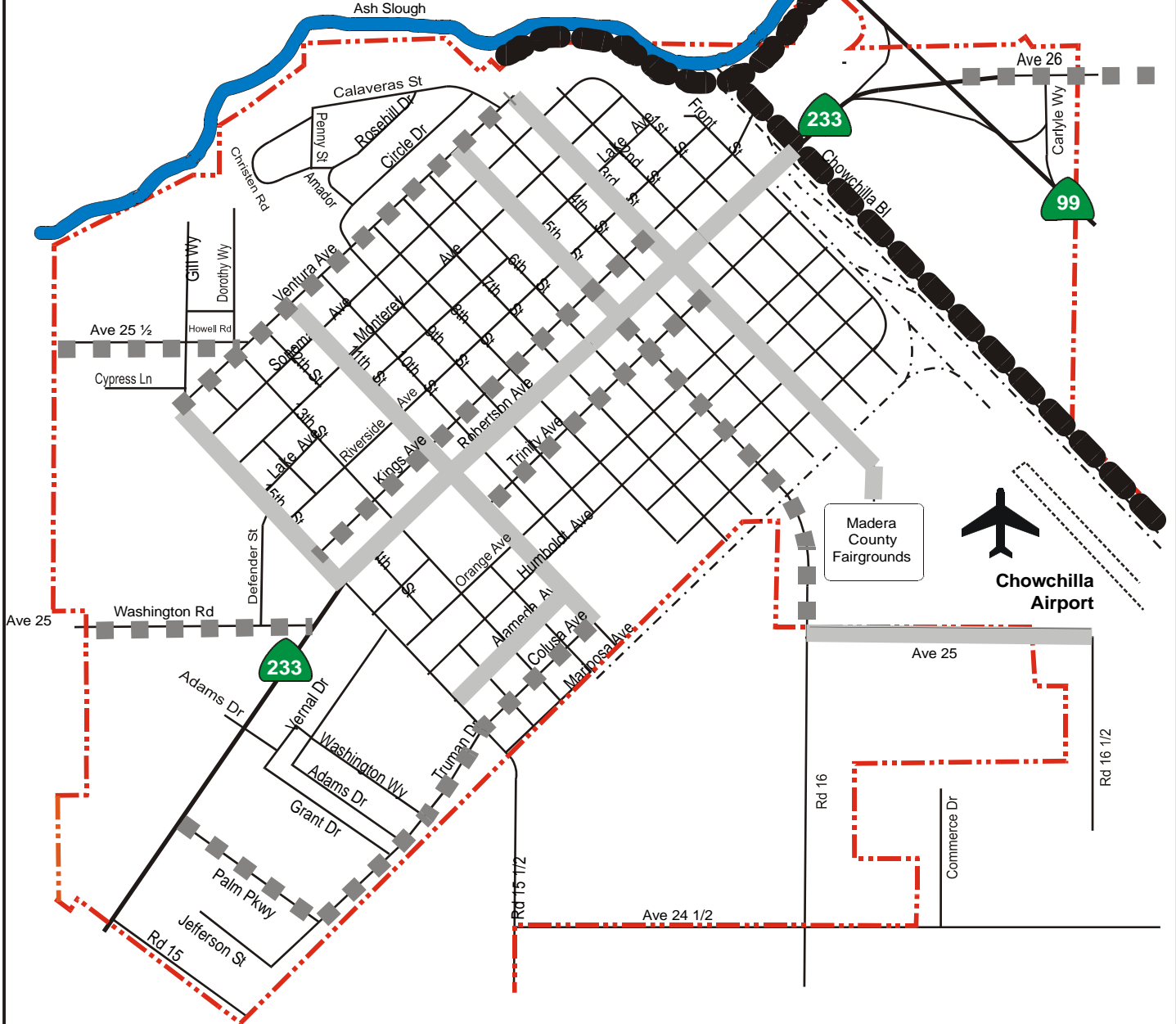
	State Route		Park and Ride Area
	Local Streets & Roads		Class 1 (Bike Paths)
	County Boundary		Class 2 (Bike Lanes)
	Cities		Class 3 (Bike Routes)
	Communities		
	National Park/Forest		



Not to Scale

# City of Chowchilla Bicycle Plan

## Exhibit 4-6



Madera County  
2011 Regional Bicycle  
Transportation Plan

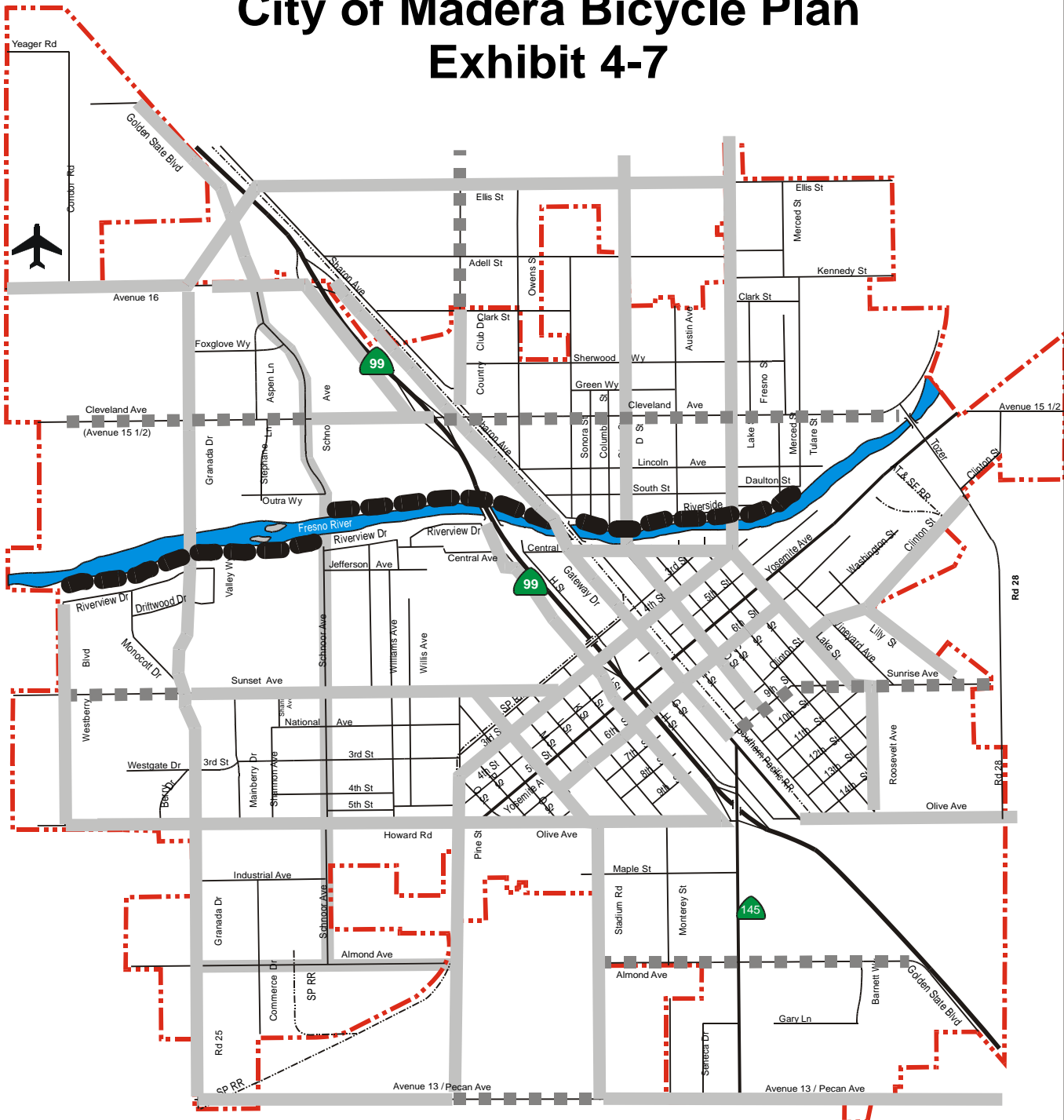


Not to Scale

**LEGEND:**

- State Route
- Local Streets & Roads
- City Boundary
- Class 1 (Bike Paths)
- Class 2 (Bike Lanes)
- Class 3 (Bike Routes)

# City of Madera Bicycle Plan Exhibit 4-7



Madera County  
2011 Regional Bicycle  
Transportation Plan



**LEGEND:**

State Route	Class 1 (Bike Paths)
Local Streets & Roads	Class 2 (Bike Lanes)
City Boundary	Class 3 (Bike Routes)

The Madera County 2004 Bicycle Transportation Plan addresses the needs of both commuting and recreational cyclists throughout the county, identifies safe and convenient routes to key locations throughout the county, and suggests needed improvements and additions to the bikeway routes and facilities. MCTC staff will focus on the implementation program of the plan.

Although it is difficult to prioritize proposed bikeway and pedestrian projects countywide due to funding fluctuations, coordination with larger street improvement projects and relative private development schedule changes, the plan divides proposals into short-term (5 to 10 years from implementation) or long-range (more than 10 years) implementation priority.

The plan proposes a regional bikeway network to connect urban areas and communities in Madera County with adjoining County systems in Fresno, Merced and Mariposa County. The focus of the internal network in Madera County includes the City of Madera, City of Chowchilla, the urban unincorporated communities of Madera and Bonnadelle Ranchos, and the foothill/mountain community of Oakhurst.

The Madera County 2004 Bicycle Transportation Plan will serve as the basis for future investment in bicycle and pedestrian infrastructure. The plan identifies development priorities, funding sources, and grant opportunities.

Non-motorized travel should continue to increase in popularity due to public awareness of health and environmental benefits. There are four needs related to bike facilities the implementation plan:

- ◆ need for education and enforcement programs to ensure safe and proper use of proposed bike lanes and routes;
- ◆ lack of adequate shoulders to allow for safe bicycle travel on State Highways 41, 49 and 145 (and similar constraints on other State Highways and County roadways of regional significance);
- ◆ provision of bike route facilities and services, particularly in rural areas; and
- ◆ bike parking and storage facilities in urban centers and air and water supplies at rural stops were generally suggested.

### ***Bicycle and Trail Improvements***

To enable the vision of non-motorized linkages to activity centers within the Region, the local agencies have requested approximately \$21.3 million for non-motorized projects in the 2011 RTP (reference Table 4-9). Regional decision makers should continue to promote the integration of non-motorized modes into the transportation planning process; the County should continue to implement the County Bikeway Plan; agencies should work together to continue implementation of the Fresno River Trail; and all responsible agencies should take steps to move beyond conceptual planning and development to implementation of plans and strategies.

**TABLE 4-9**  
**Candidate Non-Motorized Projects for Inclusion in the**  
**Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost	Funding Year	Funding Source
CHOWCITY	1	Monterey Ave	3rd to 13th Street	Construct Pedestrian Facilities	\$158,333	2014	CMAQ/LTF
CHOWCITY	2	School	Various	Construct Pedestrian Facilities	\$325,000	2012	CMAQ/LTF
MADCITY	3	Tulare St, Cleveland, Raymond Rd	Fresno River to City Limits via Cleveland and Raymond	Class I, II Bicycle Facilities	\$311,000	2014	CMAQ/LTF
MADCITY	4	Cleveland Ave	Schnoor Ave to Granada Ave	Construct Bike/Ped Facilities	\$339,000	2015	CMAQ/LTF
MADCITY	5	Madera	D St to Sierra St	Construct Pedestrian Facilities	\$140,000	2015	CMAQ/LTF
MADCITY	6	Rotary Park	Various	Construct Pedestrian Facilities	\$314,200	2011	CMAQ/LTF
MADCITY	7	Laurel Street	Various	Construct Class I Bicycle Facilities	\$267,700	2014	CMAQ/LTF
MADCITY	8	Fresno River Trail	Gateway & UPRR	Construct Bike/Ped Undercrossing	\$560,000	2011	CMAQ/RTIP(TE)/LTF
MADCITY	9	Fresno River Trail	Schnoor Ave	Construct Bike/Ped Undercrossing	\$384,000	2011	CMAQ/RTIP(TE)/LTF
MADCO	10	Road 225	Creek Dr to Road 228	Construct Pedestrian Facilities	\$181,550	2014	CMAQ/LTF
MADCO	11	Road 426	SR 41 to Road 427	Construct Pedestrian Facilities	\$89,000	2014	CMAQ/LTF
	12	Various	2004 Bike Plan	Class I, II, III Bicycle Facilities	\$2,960,373	2011-2020	CMAQ/Local
	13	Various	2004 Bike Plan	Class I, II, III Bicycle Facilities	\$15,309,782	2021-2035	CMAQ/Local
<b>TOTAL:</b>					<b>\$21,339,938</b>		

The following actions are recommended to facilitate the achievement of these goals:

- ◆ determine the status of existing non-motorized system to achieve the desired vision, goals, objectives and update and implement the existing Bikeway Plans as appropriate;
- ◆ implement recreational trails within the mountain communities that connect major activity centers and provide alternatives to driving between the communities;
- ◆ as part of the Bikeway Plan Update process, identify and develop strategies to address institutional, transportation, funding, infrastructure and other barriers to the effective use of non-motorized transportation for commute purposes;
- ◆ identify strategies to link non-motorized transportation funding programs to standards for transit programs;
- ◆ fund the development and implementation of bicycle safety and education programs aimed at cyclists of all ages, potential bike commuters and motorists;
- ◆ sponsor legislation and or ordinances to increase enforcement of bicycling and driving laws to provide a safer climate for bicycle use;
- ◆ develop and implement bicycle incentive programs that recognize and reward employees for bicycle use similar to those that reward transit use;
- ◆ assist local governments in the implementation of nonmotorized facilities consistent with the Madera County 2004 Bicycle Transportation Plan;
- ◆ encourage the use of nonmotorized facilities as a transportation control measure;



- ◆ continue to allocate funds for nonmotorized projects promoting both bicycle and pedestrian facilities; and
- ◆ encourage local jurisdictions to consider adopting land use policies that promote non-motorized transportation and reduce dependence on the automobile for work, shopping, social and recreational purposes consistent with the *Madera County 2004 Bicycle Transportation Plan*. The SJVAPCD's [Air Quality Guidelines for General Plans](#) is available for use by local agencies to assist in the efforts to coordinate transportation, land use and air quality planning.

### ***Pedestrian Improvements***

There are several strategies that will serve to improve conditions for existing pedestrians and to induce others to join them. These measures include:

- ◆ routine maintenance of existing sidewalks and curbing, including smoothing uneven surfaces, improving drainage, trimming vegetation, removing intrusive street furniture, including signs, sweeping and shoveling;
- ◆ building new sidewalks to provide continuity;
- ◆ providing 'pedestrian-friendly' intersection design (appropriate signal-head placement, signal intervals, curb ramps, signed and painted crosswalks, adequate lighting, etc.);
- ◆ increased emphasis on access to transit. In all these areas, access for people with disabilities must also be part of the program;
- ◆ providing safe and direct pedestrian routes and bikeways between places; and
- ◆ promoting walking and bike riding for transportation and recreation.

In general, all new roadway projects and all reconstruction projects should be constructed so as to provide increased safety and mobility for all users, including people who walk and bicycle.

### **Goods Movement**

Goods movement in Madera County is primarily made along the network of highways and railroads. After many years of decline due to increased competition from trucks, rail freight is reasserting itself as an important component of the transportation system. While cartage by truck will remain an important component of a competitive and multimodal freight network, an efficient, high capacity freight rail system is also essential to ensure the seamless movement of goods between Madera County and markets and manufacturers in the north, south and east. While local freight distribution within the San Joaquin Valley, including Madera County, will continue to be handled mostly by trucks, railroads will serve some industries along the railroad lines. Improvements made to rail rights-of-way, generally for passenger travel, should also help the freight railroads by allowing faster, smoother travel.

## **Goods Movement Needs and Actions**

An important goal of the 2011 RTP is to ensure smooth connections between regional communities, the rest of the Valley, the State, and the nation. The purpose of the regional goods movement program is to improve the efficiency of all modes—truck, rail freight, and air cargo; and for all kinds of freight—domestic import/export, container, break-bulk, and bulk cargo. In addition, the Region recognizes the importance of ancillary facilities such as airports and intermodal terminals and supporting functions including freight forwarding, parcel consolidation, and warehousing. The intent is to ensure a more efficient system, with greater throughput, elimination of bottlenecks, reduced congestion, lower environmental impacts, and corresponding economic benefits for the Region.

Improvements to the regional goods movement transportation, terminal, and intermodal transfer facilities will require a combination of traditional public sector and private sector funding. For instance, introduction of new and more powerful but lower-polluting railroad locomotives, main line track capacity, and railyard operational improvements are the responsibility of the private freight railroads. Most roadway and traffic signaling improvements used by trucks are provided by the public sector and financed by fuel taxes, other user fees, and private development. Still other improvements to transportation infrastructure serving airports may be funded using a mix of airport revenues, other public funds, and privately generated capital.

Development of a modern, efficient goods movement system for the Region is a cooperative venture, including all of the freight modal providers, airport operators, the federal, State, and local governments, and many other parties. While air cargo operations at the Chowchilla and Madera Municipal Airports are desirable, the feasibility of transporting goods by air is questionable. According to *the Regional Aviation System Plan* for Madera County prepared by MCTC in June 1994, most of the products from agribusiness are transported by truck or by train. In addition to those actions contained in Appendix G of this RTP, the following actions are also recommended to address improvements in the area of rail-highway grade crossings and goods movement modeling.

The most obvious issues related to goods movement include the following:

- ◆ trucking will continue to be the most inexpensive form of goods movement and will continue to add highway congestion;
- ◆ air and rail services are under-utilized for the movement of goods; and
- ◆ it is anticipated that rail transport will continue to increase because of its flexibility and speed.

### ***Grade Separation Improvements***

Regional rail freight movements often conflict with highway commuter and goods movement traffic. With the anticipated increase in truck and train movements, substantial additional delay for passenger vehicles and trucks can be expected at grade crossings. To avoid these delays, grade separations carrying arterials under or over rail lines carrying substantial amounts of freight is recommended along critical routes such as SR 99 near SR 152 and near Avenue 16.

In order to support rail/highway grade crossing conflicts, MCTC intends to support the local agencies' in obtaining funds for grade crossing studies, support the construction of grade separations where streets and highways cross regional rail lines, and recognize the need for additional funding for grade crossing improvement projects to relieve truck and other highway congestion because current program funding needs exceed available public and private funding.

### **Goods Movement Modeling**

The Regional Transportation Planning Agencies in the San Joaquin Valley have developed Phase 1 of the *San Joaquin Valley Goods Movement Study*, which focussed on issues related to the movement of goods from farm to market, congestion, railroad crossings, roadway geometry, parking/rest area problems, route restriction, and signal timing. Phase 2 of the Study will focus on building a Valleywide truck model that can be integrated into the Traffic Modeling process.

The following list of actions is designed to address regional needs related to goods movement:

- ◆ continue to evaluate and designate truck routes;
- ◆ coordinate and consult with private sector providers to identify obstacles to the efficient movement of goods and develop alternative strategies;
- ◆ identify funding sources in support of the transport of goods from farm to market;
- ◆ identify and implement railroad crossing safety improvements;
- ◆ assist in implementing State and federally-funded rail projects, as required;
- ◆ seek strict enforcement of transportation regulations concerning the transport of hazardous substances;
- ◆ consider locating industrial development near railroads, airports, and major highways in the lane-use element of local general plans;
- ◆ encourage the use of rail, air and buses for the transportation of goods;
- ◆ provide technical assistance to local jurisdictions for industrial and wholesale land use and transportation planning;
- ◆ coordinate planning efforts to ensure efficient, economical and environmentally sound movement of goods;
- ◆ encourage the use of rail, air and buses for the transportation of goods;
- ◆ encourage coordination and consultation between the public and private sectors to explore innovative strategies for the efficient movement of goods;
- ◆ support intermodal linkage of truck on rail as a technique of reducing traffic on selected corridors;

- ◆ pursue additional funding for street, road, highway, and air and rail projects by working with the League of California Cities and the County Supervisors Association of California to ensure the efficient movement of goods;
- ◆ oppose higher cargo weights for trucking industry;
- ◆ encourage and support strict enforcement of transportation regulations concerning the transportation of hazardous material;
- ◆ support and work with districts, local jurisdictions, regional agencies and the private sector to provide improved intermodal freight transfer facilities and access at major airports and rail terminals;
- ◆ assess and incorporate, where appropriate, innovative intermodal linkage of truck on rail as a technique of reducing truck annual average daily traffic on select highway corridors; and
- ◆ encourage more stringent emissions controls on trucks, buses, trains, and airplanes operating in California.

## **Transportation Demand Management**

Transportation demand management (TDM) is the all-inclusive term given to a variety of measures used to improve the efficiency of the existing transportation system by managing travel demand. Travel behavior may be influenced by mode, reliability, frequency, route, time, and costs, support programs/facilities and education. TDM strategies encourage the use of alternatives to the single occupant vehicle such as carpools, vanpools, bus, rail, bikes, and walking. Alternative work hour programs such as compressed work week programs, flextime, and telecommuting (teleworking) are also TDM strategies as are parking management tactics such as preferential parking for carpools and parking pricing.

## **Transportation Demand Management Needs and Actions**

To make the most of TDM in reducing travel demand in Madera County, MCTC should:

- ◆ work with Caltrans to develop a master plan for the Region's park and ride system;
- ◆ support the implementation of strategies to enhance the use of under-utilized park and ride lots focusing on increased security, marketing and outreach, lot siting and transit service;
- ◆ support the development and implementation of marketing and outreach strategies for the park and ride system;
- ◆ provide for adequate funding for park and ride lots to ensure proper system operation and safety, maintenance, marketing and development;

- ◆ establish an on-going mechanism to explore park-and-ride lot funding and to assure that the Region's facilities will continue to be fully integrated with transit, ridesharing, and bicycling programs;
- ◆ support the maintenance of the existing carpool market share and an increase in ridesharing;
- ◆ continue to support Central Valley Ridesharing operations and services provided by Fresno COG;
- ◆ continue to support funding for education and outreach to the general public in order to increase awareness and participation in ridesharing;
- ◆ support the allocation of funding toward the conversion of fleet vehicles from gasoline powered engines to other cleaner burning energy sources, including Compressed Natural Gas (CNG) and electric-powered vehicles; and
- ◆ support development of telecommunications infrastructure in new residential developments to facilitate reductions in peak hour trips.

## **Intelligent Transportation Systems**

In addition to traditional lane widening and signal system improvements, the need to further enhance the capacity of the existing and future system using ITS will be important.

ITS represents a means of applying new technological breakthroughs in detection, communications, computing and control technologies to improve safety and performance of the surface transportation system. This can be done by using the technologies to manage the transportation system to respond to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles. ITS includes Advanced Traffic Management Systems (ATMS), Advanced Vehicle Control Systems (AVCS) and Commercial Vehicle Operations (CVO).

Today, applications of ITS technologies allow the monitoring of traffic conditions and the dynamic adjustment of traffic signals to reduce unnecessary delay, the automated collection of tolls, advanced detection and television cameras to detect, assess and respond to traffic accidents and incidents. In the future, ITS technologies will automate transit fare collection and parking payments, use vehicle location systems to track trains and buses to give users "real time" arrival and departure information and use onboard systems to detect and avoid collisions.

## **Intelligent Transportation Systems Needs and Actions**

The *San Joaquin Valley Strategic Deployment Plan*, a collaborate effort between the eight Valley counties and Caltrans, was completed in 2001. The plan includes specific strategies and implementation program for ITS applications in Madera County. Chapter III and Appendix G provide additional detail regarding ITS opportunities in Madera County and throughout the Valley.

MCTC continues to participate in the deployment of 511 traveler information technology in the San Joaquin Valley.

## **Land Use and Transportation Planning Coordination**

Madera County participated with Caltrans, Fresno County, the Cities of Fresno and Clovis, and various stakeholder groups in Phase III of the San Joaquin Valley Growth Response Study. Phase III of the Study focused on development of a land use allocation model and a visualization/indicator model for use with the current transportation demand models. These modeling tools will assist the cities of Fresno and Clovis and the counties of Fresno and Madera in reviewing the urban landscape, considering alternative growth scenarios, and making policy changes to successfully implement their planning documents. The tools will provide information on the land use patterns that could enhance transit, reduce vehicle miles traveled, and address air quality issues.

In 2006, the eight regional planning agencies in the San Joaquin Valley came together in an unprecedented effort to develop a coordinated valley vision – the San Joaquin Valley Regional Blueprint. This eight county venture was conducted in each county, and was ultimately integrated to form a preferred vision for future development throughout the Valley to the year 2050. On April 1, 2009, the San Joaquin Valley Regional Policy Council adopted a preferred growth scenario for the Valley along with 12 Smart Growth Principles to guide development and promote the livable and sustainable communities mentioned above. A discussion of the Blueprint planning process in Madera County can be found in Chapter 6, and a summary of the work completed Valleywide is included in Appendix G.

## **Other Projects**

In addition to projects identified in the mode categories described above, a number of additional projects that do not necessarily fit into any one category or mode are described in Table 4-10. These projects total \$63.9 million and include such items as signalization projects, and TCMs.

## **Environmental Mitigation**

Following the provisions and requirements of CEQA, MCTC has prepared a subsequent programmatic environmental impact report for the 2011 RTP that describes strategy-level mitigation measures which could avoid or minimize significant adverse impact of implementing the 2011 RTP. In doing so, the 2011 RTP EIR identifies measures that will restore and maintain the environmental functions affected by the metropolitan transportation plan to the maximum extent feasible. The adopted mitigation measures are typical for transportation and development projects and have been demonstrated to be effective.

**TABLE 4-10**  
**Candidate Miscellaneous Projects for Inclusion in the Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost	Funding Year	Funding Source
CHOWCITY	1	Chowchilla	Roberson Blvd District	Pave alleys	\$301,000	2011	CMAQ/LTF
CHOWCITY	2	Ave 24 1/2	Various	Shoulder Paving	\$300,000	2014	CMAQ/LTF
CHOWCITY	3	Chowchilla	Alternative Fuel Fleet Vehicle	Fleet Conversion	\$62,126	2011	CMAQ/LTF
MADCITY	4	Madera	1 Diesel Front End Loader	Fleet Conversion	\$158,000	2014	CMAQ/LTF
MADCITY	5	Raymond Road	Various	Shoulder Paving	\$304,000	2015	CMAQ/LTF
MADCITY	6	Madera	1 CNG replacement Water Truck	Fleet Conversion	\$187,000	2013	CMAQ/LTF
MADCITY	7	Madera	1 CNG replacement Heavy Duty Dump Truck	Fleet Conversion	\$188,000	2013	CMAQ/LTF
MADCITY	8	Madera	Purchase and Install 1 CNG Compressor	Fleet Conversion	\$338,000	2013	CMAQ/LTF
MADCITY	9	Cleveland	Schnoor	Dual Left Turn Lanes	\$342,000	2014	CMAQ/LTF
MADCITY	10	Tozer	Clinton to MID canal	Shoulder Paving	\$70,000	2015	CMAQ/LTF
MADCO	11	Ave 9	Road 23 to Road 23 1/2	Shoulder Paving	\$99,000	2013	CMAQ/LTF
MADCO	12	Children's Blvd	at Peck Ave	Traffic Signal	\$396,600	2015	CMAQ/LTF
MADCO	13	Road 28	at Ave 14 1/2	Left Turn Lane	\$286,000	2015	CMAQ/LTF
MADCO	14	Glen Oaks	Rancho to Ave 21 1/2	Pave dirt roads	\$98,000	2012	CMAQ/LTF
MADCO	15	Ave 15	SR 41 to Road 36	Shoulder Paving	\$895,000	2015	CMAQ/LTF
MADCO	16	Valley View	Ave 21 to Ave 22	Pave dirt roads	\$98,000	2012	CMAQ/LTF
MADCO	17	Road 23	Ave 8 1/2 to Ave 9 1/2	Shoulder Paving	\$187,000	2014	CMAQ/LTF
MADCO	18	Road 28 1/2	Ave 13 to Ave 15	Shoulder Paving	\$350,000	2015	CMAQ/LTF
MADCO	19	Ave 15	Road 29 to Road 36	Shoulder Paving	\$338,900	2014	CMAQ/LTF
MADCO	20	Ave 25	Road 8 to Road 11	Shoulder Paving	\$497,000	2015	CMAQ/LTF
MADCO	21	Road 30	Ave 12 to 500 ft north	Shoulder Paving	\$70,800	2015	CMAQ/LTF
MADCO	22	Road 407	Willow Creek Bridge to .55 miles west	Pave dirt roads	\$408,000	2014	CMAQ/LTF
MADCO	23	Road 407	Road 600 to .55 miles east	Pave dirt roads	\$408,000	2014	CMAQ/LTF
MADCO	24	Hickory Street	Palm St to end	Pave dirt roads	\$65,000	2011	CMAQ/LTF
MADCO	25	Road 406	Road 400 to 2.5 miles east	Pave dirt roads	\$498,000	2013	CMAQ/LTF
MADCO	26	Valley Lake Ranchos	Various	Pave dirt roads	\$706,000	2011	CMAQ/LTF
MADCO	27	Road 29	Ave 21 to Ave 21 1/2	Pave dirt roads	\$95,000	2012	CMAQ/LTF
MADCO	28	Lomita Road	Ave 21 to Ave 21 1/2	Pave dirt roads	\$95,000	2012	CMAQ/LTF
MADCO	29	Road 29 1/2	Ave 21 to Ave 21 1/2	Pave dirt roads	\$95,000	2012	CMAQ/LTF
MADCO	30	Dennis Road	Ave 21 to Ave 21 1/2	Pave dirt roads	\$95,000	2012	CMAQ/LTF
MUSD	31	MUSD	4 CNG School Buses	Fleet Conversion	\$843,000	2012	CMAQ/LTF
MID	32	MID	2 CNG Dump Trucks	Fleet Conversion	\$250,000	2015	CMAQ/LTF
MCTC	33	Various	To Be Determined	TCMs	\$8,881,118	2011-2020	CMAQ/Local
MCTC	34	Various	To Be Determined	TCMs	\$45,929,346	2021-2035	CMAQ/Local
<b>TOTAL:</b>					<b>\$63,934,890</b>		

As part of the development of the 2011 RTP EIR, Fresno COG followed standard CEQA requirements for public outreach and agency consultation. This consultation included the: Notice of Preparation of the EIR, Notice of Completion of the Draft EIR, Draft Final EIR, and the Notice of Determination. Notifications were sent to all interested parties, including local agencies, other regional agencies, and the California State Office of Planning and Research – State Clearinghouse which distributes CEQA EIR documents to affected State resource agencies. In addition, comments and responses to comments received during the 30-day Notice of Preparation comment period and the mandatory 45-day comment period for the Draft EIR are documented in of the Final 2011 RTP EIR.

Potential mitigation activities include, but are not limited to, the following:

- Implement design guidelines, local policies, and programs aimed at protecting views of scenic corridors and avoiding visual intrusions.
- To the extent feasible, noise barriers that will not degrade or obstruct a scenic view will be constructed. Noise barriers will be well landscaped, complement the natural landscape and be graffiti-resistant.
- Avoid construction of transportation facilities in state and locally designated scenic highways and vista points.
- Develop design guidelines for each type of transportation facility that make light elements of proposed facilities visually compatible with surrounding areas.
- Individual projects will be consistent with local land use plans and policies that designate areas for urban land use and preserve agricultural lands that support the economic viability of agricultural activities.
- Native soils in construction areas will be removed, stockpiled separately, and replaced in those areas where onsite revegetation of the native habitat is planned.
- Any disturbed natural areas will be replanted with appropriate native vegetation following the completion of construction activities.
- During the individual improvement project design phase, impacts to jurisdictional waters and wetlands will be minimized to the greatest extent feasible.
- Each proposed individual improvement project will consider the displacement of sensitive habitat and sensitive species during the individual improvement project design phase.
- During final design, implementing agencies will design, construct, and maintain terrestrial wildlife crossings in order to minimize barrier effects and habitat fragmentation created by the individual improvement project.

A full discussion of mitigation activities discussed in the development of the 2011 RTP is included in the 2011 RTP EIR.

## **SUMMARY**

The preceding discussion of the components of the regional transportation system helps to frame the choices that must be made in this plan. The system is mature and will require regular investments to preserve its capabilities, but there will be opportunities to improve efficiency through the use of new technology and increased TDM strategies. Other additions, such as bikeways and increased transit use, will assume greater importance in the future system. Clearly, each mode has an important role to play in the current and future system. The overall



vision for the Transportation Plan is to identify investments and projects that can support a multimodal system.

## V. FINANCIAL ELEMENT

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### INTRODUCTION

This chapter provides a long-range view of proposed transportation projects within Madera County and how they will be funded. This plan is required to be “financially constrained” reflecting those projects that can be funded based on projected revenues rather than a “wish list” of projects. The challenge posed by this plan is how to sustain and develop an effective transportation infrastructure in Madera County as it experiences dynamic economic and demographic change over the next twenty-five years and limited transportation revenues.

The focus of this section is to project the realistic implementation of planned transportation projects within a financially-constrained scenario. Projections of potential federal, State, and local funding are included along with projected costs of proposed transportation projects through 2035 based upon the goals and objectives referenced in Chapter III and the analysis of needs identified in Chapter IV. A comprehensive overview of existing and potential sources of transportation funding also is provided in Appendix E of this plan. This section was developed based on significant collaborative efforts with Madera County jurisdictions to best reflect desired projects by region. Technical plans and studies and General Plan Elements for jurisdictions within Madera County also support this effort to implement the various transportation modes.

Madera County’s multi-modal transportation system will need to be maintained and enhanced to meet mobility needs and people and goods for the twenty-five year horizon of this plan. Specific emphasis is placed on maintaining, rehabilitating, and operating the existing multi-modal transportation infrastructure balanced with enhanced new streets and roads capacity, expanded public transit services, and other supportive transportation modes, including bicycle, pedestrian, aviation, and rail.

### PROJECTED REVENUES

A realistic revenue projection is required to determine how many proposed projects can be fully funded through 2035. Traditional or historical transportation funds are available through a variety of sources. Many funds, however, are restricted in their use. The following revenue sources were assumed to be available and projected for purposes of this plan:

#### Federal

- Regional Surface Transportation Program (RSTP)
- Transportation Enhancement (TE)
- Highway Bridge Replacement and Rehabilitation (HBRR)
- Section 5307
- Section 5311
- Congestion Mitigation Air Quality (CMAQ)

State

- State Transportation Improvement Program (STIP)
- State Gas Tax
- State Highway Operation and Protection Program (SHOPP)
- Caltrans – Interregional Transportation Improvement Program (ITIP)
- Prop 1B Bond Programs (SR 99, SLPP, PTMISEA, TSSSDRA)

Local

- Measure T – ½% Local Sales Tax
- Local Transportation Fund (LTF)
- Local Agency Impact Fees

**Table 5-1**  
**2011 RTP Revenue Sources**

2011 RTP Revenue (\$1,000)	2011-2020	2021-2035	Total
<b>State Highway Account Funds</b>			
SHOPP	\$ 70,054	\$ -	\$ 70,054
STIP	\$ 48,970	\$ 115,380	\$ 164,350
ITIP	\$ 145,011	\$ 160,571	\$ 305,582
<b>Local Assistance</b>			
CMAQ	\$ 20,146	\$ 54,215	\$ 74,361
RSTP	\$ 17,998	\$ 50,295	\$ 68,293
<b>Federal Transit Funds</b>			
5307 – Urbanized Area Formula	\$ 13,652	\$ 32,650	\$ 46,302
5311 – NonUrbanized Area Formula	\$ 3,717	\$ 10,371	\$ 14,088
<b>Other State Transportation Funds</b>			
State Bond (SR 99 Fund)	\$ 48,400	\$ -	\$ 48,400
State Bond (Transit)	\$ 5,742	\$ -	\$ 5,742
State Bond (SLPP)	\$ 2,292	\$ -	\$ 2,292
<b>Local Funds</b>			
LTF	\$ 43,918	\$ 122,731	\$ 166,649
Measure T	\$ 101,829	\$ 95,906	\$ 197,735
Impact Fees	\$ 224,793	\$ 364,165	\$ 588,958
<b>Total Revenue</b>	<b>\$ 746,522</b>	<b>\$ 1,006,284</b>	<b>\$ 1,752,806</b>

In developing the countywide revenue projections, a number of key assumptions were made, as follows:

**Revenue Assumptions**

- ◆ Revenues that historically have been constant and reliable are reflected through 2035 for all modes.

- ◆ Projections assume continuation of SAFETEA-LU programs (i.e., RSTP, TE, CMAQ) in a new Federal transportation authorization with historical program revenue allocations.
- ◆ State revenues (i.e., STIP, gas tax, LTF) are expected to be available at historical funding levels for all modes.
- ◆ The first four years of the RTP revenue estimate are consistent with the 4-year STIP fund estimate.
- ◆ The Madera County Measure T - Local Sales Tax is assumed to sunset in 2027.
- ◆ A 3% annual inflation rate is assumed for all revenue sources.

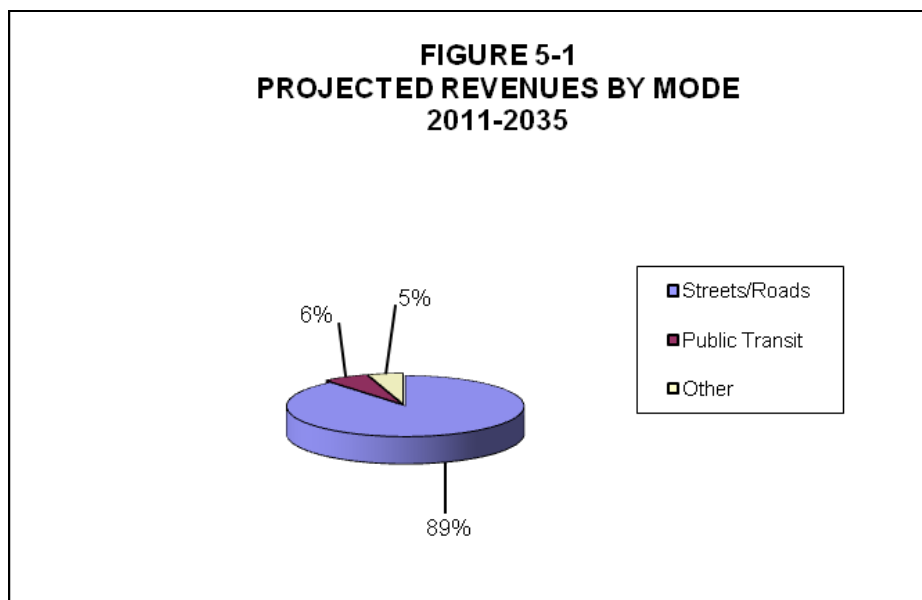
As reflected in Table 5-2, the cumulative transportation revenues for all modes are projected at \$746.5 million by 2020 and \$1,006.3 million by 2035 for a total of \$1,752.8 million over the next 25 years.

**TABLE 5-2**  
**Revenues by Mode**  
**(\$ Million)**

MODE	FY 2011-20	FY 2021-35	TOTAL
Streets & Roads	\$685.4	\$875.2	\$1,560.6
Public Transit	\$38.1	\$69.8	\$107.9
Other*	\$23.0	\$61.2	\$84.2
Total	\$746.5	\$1,006.3	\$1,752.8

\* "Other" includes non-motorized (bicycle and pedestrian), alternative-fuel vehicle projects, etc.

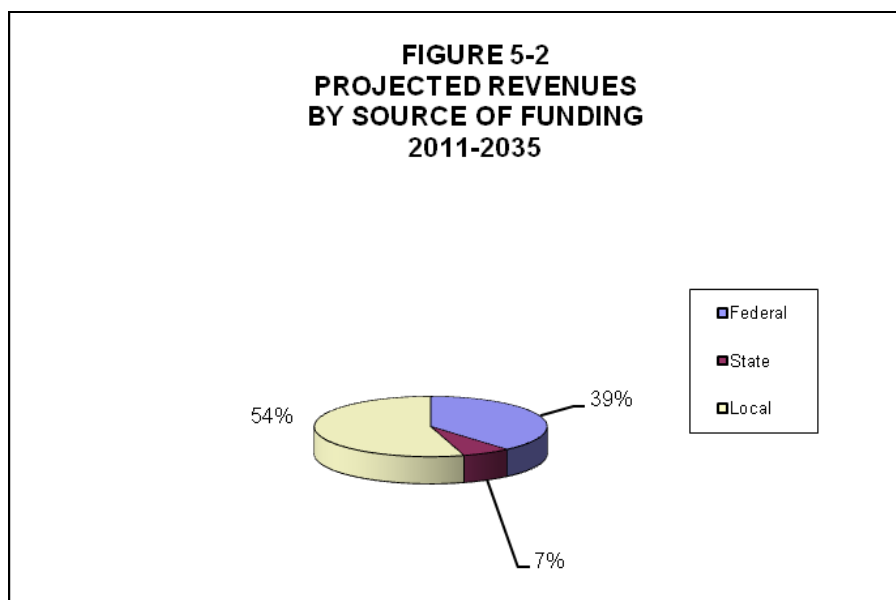
Figure 5-1 shows that \$1,560.6 million or 89 percent of projected revenue through 2035 will be expended on streets and roads; \$107.9 million or 6 percent on public transit; and \$84.2 million or 5.0 percent on other transportation projects, such as bicycle, pedestrian, and alternative-fuel projects.



Local funds will be the greatest source of transportation funding for Madera County at \$953.3 million or 54% of total revenues, as shown in Table 5-3 and Figure 5-2. Federal funds will be the second greatest at \$681.1 million or 39% of total revenues, while State funds are projected at \$118.4 million or 7% of total revenues.

**TABLE 5-3**  
**Revenues by Source of Funding**  
**2011 - 2035**  
**(\$ Millions)**

Project Type	Federal	State	Local	Total
Streets & Roads	\$546.3	\$110.3	\$904.0	\$1,560.6
Public Transit	\$60.4	\$8.0	\$39.5	\$107.9
Other	\$74.4	\$0.0	\$9.8	\$84.2
<b>Total</b>	<b>\$681.1</b>	<b>\$118.4</b>	<b>\$953.3</b>	<b>\$1,752.8</b>
<b>% of Total</b>	<b>39%</b>	<b>7%</b>	<b>54%</b>	<b>100%</b>



## PROJECTED EXPENDITURES

Expenditures were projected based on transportation projects planned by Madera County, City of Madera, City of Chowchilla, and Caltrans. Key assumptions used in projecting expenditures include the following:

- ◆ Local Transportation Funds (LTF) for streets and roads and funds are expended in the operating and maintenance category.
- ◆ Transit operating expansion will occur at five-year intervals while transit capital improvements reflect replacement as vehicles exceed their useful life with additional vehicles as expansion occurs.

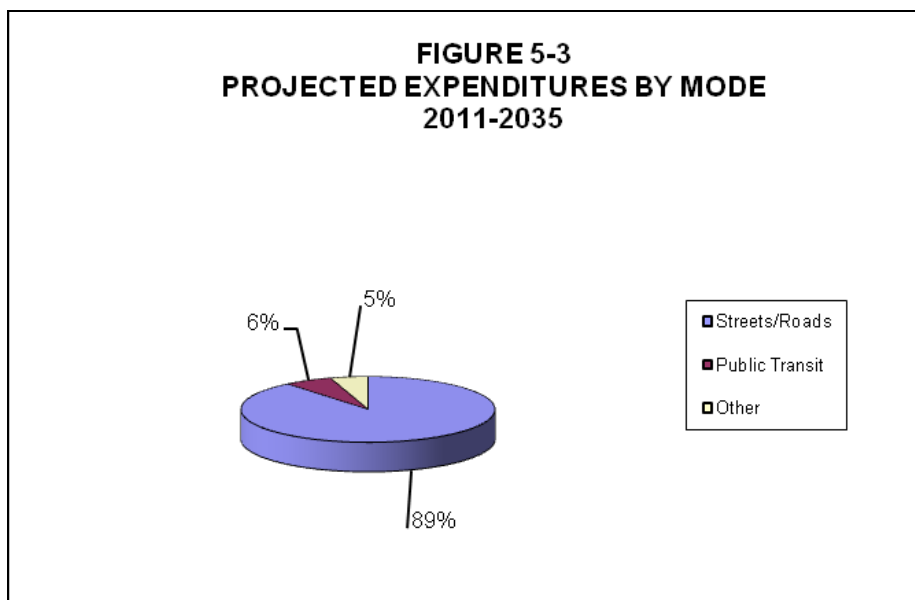
- ◆ Expenditures assume continuation of SAFETEA-LU programs (i.e., RSTP, TE, CMAQ) in a new Federal transportation authorization with historical program revenue allocations and availability of state revenues.
- ◆ The Madera County Measure T - Local Sales Tax is assumed to sunset in 2027.
- ◆ A 3% annual inflation rate is assumed for all expenditures, reflecting “Year of Expenditure” cost estimates for each project.

Table 5-4 and Figure 5-3 reflect projected expenditures by transportation mode through 2035. As shown, total expenditures in Year of Expenditure dollars through 2035 for streets and roads are projected at \$1,560.6 million or 89% of expenditures, public transit at \$107.9 million or 6%, and other projects at \$84.2 million or 5%.

**TABLE 5-4**  
**Transportation Expenditures by Mode**  
**2011 – 2035**  
**(\$ Million)**

MODE	FY 2011-20	FY 2021-35	TOTAL
Streets & Roads – Rehab & Safety	\$511.4	\$675.3	\$1,165.3
Streets & Roads – Capacity Increasing	\$109.6	\$41.0	\$152.8
Streets & Roads – Operations/Mtn.	\$64.4	\$158.9	\$242.5
Subtotal: Streets & Roads	\$685.5	\$875.2	\$1,560.7
Public Transit – Operating	\$31.4	\$52.1	\$83.5
Public Transit – Capital	\$6.7	\$17.7	\$24.4
Subtotal: Public Transit	\$38.1	\$69.8	\$107.9
Other*	\$23.0	\$61.2	\$84.2
<b>Total</b>	<b>\$746.5</b>	<b>\$1,006.3</b>	<b>\$1,752.8</b>

\* “Other” includes non-motorized (bicycle and pedestrian), aviation, alternative-fuel vehicle projects, etc.



## FINANCIALLY-CONSTRAINED PLAN

Consistent with requirements for a financially constrained plan, this 2011 RTP maintains and enhances the existing transportation system by funding an array of multi-modal projects planned throughout Madera County. Projects submitted by each jurisdiction within the County were developed under a constrained scenario and therefore are fully funded under this plan.

As shown on Table 5-5, this plan identifies projected Countywide 25-year transportation revenues of \$1,752.8 million based on historical funding sources. Total expenditures over that same period are estimated at \$1,752.8 million resulting in a surplus of \$0.0 million in revenues.

**TABLE 5-5**  
**Summary of Countywide Revenues and Expenditures**  
**2011 – 2035**  
**(\$ Millions)**

<b>Project Type</b>	<b>Revenues</b>	<b>Expenditures</b>	<b>Balance</b>
Streets & Roads	\$1560.6	\$1560.6	\$0.0
Public Transportation	\$107.9	\$107.9	\$0.0
Other	\$84.2	\$84.2	\$0.0
<b>Total</b>	<b>\$1,752.8</b>	<b>\$1,752.8</b>	<b>\$0.0</b>

## Measure T Impacts

The 2004 RTP Project Prioritization Study identified \$550 million in unfunded capacity increasing projects in Madera County. These projects are needed to correct LOS deficiencies forecasted in 2030 by the MCTC Travel Model. The 20-year Measure T Expenditure Plan (approved by the voters in November 2006) provides an estimated \$210 million in revenues for regional capacity increasing projects. Although Measure T revenues are not sufficient enough to close the funding gap, local sales tax dollars are key to the ability of MCTC to leverage other federal and state dollars.

This revenue shortfall signifies that challenges lie ahead through 2035 to meet the projected growth and increased demands on Madera County's transportation network. The potential revenue shortfalls also point to the need for efficient and timely project implementation to maximize forecasted revenue and to be well positioned to receive potential future federal and State funds. Clearly, the goal of achieving a fully implemented regional transportation plan that will vastly improve the quality of life in Madera County will be a significant challenge without the infusion of increased revenues from existing and other new sources.

## UNCONSTRAINED PROJECTS

Table 5-6 provides a list of needed capacity increasing projects that cannot be funded within the twenty-five year timeframe of the RTP. MCTC, Caltrans, and the local agencies should work cooperatively to identify appropriate funding sources to consider programming the projects.

**TABLE 5-6  
Unconstrained Capacity Increasing  
and Rehabilitation Projects for Inclusion in the  
Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost
CTRTP	1	41	Ave 10 to Ave 12	4 to 6 lane freeway	\$28,500,000
CTRTP	2	41	Ave. 12 to Ave 15	4 to 6 lane arterial	\$28,500,000
CTRTP	3	41	In Oakhurst From 0.2 KM S of Royal Oaks Drive to Hartwell Road	2 to 4 lanes	\$33,030,000 + RW \$26,880,000
CTRTP	4	99	In Madera County from 0.1 KM N of Ave 17 to Ave 21 1/2	Widen 4-Lane Fwy to 6-Lane Fwy	N/A
CTRTP	5	99	SR 152 Interchange	New Interchange and Rail Crossing	\$96,600,000
CTRTP	6	99	SR 152 to Merced County Line	4-Lane Freeway to 6-Lane Freeway	N/A
CTRTP	7	SR 145	Ave 13 1/2/SR 99	4 to 6 lane arterial	N/A
CTRTP	8	SR 145	Gateway/C St	4 to 6 lane arterial	N/A
CTRTP	9	SR 145	C St/Lake St	4 to 6 lane arterial	N/A
CTRTP	10	SR 145	Road 29/Road 32	2 to 4 lane arterial	N/A
CTRTP	11	SR 152	Madera County Line/Jct 59	4 to 6 lane expressway	N/A
CTRTP	12	SR 152	Jct 59/Road 4	4 to 6 lane expressway	N/A
CTRTP	13	SR 152	Road 4/Road 7	4 to 6 lane expressway	N/A
CTRTP	14	SR 152	Road 7/Road 9	4 to 6 lane expressway	N/A
MADCITY	15	99	Ellis St Overcrossing	Construct Interchange	\$56,100,000
MADCITY	16	6TH	SR 99 to D St	2 to 4 lanes	\$800,000
MADCITY	17	9TH	Gateway to B St.	2 to 4 lanes	\$1,600,000
MADCITY	18	Almond	SR145 to 390' e. of SR145	2 to 4 lanes	\$170,000
MADCITY	19	AVE 13	Rd 28 to Road 30 1/2	2 to 4 lanes	\$15,715,423
MADCITY	20	AVE 14	Road 28 to Road 29	2 to 4 lanes	N/A
MADCITY	21	Avenue 13	At Cottonwood Creek	Structure widening 2 to 4 Lanes	\$770,000
MADCITY	22	Avenue 13	SR 99 Overxing	Widen Structure 2 to 4 Lanes	\$5,250,000
MADCITY	23	CLEVELAND	Country Club Dr to D Street	4 to 6 Lanes	N/A
MADCITY	24	CLEVELAND	Lake to Tozer	4 to 6 Lanes	N/A
MADCITY	25	D St	SR 145 to Cleveland	2 to 4 lanes	\$3,600,000
MADCITY	26	D St	Cleveland to Clark	2 to 4 lanes	\$2,400,000
MADCITY	27	GATEWAY	Fresno River to SR 145	4 to 6 lanes	N/A
MADCITY	28	Golden State	MCH to Pecan	2 to 4 lanes	\$1,940,000
MADCITY	29	Granada	Sunset to Cleveland	2 to 4 Lanes	N/A
MADCITY	30	HOWARD RD	Yosemite Ave to Mainberry	4 to 6 lanes	\$8,200,000
MADCITY	31	Kennedy Street	Tulare to Chapin	2 to 4 lanes	\$1,220,000
MADCITY	32	LAKE	Yosemite (SR 145) to 6th	2 to 4 lanes	\$600,000
MADCITY	33	MADERA (SR 145)	Almond to Ave 13	2 to 4 lanes	\$2,200,000
MADCITY	34	MADERA (SR 145)	Ave 12 to Ave 13	2 to 4 lanes	\$2,713,349
MADCITY	35	Road 23	at Fresno River	Widen Structure 2 to 4 Lanes	\$3,600,000
MADCITY	36	ROAD 26	Cleveland to Ellis	4 to 6 lanes	N/A
MADCITY	37	Road 29	at Fresno River	New 2 Lane Bridge	\$2,400,000
MADCITY	38	Schnoor	Avenue 16 to City Limits	2 to 4 lanes	\$420,000
MADCITY	39	SUNSET	Mainberry to 4th w/ RR Xing	2 to 4 lanes	\$2,800,000
MADCITY	40	Sunset	Road 24 to Caitlin	2 to 4 lanes	\$530,000
MADCITY	41	TOZER	SR 145 to Ave 15	2 to 4 lanes	\$1,400,000
MADCITY	42	YOSEMITE (SR 145)	Lake to Tozer	2 to 4 lanes	\$2,400,000
MADCITY	43	YOSEMITE (SR 145)	Tozer to Rd 29 w/RR Underpass	2 to 4 lanes	\$16,400,000



**TABLE 5-6**  
**Unconstrained Capacity Increasing**  
**and Rehabilitation Projects for Inclusion in the**  
**Madera County 2011 Regional Transportation Plan**

Agency Identifier	Project Number	Route	Project Limits	Description	Estimated Cost
MADCO	44	41	SB on ramp/SR 41 @ Children's Blvd	Widen to 2 lanes	\$23,800,000
MADCO	45	41	SR 145 to Rd 406	2 to 4 lanes	\$38,400,000
MADCO	46	41	Rd 406 to Rd 200	2 to 4 lanes	\$14,600,000
MADCO	47	41	Rd 200 to Rd 416	2 to 4 lanes	\$33,700,000
MADCO	48	41	Rd 416 to Rd 415	2 to 4 lanes	\$33,800,000
MADCO	49	41	Rd 415 to Rd 420	2 to 4 lanes	\$24,000,000
MADCO	50	41	Hartwell to Rd 222 (Bass Lake Rd)	2 to 4 lanes	\$23,000,000
MADCO	51	41	Rd 222 to Madera County Line	2 to 4 Lanes	N/A
MADCO	52	99	In Madera County at Ave 24 Interchange	Recon IC at Ave 24	N/A
MADCO	53	AVE 12	Grade Sep @ BNSF	Grade Sep.	\$20,000,000
MADCO	54	AVE 16	Schnoor to SR 99	2 to 4 lanes	\$400,000
MADCO	55	AVE 17	Road 23 to Airport	2 to 4 lanes	N/A
MADCO	56	AVE 17	Airport to SB SR 99 Ramps	2 to 4 lanes	\$600,000
MADCO	57	AVE 17	SR 99 to Walden Dr	2 to 4 lanes	\$8,400,000
MADCO	58	AVE 181/2	Golden State Blvd to SR 99 SB Ramps	2 to 4 lanes	\$2,817,324
MADCO	59	AVE 181/2	Interchange	2 to 4 lanes	\$15,600,000
MADCO	60	AVE 20 1/2	SR 99 to Road 26	2 to 4 lanes	N/A
MADCO	61	AVE 7	SR 145 to SR 99	2 to 4 lanes	\$13,287,494
MADCO	62	AVE 7	Road 23 to SR 145	2 to 4 lanes	\$9,471,602
MADCO	63	AVE 7	Road 21 to Road 23	2 to 4 lanes	N/A
MADCO	64	AVE 7 1/2	Ave 12/Avenue 7 "Y" to Fresno Co. Line	2 to 4 lanes	\$1,083,428
MADCO	65	AVE 9	Road 40 1/2 to Children's Blvd	2 to 4 lanes	\$3,114,006
MADCO	66	AVE 10	Road 40 1/2 to SR 41	2 to 4 lanes	\$4,963,038
MADCO	67	AVE 12	Road 36 to Road 38	2 to 4 lanes	\$4,473,546
MADCO	68	AVE 12	Road 32 to Road 36	2 to 4 lanes	\$5,369,941
MADCO	69	AVE 12	SR 99 to Road 30	4 to 6 lanes	N/A
MADCO	70	AVE 15	Road 28 to Road 29	2 to 4 lanes	\$3,017,324
MADCO	71	AVE 15	Road 29 to Road 36	2 to 4 lanes	N/A
MADCO	72	Road 23	Ave 15 1/2 to Ave 18 1/2	2 to 4 Lanes	\$15,408,044
MADCO	73	ROAD 26	Club Drive to Ave 21	2 to 4 lanes	N/A
MADCO	74	ROAD 26	Ave 17 to Club Drive	2 to 4 lanes	\$6,400,000
MADCO	75	ROAD 27	Ellis St to Ave 17	2 to 4 lanes	N/A
MADCO	76	ROAD 27	Ave 17 to Ave 18 1/2	2 to 4 lanes	N/A
MADCO	77	ROAD 29	Ave 14 to Ave 15	2 to 4 lanes	N/A
MADCO	78	ROAD 30 1/2	Ave 9 to Ave 12	2 to 4 lanes	\$6,682,482
MADCO	79	ROAD 30 1/2	Ave 12 to Ave 13	2 to 4 lanes	N/A
MADCO	80	SR 145	Road 32 to SR 41	2 to 4 lane arterial	N/A
MADCO	81	SR 145	CL to Ave 7	2 to 4 lanes	\$1,520,000
MADCO	82	SR 145	Ave 7 to Ave 12	2 to 4 lanes	\$6,100,000
MADCO	83	SR 49	SR 41 to Rd 600	2 to 4 lanes	\$7,356,098
MADCO	84	SR 233	Ave 23 1/2 to Palm Pkwy	2 to 4 lanes	N/A
MADCO	85	SR 65	SR 152 to SR 145	Construct new 4 lane freeway	\$75,000,000

## VI. BLUEPRINT PLANNING

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### INTRODUCTION

The San Joaquin Valley Regional Blueprint planning process, begun in 2006 as a joint effort by the eight Valley MPOs, provides an initial framework for implementation of land use planning measures that can produce substantive reductions in GHG emissions. This chapter includes a summary of the Blueprint planning process in Madera County and offers solutions to improve the quality of life in the region for future generations. Further discussion of the Regional Blueprint process and ongoing implementation efforts can be found in Appendix G.

In September 2006, Governor Arnold Schwarzenegger signed into law AB 32, the California Global Warming Solutions Act of 2006. This landmark legislation establishes a statewide greenhouse gas (GHG) emissions cap for 2020, based on 1990 emissions levels. Two years later, the Governor signed SB 375, which implements the reduction requirements of AB 32 by establishing emissions-reduction goals around which regions can plan.

Although the planning requirements for SB 375, including the development of a Sustainable Communities Strategy (SCS) to meet state-established GHG reduction targets, will not take effect until the next planned update of the RTP in 2014, MCTC staff has already developed a comprehensive strategy for the implementation of smart growth planning over the next 40 years. The alternative land use scenario included in this chapter offers a glimpse of how Madera County could develop if smart growth principles and best practices for sustainable growth are implemented in the region.

### Blueprint Planning Process



### Background

#### *What is the Valley Blueprint?*

The San Joaquin Valley Blueprint Planning Process is a chance to plan for the future of transportation and land use in the San Joaquin Valley to the Year 2050. The Blueprint is a "goals oriented" mechanism for regional integrated land use and transportation planning that is not "one size fits all." It is explicitly understood by all jurisdictions and regional planning agencies within Madera County that Madera, Chowchilla and Madera County would maintain authority over local planning and zoning. It is further understood that local agencies can customize the implementation of the Blueprint considering the values, socioeconomic conditions, and desires of the local area.

### *Why the Blueprint is Important?*

The San Joaquin Valley Blueprint provides a proactive plan to help guide the Valley down a cooperative path as a region and addresses regional issues such as land use and transportation that can't be adequately addressed on a county-by-county basis. We have choices about how, where, and in what form our region will grow. We can continue our current pattern of development, which will cause us to consume land at a rapid pace, encroach on critical environmental resources, lose the distinctiveness of our communities, and paralyze our residents and businesses in traffic. Or, we can boldly choose a different approach where we conserve our environment, strengthen our urban centers, and provide a variety of choices for how we live, work, travel, raise our families, and enjoy our free time.

### *What will the Blueprint Planning Process do?*

Planning issues do not exist in a vacuum. Transportation and land use are intertwined; these issues also affect housing, employment centers, and air quality. The San Joaquin Valley Blueprint Planning Process will enable the region to better understand that what we do locally affects the entire region. This growth vision and the accompanying action plan offer strategic direction for our Valley's future. We acknowledge that this growth vision is a community-generated guide for the Valley's future development. We agree to enhance existing and/or develop new practices to continue cooperation and consensus-building at the regional level in support of the Valley's growth vision. These practices may include:

- Establishing a Valley-wide forum for continued cooperation among regional elected officials
- Work with our county legislative delegation to establish regional legislative delegation meetings and priorities
- Work with the legislature to advance regional priorities consistent with this vision



The eight Councils of Governments (COGs) in the San Joaquin Valley have come together in an unprecedented effort to develop a coordinated valley vision – the San Joaquin Valley Regional Blueprint. This eight county venture is being conducted in each county, and will ultimately be integrated to form a preferred vision for future development throughout the Valley to the year 2050. Technical activities will lead to the development of alternative growth scenarios that will be modeled to illustrate the various potential footprints and the consequences of each alternative. Ultimately, the goal is to select a preferred growth alternative that will help the State, counties, cities and special districts with their planning activities and capital facilities construction considering their individual values, needs and issues.

### *Why should we plan for the Future?*

The San Joaquin Valley is a special place. It has a rich, diverse population; communities that blend rural calm with urban amenities; and an unrivaled agricultural economy. These qualities also mean the region will grow. In the next 45 years, the Valley will more than double in population from 3.3 million to more than 7 million. With this growth comes many challenges. Where should we grow? How will we grow? The San Joaquin Valley Blueprint Planning Process provides an opportunity to work together to answer these questions. We recognize that the decisions we make today about future growth will determine the competitiveness of our economy, the sustainability of our environment, and the quality of life for future generations. The decisions about development made by individual communities can have impacts far beyond their boundaries. That's why a regional, collaborative approach is imperative.

We applaud the work of numerous public, private, and civic organizations, as well as the many Madera County residents who have helped to answer the question of “How Shall We Grow?” We believe that this vision reflects what matters most as we raise our families, grow our businesses and build our communities.

**What were the Technical Steps Taken To Show How Madera County Should Grow?**

A number of technical steps were taken to identify and evaluate how Madera County should grow over the next 42 years. The modeling effort required collecting Geographic Information System (GIS) based data from various County agencies and cities in the county; standardizing it, and converting it to inputs for the UPLAN Land use modeling software. Each of the steps is detailed below. Specific details regarding standardization of the General Plan land use categories and the selection criteria for existing developable and non-developable parcels are provided in Appendix 6-A.

■ **Data Collection**

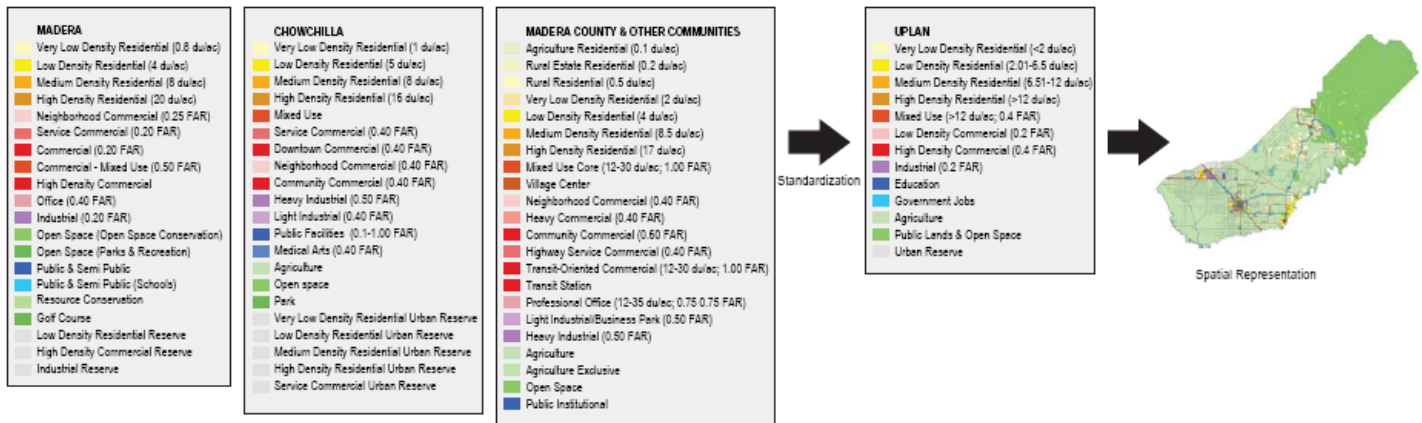
Numerous sets of data; Assessor’s Parcel Data, General Plans, geographical & environmental data, and others were collected. The data sets were analyzed and standardized to create the different inputs for the model. The Assessor’s data was critical to this process.

■ **General Plans**

The General plans were standardized to fifteen (15) land use categories utilized by the UPLAN software (reference Figure 6-1). The UPLAN software allocates jobs and housing based on the standardized General Plan map derived from the collected general plans. The gross densities utilized in the software included the specific use (type of residential or type of employment) and the access required for those uses e.g.: neighborhood or streets and roads or “local” streets and roads within a subdivision, utilities, trails, and pedestrian connections. For example, gross low density does not include neighborhood commercial or any other type of employment, parks, schools, or major streets and roads (collectors, arterials, expressways, or freeways) since these uses are already mapped or designated in each of the General Plans GIS files. If such uses were not in the General Plans, then they were considered as the gross densities were established.

FIGURE 6-1

**MADERA COUNTY BLUEPRINT**  
 Standardization of Assorted General Plans



■ **Assessor’s Data**

Assessor's parcel data was utilized to identify vacant, developable and re-developable parcels for the different scenarios. A set of 11 criteria were utilized to identify parcels that had the potential for new development or re-development. The selection criteria were modified for the *Moderate* and *Major* scenarios to include more existing developments as having potential for re-development.

- **Selection Criteria for Existing Developable/Non-developable Parcels**

Appendix 6-A describes the criteria applied to select developable and non-developable parcels for use in UPLAN modeling.

- **Geographical & Environmental Data**

Geographical and environmental data such as slopes, rivers and wetlands were obtained from UC Davis and the State's GIS data banks accessible on the internet (CASil & Ceres). The Consultant Team also obtained the State's data on quality agricultural land and merged it with the Assessor's parcel data on agricultural land under the Williamson Act. Furthermore, infrastructure and political datasets were obtained such as Sphere's of Influence and roads and highways from the County and the two cities. All of these datasets were primarily used as attractors or discouragers to development in the UPLAN software model.

- **Modeling Allocation Assumptions**

The data collected from the State about prime agricultural land was combined with the assessor's data identifying preserved agricultural land to create a layer of high quality farmland on which new growth was severely discouraged. In addition, the urbanized areas of different cities and communities (Spheres of Influence) were utilized as attractors to growth. The priority of attraction was varied to simulate the different levels of attractiveness and real world trends. Further details regarding these two important allocation assumptions are provided in Appendix 6-A.

- **Modeling Process Assumptions**

The Blueprint process objective was to give communities an opportunity to envision alternative futures of their region based upon development choices made in the present. For the Madera Blueprint process the goal was to envision four alternative scenarios including the Status Quo (prevailing trends), Low Change (15-20% reduction in lot size with enhanced transit), Moderate Change (higher densities that would support Bus Rapid Transit or BRT and Light Rail Transit or LRT systems), and Major Change (doubles the share for multiple-family housing with additional BRT routes and LRT expansion). Details regarding each of the alternative scenarios are provided in Appendix 6-B.

### ***What is Madera County's Regional Blueprint Vision?***

Madera County will be composed of unique cities, communities and a diverse population that is supported by a vibrant economy, a healthy and sustainable environment and public safety, accomplished through a land use and transportation system that supports livable communities and interregional coordination and connectivity, while preserving



agricultural and natural resources. This growth vision and the accompanying action plan offer strategic direction for our future. We acknowledge that this growth vision is a community-generated guide for our future development. It is time to enhance existing and/or develop new practices to continue cooperation and consensus-building at the regional level in support of this growth vision. These practices may include:

- Establishing a forum for continued cooperation among regional elected officials
- Work with our county legislative delegation to establish regional legislative delegation meetings and priorities
- Work with the legislature to advance regional priorities consistent with this vision

It is also time to consider the following six regional growth principles when making future public, private, and civic investment decisions:

- Preserve open space, recreational areas, farmland, water resources, and regionally significant natural areas
- Provide a variety of transportation choices
- Foster distinct, attractive and safe places to live
- Encourage a diverse, globally competitive economy
- Create a range of obtainable housing opportunities and choices
- Build communities with educational, health care and cultural amenities

Coordinating regional action in these six areas by enhancing existing or developing new regional partnerships is important to the future of Madera County and the Valley. We acknowledge that comprehensive plans and other regional and locals plans are the critical tools for translating this vision into action. We agree to:

- Develop or update strategic regional policy plans, community visions, local government comprehensive plans, transportation plans, resource agency plans, and economic development plans to develop more specific goals, policies, and programs to manage long range growth and guide infrastructure investments consistent with this Vision
- Consider this Vision and the six regional growth principles in future updates of these plans
- Coordinate local and regional plans with those of neighboring and overlapping government entities, as well as key statewide plans

Working toward additional intergovernmental agreements when necessary provides opportunities for joint action or to resolve inconsistencies amount statewide, regional and local policies and plans.

### *What are Madera County's Values As It Grows to the Year 2050?*

**1. Environmental Health and Sustainability**

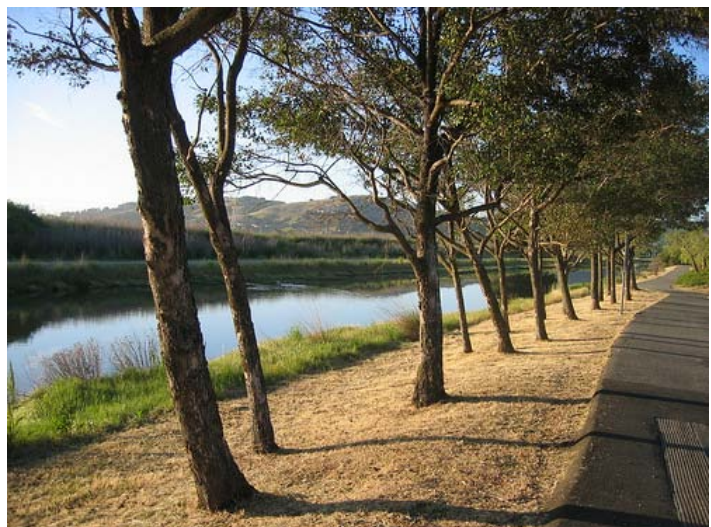
*Rational stewardship of environmental resources to provide the highest quality of life. Protection from and prevention of potential environmental health threats*

**2. Vibrant Economy**

*A healthy, independent, and sustainable economy that benefits all citizens*

**3. Public Safety**

*Provision of effective and sustainable public services and community design*



4. **World Class Education**  
*Provision of a breadth and depth of educational opportunities that challenge each student and trains the leaders of tomorrow*
5. **Transportation Options**  
*A variety of options available to all income, age and cultural groups*
6. **Housing Choices**  
*A variety of options available to all income, age and cultural groups*
7. **All People Have Worth**  
*Respect for all people that truly reflects equal opportunity*
8. **Aesthetic Quality**  
*Well-designed buildings with character*
9. **Cultural Richness**  
*Activities, structures, and districts that enrich religious, cultural, social and economic development*
10. **Positive Image**  
*Promoting and experiencing creative, innovative, and viable communities and region*

### *What Did the Public Tell Us During the Blueprint Planning Process?*

In January 2007 and March/April 2008, the Madera County Transportation Commission (MCTC) hosted public participation workshops regarding the “vision” and “values” for future growth and development within Madera County and the proposed Madera County Blueprint Land Use and Transportation Scenarios. Workshops were held in Madera, Chowchilla and in the foothill areas of Madera County.

The final exercise of each workshop was an interactive polling, or “clicker”, exercise. Each workshop participant was given a “clicker” for the purpose of voting on questions prepared by the Madera County Blueprint Team.

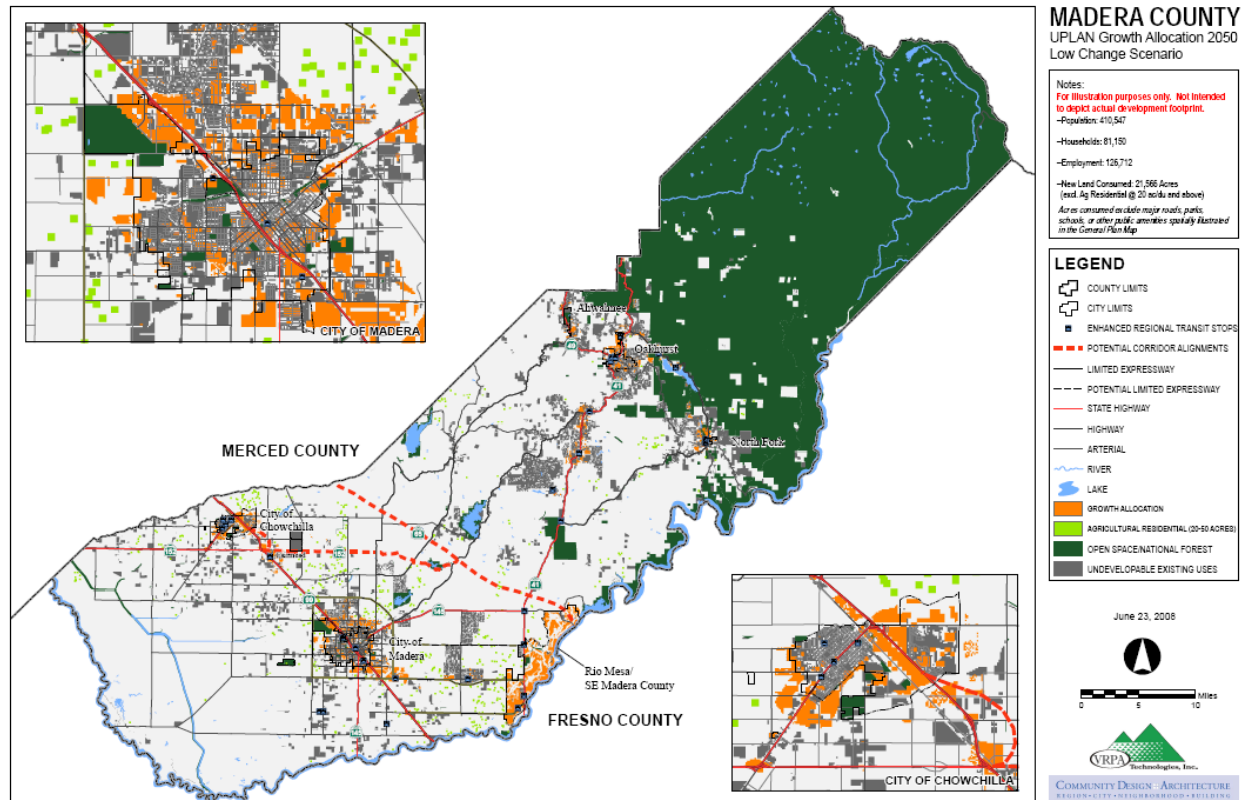


Responses in the Foothill areas of the County differed from responses provided by those residing on the Valley floor areas of the County. For the most part, the vision and values are generally consistent with those described above. Regarding the alternative scenarios, participants from the Valley floor communities and the foothill areas of Madera County favored the “Moderate Growth Scenario”. It is understood however, that clicker results are not statistically accurate since workshop participants did not represent a true cross-section of the Madera

County community, but only those who attended voluntarily given their particular interest in the future of the County.

### Action Plan & Implementation Strategy Specific to Madera County

Thus far, this report has looked at plans and strategies that can easily be implemented throughout the San Joaquin Valley as a whole. MCTC Policy Board feels that the Low Change Scenario of Growth Allocation 2050 best fits the Madera Region's vision. The map depicting the Low Change Scenario is shown below.



The low change scenario assumes that Madera County desires to implement some aspects of “smart growth” by the year 2050 without radically changing housing densities or transportation mode choices. As referenced in Appendix 6-B, the Low Change Scenario was developed as a variant of the Status Quo scenario wherein the demand for the different housing types would shift slightly towards higher densities, and lot sizes would be reduced by 15-20% for single-family and multi-family parcels. The transportation infrastructure was similar to the status quo, but an enhanced transit system based upon the existing regional transit network was utilized. Preservation of agricultural lands and environmentally sensitive land was given more consideration than under the Status Quo Scenario.

The Low Change Scenario provides for the following conditions:

- Status Quo densities are increased by 12%
- Highway 65 extends through the entire eastern portion of the county
- SR 152 extends easterly to future Highway 65
- Existing transit is expanded to increase connectivity throughout the county
- Density: 7.2 DU/Acre
- Housing Mix: Low Density - 11.5%, Medium Density - 68.5%, High Density - 20.0%

Estimated Resource Consumption for the Low Change Scenario is outlined below:

- Land Consumed – 17,502 acres of land will be consumed



- Agricultural Land Spared – 2,185 acres of agricultural land will be spared
- Population Density – 15.2 person/acre
- Water Consumption – 525,000 acre feet
- CO2 Emission – 419.48 thousand tons
- Megawatt Hours Consumed – 954,438

Balancing demand for single family homes with a good mix of housing types in the medium and high density range is important in planning for the most efficient use of both urban land and existing infrastructure. Balancing this demand creates compact neighborhoods, provides cost effective transit services and allows for a choice of residential types for a broader range of the population. One option for housing choices will be to maintain the availability and increase the variety of housing, while emphasizing an overall increase in housing density over time. This increase in housing density can include multi-family homes, single-family attached homes, mixed land use on the same parcels, cluster housing, as well as infill. Development projects that incorporate good urban design will further our transportation and mobility options ensuring that our future growth is walkable and bicycle-friendly and supports public transportation.

Land use development and transportation projects must incorporate strategies that will reduce our dependency on automobiles, as well as use energy efficient and environmentally friendly design. Poor air quality in Madera County and in the surrounding region lends itself to making future choices that will improve overall health. Increasing the



walkability of our communities will lead to increased opportunities for healthy mobility lifestyles, as well as improve air quality. Incorporating “greener” strategies into our future development will further improve our air quality while providing the opportunity decrease our energy consumption and CO2 emissions consistent with AB 32.

With Madera County’s agriculture production valued at \$1 billion annually, we must ensure that our farming/agricultural industry remains viable. We must respect the private property rights of the land owner to farm, or not to farm, while providing incentives to discourage farm land conversion for development. Farmer’s markets, roadside fruit stands, wine industry promotion, and other ancillary agricultural tourism uses such as bed & breakfast, restaurants and education need

to be encouraged to further add value to Madera County. Discouraging incompatible development both residential and non-residential within agriculturally zoned areas is essential to future growth in Madera County. Minimizing conflicts between residents and the farming industry can be accomplished by strengthening support for physical separators or buffer zones at agricultural/urban interfaces.

Madera County’s Regional Blueprint Vision includes building communities with educational, health care and cultural amenities. In order to create a thriving economy in Madera County, it will be necessary to increase the quality and diversity of job opportunities that are available to our residents. Supporting the expansion of education and training opportunities and increasing their accessibility to all area residents will foster shared economic prosperity. Madera County is comprised of unique communities that have individual identities that are rich in cultural history. It is imperative that we recognize the importance of these identities and seek to integrate them into our future growth. Art and culture should play an important role in the future planning and architectural design of our communities.

## Imagine the Possibilities for Madera County



The Implementation and Action Strategy recommended in this chapter, provides us with the opportunity to imagine a place where natural resources are treasured: the air is sweet and clean, lakes and rivers are crystal clear. Unique wildlife, vegetation and ecosystems thrive. Open space is protected and abundant. Water and land are used responsibly, so that they are preserved for future generations. Residential, commercial and public buildings and infrastructure enhance the region's environment, respecting the private property rights, value of wildlife habitats, critical waters and other natural treasures.

Just imagine a place where original farms and villages exist alongside 21<sup>st</sup> century cities. Traditional rural communities maintain their character and heritage. Rural development in the Valley floor area is compact, has clear boundaries, and respects the important role of agriculture in the regions economy. Parts of the region still feel untouched by the rapid growth of the last 100 years. As a result, the focus of Blueprint principles should primarily address growth within the Valley floor areas of Madera County. The mountain and foothill areas of Eastern Madera County will continue to grow as they have in the past, providing vital services for recreational activities and a quiet rural atmosphere for its residents.

**Welcome to one of the world's most inviting regions.**  
**Welcome to Madera County, Year 2050**

Now we can imagine a place where people can live close to their jobs, schools, stores, restaurants and recreational areas. Schools, hospitals, public transportation systems, parks, museums, and other cultural amenities are easy to reach and reflect the character of the communities that they serve. Street-level retail shops and restaurants form a welcoming space. Neighborhoods have charm and character. People see family, friends and co-workers on a regular basis, creating a community.

We can also imagine a place where travel within and between communities is efficient and dependable. Residents and visitors have choices for how they move within the region and to other locations. These choices save travel time, allowing people to spend more time with family and friends. Businesses can easily access national and global markets with their products and services. They are able to expand their reach worldwide. The Valley and Madera County must compete globally, now *we can imagine* the possibilities.

## Looking Back: History of Madera County as Part of the San Joaquin Valley

### The SJV Region at a Glance — 2000

**Counties:** Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare

**Total area:** 27,280 square miles; 17% of the land area of California

**Total population:** 3.3 million; 10% of California's population

**Ethnic composition:** 53% white, 34% Hispanic, 8% Asian/Pacific Islander, 4% African American, and 1% Native American

**Age distribution:** 0-9 years old, 18%; 10-19 years old, 16%; 20-44 years old, 36%; 45-64 years old, 19%; 65+ 10%

**Adult educational attainment:** 66% are high school graduates; 14% have Bachelor's degree

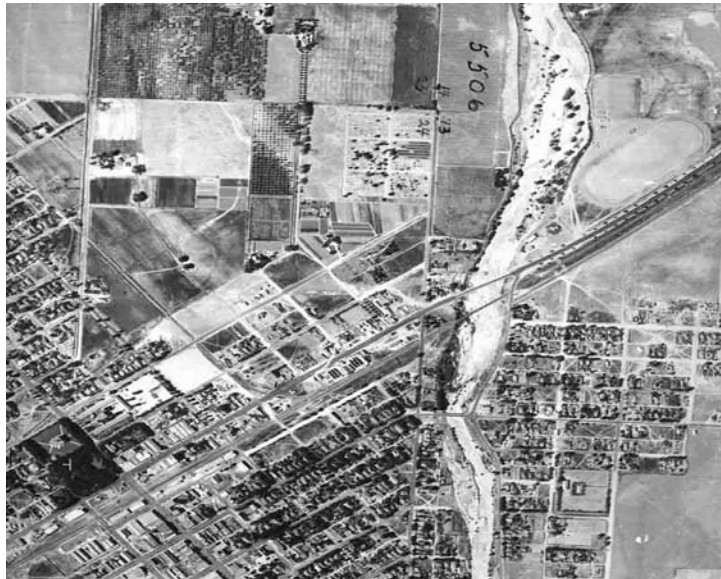
**Source:** Great Valley Center. *The Economic Future of the SJV: Growing a Prosperous Economy that Benefits People and Place*. 2000

The 27,280 square mile San Joaquin Valley, part of California's Central Valley, is home to 5 of the 10 most agriculturally productive counties in the United States, as measured by value of total annual sales.

Since the middle of the 20<sup>th</sup> century, the San Joaquin Valley has transitioned from an area of small towns and agricultural fields to a bustling metropolitan region. The region's growth has been a product of several factors: its climate, land, and other natural resources; its lower cost of living and business-friendly environment; and strategic investments in education, transportation, technology and other infrastructure.



Madera County was formed in 1893 and is located in the exact center of California. As such, it is the heart of California and the "Passage Way to the Sierras." It is considered by many to be the perfect location. Madera County residents have easy access to Yosemite, Kings Canyon and Sequoia National Parks as well as access to the Pacific Coast, Bay Area and Southern California. Madera County encompasses 2,153 square miles. Of this total area, 2,136 square miles is land and the remaining 17 square miles is water.



Madera County shared in the beginnings of the San Joaquin Valley life. Land that is now Madera County was traversed by fur trader, explorer and gold seeker. Growth of the territory progressed in waves. The first small wave included explorers, soldiers, trappers and Spanish speaking settlers with Mexican land grants. Immigrants composed the second wave of growth which followed the discovery of gold in the area.

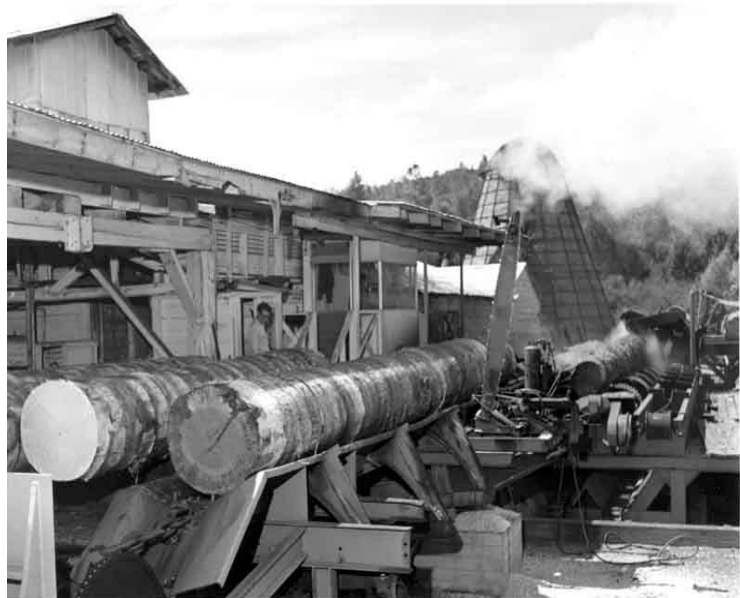


Madera history, before and after the formation of the county in 1893, has been determined by its three different physical areas and its consequent resources; First, the belt of foothill region in which gold was discovered and the first village established for the accommodation of homesteaders on the only available water supply; secondly, the plains area, with but scant water supply under natural conditions, which could furnish only pasture until such time as electric power warranted pumping or highly capitalized water storage furnished gravity water to the farmer; and thirdly, the higher Sierras, with their timber and mineral and opportunities for recreation and the accommodation of tourists. "Madera" is the Spanish word for "lumber", the first industry in the County. From 1899 to 1931, the Madera Sugar Pine Lumber

Company operated miles of narrow gauge railroad track. During that time, nearly one and a half billion board feet of lumber were harvested from the forests. Five wood burning Shay locomotives hauled massive log trains to the mill over the extensive rail network. Part of the historic Sugar Pine Railroad remains as a tourist attraction and draws 50,000 visitors each year.

Agriculture holds the highest importance in Madera County today. As an industry, Madera County agriculture has a production value of \$1 billion annually. That works out to be \$3 million per day.

Of the 250 crops grown in this agriculturally productive region of the San Joaquin Valley, 80 crops are grown in the boundaries of Madera County. As remarkable as the productivity is the diversity of the product. The county's top ten products show this diversity. Ranked by dollar value, Madera County's top ten agricultural products are: almonds, grapes, milk, replacement heifers, pistachios, alfalfa, cattle & calves, poultry, cotton and nursery stock.



The commodities of the county are exported to destinations around the world. We are ranked first in the production of figs, second in the production of raisins and grapes and third in the production of pistachios.

## Key Challenges

### Why it's important to act now

- Previous Trends – San Joaquin Valley
  - 74% of the 115,000 acres of land urbanized in the Valley from 1990-2004 was agricultural land
  - 70%+ of all urban development occurred on prime, unique, or statewide important farmland in 5 Central Valley counties
  - 57% of Valley residents report they or a family member have asthma
  - \$3 billion/year spent on health problems caused by air pollution
  - 118% increase in traffic delays in Fresno and Kern counties from 1999-2002
  - 7.9% average Valley unemployment rate is higher than the state average and among the highest in the U.S.



- Previous Trends – Madera County
  - Loss of high-quality agricultural land
  - Increasing health problems due to poor air quality
  - Increased traffic congestion

## If We Don't Act...Previous Trends Continue to 2050

### Population growth

The San Joaquin Valley faces major challenges. One concerns how to handle future growth. Population in the Valley is expected to nearly triple by 2050, from 3.6 million to 9.4 million people, the equivalent of adding 11 new towns the size of Fresno to the area.

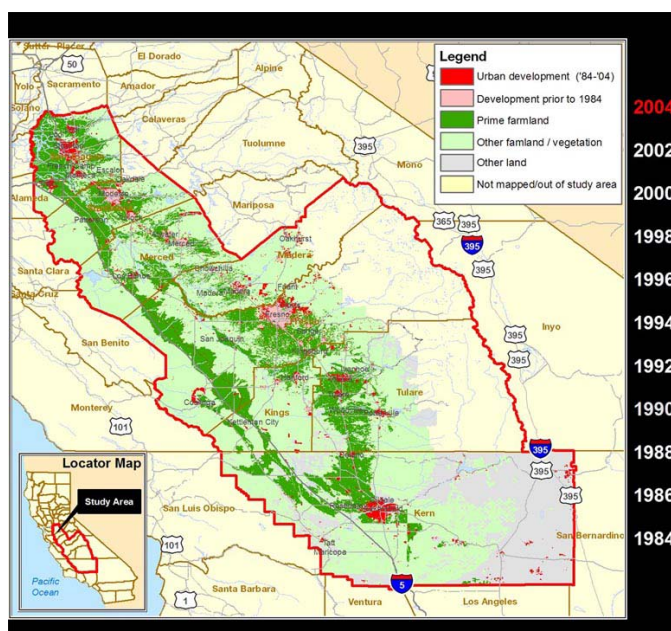
As of January 1, 2007, Madera County had a population of 148,721. This was a 2.4% increase since January 1, 2006. The following table shows the projected population for Madera County thru the year 2050.

Year	2000	2010	2020	2030	2040	2050
Madera County	124,696	162,114	212,874	273,456	344,455	413,569

This population growth will place increasing pressure on our County's unique and fragile environment along with our transportation system.

### Development on agricultural land

Productive agricultural land is a finite and irreplaceable natural resource. Along with the food and fiber products that Madera County's agricultural land provides, it also supplies products which have little market value but substantial cultural and ecological importance. These values can be both immediate and long-term. The immediate values are social heritage, scenic views, open space and community character. The long-term environmental benefits include wildlife habitat, clean air and water, flood control, ground-water recharge and carbon sequestration. By 2040, it is projected that 34% of high-quality farmland will be developed in Madera County that will equate to roughly 40,000 acres of lost farmland.



### Traffic congestion

Traffic congestion, a condition of traffic delay, occurs when the number of vehicles using a roadway exceeds the design capacity. Rapid growth in urban areas contributes to traffic congestion as the area grows faster than the overall capacity of the transportation system. The resulting slow-downs negatively impact the residents and the businesses through impacts on air quality, quality of life and business activities. To date, 69% of our increase in traffic can be attributed to factors associated with sprawl. Road-building attempts to ease congestion have only been temporarily effective. Transportation costs, for the average American, outweigh health care, education and food costs.

## If We DO Act...A Positive Outlook for 2050

Positioning Madera County as an economically viable and vibrant county through a multifaceted and diversified economic base is our goal. We want to ensure that Madera County is business friendly, and the right choice for quality of life.

In using our Blueprint planning process in Madera County, we have learned that our community does not want to continue on its current path of development, but wants to see our future growth preserve our precious environmental and agricultural lands, focus development in urban centers and connect these centers with transportation corridors that provide choices.

Through workshops and live-interactive surveys, the residents, business leaders and elected officials of Madera County worked together to envision a future that is overwhelmingly different from where we are today. A future where Madera County is recognized as a great place to live, learn, work and play. A future where people with diverse backgrounds and talents come together to enhance an economy that rivals the greatest cities. A future where the natural beauty and other amenities that are unique to our region are enjoyed by all. A future where we consume less land, preserve more precious environmental resources, create more distinctive places to live and provide more travel choices.



A future that reflects four key themes: Conservation, Countryside, Centers and Corridors.

### Conservation

#### Enjoying Madera County's most precious resources – land, water, air and wildlife

Madera County's natural settings are precious to all of us. Within a relatively short drive, we can enjoy the beauty of several national parks, hike or bike the numerous trails available, or walk along the Pacific Coast beaches.



As a community, we seek to ensure that our natural resources are available for our children and grandchildren. We want them to be able to access and enjoy our beaches, parks, trails and recreation areas. We want them to see how irreplaceable wildlife, plants and ecosystems can thrive alongside a dynamic economy. We never want them to worry whether they will have clean air to breathe and clean water to drink.

We will significantly expand the amount of land preserved for posterity, including our critical lands and water. These additional conservation lands will create many new spaces for recreation, wildlife and groundwater recharge. Conservation lands will be connected in a necklace of "green" corridors

throughout the region that preserve natural ecosystems and provide better mobility for wildlife and recreational travelers. Growth in water consumption and greenhouse gas emissions will be reduced so that even as we add new residents to our mix, our overall "footprint" on the environment will be limited.

## Countryside

### Maintaining Madera County's heritage of agriculture and small villages

Agriculture will remain a viable option for large swaths of our region's land. Local farms will continue to provide a significant portion of our food supply, as well as valuable exports to other states and nations.



Farms, small towns and undeveloped countryside will remain a key element for Madera County's landscape. They will provide choices for where people live and wide open spaces for people to enjoy. These countryside areas provide the soft edges to the urban areas of our community.

Rural communities will enjoy welcoming retirees, visitors and families. Our small towns will combine a relaxed quality of life with easy access to world-class urban centers throughout the region. With our modern transportation and communication systems, easy access to markets in other regions, state and nations will be available.

## Centers

### A variety of places to live, work and play

Distinctive cities and towns will provide choices for how our residents live. Communities will meet the needs of residents, from those who want to live in a downtown like setting to those who desire a five-acre parcel in the country.

The area's most vibrant centers will provide a mix of residential and commercial development. Housing options will be available for all residents of all income levels. Desirable, attractive, compact and convenient shopping will be mainstream.

Rich architectural details, urban parks, and commercial and cultural amenities will create a unique feel for each center. Most urban areas will have fewer single-family homes and an increased mix of apartments and condominiums. Schools, jobs, shopping, health care facilities and cultural amenities will be located in close proximity to residential areas. Residents will feel safe and secure and will see Madera County as a place where they can raise families and retire.



## Corridors

### Connecting our region with more choices for how people and freight move

Transportation corridors will provide the glue that links our communities to each other as well as to the rest of the world. A wide range of travel options will be available to the residents and businesses of our area.

People in the most compact urban centers will be able to walk, bicycle or take a bus to school, to work or to shop. People moving between centers will be able to drive or use transit or passenger rail systems. Greater choices and shorter trips will help reduce congestion, save time and money and alleviate stress.



## How We Get There: Action Plan & Implementation Strategy

### Action Plan & Implementation Strategy

Through our Blueprint planning process, we have identified six principles that will guide future growth decisions for Madera County, as well as the actions necessary to implement each principle:

- ✓ PRESERVE open space, recreational areas, farmland, water resources and regionally significant natural areas.
- ✓ PROVIDE a variety of transportation choices.
- ✓ FOSTER distinct, attractive and safe places to live.
- ✓ ENCOURAGE a diverse, globally competitive economy.
- ✓ CREATE a range of obtainable housing opportunities and choices.
- ✓ BUILD communities with educational, health care and cultural amenities.



#### ***Preserve open space, recreational areas, farmland, water resources and regionally significant natural areas***

Preserving and enjoying our natural resources is what matters most to our citizens. This is the foundation of our shared regional vision – the principle that above all we must follow if our region is to become the place where our children and grandchildren would want to live in 2050.

##### **1. Identify the “must save” lands.**

The centerpiece of the regional vision is a “greenprint,” which is a plan for an inter-connected network of conservation lands, open space, and recreational areas.

##### **2. Invest in preserving these critical lands.**

Dedicated public funding will be one way to purchase lands for this “greenprint.” However, conservation also can occur through private investment. Incentives can encourage landowners to conserve greenprint lands and other open space, and to set aside lands for preservation as part of major development projects.



##### **3. Ensure that residents can easily access recreational areas.**

It is not enough to conserve lands; we also must make sure we can access and enjoy nature. Communities will be designed so that the vast majority of our residents are within a short walk or bike ride from a green space. Appropriate transportation access also will be needed to recreational areas located outside of the urban areas.

**4. Develop in a sensitive manner.**

The environment will be a critical factor in future decisions about public and private investment in our region. Development should focus in existing centers and other areas that do not pose significant risk to environmental resources and that reduce the overall land required to support future growth. Transportation corridors should impact sensitive lands only when absolutely necessary to connect centers, and then only when access to these corridors can be restricted to avoid drawing even more growth into the area. The design of buildings and infrastructure also should help reduce the region's water consumption, greenhouse gas emissions, and other "footprints" on the environment.

**5. Encourage sustainable agriculture.**

Agriculture should remain a viable option for our land to provide part of our food supply and to serve export markets. Local governments, land owners, and farmers should work together to promote the importance of agriculture, to retain suitable lands in agriculture, and to ensure that farming remains economically and environmentally viable.



**6. Plan for future water needs.**

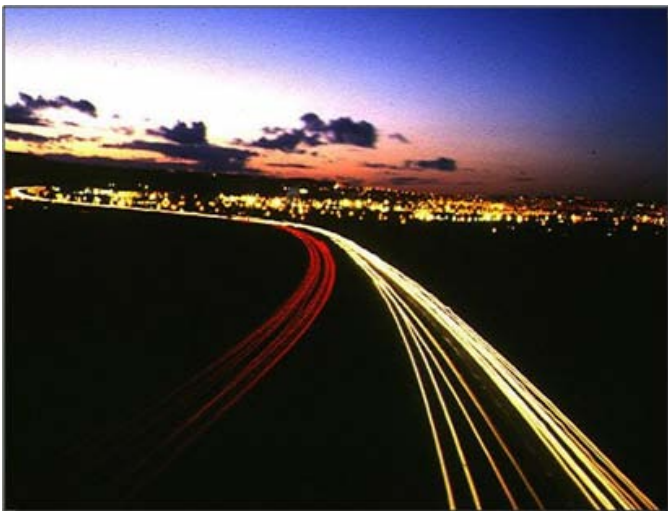
The region also should develop strategies for providing sufficient water and ensuring that water supply is in place to support new development. A regional water resources plan should include strategies for reducing consumption, sharing available water sources, and developing alternative water sources.

*Provide a variety of transportation choices*

Transportation is the key factor that will shape urban and rural development around the greenprint. The region's transportation investments will support the shared regional vision by providing:

**1. Connectivity between centers and to other regions.**

Existing or new corridors will connect the city centers within the region. Where possible, the preference should be to enhance existing corridors, but new corridors may be needed where there are "gaps" in this system. It also will be important to work with the state to enhance the corridors that connect Madera County to other parts of California, other states, and other nations, using a mix of road, rail, water, and air.



**2. Congestion relief.**

Madera County's residents desire to spend less time traveling, and our businesses are looking for ways to reduce the cost and improve the reliability of moving goods. Our regional transportation strategy will include ways to reduce traffic delays, such as eliminating bottlenecks and creating more travel options.

### 3. Choices for moving people and goods.

Residents of Madera County envision a regional transit system that connects existing and future urban centers in all parts



of the region. They also envision local light rail, street car, or bus rapid transit systems that connect neighborhoods with the regional transit service. They seek to expand the use of freight rail, and high-speed passenger rail, to move people and freight between Madera County and other regions. They also desire a system of greenways and trails for walking or bicycling. A regional transportation plan should identify where these choices are most feasible, and set priorities to implement these investments.

### 4. Concurrency with new development.

Local governments should work with developers to implement needed roads and transit systems in parallel with anticipated growth. This balancing of growth and infrastructure should occur at both local and regional levels to better address impacts of growth that spill over city or county lines. Regional standards can help ensure that development in one county or municipality does not adversely impact other counties or municipalities.

### *Foster distinctive, attractive and safe places to live*

Centers ranging from villages to towns to cities will be the region's focal point for future development. Our region already offers many choices for where and how we live. How can we expand these options and create new ones in the future?

#### 1. Enhance existing communities.

Each community should develop according to the size and character envisioned by its residents, consistent with the shared regional vision. Some communities may choose to create compact developments that can accommodate more residents; others may redevelop and redesign downtowns and central business districts to be more inviting; still others may remain much the same as they are today, whether they are rural communities or urban centers.

#### 2. Create new centers.

A small number of new centers may be created at locations that are suitable for compact development. These locations should reflect market demand, avoid critical environmental lands, and be connected to existing or planned transportation corridors.

#### 3. Encourage creativity.

The development of our cities, towns, and other centers should reflect the diversity of our people and our economy. Incentives could be provided for creative design practices; developing mixed land uses, creating more compact centers located close to regional transit stations and expressway interchanges; and implementing "green" community designs that support a reduced urban and environmental footprint.



#### 4. Meet the unique needs of key population groups.

The region should develop centers that appeal to people of all ages and walks of life. Some centers may be family friendly with good schools and child care; others may appeal to active retiree populations by providing accessible health care and recreational and cultural amenities.

**5. Provide peace of mind.**

From the smallest neighborhood to the largest city, residents of each community seek to feel safe and secure. The public and private sectors will consider public safety, public health, and emergency evacuation needs in community design decisions.

**Encourage a diverse, globally competitive economy**

Madera County's economic vision focuses on building an innovative economy and creating higher-wage jobs to complement its historic strengths in tourism, and agriculture. The region's built environment will support this economic vision through efforts to:

**1. Develop centers that will function as hubs of economic activity.**

Jobs and housing can be spread throughout the region, enabling people to live close to their jobs. Our plans will ensure that sufficient land is designated for economic centers with appropriate transportation and other infrastructure already in place.

**2. Provide connectivity to global markets.**

The regional transportation plan should set priorities for investing in the highway, rail, water, aviation, and communication systems that link Madera County businesses to customers in other states and nations.

**3. Ensure access to key economics assets.**

The regional transportation plan also should identify needs for efficient transportation access to key economic assets such as:

- Gateways for commerce and visitors,
- "Idea factories" that generate new research and products,
- Key gathering places for business people and creative leaders,

**4. Develop creative communities.**

Our communities should provide a stimulating mix of educational, cultural, and environmental resources that will attract and retain highly skilled workers.



*Create a range of obtainable housing opportunities and choices*

The region's housing stock is becoming less affordable due to rapid price increases and limited wage gains. Housing is increasingly out of reach not just for the working poor, but also for the teachers, nurses, police, firefighters, and other public servants who are so essential to our communities. Obtainable housing for residents from every walk of life is integral to our future. We will work together to:



**1. Set regional goals**

How to make housing more obtainable in the region for both owners and renters and how to maintain this affordability over time.

**2. Educate citizens about obtainable housing.**

Better understanding about affordable housing will help debunk myths, relieve fears, and otherwise reduce opposition to placing more obtainable housing in communities.

**3. Balance the geographic distribution of obtainable housing.**

All types of communities, not just urban centers, should provide an appropriate share of the region's obtainable housing. Where possible, the design of

obtainable housing should be integrated with market rate housing in the communities in which it is located. Without a diverse array of suitable housing locations, workers will be forced to live further from their jobs.

**4. Provide incentives for obtainable housing.**

Dedicated public funding will continue to be one source of investment in obtainable housing. Creative solutions can help leverage public funding, such as community land trusts, developer incentives, and co-location of housing for essential service workers on school properties and other public lands.

*Build communities with educational, health care, and cultural amenities*

Madera County's people are its most significant asset. Today's society is the most mobile in history, and education, health care, and cultural amenities all play a critical role in attracting and retaining workers, retirees, and visitors. In implementing the shared regional vision, Madera County will strive to:

**1. Encourage development standards that promote walkable neighborhoods.**

**2. Coordinate the location of school sites**

with the location of new residential development, as well as the location of parks, recreational areas, and transportation services. Create safe routes for students to walk and ride bicycles to schools.

**3. Provide access**

to healthcare, social services, child care, elder care, and other family support services at locations throughout the region.

**4. Create, preserve, and provide access**

to museums, performing arts, public art, historic properties, and other cultural amenities at locations throughout the region.



## Working Together: Staying Focused on a Common Goal

### What must we do next?

#### 5 Regional Actions

The decisions that we make today about growth will shape Madera County's future over the next 50 years. The public and private organizations who have participated in this planning process commit to the following five actions to initiate implementation of the shared regional growth vision.

- **KEEP WORKING TOGETHER**

We will continue to meet as regional leaders to review progress toward the regional vision, and begin the hard work of carrying out key actions. The San Joaquin Regional Blueprint Planning Committee will continue to meet on a regular basis to discuss the growth issues and policies. We will also establish a forum for public, private and civic organizations representing all disciplines – environment, transportation, land use, economic development, housing, education, health, safety and others to meet on a continuing basis.

- **DEVELOP A REGIONAL "GREENPRINT"**

In painting the canvas of our region for the next 50 years, the first colors we will use are green and blue, for our critical lands and waters. We will develop a strategy to effectively weave together Madera County's environmental and urban systems to sustain, protect, and provide access to our exceptional natural resources. State and local governments, landowners, and environmental interests will define the "greenprint" of critical lands and waters, and use public funding and private incentives to set aside these lands, waters, other open space, and recreational areas. In doing so, we will preserve the best of our region for our children and grandchildren.

- **DEVELOP REGIONAL TRANSPORTATION CORRIDORS**

We next will paint our region gray, as we develop the transportation and other infrastructure that connect our city centers to each other and to other regions, states, and nations. Our transportation corridors will link our centers into a region, and, together with the greenprint, will establish the broad framework for where future growth will occur. We will develop a comprehensive, long-range regional transportation plan that will enhance connectivity, relieve congestion, and expand travel choices. We will give particular emphasis to developing regional transit corridors that can serve as the future backbone for travel, much like the major highways do today. To do so, we will expand planning activities across all jurisdictions and across all modes—highway, rail, water, air, and space.

- **UNLEASH CREATIVITY**

We then will use the complete palette of colors to paint our region with distinctive neighborhoods, villages, towns, and cities. Through market forces and incentives, we will encourage our local governments and developers to imagine and then implement creative solutions for reducing sprawl, promoting compact development, designing distinctive places, making housing more affordable, and growing economic centers of excellence. We will begin the detailed process of revising regional and local plans, regulations, and processes to convert these dreams into reality.

- **MEASURE, INSPECT AND IMPROVE**

Finally, we will regularly monitor the progress of the region toward implementing the shared regional vision, determine where we are falling short, and make the midcourse corrections necessary to keep us on track. We will work with other partners to develop an annual regional progress report, and periodically convene regional leaders to make adjustments to the vision and related plans.

## Appendix 6-A Modeling the Alternative Scenarios Using UPLAN

The following section provides additional detail and specifics regarding development of the UPLAN modeling process applied to analyze the four land use and transportation scenarios as referenced in this chapter.

### Land Use Categories

The various land use categories in the General Plans for each of the cities and the County were compared to the 15 category definitions referenced in Table 6-1 in an effort to best match their definitions to the definitions listed in the table.

**Table 6-1 - UPLAN Land Use Definitions**

Residential Uses				
General Plan Residential Land Use Designations	Density Range (units/acre)	Lots Size Range Gross (Sq.Ft.)	Average Lot Size Gross (Sq.Ft.) *	
Very Low Density	<2	> 22,000	75,000	
Low Density	2.01-6.5	6,700-22,000	10,750	
Medium Density	6.51-12.00	2,900-6,700	5,500	
High Density	>12.00	2,000 -2,900	2,400	
Mixed Use	>12.00	2,000-2,900	2,400	
Employment Uses				
General Plan Residential Land Use Designations	F.A.R.*	Density Range (jobs/acre) <sup>+</sup>	Square (building) Employee*	Feet per
High Density Commercial	0.4	36.00-48.00	400	
Low Density Commercial	0.2	15.00-35.99	500	
Industrial	0.2	10.65	825	
Mixed Use	0.4	36.00-48.00	400	
Other Uses				
Agriculture		Urban Reserve		
Public Lands and Open Space		Government Jobs		
Water Bodies		Education		
+ Density Ranges are based on SJVGRS project assumptions				
* Columns in Orange are UPLAN inputs				

The allocation categories were matched to the different General Plan categories. In UPLAN 2.1, the allocation priority is fixed with the first allocation being Industrial growth and the last being Very low Density Residential. The sequence primarily allocates higher intensity uses first, then moves down to lower intensity uses. In the Madera County Blueprint Process, the Consultant Team limited the allocation to the respective General Plan categories. However, it did allow for higher intensity commercial growth allocated to lower intensity uses and vice versa. This was done with the knowledge that high intensity growth will be allocated first and if there was extra growth still to be allocated and available are under that category; low intensity commercial could fill that in order to avoid gaps in development. A similar approach was used in allocating low and medium density residential growth as well. Only the Urban Reserve category was allowed to accept residential and employment uses. Table 6-2 identifies the allocation uses that were assigned to the different General Plan categories.

**Table 6-2 - UPLAN Land Use Allocation**

Value	General Plan Value Definition	UPLAN LAND USES TYPE						
		Industrial	Com High	Res High	Com Low	Res Med	Res Low	Res V Low
1	Agriculture							X
2	Industrial	x						
3	High Density Commercial		x		x			
4	Low Density Commercial				x			
5	High Density Residential			x				
6	Medium Density Residential			x		x		
7	Low Density Residential					x	x	
8	Public Lands & Open Space							
9	Water Bodies							
10	Urban Reserve	x		x	x	x	x	
11	Planned Development		x	x	x	x		
12	Mixed Uses		x	x				
13	Very Low Density Residential						x	
14	Government Jobs							
15	Schools							

**Selection Criteria for Existing Developable/Non-developable Parcels**

■ **Developable Land**

**Criteria (1): Rural Residential Land**

In the County area, the parcels considered Rural Residential that are larger than 5 acres were allowed to be subdivided while those smaller than 5 acres are considered 'not-developable'. This rule applied outside of any city's sphere of influence areas. If the Rural Residential falls inside of the sphere of influence, it will be considered as *re-developable* if the General Plan land use designation was different than Rural Residential.

**Criteria (2): Non-residential Urban Lands I**

**STATUS QUO & LOW CHANGE SCENARIOS:** For non-residential uses in urban areas, parcels were selected where the non-residential density was 50 percent or less than the permitted General Plan Floor Area Ratio (FAR) and if the building's age was available and was older than 25 years. If the existing use fit into this criterion, it was reviewed considering the classification parameters of Criteria 3 below.

**MODERATE CHANGE SCENARIO:** For non-residential uses in urban areas, parcels were selected where the non-residential density was 70 percent or less than the permitted General Plan FAR and if the building age was available and was older than 10 years. If the existing use fit into this criterion, it was reviewed considering the classification parameters of Criteria 3 below.



*MAJOR CHANGE SCENARIO:* For non-residential uses in urban areas, parcels were selected where the non-residential density was 80 percent or less than the permitted General Plan FAR and if the building age was available and was older than 1.25 years. If the existing use fit into this criterion, it was reviewed considering the classification parameters of Criteria 3 below.

*Note: All parcels that were classified as Criteria 2 but did not meet Criteria 3 were marked as 'Not Developable'.*

**Criteria (3): Non-residential Urban lands II (Infill)**

Parcels meeting Criteria (2) and having an improvement value that is equal to, or less than, the land value as recorded by Assessor's parcel data were identified as developable land.

**Criteria (4): Re-developable Residential Parcels (Infill)**

*STATUS QUO & LOW CHANGE SCENARIOS:* Parcels identified with an improvement value that was less than 50 percent of land value (likely an unused building) and were greater than 1 acre in land area in urban areas were identified as residential uses that can redevelop.

*MODERATE CHANGE SCENARIO:* Parcels identified with improvement value is less than 70 percent of land value, and were greater than 0.75 acre in land area in urban areas were identified as residential uses that can redevelop.

*MAJOR CHANGE SCENARIO:* Parcels identified with improvement value is less than 80 percent of land value, and WERE greater than .50 acre in land area in urban areas were identified as residential uses that can redevelop.

**Criteria (5): Vacant Land**

All parcels that were identified as Vacant.

**Criteria (6): Developable Agricultural Land**

All Agricultural Land within City Spheres of Influence.

***Non Developable Land***

**Criteria (7): Non Developable Residential Parcels**

All Residential uses in Urban Areas that did not meet Criteria (4) or Criteria (1)

**Criteria (8): Public Uses**

All Public Uses, Parks, Schools, Institutions, Roads and ROW easements.

**Criteria (9) Non Developable Commercial Parcels**

All employment uses (Commercial/Office/Industrial) that do not match Criteria (2) and (3).

**Criteria (10) Proposed Developments**

All proposed developments collected from local jurisdictions and available in Assessor's parcel data.

**Criteria (11): Preserved Lands**

All agriculture land, open space, and water bodies that are classified as agriculture land, open space, conserved lands and water bodies in the General Plans.

## Appendix 6-B Analyzing the Alternative Scenarios

This appendix provides details regarding each of the alternative scenarios analyzed using UPLAN software, as well as specifics regarding consideration of urban area attraction priorities, prime farm lands, a review of alternative parameters applied to each scenario during the modeling process, and results of the evaluation parameters comparing the benefits of each of the four scenarios.

### Urban Area Attractors

The UPLAN model allocates housing and employment based upon ratings assigned to specific attractors and discouragers. The urbanized areas of different cities and communities (Spheres of Influence) were utilized as attractors to growth. However, the priority of attraction was varied to simulate the different levels of attractiveness and real world trends. Eight areas were utilized:

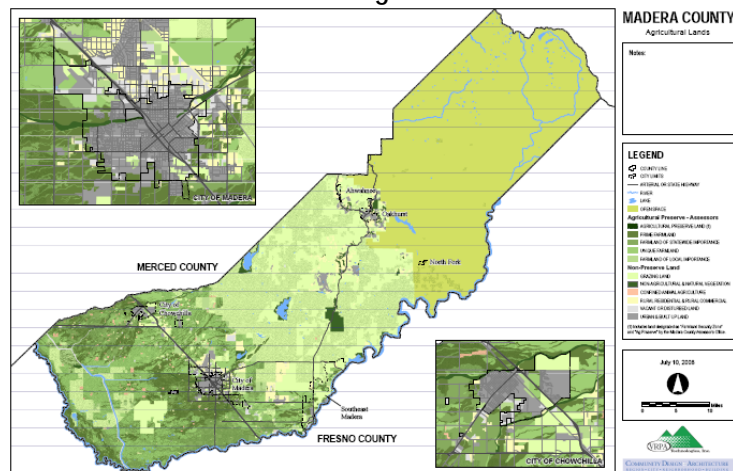
- |                       |                                  |               |
|-----------------------|----------------------------------|---------------|
| 1) Rio Mesa Area      | 4) Madera Community College Area | 7) North Fork |
| 2) City of Madera     | 5) Fairmead                      | 8) Ahwahnee   |
| 3) City of Chowchilla | 6) Oakhurst                      |               |

The prioritization of these areas was accomplished in consultation with the Blueprint Roundtable and was modified across the different scenarios (*reference Table 6-1*). Primarily the most attractive areas were Rio Mesa and the City of Madera, whereas North Fork and Ahwahnee were the least attractive.

### Prime Agricultural Land Discouragement

The data collected from the State about prime agricultural land was combined with the assessor's data identifying preserved agricultural land to create a layer of high quality farmland on which new growth was severely discouraged. Figure 6-2 provides a view of agricultural lands within Madera County based upon the sources identified above. Furthermore, local inputs about prime farmland west of highway 99 lead to restricting new growth close to highway 99 and in pocket of areas with poor agricultural land west of the highway.

**FIGURE 6-2 - Prime Agricultural Lands**



**Table 6-3 - Madera County Blueprint Alternative Parameters**

PARAMETERS		Status Quo	Low Change	Moderate Change	Major Change												
1	Demographic Shift in Housing Share	(82150 HH)	(82150 HH)	(82150 HH)	(82150 HH)												
	Very Low	0.5% (1)	0.5%	0.5%	0.25%												
	Low	11% (1)	11.0%	9.0%	3.25%												
	Medium	75.75% (2)	68.5%	70.5%	66.50%												
	High	12.75% (2)	20.0%	20.0%	30.0%												
2	Change in Lot Sizes																
	Very Low	871,200sf (20 ac)	871,200sf (20 ac)	871,200sf (20 ac)	2,178,000sf (50 ac)												
	Low	43,560sf (1 ac)	43,560sf (1 ac)	43,560sf (1 ac)	217,800sf (5 ac)												
	Medium	7,000sf (0.16 ac)	5,600sf (.13 ac)	4,700sf (.11 ac)	4,300sf (.1 ac)												
	High	3,500 (0.08 ac)	3,000sf (.07 ac)	2,200sf (.05 ac)	1,700sf (.04 ac)												
3	Persons Per Household	3.24	3.24	3.24	3.24												
	Employees Per Household	1	1	1	1												
4	Demographic Shift in Employment Share	(82150 jobs)	(82150 jobs)	(82150 jobs)	(82150 jobs)												
	Industrial	22%	22%	25%	28%												
	Commercial Low	63%	63%	52%	44%												
	Commercial High	7%	7%	15%	20%												
5	Change in Intensities																
	Industrial	0.2 FAR (825 sf/emp)	0.22 FAR	0.25 FAR	0.3 FAR												
	Commercial Low	0.2 FAR (500 sf/emp)	0.25 FAR	0.25 FAR	0.25 FAR												
	Commercial High	0.4 FAR (400 sf/emp)	0.4 FAR	0.45 FAR	0.5 FAR												
6	Spatial Shift in Jobs and Households (1=most attractive, 6= least attractive)	Jobs (priority)	HH (priority)	Jobs (priority)	HH (priority)	Jobs (priority)	HH (priority)	Jobs (priority)	HH (priority)								
		I*	C*	MH*	L*	I	C	MH	L	I	C	MH	L				
		Ahwahnee	6	6	6	6	5	4	5	5	5	4	5	5			
		Chowchilla	3	4	3	4	3	3	3	3	2	2	2	2			
		Fairmead	3	4	4	4	3	4	4	4	3	3	3	3			
		Madera City	2	2	2	2	2	2	2	2	1	1	2	2			
		Madera CC	4	3	2	3	2	2	2	2	2	2	2	2			
		North Fork	6	6	6	6	6	4	5	5	6	5	6	6			
		Oakhurst	5	5	5	5	4	4	4	4	4	3	4	4			
		Rio Mesa	1	1	1	1	1	1	1	1	1	1	1	2			
7	Transportation Enhancements	New Freeway Ramps				Regional Transit Network (RTN)				RTN, BRT routes				RTN, BRT, LRT routes			
						Enhanced Existing Transit				possible BRT on 99 & 41				possible BRT on 99.41. Transit upto Oakhurst; LRT from Rio Mesa into Fresno			
8	Change in General Plan	No Change. Used old GP for Madera City and Chowchilla				Use new GP for City of Madera and Chowchilla				Use new GP for City of Madera and Chowchilla				Use new GP for City of Madera and Chowchilla			
9	Infill Consideration	Urban Non Res: <50% of GP FAR & >25 yrs; Improvement Value =< Land Value				Urban Non Res: <50% of GP FAR & >25 yrs; Improvement Value =< Land Value				Urban Non Res: <70% of GP FAR & >10 yrs; Improvement Value =< Land Value				Urban Non Res: <80% of GP FAR & >1.25 yrs; Improvement Value =< Land Value			
		Urban Res: Imp Value =< 50% of Land Value & Land Area >1 Acre in Urban Areas				Urban Res: Imp Value =<50% of Land Value & Land Area >1 Acre in Urban Areas				Urban Res: Imp Value =<70% of Land Value & Land Area >0.75 Acre in Urban Areas				Urban Res: Imp Value =<80% of Land Value & Land Area >0.50 Acre in Urban Areas			
	Demand Characterization	Status Quo				Demand for unit types stays the same				Shift to higher density				More shift towards attached Ag/forest & rural are less dense. Attached and detached are more dense			
		Status Quo				Lot size decreases				Lot size decreases							

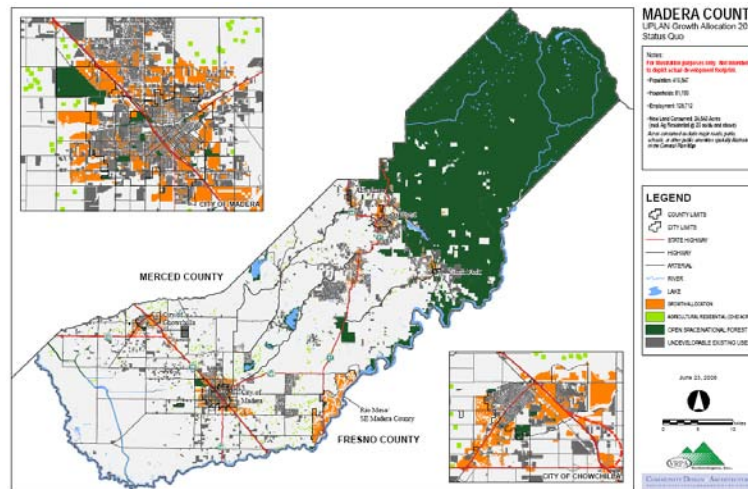
\* I = Industrial  
C = Commercial  
MH = Medium & High Density Residential  
L = Low Density Residential

**Alternative Scenarios**

■ **Status Quo**

This scenario (reference Figure 6-3) was to evaluate the impacts of growth as it has happened in the past and would continue without a shift in direction. The densities of residential uses and the intensity of employment uses were kept at prevailing trends. The distribution of jobs and household types were also kept to the prevailing present trend. The transportation infrastructure was limited to new freeway off-ramps and the existing regional transit network. Preservation of agricultural lands and environmentally sensitive land was given some consideration.

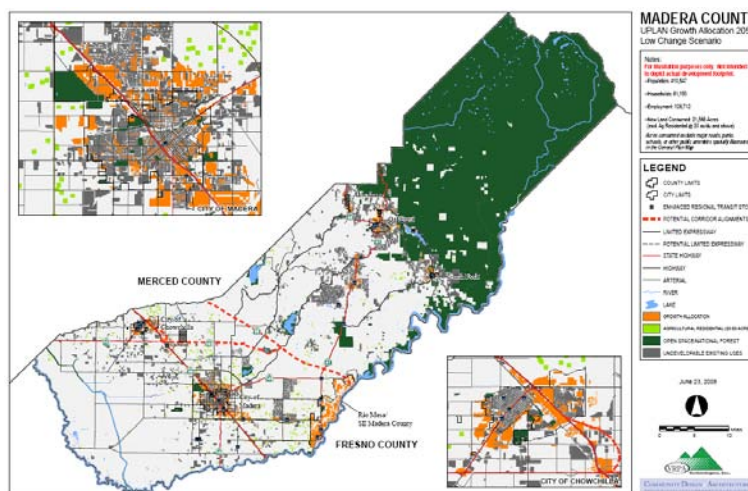
**FIGURE 6-3 – Status Quo Scenario**



■ **Low Change**

This scenario (reference Figure 6-4) was developed as a variant of the *Status Quo scenario* wherein the demand for the different housing types would shift slightly towards higher densities, and the lot sizes would reduce by 15-20% for single-family and multi-family parcels. The transportation infrastructure was similar to the status quo, but an enhanced transit system based upon the existing regional transit network was utilized. Preservation of agricultural lands and environmentally sensitive land was given more consideration than under the *Status Quo Scenario*.

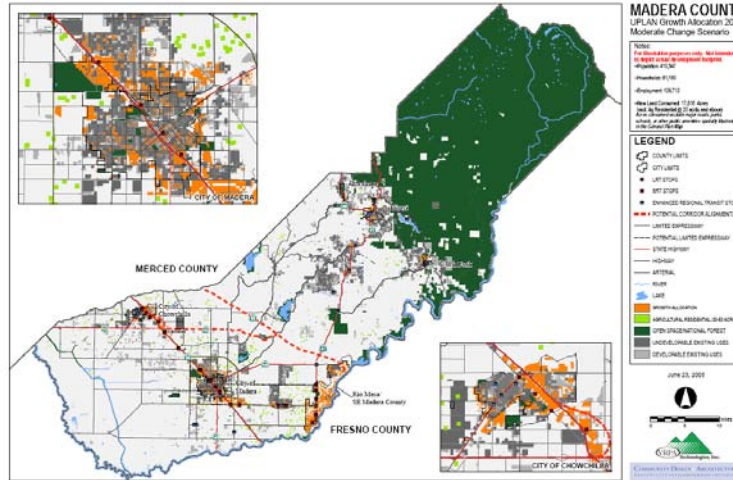
**FIGURE 6-4 – Low Change Scenario**



■ **Moderate Change**

This scenario (reference Figure 6-5) shifts further the demand for housing towards higher densities. In addition to the housing shift, it also assumes a change in the distribution of employment from retail to more service and industrial oriented jobs. The transportation infrastructure builds on top of the previous scenarios with the addition of Bus Rapid Transit (BRT) routes connecting the city centers of Madera and Chowchilla to the Rio Mesa/Southeast Madera County area where a Light Rail Transit (LRT) line along the SR41 corridor connecting with Fresno. Preservation of agricultural lands and environmentally sensitive land was given similar consideration than the *Low Change Scenario*.

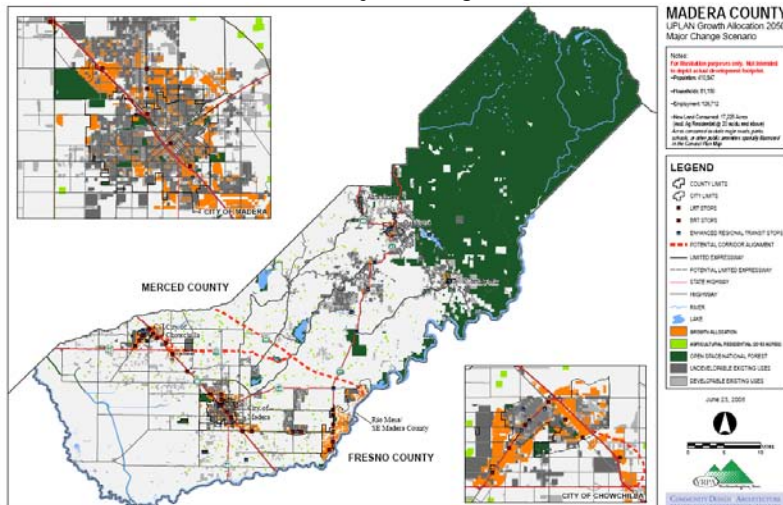
**FIGURE 6-5 – Moderate Change Scenario**



■ **Major Change**

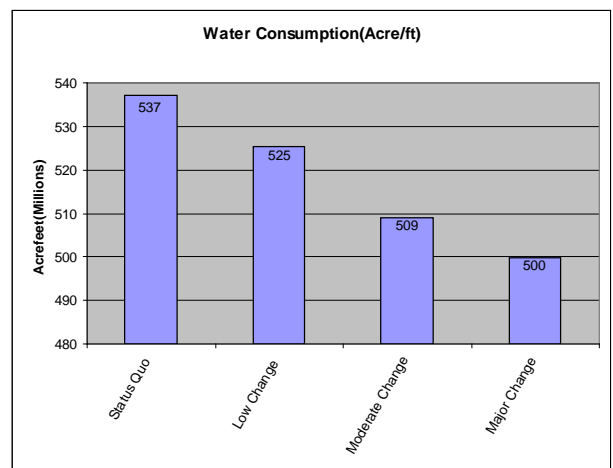
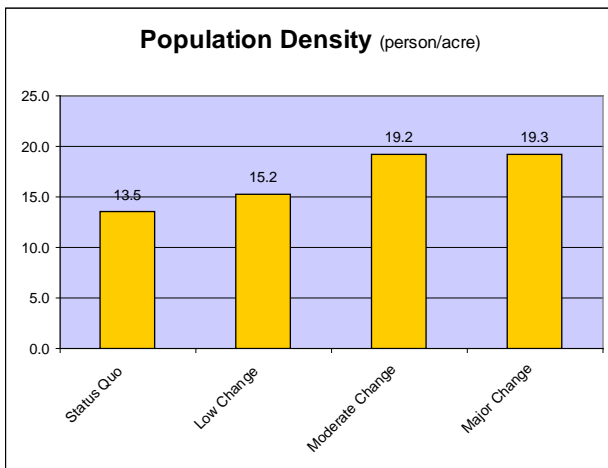
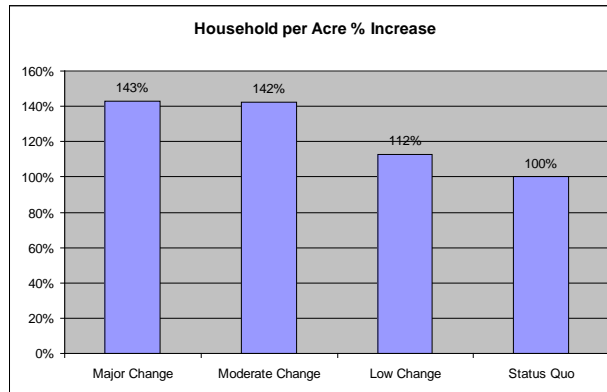
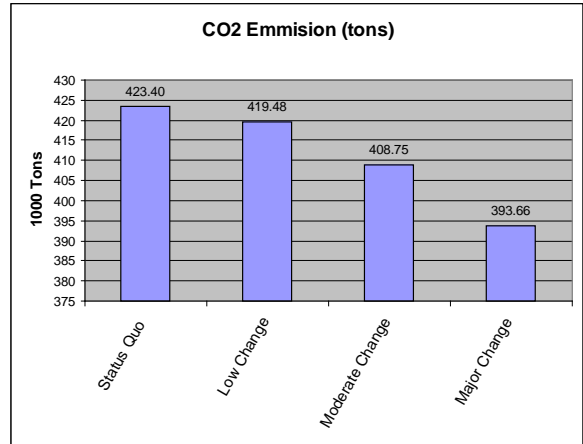
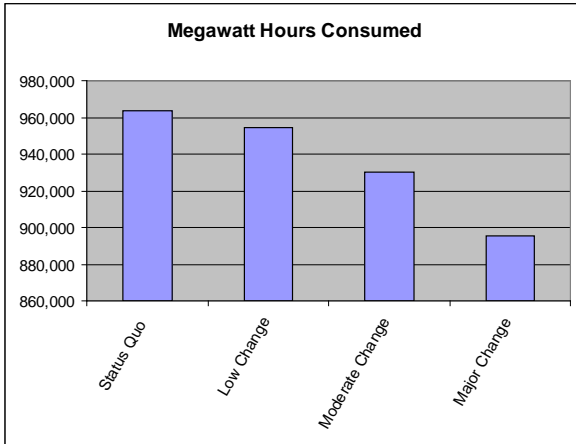
This scenario (reference Figure 6-6) assumes a large shift in the demographics of the County, wherein there would be a stronger demand for urban living and service oriented jobs within the urban centers. This scenario would double the share of housing to 30 percent for high density residential, while significantly reducing rural residential and agricultural residential uses in the County. The transportation infrastructure improvements include further enhancement of the BRT routes within the cities of Madera and Chowchilla and adds an additional LRT stop further north into Southeast Madera County. Preservation of agricultural lands and environmentally sensitive land was given the highest consideration of all of the *Scenarios*.

**FIGURE 6-6 – Major Change Scenario**



**Scenario Evaluation and Comparison of Benefits**

The model results were evaluated utilizing parameters developed by Kern County. It predictably showed that the Major Change Scenario showed the lowest land consumption as well as resource consumption. The charts comparing the performance of all the indicators are shown below.





## **VII. ENVIRONMENTAL CONSIDERATIONS AND ENVIRONMENTAL JUSTICE**

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### **ENVIRONMENTAL COMPLIANCE**

As mandated by State law, a Program Environmental Impact report (PEIR) has been prepared pursuant to Section 15163 of the California Environmental Quality Act (CEQA). The intent of the PEIR is to serve as CEQA compliance for the RTP and:

- ◆ identifies the significant effects of the updated 2011 RTP on the environment and indicate the manner in which those significant effects can be mitigated or avoided;
- ◆ identifies unavoidable adverse impacts that cannot be mitigated; and
- ◆ identifies alternatives.

In this regard, the PEIR is an informational document, the purpose of which is to inform public agency decision-makers and the general public of the significant environmental effects (both beneficial and adverse) of the proposed 2011 RTP.

In 2007, Madera County adopted the last RTP and Measure T & RTP PEIR. These documents were used to update the 2011 RTP and to prepare a Subsequent Environmental Impact Report (SEIR) for the 2011 RTP. The EIR process included a Notice of Preparation and preparation of an Administrative Draft, Draft, and Final EIR. Environmental topics evaluated in the PEIR range from air quality and noise to land use planning and transportation.

It should be noted that the 2011 RTP Air Quality Conformity Finding has been completed and is incorporated in the Final EIR and this RTP by reference.

### **RTP CHECKLIST**

Included in this RTP is a checklist that identifies where various requirements referenced in the RTP Guidelines can be found in the text of the RTP. This checklist allows the reader to identify easily the sections that comply with RTP Guideline requirements. The checklist is included as Appendix F.



## **ENVIRONMENTAL JUSTICE**

### **INTRODUCTION**

Transportation systems play a vital role in advancing the safety, economy, and quality of life for residents of Madera County. Each day, transportation facilitates the movement of goods and people, providing mobility to Madera's residents, visitors, and businesses. Transportation systems are quite diverse, including roadways, public transportation, bicycle and pedestrian facilities, airports, and railroads and like any system, maintenance and improvements are crucial to its success. Madera is committed to maintain the existing infrastructure and to create and implement changes, which would add to the system's efficiency and safety.

Investment in the transportation system creates measurable benefits, but may also result in unintended consequences if not planned correctly. Projects may generate disproportionate negative impacts to minority or low-income communities by either denying them their "fair-share" of transportation projects or subjecting them to an unequal share of the negative externalities. To prevent such an event from occurring, the Madera County Transportation Commission (MCTC) is committed to employing an environmental justice program that will help ensure early and continued public involvement, and an equal distribution of transportation projects, paying close attention to the needs of low income and minority populations.

Environmental Justice is a public policy goal of promoting the fair treatment and meaningful involvement of all people in the decision-making process for transportation. Satisfying this goal means ensuring that low-income and minority communities receive an equitable distribution of the benefits of transportation activities without suffering disproportionate adverse impacts. Achieving environmental justice requires both analytical techniques as well as the full and fair participation by all potentially affected communities in the transportation decision-making process.

## **HOW TRANSPORTATION INVESTMENT AFFECTS COMMUNITIES**

### **Multiple Modes of Transportation**

The number and availability of different transportation modes plays an important role within Madera. Non-automobile travel modes (primarily transit) are essential to ensure access to jobs and services for the low income and elderly who may not have reliable access to a car. The investment in public transit affects the mobility of Madera residents by offering alternatives to the personal automobile.

Residents have access to transit in the form of a fixed route bus service for the City of Madera (Madera Area Express); a demand-response system for the City of Madera and Chowchilla (Madera Dial-a-Ride and Chowchilla Area Transit Express); an intercity fixed-route system that services the unincorporated areas of Madera County (Madera County Connection); a demand-response system for the elderly and people with disabilities in Eastern Madera County (Eastern Madera County Senior Bus); and a demand-response service for medical and dental appointments for residents of Eastern Madera County (Eastern Madera County Escort Service).

Madera also invests in other modes of transportation such as bicycle and pedestrian facilities and encourages rideshare activities such as carpooling and vanpooling.

## **Air Quality**

The effect of motor vehicles on air quality is one of the most recognized and quantified environmental impacts of transportation. There is a significant body of evidence that suggests air pollution from motor vehicle emissions cause a number of public health problems. Investment in transportation may have a positive or negative effect on air quality. Generally, investments that cause travelers to shift to less polluting modes (public transit, carpooling, bicycling, rail, etc.) can have a positive air quality impact. Similarly, investment that reduces roadway congestion typically reduces pollution emissions, but may be slightly offset through greater induced travel.

The U.S. EPA established National Ambient Air Quality Standards (NAAQS) to protect public health, including the health of sensitive populations such as children and the elderly, from adverse effects of poor air quality. Pollutants covered by NAAQS include carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), fine particulate matter (PM<sub>2.5</sub>), coarse particulate matter (PM<sub>10</sub>) and lead (Pb). Of these six pollutants, lead is the only one that is not directly linked to transportation.

## **BACKGROUND**

The goal of environmental justice is to avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations and to ensure the full and fair participation by all potentially affected communities in the transportation decision making process.

### **Title VI**

Title VI of the 1964 Civil Rights Act provides one of the principle legal underpinnings for environmental justice. Title VI states that “No person . . . shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Title VI prohibits recipients of Federal funds from actions that reflect ‘intentional discrimination’ or that exhibit ‘adverse disparate impact discrimination’ on the basis of race, ethnicity or national origin.”

The Civil Rights Restoration Act of 1987 amended Title VI so that recipients of federal aid must comply with non-discriminatory requirements in all their activities, not just the programs and activities that directly receive Federal support. That is, an agency that receives any federal funding must not only plan against discriminatory impacts on those projects that receive federal funding, but also for programs that are entirely state or locally funded. Later statues prohibit discrimination on the basis of sex, religion, or disability. As a government agency receiving federal funding, the Madera County Transportation Commission (MCTC) is committed to implementing Title VI and conforming to federal environmental justice principles.

## **Executive Order 12898 and 13175**

Environmental justice was first identified as a national policy in 1994 when President Clinton signed executive order 12898, requiring that federal agencies shall, to the greatest extent of the law, carry out their activities, programs and policies in a way that avoids disproportionately high and adverse health and environmental impacts on low-income and minority populations. E.O. 12898 thus applies to a wider population than does Title VI, which did not include low-income non-minority populations.

An interagency working group, led by the Environmental Protection Agency (EPA), was established to oversee the implementation of E.O. 12898. The Order itself does not create any new legal rights and is not enforceable in court. Rather, it is intended to focus federal agencies on the existing regulations, such as the Title VI and the National Environmental Policy Act (NEPA), that protect low-income and minority communities from discrimination and ensure their full participation.

Executive Order 13175, Consultation and Coordination With Indian Tribal Governments (November 6, 2000), establishes regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies with tribal implications. The goals of this order are to strengthen government-to-government relationships with Indian tribes and to reduce the imposition of unfunded mandates upon Indian tribes.

## **PUBLIC PARTICIPATION**

Because the RTP plays such a major role in establishing goals and objectives and guides development of infrastructure improvements, extensive efforts were made to achieve consultation and coordination with all transportation providers, facility operators, appropriate federal, State, and local agencies, Native American Tribal Governments, environmental resource agencies, air districts, pedestrian and bicycle representatives, and adjoining MPOs/RTPAs according to the requirements of 23 CFR 450.316 and the 2007 MCTC Public Participation Plan (see Appendix H). Historical and ongoing outreach efforts are listed below:

### **2001 RTP Update**

- ◆ Public workshops to introduce the RTP and environmental review process were held in the City of Madera and in the mountain community of Oakhurst on January 9<sup>th</sup> and 10<sup>th</sup>, 2001. During the meetings, attendees were informed about the RTP Update process and schedule. Attendees had an opportunity to ask questions and provide comments on the preliminary set of goals and objectives and transportation needs that felt should be addressed as part of the RTP Update process;
- ◆ Attendees were invited to the monthly RTP Steering Committee meetings;
- ◆ MCTC staff and the consultant made a presentation to the North Fork Rancheria of Mono Indians Tribal Council on April 24, 2001. The presentation focused on the RTP Update process, schedule, and status. Staff will also seek input from the Picayunne Rancheria and will inform the RTP Steering Committee of their findings;
- ◆ Representatives of the North Fork Rancheria of Mono Indians and the Picayunne Rancheria

were included as members of the RTP Steering Committee to insure that their issues were considered throughout the RTP development process;

- ◆ The San Joaquin Valley Air Pollution Control District (SJVAPCD) was also included as a member of the RTP Steering Committee. In addition, MCTC staff have coordinated with other RTPAs within the Valley and with the SJVAPCD to identify air quality conformity requirements/issues and to develop the Conformity Finding which will be distributed separate from this RTP; and
- ◆ The public was invited to another set of public workshops were publicly noticed and held on May 21 and 22, 2001 in Madera and in Oakhurst to review the Draft RTP and the Draft EIR;
- ◆ Presentations were made to each local agency in the County (Cities of Chowchilla and Madera and Madera County) to review the Draft RTP and Draft EIR and to receive input from the agencies and the public. These meeting were held in July 2001 during the 45-day review period; and
- ◆ The MCTC Board took action regarding the 2001 RTP, Final EIR and the Air Quality Conformity Finding on October 17, 2001.

## **2004 RTP Update**

With the 2004 RTP update, MCTC adopted a proactive approach to public participation. MCTC staff conducted six public workshops informing the public and soliciting input on the 2004 Regional Transportation Plan (RTP), including one specific workshop dedicated to environmental justice principles and low-income and minority populations.

- ◆ A Spanish language interpreter was present at workshops conducted in areas with significant Spanish speaking populations, such as the City of Madera.
- ◆ Two workshops were held in the City of Madera, along with workshops in Oakhurst, North Fork, Madera Ranchos, and the City of Chowchilla.
- ◆ To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:30 and 8:30 p.m. to make attendance more accessible.
- ◆ Flyers for the RTP workshops were made available in both Spanish and English and were posted, distributed and mailed to residents and businesses throughout the county. Information on the workshops was also made available in MCTC's quarterly newsletter, "Go Madera".
- ◆ 2004 also marked the first year of the MCTC Public Participation Plan (PPP). The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access.
- ◆ As an additional measure to increase public awareness of transportation issues within Madera County, MCTC has recently expanded its newsletter and mass mailing list by 50%.

Over 100 new businesses, organizations and individuals have been added, including a significant number of religious-based groups.

- ◆ The MCTC Board took action regarding the 2004 RTP and the Air Quality Conformity Finding on July 21, 2004.

## **2007 RTP Update**

The 2007 RTP update public participation program was closely tied to the development and public education campaign of the Madera County Measure T Investment Plan, which began in late 2005 and early 2006. The Measure T Investment Plan was developed by a steering committee that was representative of the stakeholder groups within Madera County. The Investment Plan funding programs and projects were refined through two scientific public opinion polls relating to the transportation needs of individual communities within Madera County.

An Environmental Impact Report (EIR) for the Measure T Investment Plan and RTP was prepared and distributed to the appropriate regulatory agencies for consultation and comment. MCTC then engaged the public through a comprehensive public information campaign that included meeting with community organizations, interest groups, service clubs, etc that provided access to and input from over 1000 persons. A sample of the groups that participated is given below.

The public information campaign also utilized the media outlets of television, radio, and direct mail to convey to the public the benefits of the Measure T Investment Plan and of the comprehensive transportation needs of Madera County through the year 2030. Madera County voters responded, validated, and legitimized MCTC's Regional Transportation Planning efforts by approving the Measure T Investment Plan by 73% of the vote. The Measure T Investment plan is the basis for the RTP Update and is thoroughly incorporated into the plan. In addition, three 2007 RTP public workshops were held in development of the RTP update.

### **Measure T/RTP Update Presentations – Over 1000 People attended**

Madera Kiwanis Club  
Madera County Coalition  
Yosemite Gateway Realtors Association  
Madera Hispanic Chamber of Commerce  
Pan American Club  
American Legion Post #11  
Madera County Democratic Club (North Fork)  
VFW Post #1981  
Mexican-American Senior Citizens Club  
Association of Mexican American Educators  
Madera Farm Bureau  
NAACP Branch #1084  
CELSOC  
Madera Breakfast Lions Club

Madera County Democratic Club (Madera)  
Madera Coalition for Community Justice  
Madera Taxpayers Assoc  
Madera High Twelve Club #646  
Yosemite Lakes Park Owners Association  
Latinas Unidas  
Knights of Columbus, St. Joseph Mareello Council #364  
Sierra Senior Society  
Madera Sunrise Rotary  
Oakhurst Democratic Club  
Board of Trustees of Madera Community Hospital  
Madera County Historical Society  
Greater Madera County Industrial Association  
Madera High School PTA-North Campus  
Oakhurst Sunrise Rotary  
Madera Mountain Chamber Area

- ◆ Public workshops were held in the City of Madera; Oakhurst; and the City of Chowchilla.
- ◆ A Spanish language interpreter was present at workshops conducted in areas with significant Spanish speaking populations, such as the City of Madera.
- ◆ To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:00 and 8:30 p.m. to make attendance more accessible.
- ◆ Flyers for the RTP workshops were made available in both Spanish and English and were posted, distributed and mailed to residents and businesses throughout the county. Information on the workshops was also made available on MCTC's website.
- ◆ The MCTC Public Participation Plan (PPP), consistent with SAFETEA-LU requirements and developed in consultation with federal, state, and local agency partners, guided the public participation program of the 2007 RTP Update. The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access.
- ◆ The MCTC Board took action regarding the 2007 RTP, Final EIR and the Air Quality Conformity Finding on May 23, 2007.

## **2011 RTP Update**

The 2011 RTP public participation program built on the success of previous public outreach campaigns to ensure widespread dissemination of information to a geographically and socially diverse population. Since the last RTP update, MCTC staff has continued to engage the public

through workshops, public meetings, and presentations at service clubs and professional organizations. Educating the public about the regional transportation planning process and opportunities for continued public participation and input remains a priority for MCTC.

During the past year, MCTC joined with seven other Valley MPOs in the San Joaquin Valley Tribal EJ Collaborative Grant Project (see Appendix G). This Caltrans-sponsored grant has facilitated increased collaboration between MPO staff and the leadership of local, federally-recognized and unrecognized tribal governments. Through this process, MCTC staff has been able to increase awareness of long-range planning projects in the County, including the Regional Blueprint and the RTP.

A Notice of Preparation (NOP) for the 2011 RTP Environmental Impact Report (EIR) was prepared and distributed to the appropriate regulatory agencies for consultation and comment. Responding to comments received during the NOP review period, MCTC conducted a meeting with the superintendants of several local school districts, a stakeholder group that has not traditionally participated in the RTP planning process.

Public workshops were held in the City of Madera, Oakhurst, and the City of Chowchilla after an extensive public outreach campaign including newspaper advertisements, email invitations, and a notice on the MCTC website. To make public participation as convenient as possible staff felt it was important to have a number of different workshops throughout the county. The selected time for each workshop was between 6:00 and 8:30 p.m. to make attendance more accessible.

The MCTC Public Participation Plan (PPP), consistent with SAFETEA-LU requirements and developed in consultation with federal, state, and local agency partners, guided the public participation program of the 2011 RTP Update. The PPP establishes a baseline for MCTC communication policies and procedures, ensuring that the public is well informed during the decision making process. Detailed within the plan is the length of public comment periods for MCTC documents; methods MCTC employs to distribute information; and goals for public access. The PPP is included in this document as Appendix H. A copy of the MCTC consultation mailing list is also included in Appendix H.

## **EQUITY ANALYSIS**

### **Defining Population Groups**

Identifying low-income and minority populations is necessary both for conducting effective public participation and for assessing the distribution of benefits and burdens of transportation plans and projects. MCTC defines minority and low-income populations in accordance with existing federal guidelines. Title VI of the Civil Rights Act prohibits discrimination on the basis of race, color, or national origin. The Office of Management and Budget (OMB) issued Policy Directive 15, "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity", in 1997, establishing five minimum categories for data on race and poverty:

Black - a person having origins in any of the black racial groups of Africa.

Hispanic - a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

Asian - a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.

American Indian and Alaskan Native - a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.

Low-Income - a person whose household income (or in the case of a community or group, whose median household income) is at or below the U.S. Department of Health and Human Services poverty guidelines. For the year 2003, the poverty level has been set at \$18,400 for a family of four.<sup>1</sup>

Note: OMB, in its Bulletin No. 00-02, "Guidance on Aggregation and Allocation of Data on Race for Use in Civil Rights Monitoring and Enforcement," issued March 9, 2000, provided guidance on the way Federal agencies collect and use aggregate data on race. Added to the previous standard delineations of race/ethnicity was the category of:

Native Hawaiian or Other Pacific Islander - a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

According to the Council of Environmental Quality (CEQ), an advisory body in the Executive Branch, minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above stated thresholds<sup>2</sup>.

## **Methodology of Analysis**

MCTC staff began by analyzing racial and income data from the 2000 Census. The block group level data was chosen as the primary level of Census data analysis because it provides the most specific data for the geographic analysis of income and race. With 79 block groups within Madera County, block group data provides a more accurate level of analysis for both income and race when compared to census tract level data, which includes only 19 tracts within Madera County.

For racial data, block level data is available, which would provide a more accurate level of data analysis; however, the most specific level of data available for income information is the block group. To keep the maps and boundaries of the income and race data consistent, the block group level data was chosen.

Once the Census information for race and income were imported into the MCTC Geographic Information Systems (GIS) database, staff was able to identify racial and income characteristics of the county. Based on these characteristics, staff demarcated block groups into five target areas to analyze equity of the 2011 RTP capacity increasing; rehabilitation and maintenance;

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<sup>1</sup> SOURCE: *Federal Register*, Vol. 68, No. 26, February 7, 2003, pp. 6456-6458.

<sup>2</sup> Council on Environmental Quality, "Environmental Justice under the National Environment Policy Act," December 10, 1997. <<http://ceq.eh.doe.gov/nepa/regs/ej/ej.pdf>>



transit; air quality; bicycle and pedestrian; and Caltrans projects. Projects were then assigned to particular target areas and analyzed for levels of benefit.

The goal of this process was to ensure racial, low-income and geographic equity of project benefit. That is, populations considered minority or low-income should have equal levels of benefit compared to other population groups. Similarly, projects and the level of benefit they provide should not be concentrated into one geographic region, but rather should be distributed proportionally to the share of use of a particular system. A map of the five target areas and the population density of the County are displayed in exhibit 7-1. As shown in exhibit 7-1, the locations with the highest concentrations of persons in the county are the City of Madera, City of Chowchilla, Oakhurst and the Madera Ranchos areas. Exhibit 7-2 displays the target areas and significant roads in more detail.

## **Target Area Population Characteristics**

Target area I includes the town of La Vina, located in the south-west corner and is characterized by being mostly rural, with a population of 4,531 persons, 3,215 of which—or 70.96%—are ethnic minorities. Target area I accounts for roughly 4% of the total county population.

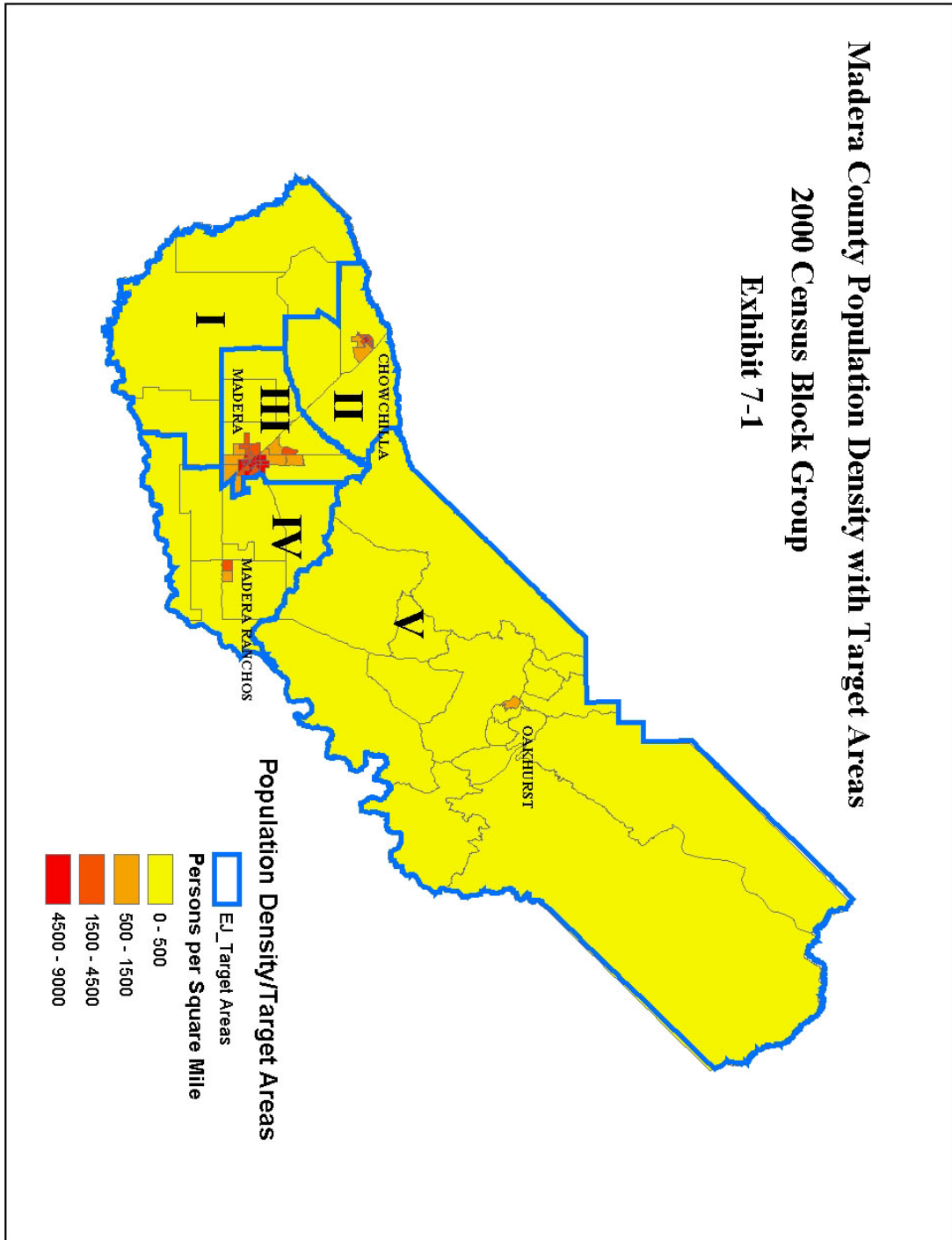
Target area II includes all of the City of Chowchilla and surrounding block groups. Racial and population figures from the two prisons within this area have been omitted. There are 11,215 persons within the target area, 42.43%, or 4,759 persons are ethnic minorities. Target area II represents 10% of the total county population.

Target area III includes all of the City of Madera and is therefore, the most populous of the five target areas. There are 60,469 persons within the area, 43,956 persons or 72.69% are ethnic minorities. Target area III represents 52% of the total county population.

Target area IV includes the Madera Ranchos area, which is located near Avenue 12, between Highway 41 and Road 34. Target area IV also includes the areas of Ripperdan and Eastin Arcola, located in the south-west portion of the target area. There is significant population growth planned for this target area in the future, much of which will take place in the Rio Mesa development area, located in the north-eastern portion of the target area. Roughly 15,000 housing units and 40,000 persons are expected to occupy the Rio Mesa development area once it is fully developed. Currently, there are 14,330 persons in the target area, 36.9%, or 5,288 persons are ethnic minorities. Target area IV represents 12% of the total county population.

Target area V represents the mountain communities within Madera County, north of the Madera Canal. A significant portion of target area V lies within the Sierra National Forest, with little population. The majority of the persons living within target area V live in the Yosemite Lakes, Coarsegold, Oakhurst, Bass Lake and North Fork areas. There are 25,734 persons within target area V, 15.32%, or 3,943 persons are ethnic minorities. Target area V represents 22% of the county's total population.

Figures 7-1 and 7-2 display graphical representations of the five target area characteristics.



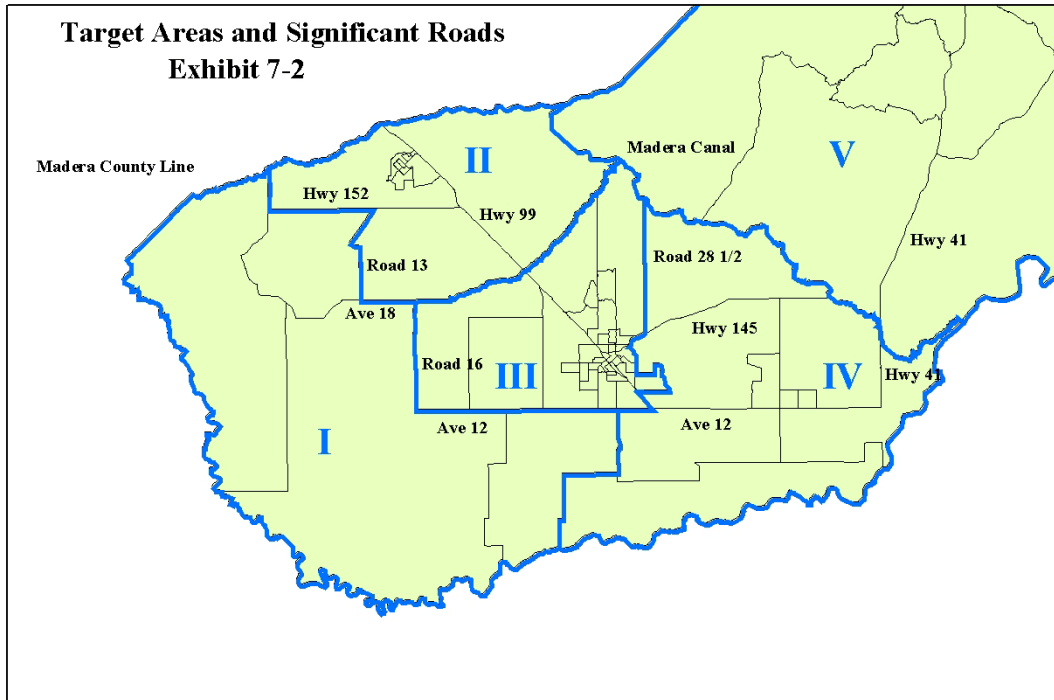


Figure 7-1

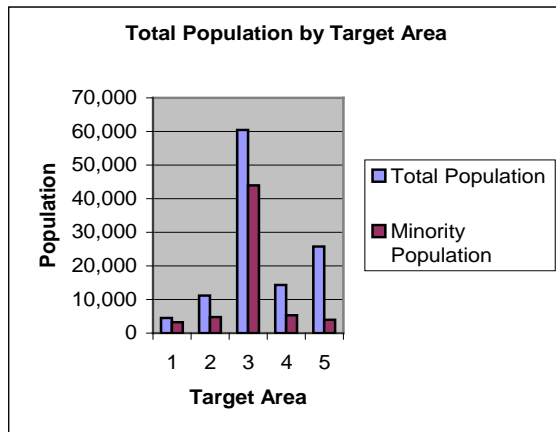
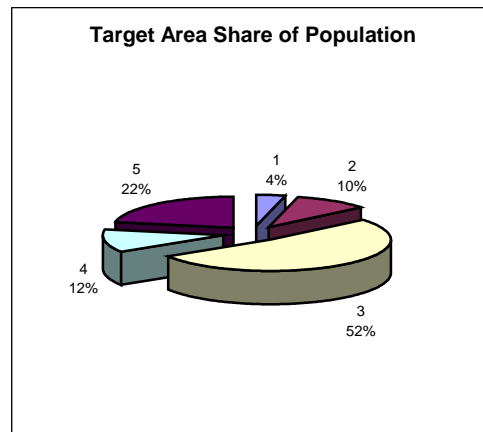
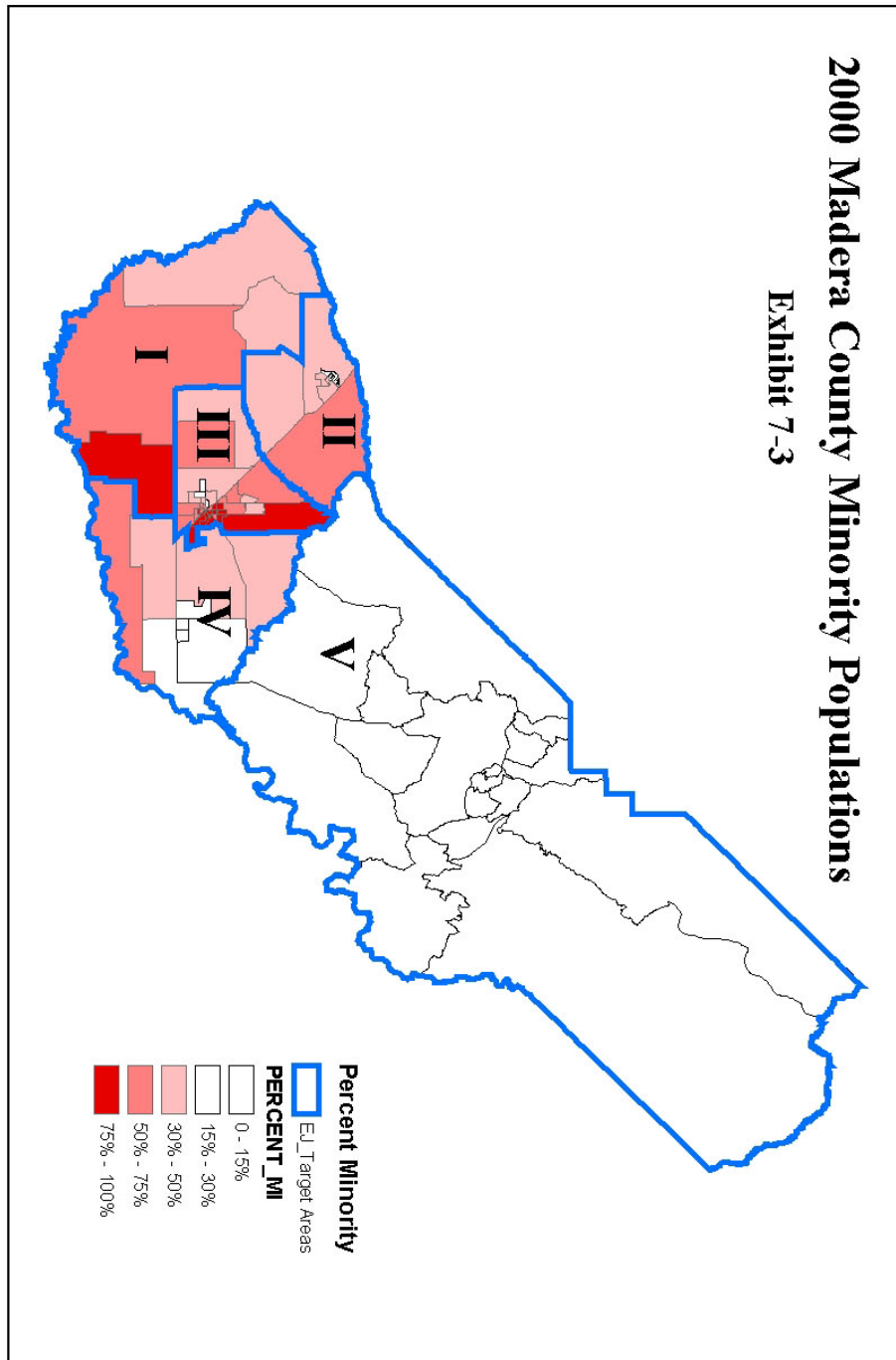


Figure 7-2



## Racial Minority Populations

Exhibit 7-3 shows the percentage of racial minorities by block group according to the 2000 Census. The breakdown in percent minority is as follows: 0-15%; 15%-30%; 30%-50%; 50%-75%; and 75%-100%. According to the Council of Environmental Quality (CEQ), minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. Within the County of Madera, 61,161 persons, or 53% of the County population fall under the category of racial minority.



In Exhibit 7-3, high percentage minority populations are demarcated by shades of red, and low percentage minority populations shaded white. High minority regions are located primarily in target area III and I. The red shaded region in target area II reflects the prison population and therefore omitted. The red shaded region in target area IV reflects the Eastin Arcola and Ripperdan areas, located in the South-Western portion of the target area. There are no block groups with over 30% minority populations within target area V. Averaging the block group level data of each target area reveals that only target areas I and III contain minority populations above 50%, with 70.96% and 72.69% respective minority populations.

## **Low-Income Populations**

In addition to racial minorities, another traditionally underserved population is low-income residents. For the purpose of this study, each block group within the five target areas is labeled according to median household income. The breakdown in median household income is as follows: 0-\$20,000; \$20,000-\$25,000; \$25,000-\$30,000; \$30,000-\$40,000; and \$40,000-Above. The U.S. Department of Health and Human services has determined that the poverty level in 2003 for a family of four is \$18,400.

In Exhibit 7-4, low-income populations are demarcated by a dark shade of red, with a lighter shade indicating populations close to the poverty line with incomes between \$20,000-\$25,000. Median household incomes above \$25,000 are shown in shades of yellow. Examining the median household income for each block group reveals that only the City of Chowchilla, within target area I and the City of Madera, within target area III, contain block groups with significant levels of residents at or near the poverty line. Of all the target areas, only target area III contains significant minority and low-income populations.

## **Roadway-Emphasis Projects**

Roadway-emphasis projects include mainline highway, highway interchange, highway maintenance, regional roadway and regional roadway maintenance projects as listed in the 2011 RTP. Due to these projects' location-specific nature, this analysis is reliant on proximity to the proposed improvements and to regional travel patterns.

Each project is assigned to one of the five target areas; however, the benefit of each particular project is not limited only to residents of the target area in which the project is located. For example, any capacity increasing or rehabilitation project located on Highway 41 near Avenue 12 will not only benefit residents in target area IV, but will benefit residents in target area V as well, since Highway 41 is the main thoroughfare to the mountain communities. Similarly, improvements made to Highway 99 will benefit all communities located on the valley floor since it is a primary travel corridor for Madera County residents. Benefit of Highway 99 projects is therefore assigned to target areas I, II, III and IV.

This method of assigning benefit to more than one target area explains why the analysis category "percent share of investment" used throughout this chapter will not be zero sum. This process of analyzing project benefit relative to geography was found to be the most accurate method of analysis. Subsequently, if MCTC staff is able to show a geographically equitable distribution of projects, those minority and low-income populations that exist within the specific geography would garner equal levels of project benefit relative to the rest of the county.

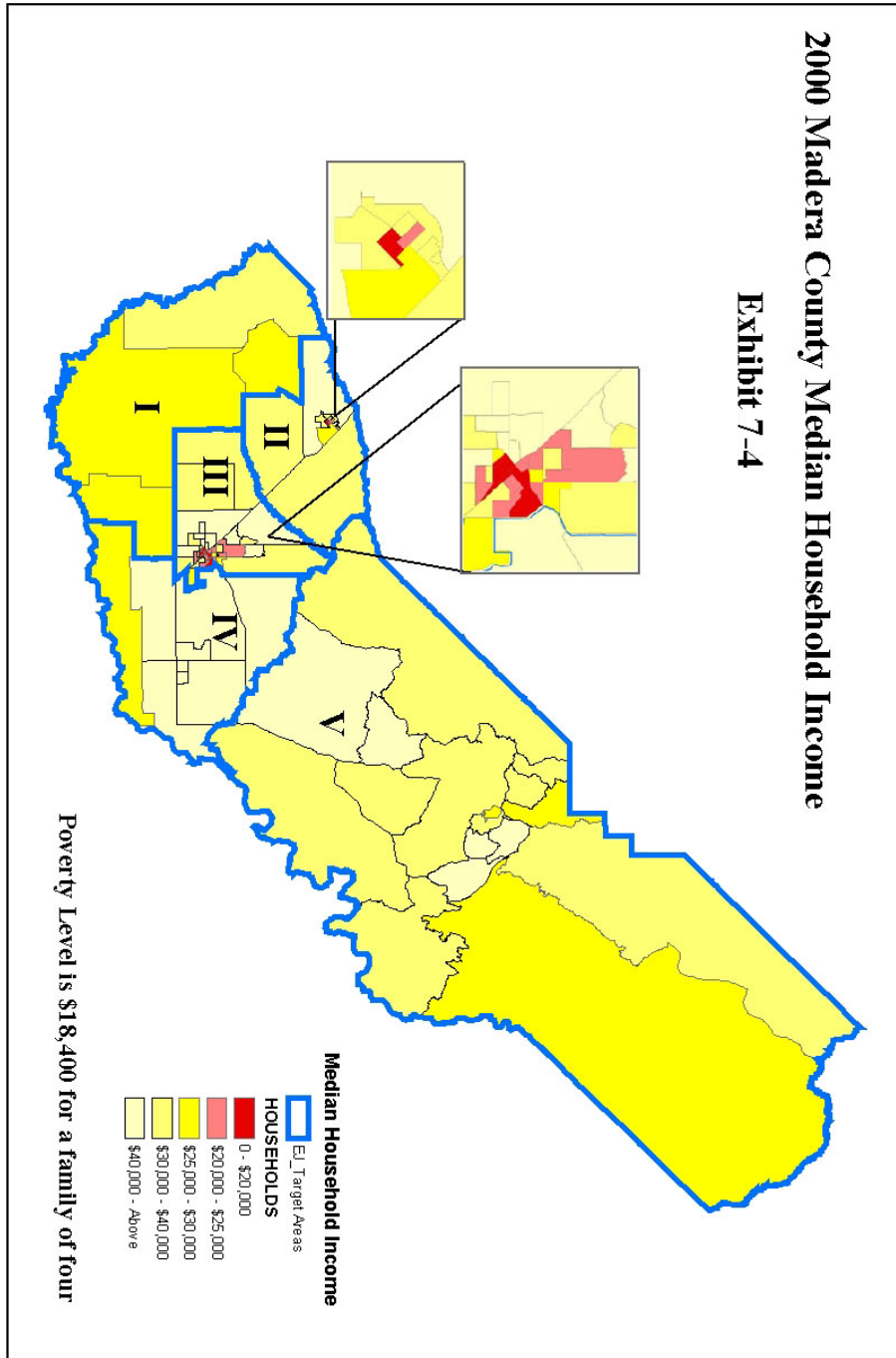
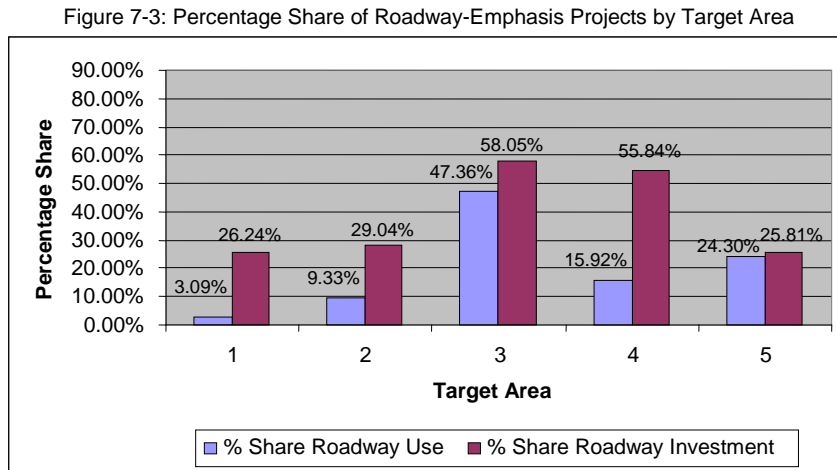


Figure 7-3 summarizes the entire equity analysis on roadway-emphasis projects by target area. As previously mentioned, the percentage share of roadway benefit, or investment, is not a zero sum scenario, which explains why the sum of benefit will not add to one. The percentage of roadway use was derived from the 2000 Census drive-to-work population. This percentage of roadway use closely mirrors the overall population share of the target area and the county.



From this information, it is clear that all target areas receive a significant benefit from roadway-emphasis projects. What is not as obvious is the relative difference in benefit. Target area III has the highest percentage of roadway investment because it is the only area that is assigned both Highway 99 and Highway 41 project benefits, which represent a significant portion of investment.

Similarly, there are more investment dollars planned for Highway 99 compared to Highway 41, which explains the slightly less investment dollars in target area V, which is not assigned Highway 99 project benefits. The large investment of Highway 99 projects also explains the relatively large amount of benefit to target areas I and II relative to their share of the drive-to-work population.

Figure 7-3 further demonstrates that roadway-emphasis investments are equitable across the spectrum of different income and racial groups. With geographic equity among target areas, block groups contained within these areas benefit from similar levels of equity. In particular, target area III, which is characterized by low-income and racial minority populations, derives significant benefit from roadway-emphasis investment.

## Bus Transit Projects

Transit services within Madera County play an integral role in the transportation of low-income, elderly and people with disabilities residents who lack reliable use of personal automobiles. Fixed-route and demand-response transit systems provide access to jobs and services throughout the county.

Residents of Madera have access to transit in the form of a fixed route bus service for the City of Madera (Madera Area Express and JET Express); a demand-response system for the City of Madera and Chowchilla (Madera Dial-a-Ride and Chowchilla Area Transit Express); an intercity

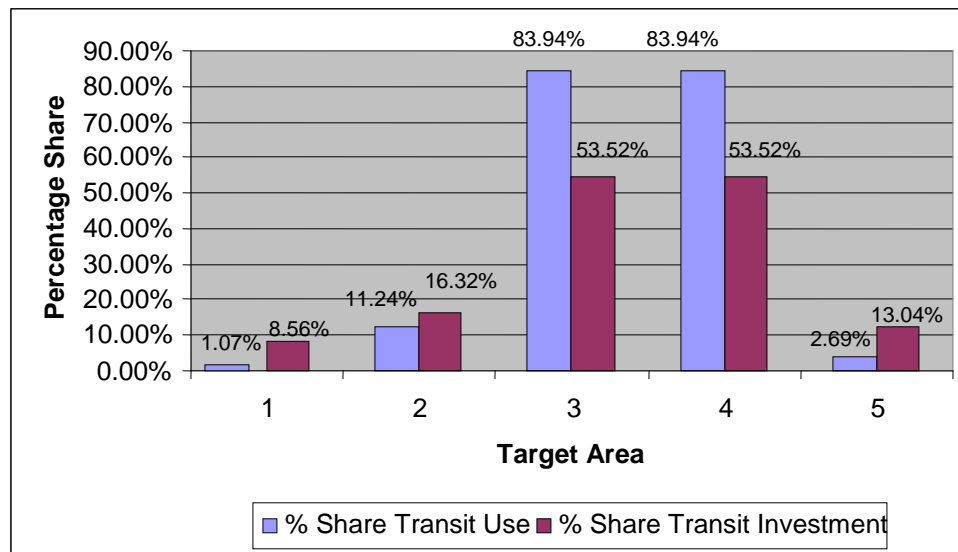
fixed-route system that services the unincorporated areas of Madera County (Madera County Connection); a demand-response system for the elderly and people with disabilities in Eastern Madera County (Eastern Madera County Senior Bus); and a demand-response service for medical and dental appointments for residents of Eastern Madera County (Eastern Madera County Escort Service).

To determine the adequacy of the current transit system and areas needed for improvement, public participation is critical. MCTC is committed to annually complete an Unmet Transit Needs Public Hearing process. The purpose of this process is to receive testimony from the public regarding transit systems within the County. The fixed route system, Madera Area Express, and the Madera County Connection owe their creation to this process, and since it is such an important one, MCTC staff undertakes extensive efforts to outreach to the community. Once comments are received, MCTC staff works with the Social Service Transportation Advisory Committee (SSTAC) to make recommendations for improvement to the MCTC Policy Board.

Transit expenditures were calculated using projected estimates of FTA 5307, FTA 5311, Local Transportation Fund (LTF), and Congestion Mitigation & Air Quality (CMAQ) dollars. These funds were further broken down to the specific transit systems operating within Madera County and into their respective target areas. Since the Madera County Connection (MCC) operates in all five target areas, the \$32.7 million dollar estimate was divided equally among the five target areas.

In FY2008/09, 200,063 passengers used public transit within Madera County.<sup>3</sup> Each transit system operates within a specific target area, except for the Madera County Connection, which provides service to all target areas. The number of passengers per service is assigned to the specific target area to quantify the percentage share of use. This share is then compared to the percentage share of transit investment. The results are shown in figure 7-4.

Figure 7-4: Percentage Share of Transit Use and Investment by Target Area



<sup>3</sup> 2009 Short Range Transit Development Plan

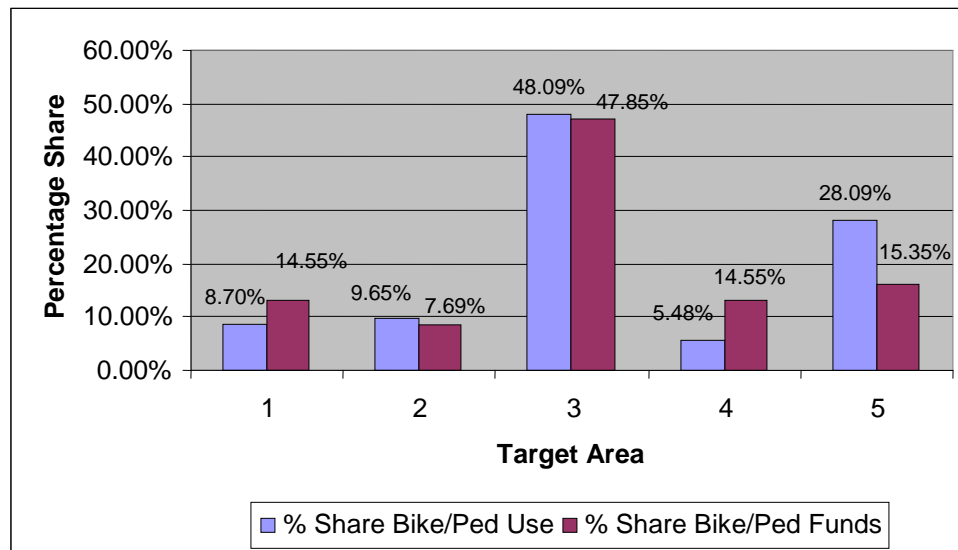


From this figure, it is apparent that there exists a strong correlation between transit use and transit investment within Madera. Target area III, which has the largest proportion of minority and low-income residents--and also the most access to transit services (Madera Area Express and Madera Dial-A-Ride)--receives the largest proportion of transit investment. This proportionality is a key element of equity analysis. Residents who rely on public transit most, should subsequently receive the largest share of transit investment. Similarly, transit investment in other target areas should be relatively proportional to its residents' use of the transit system. In this respect, there is equity of transit investment among all residents of Madera County.

## Bicycle/Pedestrian Facilities

Bicycle and pedestrian facilities are integral components of a multi-modal transportation network. These facilities not only provide regional connectivity, but by reducing the reliance on motor vehicles, can have positive impacts on air quality. Bicycle and pedestrian facilities are funded through LTF and CMAQ dollars and there is an estimated \$22.7 million dollars over the next 25 years. The benefit of investment is derived through population shares and then subdivided by target area. Use is derived from the 2000 Census commute patterns. The results are displayed in figure 7-5.

Figure 7-5: Percentage Share of Bicycle/Pedestrian Use and Investment by Target Area



The majority of bicycle/pedestrian funding positively correlates with use, however there are some discrepancies. These discrepancies can be attributed to two factors. First, there are limitations to the number of residents who use the facilities. 2000 Census data is used, but this data only delineates users for commute purposes. Since the City of Madera has higher population and commercial densities relative to the rest of the county, there is little surprise that there are significantly higher numbers of pedestrians who walk to work within the city. Similarly, more existing bicycle and pedestrian infrastructure can be found in the city relative to the rest of the county.

## **ENVIRONMENTAL IMPACTS**

The equity analysis section mainly assesses whether all racial and income target areas will benefit from fair shares in the transportation investments. However, some transportation projects may create some adverse impacts. Successful transportation projects do not only focus on improvements to the transportation system, but also minimizes and mitigates any negative environmental and social impacts the project may create.

### **Air Pollution Emission**

The projects included in this RTP are intended to alleviate existing congestion and improve the level of service (LOS) for the roadway system. The completion of these proposed projects is likely to help congestion, thus reducing air pollutant emissions from vehicle idling and constantly accelerating and decelerating. Therefore, the neighborhoods that contain these projects may initially experience some negative impacts in local air quality due to the projects' construction, but in the long run, the local air quality in these areas will benefit from the better traffic flow and less localized pollutant emission.

In addition to the roadway projects, the transit and bike projects included in this RTP will also contribute to the improvement of air quality. The City and County of Madera has also been recognized for its efforts to improve air quality through the purchase of low pollutant or natural gas vehicles. Much of the money used for these particular clean air projects comes from CMAQ dollars.

## **CONCLUSION**

The analysis in this chapter mainly focuses on racial minority, low-income and geographic equity of transportation projects within Madera County. This analysis endeavors to present a reasonably comprehensive investigation on the fairness of the distribution of benefits and detriments of the transportation projects included in this RTP.

Considering all the analyses as a whole, it is sufficient to conclude that the RTP does meet the environmental justice requirements: ensuring that all residents of Madera County are subject to proportionate benefits and detriments of transportation investment.



## **VIII. PERFORMANCE MONITORING PROGRAM**

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### **INTRODUCTION**

As the Regional Transportation Planning Agency (RTPA) for Madera County, the Madera County Transportation Commission (MCTC) monitors local and other regional transportation plans, projects and programs for consistency with regional plans. This monitoring process is conducted through the following processes:

- ◆ **Regional Transportation Improvement Program (RTIP) / Federal Transportation Improvement Program (FTIP)**

MCTC is required to prepare the Regional Transportation Improvement Program (RTIP), to demonstrate its consistency with the Regional Transportation Plan (RTP), and to make a finding of conformity with the applicable State Implementation Plan (SIP) before any federal funds may be expended on transportation projects. Preparation of the RTIP involves analysis of candidate projects and project changes. MCTC prepares quarterly amendments, and works with State, other regional agencies, and local agencies to coordinate implementation of the RTP through the RTIP.

The RTIP is a capital listing of all transportation projects proposed over a six-year period for the Region. The projects include highway improvements, transit, rail and bus facilities, signal synchronization, intersection improvements, freeway ramps, etc. The locally prioritized lists of projects are forwarded to MCTC for review, and MCTC develops the RTIP list of projects based on consistency with the RTP, financial constraint, and its ability to make a conformity determination.

- ◆ **Conformity**

MCTC is required to make findings of air quality conformity for both the RTP and the RTIP before these documents are approved by federal agencies. Conformity findings must be made with the adoption of a new State Transportation Improvement Program (STIP) or where changes in federal air quality designation or standards require a further demonstration of conformity.

In federally designated non-attainment or maintenance areas such as Madera County, specific monitoring and consistency are required under the Transportation Conformity Rule. At the time of conformity determination, the RTIP must be consistent with the RTP. During project implementation, the sponsor agencies must implement only those projects that are consistent with the conforming RTIP and RTP. The project design concept and scope must be consistent with those reflected in the conforming RTIP.

The project sponsors must inform MCTC (as the region's RTPA) of any delay in implementation of any Transportation Control Measure (TCM) project that is included in an

approved SIP and any project regionally significant and modeled, regardless of funding sources. Working with the local agencies and with the San Joaquin Valley Air Pollution Control District (SJVAPCD), MCTC must report on the timely implementation of TCMs. Additionally, MCTC monitors changes resulting from a legal legislative, or election process that may adversely impact the implementation of any TCM or regional significant project. MCTC informs the sponsor agency of any required actions. In the case of TCM projects, the sponsor agency must officially substitute or replace the affected TCM project.

◆ **Regional Transportation Monitoring**

Transportation planning for the region requires continually improved information on the condition and utilization of the transportation system. Special reports are required from MCTC periodically to show the condition of the highway infrastructure and to monitor the region's overall traffic. The Highway Performance Monitoring System (HPMS) is a federally mandated program designed by the Federal Highway Administration (FHWA) to assess the performance of the nation's highway system. Caltrans is currently responsible for preparation and coordination of the HPMS process in Madera County. For purposes of this required performance monitoring process however, MCTC will request that Caltrans forward updated HPMS reports directly to MCTC for their use in monitoring the RTP.

In addition, MCTC prepares a traffic monitoring report, which provides traffic count data along the major streets and highways within the County. This report is used to update the Madera County Regional Traffic Model, supply information for Project Study Reports (PSRs) and other corridor studies, and to monitor level of service constraints along the system.

◆ **Highway Performance Monitoring System**

HPMS is used as a transportation monitoring and management tool to determine the allocation of Federal Aid Funds, to assist in setting policies, and to forecast future transportation needs as it analyzes the transportation system's length, condition, and performance. Additionally, HPMS is used to provide data to the Environmental Protection Agency (EPA) to assist in monitoring air quality conformity, and its data are used in support of the Biennial Report to Congress on the Status of the Nation's Highways. The HPMS program is implemented annually by the California Department of Transportation (Caltrans) in the State of California. In Madera County, Caltrans contacts the local agencies directly for input into the annual updates. As mentioned above, for purposes of this required performance monitoring process, MCTC will request that Caltrans forward updated HPMS reports directly to MCTC for their use in monitoring the RTP.

◆ **Triennial Performance Audit for Transit**

MCTC evaluates the performance of selected transit operators through its Short-Range Transit Planning process. Social Service transportation agencies are evaluated through the AB 120 Action Plan.

◆ **Benchmarking**

As the designated RTPA, MCTC is required to prepare the RTP using performance based measures that will help decision makers better analyze transportation options and trade-offs. MCTC has developed performance indicators for the region's transportation system. The overall goal of this effort was to develop specific, quantifiable, and easily understandable performance indicators, which better inform elected officials and policy boards of the broad array of choices for investing public and private funds.



## **APPENDICES**

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## **APPENDIX A – LEVEL OF SERVICE METHODOLOGY / LOS VARIABLES**

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## LEVEL OF SERVICE (LOS) METHODOLOGY

Florida Department of Transportation (DOT) Level of Service (LOS) Tables have been utilized to analyze street and highway segments along the Madera County Street and Highway System. The Tables (referred to as "Modified Highway Capacity Manual LOS Tables") have been used to specifically evaluate the impacts of existing and planned growth and development on the existing and proposed traffic circulation system.

The Florida LOS Tables were developed in 1988 by Florida FDOT in response to the passage of significant growth management legislation during the mid-1980s, as well as to the need to comply to standards published in the revised 1985 Highway Capacity Manual (HCM). The Tables were established to:

- provide a grade LOS (A thru F) for future transportation corridor segment analysis. Such analysis is not available from HCM applications;
- to provide a better estimate of segment LOS versus reliance on the volume to capacity (V/C) ratio methodology which is not HCM-based, since it does not consider the effects of delay and congestion, especially at signalized intersections along rural facilities where passing opportunities are limited; and
- to provide a consistent process to measure LOS.

The Tables were recently updated in September 1998 to reflect methodologies contained in the 1997 HCM. Because the Tables consider the effects that cause congestion and delay, they are considered HCM-based and in accordance with the 1997 HCM wherein delay is the primary factor used to measure LOS.

The standards incorporated in the Modified HCM-Based LOS Tables include the correlation between urban size and highway congestion, urban infill, the different roles provided by state facilities, the impact of development and the provision of necessary infrastructure, flexibility in assessing special transportation areas, consideration of the relationship between highways and exclusive transit systems servicing commuters, and recognition that numerous state facilities are constrained and backlogged with no potential for expansion due to physical or policy barriers. Furthermore, the LOS Tables are applicable in determining street and highway system needs and deficiencies; directing development of long-range transportation activities within urban areas; assessing project priorities; evaluating additional access points such as interchanges, roads and driveways; analyzing regional and local government transportation/circulation plans; and determining impacts from proposed developments.

Information provided in the LOS Tables includes three different types of area analysis including: urbanized areas; areas transitioning into urbanized areas or non-urbanized areas with a population of over 5,000; and rural undeveloped areas or developed areas with a population of less than 5,000. The Tables are representative of peak hour and peak direction conditions with daily volumes encompassing directional, subhourly, hourly, daily, monthly, and seasonal peaking characteristics of traffic. Traffic conditions are evaluated considering 1) service flow rates (considered as the maximum hourly rate at which vehicles can safely pass through an intersection during a 15-minute interval under current traffic signalization conditions), and 2) a specified LOS.

Data provided by the LOS Tables are based upon methodologies provided from the 1997 HCM, as well as from actual traffic and signalization conditions. It should be noted that the Tables are considered measurement guidelines for street and highway LOS estimations, and are not to be considered as statewide standards. The use of LOS Tables is recommended for general planning applications necessary to evaluate street and highway LOS and through lane requirements. The Tables are directly applicable for use within more comprehensive planning activities in which less field data is available when planning takes longer to implement.

When dealing with the LOS Tables, default variables can be applied and include a variety of street and highway characteristics such as number of lanes, number of signalized intersections per mile, saturation flow rate, etc. The default variables referenced by street and highway types above, were only applied to calculate LOS when actual known data (existing and future) was not available. To the extent possible, actual or planned street and highway geometrics, speeds, saturation flow, etc., were applied to calculate LOS. This information was gathered from the County of Madera, the cities, and the Madera County Transportation Commission (MCTC).

Given the extensive application of LOS Tables to various types of projects and analysis, the Tables are considered extremely applicable to the goal of segment LOS. This conclusion is based upon detailed comparative analysis considering various other HCM and delay-based methodologies referenced in the HCM.

**Madera County Regional Transportation Plan Roadway  
Capacity / Level of Service <sup>(1)</sup>**

**1/29/2001**

		Maximum Two-Way Average Daily Traffic (ADT) <sup>(2)</sup>				
Roadway Classification	Number of Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
Collector	2	7,800	9,100	10,400	11,700	13,000
Secondary	4	15,500	18,100	20,700	23,300	25,900
Major	4	20,500	23,900	27,300	30,700	34,100
Arterial (3)	2	10,800	12,600	14,400	16,200	18,000
Arterial	4	21,500	25,100	28,700	32,300	35,900
Mountain Arterial (3)	2	9,700	11,300	12,900	14,500	16,100
Mountain Arterial	3	12,500	14,600	16,700	18,800	20,900
Mountain Arterial	4	22,300	26,000	29,800	33,500	37,200
Urban Arterial	4	21,500	25,100	28,700	32,300	35,900
Urban Arterial	6	32,300	37,700	43,100	48,500	53,900
Urban Arterial	8	43,100	50,300	57,400	64,600	71,800
Expressway (4)	4	24,500	28,600	32,700	36,800	40,900
Expressway (4)	6	36,800	42,900	49,000	55,200	61,300
Expressway (4)	8	49,000	57,200	65,400	73,500	81,700
Freeway	4	45,900	53,600	61,200	68,900	76,500
Freeway	6	70,500	82,200	94,000	105,800	117,500
Freeway	8	96,300	112,400	128,400	144,500	160,500
Freeway	10	120,400	140,400	160,500	180,500	200,600

Notes:

(1) All Capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.

(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.

(3) Level two-lane arterials are analyzed as arterials.

(4) There are currently no roadways in Madera County that match this category, but capacity values are included for future conditions analysis.



## **APPENDIX B – SEGMENT LOS ANALYSES**

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**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

<i>Roadway Segment</i>		<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>
1	3rd ST.	Fairview Ave/Rotan Ave	City of Madera	Coll/Local	2	800	A
2	3rd ST.	Gateway Dr/E st	City of Madera	Coll/Local	2	1100	A
3	3rd ST.	Robertson Blvd/Kings Ave	City of Chowchilla	Collector	2	2300	A
4	3rd ST.	Robertson Blvd/Trinity Av	City of Chowchilla	Collector	2	1500	A
5	3rd ST.	Trinity Ave/Orange Ave	City of Chowchilla	Collector	2	900	A
6	4th ST.	Amerine Ave/Williams Ave	City of Madera	Collector	2	200	A
7	4th ST.	D St/C St	City of Madera	Arterial	2	2900	A
8	4th ST.	D St/E St	City of Madera	Arterial	2	9600	A
9	4th ST.	Gateway Dr/E St	City of Madera	Arterial	2	12100	B
10	4th ST.	Gateway Dr/G St	City of Madera	Arterial	2	14700	D
11	4th ST.	I St/H St	City of Madera	Arterial	2	13800	C
12	4th ST.	J St/I St	City of Madera	Arterial	2	13500	C
13	4th ST.	K St/L St	City of Madera	Collector	2	6600	A
14	4th ST.	Lake St/A St	City of Madera	Arterial	2	4700	A
15	4th ST.	Lake St/Flume St	City of Madera	Collector	2	900	A
16	5th ST.	P St/Q St	City of Madera	Coll/Local	2	800	A
17	5th ST.	Robertson Blvd/Kings Ave	City of Chowchilla	Arterial	2	2600	A
18	5th ST.	Robertson Blvd/Trinity Av	City of Chowchilla	Arterial	2	4100	A
19	6th ST.	B St/Ast	City of Madera	Arterial	2	5200	A
20	6th ST.	B St/C St	City of Madera	Arterial	2	5500	A
21	6th ST.	D St/C St	City of Madera	Arterial	2	5700	A
22	6th ST.	D St/E St	City of Madera	Arterial	2	7200	A
23	8th ST.	Ventura Ave/Sonoma Ave	City of Chowchilla	Coll/Local	2	200	A
24	15th ST.	Robertson Blvd/Kings Ave	City of Chowchilla	Collector	2	3500	A
25	15th ST.	Robertson Blvd/Trinity St	City of Chowchilla	Arterial	2	3400	A
26	A ST.	Yosemite Ave/5th St	City of Madera	Coll/Local	2	2000	A
27	AIRPORT DR.	Ave 17/Yeager Road	City of Madera	Coll/Local	2	3700	A
28	ALMOND	Barnett Way/Emily Way	City of Madera	Coll/Local	2	5800	A
29	ALMOND	Barnett Way/Golden State	City of Madera	Coll/Local	2	5600	A
30	ALMOND	Madera Ave/Emily Way	City of Madera	Coll/Local	2	6300	A
31	ALMOND	Madera Ave/Monterey St	City of Madera	Coll/Local	2	2700	A
32	ALMOND	Monterey St/Stadium Rd	City of Madera	Collector	2	2600	A
33	AMERINE	4th St/5th St	City of Madera	Collector	2	600	A
34	AMERINE	4th St/Jennings St	City of Madera	Collector	2	300	A
35	AMERINE	Jennings St/3rd St	City of Madera	Collector	2	300	A
36	AVE. 7	Firebaugh Blvd/RD. 13	Madera County	Arterial	2	3600	A
37	AVE. 7	Road 23/Road 24	Madera County	Arterial	2	3700	A
38	AVE. 7	Road 26/RT. 145	Madera County	Arterial	2	4400	A
39	AVE. 7	Road 32/SR 99	Madera County	Arterial	2	3500	A
40	AVE. 7	RT. 145/Road 28	Madera County	Arterial	2	5400	A
41	AVE. 7	SR 99/Road 34	Madera County	Arterial	2	2500	A
42	AVE. 8	Road 23/Road 23 1/2	Madera County	Coll/Local	2	3800	A
43	AVE. 9	Road 30 1/2/SR 99	Madera County	Arterial	2	1500	A
44	AVE. 9	Road 35/Road 36	Madera County	Arterial	2	2600	A
45	AVE. 9	Road 38/Road 40 1/2	Madera County	Arterial	2	900	A
46	AVE. 10	Road 40 1/2/RT 41	Madera County	Coll/Local	2	2400	A
47	AVE. 12	Firebaugh Blvd/RD. 16	Madera County	Arterial	2	2000	A
48	AVE. 12	RD 16/Road 17	Madera County	Arterial	2	1900	A
49	AVE. 12	Road 23/Road 24	Madera County	Arterial	2	2400	A
50	AVE. 12	Road 26 1/2/RT 145	Madera County	Arterial	2	4700	A
51	AVE. 12	Road 28/Road29	Madera County	Arterial	2	5100	A
52	AVE. 12	Road 29/Golden State Blv	Madera County	Arterial	2	9700	A
53	AVE. 12	Road 35/Road 36	Madera County	Arterial	2	5400	A
54	AVE. 12	Road 36/Topper Road	Madera County	Coll/Local	2	8900	B
55	AVE. 12	Road 37/Road 38	Madera County	Arterial	2	11000	B
56	AVE. 12	RT 145/Road 28	Madera County	Arterial	2	5500	A
57	AVE. 12	RT 41/Road 39 1/2	Madera County	Collector	2	9100	B
58	AVE. 12	SR 99/Road 29	Madera County	Arterial	2	8200	A
59	AVE. 13	Road 29/Road 28 1/2	Madera County	Arterial	2	1200	A
60	AVE. 14	Road 14/Road 16	Madera County	Collector	2	1000	A
61	AVE. 14	Road 18/Road 19	Madera County	Collector	2	2100	A
62	AVE. 14	Road 22/Road 23	Madera County	Arterial	2	2900	A
63	AVE. 14	Road 9/Road 14	Madera County	Collector	2	300	A
64	AVE. 15	Road 29/Road 35	Madera County	Arterial	2	2100	A
65	AVE. 15	Road 36/Road 37	Madera County	Arterial	2	1900	A

**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

	<i>Roadway Segment</i>	<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>
66	AVE. 15	Road 37/RT 41	Madera County	Arterial	2	2900	A
67	AVE. 16	Schnoor/Granada Dr	City of Madera	Arterial	2	1600	A
68	AVE. 16	Schnoor/SR 99	City of Madera	Arterial	2	4600	A
69	AVE. 17	RD 26/Crystal Dr	Madera County	Arterial	2	4600	A
70	AVE. 17	SR 99/Airport Dr	City of Madera	Arterial	2	4500	A
71	AVE. 17	SR 99/Waldon Dr	Madera County	Arterial	2	7500	A
72	AVE. 18 1/2	Road 10 1/2/Robertson Bl	Madera County	Arterial	2	800	A
73	AVE. 18 1/2	Road 16/Road 17	Madera County	Arterial	2	800	A
74	AVE. 18 1/2	Road 19/Road 19 1/2	Madera County	Arterial	2	1200	A
75	AVE. 18 1/2	Robertson Blvd/Road 11.	Madera County	Arterial	2	600	A
76	AVE. 18 1/2	SR 99/Road 22	Madera County	Coll/Local	2	2100	A
77	AVE. 18 1/2	SR 99/Road 24	Madera County	Arterial	2	2300	A
78	AVE. 20 1/2	SR 99/Road 22	Madera County	Arterial	2	3400	A
79	AVE. 21	Road 26/Road 24	Madera County	Coll/Local	2	1200	A
80	AVE. 21	Road 28 1/2/Road 29	Madera County	Coll/Local	2	2300	A
81	AVE. 24	Road 20/Road 22	Madera County	Arterial	2	2500	A
82	AVE. 26	Road 19/Road 22	Madera County	Arterial	2	1100	A
83	AVE. 26	Road 26/Road 29	Madera County	Arterial	2	500	A
84	AVE. 26	SR 99/Road 16 1/2	Madera County	Arterial	2	1700	A
85	AVE. 26	SR 99/Road 19	Madera County	Arterial	2	1500	A
86	B ST.	6th St/Clinton St	City of Madera	Collector	2	1700	A
87	B ST.	Yosemite Ave/5th St	City of Madera	Collector	2	1000	A
88	B ST.	Yosemite Ave/6th St	City of Madera	Collector	2	1300	A
89	CENTRAL	Lake St/A St	City of Madera	Collector	2	1700	A
90	CLEVELAND	Country Club Dr/Owens St	City of Madera	Arterial	2	14800	D
91	CLEVELAND	D St/Nebraska Ave	City of Madera	Arterial	2	16800	E
92	CLEVELAND	D St/Sierra St	City of Madera	Arterial	2	15900	D
93	CLEVELAND	Granada Dr/Aspen Lane	City of Madera	Arterial	2	7100	A
94	CLEVELAND	Granada Dr/Road 23	City of Madera	Arterial	2	1700	A
95	CLEVELAND	Lake St/Bloker St	City of Madera	Arterial	2	14000	C
96	CLEVELAND	Lake St/Fresno St	City of Madera	Arterial	2	14600	D
97	CLEVELAND	SR 99/ Schnoor Ave	City of Madera	Arterial	4	22500	B
98	CLEVELAND	Tulare St/Kadota Ave	City of Madera	Arterial	2	12400	B
99	CLEVELAND	Tulare St/Merced St	City of Madera	Arterial	2	12900	C
100	CLEVELAND	Yosemite Ave/Echo St	City of Madera	Arterial	2	12000	B
101	CLINTON	Lilly St/Malone St	City of Madera	Collector	2	2700	A
102	CLINTON	Storey St/Tozar St	City of Madera	Collector	2	500	A
103	CLINTON	Vineyard Ave/Lilly St	City of Madera	Collector	2	3100	A
104	COUNTRY CLUB DR.	Clark St/Adell St	Madera County	Arterial	4	14800	A
105	COUNTRY CLUB DR.	Cleveland Ave/Sherwood	City of Madera	Arterial	4	18700	A
106	COUNTRY CLUB DR.	Sherwood Ave/Clark St	City of Madera	Arterial	4	15600	A
107	D ST.	4th St/3rd St	City of Madera	Collector	2	11400	D
108	D ST.	4th St/5th St	City of Madera	Collector	2	8200	B
109	D ST.	6th St/7th St	City of Madera	Collector	2	4800	A
110	D ST.	6th St/Yosemite Ave	City of Madera	Collector	2	4200	A
111	D ST.	Adell St/Ellis St	County Madera	Collector	2	2400	A
112	D ST.	Cleveland Ave/Green Way	City of Madera	Collector	2	6600	A
113	D ST.	Cleveland Ave/Rush St	City of Madera	Collector	2	10000	C
114	FAIRVIEW	Jennings St/3rd St	City of Madera	Coll/Local	2	300	A
115	FAIRVIEW	Jennings St/4th St	City of Madera	Coll/Local	2	200	A
116	GARY	Madera Ave/Diamond Way	City of Madera	Coll/Local	2	600	A
117	GATEWAY DR.	4th St/3rd St	City of Madera	Arterial	2	15900	D
118	GATEWAY DR.	4th St/5th St	City of Madera	Arterial	2	18900	F
119	GATEWAY DR.	Cleveland Ave/Ave 16	City of Madera	Arterial	2	4900	A
120	GATEWAY DR.	Cleveland Ave/Central Ave	City of Madera	Arterial	2	11100	B
121	GATEWAY DR.	Olive Ave/9th St	City of Madera	Arterial	2	8900	A
122	GATEWAY DR.	Olive Ave/SR 99	City of Madera	Arterial	2	8900	A
123	GOLDEN STATE	Almond Ave/Ave 13	City of Madera	Collector	2	2300	A
124	GRANADA	Cleveland Ave/Foxglove	City of Madera	Collector	2	400	A
125	GRANADA	Cleveland Ave/Steeple Gt	City of Madera	Collector	2	5000	A
126	GRANADA	Howard Rd/Gamay Ave	City of Madera	Collector	2	4600	A
127	GRANADA	Howard Rd/Westgate Dr	City of Madera	Collector	2	5000	A
128	GRANADA	Pecan-Ave13/Almond Ave	City of Madera	Collector	2	3700	A
129	GRANADA	Sunset Ave/Monocott Dr	City of Madera	Collector	2	5100	A
130	GRANADA	Sunset Ave/Sunnydale Av	City of Madera	Collector	2	4700	A

**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

<i>Roadway Segment</i>	<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>	
131	HOWARD	Autumn Road/Road 24	City of Madera	Arterial	2	4900	A
132	HOWARD	Granada Dr/Berry Dr	City of Madera	Arterial	2	5000	A
133	HOWARD	Granada Dr/Mainberry St	City of Madera	Arterial	4	10600	A
134	HOWARD	Mainberry Dr/Sassafras Dr	City of Madera	Arterial	4	10000	A
135	HOWARD	Pine Ave/Q St	City of Madera	Arterial	4	19200	A
136	HOWARD	Pine Ave/Rotan Ave	City of Madera	Arterial	4	23400	B
137	HOWARD	Williams Ave/Fairview Ave	City of Madera	Arterial	4	18900	A
138	HUMBOLT	15th St/14th St	City of Chowchilla	Coll/Local	2	800	A
139	HUMBOLT	5th St/6th St	City of Chowchilla	Coll/Local	2	700	A
140	I ST.	2nd St/ 3rd St	City of Madera	Collector	2	7900	B
141	I ST.	4th St/5th St	City of Madera	Collector	2	5100	A
142	I ST.	Olive Ave/9th St	City of Madera	Collector	2	4400	A
143	I ST.	Yosemite Ave/5th St	City of Madera	Collector	2	5700	A
144	INDIAN SPRINGS RD	Road 427/Road 428	Madera County	Coll/Local	2	700	A
145	J ST.	4th St/5th St	City of Madera	Coll/Local	2	1100	A
146	JENNINGS	Amerine Ave/Schnoor Ave	City of Madera	Collector	2	200	A
147	JENNINGS	Amerine Ave/Williams Ave	City of Madera	Collector	2	200	A
148	JENNINGS	Fairview Ave/Rotan Ave	City of Madera	Coll/Local	2	200	A
149	JENNINGS	Fairview Ave/Willis Ave	City of Madera	Coll/Local	2	100	A
150	KENNEDY	Lake St/Merced St	City of Madera	Collector	2	3600	A
151	LAKE	4th St/5th St	City of Madera	Arterial	2	12000	B
152	LAKE	4th St/Riverside Dr	City of Madera	Arterial	2	10800	A
153	LAKE	Adell St/Kennedy St	City of Madera	Arterial	2	7700	A
154	LAKE	Cleveland Ave/Grant Ave	City of Madera	Arterial	2	11800	B
155	LAKE	Cleveland Ave/Mission Av	City of Madera	Arterial	2	12400	B
156	LAKE	Ellis St/Martin St	Madera County	Arterial	2	6100	A
157	LAKE	Sherwood Way/Wessmith	City of Madera	Arterial	2	9600	A
158	LAKE	Sunrise Ave/12th St	City of Madera	Arterial	2	400	A
159	LAKE	Sycamore Ave/6th St	City of Madera	Arterial	2	3300	A
160	LAKE	Sycamore Ave/Clinton St	City of Madera	Arterial	2	2700	A
161	LANES BRIDGE RD	Ave 10/Loma Dr	Madera County	Collector	2	6800	A
162	LILLY	Clinton St/Sunrise Ave	City of Madera	Collector	2	1100	A
163	LILLY	Clinton St/Washington St	City of Madera	Collector	2	400	A
164	MAMMOTH RD.	Road 225/Cascadel Road	Madera County	Collector	2	500	A
165	MAPLE	Cortopassi St/Madera Av	City of Madera	Collector	2	700	A
166	MAPLE	Cortopassi St/Monterey St	City of Madera	Collector	2	800	A
167	MAPLE	Pine St/Cypress St	City of Madera	Collector	2	1200	A
168	MONTEREY	Maple St/Dunham Ave	City of Madera	Coll/Local	2	1100	A
169	MONTEREY	Maple St/Walnut St	City of Madera	Coll/Local	2	1100	A
170	MUDGE RANCH RD.	Johnson Rd/Road420	Madera County	Coll/Local	2	400	A
171	MUDGE RANCH RD.	SR 41/ Sunny View Way	Madera County	Coll/Local	2	200	A
172	N ST.	3rd St/Pine St	City of Madera	Coll/Local	2	300	A
173	NATIONAL	Accornero Ave/Schnoor	City of Madera	Collector	2	600	A
174	NATIONAL	Fairview Ave/Rotan Ave	City of Madera	Coll/Local	2	600	A
175	OLIVE	Gateway Dr/13th St	City of Madera	Arterial	2	2100	A
176	OLIVE	Gateway Dr/E ST	City of Madera	Arterial	2	3700	A
177	OLIVE	I St/10th St	City of Madera	Arterial	2	10300	A
178	OLIVE	I St/Madera Ave	City of Madera	Arterial	2	11500	B
179	OLIVE	Monterey St/Martin St	City of Madera	Arterial	2	9600	A
180	OLIVE	Road 28/Road 28 1/2	Madera County	Arterial	2	1800	A
181	OLIVE	Roosevelt St/Road 27 3/4	City of Madera	Arterial	2	4200	A
182	OLIVE	Roosevelt St/Don Miguel	City of Madera	Arterial	2	5600	A
183	OLIVE	Stadium Road/Cedar St	City of Madera	Arterial	2	12000	B
184	OLIVE	Stadium Road/Santa Cruz	City of Madera	Arterial	2	9900	A
185	P ST.	5th St/4th St	City of Madera	Coll/Local	2	700	A
186	P ST.	5th St/Yosemite Ave	City of Madera	Coll/Local	2	700	A
187	PECAN	Madera Av/Colombard Dr	City of Madera	Arterial	2	4000	A
188	PECAN	Madera Ave/Watt St	City of Madera	Arterial	2	2800	A
189	PECAN	Schnoor Ave/Road 25	City of Madera	Arterial	2	2600	A
190	PECAN	Stadium/Road 26	Madera County	Arterial	2	4100	A
191	PECAN-Ave 13	Madera Ave/Conrad St	City of Madera	Arterial	2	1900	A
192	PINE	Almond Ave/Ave 13	Madera County	Collector	2	5300	A
193	PINE	Howard Road/5th St	City of Madera	Collector	2	4200	A
194	PINE	Oak St/Howard Road	City of Madera	Collector	2	6300	A
195	PINE	Oak St/Maple St	City of Madera	Collector	2	5100	A

**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

<i>Roadway Segment</i>		<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>
196	RD. 9	Ave 18 1/2/Ave 19	Madera County	Arterial	2	500	A
197	RD. 16	Ave 12/Ave 13	Madera County	Arterial	2	600	A
198	RD. 16	Ave 14/Ave 17	Madera County	Arterial	2	700	A
199	RD. 16	Ave 18 1/2/Ave 20	Madera County	Arterial	2	500	A
200	RD. 16	Ave 25/Mariposa Ave	City of Chowchilla	Arterial	2	2500	A
201	RD. 19	Ave 14/Ave 15	Madera County	Coll/Local	2	700	A
202	RD. 19	Ave 18 1/2/Ave 19	Madera County	Coll/Local	2	500	A
203	RD. 22	Ave 20 1/2/Ave 21	Madera County	Coll/Local	2	2400	A
204	RD. 22	Ave 24/Ave 21	Madera County	Coll/Local	2	2100	A
205	RD. 22	Ave 26/Santa Fe Dr	Madera County	Coll/Local	2	500	A
206	RD. 23	Ave 12/Ave 12 1/2	Madera County	Arterial	2	1600	A
207	RD. 23	Ave 14/Ave 15	Madera County	Arterial	2	3000	A
208	RD. 23	Ave 7/Ave 7 1/2	Madera County	Arterial	2	1200	A
209	RD. 26	Ave 13/Maple St	Madera County	Collector	2	4700	A
210	RD. 26	Ave 17/Ave 17 1/2	Madera County	Coll/Local	2	9100	B
211	RD. 26	Ave 17/Ellis St	Madera County	Arterial	2	11200	B
212	RD. 26	Ave 21/Ave 20 1/2	Madera County	Coll/Local	2	1700	A
213	RD. 26	Ave 26/Ave 24	Madera County	Coll/Local	2	900	A
214	RD. 27	Ave 17/Martin St	Madera County	Arterial	2	3100	A
215	RD. 27	Ave 21/Ave 20 1/2	Madera County	Coll/Local	2	800	A
216	RD. 28	Ave 11/Ave 9	Madera County	Coll/Local	2	500	A
217	RD. 28	Ave 14/Ave 14 1/2	Madera County	Arterial	2	4700	A
218	RD. 28	Sunrise Ave/Magnolia St	Madera County	Arterial	2	4400	A
219	RD. 28 1/2	Ave 21/Ave 20 1/2	Madera County	Coll/Local	2	1300	A
220	RD. 28 1/2	Ave 21/Ave 21 1/2	Madera County	Coll/Local	2	700	A
221	RD. 29	Ave 12/Borden St	Madera County	Coll/Local	2	3200	A
222	RD. 29	Ave 15/Ave 14 1/2	Madera County	Coll/Local	2	2500	A
223	RD. 29	Ave 26/Buchanon Rd	Madera County	Coll/Local	2	100	A
224	RD. 29	RT 145/Ave 16 1/4	Madera County	Coll/Local	2	900	A
225	RD. 33	RT 145/ River Road	Madera County	Coll/Local	2	300	A
226	RD. 36	Ave 12/Ave 12 1/2	Madera County	Coll/Local	2	3600	A
227	RD. 36	Ave 15/Ave 14 1/2	Madera County	Coll/Local	2	1400	A
228	RD. 36	Ave 9/Ave 12	Madera County	Coll/Local	2	1500	A
229	RD. 36	RT 145/Ave 17 1/2	Madera County	Coll/Local	2	800	A
230	RD. 37	RT 145/Ave 17 1/2	Madera County	Coll/Local	2	500	A
231	RD. 38	Ave 12/Ave 10	Madera County	Coll/Local	2	900	A
232	RD. 38	Ave 9/Ave 10	Madera County	Coll/Local	2	400	A
233	RD. 200	Road 211/Mercer Road	Madera County	Collector	2	2200	A
234	RD. 200	Road 222/Road 225	Madera County	Collector	2	4000	A
235	RD. 200	RT 41/O'Neals Road	Madera County	Collector	2	2800	A
236	RD. 221	Road 200/Saddle Road	Madera County	Collector	2	1500	A
237	RD. 222	Road 226/Road 229	Madera County	Collector	2	1300	A
238	RD. 222	Road 274/Crane Valley Rd	Madera County	Coll/Local	2	2800	A
239	RD. 222	Road 274/Dorstan Dr	Madera County	Coll/Local	2	6300	A
240	RD. 222	RT 41/Dorstan Dr	Madera County	Collector	2	2900	A
241	RD. 223	Road 426/Road 420	Madera County	Collector	2	1700	A
242	RD. 225	Road 274/Cascadel Road	Madera County	Collector	2	2500	A
243	RD. 225	Road 274/Road 222	Madera County	Collector	2	3100	A
244	RD. 23	Ave 17/Ave 16	Madera County	Arterial	2	2900	A
245	RD. 26	Adell St/Ellis St	Madera County	Arterial	2	13500	C
246	RD. 274	Road 222/Camp	Madera County	Coll/Local	2	3800	A
247	RD. 274	Road 225/Road 200	Madera County	Coll/Local	2	1400	A
248	RD. 274	Road 225/Road 229	Madera County	Collector	2	1000	A
249	RD. 28	Olive Ave/Cedar St	Madera County	Arterial	2	3700	A
250	RD. 28	Sunrise Ave/Magnolia St	Madera County	Arterial	2	4000	A
251	RD. 400	Road 603/Bates Road	Madera County	Collector	2	700	A
252	RD. 400	Road 603/Lilly Mtn Dr	Madera County	Coll/Local	2	600	A
253	RD. 415	RT 41/Millbrook Road	Madera County	Collector	2	4600	A
254	RD. 417	SR 41/Quarzt Mnt Rd	Madera County	Coll/Local	2	2900	A
255	RD. 425B	Road 426/Flats Road	Madera County	Coll/Local	2	1900	A
256	RD. 426	Road 425B to Road 427	Madera County	Collector	4	13300	A
257	RD. 426	Road 427/Road 423	Madera County	Collector	2	7600	A
258	RD. 427	Rd 426/Indian Springs Rd	Madera County	Collector	2	8500	B
259	RD. 600	Road 603/Heiskell Dr	Madera County	Collector	2	1000	A
260	RD. 600	Road 613/Road 612	Madera County	Collector	2	1100	A

**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

	<i>Roadway Segment</i>	<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>
261	RD. 600	W/O RT. 49	Madera County	Collector	2	1000	A
262	RD. 603	Road 600/Dalton Dr	Madera County	Collector	2	500	A
263	RD. 613	Road 600/Road 800	Madera County	Collector	2	400	A
264	RD. 632	SR 41/Sky Acres	Madera County	Coll/Local	2	1300	A
265	ROBERTSON BLVD.	15 St/14 St	City of Chowchilla	Arterial	2	11400	B
266	ROBERTSON BLVD.	15 St/Adams Dr	City of Chowchilla	Arterial	2	12600	B
267	ROBERTSON BLVD.	Ave 18 1/2/Ave 19	City of Chowchilla	Arterial	2	500	A
268	ROOSEVELT	Olive Ave/C St	City of Madera	Collector	2	1700	A
269	ROOSEVELT	Olive Ave/La Perla Lane	City of Madera	Collector	2	500	A
270	RUSH	D St/Nebraska Ave	City of Madera	Coll/Local	2	500	A
271	SCHNOOR	Ave 16/Foxglove Way	City of Madera	Arterial	2	4000	A
272	SCHNOOR	Howard Rd/4th St	City of Madera	Collector	2	5100	A
273	SCHNOOR	Riverview Dr/Trevor Way	City of Madera	Arterial	2	8900	A
274	SCHNOOR	Sunset Ave/Paul Ave	City of Madera	Collector	2	6400	A
275	SCHNOOR	Sunset Ave/Venturi Ave	City of Madera	Collector	2	7500	A
276	SHARON	Cleveland Ave/Wilson St	City of Madera	Collector	2	3500	A
277	SPRINGS PARKWAY	SR 41/Revis Rd	Madera County	Collector	2	3900	A
278	SR 41	Madera County Ln/Ave 10	Madera County	Freeway	4	27100	A
279	SR 41	Ave. 10 to Ave. 12	Madera County	Arterial	2	12100	B
280	SR 41	Ave. 12 to SR 145	Madera County	Arterial	2	10600	A
281	SR 41	SR 145 to Rd. 200	Madera County	Mnt Arterial	2	10500	C
282	SR 41	Rd. 200 to Rd 415	Madera County	Mnt Arterial	2	9400	D
283	SR 41	Rd 415 to SR 49	Madera County	Mnt Arterial	2	14600	E
284	SR 41	SR 49/Rd426	Madera County	Mnt Arterial	2	24500	F
285	SR 41	County Rd 426/Bass Lake Rd	Madera County	Mnt Arterial	2	10900	B
286	SR 41	Bass Lake Rd/Madera County Ln	Madera County	Mnt Arterial	2	12300	C
287	SR 49	SR 41/Rd 600	Madera County	Mnt Arterial	2	8600	A
288	SR 49	Rd 600/Rd 628	Madera County	Mnt Arterial	2	8000	A
289	SR 49	Rd 628/Rd 601	Madera County	Mnt Arterial	2	3700	A
290	SR 49	Rd 601/Madera-Mari County Line	Madera County	Mnt Arterial	2	3600	A
291	SR 99	Madera County Ln/Ave 7	Madera County	Freeway	4	58400	C
292	SR 99	Ave 7/Ave 9	Madera County	Freeway	4	53100	B
293	SR 99	Ave 9/Ave 12	Madera County	Freeway	4	54100	C
294	SR 99	Ave12/Gateway Dr	Madera County	Freeway	4	57300	C
295	SR 99	Gateway Dr/SR 145	City of Madera	Freeway	4	47800	B
296	SR 99	SR 145/4th St	City of Madera	Freeway	4	49900	B
297	SR 99	4th St/2nd St	City of Madera	Freeway	4	48300	B
298	SR 99	2nd St/Cleveland Ave	City of Madera	Freeway	4	56200	C
299	SR 99	Cleveland Ave/Ave 16	City of Madera	Freeway	4	52000	B
300	SR 99	Ave 16/Ave17	City of Madera	Freeway	4	50900	B
301	SR 99	Ave 17/Ave 18 1/2	Madera County	Freeway	4	58400	C
302	SR 99	Ave 18 1/2/Ave 20	Madera County	Freeway	4	52000	B
303	SR 99	Ave 20/Rte 152	Madera County	Freeway	4	49900	B
304	SR 99	Rte 152/Ave 24	Madera County	Freeway	4	34000	A
305	SR 99	Ave 24/Ave 24 1/2	Madera County	Freeway	4	33400	A
306	SR 99	Ave 24 1/2/Ave 26	City of Chowchilla	Freeway	4	33400	A
307	SR 99	Ave 26/Minturn Rd	City of Chowchilla	Freeway	4	30800	A
308	SR 99	Minturn Rd/Madera County L	Madera County	Freeway	4	37100	A
309	SR 145	Madera County Line/Ave 12	Madera County	Arterial	2	5600	A
310	SR 145	Ave12/Ave 13	Madera County	Arterial	2	9900	A
311	SR 145	Ave 13/Ave 13 1/2	City of Madera	Arterial	2	10100	A
312	SR 145	Ave 13 1/2 /SR 99 (Olive)	City of Madera	Arterial	4	18300	A
313	SR 145	SR 99 (Olive)/F St	City of Madera	Arterial	4	12900	A
314	SR 145	F St/6th St	City of Madera	Arterial	4	20000	A
315	SR 145	6th St/Yosemite Ave	City of Madera	Arterial	2	14400	C
316	SR 145	Yosemite Ave/C St	City of Madera	Arterial	4	18900	A
317	SR 145	C St/Lake St	City of Madera	Arterial	4	14600	A
318	SR 145	Lake St/Tozer St	City of Madera	Arterial	2	9800	A
319	SR 145	SR 41/Yosemite Rd	Madera County	Arterial	2	3800	A
320	SR 152	Madera County Line/Jct 59	Madera County	Expressway	4	13600	A
321	SR 152	Jct 59/Jct 233	Madera County	Expressway	4	11000	A
322	SR 152	Jct 233/Jct 99	Madera County	Expressway	4	11000	A
323	SR 233	SR 152/Ave 25	Madera County	Arterial	2	11500	B
324	SR 233	Ave 25/15th St	City of Chowchilla	Arterial	2	14200	C
325	SR 233	15th St/6th St	City of Chowchilla	Arterial	4	19400	A

**APPENDIX B - TABLE B-1  
LOS ANALYSIS  
CONDITIONS - YEAR 2000**

<i>Roadway Segment</i>	<i>Limits</i>	<i>Within City/County</i>	<i>Facility Type</i>	<i># of Lanes</i>	<i>ADT</i>	<i>LOS</i>	
326	SR 233	6th St/3rd St	City of Chowchilla	Arterial	2	14100	C
327	SR 233	3rd St/Chowchilla Ave	City of Chowchilla	Arterial	2	9100	A
328	SR 233	Chowchilla Ave/SR 99	City of Chowchilla	Arterial	2	9000	A
329	STADIUM	Almond Ave/Ave 13	City of Madera	Collector	2	4200	A
330	STADIUM	Olive Ave/Maple St	City of Madera	Collector	2	5200	A
331	STOREY	RT 145/Road 28 1/2	Madera County	Collector	2	2300	A
332	SUNRISE	Road 28/Lilly St	Madera County	Arterial	2	2500	A
333	SUNRISE	Road 28/Road 28 1/2	Madera County	Collector	2	1100	A
334	SUNSET	4th St/3rd St	City of Madera	Collector	2	7000	A
335	SUNSET	Granada Dr/Doubletree Wy	City of Madera	Collector	2	5000	A
336	SUNSET	Granada Dr/Linden St	City of Madera	Collector	2	5500	A
337	SUNSET	Road 24/Road 24 1/2	Madera County	Collector	2	2500	A
338	SUNSET	Schnoor Ave/El Rancho	City of Madera	Collector	2	6700	A
339	SUNSET	Schnoor Ave/Shannon Av	City of Madera	Collector	2	6100	A
340	SUNSET	Shannon Ave/Hilton St	City of Madera	Collector	2	5900	A
341	SUNSET	Westberry/Woodlands Dr	City of Madera	Collector	2	2900	A
342	SYCAMORE	Vineyard Ave/Lake St	City of Madera	Coll/Local	2	1500	A
343	TOZER	Yosemite Ave/Clinton St	City of Madera	Arterial	2	6600	A
344	TRINITY	5th St/4th St	City of Chowchilla	Coll/local	2	1900	A
345	TRINITY	5th St/6th St	City of Chowchilla	Coll/local	2	900	A
346	TRINITY	Front St/1st St	City of Chowchilla	Coll/local	2	400	A
347	TULARE	Cleveland Ave/Grant Ave	City of Madera	Collector	2	1100	A
348	TULARE	Cleveland Ave/Mission Av	City of Madera	Collector	2	3600	A
349	UNIVERSITY	Schnoor Ave/Accornero	City of Madera	Collector	2	700	A
350	VENTURA	15th St/14th St	City of Chowchilla	Collector	2	1600	A
351	VENTURA	3rd St/4th St	City of Chowchilla	Collector	2	1400	A
352	WESTBERRY	Sunset Ave/Cedar Creek	City of Madera	Collector	2	600	A
353	WESTBERRY	Sunset Ave/Crown Ln	City of Madera	Collector	2	800	A
354	YEAGER	Airport Dr/Falcon Dr	City of Madera	Collector	2	1300	A
355	YOSEMITE	I St/G St	City of Madera	Arterial	4	17700	A

# **APPENDIX C – RTP CAPACITY INCREASING PROJECT PERFORMANCE EVALUATION ANALYSES**

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**APPENDIX C - TABLE - C1**  
**CAPACITY INCREASING PROJECTS**  
**2004 RTP PROJECT PRIORITIZATION STUDY**  
**Initial Project Evaluation Methodology**

Agency Identifier	Proj. #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3															
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length)			
						ADT*1	Length*2	DL	Savings	ADT*1	Length*2	DL	Savings	Length*2	Savings						
CHOWCITY	1	AVE 26	SR 99 to Coronado St.	2 to 4 lanes	\$1,200,000	\$8.73	16108	0.5	20	=	1,406,228	\$0.075	16,108	0.5	20	=	12,081	\$120,000	0.5	=	60000
CHOWCITY	2	FIG TREE OVERPASS	SR 99 to Chowchilla Blvd	Extend	\$5,400,000	\$8.73	10000	0.5	20	=	873,000	\$0.075	10,000	0.5	20	=	7,500	\$120,000	0.5	=	60000
CHOWCITY	3	WASHINGTON	At Robertson	Reconst/Widen to Standard	\$200,000	\$8.73	2418	0.5	20	=	211,091	\$0.075	2,418	0.5	20	=	1,814	\$120,000	0.5	=	60000
CHOWCITY	4	ROBERTSON BLVD	15TH to Palm Parkway	Reconst/Widen to Standard	\$350,000	\$8.73	25722	0.5	20	=	2,245,531	\$0.075	25,722	0.5	20	=	19,292	\$120,000	0.5	=	60000
CHOWCITY	5	SR 233/SR 99	Interchange	IC Recon	\$9,000,000	\$8.73	27000	1	20	=	4,714,200	\$0.075	27,000	1.0	20	=	40,500	\$120,000	1.0	=	120000
MADCITY	6	GATEWAY	Cleveland to Yosemite	2 to 4 lanes	\$2,926,300	\$8.73	29405	1.2	20	=	6,160,936	\$0.075	29,405	1.2	20	=	52,929	\$120,000	1.2	=	144000
MADCITY	7	SR 145	Yosemite to SR 99	2 to 4 lanes	\$1,473,700	\$8.73	35252	0.7	20	=	4,308,499	\$0.075	35,252	0.7	20	=	37,015	\$120,000	0.7	=	84000
MADCITY	8	AIRPORT	Ave 17 to Yeager	Restripe to 4 lanes	\$210,000	\$8.73	16772	0.1	20	=	292,839	\$0.075	16,772	0.1	20	=	2,516	\$120,000	0.1	=	12000
MADCITY	9	CLEVELAND	Tozer to Lake	2 to 4 lanes	\$220,000	\$8.73	24216	0.7	20	=	2,959,680	\$0.075	24,216	0.7	20	=	25,427	\$120,000	0.7	=	84000
MADCITY	10	CLEVELAND	Lake to Rd. 26 (Country Club Drive)	Restripe to 4 lanes	\$20,000	\$8.73	24026	1	20	=	4,194,940	\$0.075	24,026	1.0	20	=	36,039	\$120,000	1.0	=	120000
MADCITY	11	COUNTRY CLUB	Cleveland to Adell	Restripe/Median	\$800,000	\$8.73	32240	0.6	20	=	3,377,462	\$0.075	32,240	0.6	20	=	29,016	\$120,000	0.6	=	72000
MADCITY	12	SCHNOOR	Trevor to Sunset	Restripe to 4 lanes	\$640,000	\$8.73	14382	0.8	20	=	2,008,878	\$0.075	14,382	0.8	20	=	17,258	\$120,000	0.8	=	96000
MADCITY	13	YEAGER	Airport to Falcon	Restripe to 4 lanes	\$210,000	\$8.73	16772	0.5	20	=	1,464,196	\$0.075	16,772	0.5	20	=	12,579	\$120,000	0.5	=	60000
MADCITY	14	AVE 17	Airport to SB SR 99 Ramps	2 to 4 lanes	\$600,000	\$8.73	19726	0.2	20	=	688,832	\$0.075	19,726	0.2	20	=	5,918	\$120,000	0.2	=	24000
MADCITY	15	LAKE	Cleveland to Ellis	2 to 4 lanes	\$2,400,000	\$8.73	18916	1	20	=	3,302,734	\$0.075	18,916	1.0	20	=	28,374	\$120,000	1.0	=	120000
MADCITY	16	SUNRISE	B Street to Road 28	2 to 4 lanes	\$1,200,000	\$8.73	19620	0.8	20	=	2,740,522	\$0.075	19,620	0.8	20	=	23,544	\$120,000	0.8	=	96000
MADCITY	17	CLEVELAND	Rd 26 to SR 99 w/RR Xing	4 to 6 lanes	\$6,400,000	\$8.73	59728	1	20	=	10,428,590	\$0.075	59,728	1.0	20	=	89,592	\$120,000	1.0	=	120000
MADCITY	18	CLEVELAND	Schnoor to SR 99	4 to 6 lanes	\$2,600,000	\$8.73	37994	0.5	20	=	3,316,876	\$0.075	37,994	0.5	20	=	28,496	\$120,000	0.5	=	60000
MADCITY	19	LAKE	4th to Cleveland	2 to 4 lanes	\$1,200,000	\$8.73	15454	0.5	20	=	1,349,134	\$0.075	15,454	0.5	20	=	11,591	\$120,000	0.5	=	60000
MADCITY	20	SR 145	Almond to Ave 13	2 to 4 lanes	\$2,200,000	\$8.73	26052	0.5	20	=	2,274,340	\$0.075	26,052	0.5	20	=	19,539	\$120,000	0.5	=	60000
MADCITY	21	4TH	Sunset to SR 99	2 to 4 lanes/RR Xing	\$1,200,000	\$8.73	18092	0.2	20	=	631,773	\$0.075	18,092	0.2	20	=	5,428	\$120,000	0.2	=	24000
MADCITY	22	4TH	SR 99 to Lake w/RR Xing	2 to 4 lanes	\$1,400,000	\$8.73	19692	0.6	20	=	2,062,934	\$0.075	19,692	0.6	20	=	17,723	\$120,000	0.6	=	72000
MADCITY	23	AVE 16	Schnoor to SR 99	2 to 4 lanes	\$400,000	\$8.73	19412	0.1	20	=	338,934	\$0.075	19,412	0.1	20	=	2,912	\$120,000	0.1	=	12000
MADCITY	24	D St	SR 145 to Cleveland	2 to 4 lanes	\$3,600,000	\$8.73	15332	1	20	=	2,676,967	\$0.075	15,332	1.0	20	=	22,998	\$120,000	1.0	=	120000
MADCITY	25	D St	Cleveland to Adell	2 to 4 lanes	\$2,400,000	\$8.73	11202	0.8	20	=	1,564,695	\$0.075	11,202	0.8	20	=	13,442	\$120,000	0.8	=	96000
MADCITY	26	SR 145/YOSEMITE	Lake to Tozer	2 to 4 lanes	\$2,400,000	\$8.73	19804	0.7	20	=	2,420,445	\$0.075	19,804	0.7	20	=	20,794	\$120,000	0.7	=	84000
MADCITY	27	SUNSET	Schnoor to 4th w/ RR Xing	2 to 4 lanes	\$2,800,000	\$8.73	11642	1	20	=	2,032,693	\$0.075	11,642	1.0	20	=	17,463	\$120,000	1.0	=	120000
MADCITY	28	TOZER	SR 145 to Ave 15	2 to 4 lanes	\$1,400,000	\$8.73	25212	0.6	20	=	2,641,209	\$0.075	25,212	0.6	20	=	22,691	\$120,000	0.6	=	72000
MADCITY	29	ELLIS AVE. OC	Granada to Road 26	New 4 Lane	\$15,343,809	\$8.73	15,000	1.3	20	=	3,273,750	\$0.075	15,000	1.3	20	=	28,125	\$120,000	1.3	=	150000
MADCITY	30	HOWARD RD	Pine to Mainberry	4 to 6 lanes	\$8,200,000	\$8.73	32106	0.75	20	=	4,204,281	\$0.075	32,106	0.8	20	=	36,119	\$120,000	0.8	=	90000
MADCITY	31	OLIVE	Gateway to Roosevelt	2 to 4 lanes/RR Xing	\$1,200,000	\$8.73	17680	0.3	20	=	926,078	\$0.075	17,680	0.3	20	=	7,956	\$120,000	0.3	=	36000
MADCITY	32	SR 99	Cleveland / SR 99 Interchange	IC Recon	\$20,200,000	\$8.73	46900	1	20	=	8,188,740	\$0.075	46,900	1.0	20	=	70,350	\$120,000	1.0	=	120000
MADCITY	33	4TH	Interchange @ SR 99	IC Recon	\$8,400,000	\$8.73	42800	1	20	=	7,472,880	\$0.075	42,800	1.0	20	=	64,200	\$120,000	1.0	=	120000
MADCITY	34	6TH	SR 99 to D St	2 to 4 lanes	\$800,000	\$8.73	12054	0.3	20	=	631,389	\$0.075	12,054	0.3	20	=	5,424	\$120,000	0.3	=	36000
MADCITY	35	LAKE	Yosemite (SR 145) to 6th	2 to 4 lanes	\$600,000	\$8.73	14358	0.1	20	=	250,691	\$0.075	14,358	0.1	20	=	2,154	\$120,000	0.1	=	12000
MADCITY	36	SR 99/ SR 145 IC	Interchange	IC	\$5,400,000	\$8.73	63300	1	20	=	11,052,180	\$0.075	63,300	1.0	20	=	94,950	\$120,000	1.0	=	120000
MADCITY	37	SR 145/YOSEMITE	Tozer to Rd 29 w/RR Underpass	2 to 4 lanes	\$16,400,000	\$8.73	21194	1.5	20	=	5,550,709	\$0.075	21,194	1.5	20	=	47,687	\$120,000	1.5	=	180000
MADCO	38	CHILDREN'S BLVD	Road 401/2 to Peck Blvd	2/4 to 6 lanes	\$950,000	\$8.73	37,328	0.8	20	=	4,888,102	\$0.075	37,328	0.8	20	=	41,994	\$120,000	0.8	=	90000
MADCO	39	AVE. 12	Road 38 to SR 41	2 to 4 lanes	\$9,389,587	\$8.73	36,350	4.1	20	=	26,021,511	\$0.075	36,350	4.1	20	=	223,553	\$120,000	4.1	=	492000
MADCO	40	AVE. 12	SR 41 to North Rio Mesa Blvd	2 to 6 lanes	\$5,906,385	\$8.73	41,660	1.0	20	=	7,273,836	\$0.075	41,660	1.0	20	=	62,490	\$120,000	1.0	=	120000
MADCO	41	AVE. 10	Road 401/2 to SR 41	2 to 4 lanes	\$1,965,624	\$8.73	17,944	1.6	20	=	5,012,836	\$0.075	17,944	1.6	20	=	43,066	\$120,000	1.6	=	192000
MADCO	42	CHILDREN'S BLVD	SR 41 NB Ramps to Peck Blvd.	6 to 8 lanes	\$1,827,392	\$8.73	77,122	1.0	20	=	13,465,501	\$0.075	77,122	1.0	20	=	115,683	\$120,000	1.0	=	120000
MADCO	43	PECK	At Children's Blvd	2 to 6 lanes	\$1,122,227	\$8.73	50,000	0.3	20	=	2,619,000	\$0.075	50,000	0.3	20	=	22,500	\$120,000	0.3	=	36000
MADCO	44	ROAD. 29	Olive to Ave 13	2 to 4 lanes	\$2,020,494	\$8.73	18,906	1.0	20	=	3,300,988	\$0.075	18,906	1.0	20	=	28,359	\$120,000	1.0	=	120000
MADCO	45	ROAD. 301/2	Ave 12 to Ave 13	2 to 4 lanes	\$2,039,447	\$8.73	19,418	1.0	20	=	3,390,383	\$0.075	19,418	1.0	20	=	29,127	\$120,000	1.0	=	120000
MADCO	46	AVE. 12	SR 99 to Road 301/2	2 to 4 lanes	\$2,431,525	\$8.73	24,512	1.5	20	=	6,419,693	\$0.075	24,512	1.5	20	=	55,152	\$120,000	1.5	=	180000
MADCO	47	ROAD. 29	Ave 12 to Ave 13	2 to 4 lanes	\$2,227,057	\$8.73	22,404	1.0	20	=	3,911,738	\$0.075	22,404	1.0	20	=	33,606	\$120,000	1.0	=	120000
MADCO	48	SR 41 FRONTAGE RD	Ave 10 to Ave 12	2 to 4 lanes	\$4,454,988	\$8.73	12,128	2.0	20	=	4,235,098	\$0.075	12,128	2.0	20	=	36,384	\$120,000	2.0	=	240000
MADCO	49	SR 41	Madera County Ln to Ave 10	4 to 6 lanes*9	\$4,700,000	\$8.73	127,440	1.4	20	=	31,151,434	\$0.075	127,440	1.4	20	=	267,624	\$120,000	1.4	=	168000
MADCO	50	SR 41	NB On Ramp/SR 41 @ Children's Blvd	1 to 2 lanes	\$3,000,000	\$8.73	37,998	1.0	20	=	6,634,451	\$0.075	37,998	1.0	20	=	56,997	\$120,000	1.0	=	120000
MADCO	51	SR 41	Ave 12 to Ave 15	4 lane expwy	\$20,600,000	\$8.73	45,918	3.0	20	=	24,051,848	\$0.075	45,918	3.0	20	=	206,631	\$120,000	3.0	=	360000
MADCO	52	SR 145	Ave12 to Ave 13	2 to 4 lanes	\$2,713,349	\$8.73	26,056	1.0	20	=	4,549,378	\$0.075	26,056	1.0	20	=	39,084	\$120,000	1.0	=	120000
MADCO	53	AVE. 7	SR 145 to SR 99	2 to 4 lanes	\$13,287,494	\$8.73	12,868	6.0	20	=	13,480,517	\$0.075	12,868	6.0	20	=	115,812	\$120,000	6.0	=	720000
MADCO	54	AVE. 71/2	Ave 12/Avenue 7 "Y" to Fresno Co. Line	2 to 4 lanes	\$1,083,428	\$8.73	13,344	6.0	20	=	13,979,174	\$0.075	13,344	6.0	20	=	120,096	\$120,000	6.0	=	720000
MADCO	55	AVE. 9	Rd. 38 to Rd 401/2	2 to 4 lanes	\$5,468,966	\$8.73	16,512	2.5	20	=	7,207,488	\$0.075	16,512	2.5	20	=	61,920	\$120,000	2.5	=	300000

# APPENDIX C - TABLE - C1

## CAPACITY INCREASING PROJECTS 2004 RTP PROJECT PRIORITIZATION STUDY Initial Project Evaluation Methodology

Agency Identifier	Proj. #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3															
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)					Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life					Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length)					
						ADT*1	Length*2	DL	Savings	ADT*1	Length*2	DL	Savings	Length*2	Savings						
MADCO	56	AVE 13/PECAN	Golden State Blvd to Rd 28	2 to 4 lanes	\$10,985,197	\$8.73	21,628	0.3	20	=	1,132,875	\$0.075	21,628	0.3	20	=	9,733	\$120,000	0.3	=	36000
MADCO	57	AVE. 13	Rd 28 to Road 30 1/2	2 to 4 lanes	\$15,715,423	\$8.73	27,820	2.5	20	=	12,143,430	\$0.075	27,820	2.5	20	=	104,325	\$120,000	2.5	=	300000
MADCO	58	ROAD. 301/2	Ave 9 to Ave 12	2 to 4 lanes	\$6,682,482	\$8.73	13,094	3.0	20	=	6,858,637	\$0.075	13,094	3.0	20	=	58,923	\$120,000	3.0	=	360000
MADCO	59	SR 41	Rd 415 to Rd 420	2 to 4 lanes	\$24,000,000	\$8.73	23,464	3.5	20	=	14,338,850	\$0.075	23,464	3.5	20	=	123,186	\$120,000	3.5	=	420000
MADCO	60	SR 41	Rd 420 to SR 49	2 to 4 lanes	\$22,900,000	\$8.73	26,608	3.8	20	=	17,653,876	\$0.075	26,608	3.8	20	=	151,666	\$120,000	3.8	=	456000
MADCO	61	AVE. 12	Road 301/2 to Road 331/2	2 to 4 lanes	\$6,664,188	\$8.73	13,756	3.0	20	=	7,205,393	\$0.075	13,756	3.0	20	=	61,902	\$120,000	3.0	=	360000
MADCO	62	AVE. 12	Road 36 to Road 38	2 to 4 lanes	\$2,000,000	\$8.73	17,084	2.0	20	=	5,965,733	\$0.075	17,084	2.0	20	=	51,252	\$120,000	2.0	=	240000
MADCO	63	AVE 17	SR 99 to Rd 26	2 to 4 lanes	\$8,400,000	\$8.73	17,948	1.5	20	=	4,700,581	\$0.075	17,948	1.5	20	=	40,383	\$120,000	1.5	=	180000
MADCO	64	GOLDEN STATE	Ave 12 to Ave 13	2 to 4 lanes	\$2,835,166	\$8.73	10,672	1.3	20	=	2,422,331	\$0.075	10,672	1.3	20	=	20,810	\$120,000	1.3	=	156000
MADCO	65	ROAD. 29	SR 41 to Rd 206	2 to 4 lanes	\$7,294,700	\$8.73	12,368	3.5	20	=	7,558,085	\$0.075	12,368	3.5	20	=	64,932	\$120,000	3.5	=	420000
MADCO	66	ROAD 206	Rd 145 to County Line	2 to 4 lanes	\$3,648,703	\$8.73	13,832	1.8	20	=	4,347,121	\$0.075	13,832	1.8	20	=	37,346	\$120,000	1.8	=	216000
MADCO	67	SR 49	SR 41 to Rd 600	2 to 4 lanes	\$7,356,098	\$8.73	16,368	4.0	20	=	11,431,411	\$0.075	16,368	4.0	20	=	98,208	\$120,000	4.0	=	480000
MADCO	68	SR 145	CL to Ave 7	2 to 4 lanes	\$1,520,000	\$8.73	15,656	1.2	20	=	3,280,245	\$0.075	15,656	1.2	20	=	28,181	\$120,000	1.2	=	144000
MADCO	69	SR 145	Ave 7 to Ave 12	2 to 4 lanes	\$6,100,000	\$8.73	17,868	5.0	20	=	15,998,764	\$0.075	17,868	5.0	20	=	134,010	\$120,000	5.0	=	600000
MADCO	70	AVE. 12	Between SR 99 Ramps w/ IC	IC Recon	\$4,451,629	\$8.73	47,000	1.0	20	=	8,206,200	\$0.075	47,000	1.0	20	=	70,500	\$120,000	1.0	=	120000
MADCO	71	AVE. 17	Interchange	IC Recon	\$15,800,000	\$8.73	34,000	1.0	20	=	5,936,400	\$0.075	34,000	1.0	20	=	51,000	\$120,000	1.0	=	120000
MADCO	72	CHILDRENS BLVD	Between SR 41 Ramps	4 to 6 lanes	\$5,000,000	\$8.73	34,888	0.1	20	=	605,652	\$0.075	34,888	0.1	20	=	5,203	\$120,000	0.1	=	12000
MADCO	73	SR 41	Ave 10 to Ave 12 with IC at Ave 12	4 lane fwy	\$46,800,000	\$8.73	65,575	2.0	20	=	22,898,790	\$0.075	65,575	2.0	20	=	196,725	\$120,000	2.0	=	240000
MADCO	74	SR 41	SR 145 to Rd 406	2 to 4 lanes	\$38,600,000	\$8.73	24,418	6.0	20	=	25,580,297	\$0.075	24,418	6.0	20	=	219,762	\$120,000	6.0	=	720000
MADCO	75	SR 41	Rd 200 to Rd 416	2 to 4 lanes	\$33,900,000	\$8.73	23,076	5.5	20	=	22,159,883	\$0.075	23,076	5.5	20	=	190,377	\$120,000	5.5	=	660000
MADCO	76	SR 41	Rd 416 to Rd 415	2 to 4 lanes	\$33,800,000	\$8.73	22,970	4.0	20	=	16,042,248	\$0.075	22,970	4.0	20	=	137,820	\$120,000	4.0	=	480000
MADCO	77	SR 41	SR 49 to Rd 426	2/4 to 4 lanes	\$6,000,000	\$8.73	34,622	0.4	20	=	2,418,000	\$0.075	34,622	0.4	20	=	20,773	\$120,000	0.4	=	48000
MADCO	78	SR 41	Rd 426 to Rd 222 (Base Lake Rd)	2 to 4 lanes	\$23,000,000	\$8.73	28,022	4.1	20	=	20,059,829	\$0.075	28,022	4.1	20	=	172,335	\$120,000	4.1	=	492000
MADCO	79	9TH	Gateway to B St.	2 to 4 lanes	\$1,600,000	\$8.73	16,406	0.4	20	=	1,145,795	\$0.075	16,406	0.4	20	=	9,844	\$120,000	0.4	=	48000
MADCO	80	AVE. 7	Road 23 to SR 145	2 to 4 lanes	\$9,471,602	\$8.73	12,110	4.0	20	=	8,457,624	\$0.075	12,110	4.0	20	=	72,660	\$120,000	4.0	=	480000
MADCO	81	AVE 13/PECAN	SR 145 to Golden State Blvd	2 to 4 lanes	\$2,817,324	\$8.73	14,610	1.0	20	=	2,550,906	\$0.075	14,610	1.0	20	=	21,915	\$120,000	1.0	=	120000
MADCO	82	AVE. 15	Road 28 to Road 29	2 to 4 lanes	\$3,017,324	\$8.73	14,606	1.0	20	=	2,550,208	\$0.075	14,606	1.0	20	=	21,909	\$120,000	1.0	=	120000
MADCO	83	AVE. 9	Rd 35 to Rd 36	2 to 4 lanes	\$2,387,587	\$8.73	11,600	1.0	20	=	2,025,360	\$0.075	11,600	1.0	20	=	17,400	\$120,000	1.0	=	120000
MADCO	84	AVE 181/2	Golden State Blvd to SR 99 SB Ramps	2 to 4 lanes	\$2,817,324	\$8.73	13,546	0.1	20	=	236,513	\$0.075	13,546	0.1	20	=	2,032	\$120,000	0.1	=	12000
MADCO	85	AVE 181/2	Interchange	2 to 4 lanes	\$15,600,000	\$8.73	19,700	1.0	20	=	3,439,620	\$0.075	19,700	1.0	20	=	29,550	\$120,000	1.0	=	120000
MADCO	86	AVE 12	Grade Sep @ BNSF	Grade Sep.	\$20,000,000	\$8.73	13,756	1.0	20	=	2,401,798	\$0.075	13,756	1.0	20	=	20,634	\$120,000	1.0	=	120000
MADCO	87	NORTH RIO MESA	Rio Mesa Blvd to Avenue 15 @ SR 41	2 to 4 lanes	\$11,359,284	\$8.73	13,772	3.5	20	=	8,416,069	\$0.075	13,772	3.5	20	=	72,303	\$120,000	3.5	=	420000
MADCO	88	ROAD 26	Ave 17 to Club Drive	2 to 4 lanes	\$6,400,000	\$8.73	10,096	2.0	20	=	3,525,523	\$0.075	10,096	2.0	20	=	30,288	\$120,000	2.0	=	240000
MADCO	89	SR 41	Ave 15 to SR 145	2 to 4 lanes	\$20,200,000	\$8.73	20,514	3.0	20	=	10,745,233	\$0.075	20,514	3.0	20	=	92,313	\$120,000	3.0	=	360000
MADCO	90	SR 41	Rd 406 to Rd 200	2 to 4 lanes	\$14,800,000	\$8.73	22,276	2.5	20	=	9,723,474	\$0.075	22,276	2.5	20	=	83,535	\$120,000	2.5	=	300000
<b>TOTAL:</b>					<b>\$698,505,803</b>																

\*1 ADTs resulted from MCTC Traffic Model output for Year 2030.

\*2 Project length in miles.

\*3 Benefit/Cost Ratio Methodology from Federal Equations.

\*4 Maintenance benefits only apply to projects involving "full reconstruction".

\*5 Resultant Benefit/Cost Ratio.

\*6 Evaluation Criteria:

A - Benefit/Cost receives 0 points if the ratio is less than 1.0 and 2 points if it is greater than or equal to 1.0.

B - Used most recent MCTC 2025 Traffic Model Output to identify congested areas and LOS from the Model. Future Year improvements were omitted to clearly identify resulting volume and LOS or need for the project.

C - 2 points if project does not involve significant environmental analysis/issues, 1 point if some issues are likely, and 0 points if significant issues are expected.

D - 2 points if project has a V/C Ratio greater than 2.0. 1 point if project has a V/C Ratio greater than 1.0. 0 points if project has a V/C Ratio less than 1.0.

E - 2 points if project has an existing (year 2000) F LOS. 1 point if project has an existing E LOS. 0 points if project has an existing A through D LOS.

\*7 Criteria A multiplied by 2 to increase the relative weight of this criteria.

\*8 The total or sum of scores for Criteria B & C.

\*9 Criteria D multiplied by 2 to increase the relative weight of this criteria.

\*10 Criteria E multiplied by 2 to increase the relative weight of this criteria.

\*11 Sum of \*7 and \*8 resulting in the Total Score. The greater the point score the higher the priority.

**APPENDIX C - TABLE - C1**  
**CAPACITY INCREASING PROJECTS**  
**2004 RTP PROJECT PRIORITIZATION STUDY**  
**Initial Project Evaluation Methodology**

Agency Identifier	Proj. #	Route	Project Limits	Description of Improvement	Estimated Cost	Savings/ Benefit Cost. Ratio *5	Criteria and Ranking*6					AX2	(+B & C)	DX2	EX2	Total Score
							A	B	C	D	E					
							Ben./ Cost.	Improves LOS	Env. Sens.	V/C Ratio	Exist. LOS Def.					
CHOWCITY	1	AVE 26	SR 99 to Coronado St.	2 to 4 lanes	\$1,200,000	1.23	2	1	1	0	0	4	2	0	0	6
CHOWCITY	2	FIG TREE OVERPASS	SR 99 to Chowchilla Blvd	Extend	\$5,400,000	0.17	0	1	0	0	0	0	1	0	0	1
CHOWCITY	3	WASHINGTON	At Robertson	Reconst./Widen to Standard	\$200,000	1.36	2	0	1	0	0	4	1	0	0	5
CHOWCITY	4	ROBERTSON BLVD	15TH to Palm Parkway	Reconst./Widen to Standard	\$350,000	6.64	2	0	1	0	0	4	1	0	0	5
CHOWCITY	5	SR 233/SR 99		IC Recon	\$9,000,000	0.54	0	1	0	0	0	0	1	0	0	1
MADCITY	6	GATEWAY	Cleveland to Yosemite	2 to 4 lanes	\$2,926,300	2.17	2	2	1	1	2	4	3	2	4	13
MADCITY	7	SR 145	Yosemite to SR 99	2 to 4 lanes	\$1,473,700	3.01	2	2	0	1	2	4	2	2	4	12
MADCITY	8	AIRPORT	Ave 17 to Yeager	Restripe to 4 lanes	\$210,000	1.46	2	2	2	1	0	4	4	2	0	10
MADCITY	9	CLEVELAND	Tozer to Lake	Restripe to 4 lanes	\$220,000	13.95	2	2	2	1	0	4	4	2	0	10
MADCITY	10	CLEVELAND	Lake to Rd. 26 (Country Club Drive)	Restripe to 4 lanes	\$20,000	217.55	2	2	2	1	0	4	4	2	0	10
MADCITY	11	COUNTRY CLUB	Cleveland to Adell	Restripe/Median	\$800,000	4.35	2	2	2	1	0	4	4	2	0	10
MADCITY	12	SCHNOOR	Trevor to Sunset	Restripe to 4 lanes	\$640,000	3.32	2	2	2	1	0	4	4	2	0	10
MADCITY	13	YEAGER	Airport to Falcon	Restripe to 4 lanes	\$210,000	7.32	2	2	2	1	0	4	4	2	0	10
MADCITY	14	AVE 17	Airport to SB SR 99 Ramps	2 to 4 lanes	\$600,000	1.20	2	2	1	1	0	4	3	2	0	9
MADCITY	15	LAKE	Cleveland to Ellis	2 to 4 lanes	\$2,400,000	1.44	2	2	1	1	0	4	3	2	0	9
MADCITY	16	SUNRISE	B Street to Road 28	2 to 4 lanes	\$1,200,000	2.38	2	2	1	1	0	4	3	2	0	9
MADCITY	17	CLEVELAND	Rd 26 to SR 99 w/RR Xing	4 to 6 lanes	\$6,400,000	1.66	2	2	0	1	0	4	2	2	0	8
MADCITY	18	CLEVELAND	Schnoor to SR 99	4 to 6 lanes	\$2,600,000	1.31	2	2	0	1	0	4	2	2	0	8
MADCITY	19	LAKE	4th to Cleveland	2 to 4 lanes	\$1,200,000	1.18	2	2	0	1	0	4	2	2	0	8
MADCITY	20	SR 145	Almond to Ave 13	2 to 4 lanes	\$2,200,000	1.07	2	2	0	1	0	4	2	2	0	8
MADCITY	21	4TH	Sunset to SR 99	2 to 4 lanes/RR Xing	\$1,200,000	0.55	0	2	0	1	2	0	2	2	4	8
MADCITY	22	4TH	SR 99 to Lake w/RR Xing	2 to 4 lanes	\$1,400,000	1.54	2	2	0	1	0	4	2	2	0	8
MADCITY	23	AVE 16	Schnoor to SR 99	2 to 4 lanes	\$400,000	0.88	0	2	1	1	0	0	3	2	0	5
MADCITY	24	D St	SR 145 to Cleveland	2 to 4 lanes	\$3,600,000	0.78	0	2	1	1	0	0	3	2	0	5
MADCITY	25	D St	Cleveland to Adell	2 to 4 lanes	\$2,400,000	0.70	0	2	1	1	0	0	3	2	0	5
MADCITY	26	SR 145/YOSEMITE	Lake to Tozer	2 to 4 lanes	\$2,400,000	1.05	2	1	0	0	0	4	1	0	0	5
MADCITY	27	SUNSET	Schnoor to 4th w/ RR Xing	2 to 4 lanes	\$2,800,000	0.78	0	2	1	1	0	0	3	2	0	5
MADCITY	28	TOZER	SR 145 to Ave 15	2 to 4 lanes	\$1,400,000	1.95	2	1	0	0	0	4	1	0	0	5
MADCITY	29	ELLIS AVE, OC	Granada to Road 26	New 4 Lane	\$15,343,809	0.22	0	2	0	1	0	0	2	2	0	4
MADCITY	30	HOWARD RD	Pine to Mainberry	4 to 6 lanes	\$8,200,000	0.53	0	2	0	1	0	0	2	2	0	4
MADCITY	31	OLIVE	Gateway to Roosevelt	2 to 4 lanes/RR Xing	\$1,200,000	0.81	0	2	0	1	0	0	2	2	0	4
MADCITY	32	SR 99	Cleveland / SR 99 Interchange	IC Recon	\$20,200,000	0.41	0	2	0	1	0	0	2	2	0	4
MADCITY	33	4TH	Interchange @ SR 99	IC Recon	\$8,400,000	0.91	0	2	0	1	0	0	2	2	0	4
MADCITY	34	6TH	SR 99 to D St	2 to 4 lanes	\$800,000	0.84	0	2	0	1	0	0	2	2	0	4
MADCITY	35	LAKE	Yosemite (SR 145) to 6th	2 to 4 lanes	\$600,000	0.44	0	1	0	0	0	0	1	0	0	1
MADCITY	36	SR 99/ SR 145 IC	Interchange	IC	\$5,400,000	2.09	2	2	0	1	2	4	2	2	4	12
MADCITY	37	SR 145/YOSEMITE	Tozer to Rd 29 w/RR Underpass	2 to 4 lanes	\$16,400,000	0.35	0	1	0	0	0	0	1	0	0	1
MADCO	38	CHILDREN'S BLVD	Road 401/2 to Peck Blvd	2/4 to 6 lanes	\$950,000	5.28	2	2	1	2	0	4	3	4	0	11
MADCO	39	AVE. 12	Road 38 to SR 41	2 to 4 lanes	\$9,389,587	2.85	2	2	0	2	0	4	2	4	0	10
MADCO	40	AVE. 12	SR 41 to North Rio Mesa Blvd	2 to 6 lanes	\$5,906,385	1.26	2	2	0	2	0	4	2	4	0	10
MADCO	41	AVE. 10	Road 401/2 to SR 41	2 to 4 lanes	\$1,965,624	2.67	2	2	1	1	0	4	3	2	0	9
MADCO	42	CHILDREN'S BLVD	SR 41 NB Ramps to Peck Blvd.	6 to 8 lanes	\$1,827,392	7.50	2	2	1	1	0	4	3	2	0	9
MADCO	43	PECK	At Children's Blvd	2 to 6 lanes	\$1,122,227	2.39	2	2	1	1	0	4	3	2	0	9
MADCO	44	ROAD. 29	Olive to Ave 13	2 to 4 lanes	\$2,020,494	1.71	2	2	1	1	0	4	3	2	0	9
MADCO	45	ROAD. 301/2	Ave 12 to Ave 13	2 to 4 lanes	\$2,039,447	1.74	2	2	1	1	0	4	3	2	0	9
MADCO	46	AVE. 12	SR 99 to Road 301/2	2 to 4 lanes	\$2,431,525	2.74	2	2	0	1	0	4	2	2	0	8
MADCO	47	ROAD. 29	Ave 12 to Ave 13	2 to 4 lanes	\$2,227,057	1.83	2	2	0	1	0	4	2	2	0	8
MADCO	48	SR 41 FRONTAGE RD	Ave 10 to Ave 12	2 to 4 lanes	\$4,454,988	1.01	2	2	0	1	0	4	2	2	0	8
MADCO	49	SR 41	Madera County Ln to Ave 10	4 to 6 lanes*9	\$4,700,000	6.72	2	2	0	1	0	4	2	2	0	8
MADCO	50	SR 41	NB On Ramp/SR 41 @ Children's Blvd	1 to 2 lanes	\$3,000,000	2.27	2	2	0	1	0	4	2	2	0	8
MADCO	51	SR 41	Ave 12 to Ave 15	4 lane expwy	\$20,600,000	1.20	2	2	0	1	0	4	2	2	0	8
MADCO	52	SR 145	Ave12 to Ave 13	2 to 4 lanes	\$2,713,349	1.74	2	2	0	1	0	4	2	2	0	8
MADCO	53	AVE. 7	SR 145 to SR 99	2 to 4 lanes	\$13,287,494	1.08	2	1	2	0	0	4	3	0	0	7
MADCO	54	AVE. 71/2	Ave 12/Avenue 7 "Y" to Fresno Co. Line	2 to 4 lanes	\$1,083,428	13.68	2	1	2	0	0	4	3	0	0	7
MADCO	55	AVE. 9	Rd. 38 to Rd 401/2	2 to 4 lanes	\$5,468,966	1.38	2	1	1	0	0	4	2	0	0	6

**APPENDIX C - TABLE - C1**  
**CAPACITY INCREASING PROJECTS**  
**2004 RTP PROJECT PRIORITIZATION STUDY**  
**Initial Project Evaluation Methodology**

Agency Identifier	Proj. #	Route	Project Limits	Description of Improvement	Estimated Cost	Savings/ Benefit Cost Ratio *5	Criteria and Ranking*6					AX2	(+B & C)	DX2	EX2	Total Score
							A	B	C	D	E					
							Ben./ Cost	Improves LOS	Env. Sens.	V/C Ratio	Exist. LOS Def.					
*7	*8	*9	*10	*11												
MADCO	56	AVE 13/PECAN	Golden State Blvd to Rd 28	2 to 4 lanes	\$10,985,197	0.11	0	2	2	1	0	0	4	2	0	6
MADCO	57	AVE. 13	Rd 28 to Road 30 1/2	2 to 4 lanes	\$15,715,423	0.80	0	2	2	1	0	0	4	2	0	6
MADCO	58	ROAD. 301/2	Ave 9 to Ave 12	2 to 4 lanes	\$6,682,482	1.09	2	1	1	0	0	4	2	0	0	6
MADCO	59	SR 41	Rd 415 to Rd 420	2 to 4 lanes	\$24,000,000	0.62	0	2	0	1	1	0	2	2	2	6
MADCO	60	SR 41	Rd 420 to SR 49	2 to 4 lanes	\$22,900,000	0.80	0	2	0	1	1	0	2	2	2	6
MADCO	61	AVE. 12	Road 301/2 to Road 331/2	2 to 4 lanes	\$6,664,188	1.14	2	1	0	0	0	4	1	0	0	5
MADCO	62	AVE. 12	Road 36 to Road 38	2 to 4 lanes	\$2,000,000	3.13	2	1	0	0	0	4	1	0	0	5
MADCO	63	AVE 17	SR 99 to Rd 26	2 to 4 lanes	\$8,400,000	0.59	0	2	1	1	0	0	3	2	0	5
MADCO	64	GOLDEN STATE	Ave 12 to Ave 13	2 to 4 lanes	\$2,835,166	0.92	0	2	1	1	0	0	3	2	0	5
MADCO	65	ROAD. 29	SR 41 to Rd 206	2 to 4 lanes	\$7,294,700	1.10	2	1	0	0	0	4	1	0	0	5
MADCO	66	ROAD 206	Rd 145 to County Line	2 to 4 lanes	\$3,648,703	1.26	2	1	0	0	0	4	1	0	0	5
MADCO	67	SR 49	SR 41 to Rd 600	2 to 4 lanes	\$7,356,098	1.63	2	1	0	0	0	4	1	0	0	5
MADCO	68	SR 145	CL to Ave 7	2 to 4 lanes	\$1,520,000	2.27	2	1	0	0	0	4	1	0	0	5
MADCO	69	SR 145	Ave 7 to Ave 12	2 to 4 lanes	\$6,100,000	2.68	2	1	0	0	0	4	1	0	0	5
MADCO	70	AVE. 12	Between SR 99 Ramps w/ IC	IC Recon	\$42,451,629	0.20	0	2	0	1	0	0	2	2	0	4
MADCO	71	AVE. 17	Interchange	IC Recon	\$15,800,000	0.39	0	2	0	1	0	0	2	2	0	4
MADCO	72	CHILDREN'S BLVD	Between SR 41 Ramps	4 to 6 lanes	\$5,000,000	0.12	0	2	0	1	0	0	2	2	0	4
MADCO	73	SR 41	Ave 10 to Ave 12 with IC at Ave 12	4 lane frwy	\$46,800,000	0.50	0	2	0	1	0	0	2	2	0	4
MADCO	74	SR 41	SR 145 to Rd 406	2 to 4 lanes	\$38,600,000	0.69	0	2	0	1	0	0	2	2	0	4
MADCO	75	SR 41	Rd 200 to Rd 416	2 to 4 lanes	\$33,900,000	0.68	0	2	0	1	0	0	2	2	0	4
MADCO	76	SR 41	Rd 416 to Rd 415	2 to 4 lanes	\$33,800,000	0.49	0	2	0	1	0	0	2	2	0	4
MADCO	77	SR 41	SR 49 to Rd 426	2/4 to 4 lanes	\$6,000,000	0.41	0	2	0	1	0	0	2	2	0	4
MADCO	78	SR 41	Rd 426 to Rd 222 (Base Lake Rd)	2 to 4 lanes	\$23,000,000	0.90	0	2	0	1	0	0	2	2	0	4
MADCO	79	9TH	Gateway to B St.	2 to 4 lanes	\$1,600,000	0.75	0	2	0	1	0	0	2	2	0	4
MADCO	80	AVE. 7	Road 23 to SR 145	2 to 4 lanes	\$9,471,602	0.95	0	1	2	0	0	0	3	0	0	3
MADCO	81	AVE 13/PECAN	SR 145 to Golden State Blvd	2 to 4 lanes	\$2,817,324	0.96	0	1	2	0	0	0	3	0	0	3
MADCO	82	AVE. 15	Road 28 to Road 29	2 to 4 lanes	\$3,017,324	0.89	0	1	2	0	0	0	3	0	0	3
MADCO	83	AVE. 9	Rd 35 to Rd 36	2 to 4 lanes	\$2,387,587	0.91	0	1	1	0	0	0	2	0	0	2
MADCO	84	AVE 181/2	Golden State Blvd to SR 99 SB Ramps	2 to 4 lanes	\$2,817,324	0.09	0	1	1	0	0	0	2	0	0	2
MADCO	85	AVE 181/2	Interchange	2 to 4 lanes	\$15,600,000	0.23	0	1	1	0	0	0	2	0	0	2
MADCO	86	AVE 12	Grade Sep @ BNSF	Grade Sep.	\$20,000,000	0.13	0	1	0	0	0	0	1	0	0	1
MADCO	87	NORTH RIO MESA	Rio Mesa Blvd to Avenue 15 @ SR 41	2 to 4 lanes	\$11,359,284	0.78	0	1	0	0	0	0	1	0	0	1
MADCO	88	ROAD 26	Ave 17 to Club Drive	2 to 4 lanes	\$6,400,000	0.59	0	0	1	0	0	0	1	0	0	1
MADCO	89	SR 41	Ave 15 to SR 145	2 to 4 lanes	\$20,200,000	0.55	0	1	0	0	0	0	1	0	0	1
MADCO	90	SR 41	Rd 406 to Rd 200	2 to 4 lanes	\$14,800,000	0.68	0	1	0	0	0	0	1	0	0	1
<b>TOTAL:</b>					<b>\$698,505,803</b>											

\*1 ADTs resulted from MCTC Traffic Model output for Year 2030.  
\*2 Project length in miles.  
\*3 Benefit/Cost Ratio Methodology from Federal Equations.  
\*4 Maintenance benefits only apply to projects involving "full reconstruction".  
\*5 Resultant Benefit/Cost Ratio.  
\*6 Evaluation Criteria:  
A - Benefit/Cost receives 0 points if the ratio is less than 1.0 and 2 points if it is greater than or equal to 1.0.  
B - Used most recent MCTC 2025 Traffic Model Output to identify congested areas and LOS from the Model. Future Yr  
C - 2 points if project does not involve significant environmental analysis/issues, 1 point if some issues are likely, and 0 points if significant issues are expected.  
D - 2 points if project has a V/C Ratio greater than 2.0. 1 point if project has a V/C Ratio greater than 1.0. 0 points if pr  
E - 2 points if project has an existing (year 2000) F LOS. 1 point if project has an existing E LOS. 0 points if project ha  
\*7 Criteria A multiplied by 2 to increase the relative weight of this criteria.  
\*8 The total or sum of scores for Criteria B & C.  
\*9 Criteria D multiplied by 2 to increase the relative weight of this criteria.  
\*10 Criteria E multiplied by 2 to increase the relative weight of this criteria.  
\*11 Sum of \*7 and \*8 resulting in the Total Score. The greater the point score the higher the priority.

## **APPENDIX D – RTP REHABILITATION/SAFETY PROJECT PERFORMANCE EVALUATION ANALYSES**

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# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3												
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						
						ADT*1	Length*2	DL	ADT*1	Length*2	DL	ADT*1	Length*2	DL	ADT*1	Length*2	DL	
CTSHOPP	1	145	R0.0	Replace Bridge (Scour)	\$8,189,000	\$8.73	7216	6800	1.0	20	=	1,259,951	\$0.075	7,216	1.0	20	=	10,824
CTSHOPP	2	145	5.9	Replace Bridge (Scour)	\$833,000	\$8.73	4669	4400	1.0	20	=	815,262	\$0.075	4,669	1.0	20	=	7,004
CTSHOPP	3	41	35.3	Replace Bridge (Scour)	\$308,000	\$8.73	12522	11800	1.0	20	=	2,186,386	\$0.075	12,522	1.0	20	=	18,783
CTSHOPP	4	99	R7.28L	Rehabilitate Bridge (Scour)	\$444,000	\$8.73	81713	77000	1.0	20	=	14,267,093	\$0.075	81,713	1.0	20	=	122,570
CTSHOPP	5	99	R7.28S	Replace Bridge (Scour)	\$444,000	\$8.73	81713	77000	1.0	20	=	14,267,093	\$0.075	81,713	1.0	20	=	122,570
CTSHOPP	6	99	R7.28R	Rehabilitate Bridge (Scour)	\$297,000	\$8.73	81713	77000	1.0	20	=	14,267,093	\$0.075	81,713	1.0	20	=	122,570
CTSHOPP	7	99	0.08	Replace Bridge (Scour)	\$4,085,000	\$8.73	142202	134000	1.0	20	=	24,828,447	\$0.075	142,202	1.0	20	=	213,303
CTSHOPP	8	99	24.78L	Replace Bridge (Scour)	\$750,000	\$8.73	48816	46000	1.0	20	=	8,523,198	\$0.075	48,816	1.0	20	=	73,223
CTSHOPP	9	99	24.78R	Replace Bridge (Scour)	\$750,000	\$8.73	48816	46000	1.0	20	=	8,523,198	\$0.075	48,816	1.0	20	=	73,223
CTSHOPP	10	99	11.65	Replace Bridge (Scour)	\$2,094,000	\$8.73	112488	106000	1.0	20	=	19,640,413	\$0.075	112,488	1.0	20	=	168,732
CTSHOPP	11	145	22.82	Replace Bridge (Scour)	\$211,000	\$8.73	17616	16600	1.0	20	=	3,075,763	\$0.075	17,616	1.0	20	=	26,424
CTSHOPP	12	49	3.85	Replace Bridge (Scour)	\$87,000	\$8.73	9126	8600	1.0	20	=	1,593,467	\$0.075	9,126	1.0	20	=	13,690
CTSHOPP	13	99	12.75	Upgrade Bridge Rail	\$342,000	\$8.73	101876	96000	1.0	20	=	17,787,544	\$0.075	101,876	1.0	20	=	152,814
CTSHOPP	14	145	9.38	Upgrade Bridge Rail	\$66,000	\$8.73	22285	21000	1.0	20	=	3,891,025	\$0.075	22,285	1.0	20	=	33,428
CTSHOPP	15	99	23.77	Upgrade Bridge Rail	\$176,000	\$8.73	80652	76000	1.0	20	=	14,081,806	\$0.075	80,652	1.0	20	=	120,978
CTSHOPP	16	99	R14.6	Upgrade Bridge Rail	\$76,000	\$8.73	99754	94000	1.0	20	=	17,416,970	\$0.075	99,754	1.0	20	=	149,630
CTSHOPP	17	152	4.45	Upgrade Bridge Rail	\$66,000	\$8.73	29714	28000	1.0	20	=	5,188,034	\$0.075	29,714	1.0	20	=	44,571
CTSHOPP	18	233	3.87	Upgrade Bridge Rail	\$188,000	\$8.73	2865	2700	1.0	20	=	500,275	\$0.075	2,865	1.0	20	=	4,298
CTSHOPP	19	99	28.17	Seismic/Upgrade Bridge Rail	\$86,000	\$8.73	105060	99000	1.0	20	=	18,343,405	\$0.075	105,060	1.0	20	=	157,589
CTSHOPP	20	99	9.74	Upgrade Bridge Rail and Widen	\$126,000	\$8.73	146447	138000	1.0	20	=	25,569,595	\$0.075	146,447	1.0	20	=	219,670
CTSHOPP	21	41	27.93/28.0	Upgrade Bridge Rail and Widen	\$1,000,000	\$8.73	12416	11700	1.0	20	=	2,167,857	\$0.075	12,416	1.0	20	=	18,624
CTSHOPP	22	145	19.68	Upgrade Bridge Rail and Widen	\$312,000	\$8.73	20057	18900	1.0	20	=	3,501,923	\$0.075	20,057	1.0	20	=	30,085
CTSHOPP	23	41	6.94	Upgrade Bridge Rail and Widen	\$95,000	\$8.73	17828	16800	1.0	20	=	3,112,820	\$0.075	17,828	1.0	20	=	26,742
CTSHOPP	24	41	20.9/35.3	ACOL/CAPM (Cap Overlay)	\$3,137,000	\$8.73	16343	15400	14.0	20	=	39,947,859	\$0.075	16,343	14.0	20	=	343,195
CTSHOPP	25	99	13.0/23.1	ACOL-Rehab	\$8,756,000	\$8.73	99117	93400	10.0	20	=	173,057,980	\$0.075	99,117	10.0	20	=	1,486,752
CTSHOPP	26	99	13.0/23.1 n/o Ave 16 - n/o SR 152	Rehabilitate Roadway	\$5,175,000	\$8.73	99117	93400	10.0	20	=	173,057,980	\$0.075	99,117	10.0	20	=	1,486,752
CTSHOPP	27	99	R7.3/9.6	ACOL-Rehab	\$3,220,000	\$8.73	132651	125000	2.0	20	=	46,321,729	\$0.075	132,651	2.0	20	=	397,953
CTSHOPP	28	145	6.8/11.0	ACOL-Rehab	\$8,160,000	\$8.73	23665	22300	4.0	20	=	16,527,593	\$0.075	23,665	4.0	20	=	141,990
CTSHOPP	29	41	40.9/45.739	ACOL/CAPM	\$1,226,000	\$8.73	14857	14000	5.0	20	=	12,970,084	\$0.075	14,857	5.0	20	=	111,427
CTSHOPP	30	41	40.8/45.7 Big Cedar Springs - Yosemite Natl Pk	Rehabilitate Roadway	\$2,482,000	\$8.73	14857	14000	5.0	20	=	12,970,084	\$0.075	14,857	5.0	20	=	111,427
CTSHOPP	31	41	East of Big Cedar Springs to Yosemite Natl Park	AC Overlay	\$2,482,000	\$8.73	6261	5900	1.0	20	=	1,093,193	\$0.075	6,261	1.0	20	=	9,392
CTSHOPP	32	41	D0.639/D1.81	ACOL/CAPM	\$304,000	\$8.73	141141	133000	1.0	20	=	24,643,160	\$0.075	141,141	1.0	20	=	211,711
CTSHOPP	33	99	0.0/1.4	ACOL-Rehab	\$1,176,000	\$8.73	142202	134000	1.0	20	=	24,828,447	\$0.075	142,202	1.0	20	=	213,303
CTSHOPP	34	152	R0.0R/15.63R	AR OGAC-CAPM	\$1,878,000	\$8.73	29714	28000	16.0	20	=	83,008,539	\$0.075	29,714	16.0	20	=	713,132
CTSHOPP	35	145	12.3/22.5	ACOL-Rehab	\$9,838,000	\$8.73	3502	3300	10.0	20	=	6,114,468	\$0.075	3,502	10.0	20	=	52,530
CTSHOPP	36	145	In and near Madera - east of AT&SF RR to Rte 41	AC Overlay and Widen Shoulders	\$9,841,000	\$8.73	31836	30000	13.0	20	=	72,261,898	\$0.075	31,836	13.0	20	=	620,807
CTSHOPP	37	41	3.2/11.5	ACOL/CAPM	\$2,872,000	\$8.73	20587	19400	7.0	20	=	25,161,963	\$0.075	20,587	7.0	20	=	216,168
CTSHOPP	38	152	R0.0L/15.634L	Replace Slab & Grind	\$3,130,000	\$8.73	29608	27900	16.0	20	=	82,712,080	\$0.075	29,608	16.0	20	=	710,585
CTSHOPP	39	152	R0.0L/15.634L Merced C/L - SR 99	Rehabilitate Roadway	\$4,293,000	\$8.73	29608	27900	16.0	20	=	82,712,080	\$0.075	29,608	16.0	20	=	710,585
CTSHOPP	40	145	R 0.0-6.8	ACOL-Rehab	\$8,777,000	\$8.73	24726	23300	7.0	20	=	30,220,296	\$0.075	24,726	7.0	20	=	259,625



# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3												
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						
						ADT*1	Length*2	DL	ADT*1	Length*2	DL							
CTSHOPP	41	145	R0.0 San Joaquin River Bridge	Replace Bridge (Bridge Scour)	\$8,852,000	\$8.73	7110	6700	1.0	20	=	1,241,422	\$0.075	7,110	1.0	20	=	10,665
CTSHOPP	42	145	Near Kerman - at San Joaquin River	Replace Bridge (Scour)	\$8,908,000	\$8.73	7110	6700	1.0	20	=	1,241,422	\$0.075	7,110	1.0	20	=	10,665
CTSHOPP	43	41	35.3/40.9	ACOL/CAPM	\$1,968,000	\$8.73	12416	11700	6.0	20	=	13,007,142	\$0.075	12,416	6.0	20	=	111,745
CTSHOPP	44	49	0.0/9.275	ACOL/CAPM	\$2,232,000	\$8.73	9126	8600	9.0	20	=	14,341,207	\$0.075	9,126	9.0	20	=	123,206
CTSHOPP	45	41	11.5/20.9	ACOL-Rehab	\$5,940,000	\$8.73	16555	15600	9.0	20	=	26,014,283	\$0.075	16,555	9.0	20	=	223,490
CTSHOPP	46	99	9.5/13.0	ACOL/CAPM	\$980,000	\$8.73	101451	95600	4.0	20	=	70,853,717	\$0.075	101,451	4.0	20	=	608,709
CTSHOPP	47	99	23.1/26.8	ACOL-Rehab	\$3,700,000	\$8.73	96358	90800	4.0	20	=	67,296,208	\$0.075	96,358	4.0	20	=	578,146
CTSHOPP	48	99	26.8/29.359	ACOL-Rehab	\$2,559,000	\$8.73	96358	90800	2.0	20	=	33,648,104	\$0.075	96,358	2.0	20	=	289,073
CTSHOPP	49	145	22.5/25.459	ACOL-Rehab	\$1,775,000	\$8.73	16130	15200	3.0	20	=	8,449,083	\$0.075	16,130	3.0	20	=	72,587
CTSHOPP	50	41	R0.0/2.3	New Highway Planting (qualified before 12/87)	\$2,365,000	\$8.73	142202	134000	2.0	20	=	49,656,894	\$0.075	142,202	2.0	20	=	426,606
CTSHOPP	51	99	8.7-10.5	New Highway Planting (qualified after 12/87)	\$1,742,000	\$8.73	146447	138000	2.0	20	=	51,139,189	\$0.075	146,447	2.0	20	=	439,340
CTSHOPP	52	99	26.3-26.7	New Highway Planting (qualified after 12/87)	NA	\$8.73	96358	90800	1.0	20	=	16,824,052	\$0.075	96,358	1.0	20	=	144,537
CTSHOPP	53	152	w/o Ash Slough Bridge - SR 99	Widen Shoulders and Replace Bridges	\$4,605,000	\$8.73	25893	24400	1.0	20	=	4,521,001	\$0.075	25,893	1.0	20	=	38,840
CTSHOPP	54	152	Near Chowchilla - at various locations	Widen and Replace Bridges	\$4,605,000	\$8.73	29714	28000	1.0	20	=	5,188,034	\$0.075	29,714	1.0	20	=	44,571
CTSHOPP	55	99	0.0/29.36	CURE	\$275,000	\$8.73	142202	134000	29.0	20	=	720,024,959	\$0.075	142,202	29.0	20	=	6,185,781
CTSHOPP	56	99	R18.11/R18.99	Double Three Beam Barrier	\$265,000	\$8.73	79697	75100	1.0	20	=	13,915,047	\$0.075	79,697	1.0	20	=	119,545
CTSHOPP	57	99	9.74	Rehabilitate Bridge Deck	\$150,000	\$8.73	101451	95600	1.0	20	=	17,713,429	\$0.075	101,451	1.0	20	=	152,177
CTSHOPP	58	41	58.3/58.7	Culvert Maintenance	\$115,000	\$8.73	6367	6000	1.0	20	=	1,111,722	\$0.075	6,367	1.0	20	=	9,551
CTSHOPP	59	41	7.7/R8.4	Stream & Culvert Maintenance	\$699,000	\$8.73	17828	16800	1.0	20	=	3,112,820	\$0.075	17,828	1.0	20	=	26,742
CTSHOPP	60	99	11.7 Fresno River Bridge - Cleveland Ave	Replacement Planting	\$252,000	\$8.73	99011	93300	1.0	20	=	17,287,269	\$0.075	99,011	1.0	20	=	148,516
MADCITY	61	Lake	Roosevelt - Moore	Realignment & Reconstruction	\$160,000	\$8.73	9020	8500	1.0	20	=	1,574,939	\$0.075	9,020	1.0	20	=	13,530
MADCITY	62	Pavement Overlays	Various	Pavement Overlays	\$2,200,000	\$8.73	6000	NA	5.0	20	=	5,238,000	\$0.075	6,000	5.0	20	=	45,000
MADCITY	63	Lake	Yosemite to Central	Rehabilitate Pavement	\$140,000	\$8.73	20163	19000	1.0	20	=	3,520,451	\$0.075	20,163	1.0	20	=	30,244
MADCITY	64	Rehab/Overlay	To Be Determined	Rehabilitate/Overlay	\$1,260,000	\$8.73	2000	NA	3.0	20	=	1,047,600	\$0.075	2,000	3.0	20	=	9,000
MADCITY	65	"I" Street	2nd to 4th	Reconstruct 2-Lane Collector	\$130,000	\$8.73	5943	5600	1.0	20	=	1,037,607	\$0.075	5,943	1.0	20	=	8,914
MADCITY	66	"D" Street	9th to Yosemite	Rehabilitate & Overlay	\$115,000	\$8.73	2547	2400	1.0	20	=	444,689	\$0.075	2,547	1.0	20	=	3,820
MADCITY	67	"D" Street	Fresno River to Cleveland	Reconstruct 2-Lane Collector	\$230,000	\$8.73	5943	5600	1.0	20	=	1,037,607	\$0.075	5,943	1.0	20	=	8,914
MADCITY	68	Olive Ave.	Gateway to Rd 28	Reconstruct 2-Lane Collector	\$620,000	\$8.73	8596	8100	1.0	20	=	1,500,824	\$0.075	8,596	1.0	20	=	12,894
MADCITY	69	Schnoor	n/o Almond to Howard	Reconstruct 2-Lane Collector	\$400,000	\$8.73	5200	4900	1.0	20	=	907,906	\$0.075	5,200	1.0	20	=	7,800
MADCITY	70	Sunset	Schnoor - 4th	Rehabilitate & Overlay	\$500,000	\$8.73	2229	2100	2.0	20	=	778,205	\$0.075	2,229	2.0	20	=	6,686
MADCITY	71	6th	P - Gateway	Reconstruct 2-Lane Collector	\$800,000	\$8.73	6155	5800	1.0	20	=	1,074,664	\$0.075	6,155	1.0	20	=	9,233
MADCITY	72	Pine	Howard - 4th	Reconstruct 2-Lane Collector	\$200,000	\$8.73	2971	2800	1.0	20	=	518,803	\$0.075	2,971	1.0	20	=	4,457
MADCITY	73	4th	Pine - SR 99	Reconstruct 2-Lane Collector	\$750,000	\$8.73	6155	5800	1.0	20	=	1,074,664	\$0.075	6,155	1.0	20	=	9,233
MADCITY	74	Yosemite	"Q" - Gateway	Rehabilitate Pavement	\$450,000	\$8.73	19951	18800	1.0	20	=	3,483,394	\$0.075	19,951	1.0	20	=	29,926
MADCITY	75	9th	"E" to "B"	Reconstruct 2-Lane Collector	\$200,000	\$8.73	21755	20500	1.0	20	=	3,798,382	\$0.075	21,755	1.0	20	=	32,632
MADCITY	76	Pavement Overlays	Various	Pavement Overlays	\$2,200,000	\$8.73	6000	NA	5.0	20	=	5,238,000	\$0.075	6,000	5.0	20	=	45,000
MADCITY	77	Almond	Commerce to Schnoor	Rehabilitate & Overlay	\$120,000	\$8.73	3820	3600	1.0	20	=	667,033	\$0.075	3,820	1.0	20	=	5,731
MADCITY	78	"I" Street	4th to 9th	Reconstruct 2-Lane Collector	\$270,000	\$8.73	4033	3800	1.0	20	=	704,090	\$0.075	4,033	1.0	20	=	6,049

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3												
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						
						ADT*1	Length*2	DL	ADT*1	Length*2	DL	ADT*1	Length*2	DL				
MADCITY	79	Sherwood	County Club to Sonora	Rehabilitate & Overlay	\$200,000	\$8.73	3078	2900	1.0	20	=	537,332	\$0.075	3,078	1.0	20	=	4,616
MADCITY	80	Sherwood	Austin to Lake	Rehabilitate & Overlay	\$100,000	\$8.73	2441	2300	1.0	20	=	426,160	\$0.075	2,441	1.0	20	=	3,661
MADCITY	81	'D' Street	Cleveland to Adell	Rehabilitate & Overlay	\$550,000	\$8.73	5412	5100	1.0	20	=	944,963	\$0.075	5,412	1.0	20	=	8,118
MADCITY	82	Central	'D' - Lake	Rehabilitate & Overlay	\$600,000	\$8.73	11673	11000	1.0	20	=	2,038,156	\$0.075	11,673	1.0	20	=	17,510
MADCITY	83	Almond	Monterey - SR 145	Reconstruct 2-Lane Collector	\$280,000	\$8.73	1592	1500	1.0	20	=	277,930	\$0.075	1,592	1.0	20	=	2,388
MADCITY	84	Golden St	Pecan to Almond	Rehabilitate & Overlay	\$250,000	\$8.73	6898	6500	1.0	20	=	1,204,365	\$0.075	6,898	1.0	20	=	10,347
MADCITY	85	Schnoor	Sunset to University	Rehabilitate & Overlay	\$200,000	\$8.73	1000	900	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCITY	86	'H' Street	4th to Central	Rehabilitate & Overlay	\$250,000	\$8.73	3078	2900	1.0	20	=	537,332	\$0.075	3,078	1.0	20	=	4,616
MADCITY	87	Central	'H' - 'D'	Reconstruct 2-Lane Collector	\$400,000	\$8.73	8490	8000	1.0	20	=	1,482,295	\$0.075	8,490	1.0	20	=	12,734
MADCITY	88	Vineyard	Clinton to Yosemite	Rehabilitate & Overlay	\$130,000	\$8.73	4775	4500	1.0	20	=	833,791	\$0.075	4,775	1.0	20	=	7,163
MADCITY	89	Pavement Overlays	Various	Pavement Overlays	\$2,430,000	\$8.73	6000	NA	5.0	20	=	5,238,000	\$0.075	6,000	5.0	20	=	45,000
MADCITY	90	Merced	Kennedy - Adell	Reconstruct 2-Lane Collector	\$50,000	\$8.73	1592	1500	1.0	20	=	277,930	\$0.075	1,592	1.0	20	=	2,388
MADCITY	91	Kennedy	Merced - Tulare	Reconstruct 2-Lane Collector	\$800,000	\$8.73	1380	1300	1.0	20	=	240,873	\$0.075	1,380	1.0	20	=	2,069
MADCITY	92	'D' Street	Adell to Ellis	Reconstruct 2-Lane Collector	\$300,000	\$8.73	1486	1400	1.0	20	=	259,402	\$0.075	1,486	1.0	20	=	2,229
MADCITY	93	Owens Street	Sherwood to Ellis	Reconstruct 2-Lane Collector	\$700,000	\$8.73	3396	3200	1.0	20	=	592,918	\$0.075	3,396	1.0	20	=	5,094
MADCITY	94	Clark Street	Sharon to Owens	Reconstruct 2-Lane Collector	\$600,000	\$8.73	1167	1100	1.0	20	=	203,816	\$0.075	1,167	1.0	20	=	1,751
MADCITY	95	City of Madera	Various	Pavement Overlays	\$2,500,000	\$8.73	6000	NA	5.0	20	=	5,238,000	\$0.075	6,000	5.0	20	=	45,000
MADCITY	96	City of Madera	9th St. to Yosemite	Reconstruct	\$115,000	\$8.73	10000	10000	1.0	20	=	1,746,000	\$0.075	10000	1.0	20	=	15,000
MADCITY	97	City of Madera	Fresno River to Cleveland	Reconstruct	\$230,000	\$8.73	10000	10000	1.0	20	=	1,746,000	\$0.075	10000	1.0	20	=	15,000
CHOWCITY	98	Robertson	FY 2000-01, Street Project ST-3	Robertson Blvd curb, gutters, sidewalks, handicap return, incidentals	746,000.00	\$8.73	10081	9500	1.0	20	=	1,760,226	\$0.075	10,081	1.0	20	=	15,122
CHOWCITY	99	Humboldt	FY 2001-02, Street Project ST-4	Humboldt Ave from 6th St to 12th St	559,338.00	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	100	Road 16	Ave 25 to Basin	Drainage Improvements	404,525.00	\$8.73	8700	8700	1.0	20	=	1,519,020	\$0.075	8700	1.0	20	=	13,050
CHOWCITY	101	Avenue 25/Road 16	On Ave. 25, 300' EO Rd. 16/from Ave 25 to RR	Reconstruct & Upgrade to City Stnds.	493,750.00	\$8.73	7800	7800	1.0	20	=	1,361,880	\$0.075	7800	1.0	20	=	11,700
CHOWCITY	102	Ventura	FY 2005-06, Street Project ST-6	Ventura Ave from 3rd St to 9th St	560,410.78	\$8.73	2547	2400	1.0	20	=	444,689	\$0.075	2,547	1.0	20	=	3,820
CHOWCITY	103	Adams, Colusa	FY 2006-07, Street Project ST-7	Adams Dr from Robertson Blvd to Vernal Dr, Colusa Ave from Front St to 5th St	\$1,041,734	\$8.73	4202	2000	2.0	20	=	1,467,338	\$0.075	4,202	2.0	20	=	12,606
CHOWCITY	104	Humboldt	FY 2007-08, Street Project ST-8	Humboldt Ave from 3rd St to 6th St	\$577,710	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	105	Humboldt	FY 2008-09, Street Project ST-9	Humboldt Ave from 6th St to 12th St	\$1,059,207	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	106	Humboldt	FY 2009-10, Street Project ST-10	Humboldt Ave from 12th St to 13th St	\$750,708	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	107	Humboldt, 13th	FY 2010-11, Street Project ST-11	Humboldt Ave from 13th St to 15th St, 13th St from Mariposa Ave to Orange Ave	\$1,081,523	\$8.73	4202	2000	2.0	20	=	1,467,338	\$0.075	4,202	2.0	20	=	12,606
CHOWCITY	108	13th	FY 2011-12, Street Project ST-12	13th St from Orange Ave to Kings Ave	\$617,509	\$8.73	1380	1300	1.0	20	=	240,873	\$0.075	1,380	1.0	20	=	2,069
CHOWCITY	109	13th, Monterey	FY 2012-13, Street Project ST-13	13th St from Kings Ave to Ventura Ave, Monterey Ave from 3rd St to 4th St	\$1,099,105	\$8.73	2740	1300	2.0	20	=	956,808	\$0.075	2,740	2.0	20	=	8,220
CHOWCITY	110	Monterey	FY 2013-14, Street Project ST-14	Monterey Ave from 4th St to 7th St	\$724,889	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	111	Monterey	FY 2014-15, Street Project ST-15	Monterey Ave from 7th St to 12th St	\$1,121,661	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3												
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						
						ADT*1	Length*2	DL	ADT*1	Length*2	DL							
CHOWCITY	112	Monterey	FY 2015-16, Street Project S1-16	Monterey Ave from 12th St to 15th St	\$667,503	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	113	Truman, Front	FY 2016-17, Street Project ST-17	Truman Dr from 15th St to Wilson Way, Front St from Colusa Ave to Trinity Ave	\$1,148,522	\$8.73	2000	1000	2.0	20	=	698,400	\$0.075	2,000	2.0	20	=	6,000
CHOWCITY	114	Front, Trinity	FY 2017-18, Street Project ST-18	Front St from Trinity Ave to Robertson Blvd, Trinity Ave from Front St to 1st St	\$689,053	\$8.73	2000	1000	2.0	20	=	698,400	\$0.075	2,000	2.0	20	=	6,000
CHOWCITY	115	Trinity	FY 2018-19, Street Project S1-19	Trinity Ave from 1st St to 6th St	\$1,174,830	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	116	Trinity	FY 2019-20, Street Project S1-20	Trinity Ave from 6th St to 7th St	\$917,289	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	117	Trinity	FY 2020-21, Street Project S1-21	Trinity Ave from 7th St to 11th St	\$1,200,450	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	118	Kings	FY 2021-22, Street Project S1-22	Kings Ave from Front St to 2nd St	\$745,130	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	119	Kings	FY 2022-23, Street Project S1-23	Kings Ave from 2nd St to 7th St	\$1,229,915	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	120	Kings	FY 2023-24, Street Project S1-24	Kings Ave from 7th St to 8th St	\$887,797	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	121	Kings	FY 2024-25, Street Project S1-25	Kings Ave from 8th St to 13th St	\$1,104,159	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
CHOWCITY	122	Reconstruct	To Be Determined	To Be Determined	\$373,734		7500	7500	1.0	20	=	0	\$0.075	7500	1.0	20	=	11,250
CHOWCITY	123	Various City Streets	3rd, 5th, 15th, Ventura	Resurfacing, curb/gutter, sidewalk	\$960,000	\$8.73	2122	2000	1.0	20	=	370,574	\$0.075	2,122	1.0	20	=	3,184
MADCO	124	Ave 7	Rd 25 - SR 145	Overlay	\$200,000	\$8.73	3820	3600	2.0	20	=	1,334,066	\$0.075	3,820	2.0	20	=	11,461
MADCO	125	Ave 7	SR 99 - SR 145	Reconstruct & Widen	\$4,600,000	\$8.73	4882	4600	5.0	20	=	4,261,599	\$0.075	4,882	5.0	20	=	36,612
MADCO	126	Ave 7 1/2	Ave 12 - Firebaugh	Overlay	\$1,091,000	\$8.73	3714	3500	7.0	20	=	4,539,529	\$0.075	3,714	7.0	20	=	38,999
MADCO	127	Ave 7 1/2	**Y* Ave 12 - Firebaugh	PE/reconstruct 2 Lanes	\$7,400,000	\$8.73	3714	3714	7.0	20	=	4,539,529	\$0.075	3,714	7.0	20	=	38,999
MADCO	128	Ave 9	SR 99 - Rd 40 1/2	Overlay	\$1,000,000	\$8.73	10612	10000	10.0	20	=	18,528,692	\$0.075	10,612	10.0	20	=	159,181
MADCO	129	Ave 12	Rd 16 - Rd 23	PE & Reconstruct 2 Lns	\$8,000,000	\$8.73	2235	2235	7.0	20	=	2,731,617	\$0.075	2,235	7.0	20	=	23,468
MADCO	130	Ave 12	Rd 36 - SR 41	Overlay	\$550,000	\$8.73	13583	12800	5.0	20	=	11,858,363	\$0.075	13,583	5.0	20	=	101,876
MADCO	131	Ave 12	Rd 19 - Rd 15	Overlay	\$400,000	\$8.73	2335	2200	4.0	20	=	1,630,525	\$0.075	2,335	4.0	20	=	14,008
MADCO	132	Ave 12	Rd 23 - Rd 24	Reconstruct & Widen	\$780,000	\$8.73	3290	3100	1.0	20	=	574,389	\$0.075	3,290	1.0	20	=	4,935
MADCO	133	Ave 13	CL - Rd 30 1/2	PE and Reconstruct 2 Lanes	\$2,500,000	\$8.73	14008	13200	2.0	20	=	4,891,575	\$0.075	14,008	2.0	20	=	42,024
MADCO	134	Ave 14	CL - Rd 19	Overlay	\$765,000	\$8.73	3502	3300	4.0	20	=	2,445,787	\$0.075	3,502	4.0	20	=	21,012
MADCO	135	Ave 15	Rd 28 - Rd 29	Overlay	\$116,000	\$8.73	6898	6500	1.0	20	=	1,204,365	\$0.075	6,898	1.0	20	=	10,347
MADCO	136	Ave 15	Little Dry Creek	Replace Bridge	\$294,000	\$8.73	3926	3700	1.0	20	=	685,562	\$0.075	3,926	1.0	20	=	5,890
MADCO	137	Ave 17	SR 99 - Hill Dr.	Reconstruct & Widen	\$2,800,000	\$8.73	17192	16200	1.0	20	=	3,001,648	\$0.075	17,192	1.0	20	=	25,787
MADCO	138	Ave 18 1/2	Rd 9 - Rd 22	Chip Seal	\$132,000	\$8.73	1698	1600	11.0	20	=	3,261,050	\$0.075	1,698	11.0	20	=	28,016
MADCO	139	Ave 18 1/2	Rd 22 - SR 99	PE/Reconstruct 2 Lanes	\$13,000,000	\$8.73	2335	2200	1.0	20	=	407,631	\$0.075	2,335	1.0	20	=	3,502
MADCO	140	Ave 20	Robertson Blvd.-SR99	PE/Reconstruct 2 lanes	\$10,000,000	\$8.73	7800	7800	1.0	20	=	1,361,880	\$0.075	7,800	1.0	20	=	11,700
MADCO	141	Ave 24	Rd 16 - SR 99	PE/Reconstruct w/ Shoulders	\$1,380,000	\$8.73	2653	2500	2.0	20	=	926,435	\$0.075	2,653	2.0	20	=	7,959
MADCO	142	Ave 25	Rd 8 - Rd 13	Overlay	\$567,000	\$8.73	4775	4500	5.0	20	=	4,168,956	\$0.075	4,775	5.0	20	=	35,816
MADCO	143	Ave 26	Rd 26 - Rd 29	Overlay	\$300,000	\$8.73	6367	6000	3.0	20	=	3,335,165	\$0.075	6,367	3.0	20	=	28,653
MADCO	144	Ave 26	Rd 26 - Santa Fe Dr.	Overlay	\$400,000	\$8.73	6686	6300	3.0	20	=	3,501,923	\$0.075	6,686	3.0	20	=	30,085
MADCO	145	Ave 26	Chowchilla - BN&SF	PE/Reconstruct w/ Shoulders	\$900,000	\$8.73	6473	6100	1.0	20	=	1,130,250	\$0.075	6,473	1.0	20	=	9,710
MADCO	146	Rd 9	Ave 25 - Avenue 7 1/2	PE/Reconstruct 2 lanes	\$19,450,000	\$8.73	3400	3400	17.0	20	=	10,091,880	\$0.075	3,400	17.0	20	=	86,700
MADCO	147	Rd 13	Berenda Slough	Replace Bridge	\$586,000	\$8.73	1000	900	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	148	Rd 16	Ave 12 - Ave 18 1/2	Overlay	\$650,000	\$8.73	1698	1600	6.5	20	=	1,926,984	\$0.075	1,698	6.5	20	=	16,555

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

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						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)					Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life							
						ADT*1	Length*2	DL	ADT*1	Length*2	DL							
MADCO	149	Rd 16	SR 152 - Ave 24	PE/Reconstruct w/ Shoulders	\$675,000	\$8.73	2865	2700	3.0	20	=	1,500,824	\$0.075	2,865	3.0	20	=	12,894
MADCO	150	Rd 17 1/2	Berenda Slough	Replace Bridge	\$224,000	\$8.73	1000	800	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	151	Rd 19	Ave 12 - Ave 14	Overlay	\$200,000	\$8.73	1698	1600	2.0	20	=	592,918	\$0.075	1,698	2.0	20	=	5,094
MADCO	152	Rd 23	Ave 12 - Ave 18 1/2	PSR and Reconstruct 2 Lanes / ROW 4 Lanes	\$7,500,000	\$8.73	1804	1700	7.0	20	=	2,204,914	\$0.075	1,804	7.0	20	=	18,943
MADCO	153	Rd 24	Ave 18 - Ave 20 1/2	Overlay	\$290,900	\$8.73	1273	1200	3.0	20	=	667,033	\$0.075	1,273	3.0	20	=	5,731
MADCO	154	Rd 26	Mateo Way - Ave 18	Reconstruct & Widen	\$1,381,000	\$8.73	7428	7000	1.0	20	=	1,297,008	\$0.075	7,428	1.0	20	=	11,143
MADCO	155	Rd 26	Ave 18 - Ave 19	Reconstruct 2 Lns / Widen	\$1,200,000	\$8.73	6898	6500	1.0	20	=	1,204,365	\$0.075	6,898	1.0	20	=	10,347
MADCO	156	Rd 28	Cottonwood Creek	Replace Bridge	\$532,000	\$8.73	1000	800	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	157	Rd 29	Ave 12 - Ave 14	PSR and Realign & Reconstruct	\$5,790,000	\$8.73	10188	9600	2.0	20	=	3,557,509	\$0.075	10,188	2.0	20	=	30,563
MADCO	158	Rd 30	Ave 12 - Ave 13	PE/reconstruct 2 lanes	\$1,000,000	\$8.73	3400	3400	1.0	20	=	593,640	\$0.075	3,400	1.0	20	=	5,100
MADCO	159	Rd 30 1/2	Ave 9 - Ave 13	PSR and Reconstruct 2 Lanes / ROW 4 Lanes	\$2,888,000	\$8.73	1698	1600	4.0	20	=	1,185,836	\$0.075	1,698	4.0	20	=	10,188
MADCO	160	Rd 33 1/2	Ave 9 - Ave 12	Overlay	\$300,000	\$8.73	1000	300	3.0	20	=	523,800	\$0.075	1,000	3.0	20	=	4,500
MADCO	161	Rd 36	Ave 9 - SR 145	PSR and Reconstruct 2 Lanes	\$11,030,000	\$8.73	6792	6400	9.0	20	=	10,672,526	\$0.075	6,792	9.0	20	=	91,688
MADCO	162	Rd 200	Walker Grade	Overlay	\$500,000	\$8.73	6579	6200	1.0	20	=	1,148,779	\$0.075	6,579	1.0	20	=	9,869
MADCO	163	Rd 200	Various Locations	Overlay	\$300,000	\$8.73	12735	4000	3.0	20	=	6,670,593	\$0.075	12,735	3.0	20	=	57,308
MADCO	164	Rd 200	Ladd Creek - Fine Gold	PE/Reconstruct & Widen	\$5,050,000	\$8.73	4457	4200	4.0	20	=	3,112,820	\$0.075	4,457	4.0	20	=	26,742
MADCO	165	Rd 200	Spring Valley - Ladd Creek	PE/Reconstruct & Widen	\$5,875,000	\$8.73	4457	4200	4.0	20	=	3,112,820	\$0.075	4,457	4.0	20	=	26,742
MADCO	166	Rd 211	Rd 210/ Rd 200	PE/Realign & Reconstruct	\$500,000	\$8.73	3500	2500	4.0	20	=	2,444,400	\$0.075	2,500	4.0	20	=	15,000
MADCO	167	Rd 221	Rd 200 N/B	Chip Seal	\$22,000	\$8.73	4563	4300	2.0	20	=	1,593,467	\$0.075	4,563	2.0	20	=	13,690
MADCO	168	Rd 222	San Joaquin R	Replace Bridge	\$2,600,000	\$8.73	1000	700	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	169	Rd 222	Willow Creek	Replace Bridge	\$224,000	\$8.73	1000	700	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	170	Rd 415	Fresno River W/B	Chip Seal	\$33,000	\$8.73	6367	6000	2.0	20	=	2,223,443	\$0.075	6,367	2.0	20	=	19,102
MADCO	171	Rd 415	SR 41 - Jennifer Wy	Reconstruct & Widen / Realign	\$2,038,000	\$8.73	6367	6000	2.0	20	=	2,223,443	\$0.075	6,367	2.0	20	=	19,102
MADCO	172	Rd 417	SR 41 - Ile	PE/Realign & Reconstruct	\$3,000,000	\$8.73	1000	3500	2.0	20	=	349,200	\$0.075	3500	2.0	20	=	10,500
MADCO	173	Rd 425B	From Rd 426 S/B 1 mile	Overlay	\$100,000	\$8.73	1000	4300	1.0	20	=	174,600	\$0.075	4300	1.0	20	=	6,450
MADCO	174	Rd 425B	Rd 426 to SR 41	PE/ Realign, Reconstruct 2 Lanes	\$6,750,000	\$8.73	1000	4300	1.0	20	=	174,600	\$0.075	4300	1.0	20	=	6,450
MADCO	175	Rd 426	426/427-China Creek	Replace Bridge	\$1,400,000	\$8.73	8700	8700	1.0	20	=	1,519,020	\$0.075	8,700	1.0	20	=	13,050
MADCO	176	Rd 426	Rd 427 E/B	Overlay	\$420,000	\$8.73	9551	9000	1.0	20	=	1,667,582	\$0.075	9,551	1.0	20	=	14,326
MADCO	177	Rd 426	SR41-Rd 427	PE/Construct Sidewalks/Select Locations	\$80,000	\$8.73	1000	9000	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	178	Rd 600	SR 49 W/B	Chip Seal	\$132,000	\$8.73	1592	1500	2.0	20	=	555,861	\$0.075	1,592	2.0	20	=	4,775
MADCO	179	Rd 632	Sky Ranch Lewis Creek	Replace Bridge	\$4,281,000	\$8.73	1000	?	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	180	Rd 800	Rd 613 - Rd 820	Overlay	\$700,000	\$8.73	1000	?	6.0	20	=	1,047,600	\$0.075	1,000	6.0	20	=	9,000
MADCO	181	Cedar Vly Dr.	Lewis Fork	Replace Bridge	\$524,000	\$8.73	1000	?	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	182	Firebaugh B.	Ave 7 1/2 "Y" - Rd 16	PE & Reconstruct 2 Lns	\$6,200,000	\$8.73	5500	?	8.5	20	=	8,162,550	\$0.075	5,500	8.5	20	=	70,125
MADCO	183	Hang Tree	Rd 426 - Rd 428	PE/Reconstruct 2 Lanes	\$250,000	\$8.73	1000	?	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	184	Indian Sprs Rd.	Rd 427 - Hartwell	PE/Extend 2 Lanes / Construct Bridge	\$1,250,000	\$8.73	1000	?	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	185	Robt. Blvd	SR 152 - Ave 18 1/2	Overlay	\$500,000	\$8.73	3714	3500	5.0	20	=	3,242,521	\$0.075	3,714	5.0	20	=	27,857
MADCO	186	Santa Fe Dr.	CL - Ave 24	Chip Seal	\$176,000	\$8.73	1000	100	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	187	41	Ave 15 - SR 145	Add Shoulders & Passing Lanes	\$3,500,000	\$8.73	18041	17000	3.0	20	=	9,449,633	\$0.075	18,041	3.0	20	=	81,182
MADCO	188	41	SR 145 - Rd 200	Add Shoulders & Passing Lanes	\$9,500,000	\$8.73	16979	16000	15.0	20	=	44,468,860	\$0.075	16,979	15.0	20	=	382,035

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Estimated Cost	Benefit/Cost Analysis *3												
						Safety Benefits: \$8.73 x ADT x L (Length) x Project Design Life (DL)						Operational Benefits: \$0.075 x ADT x L (Length) x Project Design Life						
						ADT*1	Length*2	DL	ADT*1	Length*2	DL	ADT*1	Length*2	DL	=			
MADCO	189	Various	Ahwahnee Area Plan	PSR/PE/Construction - Looped ROW per plan	\$3,795,000	\$8.73	5837	5500	1.0	20	=	1,019,078	\$0.075	5,837	1.0	20	=	8,755
MADCO	190	Unnamed Rd.	Rd 425B to SR 49/41	PSR for the construction of 2 lanes (local Road)	\$100,000	\$8.73	1000	?	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	191	Rd 200	Fine Gold Creek	Replace Bridge	\$1,000,000	\$8.73	5306	5000	1.0	20	=	926,435	\$0.075	5,306	1.0	20	=	7,959
MADCO	192	Rd 800	Chowchilla River	Replace Bridge	\$1,000,000	\$8.73	1000	400	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	193	Rd 800	Striped Rock Creek	Replace Bridge	\$1,000,000	\$8.73	1000	500	1.0	20	=	174,600	\$0.075	1,000	1.0	20	=	1,500
MADCO	194	Rd 810	East to East Fork of the Chowchilla River	Replace Bridge	\$1,000,000	\$8.73	1000	500	5.0	20	=	873,000	\$0.075	1,000	5.0	20	=	7,500
MADCO	195	Replace Bridges	Where needed	Replace 5 Bridges	\$5,000,000	\$8.73	5000	NA	5.0	20	=	4,365,000	\$0.075	5,000	5.0	20	=	37,500

1.06121

\*1 ADTs resulted from MCTC Traffic Model output for Year 2022 multiplied by 2% per year to reflect year 2025.

A minimum volume of 1,000 ADT was applied.

\*2 Project length rounded to nearest mile. A minimum of 1 mile was applied.

\*3 Benefit/Cost Ratio Methodology from Federal Equations.

\*4 Maintenance benefits only apply to projects involving "full reconstruction".

\*5 Resultant Benefit/Cost Ratio.

\*6 Evaluation Criteria:

A - Benefit/Cost receives 0 points if the ratio is less than 1.0 and 2 points if it is greater than or equal to 1.0.

B - 2 points when project meets standards and improves safety, 1 point when the project improves safety only.

C - 2 points for improvements that reduce primarily airborne and tire wear emissions (PM10), 1 point if the project is neutral for air quality benefits.

D - 2 points if project does not involve significant environmental analysis/issues, 1 point if some issues are likely, and 0 points if significant issues are expected.

E - 2 points allocated for all projects. The projects address needs throughout the County.

F - 2 points allocated to each project. Maintenance assumed over life of project.

\*7 The total or sum of scores for Criteria A & B multiplied by 2 to increase the relative weight of these Criteria.

\*8 The total of Criteria C through F.

\*9 Sum of \*7 and \*8 resulting in the Total Score.

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2			Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total	
									A	B	C	D	E	F					
									Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded					
CTSHOPP	1	145	R0.0	Replace Bridge (Scour)	\$0	1.0	=	0	0.16	0	1	2	2	2	2	0	2	8	10
CTSHOPP	2	145	5.9	Replace Bridge (Scour)	\$0	1.0	=	0	0.99	0	1	2	2	2	2	0	2	8	10
CTSHOPP	3	41	35.3	Replace Bridge (Scour)	\$0	1.0	=	0	7.16	2	1	2	2	2	4	2	8	14	
CTSHOPP	4	99	R7.28L	Rehabilitate Bridge (Scour)	\$0	1.0	=	0	32.41	2	1	2	2	2	4	2	8	14	
CTSHOPP	5	99	R7.28S	Replace Bridge (Scour)	\$0	1.0	=	0	32.41	2	1	2	2	2	4	2	8	14	
CTSHOPP	6	99	R7.28R	Rehabilitate Bridge (Scour)	\$0	1.0	=	0	48.45	2	1	2	2	2	4	2	8	14	
CTSHOPP	7	99	0.08	Replace Bridge (Scour)	\$0	1.0	=	0	6.13	2	1	2	2	2	4	2	8	14	
CTSHOPP	8	99	24.78L	Replace Bridge (Scour)	\$0	1.0	=	0	11.46	2	1	2	2	2	4	2	8	14	
CTSHOPP	9	99	24.78R	Replace Bridge (Scour)	\$0	1.0	=	0	11.46	2	1	2	2	2	4	2	8	14	
CTSHOPP	10	99	11.65	Replace Bridge (Scour)	\$0	1.0	=	0	9.46	2	1	2	2	2	4	2	8	14	
CTSHOPP	11	145	22.82	Replace Bridge (Scour)	\$0	1.0	=	0	14.70	2	1	2	2	2	4	2	8	14	
CTSHOPP	12	49	3.85	Replace Bridge (Scour)	\$0	1.0	=	0	18.47	2	1	2	2	2	4	2	8	14	
CTSHOPP	13	99	12.75	Upgrade Bridge Rail	\$0	1.0	=	0	52.46	2	1	1	2	2	4	2	7	13	
CTSHOPP	14	145	9.38	Upgrade Bridge Rail	\$0	1.0	=	0	59.46	2	1	1	2	2	4	2	7	13	
CTSHOPP	15	99	23.77	Upgrade Bridge Rail	\$0	1.0	=	0	80.70	2	1	1	2	2	4	2	7	13	
CTSHOPP	16	99	R14.6	Upgrade Bridge Rail	\$0	1.0	=	0	231.14	2	1	1	2	2	4	2	7	13	
CTSHOPP	17	152	4.45	Upgrade Bridge Rail	\$0	1.0	=	0	79.28	2	1	1	2	2	4	2	7	13	
CTSHOPP	18	233	3.87	Upgrade Bridge Rail	\$0	1.0	=	0	2.68	2	1	1	2	2	4	2	7	13	
CTSHOPP	19	99	28.17	Seismic/Upgrade Bridge Rail	\$0	1.0	=	0	215.13	2	1	1	2	2	4	2	7	13	
CTSHOPP	20	99	9.74	Upgrade Bridge Rail and Widen	\$0	1.0	=	0	204.68	2	2	2	1	2	4	4	7	15	
CTSHOPP	21	41	27.93/28.0	Upgrade Bridge Rail and Widen	\$0	1.0	=	0	2.19	2	2	2	0	2	4	4	6	14	
CTSHOPP	22	145	19.68	Upgrade Bridge Rail and Widen	\$0	1.0	=	0	11.32	2	2	2	0	2	4	4	6	14	
CTSHOPP	23	41	6.94	Upgrade Bridge Rail and Widen	\$0	1.0	=	0	33.05	2	2	2	0	2	4	4	6	14	
CTSHOPP	24	41	20.9/35.3	ACOL/CAPM (Cap Overlay)	\$0	14.0	=	0	12.84	2	1	1	2	2	4	2	7	13	
CTSHOPP	25	99	13.0/23.1	ACOL-Rehab	\$0	10.0	=	0	19.93	2	1	2	2	2	4	2	8	14	
CTSHOPP	26	99	13.0/23.1 n/o Ave 16 - n/o SR 152	Rehabilitate Roadway	\$0	10.0	=	0	33.73	2	1	2	2	2	4	2	8	14	
CTSHOPP	27	99	R7.3/9.6	ACOL-Rehab	\$0	2.0	=	0	14.51	2	1	2	2	2	4	2	8	14	
CTSHOPP	28	145	6.8/11.0	ACOL-Rehab	\$0	4.0	=	0	2.04	2	1	2	2	2	4	2	8	14	
CTSHOPP	29	41	40.9/45.739	ACOL/CAPM	\$0	5.0	=	0	10.67	2	1	1	2	2	4	2	7	13	
CTSHOPP	30	41	40.8/45.7 Big Cedar Springs - Yosemite Natl Pk	Rehabilitate Roadway	\$0	5.0	=	0	5.27	2	1	2	2	2	4	2	8	14	
CTSHOPP	31	41	East of Big Cedar Springs to Yosemite Natl Park	AC Overlay	\$0	1.0	=	0	0.44	0	1	1	2	2	0	2	7	9	
CTSHOPP	32	41	D0.639/D1.81	ACOL/CAPM	\$0	1.0	=	0	81.76	2	1	1	2	2	4	2	7	13	
CTSHOPP	33	99	0.0/1.4	ACOL-Rehab	\$0	1.0	=	0	21.29	2	1	2	2	2	4	2	8	14	
CTSHOPP	34	152	R0.0R/15.63R	AR OGAC-CAPM	\$0	16.0	=	0	44.58	2	1	1	2	2	4	2	7	13	
CTSHOPP	35	145	12.3/22.5	ACOL-Rehab	\$0	10.0	=	0	0.63	0	1	2	2	2	0	2	8	10	
CTSHOPP	36	145	In and near Madera - east of AT&SF RR to Rte 41	AC Overlay and Widen Shoulders	\$0	13.0	=	0	7.41	2	2	2	0	2	4	4	6	14	
CTSHOPP	37	41	3.2/11.5	ACOL/CAPM	\$0	7.0	=	0	8.84	2	1	1	2	2	4	2	7	13	
CTSHOPP	38	152	R0.0L/15.634L	Replace Slab & Grind	\$120,000	16.0	=	1920000	27.27	2	1	2	2	2	4	2	8	14	
CTSHOPP	39	152	R0.0L/15.634L Merced C/L - SR 99	Rehabilitate Roadway	\$0	16.0	=	0	19.43	2	1	2	2	2	4	2	8	14	
CTSHOPP	40	145	R 0.0-6.8	ACOL-Rehab	\$0	7.0	=	0	3.47	2	1	2	2	2	4	2	8	14	

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2				Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total
										A	B	C	D	E	F				
										Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded				
CTSHOPP	41	145	R0.0 San Joaquin River Bridge	Replace Bridge (Bridge Scour)	\$0	1.0	=	0	0.14	0	1	2	2	2	2	0	2	8	10
CTSHOPP	42	145	Near Kerman - at San Joaquin River	Replace Bridge (Scour)	\$0	1.0	=	0	0.14	0	1	2	2	2	2	0	2	8	10
CTSHOPP	43	41	35.3/40.9	ACOL/CAPM	\$0	6.0	=	0	6.67	2	1	1	2	2	2	4	2	7	13
CTSHOPP	44	49	0.0/9.275	ACOL/CAPM	\$0	9.0	=	0	6.48	2	1	1	2	2	2	4	2	7	13
CTSHOPP	45	41	11.5/20.9	ACOL-Rehab	\$0	9.0	=	0	4.42	2	1	1	2	2	2	4	2	7	13
CTSHOPP	46	99	9.5/13.0	ACOL/CAPM	\$0	4.0	=	0	72.92	2	1	1	2	2	2	4	2	7	13
CTSHOPP	47	99	23.1/26.8	ACOL-Rehab	\$0	4.0	=	0	18.34	2	1	2	2	2	2	4	2	8	14
CTSHOPP	48	99	26.8/29.359	ACOL-Rehab	\$0	2.0	=	0	13.26	2	1	2	2	2	2	4	2	8	14
CTSHOPP	49	145	22.5/25.459	ACOL-Rehab	\$0	3.0	=	0	4.80	2	1	2	2	2	2	4	2	8	14
CTSHOPP	50	41	R0.0/2.3	New Highway Planting (qualified before 12/87)	\$0	2.0	=	0	21.18	2	0	2	2	2	2	4	0	8	12
CTSHOPP	51	99	8.7-10.5	New Highway Planting (qualified after 12/87)	\$0	2.0	=	0	29.61	2	0	2	2	2	2	4	0	8	12
CTSHOPP	52	99	26.3-26.7	New Highway Planting (qualified after 12/87)	\$0	1.0	=	0	NA	0	0	2	2	2	2	0	0	8	8
CTSHOPP	53	152	w/o Ash Slough Bridge - SR 99	Widen Shoulders and Replace Bridges	\$0	1.0	=	0	0.99	0	2	2	0	2	2	0	4	6	10
CTSHOPP	54	152	Near Chowchilla - at various locations	Widen and Replace Bridges	\$0	1.0	=	0	1.14	2	2	2	0	2	2	4	4	6	14
CTSHOPP	55	99	0.0/29.36	CURE	\$0	29.0	=	0	2,640.77	2	1	1	2	2	2	4	2	7	13
CTSHOPP	56	99	R18.11/R18.99	Double Three Beam Barrier	\$0	1.0	=	0	52.96	2	1	1	2	2	2	4	2	7	13
CTSHOPP	57	99	9.74	Rehabilitate Bridge Deck	\$0	1.0	=	0	119.10	2	1	1	2	2	2	4	2	7	13
CTSHOPP	58	41	58.3/58.7	Culvert Maintenance	\$0	1.0	=	0	9.75	2	1	1	2	2	2	4	2	7	13
CTSHOPP	59	41	7.7/R8.4	Stream & Culvert Maintenance	\$0	1.0	=	0	4.49	2	1	1	2	2	2	4	2	7	13
CTSHOPP	60	99	11.7 Fresno River Bridge - Cleveland Ave	Replacement Planting	\$0	1.0	=	0	69.19	2	0	2	2	2	2	4	0	8	12
MADCITY	61	Lake	Roosevelt - Moore	Realignment & Reconstruction	\$120,000	1.0	=	120000	10.68	2	2	2	1	2	2	4	4	7	15
MADCITY	62	Pavement Overlays	Various	Pavement Overlays	\$0	3.0	=	0	2.40	2	1	1	2	2	2	4	2	7	13
MADCITY	63	Lake	Yosemite to Central	Rehabilitate Pavement	\$120,000	1.0	=	120000	26.22	2	1	2	2	2	2	4	2	8	14
MADCITY	64	Rehab/Overlay	To Be Determined	Rehabilitate/Overlay	\$0	1.0	=	0	0.84	0	1	2	2	2	2	0	2	8	10
MADCITY	65	"I" Street	2nd to 4th	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	8.97	2	2	2	2	2	2	4	4	8	16
MADCITY	66	"D" Street	9th to Yosemite	Rehabilitate & Overlay	\$120,000	1.0	=	120000	4.94	2	2	2	2	2	2	4	4	8	16
MADCITY	67	"D" Street	Fresno River to Cleveland	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	5.07	2	2	2	2	2	2	4	4	8	16
MADCITY	68	Olive Ave.	Gateway to Rd 28	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	2.64	2	2	2	2	2	2	4	4	8	16
MADCITY	69	Schnoor	n/o Almond to Howard	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	2.59	2	2	2	2	2	2	4	4	8	16
MADCITY	70	Sunset	Schnoor - 4th	Rehabilitate & Overlay	\$120,000	2.0	=	240000	2.05	2	1	2	2	2	2	4	2	8	14
MADCITY	71	6th	P' - Gateway	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	1.50	2	2	2	2	2	2	4	4	8	16
MADCITY	72	Pine	Howard - 4th	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	3.22	2	2	2	2	2	2	4	4	8	16
MADCITY	73	4th	Pine - SR 99	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	1.61	2	2	2	2	2	2	4	4	8	16
MADCITY	74	Yosemite	"Q" - Gateway	Rehabilitate Pavement	\$120,000	1.0	=	120000	8.07	2	1	2	2	2	2	4	2	8	14
MADCITY	75	9th	"E" to "B"	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	19.76	2	2	2	2	2	2	4	4	8	16
MADCITY	76	Pavement Overlays	Various	Pavement Overlays	\$0	3.0	=	0	2.40	2	1	1	2	2	2	4	2	7	13
MADCITY	77	Almond	Commerce to Schnoor	Rehabilitate & Overlay	\$120,000	1.0	=	120000	6.61	2	2	2	2	2	2	4	4	8	16
MADCITY	78	"I" Street	4th to 9th	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	3.07	2	2	2	2	2	2	4	4	8	16

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2			Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total	
									A	B	C	D	E	F					
									Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded					
MADCITY	79	Sherwood	County Club to Sonora	Rehabilitate & Overlay	\$120,000	1.0	=	120000	3.31	2	2	2	2	2	2	4	4	8	16
MADCITY	80	Sherwood	Austin to Lake	Rehabilitate & Overlay	\$120,000	1.0	=	120000	5.50	2	2	2	2	2	2	4	4	8	16
MADCITY	81	'D' Street	Cleveland to Adell	Rehabilitate & Overlay	\$120,000	1.0	=	120000	1.95	2	1	2	2	2	2	4	2	8	14
MADCITY	82	Central	'D' - Lake	Rehabilitate & Overlay	\$120,000	1.0	=	120000	3.63	2	1	2	2	2	2	4	2	8	14
MADCITY	83	Almond	Monterey - SR 145	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	1.43	2	2	2	2	2	2	4	4	8	16
MADCITY	84	Golden St	Pecan to Almond	Rehabilitate & Overlay	\$120,000	1.0	=	120000	5.34	2	1	2	2	2	2	4	2	8	14
MADCITY	85	Schnoor	Sunset to University	Rehabilitate & Overlay	\$120,000	1.0	=	120000	1.48	2	2	2	2	2	2	4	4	8	16
MADCITY	86	'H' Street	4th to Central	Rehabilitate & Overlay	\$120,000	1.0	=	120000	2.65	2	2	2	2	2	2	4	4	8	16
MADCITY	87	Central	'H' - 'D'	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	4.04	2	2	2	2	2	2	4	4	8	16
MADCITY	88	Vineyard	Clinton to Yosemite	Rehabilitate & Overlay	\$120,000	1.0	=	120000	7.39	2	1	2	2	2	2	4	2	8	14
MADCITY	89	Pavement Overlays	Various	Pavement Overlays	\$0	3.0	=	0	2.17	2	1	1	2	2	2	4	2	7	13
MADCITY	90	Merced	Kennedy - Adell	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	8.01	2	2	2	2	2	2	4	4	8	16
MADCITY	91	Kennedy	Merced - Tulare	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	0.45	0	2	2	2	2	2	0	4	8	12
MADCITY	92	'D' Street	Adell to Ellis	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	1.27	2	2	2	2	2	2	4	4	8	16
MADCITY	93	Owens Street	Sherwood to Ellis	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	1.03	2	2	2	2	2	2	4	4	8	16
MADCITY	94	Clark Street	Sharon to Owens	Reconstruct 2-Lane Collector	\$120,000	1.0	=	120000	0.54	0	2	2	2	2	2	0	4	8	12
MADCITY	95	City of Madera	Various	Pavement Overlays	\$0	3.0	=	0	2.11	2	1	1	2	2	2	4	2	7	13
MADCITY	96	City of Madera	9th St. to Yosemite	Reconstruct	\$120,000	1.0	=	120000	16.36	2	2	2	2	2	2	4	4	8	16
MADCITY	97	City of Madera	Fresno River to Cleveland	Reconstruct	\$120,000	1.0	=	120000	8.18	2	2	2	2	2	2	4	4	8	16
CHOWCITY	98	Robertson	FY 2000-01, Street Project ST-3	Robertson Blvd curb, gutters, sidewalks, handicap return, incidentals	\$0	1.0	=	0	2.38	2	1	2	2	2	2	4	2	8	14
CHOWCITY	99	Humboldt	FY 2001-02, Street Project ST-4	Humboldt Ave from 6th St to 12th St	\$0	1.0	=	0	0.67	0	1	2	2	2	2	0	2	8	10
CHOWCITY	100	Road 16	Ave 25 to Basin	Drainage Improvements	\$0	1.0	=	0	3.79	2	1	2	2	2	2	4	2	8	14
CHOWCITY	101	Avenue 25/Road 16	On Ave. 25, 300' EO Rd. 16/from Ave 25 to RR	Reconstruct & Upgrade to City Stnds.	\$0	1.0	=	0	2.78	2	1	2	2	2	2	4	2	8	14
CHOWCITY	102	Ventura	FY 2005-06, Street Project ST-6	Ventura Ave from 3rd St to 9th St	\$0	1.0	=	0	0.80	0	1	2	2	2	2	0	2	8	10
CHOWCITY	103	Adams, Colusa	FY 2006-07, Street Project ST-7	Adams Dr from Robertson Blvd to Vernal Dr, Colusa Ave from Front St to 5th St	\$0	2.0	=	0	1.42	2	1	2	2	2	2	4	2	8	14
CHOWCITY	104	Humboldt	FY 2007-08, Street Project ST-8	Humboldt Ave from 3rd St to 6th St	\$0	1.0	=	0	0.65	0	1	2	2	2	2	0	2	8	10
CHOWCITY	105	Humboldt	FY 2008-09, Street Project ST-9	Humboldt Ave from 6th St to 12th St	\$0	1.0	=	0	0.35	0	1	2	2	2	2	0	2	8	10
CHOWCITY	106	Humboldt	FY 2009-10, Street Project ST-10	Humboldt Ave from 12th St to 13th St	\$0	1.0	=	0	0.50	0	1	2	2	2	2	0	2	8	10
CHOWCITY	107	Humboldt, 13th	FY 2010-11, Street Project ST-11	Humboldt Ave from 13th St to 15th St, 13th St from Mariposa Ave to Orange Ave	\$0	2.0	=	0	1.37	2	1	2	2	2	2	4	2	8	14
CHOWCITY	108	13th	FY 2011-12, Street Project ST-12	13th St from Orange Ave to Kings Ave	\$0	1.0	=	0	0.39	0	1	2	2	2	2	0	2	8	10
CHOWCITY	109	13th, Monterey	FY 2012-13, Street Project ST-13	13th St from Kings Ave to Ventura Ave, Monterey Ave from 3rd St to 4th St	\$0	2.0	=	0	0.88	0	1	2	2	2	2	0	2	8	10
CHOWCITY	110	Monterey	FY 2013-14, Street Project ST-14	Monterey Ave from 4th St to 7th St	\$0	1.0	=	0	0.52	0	1	2	2	2	2	0	2	8	10
CHOWCITY	111	Monterey	FY 2014-15, Street Project ST-15	Monterey Ave from 7th St to 12th St	\$0	1.0	=	0	0.33	0	1	2	2	2	2	0	2	8	10



# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2			Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total	
									A	B	C	D	E	F					
									Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded					
CHOWCITY	112	Monterey	FY 2015-16, Street Project ST-16	Monterey Ave from 12th St to 15th St	\$0	1.0	=	0	0.56	0	1	2	2	2	2	0	2	8	10
CHOWCITY	113	Truman, Front	FY 2016-17, Street Project ST-17	Truman Dr from 15th St to Wilson Way, Front St from Colusa Ave to Trinity Ave	\$0	2.0	=	0	0.61	0	1	2	2	2	2	0	2	8	10
CHOWCITY	114	Front, Trinity	FY 2017-18, Street Project ST-18	Front St from Trinity Ave to Robertson Blvd, Trinity Ave from Front St to 1st St	\$0	2.0	=	0	1.02	2	1	2	2	2	2	4	2	8	14
CHOWCITY	115	Trinity	FY 2018-19, Street Project ST-19	Trinity Ave from 1st St to 6th St	\$0	1.0	=	0	0.32	0	1	2	2	2	2	0	2	8	10
CHOWCITY	116	Trinity	FY 2019-20, Street Project ST-20	Trinity Ave from 6th St to 7th St	\$0	1.0	=	0	0.41	0	1	2	2	2	2	0	2	8	10
CHOWCITY	117	Trinity	FY 2020-21, Street Project ST-21	Trinity Ave from 7th St to 11th St	\$0	1.0	=	0	0.31	0	1	2	2	2	2	0	2	8	10
CHOWCITY	118	Kings	FY 2021-22, Street Project ST-22	Kings Ave from Front St to 2nd St	\$0	1.0	=	0	0.50	0	1	2	2	2	2	0	2	8	10
CHOWCITY	119	Kings	FY 2022-23, Street Project ST-23	Kings Ave from 2nd St to 7th St	\$0	1.0	=	0	0.30	0	1	2	2	2	2	0	2	8	10
CHOWCITY	120	Kings	FY 2023-24, Street Project ST-24	Kings Ave from 7th St to 8th St	\$0	1.0	=	0	0.42	0	1	2	2	2	2	0	2	8	10
CHOWCITY	121	Kings	FY 2024-25, Street Project ST-25	Kings Ave from 8th St to 13th St	\$0	1.0	=	0	0.34	0	1	2	2	2	2	0	2	8	10
CHOWCITY	122	Reconstruct	To Be Determined	To Be Determined	\$0	1.0	=	0	0.03	0	1	2	2	2	2	0	2	8	10
CHOWCITY	123	Various City Streets	3rd, 5th, 15th, Ventura	Resurfacing, curb/gutter, sidewalk	\$0	1.0	=	0	0.39	0	1	2	2	2	2	0	2	8	10
MADCO	124	Ave 7	Rd 25 - SR 145	Overlay	\$0	2.0	=	0	6.73	2	1	1	2	2	2	4	2	7	13
MADCO	125	Ave 7	SR 99 - SR 145	Reconstruct & Widen	\$120,000	5.0	=	600000	1.06	2	2	2	2	2	2	4	4	8	16
MADCO	126	Ave 7 1/2	Ave 12 - Firebaugh	Overlay	\$0	7.0	=	0	4.20	2	1	1	2	2	2	4	2	7	13
MADCO	127	Ave 7 1/2	"Y" Ave 12 - Firebaugh	PE/reconstruct 2 Lanes	\$120,000	7.0	=	840000	0.73	0	2	2	2	2	2	0	4	8	12
MADCO	128	Ave 9	SR 99 - Rd 40 1/2	Overlay	\$120,000	10.0	=	1200000	19.89	2	2	2	0	2	2	4	4	6	14
MADCO	129	Ave 12	Rd 16 - Rd 23	PE & Reconstruct 2 Lns	\$120,000	7.0	=	840000	0.45	0	2	2	2	2	2	0	4	8	12
MADCO	130	Ave 12	Rd 36 - SR 41	Overlay	\$0	5.0	=	0	21.75	2	1	1	2	2	2	4	2	7	13
MADCO	131	Ave 12	Rd 19 - Rd 15	Overlay	\$0	4.0	=	0	4.11	2	1	1	2	2	2	4	2	7	13
MADCO	132	Ave 12	Rd 23 - Rd 24	Reconstruct & Widen	\$120,000	1.0	=	120000	0.90	0	2	2	0	2	2	0	4	6	10
MADCO	133	Ave 13	CL - Rd 30 1/2	PE and Reconstruct 2 Lanes	\$120,000	2.0	=	240000	2.07	2	2	2	2	2	2	4	4	8	16
MADCO	134	Ave 14	CL - Rd 19	Overlay	\$0	4.0	=	0	3.22	2	1	1	2	2	2	4	2	7	13
MADCO	135	Ave 15	Rd 28 - Rd 29	Overlay	\$0	1.0	=	0	10.47	2	1	1	2	2	2	4	2	7	13
MADCO	136	Ave 15	Little Dry Creek	Replace Bridge	\$0	1.0	=	0	2.35	2	2	2	1	2	2	4	4	7	15
MADCO	137	Ave 17	SR 99 - Hill Dr.	Reconstruct & Widen	\$120,000	1.0	=	120000	1.12	2	2	2	0	2	2	4	4	6	14
MADCO	138	Ave 18 1/2	Rd 9 - Rd 22	Chip Seal	\$0	11.0	=	0	24.92	2	1	1	2	2	2	4	2	7	13
MADCO	139	Ave 18 1/2	Rd 22 - SR 99	PE/Reconstruct 2 Lanes	\$120,000	1.0	=	120000	0.04	0	1	1	2	2	2	0	2	7	9
MADCO	140	Ave 20	Robertson Blvd.-SR99	PE/Reconstruct 2 lanes	\$120,000	1.0	=	120000	0.15	0	1	1	2	2	2	0	2	7	9
MADCO	141	Ave 24	Rd 16 - SR 99	PE/Reconstruct w/ Shoulders	\$120,000	2.0	=	240000	0.85	0	2	2	0	2	2	0	4	6	10
MADCO	142	Ave 25	Rd 8 - Rd 13	Overlay	\$0	5.0	=	0	7.42	2	1	1	2	2	2	4	2	7	13
MADCO	143	Ave 26	Rd 26 - Rd 29	Overlay	\$0	3.0	=	0	11.21	2	1	1	2	2	2	4	2	7	13
MADCO	144	Ave 26	Rd 26 - Santa Fe Dr.	Overlay	\$0	3.0	=	0	8.83	2	1	1	2	2	2	4	2	7	13
MADCO	145	Ave 26	Chowchilla - BN&SF	PE/Reconstruct w/ Shoulders	\$120,000	1.0	=	120000	1.40	2	2	2	0	2	2	4	4	6	14
MADCO	146	Rd 9	Ave 25 - Avenue 7 1/2	PE/Reconstruct 2 lanes	\$120,000	17.0	=	2040000	0.63	0	2	2	0	2	2	0	4	6	10
MADCO	147	Rd 13	Berenda Slough	Replace Bridge	\$0	1.0	=	0	0.30	0	1	2	1	2	2	0	2	7	9
MADCO	148	Rd 16	Ave 12 - Ave 18 1/2	Overlay	\$0	6.5	=	0	2.99	2	1	1	2	2	2	4	2	7	13

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2			Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total	
									A	B	C	D	E	F					
									Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded					
MADCO	149	Rd 16	SR 152 - Ave 24	PE/Reconstruct w/ Shoulders	\$120,000	3.0	=	360000	2.78	2	2	2	0	2	2	4	4	6	14
MADCO	150	Rd 17 1/2	Berenda Slough	Replace Bridge	\$0	1.0	=	0	0.79	0	2	0	1	2	2	0	4	5	9
MADCO	151	Rd 19	Ave 12 - Ave 14	Overlay	\$0	2.0	=	0	2.99	2	1	1	2	2	2	4	2	7	13
MADCO	152	Rd 23	Ave 12 - Ave 18 1/2	PSR and Reconstruct 2 Lanes / ROW 4 Lanes	\$120,000	7.0	=	840000	0.41	0	2	2	0	2	2	0	4	6	10
MADCO	153	Rd 24	Ave 18 - Ave 20 1/2	Overlay	\$0	3.0	=	0	2.31	2	1	1	2	2	2	4	2	7	13
MADCO	154	Rd 26	Mateo Way - Ave 18	Reconstruct & Widen	\$120,000	1.0	=	120000	1.03	2	2	2	0	2	2	4	4	6	14
MADCO	155	Rd 26	Ave 18 - Ave 19	Reconstruct 2 Lns / Widen	\$120,000	1.0	=	120000	1.11	2	2	2	0	2	2	4	4	6	14
MADCO	156	Rd 28	Cottonwood Creek	Replace Bridge	\$0	1.0	=	0	0.33	0	2	2	1	2	2	0	4	7	11
MADCO	157	Rd 29	Ave 12 - Ave 14	PSR and Realign & Reconstruct	\$120,000	2.0	=	240000	0.66	0	2	2	0	2	2	0	4	6	10
MADCO	158	Rd 30	Ave 12 - Ave 13	PE/reconstruct 2 lanes	\$120,000	1.0	=	120000	0.72	2	2	2	0	2	2	####	4	6	####
MADCO	159	Rd 30 1/2	Ave 9 - Ave 13	PSR and Reconstruct 2 Lanes / ROW 4 Lanes	\$120,000	4.0	=	480000	0.58	0	2	2	0	2	2	0	4	6	10
MADCO	160	Rd 33 1/2	Ave 9 - Ave 12	Overlay	\$0	3.0	=	0	1.76	2	2	2	0	2	2	4	4	6	14
MADCO	161	Rd 36	Ave 9 - SR 145	PSR and Reconstruct 2 Lanes	\$120,000	9.0	=	1080000	1.07	2	2	2	0	2	2	4	4	6	14
MADCO	162	Rd 200	Walker Grade	Overlay	\$0	1.0	=	0	2.32	2	1	1	2	2	2	4	2	7	13
MADCO	163	Rd 200	Various Locations	Overlay	\$0	3.0	=	0	22.43	2	1	1	2	2	2	4	2	7	13
MADCO	164	Rd 200	Ladd Creek - Fine Gold	PE/Reconstruct & Widen	\$120,000	4.0	=	480000	0.72	0	2	2	0	2	2	0	4	6	10
MADCO	165	Rd 200	Spring Valley - Ladd Creek	PE/Reconstruct & Widen	\$120,000	4.0	=	480000	0.62	0	2	2	0	2	2	0	4	6	10
MADCO	166	Rd 211	Rd 210/ Rd 200	PE/Realign & Reconstruct	\$120,000	4.0	=	480000	5.88	2	1	1	2	2	2	4	2	7	13
MADCO	167	Rd 221	Rd 200 N/B	Chip Seal	\$0	2.0	=	0	73.05	2	1	1	2	2	2	4	2	7	13
MADCO	168	Rd 222	San Joaquin R	Replace Bridge	\$0	1.0	=	0	0.07	0	2	2	1	2	2	0	4	7	11
MADCO	169	Rd 222	Willow Creek	Replace Bridge	\$0	1.0	=	0	0.79	0	2	2	1	2	2	0	4	7	11
MADCO	170	Rd 415	Fresno River W/B	Chip Seal	\$0	2.0	=	0	67.96	2	1	1	2	2	2	4	2	7	13
MADCO	171	Rd 415	SR 41 - Jennifer Wy	Reconstruct & Widen / Realign	\$120,000	2.0	=	240000	1.22	2	2	2	0	2	2	4	4	6	14
MADCO	172	Rd 417	SR 41 - Ile	PE/Realign & Reconstruct	\$0	2.0	=	0	0.12	0	1	1	2	2	2	0	2	7	9
MADCO	173	Rd 425B	From Rd 426 S/B 1 mile	Overlay	\$0	1.0	=	0	1.81	2	1	1	2	2	2	4	2	7	13
MADCO	174	Rd 425B	Rd 426 to SR 41	PE/ Realign, Reconstruct 2 Lanes	\$120,000	1.0	=	120000	0.04	0	2	22	0	2	2	0	4	26	30
MADCO	175	Rd 426	426/427-China Creek	Replace Bridge	\$0	1.0	=	0	1.09	2	2	2	0	2	2	4	4	6	14
MADCO	176	Rd 426	Rd 427 E/B	Overlay	\$0	1.0	=	0	4.00	2	1	1	2	2	2	4	2	7	13
MADCO	177	Rd 426	SR41-Rd 427	PE/Construct Sidewalks/Select Locations	\$0	1.0	=	0	2.20	2	1	1	2	2	2	4	2	7	13
MADCO	178	Rd 600	SR 49 W/B	Chip Seal	\$0	2.0	=	0	4.25	2	1	1	2	2	2	4	2	7	13
MADCO	179	Rd 632	Sky Ranch Lewis Creek	Replace Bridge	\$0	1.0	=	0	0.04	0	2	2	1	2	2	0	4	7	11
MADCO	180	Rd 800	Rd 613 - Rd 820	Overlay	\$0	6.0	=	0	1.51	2	1	1	2	2	2	4	2	7	13
MADCO	181	Cedar Vly Dr.	Lewis Fork	Replace Bridge	\$0	1.0	=	0	0.34	0	2	2	1	2	2	0	4	7	11
MADCO	182	Firebaugh B.	Ave 7 1/2 "Y" - Rd 16	PE & Reconstruct 2 Lns	\$120,000	8.5	=	1020000	1.49	2	2	2	2	2	2	4	4	8	16
MADCO	183	Hang Tree	Rd 426 - Rd 428	PE/Reconstruct 2 Lanes	\$120,000	1.0	=	120000	1.18	2	2	2	2	2	2	4	4	8	16
MADCO	184	Indian Sprs Rd.	Rd 427 - Hartwell	PE/Extend 2 Lanes / Construct Bridge	\$0	1.0	=	0	0.14	0	2	2	0	2	2	0	4	6	10
MADCO	185	Robt. Blvd	SR 152 - Ave 18 1/2	Overlay	\$0	5.0	=	0	6.54	0	1	1	2	2	2	0	2	7	9
MADCO	186	Santa Fe Dr.	CL - Ave 24	Chip Seal	\$0	1.0	=	0	1.00	2	1	1	2	2	2	4	2	7	13
MADCO	187	41	Ave 15 - SR 145	Add Shoulders & Passing Lanes	\$0	3.0	=	0	2.72	2	2	2	0	2	2	4	4	6	14
MADCO	188	41	SR 145 - Rd 200	Add Shoulders & Passing Lanes	\$0	15.0	=	0	4.72	2	2	2	0	2	2	4	4	6	14

# APPENDIX D - TABLE D-1

## Rehabilitation/Safety Projects

### Initial Project Evaluation Methodology

Agency Identifier	Agency List #	Route	Project Limits	Description of Improvement	Maintenance Benefits: *4 (Full Reconstruction Only): \$120,000 x L (Length) Length*2			Benefit Cost Ratio *5	Criteria and Ranking*6						AX2	BX2	(+C..F)	Total	
									A	B	C	D	E	F					
									Ben./ Cost	Design Stand. & Safety	AQ Benef.	Env. Sens.	Bal. Transp. Invest.	Maint. Funded					
MADCO	189	Various	Ahwahnee Area Plan	PSR/PE/Construction - Looped ROW per plan	\$120,000	1.0	=	120000	0.30	0	1	2	1	2	2	0	2	7	9
MADCO	190	Unnamed Rd.	Rd 425B to SR 49/41	PSR for the construction of 2 lanes (local Road)	\$120,000	1.0	=	120000	2.96	2	2	2	2	2	2	4	4	8	16
MADCO	191	Rd 200	Fine Gold Creek	Replace Bridge	\$0	1.0	=	0	0.93	0	2	2	1	2	2	0	4	7	11
MADCO	192	Rd 800	Chowchilla River	Replace Bridge	\$0	1.0	=	0	0.18	0	2	2	1	2	2	0	4	7	11
MADCO	193	Rd 800	Striped Rock Creek	Replace Bridge	\$0	1.0	=	0	0.18	0	2	2	1	2	2	0	4	7	11
MADCO	194	Rd 810	East to East Fork of the Chowchilla River	Replace Bridge	\$0	5.0	=	0	0.88	0	2	2	1	2	2	0	4	7	11
MADCO	195	Replace Bridges	Where needed	Replace 5 Bridges	\$0	5.0	=	0	0.88	0	2	2	1	2	2	0	4	7	11

\*1 ADTs resulted from MCTC Traffic Model output for Year 2022 multiplied by 2% per year to reflect year 2025.  
A minimum volume of 1,000 ADT was applied.

\*2 Project length rounded to nearest mile. A minimum of 1 mile was applied.

\*3 Benefit/Cost Ratio Methodology from Federal Equations.

\*4 Maintenance benefits only apply to projects involving "full reconstruction".

\*5 Resultant Benefit/Cost Ratio.

\*6 Evaluation Criteria:

A - Benefit/Cost receives 0 points if the ratio is less than 1.0 and 2 points if it is greater than or equal to 1.0.

B - 2 points when project meets standards and improves safety, 1 point when the project improves safety only.

C - 2 points for improvements that reduce primarily airborne and tire wear emissions (PM10), 1 point if the project is neutral for air quality benefits.

D - 2 points if project does not involve significant environmental analysis/issues, 1 point if some issues are likely, and 0 points if significant issues are expected.

E - 2 points allocated for all projects. The projects address needs throughout the County.

F - 2 points allocated to each project. Maintenance assumed over life of project.

\*7 The total or sum of scores for Criteria A & B multiplied by 2 to increase the relative weight of these Criteria.

\*8 The total of Criteria C through F.

\*9 Sum of \*7 and \*8 resulting in the Total Score.

## **APPENDIX E – POTENTIAL FUNDING SOURCES**

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## APPENDIX E POTENTIAL FUNDING SOURCES

### INTRODUCTION

This section provides a long-range view of proposed transportation projects within Madera County and how they will be funded. A comprehensive overview of existing and potential sources of transportation funding also is provided. The focus of this section is to present the planned projects for all modal elements. Technical plans and studies and General Plan Elements for jurisdictions within Madera County also support this effort to implement the various transportation modes.

### TRANSPORTATION FUNDING SOURCES

This section provides an overview of key existing and potential federal, State, and local transportation funding sources. Many of these funding sources such, as State Local Transportation Funds, historically have generated stable revenue to the County. Many other funds, however, are less predictable over the long term, are competitively awarded, or tied to strict eligibility criteria.

These funding sources are the basis for funding street and highway improvements, as well as other transportation system improvements, including public transit, aviation, and non-motorized transportation improvement projects. A brief description of the available array of funding sources is provided below.

### FEDERAL

#### **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)**

In August 2005, President Bush signed into law a new transportation authorization act, SAFETEA-LU. This legislation was essentially a reauthorization of the prior six-year transportation program, Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). SAFETEA-LU was adopted to provide funding for highways, highway safety, and mass transportation for a six-year period (2003-2009). SAFETEA-LU expired on September 30, 2009 and is expected to remain funded under a series of Congressional continuing resolutions until a new transportation authorization bill (tentatively titled Moving Ahead for Progress in the 21<sup>st</sup> Century or MAP-21) is passed by Congress and signed by the President.

Key components of SAFETEA-LU include greater flexibility in the programming of highway and transit projects with a consistent 80/20 matching ratio, ties to the Federal Clean Air Act and Americans with Disabilities Act, and earmarked construction projects. The SAFETEA-LU program consists of programs designed to provide funds to special projects that must qualify through the Federal Transportation Improvement Program (FTIP) before being funded. Major programs funded under SAFETEA-LU are described below.

- A. **Congestion Mitigation and Air Quality (CMAQ) Program:** This program, established by the Intermodal Surface Transportation Efficiency Act (ISTEA) and continued through TEA-21 and SAFETEA-LU, directs funds toward transportation projects and programs in the Clean Air Act. The CMAQ Program funds projects and programs in air quality non-attainment and maintenance areas for ozone, carbon monoxide (CO), and small particulate matter (PM-10) which reduce transportation-related emissions. Project planning or other development activities that lead directly to construction of facilities, alternative-fuel vehicles or new services and program that have a positive air quality impact are eligible for CMAQ funding.
- B. **Transportation Enhancement (TE) Program:** Transportation enhancements are transportation-related activities that are designed to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal transportation system. The TE Program, established by the Intermodal Surface Transportation Efficiency Act (ISTEA) and continued through TEA-21 and SAFETEA-LU, funds a variety of non-traditional projects, including the restoration of historic transportation facilities, bicycle and pedestrian facilities, landscaping and scenic beautification, and mitigation of water pollution from highway runoff. The Program promotes livable communities and strengthens partnerships.
- C. **Federal Highway Administration Surface Transportation Program (STP) and National Highway System (NHS) Funds:** These programs, established by ISTEA, may be used for State and local roads, including NHS roads that are not functionally classified as local or rural minor collectors. Metropolitan Planning (PL) and State Planning and Research (SPR) are both eligible activities under both of these programs.
- D. **Federal Highway Administration Regional Surface Transportation Program (RSTP):** This program, through the Surface Transportation Program, funds transportation projects functionally classified higher than a local road or rural minor collector. Eligible projects include highway projects; bridges (including construction, reconstruction, seismic retrofit and painting) on all public roads; transit capital improvements; carpool, parking, bicycle and pedestrian facilities; safety improvements and hazard elimination; research; traffic management systems; planning; transportation enhancement activities and control measures; and wetland mitigation. Safety improvements and bridge replacement projects are also eligible on local roads and rural minor collectors. Rural counties may exchange a portion of STP funds through the "Federal Apportionment Exchange Program" for State Highway Account funds.
- E. **FTA Section 5316 - Job Access and Reverse Commute Grants:** This grant program promotes the development of transportation services specifically designed to transport welfare recipients and low-income individuals to and from jobs. Emphasis is placed on projects that use mass transportation services.
- F. **Intelligent Transportation System:** These funds provide for a comprehensive program to accelerate the integration and interoperability of intelligent transportation systems in metropolitan and rural areas. The Secretary of the Department of Transportation selects projects through a competitive process. Selected projects should serve as models to improve transportation efficiency, promote safety (including the flow of intermodal travel at ports of entry), reduce emissions of air pollutants, improve traveler information, enhance alternative transportation modes, build on existing intelligent transportation system project or promote tourism.

- G. **Technological Applications to Commercial Vehicle Operations:** This section provides for the advancement of technological capability and promotes the deployment of intelligent transportation system applications to commercial vehicles operations, including commercial vehicle, commercial driver and carrier-specific information systems and networks.

### **Federal Highway Administration Hazard Elimination Safety**

Section 152(a) funds provide funding to eliminate travel hazards and to improve safety. The projects are nominated by local agencies and funded based on a calculated safety index and annual priorities established by FHWA.

### **Federal Highway Administration Public Lands Highway-Discretionary Funds**

These funds can be used for planning, research, engineering and construction of highways, roads or transit facilities that serve federal public lands and Native American Indian reservations. Funding is competitive on a nation-wide basis. Applications are submitted annually to the FHWA through Caltrans. Eligible applicants can be local, State, and federal agencies, and non-profit organizations.

### **Federal Transit Administration (FTA)**

The FTA provides federal funds for improvements in rural and urban transit operations. With the passage of SAFETEA-LU, several new Federal transit programs, activities, and new features have been added. The funding flexibility features first incorporated in the ISTEA and similar matching ratios to the highway programs have been retained. The definition of a capital project has been revised to include preventive maintenance, paratransit service, leasing of equipment or facilities, safety equipment and facilities, facilities that incorporate community services such as daycare and health care, and transit enhancements.

- A. **FTA Section 5303 Funds – Metropolitan Planning:** Section 5303 funds are available to MPO's for transportation planning purposes.
- B. **FTA Section 5307 Funds – Urbanized Area Formula Assistance Program:** Section 5307 funds urbanized area planning, capital and operating assistance for public transit services. For urbanized areas with a population under 200,000, funds are passed through to the State for administration. For urbanized areas over 200,000, funds are allocated directly to designated recipients.
- C. **FTA Section 5308 Funds – Clean Fuels Formula Grant Program:** These funds were made available through TEA-21 on a formula basis to promote the use of clean fuels. Public transit operators in clean air non-attainment or maintenance areas, both urbanized and non-urbanized are eligible to apply. Funds are available to applicants for up to two consecutive years. Eligible projects include the purchase or lease of clean fuel buses, construction or lease of clean fuel electrical recharging facilities, and improvement of existing facilities to accommodate clean-fuel buses.
- D. **FTA Section 5309 Funds – Capital Bus Program:** Section 5309 provides capital assistance to public bodies for fixed guideway modernization (40 percent), construction and extension of new fixed guideway systems (40 percent), and bus and bus-related equipment and facilities (20 percent) in both urbanized and non-urbanized areas. States may apply on behalf of private non-profit.



- E. FTA Section 5310 Funds – Elderly and Persons with Disabilities Program: Section 5310 assists private non-profit organizations in the purchase of vehicles and related equipment to provide transportation services that meet the special needs of elderly and persons with disabilities.
- F. FTA Section 5311 Funds – Non-Urbanized Area Formula Program: Section 5311 funds are available annually to public transportation projects in non-urbanized areas. The State prepares an annual Program of Projects to reflect eligible projects by jurisdiction.
- G. FTA Section 5313(b) & 5314 Funds – Planning and Research: Section 5313(b) funds are apportioned annually to states for planning and research. Some Section 5313(b) funds are sub-allocated to metropolitan planning agencies in urbanized areas at the state's discretion. Other eligible uses include statewide planning and technical assistance activities, planning support for non-urbanized areas, research, development and demonstration projects, fellowships for training in the public transportation field, university research, and human resource allocation to MPO's for planning in urbanized areas.
- H. FTA Section 5316 Funds – Job Access and Reverse Commute (JARC): Section 5316 funds capital planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects. JARC funding is allocated by formula to States for areas with populations below 200,000 persons, and to designated recipients for areas with populations of 200,000 persons and above. The formula is based on the number of eligible low-income and welfare recipients in urbanized and rural areas.
- I. FTA Section 5317 Funds – New Freedom: Section 5317 funds capital and operating expenses for new public transportation services and new public transportation alternatives beyond those required by the American with Disabilities Act of 1990 (ADA), that are designed to assist individuals with disabilities. New Freedom funding is allocated by formula to States for areas with populations below 200,000 persons, and to designated recipients for areas with populations of 200,000 persons and above. The formula is based on the population of persons with disabilities.

### **Federal Aviation Administration (FAA) Airport Improvement Program (AIP)**

The AIP provides funding for airport planning and development projects that enhance capacity, safety, security, and noise mitigation.

## **STATE**

### **Senate Bill 45**

Senate Bill (SB) 45 substantially revises the process for estimating the amount of State and federal funds to be available for transportation projects in the State, as well as appropriating and allocating the available funds, by changing the seven-year State Transportation Improvement Program (STIP) to a four-year program. Other revisions included changing the components of the regional and state transportation improvement programs, the name of the Transportation Planning and Development (TP&D) Account to the Public Transportation Account, and the way funds are allocated from that account. SB 45 declared the Legislature's intent regarding budget

estimates by Caltrans and the California Transportation Commission (CTC) based on specified factors. The bill eliminated various transportation-related programs, including traffic systems management, flexible congestion relief, commuter and urban rail transit, and the state local transportation partnership program. The bill provided that Caltrans continue as the responsible agency for the State highway system, as specified. The Legislature, through the enactment of SB 45, establishes priorities and processes for the programming and expenditure of State transportation funds that are at the discretion of the Legislature and the Governor. Caltrans is responsible for the planning, design, construction, maintenance, and operation of the State highway system.

The method by which the estimate of funding is derived is determined by the CTC, in consultation with Caltrans, transportation planning agencies, and county transportation commissions. This bill also allowed local agencies to have more power over funds allocated to transportation planning projects in their jurisdiction.

### **State Transportation Improvement Program (STIP)**

State law requires the CTC to adopt a STIP every two years. Previously, the STIP allocated anticipated State and federal funding to projects over a seven-year period, but since the passage of SB 45, this process has changed. The 2008 STIP covers a period of four years. The STIP programs State and federal gas tax funds for CTC-controlled highway and commuter rail projects. The STIP includes a list of transportation projects, proposed in a county's RTIP and the STIP that are approved by funding by the CTC. The MCTC is responsible for preparing the RTIP for Madera County.

### **Interregional Improvement Program (IIP)**

The IIP, a State-funded program, funds projects identified as providing the most adequate interregional road system to all economic centers throughout the State. Funding for this program is equal to 25% of all funds allocated through the SB 45 process. Caltrans submits the projects for inclusion in the STIP. The STIP reflects current adopted STIP projects and those in the most recent Project Delivery Report. It may include additional schedule changes and/or cost changes, plus new projects for inclusion in the STIP. The STIP is reflects current adopted STIP projects and those in the most recent Project Delivery Report. It may include additional schedule changes and/or cost changes, plus new projects that Caltrans proposed for the interregional road system, as well as the intercity rail program, mass transit guideway or grade separation programs.

### **Regional Improvement Program (RIP)**

The RIP funds projects identified as providing the most adequate regional road system to all economic centers throughout the State. Funding for this program is equal to 75% of all funds allocated through the SB 45 process. Regional transportation planning agencies submit projects through their RTIP process to program into the STIP. All State highways and other local regional facilities currently are eligible for RIP funding.

### **State Highway Operation and Protection Program (SHOPP)**

State legislation created SHOPP for Caltrans to be responsible for State highway safety and rehabilitation projects, seismic retrofit projects, land and building projects, landscaping, operational improvements, bridge replacement, and the minor program. Unlike STIP projects,

SHOPP projects may not increase roadway capacity. SHOPP is a four-year program of projects adopted separately from the STIP cycle. The majority of funds for this project are derived from the old nine-cent State gas tax from federal funds, but a portion is also funded through the recent State gas tax increase. To be compatible with the Fund Estimate, a formula based on pavement condition and safety concerns are used to estimate an additional three years of the SHOPP.

### **State Transportation Development Act (TDA)**

The Transportation Development Act is California law, which provides funding for transit through Local Transportation Funds (LTF) and State Transit Assistance funds (STA). These funds are California State sales tax funds that are available for transit operations and street and road purposes. The LTF has been in existence since 1972 derived from 1/4 cent of retail sales tax collected in the State of California. STA have been available since 1980 and are generated by a gasoline sales tax. The LTF is distributed to each city and the unincorporated areas based on population. In Madera County, the LTF may be used for both transit and street and road purposes, if transit needs are reasonably met, whereas STA must be used for transit purposes only. As of the 2009/10 budget year, the State has suspended the STA program through FY 2013/14.

### **Proposition 1B**

The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as Proposition 1B in November 2006, provides \$20 billion for a variety of transportation projects throughout the state. Key programs authorized by Prop 1B include:

- A. State Route 99 Corridor Program: \$1 billion for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the SR 99 corridor in the San Joaquin and Sacramento Valleys.
- B. Corridor Mobility Improvement Account: \$4.5 billion for performance improvements on the state highway system.
- C. Trade Corridor Improvement Fund: \$2 billion for infrastructure improvements along federally designated "Trade Corridors of National Significance" or along other corridors that have a high volume of freight movement.
- D. STIP Augmentation: \$2 billion available for projects in the State Transportation Improvement Fund (STIP).
- E. Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA): \$4 billion available for transit capital projects including rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or for rolling stock procurement.
- F. Transit System Safety, Security & Disaster Response Account (TSSSDRA): \$1 billion for transit capital projects that provide increased protection against a security and safety threat.
- G. Local Street and Road, Congestion Relief, and Traffic Safety Account: \$2 billion allocated directly to cities and counties to assist in reducing local traffic congestion and further deterioration, improving traffic flows, or increasing traffic safety.

### **State Bicycle Transportation Account (BTA)**

State BTA funds provide for the establishment of a bicycle transportation system. It is the intent of the State Legislature to fund projects that are designed and developed to meet commuter

needs of employees, students, and shoppers. Projects also should have the physical safety of the bicyclist and bicyclist's property as a major planning component, and have the capacity to accommodate bicyclists of all ages and skills. Funding is distributed annually on a competitive basis Statewide.

### **California Aid to Airports Program (CAAP)**

CAAP funds assist in establishing and improving a Statewide system of safe and environmentally-compatible, publicly-owned airports open to public use. The CAAP consists of three sub-programs--- (1) Annual Grants for public-use, publicly-owned general aviation airports for capital improvements, maintenance, and operation; (2) Acquisition and Development funds allocated by the CTC on a discretionary basis for capital projects; and (3) Airport Improvement Program (AIP) Matching Grants allocated by the CTC to assist the sponsor in meeting the local match for FAA AIP grants.

### **Local Airport Loan Program**

This program provides financial assistance in the form of loans, payable over a period not to exceed 25 years. Three types of loans are available, including---(1) matching funds loan for the local match required for AIP grants; (2) revenue generating loan for an agency that demonstrates a need for the project, project engineering, financial feasibility, and economic justification with typical projects being hangars and fueling facilities; (3) airport development loan for other types of development at airports, such as terminals.

### **Environmental Enhancement and Mitigation (EEM) Program**

EEM funds are available for projects that demonstrate a direct or indirect relationship with the environmental impact of modifying an existing transportation facility or construction of a new facility. Projects must provide mitigation or enhancement in addition to the mitigation required as part of the transportation projects to which they are related. Examples include highway landscape and urban forestry, resource lands, and roadside recreational projects.

## **LOCAL FUNDS**

### **State Gas Taxes**

Gas tax funds are used for roadway maintenance. The amount of allocation to each city and county is primarily based on population.

### **Local Transportation Sales Tax**

Local sales tax revenues provide the largest single source of funding to most state and local governments. In 2006, Madera County voters approved Measure T, a 20-year half-cent transportation sales tax measure, which is projected to raise \$200 million in revenue through 2027. Besides Madera County, a number of other counties have implemented sale tax increases for transportation purposes, including Fresno, Tulare, Alameda, Contra Costa, Imperial, Los Angeles, Orange, Riverside, Sacramento, San Joaquin, San Bernardino, San Diego, San Francisco, San Mateo, Santa Barbara, and Santa Clara.

Major advantages of a local transportation sales tax include:

- ◆ Flexibility in how the revenues can be used, i.e., for highway maintenance or capital projects, or for transit purposes.
- ◆ Responsiveness to inflation, unlike gasoline taxes.
- ◆ Greater reliability, particularly if a jurisdiction desires to sell revenue anticipation bonds at reasonable interest rates backed by future tax receipts.
- ◆ A broader tax base, so that a small tax increase can produce a considerable revenue stream.
- ◆ Exemption from the existing Gann Initiative's spending limits.
- ◆ Easier administration for collection and distribution.
- ◆ More local control over project selection and priority than a gas tax increase which is collected by the State and disbursed consistent with State allocation requirements.
- ◆ Greater return to source, unlike existing sales tax revenues (where the State keeps three-quarters of the tax collected and returns only one quarter to the local jurisdiction), nearly all of the increase in sales taxes are returned to the local jurisdictions responsible for administering the allocation. A small share of the tax is kept by the State to cover its administrative costs.

### **San Joaquin Valley Air Pollution Control District (SJVAPCD)**

The SJVAPCD is the designated air district for the eight-county non-attainment area that includes San Joaquin, Stanislaus, Merced, Madera, Kings, Kern, Fresno, and Tulare Counties. SJVAPCD makes funds available for projects that reduce vehicle trips and improve air quality. Three key funding programs are available through a competitive application process, as described below.

- A. Reduce Motor Vehicle Emissions (REMOVE) Program: Funds for the REMOVE Program are generated from a motor vehicle registration surcharge established with AB 2766. The motor vehicle registration surcharge generates revenues to be used to reduce air pollution from vehicles and for the related planning, monitoring, enforcement, and technical studies necessary for implementation of the California Clean Air Act.
- B. Heavy-Duty Motor Vehicle Emission Reduction Incentive Program: This program funds projects that reduce emissions from on-road heavy-duty motor vehicles to assist the District in attaining federal and state air quality standards. Eligible vehicles are those with a gross vehicle weight rating over 14,000 pounds.
- C. Light- and Medium-Duty Vehicle Incentive Program: Eligible funding categories for this program include certain new on-road original equipment manufacturer (OEM) alternative-fuel vehicles with a gross vehicle weight rating up to 14,000 pounds, including passenger cars, pick-up trucks, small buses, vans and small delivery trucks. Eligible vehicles include dedicated compressed natural gas, propane, electric and hybrid vehicles.

### **Traffic Mitigation Fees**

Traffic mitigation fees are one-time charges on new development to pay for required public facilities and mitigate impacts created by the development. These fees also are referred to as traffic impact fees or developer fees. The local jurisdiction has the responsibility and authority to enact and collect these fees in order to make transportation improvements.

## **City Contributions**

City contributions, composed of several funding sources, could be applied toward construction of the City's street and highway system. This revenue source could be developed in cooperation with the County. The amount of City contribution would be based upon the extent of improvement to facilities located or planned within the SOI. City contributions would be composed of several funding sources including city general funds, local agency imposed traffic impact fees, development fees, redevelopment area funds, Vehicle In-lieu Fees, etc.

## **Community Service/Special Assessment Districts for Roads**

Assessment districts have been used to fund a variety of public works improvements in California since 1911. Assessment districts are used when a well-defined and limited area benefits from the improvement. An assessment may be paid in cash by the landholder, or through installments (usually on the landowner's property tax bill). Assessments do not require a vote of the owners or voters in the assessed area, but rather are created through administrative procedures. Typically, assessed landowners must be given appropriate notice and a hearing must be held. There is a mechanism for majority protest of the assessment.

Bonds issued to pay for improvements are exempt from State and federal taxes, and carry a lower interest rate than privately raised capital. Assessments can be levied by a county, city, or special district, and can overlap jurisdictional boundaries with the consent of local governments involved. Special district assessments must have specified enabling authority to levy assessments from the State Legislature. The distribution of assessments (or "spread") is done on a formula basis, and must be reasonably related to benefits received. The assessment can be a flat fee (e.g., \$400 per acre), or it can be related to the benefit conferred on a parcel (e.g., a graduated fee based on distance, where land further from the improvement pays less). Operating costs may also be paid through assessment districts.

## **Local (Countywide) Gasoline Tax**

A local option gas tax for streets and roads projects was enacted by the State in 1981. A tax may be imposed by voters after being placed on the ballot by the Board of Supervisors and approved of a majority of the municipalities weighed by population. The County and its cities must agree through a tax agreement on how the funds are to be allocated. To date, no counties in California have adopted such a tax.

## **Public/Private Joint Venture Revenue**

When a local jurisdiction owns excess land adjacent to its transportation facilities, the full value of such property may be captured by leasing the air, surface or subsurface rights. These leases can provide a steady stream of income, usually over long lease terms (typically 40 to 99 years).

## **Redevelopment Areas**

Transportation improvement projects within unincorporated jurisdictions could be funded through the use of tax increment funds provided from new or improved development located within redevelopment areas. Redevelopment plans would contain planned circulation improvements required as a condition for redevelopment. Tax increments received by the jurisdiction could be applied to street and highway projects within areas covered by redevelopment plans to defray the costs of such improvements.



## **APPENDIX F – REGIONAL TRANSPORTATION PLAN CHECKLIST**

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# Regional Transportation Plan Checklist

(Revised September 2007)

*(To be completed electronically in Microsoft Word format by the MPO/RTPA and submitted along with draft RTP to the Calif. Department of Transportation)*

**Name of MPO/RTPA:** Madera County Transportation Commission

**Date Draft RTP Completed:** April 30, 2010

**RTP Adoption Date:** July 21, 2010

**What is the Certification Date of the Environmental Document (ED)?** July 21, 2010

**Is the ED located in the RTP or is it a separate document?** Separate Document

*By completing this checklist, the MPO/RTPA verifies the RTP addresses all of the following required information within the RTP.*

## Regional Transportation Plan Contents

### General

1. Does the RTP address no less than a 20-year planning horizon (Title 23 CFR 450.322(a))?
2. Does the RTP include both long-range and short-range strategies/actions (Title 23 CFR 450.322(b))?
3. Does the RTP address issues specified in the policy, action and financial elements identified in California Government Code Section 65080?
4. Does the RTP include Project Intent i.e. Plan Level Purpose and Need Statements?

### Consultation/Cooperation

1. Does the MPO have a public participation plan that meets the requirements of Title 23, CFR 450.316 (1)(i-x)?
2. Did the MPO/RTPA consult with the appropriate State and local officials responsible for airport, transit, and freight operations, environmental protection, and economic development during the preparation of the RTP? (Title 23CFR 450.316(b))

Yes/No	Page #
Yes	4-1ff.
Yes	4-1ff.
Yes	3-1, 4-1, 5-1
Yes	4-1ff.
Yes	7-4ff., App. H
Yes	2-31, 7-4ff.

Yes/No	Page #
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3.	Did the MPO/RTPA who has Federal lands within its jurisdictional boundary involve the Federal land management agencies during the preparation of the RTP?	Yes	7-4ff.
4.	Where does the RTP specify that the appropriate State and local agencies responsible for land use, natural resources, environmental protection, conservation and historic preservation consulted? (Title 23 CFR 450.322(g))	Yes	7-4ff.
5.	Did the RTP include a comparison with the California State Wildlife Action Plan and (if available) inventories of natural and historic resources? (Title 23 CFR 450.322(g))	Yes	EIR
6.	Did the MPO/RTPA who has a Federally recognized Native American Tribal Government(s) and/or historical and sacred sites or subsistence resources of these Tribal Governments within its jurisdictional boundary address tribal concerns in the RTP and develop the RTP in consultation with the Tribal Government(s)? (Title 23 CFR 450.316(c))	Yes	7-4ff.
7.	Does the RTP address how the public and various specified groups, including the nonmortorized community, were given a reasonable opportunity to comment on the plan using the participation plan developed under Title 23 CFR 450.316(a) and (a) (1) (i)?	Yes	7-4ff.
8.	Does the RTP contain a discussion describing the private sector involvement efforts that were used during the development of the participation plan? (Title 23 CFR 450.316(a))	Yes	7-4ff.
9.	Does the RTP contain a discussion describing the coordination efforts with regional air quality planning authorities (Title 23 CFR 450.316(3)(b))? (MPO nonattainment and maintenance areas only)	Yes	8-1f.
10.	Is the RTP coordinated and consistent with the Public Transit-Human Services Transportation Plan?	Yes	2-22, 4-30
11.	Were the draft and adopted RTP posted on the Internet? (Title 23 CFR 450.322(j))	Yes	App. H

### Modal Discussion

1.	Does the RTP discuss intermodal and connectivity issues?	Yes	3-3, 4-36ff.
2.	Does the RTP include a discussion of highways?	Yes	4-7ff.
3.	Does the RTP include a discussion of mass transportation?	Yes	4-28ff.
4.	Does the RTP include a discussion of the regional airport system and its ground access improvement program?	Yes	4-34ff.
5.	Does the RTP include a discussion of regional pedestrian needs?	Yes	4-36ff.
6.	Does the RTP include a discussion of regional bicycle needs?	Yes	4-36ff.
7.	Does the RTP include a discussion of rail transportation?	Yes	4-28ff.

	Yes/No	Page #
8. Does the RTP include a discussion of maritime transportation (if appropriate)?	N/A	
9. Does the RTP include a discussion of goods movement?	Yes	4-43ff.

Programming/Operations

1. Is a congestion management process discussed in the RTP? (MPOs designated as TMAs only) (Title 23 CFR 450.450.320(b))	N/A	
2. Is the RTP consistent (to the maximum extent practicable) with the development of the regional ITS architecture?	Yes	4-46f.
3. Does the RTP address both safety and security issues?	Yes	3-3, 4-11
4. Does the RTP identify the objective criteria used for measuring the performance of the transportation system?	Yes	4-8ff.
5. Does the RTP contain a list of un-constrained projects?	Yes	5-7f.

Financial

1. Does the RTP include a financial plan that meets the requirements identified in Title 23 CFR 450.322(f)(10)?	Yes	5-1ff.
2. Does the RTP contain a consistency Statement between the first 4 years of the fund estimate and the 4-year STIP fund estimate? (2006 STIP Guidelines, Section 19)	Yes	1-24, 5-1f.
3. Do the projected revenues in the RTP reflect Fiscal Constraint (Title 23 CFR 450.322(f)(10)(ii))?	Yes	5-1ff.
4. Does the RTP contain a list of financially constrained projects? Any regionally significant projects should be identified. (Government Code 65808(3)(A))	Yes	4-14ff.
5. Do the cost estimates for implementing the projects identified in the RTP reflect “year of expenditure dollars” to reflect inflation rates? (Title 23 CFR 450.322(f)(10)(iv))	Yes	5-5
6. After 12/11/07, does the RTP contain estimates of costs and revenue sources that are reasonably expected to be available to operate and maintain the freeways, highway and transit within the region (Title 23 CFR 450.322(f)(10)(i))?	Yes	4-25ff., 5-1ff., App. E
7. Does the RTP contain a Statement regarding consistency between the projects in the RTP and the ITIP (2006 STIP Guidelines section 33)?	Yes	1-24, 5-3
8. Does the RTP contain a Statement regarding consistency between the projects in the RTP and the FTIP (2006 STIP Guidelines section 19)?	Yes	1-24, 8-1

9. Does the RTP address the specific financial strategies required to ensure the identified TCMs from the SIP can be implemented? (nonattainment and maintenance MPOs only) (Title 23 CFR 450.322(f)(10)(vi))

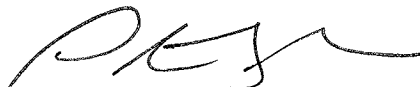
Yes/No	Page #
Yes	4-47ff., 8-1

Environmental

1. Did the MPO/RTPA prepare an EIR or a program EIR for the RTP in accordance with CEQA guidelines?
2. Does the RTP contain a list of projects specifically identified as TCMs, if applicable?
3. Does the RTP contain a discussion of SIP conformity, if applicable? **(MPOs only)**
4. Does the RTP specify mitigation activities? (Title 23 CFR part 450.322(f)(7))
5. Where does the EIR address mitigation activities?
6. Did the MPO/RTPA prepare a Negative Declaration or a Mitigated Negative Declaration for the RTP in accordance with CEQA guidelines?
7. Does the RTP specify the TCM's to be implemented in the region? **(Federal nonattainment and maintenance areas only)**

Yes	7-1
Yes	4-49
Yes	8-1f.
Yes	4-48ff, EIR
Yes	EIR
Yes	7-1, EIR
Yes	4-48

**I have reviewed the above information and concur that it is correct and complete.**

  
 \_\_\_\_\_  
 (Must be signed by MPO/RTPA  
 Executive Director  
 or designated representative)

7/27/10  
 \_\_\_\_\_  
 Date

Patricia Taylor  
 \_\_\_\_\_  
 Print Name

Executive Director  
 \_\_\_\_\_  
 Title

## **APPENDIX G – SAN JOAQUIN VALLEY REGIONAL TRANSPORTATION OVERVIEW**

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**DRAFT**  
**San Joaquin Valley Regional  
Transportation Overview**

April 2010



## 1. Executive Summary

This chapter provides an interregional perspective to transportation planning within the San Joaquin Valley (SJV) of California, consisting of the entireties of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and Kern. This chapter addresses several issues of regional and interregional importance including air quality, highways, streets and roads, aviation, rail, goods movement and bicycle efforts. The purpose of this chapter is to provide a broad overview of issues that cross jurisdictional boundaries. The Congestion Management Processes and Operations and Maintenance issues will be addressed by each individual RTPA as applicable.

### **Valleywide Planning**

The recently approved Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) replaced the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) as the funding for major infrastructure investment for transportation improvements. SAFETEA-LU funds are directed toward projects and programs for a broad variety of highway and transit work through several funding components including: Surface Transportation Program, Congestion Mitigation and Air Quality, Transportation Enhancements, Safety Program, Rail Program and Emergency Relief Programs. Previous federal legislation included the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and TEA-21. Transportation planning efforts are directed to be coordinated in geographically defined air basins. The eight counties mentioned above do share an air basin and have many attributes in common. There are also significant differences in the context of transportation planning. The eight San Joaquin Valley counties have already implemented an aggressive program of coordinated Valleywide planning. In September of 1992, the eight Valley Regional Transportation Planning Agencies (RTPAs) entered into a memorandum of understanding (MOU) to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight Valley RTPAs and the representatives of the California Department of Transportation (Caltrans), California Air Resources Board (CARB), State Office of Planning and Research (OPR), San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Federal Highway Administration (FHWA).

Each of the areas addressed in the Valleywide MOU have been assigned to a specific RTPA to serve as a lead in the coordination of planning activities. Representatives of each of the eight agencies have been meeting regularly to coordinate the preparation of Regional Transportation Plans (RTPs), Regional Transportation Improvement Programs (RTIPs), and an aviation systems plan that involves not only the eight Valley counties but the Sacramento region as well. These cooperative efforts include both staff and financial assistance from Caltrans, CARB, the Environmental Protection Agency (EPA) and the SJVAPCD. These efforts have taken place as a voluntary response to the new issues, challenges and requirements facing the transportation planning community. The San Joaquin Valley Regional Transportation Overview represents the cooperative effort between the eight counties and their coordination in the Regional Transportation Plans.

## 2. San Joaquin Valley Profile

### **Geography**

The San Joaquin Valley (Valley) is the southern portion of the Great Central Valley of California [Exhibit 1-1]. The San Joaquin Valley stretches from the Tehachapi Mountains in the south to the San Joaquin Delta in the north, a distance of nearly 300 miles. The eastern boundary is the Sierra Nevada Mountains, which reaches elevations of over 14,000 feet, while the western boundary is the lower coastal ranges. The Valley floor is about 10,000 square miles in size.

**Exhibit 1-1  
San Joaquin Valley Topography**



For the purposes of this report, the San Joaquin Valley is considered to include the entirety of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. The total area of the eight counties is 27,383 sq. mi. (larger than West Virginia). Kern County straddles the Sierra Nevada Mountains and occupies a portion of the Mojave Desert. The desert portion of Kern County (about 3,650 sq. mi.) is within the Southeastern Desert Air Basin.

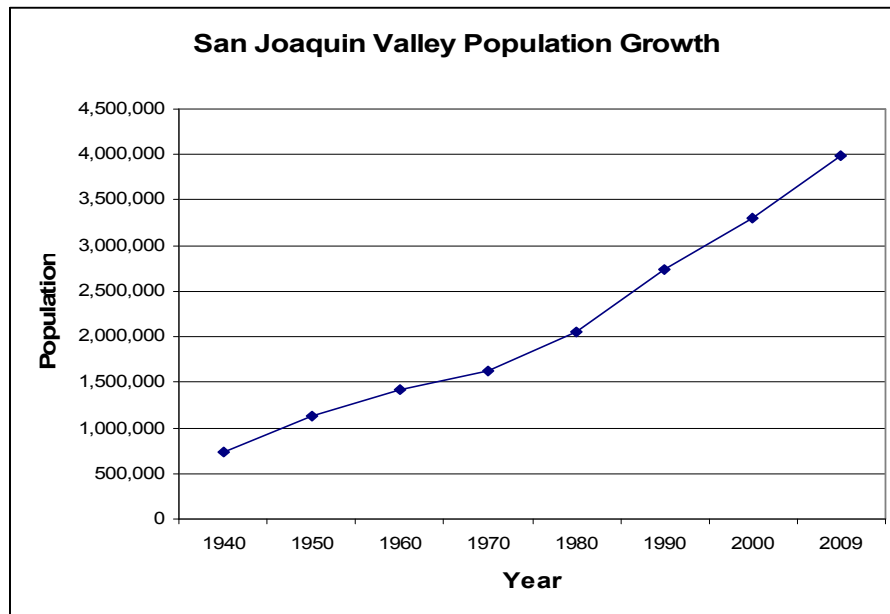
On the Valley floor, the topography is generally flat to rolling, and the climate is characterized by long, very warm summers, and short, cool winters. Precipitation is related to latitude and elevation, with the northern portions of the valley receiving approximately 12-14 inches of rain a year, while the southern portion has an annual average of less than six inches. Snow rarely falls on the Valley floor, but heavy winter accumulations are common in the Sierra Nevada Mountains.

The Valley occupies an area between the two largest metropolitan areas in California, San Francisco and Los Angeles. The major transportation facilities run generally north/south through the Valley and include State Route 99, Interstate 5, Union Pacific Railroad and Burlington Northern & Santa Fe Railroad. Several highways and some rail lines cross the Valley east/west including State Routes 4, 120, 152, 198 and 58 among others. In addition, the Valley contains numerous oil and natural gas pipelines, a myriad of telecommunication facilities, the Port of Stockton and air travel corridors.

**Population**

While the Valley is largely rural in nature, it does contain several large cities and suburbs with a total population of nearly 4 million people (more than the state of Oregon). The eight Valley counties are a part of seven Metropolitan Statistical Areas (MSAs): Stockton (San Joaquin County), Modesto (Stanislaus County), Merced, Fresno-Madera, Hanford-Corcoran (Kings County), Visalia-Porterville (Tulare County) and Bakersfield (Kern County). The large majority of the Valley’s population resides along the State Route 99 corridor including four cities of over 150,000 people (Fresno, Bakersfield, Stockton and Modesto) [Exhibit 1-2]. Population growth has been sustained and significant [Figure 1-1]. In 1970, the eight San Joaquin Valley counties had a population of just over 1.6 million. By 2000, the population had over doubled to nearly 3.4 million. The Valley continues to be one of the fastest growing regions in the state. The Valley accounted for 8.2% of California’s total population in 1970 and has grown to account for 10.4% of California’s total population in 2009.

**Figure 1-1**



Sources: US Census 1940-2000, California Department of Finance 2009

Future population growth is also expected to be sustained and significant. Both ends of the Valley are under growth pressure from the neighboring metropolitan areas of Los Angeles and the San Francisco Bay Area in addition to the natural growth rate in the Valley. Population in the eight Valley counties is projected to exceed 6.5 million by the year 2030, using growth projections from the California State Department of Finance (DOF) [Table 1-1].

**Table 1-1  
San Joaquin Valley Population Growth**

	1960	1970	1980	1990	2000	2009	2020	2030	2040
Fresno	365,945	413,329	514,621	667,490	799,407	942,298	1,201,792	1,429,228	1,670,542
Kern	291,984	330,234	403,089	544,981	661,645	827,173	1,086,113	1,352,627	1,707,239
Kings	49,954	66,717	73,728	101,469	129,461	154,743	205,707	250,516	299,770
Madera	40,468	41,519	63,116	88,090	123,109	152,331	212,874	273,456	344,455
Merced	90,446	104,629	134,560	178,403	210,554	256,450	348,690	439,905	541,161
San Joaquin	249,989	291,073	347,342	480,628	563,598	689,480	965,094	1,205,198	1,477,473
Stanislaus	157,294	194,506	265,900	370,522	446,997	526,383	699,144	857,893	1,014,365
Tulare	168,403	188,322	245,738	311,921	368,021	441,481	599,117	742,969	879,480
<b>TOTAL</b>	<b>1,414,483</b>	<b>1,630,329</b>	<b>2,048,094</b>	<b>2,743,504</b>	<b>3,302,792</b>	<b>3,990,339</b>	<b>5,318,531</b>	<b>6,551,792</b>	<b>7,934,485</b>

Sources: US Census 1960-2000, DOF estimates 2009, DOF projections 2020-2040

# San Joaquin Valley



## Economy

The San Joaquin Valley is famous for agricultural production. Nearly ideal growing conditions, reservoirs, and water distribution projects, such as the federal Central Valley Project and the State Water Project have resulted in seven of the top ten agricultural counties in the nation being in the San Joaquin Valley [Table 1-2]. In addition, if the Valley were a state, it would be the top agricultural producing state in the country [Table 1-3]. The Valley produced \$25.4 billion in agricultural products in 2008. This amount is over double the remainder of California and more than the next highest producing state (Iowa).

**Table 1-2**  
**Top United States Ag Producing Counties**

Rank	County	Production*
1	<b>Fresno, CA</b>	<b>\$5,662,895</b>
2	<b>Tulare, CA</b>	<b>\$5,018,023</b>
3	<b>Kern, CA</b>	<b>\$4,033,312</b>
4	Monterey, CA	\$3,826,791
5	<b>Merced, CA</b>	<b>\$2,999,701</b>
6	<b>Stanislaus, CA</b>	<b>\$2,473,843</b>
7	<b>San Joaquin, CA</b>	<b>\$2,129,725</b>
8	<b>Kings, CA</b>	<b>\$1,760,168</b>
9	Imperial, CA	\$1,684,522
10	Ventura, CA	\$1,613,247

Source: USDA, NASS, California Field Office, 2008

\* In thousands

**Table 1-3**  
**Top Agricultural States**

Rank	State	Production*
1	San Joaquin Valley	\$25,388,542
2	Iowa	\$24,752,867
3	Texas	\$19,172,500
4	Nebraska	\$17,315,688
5	Illinois	\$16,356,790
6	Minnesota	\$15,838,094
7	Kansas	\$13,967,496
8	California (remainder)	\$10,798,193
9	Indiana	\$9,961,850
10	Wisconsin	\$9,885,557

Source: USDA Economic Research Service, 2008

\* In thousands

While in terms of economic productivity, agriculture is by far the Valley's leading industry, the leading industries in terms of employment are Education, Health and Social Services and Retail Trade. Agriculture along with these two other sectors account for over 40% of the jobs in the Valley. Statewide, Education, Health and Social Services is also the leading sector while Professional jobs are second and Retail third.

**Table 1-4**  
**Employment by Industry**

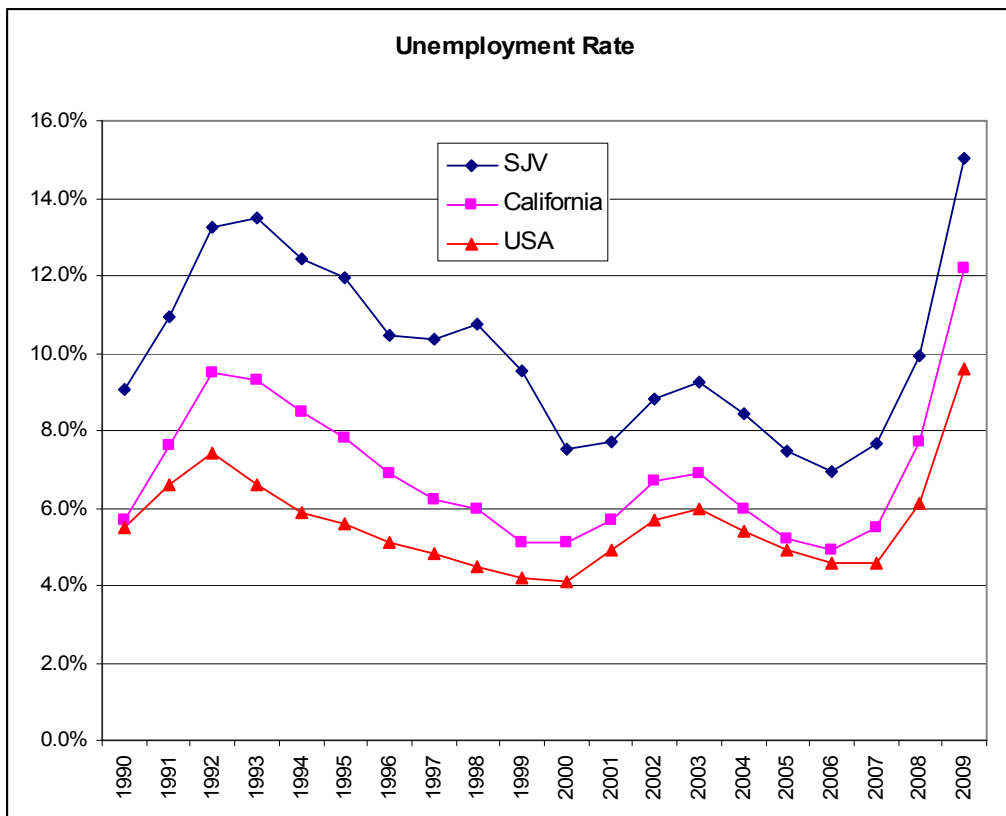
	Valley		California	
Agriculture, forestry, fishing and hunting, and mining	162,059	10.4%	355,362	2.1%
Construction	113,730	7.3%	1,222,364	7.1%
Manufacturing	128,910	8.3%	1,796,323	10.5%
Wholesale trade	58,456	3.7%	567,729	3.3%
Retail trade	179,859	11.5%	1,913,970	11.2%
Transportation and warehousing, and utilities	84,475	5.4%	837,208	4.9%
Information	24,132	1.5%	519,244	3.0%
Finance and insurance, and real estate and rental and leasing	65,863	4.2%	1,140,246	6.7%
Professional, scientific, and management, and administrative and waste management services	120,414	7.7%	2,056,620	12.0%
Educational services, and health care and social assistance	325,878	20.9%	3,438,701	20.1%
Arts, entertainment, and recreation, and accommodation and food services	124,330	8.0%	1,614,171	9.4%
Other services, except public administration	75,035	4.8%	900,254	5.3%
Public administration	97,245	6.2%	762,326	4.5%
<b>Civilian employed population 16 years and over</b>	<b>1,560,386</b>	<b>100.0%</b>	<b>17,124,518</b>	<b>100.0%</b>

Source: 2008 American Community Survey, U.S. Census Bureau

**Economically Distressed Area**

The San Joaquin Valley is one of the most economically distressed regions in the United States. High unemployment rates have historically plagued the Valley [Figure 1-2]. Over time, the Valley has consistently had unemployment rates 2.5% to 4% above the state unemployment rate and 3% to 6% above the national unemployment rate. While there is some variance with the unemployment rate in the Valley, unemployment in all Valley counties has been consistently higher than state and federal averages [Table 1-5].

**Figure 1-2**



Source: Bureau of Labor Statistics (not seasonally adjusted, data points are for August of each year)

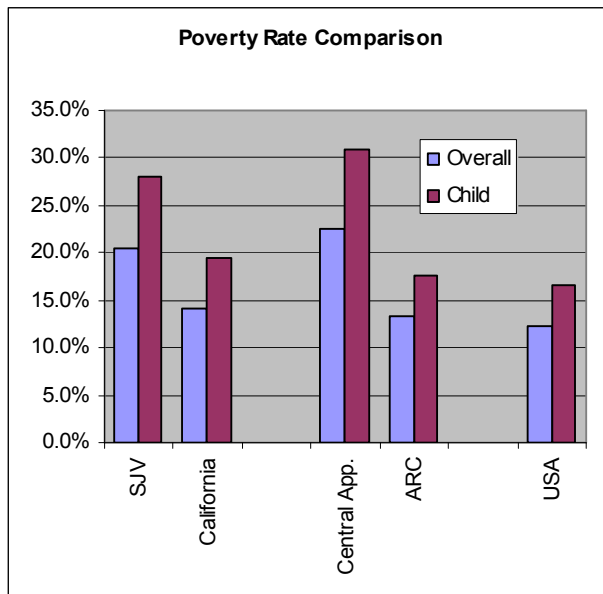
**Table 1-5  
Unemployment Rate – San Joaquin Valley Counties**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fresno	8.6	8.5	9.5	9.7	8.5	7.6	6.9	7.4	9.7	14.6
Kern	7.2	7.2	8.5	9.1	8.6	7.4	6.6	7.5	9.3	14.4
Kings	8.3	8.5	9.6	9.8	9.2	7.7	7.0	7.4	9.7	14.2
Madera	7.0	7.3	8.7	8.5	7.3	6.7	6.0	6.6	8.7	13.3
Merced	7.6	7.6	8.6	9.2	8.7	8.2	8.0	8.6	11.4	16.6
San Joaquin	6.1	6.6	8.0	8.6	7.9	7.2	6.9	7.7	10.2	15.7
Stanislaus	6.4	6.6	8.0	8.4	7.5	7.1	7.0	7.9	10.4	15.7
Tulare	8.9	9.8	10.1	10.6	10.2	8.2	7.5	8.2	10.3	15.2
Valley	7.5	7.7	8.8	9.3	8.5	7.5	7.0	7.6	9.9	15.0
California	5.1	5.7	6.7	6.9	6.0	5.2	4.9	5.5	7.7	12.2
United States	4.1	4.9	5.7	6.0	5.4	4.9	4.6	4.6	6.1	9.6

Source: Bureau of Labor Statistics (not seasonally adjusted, data points are for August of each year)

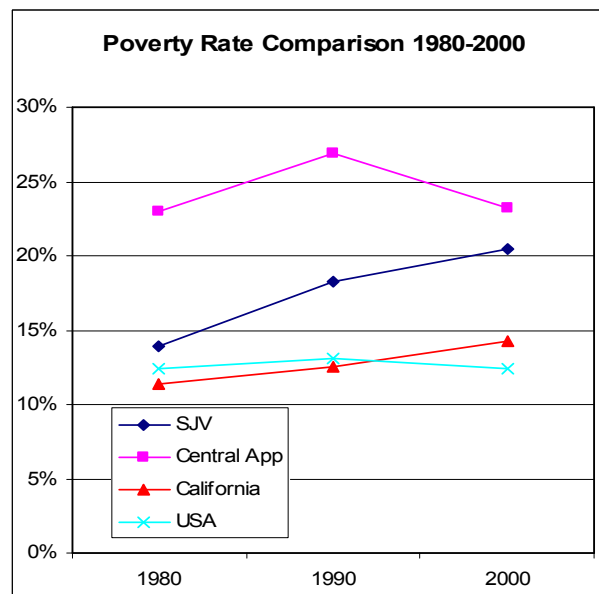
The economic plight of the San Joaquin Valley is starting to be recognized at a national level. The Congressional Research Service (CRS) completed a study in 2005 (California’s San Joaquin Valley: A Region in Transition) comparing the economic conditions of the San Joaquin Valley to the Central Appalachian region, another severely economically distressed region. The Central Appalachian region (primarily eastern KY and parts of WV, TN and VA) is the most economically distressed sub-region within the Appalachian Regional Commission (ARC). ARC was created by Congress in 1965 in response to the persistent socioeconomic challenges in the Appalachian region. Economic conditions in the Valley were shown to be comparable to Central Appalachia and lagging far behind the state of California as a whole and the United States. For example, poverty rates in the Valley are similar to the poorest region of the Appalachians and are actually trending worse than the Central Appalachian region [Figures 1-3 and 1-4].

Figure 1-3



Source: US Census Bureau 2000 via CRS

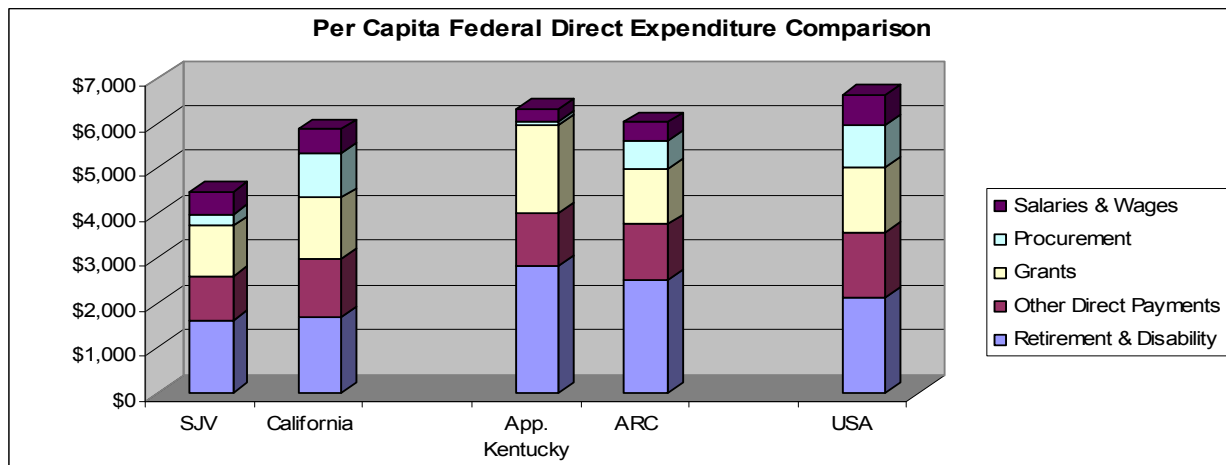
Figure 1-4



Source: US Census Bureau via CRS

While being one of the most economically challenged regions in the country, the Valley has traditionally received far less federal assistance than other regions in the United States. The CRS study also showed that the Valley is lagging behind the Appalachian region, California and the United States in per capita federal expenditures [Figure 1-5].

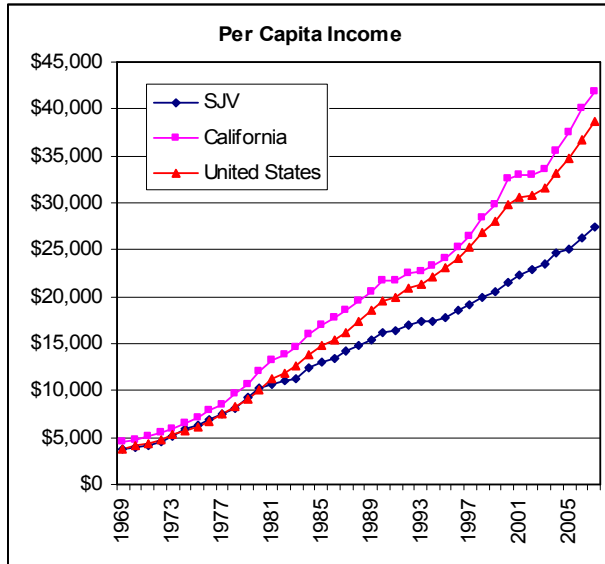
Figure 1-5



Source: CRS

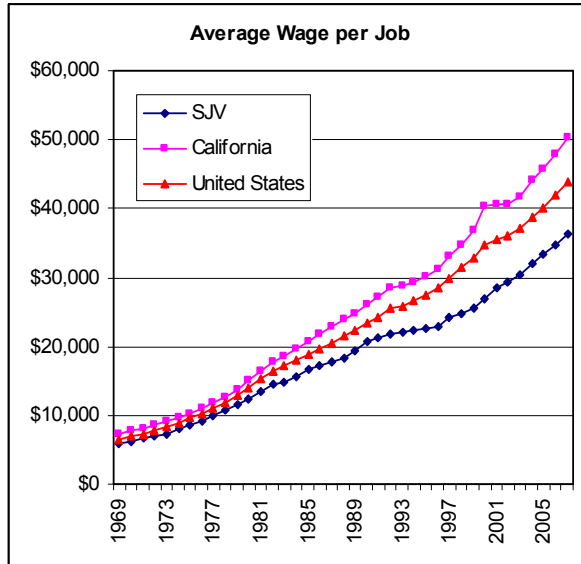
The per capita income for residents in the Valley was \$27,379 in 2007 compared to \$41,805 in California and \$38,615 in the United States. The average wage per job in the Valley was also significantly lower than California and the United States at \$36,309 in 2007 compared to \$50,182 and \$43,889 respectively. The disparity in income and wages between the Valley and the rest of the state and country has only increased over time [Figures 1-7 & 1-8].

Figure 1-7



Source: Bureau of Economic Analysis

Figure 1-8

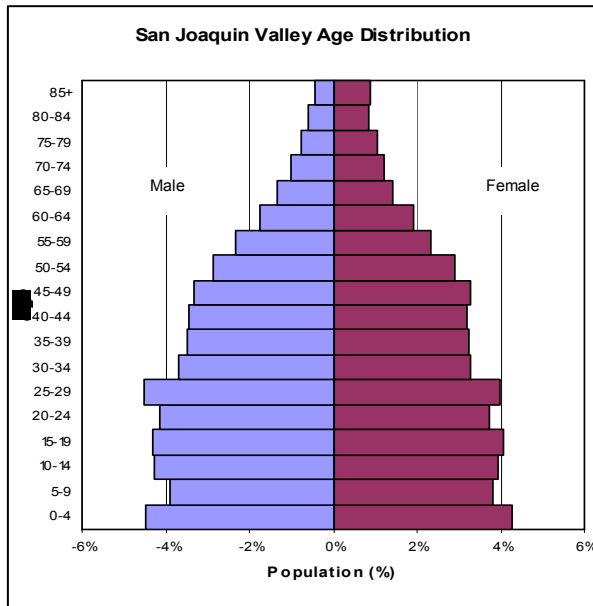


Source: Bureau of Economic Analysis

**Demographics**

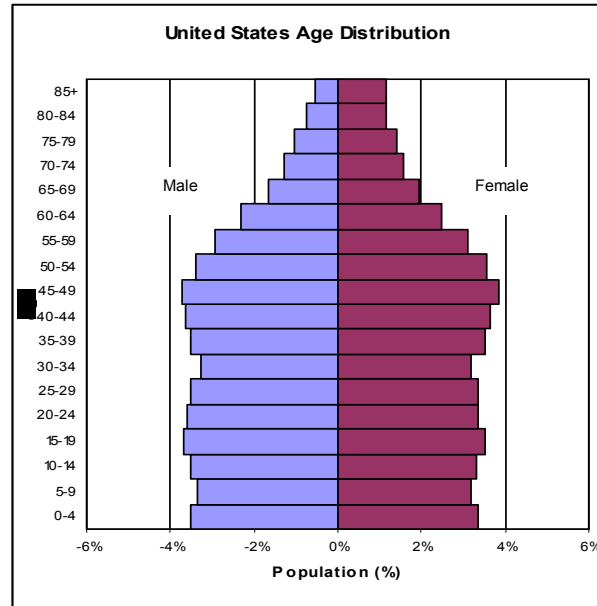
The Valley has a younger population than California as a whole and the United States [Figures 1-8 & 1-9]. In 2008, 33.1% of Valley residents were under the age of 20 compared to 28.7% for California and 27.3% for the United States. Figures 1-10 and 1-11 compare the racial/ethnic breakdown of Valley residents to the United States as a whole.

Figure 1-7



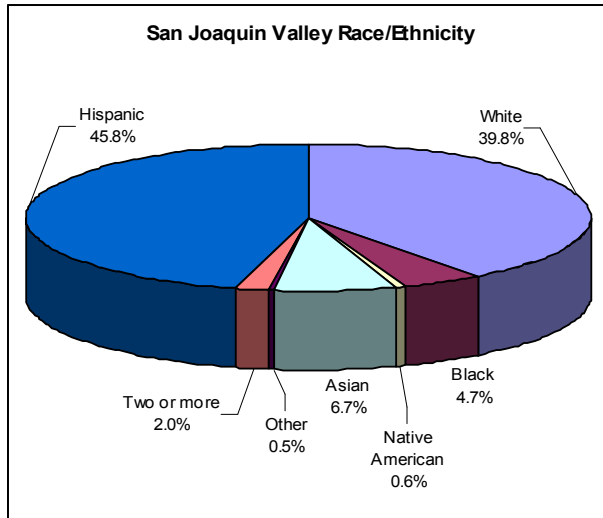
Source: 2008 American Community Survey, U.S. Census Bureau

Figure 1-8

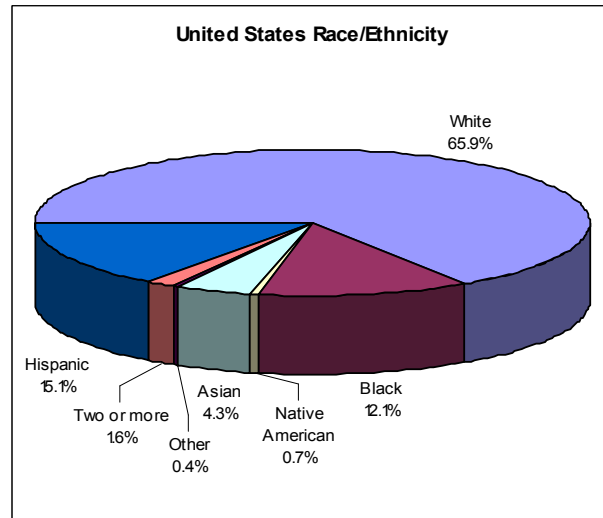




**Figure 1-10**



**Figure 1-11**



Source: 2008 American Community Survey, U.S. Census Bureau

Education levels in the San Joaquin Valley lag behind California as a whole and the United States [Table 1-6]. Nearly 28% of Valley residents 25 years and older are not high school graduates compared to 20% across the state and 15.5% across the country. Only 15.4% of Valley residents (25+ years old) have a Bachelor's degree or higher compared to 29.4% across California and 27.4% in the United States.

**Table 1-6**  
**Educational Attainment of Persons 25 Years of Age and Older**

Education Level	San Joaquin Valley		California		United States	
Less than 9th grade	349,850	15.5%	2,463,199	10.6%	12,658,853	6.4%
9th to 12th grade, no diploma	278,680	12.4%	2,137,871	9.2%	17,999,306	9.1%
High school graduate	605,515	26.9%	5,205,251	22.4%	58,547,194	29.6%
Some college, no degree	506,788	22.5%	4,833,447	20.8%	39,756,710	20.1%
Associate's degree	163,074	7.2%	1,766,067	7.6%	14,636,799	7.4%
Bachelor's degree	240,598	10.7%	4,368,693	18.8%	34,218,462	17.3%
Graduate or professional degree	106,903	4.7%	2,463,199	10.6%	19,977,252	10.1%

Source: 2008 American Community Survey, U.S. Census Bureau

**Trends and Assumptions**

Changes in population, housing and employment alter travel demand and patterns that affect transportation facilities and services. By anticipating the magnitude and distribution of growth and change within the San Joaquin Valley, present-day decisions can be made to capitalize on the positive aspects of the anticipated growth while minimizing the adverse consequences.

**Population**

Population growth within the San Joaquin Valley will continue into the foreseeable future. The driving force for the increasing population is the availability of land, the availability of water, the proximity of the urban centers of Stockton, Modesto, Fresno and Bakersfield to the large urban areas of Los Angeles and San Francisco, and the relatively low cost of land in the San Joaquin Valley.

**Housing**

Housing growth is generally a function of population growth. Housing is anticipated to grow at a rate similar to population growth.

### **Employment**

Employment opportunities within the Valley will change over the time span of this plan. Agricultural employment will drop as a percentage of total employment as agricultural activities become more and more automated, requiring less human labor to accomplish more production. Services, wholesale trade and retail trade activities are anticipated to increase in importance in the future employment pattern of the Valley.

### **Other Trends and Assumptions**

#### **Cost of Travel**

The cost of travel will increase for all modes as the price of fuel, equipment, labor, and service continue to rise.

#### **Automobile Use**

The private automobile will continue to be the dominant and preferred method of travel within the region. Travel demand management programs may lessen the percentage of trips made by private automobile.

#### **Transit Use**

Public transit use, including passenger rail, will keep pace with the rise in population and additional incentives, such as voluntary employer trip reduction programs, will be initiated to encourage additional transit use.

#### **Aviation Activity**

General and commercial aviation activity will increase as the regional population and economy expand.

#### **Air Quality**

Increases in hydrocarbons, oxides of nitrogen, carbon monoxide, particulate matter and greenhouse gases may result as population increases. Efforts will be made to reduce the number of vehicle miles traveled (VMT). VMT reduction efforts will take several forms, including compensatory and possible compulsory ridesharing, flex time work scheduling, and non-motorized commuting. Jobs-to-housing balance in local land use decision-making will become more important. Introduction of newer, cleaner fuels and more efficient internal combustion engines are also anticipated.

#### **Railroad Activity**

The California High-Speed Rail Authority is working toward the development and implementation of an inter-city high-speed rail system. Current activity focuses on evaluating alternative Central Valley alignments connecting the Los Angeles Basin with the San Francisco Bay area. Amtrak will continue its successful San Joaquin trains between Bakersfield and Oakland/Sacramento, with bus feeder lines to southern California and other areas.

#### **Land Use**

It is anticipated that agricultural land will continue to be converted at an increasingly rapid pace to residential, commercial, and industrial uses.

### 3. Valley Policy Element

#### 3a. Memorandums of Understanding (MOUs)

##### **San Joaquin Valley Regional Planning Agencies MOU**

In September of 1992, the eight Valley RTPAs entered into a MOU to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. One major addition to the 2006 MOU was the creation of the San Joaquin Valley Policy Council. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight Valley RTPAs and the representatives of Caltrans, CARB, OPR, SJVAPCD and FHWA.

Each of the areas addressed in the Valleywide MOU have been assigned to a specific RTPA to serve as a lead in the coordination of planning activities. These cooperative efforts include both staff and financial assistance from Caltrans, CARB, EPA and the SJVAPCD. These efforts have taken place as a voluntary response to the new issues, challenges and requirements facing the transportation planning community.

##### ***MOU Contents***

The MOU covers many different items. Examples of items where San Joaquin Valley Regional Planning Agencies coordinate under this MOU are below, but this list is not all-inclusive:

- Preparation of multi-modal transportation plans
- Preparation of Regional Transportation Plans
- Coordination with the San Joaquin Valley Air Pollution Control District and Caltrans District Offices
- Coordinate on rail issues
- Coordinate planning efforts with state and federal agencies
- Coordinate on various technical issues

##### ***Addition of Regional Policy Council***

The Valley RTPA's updated MOU, signed in 2006, created the San Joaquin Valley Regional Planning Agencies' Policy Council. The membership of the Policy Council consists of two elected officials and one elected alternate appointed from each RTPA Board, and one representative of the San Joaquin Valley Air Pollution Control District (added in 2009). The Policy Council is meets at least twice each year, and is authorized to represent the Valley RTPAs in multiple forums, including before the California Transportation Commission (CTC) and state and federal legislative bodies.

##### **MOU Between and Among the SJV RTPAs and the San Joaquin Valley Air Pollution Control District (Air District)**

In 1992 the eight Valley RTPAs entered into an MOU with the Air District to ensure a coordinated transportation and air quality planning approach. This MOU was updated in 2009 to reflect the increase in membership to the Valley Policy Council. The MOU acknowledges that cooperation between the agencies is key to complying with the Federal Clean Air Act, keeping current with the Transportation Conformity Rule, and to address state and federal agencies with joint or consistent policy positions when necessary.

## 4. Modal Discussion

### 4a. Highways

The regional highway system in the San Joaquin Valley plays a critical role in the movement of both people and goods. The Valley's highway network provides east-west and north-south connections to major metropolitan markets in California and beyond. Given the San Joaquin Valley's north-south geographical layout, the most important truck routes in the Valley are State Route 99 and Interstate 5, which together account for 24 of the 25 highest volume truck routes in the system. State Route 99 also serves a dual purpose as the San Joaquin Valley's "Main Street" (i.e. connecting the majority of cities within the Valley) and as the primary goods movement corridor for goods moving from southern/northern California as well as goods that are moving along the 1,400 mile West Coast Corridor from British Columbia on the north to Baja California in the south.

Both facilities carry a mix of different types of traffic, although Interstate 5 appears to carry mostly longer haul interregional traffic, while SR 99 carries both interregional and intro-valley traffic. SR 99 serves as the primary highway providing goods to the vast majority of San Joaquin Valley residents. In fact, the majority (71%) of the Valley's population is located within five miles of State Route 99.

The \$1 billion for State Route 99 included in Proposition 1B makes a small dent in the nearly \$6 billion in immediate needs identified in Caltrans' 99 Business Plan. Far greater funding is needed, however, to bring the "Main Street" and the primary goods movement corridor of the Valley up to a full six lanes from Bakersfield to Sacramento. Widening to six lanes has been a long term goal of the Valley and is necessary to accommodate the forecasted growth and avoid major congestion problems along the SR 99 corridor in the future.

Arguably, the most neglected of the Valley's goods movement street and highway facilities are the east to west highways that serve as our primary farm-to-market connectors. These facilities carry California produce to domestic and international markets. Highways like State Routes 205, 132, 152, 180, 198, and the 46 are being asked to serve a wider range of purposes today and in the future. In order to accommodate the projected growth in population and goods movement, additional investment in these facilities will be required.

Truck traffic in the Valley is growing at an amazing rate. The following statistics reflect this trend.

Truck traffic accounts for anywhere from 19% of the traffic in Stanislaus County to 27% in Kern County, while the statewide average for truck volumes is 9% by segment.

In 1992, truck VMT in the Valley accounted for 18.7% of all statewide truck VMT. In 2007 it had grown to 28% and is still climbing.

Over a six-year period from 1997 to 2003, truck traffic grew 33% while the state as a whole grew about 8%.

It is estimated that between 25% and 30% of all truck movements in the San Joaquin Valley are through trips not generated or ending in the Valley.

On Interstate 5 it is estimated that up to 30% of the traffic is trucks, depending on the location. Truck traffic on SR 99 is two to three times (18% to 27%) the average for the state.

Large trucks (5+ axles) play a very important role in the region's trucking system, constituting over 20% of total Annual Average Daily Traffic in some locations on SR 99. Surface Transportation Assistance Act (STAA) trucks are the largest trucks (STAA trucks are defined as tractor-trailer combinations more than 65 feet in length or with a kingpin to rear axle length greater than 40 feet) allowed to operate on

California's highways and are restricted to a designated STAA roadway network. Unfortunately, the geometry of many of the Valley's interchanges does not easily accommodate these longer trucks which now make up about 70% of the truck fleet. In order to address this situation, additional STAA truck signing and geometric improvements to various interchanges will be required. Additionally, necessary expansion of our roadside rest system is required to deal with truck safety and to reduce the impact of on-street parking by trucks in communities along freeways.

As we look forward, several trends are clear. Among them are:

- The Valley's agricultural industry's reliance on local routes and state highways to move goods from farm-to-market will continue to increase as the Valley's farms production continues to grow in order to meet a growing planet's needs for food and fiber.
- The Valley's centralized location lends itself to the location of distribution centers, which in turn leads to more heavy-duty diesel trucks utilizing our street and highway system, thereby creating more "wear and tear" on the facilities and generating additional emissions.
- Forecasted congestion on east-west routes connecting the Bay Area to Stockton and Modesto will continue to worsen as goods movement increases and Bay Area employees continue to seek affordable housing in the Valley.
- Investments that improve access to intermodal transfer points will need to be taken into consideration and funding sought as "Just-in-Time" delivery continues to become the primary business model for many goods movement companies.
- The Port of Stockton has emerged as the fourth (effectively tied with the Port of San Diego) largest port in California, but continues to be growth constrained due to access issues on neighborhood surface streets.
- At-grade intersections between vehicular traffic and trains are quite numerous in the Valley and present a safety hazard. Future growth in population and goods movement will only worsen the situation.
- Problematic access to large activity centers for large STAA trucks and doubles will increase due to ramp and roadway geometrics as will safety and road maintenance issues associated with truck traffic.

## 4b. Transit

### Existing Operations

For the San Joaquin Valley (SJV), there exist jurisdiction-by-jurisdiction transit services with limited inter-county transit operations throughout the SJV. These transit services include:

- Vanpool services: Kings Area Rural Transit / Agricultural Industries Transportation Services (KART/AITS), San Joaquin County Commute Connection
- Passenger rail service: Altamont Commuter Express (ACE)
- Bus services: Greyhound, San Joaquin Commuter routes, Modesto Area Express connections to ACE and BART, East Kern Express route, Yosemite Area Regional Transportation System (YARTS), Stanislaus Regional Transit routes, Merced County "The Bus" routes, KART, Tulare County Area Transit routes

However, there is not an integrated transit system that offers extensive inter-county transit and connectivity to other modes such as Bay Area Rapid Transit (BART), Altamont Commuter Express (ACE), and Amtrak.

Improvements to inter-county transit services will be needed to accommodate the projected future demands of inter-county commuters with viable modal choices.

**Transit Improvements**

The San Joaquin Valley (SJV) Express Transit Study was a sponsored effort of all eight valley Councils of Governments/Metropolitan Planning Organizations, which make up the San Joaquin Valley Regional Transportation Planning Agencies (SJVTPA). The consultant, Nelson/Nygaard Consulting Associates, commenced this study in February 2008.

The SJV Express Transit Study is valley wide and comprehensive in its documentation of existing inter- and intra-valley transit services. The study further projects future transit demand both within the Valley and to Sacramento, Bay Area, and SoCal destinations. The study proposes service options throughout the San Joaquin Valley and by various modes ranging from rideshare/TDM, vanpool, commuter express bus, and commuter rail. The study has been coordinated with local transit providers in each of our counties, vanpool programs, and the San Joaquin Regional Rail Commission.

The study identifies four feasible inter-county commute corridors.

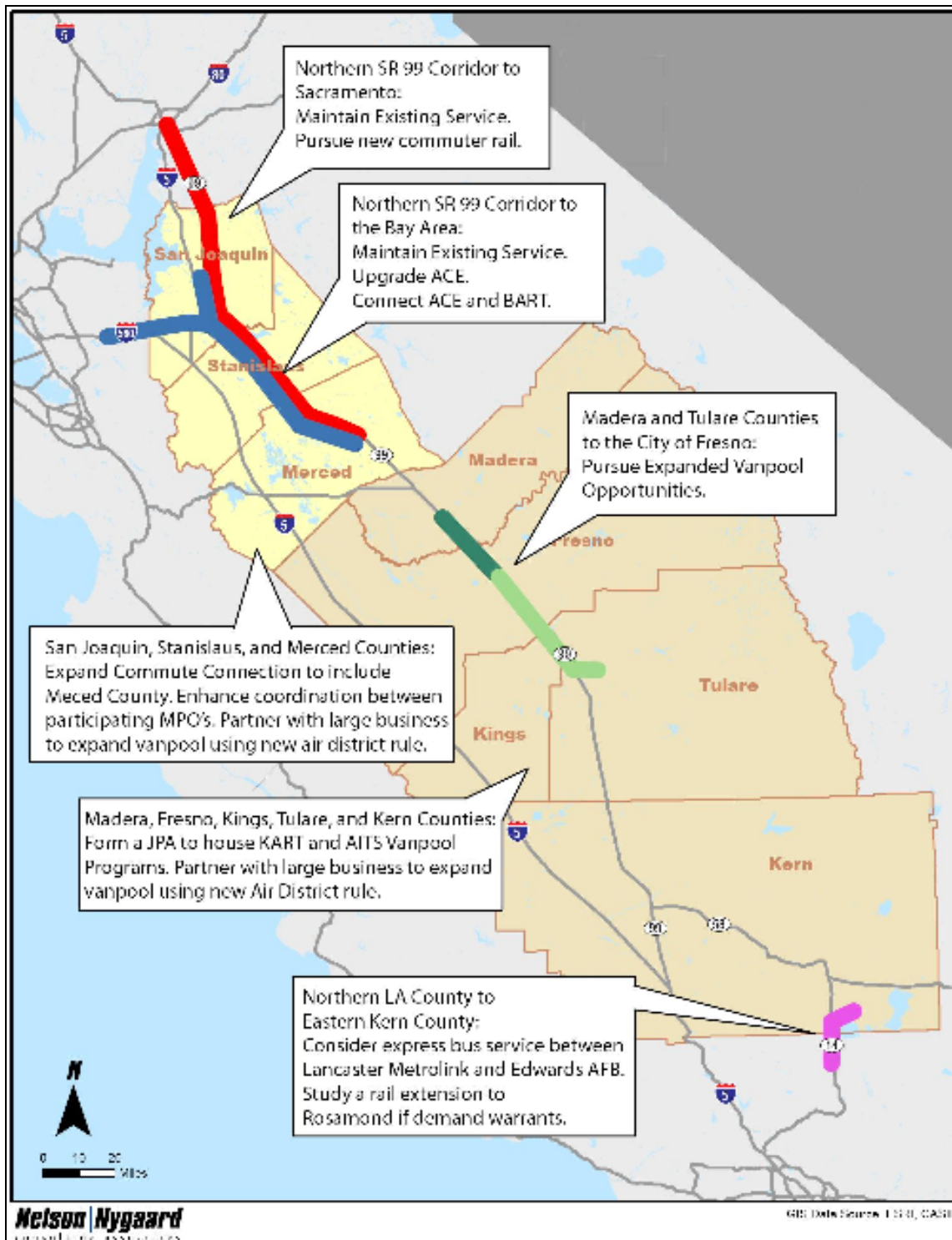
Key Travel Corridors	Description
Northern SR 99 corridor to Sacramento	Nearly 10,000 daily trips heading towards Sacramento by 2030
Northern SR 99 corridor to Bay Area	More than 50,000 daily commute trips by 2030
Madera and Visalia to Fresno	Substantial growth in commute trips to Fresno jobs
Northern LA Co. to Eastern Kern Co.	More than 20,000 people work at Edwards Air Force Base

The study summarizes the proposed services by key corridor to best serve the SJV’s inter-county commuters.

- Invest in ridesharing, which is the most cost-effective strategy for the region
- Focus on expanding vanpool offerings
- Consider expanding subscription bus service from Stockton to Sacramento and the Bay Area
- Consider implementing bus service between Lancaster Metrolink station and Edwards Air Force Base in Eastern Kern County in partnership with the base
- Consider upgrades to commuter rail service to northern SR 99 corridors which includes capitalizing on California High Speed Rail investments

Key Travel Corridors	Rideshare	Vanpool	Commuter Express Bus	Commuter Rail Improvements
Northern SR 99 corridor to Sacramento	X	X	X	X
Northern SR 99 corridor to Bay Area	X	X	X	X
Madera and Visalia to Fresno	X	X		
Northern LA Co. to Eastern Kern Co.	X	X		

The map depicts the study's proposed services for the SJV region.



The SJV Express Transit Study, from a procedural and geographic perspective, serves as a model for modal studies for the San Joaquin Valley.

## **Recommendations**

### ***Ridesharing/Vanpool***

Recognizing that lower-density land use patterns will continue to dominate most of the San Joaquin Valley for the foreseeable future, the expansion of the ridesharing and vanpool opportunities should be the primary investment to increase transportation choices for inter-county commuters in most of the SJV region. Recommendations for expanding access to ridesharing and vanpool services are:

- Continue with plans to form a Joint Powers Authority in the Southern portion of the Valley to operate KART and AITS Vanpool
- Expand Commute Connection's service area to include Merced County, and enhance coordination between the participating MPOs
- Commute Connection should consider pilot testing lease-purchasing vanpool vehicles
- Prioritize vanpooling to Fresno
- Provide a single valley-wide ride-matching and vanpool website
- Invest in more marketing of vanpool to choice riders
- Expand park-and-ride opportunities
- Offer Guaranteed Ride Home throughout the Valley
- Seek to influence the development of the new Air District trip reduction rule, so that it can fund and promote ridesharing to large employers

### ***Inter-county Express Bus***

Three key corridors (Northern SR 99 corridor to Sacramento; Northern SR 99 corridor to Bay Area; Northern LA County to Edwards Air Force Base in Eastern Kern County), which were identified through this study, have potential for commuter express transit services. Recommendations for express bus services include:

- Maintain existing inter-county commuter service
- Enhance San Joaquin Regional Transit District subscription routes to Sacramento and the San Francisco Bay Area as funding becomes available
- Study express bus service between Lancaster Metrolink and Edwards Air Force Base

### ***Commuter Rail***

Nearly half of the San Joaquin Valley's inter-county commuters travel between the Valley and the neighboring San Francisco Bay Area and Sacramento areas. High trip densities, congested roads, and the opportunity to connect to dense downtowns and high quality local rail service on the destination end makes these corridors good candidates for commuter rail service. Expanding and improving passenger rail service in these rail corridors may be the best way to serve SJV commuters in the coming decades. Recommendations for commuter rail are:

- Develop a coordinated regional advocacy plan for enhanced state and federal investments in commuter rail
- Work cohesively as Valley Counties to upgrade ACE
- Work cohesively as Valley Counties for a direct ACE/BART connection
- Work toward expansion of commuter rail service between Merced and Sacramento
- Invest in great station area planning



## 4c. High Speed Rail

### **Background**

The California High-Speed Train (HST) system will approximately be an 800-mile system that will serve Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County and San Diego. By 2030, HST will potentially be carrying 93 million passengers annually at operating speeds of up to 220 miles per hour. At such high speeds, the expected trip time from San Francisco to Los Angeles will be just over 2 ½ hours.

In 1996, the California High-Speed Rail Authority (CHSRA) was created to plan for the development, financing, construction and operation of the HST system. The CHSRA is made up of a nine-member policy board and a small core staff.

In 2000, CHSRA adopted the Business Plan, which described the economic viability of the HST system. This Final Business Plan included investment-grade forecasts of ridership, revenue, cost and benefits of the HST system.

In 2005, CHSRA, in cooperation with Federal Railroad Administration (FRA), completed the final program-level Environmental Impact Report / Environmental Impact Statement (EIR/EIS) that looked at the entire proposed statewide HST system. This was the first phase of a tiered environmental review process.

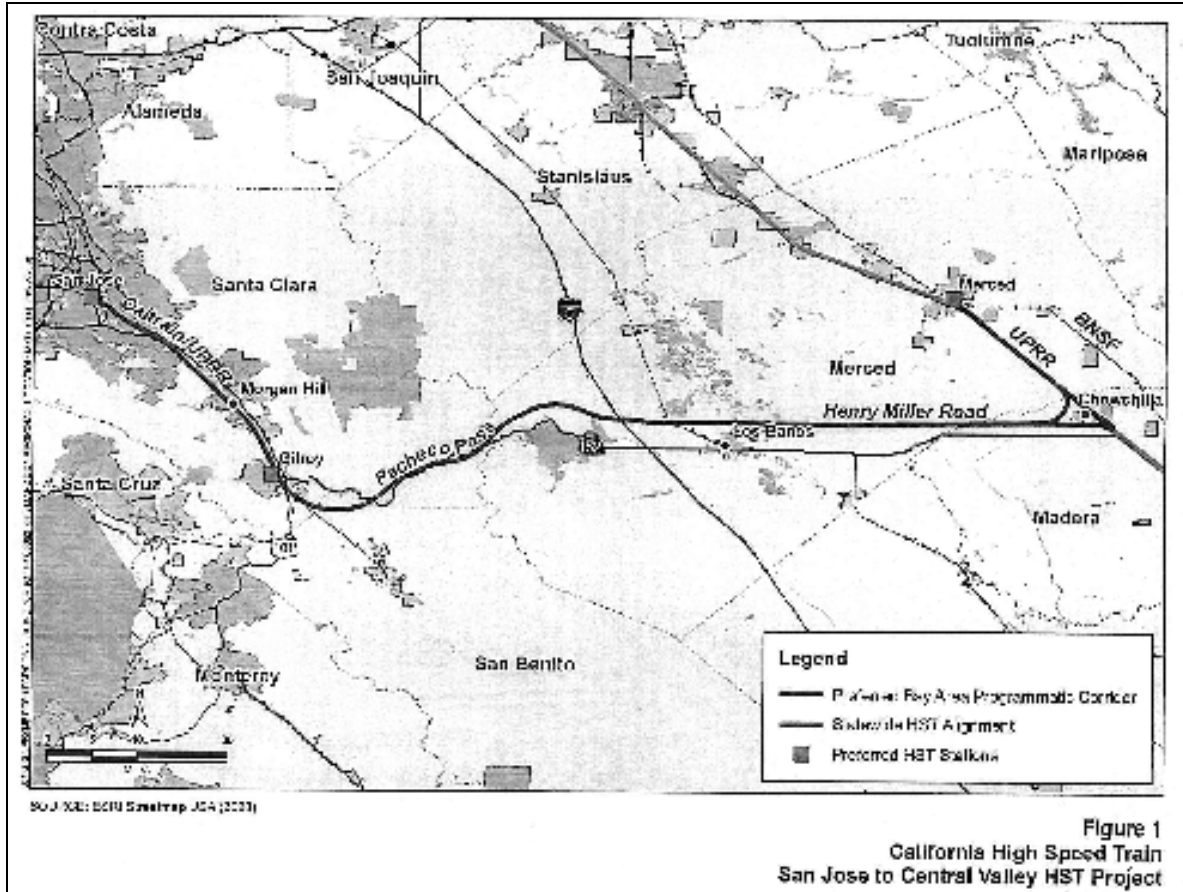
In 2007, CHSRA adopted a Phasing Plan and laid out the Preliminary Financial Plan. Factors and conditions for adopting Phase I (San Francisco to Central Valley to Anaheim) of the Phasing Plan included the following:

- Early utilization of some segments
- Local and regional funding participation in construction
- Service to several regions
- Significant operating surplus to attract private sector financing
- Timely construction



In 2007, CHSRA also laid out the Preliminary Financial Plan, which was later updated in 2008.

In 2008, CHSRA, in cooperation with FRA, completed another program-level EIR/EIS, specifically for the Bay Area to Central Valley corridor. This program-level EIR/EIS finalization resulted in the CHSRA selecting Pacheco Pass (over Altamont Pass) as the preferred alignment.



Also, in 2008, the CHSRA released an updated Business Plan with updated ridership and revenue forecasts. The 2008 Financial Plan updated the financing strategy for Phase I.

Funding Sources	Cost (2008 dollars)
State (2006 Bond - \$9.95 billion)	\$10 billion
Federal grants	\$12-16 billion
Local partnerships	\$2-3 billion
Public-private partnerships	\$6.5-7.5 billion
Estimated cost (SF to Anaheim)	\$33.6 billion

In 2008, California voters approved \$9.95 billion in state bonds for California’s HST.

**Current Work**

In 2009, with the state bond money, the CHSRA and the FRA have initiated the project-level EIR/EIS for the entire HST system. The CHSRA has invited local and transportation agencies to actively participate in the process in determining final alignments, station locations, and site for the central heavy maintenance facility. Endorsed by the SJV, the CHSRA are looking at station locations in Merced, Fresno, Bakersfield, and Hanford, and the central heavy maintenance facility somewhere within the SJV.

The CHSRA and the San Joaquin Regional Rail Commission (SJRRRC) entered into a Memorandum of Understanding for the joint planning and development of the Altamont Corridor Rail Project between the northern SJV and the Bay Area. The Altamont Corridor Rail Project will be a dedicated, grade-separated, electric regional rail corridor, which will support intercity and commuter rail passenger services. The project would transform the existing Altamont Commuter Express (ACE) service into the new Altamont

Corridor Express by accommodating more trains per day, reducing travel times with high speed travel (150 mph or higher), and eliminating freight railroad delays by providing separate passenger tracks. The Altamont Corridor Express would possibly provide connections to potential bus links, BART, CalTrain, and the Valley Transportation Authority (VTA) light rail network. The Altamont Corridor Express will service large riderships (with proposed stations in San Jose, Milpitas, Fremont/Union City, Pleasanton, Livermore, Tracy, Stockton, and Modesto), and also serve as a feeder to the statewide HST system (with considered connections at stations located in San Jose, Stockton, and Modesto). Additionally, the San Joaquin Valley supports the Altamont Corridor Rail Project to connect to Merced in order to tie in to Phase I of the statewide HST system. By ending in Modesto and not extending to Merced, there will be a gap (disconnect) between this Altamont Corridor Rail Project service and the statewide HST system.



Following the completion of the project-level EIR/EIS for California's HST system, the CHSRA will be finalizing design and acquiring right-of-way.

The CHSRA will be working on acquiring Federal funding needed for California's HST system. CHSRA has already applied for more than \$4.7 billion in funding from the Federal Economic Stimulus' High Speed Rail Program. This \$4.7 billion application includes:

- \$2.19 billion for Los Angeles to Anaheim
- \$980 million for San Francisco to San Jose
- \$466 million for Merced to Fresno
- \$819.5 million for Fresno to Bakersfield
- \$276.5 million for preliminary engineering and environmental work in all segments including Los Angeles to San Diego via the Inland Empire, Los Angeles to Palmdale and Bakersfield, Sacramento to Merced, and the Altamont Rail Corridor

This \$4.7 billion, coupled with non-Federal dollar-for-dollar match will total a nearly-\$10 billion investment. This level of investment is expected to create nearly 130,000 new jobs throughout the state.

With more Federal funding prospectively available in the next Federal Surface Transportation Act, the CHSRA may have the opportunity to acquire more monies to complete the remaining segments of Phase I (Merced to San Jose; Bakersfield to Palmdale; Palmdale to Los Angeles).

With the completion of Phase I, the HST ridership is expected to generate profits. These profits will attract private partnerships to help pay (possibly match further Federal funding support) for the construction of the remaining segments (Merced to Sacramento; Altamont Corridor; Los Angeles to San Diego) of the envisioned HST system, which would be progressing towards final EIR/EIS.

### **Recommendations**

The California High-Speed Train (HST) System is very important to the SJV. By connecting the SJV to other major metropolitan areas, high-speed rail will contribute to significant economic development opportunities, less vehicular congestion, safer highways, and improved air quality. Construction of the HST will also directly create jobs. For these reasons, the recommendations are:

- The San Joaquin Valley will continue to support the activities, including the pursuit of available future funds, of the CHSRA and the development of a HST network across our valley and throughout the state.
- The San Joaquin Valley supports the station locations in the cities of Merced, Fresno, Bakersfield, and Hanford.
- The San Joaquin Valley supports the heavy maintenance facility location somewhere within the Valley.
- The San Joaquin Valley supports the Altamont Corridor Rail Project service improvements including connection to Merced, which will tie in to Phase I of the statewide HST system.

## **4d. Goods Movement**

### **4d-1. Freight and Passenger Rail**

#### **Introduction**

In general, rail facilities are privately owned. Passenger service is provided by the National Rail Passenger Corporation, referred to as Amtrak. The Altamont Commuter Express (ACE) also provides passenger service between the bay area and the San Joaquin County. Private rail corporations, primarily the Union Pacific (UP) Railroad and the Burlington Northern Santa Fe (BNSF) Railroad provide freight service. In recent years, regional transportation planning agencies in the eight Valley counties have had an enhanced role in the planning of Interregional passenger rail service and rail freight movement.

#### **Existing Interregional Rail Facilities**

Rail facilities are located throughout the San Joaquin Valley. Many of these facilities provide for long distance movement of goods. In particular, several facilities owned by UP and BNSF stretch for significant lengths north-south through the Valley. These are connected at locations up and down the Valley by several shorter lines, owned, leased, and/or operated by a number of different companies, such as the San Joaquin Valley Railroad.

Valley passenger rail service is provided by Amtrak's *San Joaquins* service route. The *San Joaquins* is the fourth busiest route in the Amtrak national system outside the Northeast Corridor, with ridership annual ridership approaching 1 million as of October 2009. At present, there are six daily round trips provided from Oakland or Sacramento to Bakersfield. Connecting bus service has been significantly expanded over the years to now offer service points to the South Bay Area, as far north as Eureka, and as far south as Palm Springs and San Diego. The *San Joaquins* also provides connecting services to long-distance nationwide trains. Service stops along the route include the Valley cities of Lodi, Stockton, Modesto, Turlock/Denair, Merced, Madera, Fresno, Hanford, Corcoran, Wasco, and Bakersfield.

## **Interregional Issues**

### ***Passenger Rail***

In 1987, members of the Caltrans San Joaquin Task Force formed a committee to take a more active role in developing suggestions for improving the Amtrak *San Joaquins* service. This committee, known as the San Joaquin Valley Rail Committee is comprised of representatives from each of the counties served by the trains, and representatives of interested counties served by the connecting bus network. The committee serves as an advisory body to Caltrans and Amtrak on issues pertaining to the *San Joaquins* service.

Efforts of the San Joaquin Valley Rail Committee included the adoption of an annual Business Plan for the San Joaquin Corridor. This report becomes a significant resource to the Caltrans Rail Program in their work efforts to update a business plan for the *San Joaquins* rail corridor.

In recent years Committee work has focused on:

#### **Operations**

##### **Intercity Rail Connectivity**

- Promote expansion of Transit Transfer Pass with local agencies; investigate further options for direct connectivity with other rail systems.

##### **Amtrak Bus Operations**

- Evaluate the bus program for opportunities for cost-effective expansions or to restructure or discontinue bus routes that are not cost effective.
- Initiate new service in Fall 2008 between Bakersfield and Los Angeles International Airport via west Los Angeles.

##### **Food Service**

- Continue evaluation of menu items; add new menu items as appropriate.
- Pursue mobile food-service cart implementation.

##### **On Board Amenities**

- Implement mid-route cleaning of restrooms.
- Evaluate and testing of potential for on-board wireless service.

##### **Ticketing and Fares**

- Implement on-board, automated ticket sales and validation, if pilot program on the Capitol Corridor is successful.
- Evaluate market reaction to Spring 2008 fare reductions and adjust accordingly. Fare increases will be considered to offset increased operating expenses from higher diesel locomotive fuel costs.
- Continue to install Quik-Trak ticket machines.

#### **Marketing**

##### **Advertising, Public Relations and Partnerships**

- The Department will promote the recent addition of Amtrak bus connections from Merced to the eastern Sierra and a new route between Bakersfield and Los Angeles International Airport through west Los Angeles.
- The Department will sponsor the ceremony opening the new Madera train station in the winter of 2008-09.
- The Department, Amtrak and California Operation Lifesaver will provide bilingual staff for information booths at the annual 2008 National Council of La Raza.
- Continue contract with Glass McClure for advertising services.

##### **Passenger Information**

- The Amtrak California website will be revised for easier navigation. It will provide more content, and a comment and suggestion feature.
- The Fall/Winter On-Line Timetable in 2008-09 will include an enhanced Amtrak
- California System Map which will allow users to "point and click" the icons for specific trains, stations or bus routes as well as view all relevant timetables and amenities.

- A combined San Joaquin / Capitol Corridor timetable will be introduced in Fall 2008.

#### **Rail Safety**

- California Operation Lifesaver will continue to actively promote rail safety educational and media campaigns in Central California.

#### **Capital Plan**

##### **Track and Signal projects**

- Construct siding track and signals at Emeryville.
- Construct track and signal improvements at Kings Park in Kings County.
- Complete Merced Crossover Project.

##### **Station Projects**

- Complete construction of new Madera station and associated track work.
- Construct bus terminal and parking structure at Emeryville.
- Complete Fresno station shelters, parking lot and traffic circulation project.

##### **Equipment**

- Continue rebuilding of 66 rail cars.

##### **Homeland Security**

- Utilize Homeland Security funding for the development of security projects in the corridor

Long-range planning was last performed for the San Joaquins in 2001 as part of the California Passenger Rail System 20-Year Improvement Plan. That plan shows an increase from 6 to 10 trains per day, and discusses the co-benefits that capital improvements along the corridor have for both freight and passenger service. Since 1987 the State of California has invested over \$380 million on the BNSF San Joaquin Valley corridor for rail, siding and signal improvements.

#### ***The Amtrak San Joaquins and HST***

The recently funded HST service, at a minimum, will provide the expanded capacity anticipated by Caltrans 20-Year Passenger Rail System Plan. In the interim, the San Joaquins will play an important role, providing rail service for missing segments of the HST as each segment is completed, and as a feeder service for the HST.

Federal stimulus funding is anticipated for the HST test track to be built in the San Joaquin Valley to connect Merced/Fresno – “the doorstep of Yosemite and the Sierras,” with Bakersfield – “the gateway of Southern California.” Existing San Joaquin Amtrak train sets could begin operating on this test track at speeds up to 120 MPH, cutting travel times in half, and ushering in one of the first segments of the HST in California. Construction could begin in 2012.

Long term service after the HST system is completed between Bakersfield and Merced needs further study to evaluate: 1) Amtrak San Joaquins as a feeder system for highspeed rail, and 2) addition of suburban commuter stops in outlying Fresno and Bakersfield and adjacent communities/counties. In the near-term some stops along the system may need to be serviced by connector buses, until population and ridership warrant commuter/HST feeder train service. Development of connector buses and community transit centers should be coordinated with potential future commuter rail corridors that provide service from outlying communities and counties to the HST stations within the valley. Preservation and expansion of freight service along future commuter rail corridors is an important strategy to preserving potential future commuter rail corridors to the Valley’s HST stations.

#### ***Inter-County Commuter Rail***

In 2009 the SJV RTPAs completed the San Joaquin Valley Express Transit Study. The study looks at a hierarchy of transit services which include commuter passenger rail service. The study made the following recommendations on passenger commuter rail.

#### **1. Develop a coordinated regional advocacy plan for enhanced state and federal investments in commuter rail.**

## **2. Upgrade ACE.**

### *Short Range ACE Corridor Improvements:*

- Increase service to at least 12 trains (from current 8)
- Upgraded signaling
- Dispatching Improvements
- Altamont Slide Repairs
- Niles Canyon Drainage Improvements
- BNSF Crossing Improvements
- Increase Speed in curves as possible
- Additional sidings/passing tracks to speed operations and allow increase in service
- Purchase rolling stock to support expanded service

### *Mid Range ACE Corridor Improvements*

- Purchase new rolling stock to support expanded and higher speed service
- Provide additional dedicated ACE track on Fresno Subdivision and Purchase Tracy Subdivision to create a dedicated corridor from Stockton to Lathrop.
- Double-track existing ROW where possible to separate freight and passenger rail service including operating on ACE owned track parallel to UP track from East Livermore to Hearst.
- Construct track in former SP Right of way owned by Alameda County between Midway and East Livermore, and relocate service to that trackway.
- Grade separations
- Station Improvements to support increased service frequency.

### *Longer Range ACE Corridor Improvements*

- Increase service to 20 minute bi-directional peak hour service, plus regular midday service up to every half hour.
- Operate a dedicated ACE/Regional Rail corridor throughout the length of ACE
- Service through additional right of way acquisitions and new trackage.
  - Evaluate options including purchase of right of way/tunneling, and signalization
- as necessary to create a more direct, level alignment through Niles Canyon to support increased service
  - Evaluate options including purchase of right of way/tunneling, and signalization
- as necessary to create a more direct, level alignment through Altamont Pass to Support increased service.
  - Evaluate options including purchase of UP Warm Springs Subdivision to support increased service from Niles to Diridon Station
- Complete other improvements as necessary to support high speed equipment operating on regional rail corridor, including electrification.
- Purchase additional rolling stock compatible with high speed service.
- Make additional station improvements as needed to support higher frequency higher speed service.

## **3. Lobby for a direct ACE/BART connection.**

## **4. Work toward expansion of commuter rail service between Merced and Sacramento.**

## **5. Consider express bus service or LA Metrolink expansion towards Edwards Air Force Base.**

## **6. Invest in great station area planning.**

The study focused on inter-county commuter rail. The study noted the potential for commuter rail service within a county. Future studies of intra-county commuter rail service may be needed to augment this



study. Fresno and Kern COG have both funded long range transit studies that will look at future potential for light-rail, and bus rapid transit systems that could serve as feeder systems for the highspeed rail stations in those regions.

### Freight Rail

Central California is a major corridor for freight/goods movement. The highway system, and in particular State Route 99, is at times overwhelmed with truck traffic. In 1992, Caltrans District 6 prepared a report titled *Freight Movement in the San Joaquin Valley*. The report identifies key issues relating to goods movement and concludes "...modifying truck traffic demand over state highways by encouraging alternatives to highway freight movement. A logical alternative especially to long haul freight through the San Joaquin Valley would be to take advantage of available capacity on rail mainlines."

In 2000, the counties of the San Joaquin Valley in conjunction with Caltrans, hired the consulting firm Cambridge Systematics, to conduct the "San Joaquin Valley Goods Movement Study". This study noted that trucking is the dominant mode for moving freight, while rail accounted for 11% of the total tonnage. Rail was also found to be important for long-haul shipments of certain key commodities. Less than 25% of shippers surveyed

currently use rail services and only one third of those indicated that their rail usage was likely to grow. The decline in rail shipments since 1993 may have been attributable to rail network mergers and acquisitions. Many rail shippers looked for alternative shipping options during this time and found it difficult to locate enough boxcars to meet their needs. Both the Cities of Fresno and Bakersfield have looked at consolidation and relocation of rail yards in their downtowns during this period.

In 2006, the CIRIS study was completed by SJCOG, looking at rail service between the San Joaquin Valley and the port of Oakland. The study concluded that a pilot project was needed to demonstrate the feasibility of such a service. The study looked at the potential for Service from Lathrop, Crows Landing, Fresno and Shafter to Oakland.

### Draft Rail Concept Report

In 2008, the 8-valley COGs prepared a draft report on *The Altamont/San Joaquin Valley Corridor: Optimizing Goods Movement for Exports and the Environment* synthesizing 12 years worth of goods movement reports in the region. The concept report divided rail goods movement in the San Joaquin Valley into two types: 1) National Goods Movement Corridor For Long-Haul Rail, and 2) Regional Goods Movement Corridor For Short-Haul Rail. Nationally, the San Joaquin Valley serves a critical corridor between the rapidly growing Southern half of the nation, with the port of Oakland, and between Southern



California and the Pacific Northwest. This national goods movement is primarily pass-through traffic, and accounts for the majority of trains on the mainline system.

#### *Tehachapi Pass*

A critical bottleneck in the national rail freight system is the Tehachapi Pass at the Southern end of the Valley. The State and BNSF are investing over \$100M to increase capacity over the pass by as much as 70-percent. This project primarily benefits national goods movement without any federal funding. Because of this project national rail traffic is displacing short-haul rail capacity. The state and federal government needs to mitigate the potential environmental impacts of reduced short-haul rail capacity in the 8-county region.

#### *Regional Goods Movement*

Regional goods movement is characterized by shipments to and from the 8-county region to out-of-state destinations. There is currently no intra-state rail travel from the San Joaquin Valley. Goods currently traveling between the valley and the southern California or the Bay Area are shipped almost entirely by truck. This is especially true of containerized freight. Historically, the national rail companies will not ship less than 700 miles (the length of California).

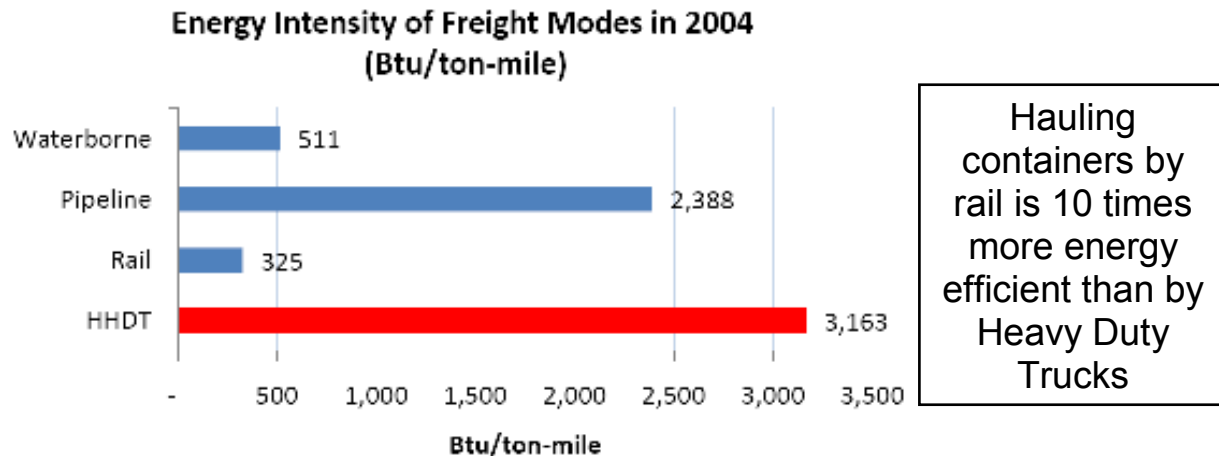
One example of out-of-state shipments includes the Rail-Ex facility in Delano. This facility ships refrigerated box cars of perishable produce from the valley non-stop to Albany, NY in 5 days.

The rail concept report also pointed out the role that short haul rail can play in persevering rail infrastructure for future passenger service, and the potential for hauling un-subsidized freight on conventional passenger corridors to help off-set the cost of subsidized passenger service.

#### *Oakland to Shafter Inland Port Pilot Project*

Building on the 2006 CIRIS study, the *Altamont/San Joaquin Valley Corridor* concept report reviewed efforts to create a rail freight shuttle between the Port of Oakland and the Valley. It proposed a phasing for the acquisition and refurbishment of the old Southern Pacific line. Phase I included a short-haul rail connection between Tulare to the rail yard in Fresno, for shipping goods out-of-state. Phase II was a proposed shuttle between the port of Oakland and Crows Landing in Stanislaus County. Phase III was completion of gaps in Los Banos and northern Kern County to complete the system to the Port of Oakland. Before the completion of such a project, a pilot effort on the BNSF or UP lines was needed.

In 2009, the Paramount Farming Company and the City of Shafter completed the Oakland-Shafter Inland Port (OSIP) position paper. The paper recommended that policy makers create long-term, sustained efforts to develop and maintain short haul rail with-in the state of California. This was critical to both economic and environmental goals for the state and nation.



ICFI, "Greenhouse Gas Emissions from Freight Trucks," Intl. Emissions Inventory Conf., 5/16/07

The OSIP paper concluded that a Midwest grain transloading facility could provide the backbone traffic necessary to make such a service from the Valley to Oakland economically viable, because the port of Oakland lacked the space necessary for such a facility. Once the service was established, other products from the valley could be containerized and shipped by rail to the ports such as almonds, nuts, cotton and other products, currently trucked to the port. By the end of 2009 a pilot shipment of grain from the Midwest had been successfully transloaded from bulk carriers to containers and then shipped to the port of Oakland. Shafter had also completed a "will-serve" agreement with the UP to provide the service, a prerequisite for state bond funding of an intermodal facility in Shafter.

#### *Rail Abandonment Issues*

In an effort to preserve a rail corridor that was threatened with abandonment, funding for the rehabilitation of the Union Pacific Coalinga branchline between Huron and Visalia was obtained from various sources. Rehabilitation of the tracks improved freight service operated by the San Joaquin Valley Railroad and reduced the amount of truck traffic on regional roads and state highways. Funding for the \$15 million project was provided with the Governor's Traffic Congestion Relief Program, federal Economic Development Initiative grant, Congestion Mitigation and Air Quality funds from Fresno, Kings and Tulare Counties, the cities of Huron, Lemoore and Visalia, private agencies and the San Joaquin Valley Railroad. Rehabilitation work was completed in early 2004 and passenger service along this corridor could be revisited again as part of a HST feeder service.

In 2006, the San Joaquin Valley Railroad (SJVR) applied to the Federal Surface Transportation Board to abandon portions of the form Southern Pacific mainline between Richgrove and Exeter. Tulare CAG is working with the Central California Rail Shippers/Receivers Association and the SJVR to preserve the corridor and has identified funding from a local transportation sales tax measure for possible acquisition of the corridor.

#### **Short Range Action Plan**

##### ***Federal Government***

- Fund HST to complete service between Los Angeles and the Bay Area with stops in the Valley – the doorstep to Yosemite and the Sierras.
- Continue to fund Amtrak service as an interim gap service during HST construction and future feeder system/back-up service for HST
- Coordinate Amtrak with ACE and other future commuter services serving as feeder networks for HST

- Provide matching funding for Tehachapi Pass, to mitigate short-haul rail displacement impacts of increased national goods movement through the San Joaquin Valley region by funding short-haul rail service infrastructure between the SJV shippers, class I rail yards, and the ports.

### **State of California**

- Fund HST to complete service between Los Angeles and the Bay Area with stops in the Valley – the doorstep to Yosemite and the Sierras.
- Establish the HST Heavy Maintenance facility in the San Joaquin Valley.
- Continue financial support of Amtrak service as an interim gap service during HST construction and future feeder system/back-up service for HST.
- Coordinate Amtrak with ACE and other future commuter services serving as feeder networks for HST
- Revise the California State Rail Plan 2005-06 to 2015-16 to consider HST, the San Joaquin Valley Express Study and Valley short-haul rail needs.
- Implement the *San Joaquins Route Business Plan* Continue cooperative planning and coordination with recommendations of the San Joaquin Valley Rail Committee.

### **Regional Transportation Planning Agencies**

- Participate in the San Joaquin Valley Rail Committee and support the committee recommendations.
- Monitor the planning and analysis work of the California High Speed Rail Authority and participate in the planning effort to ensure that Valley interests are appropriately reflected.
- Support state and federal actions that would increase accessibility to passenger rail service. The Central Valley passenger rail system should be designed to fully integrate the larger intermodal passenger transportation network including multimodal stations that provide convenient and direct access to all appropriate state, regional, and local modes, including, where applicable, urban commuter, inter-city and high speed rail service, regional and local bus service, airport shuttle services, and other feeder serviced that provide intermodal linkage.
- Work to coordinate passenger and freight rail activities to maximize co-benefits

### **Long-Range Action Plan**

#### **Federal Government**

- Fund the re-configuration of Amtrak as a commuter/feeder rail system for the HST
- Help fund the creation of a short-haul rail system for the SJV to provide more capacity on the national system.

#### **State of California**

- Fund the re-configuration of Amtrak as a commuter/feeder rail system for the HST
- Fund the creation and maintenance of a short-haul rail system for the SJV to promote the use of more efficient rail modes over trucks.

### **Regional Transportation Planning Agencies**

- Work to fund the creation of a HST passenger feeder rail and transit service for the SJV
- Work to fund the creation of a short haul rail backbone to the port of Oakland and the BNSF and UP rail yards in the valley.
- Work to coordinate passenger and freight rail activities to maximize co-benefits

## **4e. Airports**

### **Fresno**

There are eight public use / general aviation airports in the Fresno County region: Coalinga Municipal Airport, Firebaugh Airport, Chandler Executive Airport (classified a Regional General Aviation Airport in the California Aviation system Plan), Harris Ranch Airport (classified a Limited Use Airport in the California Aviation System Plan), Mendota Airport, Reedley Municipal Airport, Selma Aerodrome, and Sierra Sky Park. Fresno Yosemite International Airport (FYI) is designated a Primary Commercial Service Hub Airport in the California Aviation System Plan and also accommodates general aviation.

Fresno County's general aviation airports provide a variety of important services to the communities within which they are located and to surrounding areas. Fresno County airports provide for recreational, business, and charter air travel; police and sheriff helicopter patrols at FYI; air cargo flights; fire suppression (air tankers), and flight and aircraft mechanical instruction.

The general aviation airports are vitally important to the communities within which they are located and to all of Fresno County for all of the reasons listed. With regard to FYI in particular, it has long been recognized there is a need to better quantify and promote the economic significance of the airport to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. Caltrans Division of Aeronautics completed a Final Report in June 2003 that provided a comprehensive evaluation of the economic benefits of aviation and airports to California communities and the overall State economy. The report, prepared by Economics Research Associates, noted that aviation's overall contribution to the California economy (including direct, indirect and induced impacts) amounts to nearly 9 percent of both total state employment and total state output.

For calendar year 2008 there were a total of 1,252,751 passengers, of which 627,343 were enplanements and 625,408 were deplanements. The FYI service area consists of six counties including Fresno, Kings, Madera, Mariposa, Merced and Tulare. As population within this six county area increases it is likely that operations at FYI will increase. It has become clear that passenger usage of FYI is underutilized due to market forces generated by air fares, the automobile and alternative airports in the Bay Area, Sacramento, and Los Angeles. Total market leakage may be as high as 300,000 passengers a year or more. Reduction of this market leakage through better airline service, including additional international service, is a primary challenge at FYI. The extent to which this challenge is addressed will determine, in part, the growth in future operations at the airport.

The various short- and long-term benefits to the region, while not quantified, are nevertheless real. As noted above, there is an ongoing need to better quantify and promote the economic significance of FYI, in particular, to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. Of increasing economic significance to FYI is the role and value of air cargo, notwithstanding recent declines due to state and national economic challenges. In this regard, major airports in both Southern and Northern California are experiencing significant air cargo constraints that include both facilities and operations capacity, thereby presenting an opportunity for the Fresno region.

## **Stanislaus**

The Stanislaus County region has four (4) public use airports, including one (1) commercial/general use airport, the Modesto City-County Airport, located in the City of Modesto; two (2) general use airports, Turlock Municipal, located in Merced County and Oakdale Municipal Airport, located in the City of Oakdale; and one (1) military air facility, Crows Landing Naval Auxiliary Landing Facility (CLNALF), located in Crows Landing. This facility has been abandoned since 2000.

Based on current forecasts, the operations capacity at all airports located in the Stanislaus Region are expected to meet the future aviation needs of the public. Attracting more direct commercial aviation service to the Modesto City-County Airport has been a major challenge for the City of Modesto and Stanislaus County. Currently, air service provides passenger connections to longer distance flights via the San Francisco International Airport. The potential benefits of providing improved air service directly from Modesto include greater passenger convenience and reduced vehicle miles of travel and emissions as fewer trips are made to nearby airports in Sacramento and the Bay Area.

General aviation operations comprise the majority of local aircraft activity in Stanislaus County, and this trend is expected to continue over the next 25 years. The difficulty of general aviation airports in obtaining the funding necessary to maintain existing facilities and construct additional facilities for aircraft parking are the single most significant issue identified in StanCOG's Regional Aviation Systems Plan, 1998. Ground transportation also poses an issue for the Oakdale and Turlock Municipal Airports.

The Stanislaus Council of Governments (StanCOG) does not act as the region's Airport Land Use Commission (ALUC). The Stanislaus County ALUC works in cooperation with the Merced County ALUC to develop plans to ensure future development is compatible with airport operations.

Stanislaus County is primarily an agriculture producing region and thus the movement of goods has typically been handled by trucking and rail, not by air. The Modesto City-County airport is the only airport that has cargo operations. This operation is predominately delivering cancelled checks five (5) days per week. However, StanCOG, in cooperation with the City of Modesto and Stanislaus County, supports continued study into the development of an air cargo facility located at the abandoned CLNALF to serve the agricultural and potential future high technology businesses as they move into the Stanislaus region.

## **5. Intelligent Transportation Systems**

### **Background**

Intelligent Transportation Systems represent a means of applying new technological breakthroughs in detection, communications, computing and control technologies to improve the safety and performance of the surface transportation system. This can be done by using the technologies to manage the transportation system to respond to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles. ITS includes Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), Advanced Public Transportation Systems (APTS), Advanced Vehicle Control Systems (AVCS) and Commercial Vehicle Operations (CVO).

Today, applications of ITS technologies allow the monitoring of traffic conditions and the dynamic adjustment of traffic signals to reduce unnecessary delay, the automated collection of transit fares and advanced detection and television cameras to detect, assess and respond to traffic accidents and incidents. In the future, ITS technologies will automate transit fare collection and parking payments, use vehicle location systems to track trains and buses to give users "real time" arrival and departure information, as well as use onboard systems to detect and avoid collisions.

Within the San Joaquin Valley, utilizing a federal planning grant, the eight counties formed an ITS committee focused on solving transportation problems within the region. The ITS vision for the San

Joaquin Valley Strategic Deployment Plan is to enhance the quality of life, mobility, and the environment through coordination, communication, and integration of ITS technology into the Valley's transportation systems. The ITS plan for this corridor includes major local elements developed by the eight counties. The plan coordinates architecture, standards and institutional issues and also provides the framework for deploying an integrated ITS.

The overall strategy for the deployment of ITS includes a number of components and user services:

- Completion of advanced traffic management of the region's freeways and certain arterial corridors, through traffic operations centers, signal synchronization, visual detection and deployment of incident management systems.
- Advanced Traveler Information Systems will provide real-time information to system users on traffic conditions, incidents, accidents, events, weather and alternative routes and modes.
- Advanced Public Transportation Systems will provide some of the technology to implement improved dispatching of transit vehicles and will enable vastly improved demand-responsive transit services.
- Improved Commercial Vehicle Operations will take place by deploying technologies that track vehicles through the Valley, providing them with improved traveler information and safety warnings.

#### **General Opportunities**

- Build upon the existing Caltrans District 6 and District 10 Traffic Management Systems to fill gaps and complete coverage on major facilities, including expansion of their highway closures and restrictions database to include other agencies.
- Capitalize upon the extensive ITS technology testing and standards development conducted by Caltrans by using, where appropriate, Caltrans approaches for local traffic management systems.
- Build upon lessons learned from past and current transit ITS deployment experience (Fresno Area Express, Golden Empire Transit District, San Joaquin Regional Transit).
- Build upon Caltrans District 6 and District 10 experience with co-location and coordination between traffic management and Highway Patrol staff.
- Build upon the momentum and stakeholder coalition generated through the San Joaquin Valley Goods Movement Study to pursue ITS commercial vehicle projects.
- Investigate how to provide traveler information for commercial vehicle operators at truck rest stop locations.
- Investigate how ITS can support efforts to improve east-west travel between the inland areas and the coast.
- Improve visibility and access to existing Caltrans Valleywide alternate route plans.
- Use momentum from the Valleywide ITS planning effort in conjunction with federal rules (ITS architecture and standards conformity and statewide and metropolitan planning) to expand ITS action.

### **Fresno County Opportunities**

- Maintain momentum generated by recent ITS strategic deployment planning process, taking advantage of the level of awareness and precedent for joint action established through the previous planning effort.
- Continue efforts to improve coordination between the Caltrans District 6 and Fresno metro area traffic management centers, taking advantage of the current District 6 and Fresno fiber optic implementation projects. Utilize the Fresno-District 6 coordination efforts as a demonstration of the benefits of improved coordination between Caltrans and local traffic management centers.
- Encourage other local entities (in addition to City of Fresno) to investigate opportunities to coordinate with Caltrans District 6 fiber optic system with City of Clovis and County of Fresno.
- Support and expand upon the projects identified in the Fresno County ITS Strategic Deployment Plan that are intended to develop a regional transportation user information system (project 4.1), connections to a Valleywide or statewide information system (project 4.2), and development of common or standard electronic maps to support applications such as automatic vehicle location.

### **Kern County Opportunities**

- Coordinate Bakersfield area Transportation Management Center (TMC) with Caltrans' District 6 TMC via satellite.
- Look for ways to integrate the ITS capabilities being implemented at Golden Empire Transit (GET) with Bakersfield's traffic management system, including sharing information between the two centers during emergencies.
- Facilitate the transfer of lessons learned from the Golden Empire Transit (GET) ITS deployment, to other area transit operators, and look for opportunities for those agencies to better coordinate with GET using GET's ITS capabilities.
- Expand the accident reduction campaigns on Kern's rural highways.

### **Kings County Opportunities**

- Provide improved safety and mobility along east-west highways such as SR-198 using CMS and other ITS applications.
- Build on City of Hanford's traffic management capabilities, including coordination with Caltrans.
- Continue to develop the AVL system for Kings Area Rural Transit (KART).
- Improve safety at rural railroad crossings using ITS applications.
- Provide commercial vehicles with improved information in the I-5 corridor related to routes, facilities and parking within the County.
- Enhance the safety and capacity of Highway 43 as an alternate route to SR-99/I-5 using ITS applications.

### **Madera County Opportunities**

- Evaluate surveillance and automated red-light running at high accident locations in Madera



- Enhancements to emergency vehicle dispatching systems for rural areas, including improved evacuation plans for Yosemite Park that build on the additional roadway connections that are being constructed (i.e., elimination of “dead ends”).
- Traveler information and/or other ITS applications that would support needed park and ride lots along Highway 99.
- Develop traveler information strategies to support the relocated Amtrak station.
- Investigate options for utilizing ITS in support of upcoming restructuring/optimization of rural demand-responsive transit service.
- Develop analysis tools for traffic accidents, such as a geographic information system, for the City of Madera.

### **Merced County Opportunities**

- ITS traveler information and traffic management in support of the University of California facility, red-light running enforcement and train warning and information system applications in Merced.
- Consideration of ITS traffic signal applications in support of Merced’s major interchange improvements.
- Develop traveler information and other transit management strategies to improve coordination of the regional bus service (“the Bus”) with the intermodal transportation center in downtown Merced.
- Investigate options for supplemental railroad crossing warning and information systems at high-volume train crossings where delays are frequent and long.

### **San Joaquin County Opportunities**

- Utilize ITS to support the coordination of local transit services with the new commuter rail service to the Bay Area.
- Investigate methods to further improve coordination between San Joaquin Regional Transit and Stockton and/or Caltrans District 10 TMCs.
- Build upon next bus arrival signs and automated phone system traveler information strategies at San Joaquin Regional Transit, possibly to include kiosks and Internet information.

### **Stanislaus County Opportunities**

- Expand on the City of Modesto/Ceres Traffic Management System (TMS) to develop an integrated Urban ATMS for the County.
- Improve interjurisdictional signal coordination.
- Build upon ITS transit applications in Stockton, Fresno and Bakersfield to provide Modesto Area Express (MAX) and local transit services with a means to improve operations and management.
- Improve safety and mobility on the Counties east-west rural highways including Highway 132 between the I-5 and SR-99 corridors using ITS applications such as Road Weather Information Systems (RWIS).

- Utilize intermodal freight facilities to provide improved information to commercial vehicles.
- Improve mobility, coordination and information between the urbanized areas of Stockton and Modesto along the SR-99 corridor.

### **Tulare County Opportunities**

- Implement red-light running enforcement in Visalia.
- Build upon the current traffic signal system efforts to develop an urban ATMS in the areas of Visalia, Tulare and Goshen.
- Provide safe areas along rural routes to the National Parks system including improved traveler information.
- Development of an improved communication link between the Visalia/Tulare urbanized area and Caltrans – District 6 to address coordination efforts along the SR-99 and SR-198 corridors.

## 6. Regional Planning

### 6a. Air Quality and Conformity

#### **Background**

The SJV is one of the largest and most challenging air quality nonattainment areas in the United States. The SJV nonattainment area includes eight counties from San Joaquin County to Kern County on the Western border of the Sierra Nevada range. These counties represent a diverse mixture of urban and rural characteristics, yet are combined in a single nonattainment area that violates federal health standards for ozone and particulate matter. Air quality monitoring stations continue to indicate that the San Joaquin Valley is among the worst polluted regions in the country. Since the eight counties are combined into a single nonattainment area, a coordinated approach for compliance with the federal Clean Air Act is essential for both State Implementation Plan (SIP) development and conformity determinations.

#### **Coordination**

On-going coordination with interagency consultation partners has been, is, and will continue to be critical to the development of positive conformity determinations, as well as the conformity budgets and transportation control measures included in air quality plan updates. As one of the few multi-jurisdictional areas in the country, the individual decisions and actions of each of the SJV Regional Planning Agencies (RPAs) have the potential to affect the entire nonattainment area. At this time, it is unclear when the RPAs within the San Joaquin Valley nonattainment area will become independent of each other with regard to air quality. The interagency consultation process is critical to completing regional conformity demonstrations, processing TIP/RTP amendments, project-level hot-spot assessments/analyses and conformity determinations, as well as other processes required by the federal transportation conformity regulation.

Involvement in SIP development, including transportation conformity budgets is essential to the receipt of federal transportation funding. SIP failures, as well as non-conformance, jeopardize not only the receipt of federal transportation funding, but also the ability for locally funded (regionally significant) transportation projects to proceed. The SJV RPAs are also involved in the air quality modeling to provide assurances that the final conformity budgets can be met. In addition, the SJV RPAs participate in air quality plan development by coordinating the local government transportation control measure process that is required by the Clean Air Act.

#### **Transportation Conformity**

The primary goal is to assure compliance with transportation conformity regulations with respect to the requirements for Regional Transportation Plans (RTPs), Federal Transportation Improvement Programs (FTIPs), amendments, compliance with the California Environmental Quality Act (CEQA), implementation of applicable transportation control measures (TCMs), and applicable State Implementation Plans (SIP). Since coordination efforts have begun, the SJV RPAs have been successful in complying with conformity requirements for the 2004 TIP/RTP, 2006 TIP, and 2007 TIP/RTP. In addition, FHWA has determined that the SJV RPA planning processes substantially meet the SAFETEA-LU planning requirements. TIP/RTP Amendments, including coordinated amendment cycles and development of valley-wide process for PM<sub>2.5</sub> multi-jurisdictional areas until conformity budgets are established, continue to be federally approved. The SJV RPAs have also completed timely implementation documentation of local government commitments beginning with the 2006 TIP; two TCM substitutions have been processed and approved. Project-level assessments, including valley-wide procedures, have also been developed.

Continued examples of SJV RPA coordinated efforts with respect to transportation conformity include the following:

- Monitoring and testing of transportation model updates;

- Continued documentation of latest planning assumptions and compliance with the transportation conformity rule and corresponding guidance documents;
- Drafting of valley-wide procedures for RPA staff use, with detailed instructions from the execution of EMFAC to post-processing of emissions results consistent with applicable SIPs; and
- Preparation of boilerplate documentation, including draft public notices and adoption resolutions, as well as draft response to public comments.

### **Modeling**

Air quality model development progress is monitored to ensure that appropriate assumptions are being used in new air quality model updates. Modeling data, including defaults, emissions inventories, speeds, vehicle miles traveled, and control measure assumptions will be coordinated with the Air District and the Air Resource Board to promote accuracy of modeling output. Early communication of potential modeling problems or issues is a high priority and is presented to the appropriate modeling staff to be addressed and resolved in a timely manner.

The SJV RPAs have coordinated transportation model updates, as well as worked with both the Air District and ARB on the development of conformity budgets and EMFAC updates (i.e., EMFAC 2005 development with updated transportation data and EMFAC 2007 development, including technical comments on model updates (e.g., re-distribution of heavy-duty truck travel). These efforts have included ongoing tracking of compliance with latest planning assumptions and collaborating with the Air District and CARB on the applicable conformity budget methodology and corresponding SIP documentation. Coordination efforts will continue with Caltrans and ARB on statewide transportation models and/or networks as appropriate.

Every three to four years, CARB begins an update to the EMFAC model. EMFAC 2010 efforts will likely begin by the end of 2009. Model changes without corresponding SIP updates can result in the inability of the RPAs to demonstrate conformity. Coordination of model updates and corresponding SIP updates will continue to be vital to the SJV RPAs to assure continued conformity compliance. Protocols and programs are continually developed to facilitate the use of transportation data in air quality modeling.

### **Public Policy**

The SJV RPAs monitor proposed legislation, new regulations, court case decisions, and filed court cases related to air quality issues and evaluate the implications of these to the Valley RPAs. Unified positions are developed as needed.

As new federal, state, and/or local regulations are developed, they are evaluated for their impact on the SJV RPAs. If necessary, draft comments are prepared on behalf of the RPAs. Once regulations are finalized, summaries are prepared for the SJV RPAs regarding requirements and impacts. Over the past four years, quarterly updates on legal challenges and new air quality standards and requirements have been provided to the RPA Directors' Committee. Recent examples include analysis of draft SAFETEA-LU legislation, drafting of RPA comments, RPA workshops and continued assistance in achieving SAFETEA-LU compliance.

### **Summary of Future Efforts:**

- Continued coordination of interagency consultation;
- Development of Conformity SIP;
- Transportation conformity for future TIPs & RTPs;
- EMFAC 2010 and corresponding conformity budgets;
- Ozone and PM<sub>2.5</sub> air quality plan updates; and
- Continued public policy assessment.

## 6b. San Joaquin Valley Blueprint

The San Joaquin Valley has been identified by Governor Schwarzenegger's California Partnership for the San Joaquin Valley as "... one of the most vital, yet challenged regions of the state."

Rising to meet the San Joaquin Valley's most pressing issues, the eight RTPAs representing the eight counties within the SJV came together in 2005 to initiate the SJV Regional Blueprint planning process.

The goal of the SJV Regional Blueprint planning process is to address critical issues facing the vitality of the SJV (as well as the State of California and the nation) in planning for the future of the world's foremost agricultural region. The SJV Regional Blueprint will guide the future of infrastructure development, and in turn accommodate the exploding population and economic growth in the region to the year 2050.

In 2006, the SJV Regional Blueprint planning process developed the foundation for the Blueprint by creating an institutional framework and citizen outreach plan. In addition, this joint venture initiated the development of the SJV Regional Blueprint Vision. In 2007 overall goals, objectives, and performance measures were developed that will be used to evaluate the effectiveness of the Blueprint. In 2008, the Blueprint process continued to make progress with this historic and collaborative planning effort among the eight Valley COGs and their working partners. Throughout the process, the SJV Blueprint developed many relationships and reached numerous milestones. In early 2009, the Valleywide Blueprint Summit attracted over 600 attendees. At the event, the Valleywide alternative scenarios were presented to the public at large. The event was intended to solicit input on the scenarios, which would assist the San Joaquin Valley Regional Policy Council in adopting a preferred growth scenario for the San Joaquin Valley. On April 1, 2009, the Policy Council reviewed the Valley COGs' collaborative work on the Blueprint and took the following actions:

- Adopted a list of Smart Growth Principles to be used as the basis for Blueprint Planning the San Joaquin Valley; and
- Adopted Scenario B+ as the Preferred Blueprint Growth Scenario for the San Joaquin Valley to the year 2050. This preferred scenario will serve as guidance for the Valley's local jurisdictions with land use authority as they update their general plans.

Upcoming tasks include the integration of the Valley Blueprint into local city and county general plans within the Valley, which will ultimately result in a healthier, more vibrant economy, an improved transportation system through reduced congestion and viable transit options, improved air quality, and will accommodate the housing infrastructure needs of the Valley's growing population. Overall, implementation of the Valley Blueprint at the local level will create sustainable communities and make the Valley a more desirable place to live.

### ***Past Neglect – Hope for the Future***

For many decades the San Joaquin Valley region has been neglected by both federal and state governments and has not received its fair share of revenue. That situation is now changing with federal and state policymakers recognizing the extraordinary challenges facing the San Joaquin Valley. Through executive orders issued by two presidents, the Federal Interagency Task Force for the Economic Development of the San Joaquin Valley was formed to help coordinate federal efforts within the region. Through the Interagency Task Force, multiple initiatives have been created (Regional Jobs Initiative, Financial Education Initiative, Rural Infrastructure Initiative, Operation Clean Air, Affordable Communities Initiative: Housing Trust Fund, Clean Energy Organization) which have directed much needed attention to the quality of life in the San Joaquin Valley region.

Many of the Valley's critical issues have no political or geographic boundaries, and are often made worse through parochial practices. Often, freeway congestion in one area transports air quality impacts throughout the Valley, just as land use and development policies in one area may create reactionary development in other areas. Regional collaboration is needed to address these kinds of situations.

## **State Remedies**

### ***Interface of the Blueprint and the Partnership***

In response to these and other issues, Governor Schwarzenegger signed an executive order in 2005 creating the *California Partnership for the San Joaquin Valley (Partnership)* a state effort to direct resources to the San Joaquin Valley region. Through the Blueprint process, regional leaders are assessing regional issues jointly with the Partnership. Collaboration with the SJV Partnership will enable pooling of statewide resources, along with enhancing the multi-agency, multi-layer momentum to create a regional voice for the San Joaquin Valley.

In November 2006, the Partnership completed the Strategic Action Plan, which detailed its goals to achieve a Prosperous Economy, Quality Environment, and Social Equity through six major initiatives and the recommendations of its ten working groups. The Partnership's ten-year Strategic Action Plan references the efforts of the Valley's COGs to enhance quality of life concerns and specifically identifies the SJV Blueprint as the implementation strategy within two of its working group lists of recommendations: Transportation and Land Use and Agriculture and Housing. The interface of the Partnership and the Blueprint planning processes will allow the Valley to improve the quality of life for all residents through integrated and collaborative planning strategies.

### ***Summary of Accomplishments to Date***

Working in concert over the past three years, the eight COGs in the San Joaquin Valley have accomplished many goals that enabled the process to the benchmark of reaching consensus on a Valleywide preferred growth scenario. The adoption of this scenario and the associated smart growth principles by the SJV Regional Policy Council on April 1, 2009 was a major milestone. These accomplishments are even more noteworthy when one considers that each step along the way required approval or endorsement by eight separate and distinct policy boards. The sixty-two cities, eight counties and eight councils of governments are proud of the collaborative effort they have made to reach this point in the process and are committed to build upon the progress already made in the future.

In general, the major tasks undertaken can be summarized as follows:

***Institutional Framework, Project Management and Community Outreach:*** In order to reach the daunting goal of coordinating eight counties in an effort to reach a unified vision for growth, the SJV Blueprint process created a program management team comprised of a program manager from the lead agency and project managers representing each of the other seven COGs. This team is responsible for coordinating local efforts as well as maintaining the regional connection. During the initial phases, activities were conducted at both the county and the regional levels. Extensive local community outreach touched thousands of community members and stakeholder groups throughout the Valley. Three major Valleywide events were conducted: the Blueprint Kickoff Workshop in June of 2006, the Blueprint Executive Forum (aimed primarily at the Valley's elected officials) in April of 2008 and a Valleywide Summit in January 2009 (where the Valleywide alternative scenarios were presented to the public at large). The adoption of an integrated Valley Vision in April of 2009 moved the process from planning to implementation.

***Land Use, Transportation and Air Quality Modeling:*** The San Joaquin Valley Blueprint Project Modeling Steering Committee worked closely with UC Davis's Department of Environmental Science and Policy and the Information Center for the Environment to become familiar with the UPlan modeling software and to collect GIS and demographic data. Extensive communication was required to assemble general plan information from all 70 jurisdictions involved. Status Quo scenarios were developed in each county to provide a base case for comparison. Alternatives scenarios were also created. All county level scenarios were analyzed using land use, traffic and air quality models in order to compare the scenarios based on performance measures. A preferred concept was submitted to U.C. Davis by each county for Valleywide analysis and ultimately the selection of a preferred growth scenario for the Valley.

**Individual County Planning Process:** As mentioned above, each of the eight Valley COGs conducted the Blueprint process at their local level, which included convening roundtable stakeholder groups, engaging their member agencies, and conducting outreach activities with community groups and the general public. Much time was invested in working with local agency planners in order to gain their trust and commitment so that the ultimate Blueprint will be integrated at the local level.

**Valley Planning Process:** The Valley planning process has been ongoing since the SJV Blueprint grant was first awarded in 2006. The eight COGs have been collaborating on a Valleywide basis as part of the project management team and through partnering with the Great Valley Center and their staffing of the Blueprint Regional Advisory Committee (BRAC). The SJV Air Pollution Control District has also been an active partner both financially and through in-kind contributions during the planning process. In addition, the individual COGs have worked closely with Caltrans and UC Davis on many of the technical activities.

**Document Creation, Implementation Strategy, and Blueprint Certification Process:** The SJV Blueprint has produced a variety of communication materials including websites, videos, brochures, print and electronic media advertising, and extensive project reports. Mapping exercises have produced a multitude of excellent graphic depictions which help member agencies, stakeholder groups and the general public to understand the sometimes complex concepts that are being portrayed. In fact, Fresno COG was recognized by the Central Section of the Cal Chapter of the American Planning Association with a “1<sup>st</sup> Place Outstanding Planning Award/Best Practices” award for their extensive marketing campaign and public outreach efforts in the development of the San Joaquin Valley Regional Blueprint Plan. Fresno COG developed an ambitious marketing campaign, including many innovative strategies, to reach out and include community stakeholders in the Blueprint visioning process to foster greater participation in Fresno County.

Ultimately, the Blueprint must be integrated into local general planning processes in order to ensure implementation. Now, with the legal requirements of AB 32 and SB 375, some type of certification process will need to be established so that the planning principles defined in the Blueprint will be implemented throughout the Valley. The Blueprint will also need to show compliance with AB 32.

**Modeling:** It is widely known that the traditional four-step traffic model is not sensitive to the benefits of smart growth development such as Density, Diversity, Destination & Design (often referred to as 4-D). There have been efforts to integrate a 4-D process into the traffic model to compensate for the trip/vehicle miles traveled (VMT) reduction that smart growth can create through the SJV Blueprint process. The results were encouraging, and reinforced support of smart growth planning practices in the Valley. As the San Joaquin Valley Blueprint marches into the planning implementation stage, more smart growth projects are projected to be built. The scenario-based 4-D process, which was developed during the scenario planning stage, would not be applicable in the planning implementation stage. A project-based 4-D tool will be needed to measure the travel reduction benefits of smaller scale or even individual projects.

During the scenario planning stage of the Valley Blueprint process, UPlan, a scenario modeling tool developed by UC Davis, has been used by all eight Valley COGs. It was mostly run at the county level. Since each Valley COG’s traffic model uses different socio-economic categories, individual efforts were taken by each COG to translate the UPlan land use categories into the categories in each of the eight traffic models in the Valley. In the planning implementation stage, when Blueprint principles will be incorporated into local projects, more fine-grained software choices will be explored for community, neighborhood, or even project-level planning.

**Visualization Tool Development and Scenario Planning Tools:** The San Joaquin Valley Blueprint Process has been and will continue to be conducted through a “bottom-up” approach to securing local government and community support. Computer generated maps showcasing and explaining the local and Valleywide Blueprint options will be generated by UC Davis/Valley COGs and circulated to the Valley communities through public outreach efforts orchestrated by the Great Valley Center, and by each individual planning agency. Public meetings with interactive voting technology have and will be used to obtain feedback from the public and elected officials. Other technologies in use are interactive websites,

media outlets for radio, television and print media, emailed updates and newsletters to established and growing distribution lists. The Valley COGs also work with a variety of community, business and government agencies throughout the region to disseminate information via presentations at their pre-scheduled meetings, posting articles in their newsletters, and online publications and by mailing printed documents.

**Health and Obesity Awareness:** According to the Prevention Institute, the built environment is the designated use, layout, and design of a community's physical structures - including its housing, businesses, transportation systems, and recreational resources, all of which affect patterns of living that influence health. Smart growth strategies can transform the built environment to encourage physical activity by making a community more walkable/bikeable and can provide greater access to healthy food options, thus contributing to healthier eating. To bridge land use, transportation, community design efforts and public health, a comprehensive approach to planning can be implemented that focuses on identifying priority areas where public health strategies can be incorporated within the local planning process. In the short-term, these planning efforts will help create healthier lifestyles; in the long-term, these efforts can have a measurable impact upon chronic health conditions such as obesity, diabetes, stroke and heart disease. The SJV Blueprint process will coordinate with the Central California Regional Obesity Program (CCROP) on these issues. One of the land buffer tools discussed in the Farmland Conservation study being conducted in the Valley is that of locally grown food farm at the edge of urban areas. These areas would both preserve urban boundaries and supply healthy, locally grown food.

### **Other Tasks Completed**

1. GIS Data Inventory / GIS Standards — A Model Steering Committee was convened by the SJV Blueprint project managers and has worked collaboratively to gather GIS data that represents the current geography and urbanization of the region. This data has been converted for use in the UC Davis developed UPlan modeling software for development of all the scenarios.
2. Status Quo Scenario Development – Working with the local planners of each county and the UPlan program, a growth scenario assuming existing trends was developed called the Status Quo Scenario. If growth continues as it has over the last 5-10 years, the UPlan forecasts that approximately 533,000 acres of land will be converted to urban uses.
3. Vision / Value Development and Outreach - During 2006, the eight SJV COGs implemented their local Citizen Participant Plan in the Blueprint Value / Vision Outreach component. Each of the SJV counties conducted public outreach to identify local values and how these values translate into a Vision for the San Joaquin Valley region to the year 2050.
4. Local Visioning Results - To no one's surprise, there were more common values identified across the eight-county region, than unique values of any specific county:
  - Preserve agricultural land
  - Create an effective transportation system .....
  - Improve access to quality educational opportunities .....
  - Create a dynamic economy with quality local jobs
  - Provide a variety of quality affordable housing choices .....
  - Treasure our bountiful environment with reasonable protection .....
5. Goals and Performance Measures - With the help of the San Joaquin Valley Local Agency Planners Working Group, SJV Goals and Performance Measures have been developed and will be used throughout each component of the Blueprint process. All performance measures used by other Blueprint processes were reviewed, evaluated and selected based on the current data available and the current forecasting capabilities. While there are additional Performance Measures that could be valuable in evaluating the Scenarios, the Valley COGs currently lack the enhanced modeling capability necessary to generate them.



6. Engage Environmental Justice Communities, Tribal Governments, and Resource Agencies. The SJV COGs held a workshop in early 2007 with the purpose of engaging Environmental Justice Communities, Tribal Governments (both federally recognized and non-recognized tribes of Native Americans), and Resource Agencies in the SJV Regional Blueprint process. The workshop was a great success with good attendance of the targeted stakeholders. As a result of the inaugural workshop, the following has been implemented:
- Spanish Language Workshops -SJV Region Blueprint Public Outreach Visioning workshops sessions have been conducted in Spanish to engage residents who speak Spanish as their primary language. These workshops have been well attended.
  - State Resource Agencies - State Resource Agency representatives continue to be engaged in the SJV Region Blueprint Process.
  - Tribal Governments - As a result of the inaugural workshop, ongoing engagement has been formalized with Tribal representatives. Numerous meetings have been held with Native American participants, including: Santa Rosa tribe, Tubatulabals, Chumash, Tejon Indians, and Tule River tribe.

#### California Central Valley Tribal EJ Collaborative Grant Project

During 2007, the 8-Valley MPOs began meeting with some of the Valley tribes as part of the Blueprint process. Through a series of meetings it was determine that the 8-MPOs had a need for additional resources to outreach to local Tribes regarding transportation, land use, community development, and other Blueprint Regional planning focus. The MPOs have partnered with the Tubatulabals of Kern Valley on a California Department of Transportation (CalTrans) environmental justice (EJ) grant with the following goals.

- Goal 1:** To build a knowledge base of Tribal related Transportation Environmental Justice issues and priorities – through meetings and workshops.
- Goal 2:** Promote tribal participation and reporting on Tribal Transportation Environmental Justice issues and other long-range planning issues through the SJV Blueprint and SJV Partnership processes – through workshops, meetings, surveys.
- Goal 3:** Promote preservation of our cultural heritage while adding certainty to the timely delivery of projects in the region by developing a Cultural Sensitivity Tribal Resource Map and protocol for tribal monitoring the SJV Eight Counties – through meetings, analysis, workshops, and collaboration.
- Goal 4:** Explore the possibility of creating a tribal coalition for the region that could encourage streamlined participation of tribal nations in government planning and delivery of projects and services – through workshops, and meetings.

#### Outcomes

In 2009, efforts began on the four major categories of grant project activities include: Public Outreach and Education, Research, Analysis, and Project Management. Public Outreach involved three workshop series that included a focus of 1) Tribal perspective of EJ and transportation planning, 2) Academic and Tribal perspectives of cultural resources, EJ, and culturally sensitive resource mapping, and 3) Regional community and transportation planning challenges and models. In these workshops, all eight MPOs and 47 California Central Valley Tribes (both federally and non-federally recognized) were invited to participate in these workshops. Overall, the outcomes resulted in improved communication and identification of both Tribal and Local government partners and planners. Written documents that include Tribal and Local governments' perspectives of transportation planning, defining and protecting cultural resources, approaches and challenges of culturally sensitive resource mapping, and academic historical overviews of California Tribes of the Central Valley (Linguistics, Anthropological, and

Ethnography). Grant web site [www.catribalej.com](http://www.catribalej.com) was also established to post workshops information, grant updates, reports, San Joaquin Blueprint and transportation planning, and Tribal (including non-profits) funding opportunities. A contact listing of 211 grant participants and partners has been established.

### Next Steps

As of December 2009, Goal 1 has been accomplished. However, Goals 2 through 4 will require on-going dialog with both the participating Tribes and the eight Central Valley Councils of Government. Tribes have identified through workshop surveys and one-on-one meetings the following key factors in regional planning:

- Improve Tribal Participation in the Planning Process – Through environmental justice and new legislation, there has been an increase need to work directly with Tribal governments and identify resources for this effort.
- Improve Tribal consultation guidelines and process at local and state level. It is important to note: each Tribe may be different in their approach and definition of consultation.
- Transportation funding limitations for California Tribes – challenges with what can be place on a federally recognize Tribe's "Indian Reservation Roads Inventory (IRRI)", federal formula used by the federal Office of Management Budget (OMB) to allocate funding by area does not provide California Tribes enough funding for construction and maintenance, and misconception by legislators that all Tribes in California have profitable casino operations that should pay for their roads.
- Allotment lands (lands held in trust by the U.S. Department of Interior – Bureau of Indian Affairs) are not included in present day funding formulas. As a result, allotment lands (40, 80, and 160 acres) do not have any transportation funding support.
- Sustainable ability for Tribes to have a central communication and coordinating organization for on-going Tribal regional planning.
- Mapping can help to protect cultural resources and improve planning of regional transportation. However, on-going building of trust and rapport must occur and a few mapping pilot efforts must be established. Protection of electronic data, access, and systems must also be incorporated into any culturally sensitive resource mapping efforts.
- Cultural sensitivity courses and improved knowledge of California Central Valley Tribal history should be incorporated in State and Local planning and staff development.
- Suggested Tools for the Tribes include but not limit to: on-site Native American Monitoring services, memorandum of agreements (MOA) with U.S. Forestry and Local Governments, outline for culturally sensitivity training, and basic California Central Valley Tribal history overview of Tribes to use in working with schools and local governments.
- Tribes do share similar transportation needs such as access to housing, jobs, education, and public transportation. However, many of the California Central Valley Tribes are located in very remote and rural areas. Taking a bus to a doctor's or dentist's appointment can be an all day challenge.
- Tribes continue to learn and teach their cultural and language. There is a need to promote the past and current existence of Tribal people and their languages in road or highway names, rest stop or public visitors' areas, parks, and other public viewing or information sources.

Through monthly conference call meetings and Tribal meeting follow-ups, the above key issues and challenges will be explored. On-going information sharing of San Joaquin Valley Blueprint planning process, Tribal Transportation planning, and other regional planning efforts will be included in conference call meetings, mail-outs, and web postings.

### 7. State and Federal Level Coordination

- At the state level, the Governor's Office of Planning and Research, Caltrans, the Business Transportation and Housing Agency, and the California Department of Fish & Game have

been actively participating in the SJV Blueprint planning process. At the federal level, the Federal Highway Administration and the Federal Transit Agency have been reviewing the SJV Blueprint Planning process and providing feedback through the annual certification of the eight Valley COG's Overall Work Programs.

#### 8. Interregional / Intraregional / Local Partnerships & Interregional Coordination

- Blueprint Learning Network (BLN) – The SJV COGs and their local BLN team members participate in the statewide conferences to learn from other Blueprint efforts in California. Although each of the conferences provides valuable information it is difficult to apply Blueprint practices across individual regions due to their own unique makeup.
- Local Government Commission – Blueprint representatives worked closely with the Local Government Commission (LGC) on the development the 2007 Water Workshop - *Linking Water and Land Use in the Southern Central Valley Region*. In the 2008-09 the COGs have again worked with LGC to develop a Community Image Survey that will be used to help community members and local agencies overcome any inherent fear of increasing residential densities.
- Other regional partners:
  - California Association of Councils of Governments (CALCOG)
  - California State Association of Counties (CSAC)
  - League of California Cities
  - Great Valley Center
  - SJV Air Pollution Control District
  - American Planning Association (APA)
  - San Joaquin Valley Regional Association of Counties
- Intraregional Coordination:
  - COG Directors Association- Each of the eight Valley COG Directors is a member of the COG Directors Association helping manage the Blueprint efforts.
  - BRAC - The creation and engagement of the San Joaquin Valley stakeholders in the Blueprint Regional Advisory Committee (BRAC) to:
    - Become a champion of the final SJV Regional Blueprint Vision;
    - Advocate implementation of the SJV Regional Blueprint products to the local jurisdictions; and
    - Promote the SJV Regional Blueprint strategies at the state and federal levels.
- San Joaquin Valley Local Agency Planners Working Group - Having identified a need to engage the Planning Directors of the region with a regional focus, John Wright, recently retired planning director from the City of Clovis, in conjunction with the Blueprint project managers, convened 40 plus planning directors and/or their key staff to help with the Blueprint development. While thinking regionally, this committee is acting as a professional advisor in order to assure successful implementation of the Blueprint at the local level. This committee is also ensuring that the Blueprint is useful and helpful to them in implementing good planning practices. This is a win-win relationship as these are the planners that handle the development requests and will make a difference in what moves forward.
- San Joaquin Valley Regional Policy Council -Two elected representatives from each of the eight Councils of Governments are commissioners on the San Joaquin Valley Regional Policy Council and they are charged with making Blueprint related recommendations/decisions on behalf of the entire San Joaquin Valley.
- California Partnership for the San Joaquin Valley (Partnership) - Blueprint project managers from each of the SJV COGs attend many of the ten working group and quarterly Partnership Board meetings to maintain the critical link between both efforts. The

Partnership has a scope of work, and resources well beyond that of the SJV Blueprint process. At this time the Blueprint process is primarily focused on three of the Partnership work groups: (1) Transportation (2) Land Use, Agriculture & Housing, and (3) Air Quality.

- Elected Congress Summit - Blueprint project managers and the Great Valley Center developed a Blueprint Congress Summit targeted at elected officials that was convened in April, 2008. The focus of this Summit was to engage elected officials in the evaluation of the SJV Status Quo UPlan Modeling and discuss the fact that we cannot continue business as usual planning practices in the SJV and expect different results that affect every aspect of the quality of life in our Valley. A follow-up event is being planned for 2010.
- San Joaquin Valley Affordable Communities Initiative - Under the San Joaquin Valley Affordable Communities Initiative, the Department of Housing and Urban Development has worked in concert with the Partnership and the Blueprint process to create the San Joaquin Valley Affordable Housing Trust. The purpose of this Trust is to:
  - Link housing policies with land use, transportation, jobs, economic development, and workforce development;
  - Establish a multi-million dollar Trust as a dedicated stream of flexible seed funding for affordable housing;
  - Create a regional organization with expertise to administer the fund, promote, guide, and assist affordable community planning and development; and
  - Support projects that demonstrate the three strategic SJV Affordable Communities Initiatives elements.

9. Local Coordination:

- Local Roundtable focus groups
  - Each of the SJV COGs has established its own Roundtable group (focus groups, planners, economic development, etc.) for the following reasons:
    - Share information and learn from local experts,
    - Educate on Blueprint process,
    - Engage in each component of the Blueprint process,
    - Gather information on best practices for the Blueprint development,
    - Review Blueprint products as they are developed,
    - Create new collaborative relationships, and
    - Enhance existing relationships
- Local Municipal Advisory Councils (MACs) - SJV Blueprint efforts have included outreach to the MACs that represent the unincorporated areas of the counties.
- Local Planning Commissions - The Planning Commissioners of the cities have been engaged at various levels in the Blueprint process. In some counties, Planning Commissioner Summits are being scheduled to encourage regional thinking when making local decisions.
- Local Elected Officials - Each of the local Councils, Boards of Supervisors, and local COG Boards has been encouraged to be actively engaged in the Blueprint Process.

10. Address Goods Movement - The San Joaquin Valley Goods Movement Action Plan (SJV GMAP) is a collaborative effort between the eight COGs of the San Joaquin Valley and their working partners. The SJV GMAP focuses on removing choke points of goods movement into and out of the Valley to increase statewide throughput in an effort to provide outlets for the \$20 billion of agricultural products headed to national and international markets in a timely manner.

11. Developed strategies to effectively engage local government land use decision makers -The SJV Regional Blueprint process utilizes every opportunity available to inform local land use decision makers on the process and why change is needed for the future. The SJV Regional Blueprint

Process Decision Making Chart highlights the iterative nature of the process with the engagement of local and regional stakeholders in every step of the process.

12. Strategies for higher density housing - Compact land uses in the Valley are evolving because of increased housing and land costs. Planners are using this as an opportunity to encourage higher densities, mixed uses and more compact design. The Blueprint is an opportunity for all involved in local planning and decision making to encourage elected officials to embrace the local and regional benefits of more compact development. A strong desire in the Valley to preserve agricultural land is also creating land use policies to use land more efficiently.
  
13. Greenhouse Gas (GHG) Emissions / Energy / Environmental Considerations Greenhouse Gas Emissions – GHG emission reductions, specifically Carbon Dioxide (CO<sub>2</sub>), is an emerging area of Climate Change that will be addressed in response to AB 32 (2006) and SB 375 (2008) requirements. The California Air Resources Board (CARB) has adopted the 1990 emissions inventory that is the basis for the development of CARB's Climate Change Scoping Plan. The Climate Change Scoping Plan has been developed and specific requirements are delineated for all sectors in California, including local governments and metropolitan planning regions. The SJV Blueprint will address GHG integration. The California Transportation Commission has also adopted new Regional Transportation Planning Agency Guidelines that COGs will use to integrate GHG analysis in future Regional Transportation Plans. SB 375 has been chaptered into state law and the adopted Valleywide Blueprint will likely provide valuable concepts for the "Sustainable Communities Strategies" required by SB 375. Ideally, when the SCS is integrated with the planned regional transportation networks and the housing elements in local general plans, it will attempt to achieve the GHG emission reduction goals in AB 32 through reduction in vehicle miles traveled. SB 375 encourages regional cooperation among the eight counties in the SJV by allowing that two or more counties work together to develop a multiregional sustainable communities strategy. This will complement the existing efforts for the implementation of the Valley Blueprint.
  - Energy - The Partnership's Energy work group has created the San Joaquin Clean Energy Organization with the mission of leading a regional effort to develop, plan, and implement energy efficiencies and clean energy throughout the eight-county SJV region.
  - Environmental Considerations – Model Farmland Conservation Program. In 2007, Fresno COG was awarded Partnership seed grant funds to create a Model Farmland Conservation Program. As the process develops with data development and analysis and achieves stakeholder buy-in, the SJV Regional Blueprint Planning process will look to integrate this information.
  
14. Local General Plan Development Coordination - At a time when many of the San Joaquin Valley counties and cities are feeling tremendous pressures of population growth and urbanization, local agencies have initiated updating their local General Plan documents. Wherever it has been possible the local COG's Blueprint effort has coordinated with the local general plan update process. In fact, some of the SJV COGs have been able to coordinate general plan development and Blueprint public outreach efforts to engage the public.
  - RHNA (Regional Housing Needs Assessment)  
The SJV COGs have recently updated their local Regional Housing Needs Assessment (RHNA) Plans. With the advent of SB375, this process will be coordinated with the Regional Transportation Plan process, with updates due on an 8 year schedule. While the existing process has sometimes created conflicts in goals and policies, the evolving RHNA process will hopefully integrate with the sustainable communities strategy in an approach that will resolve potential conflicts.

Over the past three and a half years, representative stakeholders from public health, education, environmental justice communities, tribal governments, local governments, resource and regulatory agencies, developers, economists, business and commercial interests, and many, many more have come to the table to address future challenges and reach consensus on a smart growth vision for the San Joaquin Valley. In January 2009, the Great Valley Center's Blueprint Summit marked the culmination of developing the Valleywide preferred growth scenario. The Summit attracted over 600 attendees from the public and private sectors to discuss the alternative growth scenarios developed through the Blueprint process and to seek their invaluable input on a desired growth scenario for the Valley. The alternative growth scenarios, along with the feedback from the Blueprint Regional Advisory Committee (BRAC) and Summit participants, was then presented to the SJV Regional Policy Council (Valley elected officials) on April 1, 2009 for their ultimate selection and adoption of a preferred growth scenario for the entire Valley. This action officially brought the third year of the San Joaquin Valley Blueprint planning process to a close, thus moving the activities into the realm of implementation.

This holistic approach to planning for the Valley's future aims to break the barriers created by geography, political boundaries, and parochial thinking. Decisions in one locale can affect change in others. For example, land use policies that fail to curb urban sprawl will contribute to reduced investment in existing areas, producing downward pressure on existing land values. It can raise the cost to municipalities to provide utilities, water, police and fire services. Increases in vehicle miles traveled (VMT) can increase stress and congestion on the roadways and worsen air quality.

As we move forward with the tasks of the fourth year of the San Joaquin Valley Regional Blueprint planning process, we are gratified by the progress we have made in collaborating across such a vast geographic area. Our common goal is to develop a Valley Vision that will lead to thoughtful planning and an enhanced quality of life for all who live here. We have met many challenges during this effort to change the way we approach the future, but we have had a tremendous amount of success in our progress. Much still remains to be done, however. In fact, some of the most important and challenging work lies ahead: turning the *vision* into a *reality* and making the transition from a planning *process* to planning *implementation*.

### **Looking Forward to the Fourth Year – Ongoing and Future Tasks**

1. Develop Valleywide Blueprint Implementation Roadmap, which will include translating Valley Blueprint principles into local implementation strategies and developing local government commitment. It will also include development of a toolkit for implementation.
2. Convene meetings with local officials to discuss funding challenges of local government (and related "fiscalization of land use"). Track 'California Forward' and their efforts on governance and fiscal reform (see <http://www.caforward.org/about/>).
3. Develop adequate modeling tools for compliance with SB 375 (address new greenhouse gas directives, as well as to continue to use adopted methods to measure the effectiveness of the Regional Blueprint Plan)
4. Address the increasing of residential densities
  - a. Determine the impact of various development densities on the fiscal health of cities and counties in the San Joaquin Valley. Develop a fiscal analysis tool to determine this.
  - b. Determine the market demand for higher density residential housing projects
5. Identify institutional barriers, such as lending practices that may inhibit Smart Growth initiatives from being fully realized. Investigate policies, regulations and laws that may hamper or impede these initiatives.
6. Greenprint - incorporate Model Farmland Conservation Program mapping, that includes improved information on water resources into the Blueprint for each of the Valley Counties

7. Work with Central California EDCs and Partnership for SJV to address jobs/housing issue.  
*Work on this task should reconvene in early 2010.*
8. Continue Blueprint's Valleywide presence by maintaining partnership with Great Valley Center for website oversight and production of one Valleywide Blueprint event
9. Continue extensive public outreach efforts as well as developing a Blueprint Awards Program for the Valley.

## 7. Financial Element

### 7a. Valley Interregional Funding Effort

As the Valley continues to work together on various issues, an opportunity exists to work together to ensure and maximize Interregional funding (IIP) for valley projects. In order for this to happen, the Valley RTPAs will plan cooperatively to develop a unified request for IIP funding whenever possible. By working together, all RTPAs will benefit. The following is a brief discussion of the major items related to IIP priority selection for the Valley. The draft priorities below have only been proposed for discussion at this time and have not been approved or finalized by the eight RTPAs.

#### Project Priority Type

1. Existing Programmed IIP Components – Priority would be given to fund cost increases for existing programmed IIP components. This is consistent with Caltrans/CTC programming in the 2010 IIP. It is very unlikely that any of the Valley COGS have STIP capacity to spend on cost increases for already programmed IIP projects. A limit for regional support may be considered.
2. SR-99 Business Plan/Category Two projects – There are 22 Category Two projects of which 14 are 4 to 6 lane and 8 are 6 to 8 lane capacity increasing projects. *(Note: Caltrans does not support IIP for interchange improvements and therefore most of 99 Business Plan Categories 3 & 4 would not qualify.)*
3. Other interregional corridors – (Please note: the Valley has requested a grant that would outline the goods movement priorities for the Valley, focusing in particular the east-west corridors. The study outcome once adopted by the COGS would guide the priorities similar to the SR-99 Business Plan)

#### Project Priority Category

1. Construction - Priority would be given to fund cost construction component. This is consistent with Caltrans/CTC programming in the 2010 IIP and prior State Transportation Improvement Programs (STIPs).
2. PS&E/ROW – Many of our IIP projects will be in different stages of development. Given that many of the 99 projects will be widened using the existing median, Right-of-Way (ROW) costs are actually lower when compared to other IIP projects in the state. It should also be noted that is unlikely that ROW and construction will be programmed in the same STIP. Therefore ROW will often be programmed one STIP and the construction phase in the next STIP.
3. Environmental – With review of planned projects over a number of STIP cycles, the Valley could recommend environmental be started for selected segments.

### 7b. Valleywide Funding Strategies

#### Current Transportation Financing Strategies and Challenges

As California continues to grow, and add population to the world's seventh largest economy and the nearly 40 million people that will live here, California's ability to move both people and goods will become increasingly critical to our quality of life, and our ability to compete economically with the rest of the country and the world at large.

For nearly a century, California has relied on its road system "users" to pay fees. Historically, these fees have been the major source for financing the construction and maintenance of the State's transportation



infrastructure. However, in the last decade, the state has failed to raise those fees to keep up with its needs. Although federal and state fuel taxes are still the largest single source of revenue for transportation, such taxes are rising far more slowly than either traffic volumes or transportation system costs, and no longer come close to covering the costs of building, operating, and maintaining the transportation system. As the transportation system grows in extent and ages, an ever increasing share of expenditures is needed to operate, maintain, and renew the existing system, meaning that even less money is available for system growth. Yet, at the same time, there is clearly widespread opposition to raising fuel taxes in California to meet the estimated \$500 billion dollar shortfall in funding to meet California's transportation infrastructure needs.

There a number of reasons that California is unable to fund its transportation infrastructure needs, these include:

- The state's per gallon excise tax has not risen from 18 cents per gallon since 1994, and the federal excise tax has been at 18.4 cents per gallon since 1993.
- Because the excise tax on fuel is levied per gallon of fuel purchased and not per dollar or per mile, inflation and improved vehicle fuel efficiency combine to erode the excise tax's buying power.
- Improved fuel economy directly reduces per-mile revenues from motor fuel taxes, without reducing the need for new roads or wear and tear on existing ones, even as we drive many more miles per penny of revenue.
- The cost of road maintenance and construction has risen steadily by more than the consumer price index, further reducing the effectiveness of the revenue raised by the tax.
- The overall state deficit has caused a great deal of transportation funding to be diverted to cover general state costs, thus burdening transportation programs.
- The political climate is one of wariness for any kind of tax increase—even increases in transportation user fees. This perspective exists in California and the rest of the nation as well.

### **Funding Transportation Projects in the San Joaquin Valley**

With the above information as background, the Regional Transportation Planning Agencies in the San Joaquin Valley are charged with developing long range funding strategies that will provide the revenues necessary to build a multi-modal transportation system that will meet the long range needs of the San Joaquin Valley. In theory, there are a number of potential funding strategies, both traditional and non-traditional, that could be developed to help provide the necessary funding to construct our long range transportation infrastructure. However, each has its own unique set of challenges.

State Route 99 is a great example of a transportation facility that has monumental impact on the mobility of nearly all San Joaquin Valley residents, as it is the primary north-south transportation corridor through the San Joaquin Valley and directly impacts seven of the eight SJV counties. The following is a list of transportation funding sources, some traditional and some innovative or non-traditional, that might be considered as the eight SJV COGs grapple with finding the necessary funding for transportation projects.

**Traditional Transportation Fund Sources**

<b>Type of Funding</b>	<b>Programming Mechanism</b>
State Fuel Excise Taxes	State Highway Account
Federal Fuel Excise Taxes	Federal Highway Trust Fund then to State Highway Account
Sales Taxes on Fuels	Transportation Investment Fund/Public Transportation Account
Truck Weight Fees	State Highway Account
Roadway Tolls/HOT Lanes	Dedicated to Specific Routes and Corridors
Local Sales Tax Measures	Expenditure Plan Specified Projects
Development Mitigation Fees	Specified Uses

**State Fuel Excise Taxes**

This is the primary State generated transportation fund source for transportation improvements. Currently 18.0 cents per gallon of gasoline and diesel sold is generated, with 11.4 cents going into the State Highway Account and 6.46 cents per gallon going to cities and counties. In California, approximately \$2 billion per is generated from State fuel excise taxes per year.

**Federal Fuel Excise Taxes**

This is the primary federal transportation fund source for road and highway improvements nationwide. Currently 18.4 cents per gallon of gasoline and 24.4 cents per gallon of diesel fuel goes into the Federal Highway trust Fund. These funds are typically distributed to states by formulas or grants, with California's apportionment typically over \$3 billion annually.

**Sales Tax on Fuel**

California collects 7.25% sales tax on the sale of specified products, a portion of which is earmarked for transportation. In 2002, Proposition 42 was passed by voters specifying that 5% of the 7.25% sales tax per gallon of gasoline is to be earmarked for transportation and placed in the Transportation Investment Fund (TIF). State law requires that TIF are to be distributed as follows:

- 40% to the State Transportation Improvement Program
- 20% to the Public Transportation account
- 20% to counties
- 20% to cities

**Truck Weight Fees**

California truck weight fees typically generate nearly \$900 million per year in revenues and are deposited in the State Highway Account where they are eligible for many uses including the STIP. There is no set annual amount targeted for the STIP.

**Roadway Tolls**

In California, the ability to charge roadway tolls on State Highways can only be authorized through enabling statewide legislation. Currently, tolls are authorized on specified bridges in the San Francisco Bay area, Los Angeles area and the San Diego area. In addition, AB 680 passed in 1989 authorized Caltrans to enter into agreements with private entities for four toll corridors in California. As a result there are currently three toll corridors in southern California, but none yet in northern California. Generally, toll facilities are applicable in locations where there is enough time savings for users that they are willing to pay a toll fee for that time savings. This usually occurs where there is either daily recurring congestion

and/or there is no other reasonable travel alternative. Basically there are two categories of toll road approaches found in California: Traditional Toll Highways and High Occupancy Toll Lanes (HOT Lanes)

### **Traditional Toll Highways**

These are toll highway segments that require a toll to be paid for its use by all users, but exemptions or reduced fees can be authorized for certain designated users. These designated users could be high occupancy vehicles or local residents. The funds collected are typically used to maintain and improve the toll road segment. Current technology offers the opportunity to collect tolls through an electronic monitoring system for those using the toll road as a commuter route, thereby reducing the operating cost of the facility. Others would still have to pay on site for each use of the toll facility.

Thinking innovatively, there are two potential options for tolling State Route 99 in the San Joaquin Valley. Under the first option, the entire SR 99 route from its junction with I-5 in southern Kern County to Hammer Lane in San Joaquin County could be a toll facility. Under this scenario, residents of the eight San Joaquin Valley counties and the western Sierra mountain counties of Mariposa, Calaveras, Tuolumne and Amador could be authorized resident toll exemptions. Of course this approach would greatly reduce the annual revenue level, but it is likely this would be required in order for the concept to be politically acceptable to SJV residents. The second approach would be to focus the toll highway to segments with congestion lasting at least one hour during the morning or evening peak commute periods or have no competing parallel alternative road. Candidate locations are in the Stockton metro area, between Modesto and State Route 120 in Manteca, Modesto metro area, between Atwater and Ceres, Fresno metro area, and Bakersfield metro area.

### **High Occupancy Toll Roads**

High Occupancy Toll (HOT) lanes are a revenue generating form of High Occupancy Vehicle (HOV) lanes. HOT lanes are HOV lanes that single occupant vehicles, not otherwise eligible to use HOV lanes, can choose to use by paying a toll. HOT lanes provide users with a faster and more reliable travel alternative. Toll rates on HOT lanes tend to be variable base on the time of day and corresponding congestion, with toll rates varying widely.

### **Vehicle License Fee Surcharge**

The vehicle license fee surcharge is a source of funding that has been used for a number of special interest programs in recent years. In the San Joaquin Valley, counties have instituted vehicle license fee surcharges for such programs as vehicle abatement and safety call boxes. In addition, the San Joaquin Valley Air Pollution Control District has been authorized to levy a vehicle license fee surcharge for programs to achieve air quality emission reductions. In total, there are approximately 3.2 million registered vehicles in the eight county San Joaquin Valley region.

### **Vehicle Use Mileage Fee**

Vehicle use mileage fee is another user fee that could be applied with the San Joaquin Valley. This mileage fee could be collected in several ways, but the simplest from an administrative perspective, would be to collect the fee each year as part of the annual vehicle registration process. Under this approach, each year the registered owner would report their beginning of year mileage and their end of year mileage when registering their vehicle. The challenge would come in developing some method of mileage verification.

### **Local Sales Tax Measures**

Currently, there are four SJV counties (San Joaquin, Madera, Fresno & Tulare) that have local sales tax measures in place that are dedicated solely to transportation. Over time, these sales tax measures have proven very effective to those counties who have been able to institute one. The challenge is that

passage requires a supermajority (66%) of voters to support, and that can be a very difficult threshold for more politically conservative counties to attain.

### **Development Mitigation Fees**

Development mitigation fees are assessed to new development (residential, commercial, industrial, etc.). The fees are used for “mitigation” of impacts generated by that specific development. Mitigation fees can be used for a variety of purposes (transportation, education, air quality, flood control, etc.) provided there is a logical “nexus” or connection between the development and the impacts generated.

### **Possible Transition to Direct User Charges**

Motor fuel taxes can continue to provide a great deal of needed revenue for a decade or two. But several types of more efficient and equitable user charges are ready to be phased in. For example, current technology has the potential to enable government agencies to institute vehicle miles traveled (VMT) charges as flat per mile fees. If there was public support, gradually public agencies could charge higher rates on some roads and lower rates on others to reflect more accurately than do fuel taxes, the costs of providing facilities over different terrain or of different quality. This approach would end cross subsidies of some travelers by others and make travel more efficient by encouraging the use of less congested roads. Unlike gasoline taxes, more direct road user charges also could vary with time of day, encouraging some travelers to make a larger proportion of their trips outside of peak periods, easing rush hour traffic.

In the short term, direct user fees could simply replace fuel taxes in a revenue-neutral switch, but they are attractive, in part, because they can become more lucrative as travel increases, while allowing charges to be distributed more fairly among road users. Initially, some vehicle operators might be allowed to continue paying motor fuel taxes rather than newer direct charges, but eventually gas and diesel taxes would be phased out.



## **APPENDIX H – PUBLIC PARTICIPATION PLAN**

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**Public Participation Plan**  
Adopted May 23, 2007



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## INTRODUCTION

The Madera County Transportation Commission (MCTC) is committed to public involvement in transportation planning activities. MCTC encourages public input in the planning process to ensure that the community's needs are met. Engaging the public early and often in the process of planning and decision making is critical to the success of any transportation plan or program.

The goal of MCTC's Public Participation Plan is to ensure continuous public notification and participation in major actions and decisions by the MCTC Policy Board. This report will establish a baseline for the communication policies and procedures, ensuring that the public is well informed during the decision making process. The Public Participation Plan will include goals, objectives and the corresponding methods to successfully reach all communities, including those that are traditionally underserved within the county. The elements in this plan will be based on the premise that education and awareness are critical in the transportation planning process.

The Public Participation Plan elements shall be proactive and provide complete information, timely public notice, full public access to key decisions, and opportunities for early and continuous involvement. The elements will be built around the following Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) principles<sup>1</sup>:

1. Early and continuing public involvement opportunities throughout the transportation planning and programming process;
2. Timely information about transportation issues and processes to citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, other interested parties and segments of the community affected by transportation plans, programs, and projects;
3. Reasonable public access to technical and policy information used in the development of the plan and State Transportation Improvement Program (STIP);
4. Adequate public notice of public involvement activities and time for public review and comment at key decision points, including but not limited to action on the plan and STIP;
5. A process for demonstration explicit consideration and response to public input during the planning and program development process;
6. A process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households which may face challenges accessing employment and other amenities;
7. Periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all and revision of the process as necessary.

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<sup>1</sup> Title 23 Code of Federal Regulations Part 450.212 Public Involvement

## **BACKGROUND**

The Madera County Transportation Commission (MCTC) is the Regional Comprehensive Planning Agency, Regional Transportation Planning Agency (RTPA), Metropolitan Planning Organization (MPO) and Local Transportation Commission for Madera County. Major responsibilities of MCTC include the development and adoption of the Regional Transportation Plan (RTP), Regional Transportation Improvement Program (RTIP), and other environmental review documents related to transportation and required by state and Federal law. These documents provide a framework for project development and deployment within the region. The RTP in particular, is the regional long-range plan for federally funded transportation projects and serves as a comprehensive, coordinated transportation plan for all governmental jurisdictions within Madera County.

Beginning in July of 2003, MCTC assumed the newly designated role of MPO for Madera County. An MPO is the local decision making body that is responsible for carrying out the metropolitan transportation planning process and must be designated for each urban area with a population of more than 50,000 people. A Federal Register Notice regarding Qualifying Urban Areas for Census 2000 was published on May 1, 2002, listing 76 newly qualified urban areas for 2000 that were not part of an urban area in 1990. The City of Madera is among the new urban areas, with an urban population of 58,027 within the new urban boundary established by the Census Bureau. The Madera metropolitan boundary area shall cover the entire county of Madera.

The MPO's role in the transportation planning process is to foster intergovernmental coordination, undertake comprehensive regional planning with an emphasis on transportation issues, provide a forum for citizen input into the planning process, and to provide technical services to its member agencies.

In order to accomplish the objectives and responsibilities of a comprehensive transportation program, MCTC has established working relationships with a number of state, regional, and local agencies. Memoranda of Understanding (MOU) with these agencies provide a framework for the planning process, which ultimately result in the delivery of safe, efficient, and environmentally sensitive transportation projects.

In conjunction with a coordinated agency effort, the inclusion of public input is necessary. MPOs are required to solicit public input and the methods for participation shall be documented in the Public Participation Plan. This plan shall develop protocols to ensure active public participation in the development of all transportation planning activities.

## **REGULATORY SETTING**

Regulations governing public involvement are the crux of MCTC's Public Participation Plan. MCTC will strive to meet and in select instances exceed these requirements to best serve the community's rights and needs.

### **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)**

On August 10, 2005, the President signed into law the **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)**. With guaranteed funding for highways, highway safety, and public transportation totaling \$244.1 billion, SAFETEA-LU represents the largest surface transportation investment in our Nation's history. The two landmark bills that brought surface transportation into the 21<sup>st</sup> century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21)—shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU builds on this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our vital transportation infrastructure.

SAFETEA-LU addresses the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

### **The Ralph M. Brown Act (Government Code sections 54950-54962)**

The Ralph M. Brown Act governs meetings and actions of governing board members of local public agencies and their created bodies. Requirements of the Brown Act also apply to any committee or other subsidiary body of a local agency, whether permanent or temporary, decision-making or advisory, which is created by such a governing board.

The Brown Act sets minimum standards for open meetings relative to access to public, reasonable regulations ensuring the public's right to address the agency, including regulations to limit the amount of time allocated for public testimony.

The Brown Act requires the MCTC Board to conduct its business in meetings open to the public and allows boards to meet in private to discuss such issues as personnel, litigation, and labor negotiations. Time constraints for unscheduled comments may be limited to three minutes; however MCTC encourages citizens to provide written copies of their presentation to the Board if

the statement is longer than the allotted time. If citizens are unable to attend a meeting in person, relevant written comments submitted to staff will be presented to the respective governing body.

## **Americans with Disabilities Act**

The Americans with Disabilities Act of 1990 (ADA) requires involving the community, particularly those with disabilities, in the development and improvement of public services and capital facilities. Meetings and hearings must be held in ADA compliant buildings. Special accommodations must be made to assist those with disabilities to participate in meetings, planning, and programming activities.

## **Environmental Justice**

The goal of Environmental Justice is to ensure that all individuals, regardless of race, ethnicity, national origin or income are protected from disproportionate negative impacts and are given an equal distribution of benefits.

Title VI of the 1964 Civil Rights Act and Executive Order 12898 are the principle legal underpinnings for environmental justice. Title VI states that “No person . . . shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Title VI prohibits recipients of Federal funds from actions that reflect “intentional discrimination” or that exhibit “adverse disparate impact discrimination” on the basis of race, ethnicity or national origin. Later statutes prohibit discrimination on the basis of sex, religion, or disability.

In 1994, President Clinton signed Executive Order 12898 requiring that federal agencies shall, to the greatest extent of the law, carry out their activities, programs, and policies in a way that avoids disproportionately high and adverse health and environmental impacts on low-income and minority populations. E.O. 12898 thus applies to a wider population than does Title VI, which did not include low-income non-minority populations.

In terms of transportation planning, environmental justice ensures that under served communities participate in the planning and decision-making process for transportation projects and that their concerns are incorporated into plans and policies that will better serve all its users. Transportation Planning Agencies must plan against disproportionate negative impacts on low income and minority communities and must ensure an equal distribution of transportation benefits.

The Federal Highway Administration articulates three fundamental environmental justice principles:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision making process;

3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

## GOALS, OBJECTIVES AND POLICIES

The effectiveness of any program and policy plan depends upon its success in meeting the expectations of the public. Further, plans and programs need to be reassessed periodically to determine if the public's evolving needs and expectations are adequately provided for through the plan. In order to ensure that this occurs, the public must be kept informed of activities and must be given a meaningful opportunity to participate in the development and review of public policy. Thus it is important to have an ongoing program to involve citizens through the use of advisory committees, public workshops, press releases, and other public outreach activities.

### Public Participation Goal

The public involvement process for transportation planning shall provide complete information, timely public notice, and full access to key decisions; and shall support early and continuing involvement of the public. Such federal legislation has placed an increased emphasis upon effective community involvement and MCTC continues its efforts to explore ways to reach a larger audience to provide information, develop public awareness, and to facilitate an enhanced level of public involvement in the decision making process.

#### **A. Objective 1: Public Access** – The public shall be provided timely notice and reasonable access to information about transportation issues and processes.

**Policy 1.1** MCTC plans and documents shall be made available for the public to review at the MCTC office as well as on the MCTC web site. Copies of the Regional Transportation Plan (RTP) shall be distributed to all public libraries in Madera County, local planning departments, and other participating agencies and through the Technical Advisory Committee.

**Policy 1.2** Notice and agendas of MCTC Board and Committee meetings shall be available to the public 72 hours before they occur, except in cases of emergency meetings when 24 hours is allowed under The Brown Act. Agendas and Minutes will be placed on the MCTC website at: [www.maderactc.org](http://www.maderactc.org).

**Policy 1.3** MCTC shall provide reasonable access to technical and policy information used in the development of plans, the Regional Transportation Plan, and the Transportation Improvement Programs.

**Policy 1.4** In compliance with the Americans with Disabilities Act, individuals needing special accommodations to participate in meetings should contact MCTC at least three working days prior to the scheduled meeting.

**Policy 1.5** Meetings and workshops of the MCTC Board and its advisory committees shall be held in ADA-compliant venues. Further accommodations will be evaluated upon request.

**Policy 1.6** Meetings and workshops of the MCTC Board and its advisory committees are open to the public, except as allowed by The Brown Act.

**B. Objective 2: Public Outreach** – Opportunities shall be created for all segments of the public to learn and become informed about issues and proposals under consideration by MCTC, particularly those communities which may be directly affected by the outcome.

**Policy 2.1** Information pertaining to the adoption, revision, or amendment of all MCTC plans and transportation project priorities shall be available 72 hours prior to the date of the final action, unless in the course of an emergency meeting as allowed under The Brown Act.

**Policy 2.2** MCTC shall inform the public about issues and proposals under consideration through public notices, workshops, the “Go Madera” newsletter, website, or other appropriate means, during the development of transportation plans, program, studies, and projects for which MCTC is responsible.

**Policy 2.3** MCTC shall annually review the Public Participation Plan in terms of effectiveness in soliciting broad-based public input and inclusiveness of transportation stakeholders and traditionally underserved groups.

**Policy 2.4** Madera County contains significant Hispanic and Spanish-speaking populations. MCTC will continue to outreach to those communities through appropriate available media that serves minority communities.

**Policy 2.5** MCTC is aware that Native American outreach differs from traditional public outreach. Native American Tribes are sovereign nations with governments that have jurisdiction over specific territories and individuals and therefore, must be involved on a government-to-government basis. Tribal governments must be formally notified of agency actions and proposals and should be given the same courtesies and opportunities for participation and review that are given to other governmental entities. It is not enough to simply inform tribal governments at the end of the planning process, but rather they should be included from the initial stages of development. Such “consultations” shall be arranged when necessary.

**C. Objective 3: Public Input** – Consideration of public input shall be an integral part of MCTC decision-making process.

**Policy 3.1** MCTC shall provide all significant public comments pertaining to the plans and projects for which MCTC is responsible to the Board prior to any action being taken.

**Policy 3.2** MCTC shall provide an opportunity for the public to comment during the MCTC Policy Board meeting.

## **PUBLIC NOTIFICATION AND PARTICIPATION PROCEDURES**

A variety of public notification and participation procedures will be used to encourage the early and continuous involvement of citizens, jurisdictions, communities, and other interests in the planning process as well as the decisions and actions. They will include, but are not limited to, the following:

### **Meetings**

MCTC Board meetings are generally held on the third Wednesday of each month. The meetings are held at 3:00 pm in the City of Madera Council Chambers, located at 200 West Fourth Street, Madera, California. A public comment period is always available at the beginning of each meeting. All MCTC Board meetings are open to the public.

#### **A. Agendas**

MCTC Board agendas will be posted at least 72 hours before regular meetings or 24 hours before special meetings. The agendas will be posted at the following locations to the extent possible:

1. Madera County Transportation Commission entrance, located at 1816 Howard Road, Suite 8, Madera, California, as well as the Madera County Board of Supervisors Chambers
2. Agendas shall be made available by regular mail to all upon request
3. Agenda shall be posted on the MCTC website at [www.maderactc.org](http://www.maderactc.org)
4. Agendas will also be sent to local media outlets

#### **B. Public Notices**

Public notices will be used to inform the general public and media of workshops and public hearings, as appropriate.

#### **C. Public Hearings**

MCTC shall hold or sponsor public hearings or public meetings whenever appropriate or in accordance with applicable statutory requirements. The criteria shall include whether there is substantial controversy concerning the proposed action, substantial interest in holding the hearing, or a request for a hearing by another agency with jurisdiction over the action.



## MCTC Public Participation Plan

1. Public hearings are held prior to the MCTC Policy Board's actions to present and solicit information from the public regarding transportation issues. This can be a formal means to gather citizen comments and positions from all interested parties for the public record and as an input into the decision making process.
2. SAFETEA-LU and state law requires public hearings for the adoption of major plans and programs such as the Federal Transportation Improvement Program, Regional Transportation Plan, Unmet Transit Needs, and air quality conformity determinations.
3. Unless otherwise required by statute, MCTC will publish one public notice in a general circulation newspaper citing the time, date, and place of the hearing at least ten days in advance of that hearing. That notice will instruct individuals needing special accommodations to contact MCTC at least three working days prior to the scheduled meeting.
4. Public Hearings will be held in facilities that are accessible to people with disabilities.
5. MCTC will accept written comments from the public during the period between the notice and the hearing date. These comments will be considered part of the public record.
6. Staff will accept questions and provide clarification on issues raised by the public.
7. Certain plans and programs will include the required review periods noted below. This specific review period will allow agencies involved in the consultation process and the public to submit written comments to the draft document and supporting material. MCTC acknowledges that there may be other plans and programs not listed below for which a specified review and comment period is appropriate:
  - i. Regional Transportation Plan and . . . . . 30 days  
Conformity determinations for the RTP
  - ii. Federal Transportation Improvement Program . . . . 30 days  
and Conformity determinations for the FTIP
  - iii. Transportation Plan and FTIP amendments . . . . . 14 days
  - iv. Transportation Plan and FTIP amendments that . . . . 7 days  
only add or delete exempt projects
  - v. Air Quality Conformity Determinations . . . . . 30 days
  - vi. Unmet Transit Needs Hearing . . . . . 30 days
  - vii. Public Participation Policy . . . . . 45 days
  - viii. Disadvantaged Business Enterprise Program . . . . . 45 days

## Publications

The Brown Act requires that written materials provided to the MCTC Board be made available to the public upon request. All materials are available for viewing at the MCTC office or on the MCTC website.

## **A. Reports**

1. Copies of the draft and final reports will be made available to member agencies as well as the public. The first copy will be free; additional copies may require a nominal fee to offset copying costs.
2. These reports can include but are not limited to the: Regional Transportation Plan, Federal Transportation Improvement Plan, the Public Participation Plan, the Regional Bicycle Plan, etc.

## **B. Newsletters**

1. MCTC produces and publishes a regular newsletter, “Go Madera” that is distributed to stakeholders, elected and public officials, and members at large. MCTC will make copies available to anyone interested. Both printed and electronic copies are available, with the electronic copies either sent directly to a subscriber’s email address or downloaded from the website. Those who wish to be added to the mailing list should contact MCTC staff or visit the website ([www.maderactc.org](http://www.maderactc.org)) and subscribe online.
2. The newsletter provides up to date and current information on projects, meetings and important dates.

## **Other Public Notification and Participation Efforts**

### **A. Website**

MCTC maintains a website ([www.maderactc.org](http://www.maderactc.org)) that is targeted to a wide range of audiences ranging from transit riders seeking bus schedules to transportation professionals, elected officials, and news media seeking information on particular programs, projects and public meetings.

The site provides information about MCTC’s projects and programs, the agency’s structure and governing body, local transportation sales tax information, and upcoming meetings and workshops. It contains the names, email addresses, and phone numbers for staff, MCTC’s current planning documents, newsletters, and air quality information.

### **B. Public Speaking**

MCTC staff welcomes opportunities to speak before public groups, school groups, and interested organizations to provide transportation information on a regional basis.

## EVALUATION AND MONITORING

In order to regularly evaluate the Public Involvement Program, five performance measures are identified.

1. The **accessibility** of the outreach process to serve diverse geographic, language, and ability needs.
2. The extent or **reach** of the process in involving and informing as many members of the public as possible.
3. The **diversity** of participants in the outreach process and its ability to reflect the broad range of ethnicities, incomes, and special needs of Madera County residents.
4. The **impact** of public outreach and involvement on the plan/program and on Policy Board actions.
5. The **satisfaction** with the outreach process expressed by participants.

For each of these five performance measures there is a set of quantifiable indicators, which will be applied as appropriate to plans/programs.

### 1. Accessibility Indicators:

- Meetings are reasonably accessible by transit.
- Meetings are accessible under the requirements of the American with Disabilities Act.
- Meetings will be linguistically accessible to participants on a project by project basis.

### 2. Reach Indicators:

- Number of comments logged during the comment process and review period.
- Number of individuals actively participating in outreach program.

### 3. Diversity Indicators:

- Demographics of targeted individuals and organizational workshops.
- Percentage of targeted organizations and groups participating in at least one workshop.
- Participants represent a cross-section of people of various interests, places of residences, and primary modes of travel.

### 4. Impact Indicators:

- Significant written comments received will be logged, analyzed, summarized, and communicated in time for consideration by staff and the Policy Board.

**5. Participant Satisfaction: *(This information would be obtained via written surveys available at workshops and public meetings)***

- Accessibility to meeting locations.
- Materials presented in appropriate languages for targeted audiences and upon request.
- Adequate notice of the meetings provided.
- Sufficient opportunity to comment.
- Educational value of presentations and materials.
- Clear information at an appropriate level of detail.
- Clear understanding of items that are established policy versus those that are open to public influence.
- Quality of the discussion.
- Responsiveness to comments received.

## **COMMITTEES**

The Madera County Transportation Commission is organized into a Board of Directors supported by the Transportation Policy Committee and the Technical Advisory Committee. MCTC staff includes an Executive Director, three Transportation Planners, and one Administrative Assistant. There is currently one standing committee -- the Social Services Transportation Advisory Council (SSTAC), which reports through the Technical Advisory Committee. The relationship between the Board, its staff, and the committees is illustrated below.

### **Policy Board**

Policy decisions are made by the Madera County Transportation Commission Policy Board. The Commission Board of Directors is comprised of three (3) members from the Madera County Board of Supervisors, two (2) members from the Madera City Council, and one (1) member from the Chowchilla City Council.

The Transportation Policy Committee has the same membership as the Board with the addition of one (1) person representing the Caltrans District 06 Director. This committee reviews transportation plans and programs prior to action by MCTC, with particular emphasis on compliance with applicable state and federal planning and programming requirements. Both Board meetings are open to the public with time allocated at the beginning of each meeting for public comments not on the agenda.

### **Technical Advisory Committee (TAC)**

The Technical Advisory Committee (TAC) provides technical advice and recommendations to the MCTC Policy Board on transportation issues affecting the region. The TAC includes the Madera County Road Commissioner, Madera County Planning Director, City of Madera Engineer, City of Madera Planning Director, City of Chowchilla Administrator, and one representative from

## MCTC Public Participation Plan

Caltrans District 06. The TAC reviews staff work conducted pursuant to the Overall Work Program, advises MCTC and Transportation Policy Committee on transportation issues, and makes recommendations on planning and programming actions to be taken by MCTC. The TAC also serves as a forum to exchange transportation related information among member agencies and the public. All TAC meetings are open to the public and provide an opportune time for the public to access technical and policy information used in the development of plans and projects.

### **Social Services Transportation Advisory Council (SSTAC)**

In accordance with state law, the Madera County Transportation Commission has established a citizen advisory group known as the SSTAC to aid in its review of transit issues with emphasis on the annual identification of unmet transit needs within Madera County. The Social Services Transportation Advisory Council serves as a citizen advisory committee to MCTC on matters related to public transportation needs of Madera County residents. The SSTAC generally has three meetings each year.

The first meeting is held in March prior to the “unmet transit needs” public hearing. This initial meeting is used to familiarize the members with their role as advisors to MCTC and to select Council officers. The second meeting is scheduled following the “unmet transit needs” hearing to provide the Council with an opportunity to consider commentary presented at the hearing. The Council works with staff to develop recommendations for MCTC towards finding that public transportation needs that are reasonable to meet are being met. This includes the needs of transit dependent and transit disadvantaged persons, including the elderly, disabled, and persons of limited means. All SSTAC meetings are open to the public. Citizens can request to be placed on the mailing list to receive committee agendas.

**2011 RTP; Public Participation Plan; Measure T; San Joaquin Valley Blueprint Consultation Invitation List  
– Plan Development Workshops**

AGENCY	DESCRIPT.	NAME	MAIL_ADDRESS	CITY	ST	ZIP
ADOBE REALTY	BUSINESS	RON PENNER	P.O. BOX 1307	MADERA	CA	93639
ADVANCED DRAINAGE SYSTEMS	BUSINESS		1025 COMMERCE DRIVE	MADERA	CA	93637
ALLWIRE, INC.	BUSINESS		16395 AVENUE 24 1/2	CHOWCHILLA	CA	93610
AMERICAN RIVER PACKAGING	BUSINESS		P.O. BOX 1267	MADERA	CA	93639
AZTEC MILLING, L.P.	BUSINESS		P.O. BOX 1107	MADERA	CA	93639
BALTIMORE AIRCOIL COMPANY	BUSINESS		P.O. BOX 960	MADERA	CA	93639
BOMANITE COPORTATION	BUSINESS		P.O. BOX 599	MADERA	CA	93639
BRAKE PART, INC.	BUSINESS		711 S. THIRD STREET	CHOWCHILLA	CA	93610
BRITZ FERTILIZERS, INC.	BUSINESS		11856 ROAD 29	MADERA	CA	93637
CANANDAIGUA WINE COMPANY	BUSINESS	MISSION BELL WINERY	P.O. BOX 99	MADERA	CA	93639
CANANDAIGUA WINE COMPANY	BUSINESS	PAUL MASSON CELLARS	22004 ROAD 24	MADERA	CA	93638
CARRIS REELS OF CALIFORNIA, INC.	BUSINESS		P.O. BOX 88	MADERA	CA	93639
CERTAINTED CORPORATION	BUSINESS		17775 AVENUE 23 1/2	CHOWCHILLA	CA	93610
COLD SPRING GRANITE COMPANY	BUSINESS	RAYMOND DIVISION	36772 ROAD 606	RAYMOND	CA	93653
COLOR-BOX	BUSINESS	A G-P & CSK JOINT VENT.	1275 S. GRANADA DRIVE	MADERA	CA	93637
COLUMBIA CANAL COMPANY	BUSINESS	RANDY HOUK	6770 AVE. 7 1/2	FIREBAUGH	CA	93622
DOMRIES ENTERPRISES, INC.	BUSINESS		12281 ROAD 29	MADERA	CA	93638
DRIP IN IRRIGATION/ TORO AG	BUSINESS		1850 W. ALMOND AVE	MADERA	CA	93637
EVAPCO	BUSINESS		P.O. BOX 959	MADERA	CA	93639
EXCHANGE CONTRACTORS	BUSINESS	STEVE CHEDESTER	P.O. BOX 2115	LOS BANOS	CA	93635
FLORESTONE PRODUCTS CO.	BUSINESS		2851 FALCON DRIVE	MADERA	CA	93637
FMC TECHONOLOGIES, INC.	BUSINESS		P.O. BOX A	MADERA	CA	93639
GEORGIA-PACIFIC CORPORATION	BUSINESS		24600 AVE. 13	MADERA	CA	93637
GOLDEN VALLEY GRAPE JUICE AND WINE	BUSINESS		11770 ROAD 27 1/2	MADERA	CA	93637
GOTTSCHALKS, INC.	BUSINESS		2900 AIRPORT DRIVE	MADERA	CA	93637
HMC DISPLAY	BUSINESS		300 COMMERCE DRIVE	MADERA	CA	93637
ISSUES MANAGEMENT NETWORK, INC.	BUSINESS	CHRISTINE LEWIS WIPFF	300 CORPORATE POIN, STE 383	CULVER CITY	CA	90230
KINGS VALLEY INDUSTRIES	BUSINESS		P.O. BOX 538	MADERA	CA	93639
KLEENRITE	BUSINESS		1122 MAPLE STREET	MADERA	CA	93637
LAMANUZZI AND PANTALEO	BUSINESS		11767 ROAD 27 1/2	MADERA	CA	93637
MADERA ASSOCIATION OF REALTORS	BUSINESS		401 W. OLIVE ST. #5	MADERA	CA	93637
MADERA COOPERATIVE GIN	BUSINESS		12501 ROAD 19	MADERA	CA	93637
MADERA QUALITY NUT	BUSINESS		425 S. PINE STREET, BLDG #6	MADERA	CA	93637
OUTBACK MATERIALS	BUSINESS		P.O. BOX 999	O'NEALS	CA	93645

PACIFIC GOLD MARKETING, INC.	BUSINESS		3451 YEAGER DRIVE	MADERA	CA	93637
REGENCY TERMOGRAPHERS	BUSINESS		P.O. BOX 6007	MADERA	CA	93639
RESOURCE MANAGEMENT COALITION	BUSINESS	JIM COBB	8805 N. HIGHWAY 41	FRESNO	CA	93721
ROYAL MADERA VINEYARDS	BUSINESS		7770 ROAD 33	MADERA	CA	93638
SAINT GOBAIN CONTAINERS	BUSINESS		2441 AVE. 12	MADERA	CA	93637
SAN JOAQUIN VALLEY BIA	BUSINESS	STEVE KRUEGER	8805 N. HIGHWAY 41	FRESNO	CA	93720
SEALED AIR CORP.	BUSINESS		1835 W. ALMOND AVE.	MADERA	CA	93637
STEEL STRUCTURES, INC	BUSINESS		P.O. BOX 1170	MADERA	CA	93639
SUNSWEEP DRYERS	BUSINESS		P.O. BOX 607	MADERA	CA	93639
TAXPAYERS ASSOCIATION OF MADERA CO.	BUSINESS		14266 BROOKHILL ROAD	MADERA	CA	93638
ULTRA GO PLANT FOOD CO.	BUSINESS		1043 SOUTH GRANADA DR.	MADERA	CA	93637
VALLEY PISTACHIO	BUSINESS		20865 AVENUE 20	MADERA	CA	93637
VICTOR PACKING COMPANY, INC.	BUSINESS		11687 ROAD 27 1/2	MADERA	CA	93637
WARNOCK FOOD PRODUCTS	BUSINESS		20237 MASA STREET	MADERA	CA	93638
YOSEMITE GATEWAY ASSOC. OF REALTORS	BUSINESS	DIAN JIANTS	P.O. BOX 480	OAKHURST	CA	93644
CALTRANS DISTRICT 06	CALTRANS	ALAN MCCUEN	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06	CALTRANS	MAC CAVALLI	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06	CALTRANS	MARC BIRNBAUM	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06	CALTRANS	MARGARET HOKOKIAN	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06	CALTRANS	MIKE LEONARDO	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06	CALTRANS	PAUL MARQUEZ	P.O. BOX 12616	FRESNO	CA	93778
CALTRANS DISTRICT 06 LOCAL ASSISTANCE	CALTRANS	TOM GLASKI	5156 N. BLACKSTONE	FRESNO	CA	93710
CALTRANS DIVISION OF PLANNING	CALTRANS	STAN RUBENSTEIN	P.O. BOX 942874	SACRAMENTO	CA	94274
CALTRANS DIVISION OF PLANNING	CALTRANS	TRUMAIN DOWNEY	P.O. BOX 942874	SACRAMENTO	CA	94274
CALTRANS DIVISION OF PROGRAMMING	CALTRANS	KRIS BALAJI	P.O. BOX 942874-MS 82	SACRAMENTO	CA	94274
CALTRANS ENVIRONMENTAL PROGRAM	CALTRANS	MIKE BRADY	P.O. BOX 942874 MS-27	SACRAMENTO	CA	94274
DEPARTMENT OF TRANSPORTATION	CALTRANS	RIC MORALES	P.O. BOX 942874	SACRAMENTO	CA	94273
BASS LAKE CHAMBER OF COMMERCE	CHAMBER COMM	JOHN YOUNGQUIST	54432 ROAD 432	BASS LAKE	CA	93604
CHOWCHILLA CHAMBER OF COMMERCE	CHAMBER COMM	BECKY WHITEHEAD	228 TRINITY AVENUE	CHOWCHILLA	CA	93610
EASTERN MADERA CO. CHAMBER OF COMMERCE	CHAMBER COMM	RUSS HOLCOMB	19074 CIVIC CIRCLE	OAKHURST	CA	93644
GOLDEN VALLEY CHAMBER OF COMMERCE	CHAMBER COMM	BILL WHYMAN	37167 AVENUE 12, SUITE 5C	MADERA	CA	93638
MADERA CHAMBER OF COMMERCE	CHAMBER COMM	DEBI BRAY	120 NORTH "E" STREET	MADERA	CA	93637
MADERA HISPANIC CHAMBER OF COMMERCE	CHAMBER COMM	MARK LOZADA	123 "D" STREET, SUITE D	MADERA	CA	93637
NORTH FORK CHAMBER OF COMMERCE	CHAMBER COMM	JIM FLANAGAN	P.O. BOX 426	NORTH FORK	CA	93643
CHOWCHILLA CITY HALL	CHOWCHILLA	AL GINSBURG	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CHOWCHILLA CITY HALL	CHOWCHILLA	RON HARRIS	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	AL LUCCHESI	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	DOUG LACKEY	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	ELLEN BITTER	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610

CITY OF CHOWCHILLA	CHOWCHILLA	GLEN IGO	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	JERRY BELTON	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	NANCY RED	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	TOM SKINNER	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
CITY OF CHOWCHILLA	CHOWCHILLA	WENDY SMITH	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
Asamblea Apostolica	CHURCH		16294 North D Street	Madera	CA	93638
Believers Church of Madera	CHURCH		300 South G Street	Madera	CA	93637
Believers Church of Madera	CHURCH		117 North East Street	Madera	CA	93638
Bethel Southern Baptist	CHURCH		15821 North D Street	Madera	CA	93638
Calvary Baptist Church	CHURCH		210 East Cleveland Avenue	Madera	CA	93638
Central California Ministries	CHURCH		1709 Howard Road	Madera	CA	93637
Christian Science Reading Room	CHURCH		1028 East Cleveland Avenue	Madera	CA	93638
Church of Christ	CHURCH		600 Orchard Avenue	Madera	CA	93637
Church of God	CHURCH		16424 North Lake Street	Madera	CA	93638
Church of God of Prophecy	CHURCH		16339 Owens Street	Madera	CA	93638
Church of Jesus Christ of LDS	CHURCH		2112 Sunset Avenue	Madera	CA	93637
Church of The Living God	CHURCH		1013 Sunrise Avenue	Madera	CA	93638
Church of The Living God	CHURCH		333 Stinson Avenue	Madera	CA	93638
Church of The Nazarene	CHURCH		1021 Austin Street	Madera	CA	93638
Clovis Free Methodist Church	CHURCH		1429 West Central Avenue	Madera	CA	93637
Community Bible Church	CHURCH		333 East Central Avenue	Madera	CA	93638
Delta Life	CHURCH		10204 Highway 41	Madera	CA	93638
East Side Church of God	CHURCH		1108 South A Street	Madera	CA	93638
Eastside Head Start	CHURCH		1108 South A Street	Madera	CA	93638
Ebenezer Apostolic Church	CHURCH		332 Magnolia Street	Madera	CA	93638
El Buen Samaritano	CHURCH		1033 East Kennedy Street	Madera	CA	93638
Emmanuel Temple Apostolic	CHURCH		16600 Raymond Road	Madera	CA	93638
Evangelical Free Church	CHURCH		16393 Chapin Street	Madera	CA	93638
Faith Tabernacle Church	CHURCH		745 North H Street	Madera	CA	93637
First Baptist Church	CHURCH		1111 West Yosemite Avenue	Madera	CA	93637
First Christian Church	CHURCH		2300 Sunset Avenue	Madera	CA	93637
First Southern Baptist Church	CHURCH		711 Nebraska Avenue	Madera	CA	93638
Fourth Street Church God	CHURCH		222 North North Street	Madera	CA	93637
Golden Valley Baptist Church	CHURCH		12414 Road 37	Madera	CA	93638
Gospel Tabernacle	CHURCH		401 South D Street	Madera	CA	93638
Grace Assembly of God	CHURCH		1201 East Yosemite Avenue	Madera	CA	93638
Harvest Community Church	CHURCH		2001 National Avenue	Madera	CA	93637
Hosanna Worship Center Bilingual	CHURCH		1033 East Kennedy Street	Madera	CA	93638
Hull Avenue Church of God	CHURCH		344 Hull Avenue	Madera	CA	93638



Iglesia Bautista El Calvario	CHURCH		201 East Cleveland Avenue	Madera	CA	93638
Jehovahs Witnesses	CHURCH		2701 Sunset Avenue	Madera	CA	93637
Jehovahs Witnesses	CHURCH		2799 Sunset Avenue	Madera	CA	93637
Knox Chapel Ame Zion Church	CHURCH		200 East 10th Street	Madera	CA	93638
Little Zion Baptist Church	CHURCH		667 Juanita,	Madera	CA	93638
Logos Ministries	CHURCH		1003 Valley Way	Madera	CA	93637
Madera Avenue Bible Church	CHURCH		124 Walnut Street	Madera	CA	93637
Madera Christian Fellowship	CHURCH		160 Dwyer Street	Madera	CA	93637
Madera Freewill Baptist Church	CHURCH		15603 Watson Street	Madera	CA	93638
Madera Islamic Center	CHURCH		16634 Road 26	Madera	CA	93638
Madera Valley Religious SCNC	CHURCH		17326 Road 26	Madera	CA	93638
Morning Star Baptist Church	CHURCH		16587 Harper Boulevard	Madera	CA	93638
MT Zion Baptist Church	CHURCH		332 Wallace Avenue	Madera	CA	93638
New Covenant Baptist Church	CHURCH		18456 Road 21	Madera	CA	93637
New Harvest Christian	CHURCH		510 North Gateway Drive	Madera	CA	93637
Open Up Your Heart Marian Mir	CHURCH		323 West Fifth Street	Madera	CA	93637
Parksdale Southern Baptist	CHURCH		13444 Road 29	Madera	CA	93638
Pentecostal Church of God	CHURCH		15877 North D Street	Madera	CA	93638
Second Baptist Church	CHURCH		828 South A Street	Madera	CA	93638
Seventh Day Adventist Church	CHURCH		520 North North Street	Madera	CA	93637
South Side Assembly of God	CHURCH		13273 Wood Street	Madera	CA	93638
ST Joachims Catholic Church	CHURCH		401 West Fifth Street	Madera	CA	93637
Sunrise Church of God Christ	CHURCH		1125 Sunrise Avenue	Madera	CA	93638
TLC Fellowship	CHURCH		15048 Monreal Road	Madera	CA	93638
Trinity Episcopal Church	CHURCH		224 North A Street	Madera	CA	93638
Trinity Episcopal Church	CHURCH		420 East Fourth Street	Madera	CA	93638
United Methodist Church	CHURCH		500 Sunset Avenue	Madera	CA	93637
Valley Church	CHURCH		1930 Howard Road	Madera	CA	93637
MADERA COALITION FOR COMMUNITY JUSTICE	COMM ACTV	MARIA RIOS	P.O. BOX 817	MADERA	CA	93639
MADERA COMMUNITY ACTION AGENCY	COMM ACTV	MJ NABORS	1200 MAPLE STREET	MADERA	CA	93637
MADERANS MAKING A DIFFERENCE	COMM ACTV	MIKE FULLER	P.O. BOX 1312	MADERA	CA	93639
RESOURCE MANAGEMENT COALITION	COMM ACTV	LYNN SKINNER	19767 N. HUDSON	DOS PALOS	CA	93620
AHWAHNEE COMMUNITY COUNCIL	COMM DEV	VERN FACCHINO	43736 HWY 49	AHWAHNEE	CA	93614
COARSEGOLD AREA PLAN COMMITTEE	COMM DEV	DIANE BOLAND	P.O. BOX 1514	COARSEGOLD	CA	93614
ECONOMIC DEVELOPMENT COMISSION	COMM DEV	BOBBY KAHN	2425 WEST CLEVELAND AVE STE 101	MADERA	CA	93637
ROLLING HILLS CITIZENS ASSOCIATION	COMM DEV	JAN DEWOODY	10293 ROLLING HILLS DRIVE	MADERA	CA	93638
YOSEMITE SIERRA VISITOR'S BUREAU	COMM DEV	DOUG LUNDBERG	41961 HWY 41	OAKHURST	CA	93644
EARTH MATTER	CONSULTANT	BARBARA JOY	P.O. BOX 1118	JEROME	AZ	86331
EARTH MATTER	CONSULTANT	CARI ANDERSON	1023 E. MONTEBELLO AVE.	PHEONIX	AZ	85014

GIERSCH & ASSOCIATES, INC.	CONSULTANT		421 NORTH "I" STREET	MADERA	CA	93637
MOY AND ASSOCIATES	CONSULTANT	ELLEN MOY	6082 MILLERTON ROAD	FRIANT	CA	93626
NOLTE ASSOCIATES, INC.	CONSULTANT	RON PISEL	1930 HOWARD ROAD, STE H	MADERA	CA	93637
VRPA TECHNOLOGIES	CONSULTANT	GEORGIENA VIVIAN	4630 WEST JENNIFER STE 105	FRESNO	CA	93722
CHOWCHILLA PUBLIC LIBRARY	COUNTY		300 KINGS STREET	CHOWCHILLA	CA	93610
DEPARTMENT OF SOCIAL SERVICES	COUNTY	BILL MARTIN	P.O. BOX 569	MADERA	CA	93639
MADERA CO. COMMUNITY ACTION AGENCY	COUNTY	MARY LONG	1200 MAPLE STREET	MADERA	CA	93637
MADERA CO. DEPT. OF PUBLIC WELFARE	COUNTY	PAMELA HANSEN	700 EAST YOSEMITE AVE.	MADERA	CA	93639
MADERA CO. GOVERNMENT CENTER	COUNTY	BOB DEWALL	209 WEST YOSEMITE AVENUE	MADERA	CA	93637
MADERA CO. GOVERNMENT CENTER	COUNTY	BONNIE HOLIDAY	209 WEST YOSEMITE AVENUE	MADERA	CA	93637
MADERA CO. GOVERNMENT CENTER	COUNTY	Frank Bigelow	211 WEST YOSEMITE AVENUE	MADERA	CA	93637
Madera Co. Government Center	COUNTY	Gary Gilbert	209 West Yosemite Ave.	Madera	CA	93637
MADERA CO. GOVERNMENT CENTER	COUNTY	JOHN SILVA	209 WEST YOSEMITE AVENUE	MADERA	CA	93637
MADERA CO. GOVERNMENT CENTER	COUNTY	Ronn Dominici	209 WEST YOSEMITE AVENUE	MADERA	CA	93637
MADERA CO. GOVERNMENT CENTER	COUNTY	Vern Moss	210 WEST YOSEMITE AVENUE	MADERA	CA	93637
MADERA CO. PLANNING DEPARTMENT	COUNTY	DAVE HERB	135 WEST YOSEMITE AVE.	MADERA	CA	93637
MADERA CO. RESOURCE MGMT. AGENCY	COUNTY	DAVE MERCHAN	2037 Cleveland Ave.	MADERA	CA	93637
MADERA CO. RESOURCE MGMT. AGENCY	COUNTY	KATHY KIVLEY	2037 Cleveland Ave.	Madera	CA	93637
MADERA CO. RESOURCE MGMT. AGENCY	COUNTY	Larry Colucci	2037 Cleveland Ave.	Madera	CA	93637
MADERA CO. RESOURCE MGMT. AGENCY	COUNTY	Robert Townsend	2037 Cleveland Ave.	Madera	CA	93637
MADERA CO. SHERIFF'S DEPARTMENT	COUNTY	JOHN ANDERSON	14143 Road 28	MADERA	CA	93638
MADERA CO. WELFARE DEPT. - C.P.S.	COUNTY	JEAN WELTON	P.O. BOX 569	MADERA	CA	93639
MADERA CO. WORK FORCE DEVELOPMENT	COUNTY	HERMAN PEREZ	209 EAST 7TH STREET	MADERA	CA	93637
MADERA COUNTY COUNSEL	COUNTY	DOUG NELSON	333 WEST OLIVE AVENUE	MADERA	CA	93637
MADERA COUNTY HEALTH DEPARTMENT	COUNTY	ANNE HARRIS	14215 ROAD 28	MADERA	CA	93638
MADERA COUNTY HEALTH DEPARTMENT	COUNTY	CHERYL EDGAR	14215 ROAD 28	MADERA	CA	93638
MADERA COUNTY OFFICES ADMINISTRATION	COUNTY	STELL MANFREDI	333 WEST OLIVE AVENUE	MADERA	CA	93637
MADERA COUNTY TRANSPORTATION COMMISSION	COUNTY	DEREK WINNING	1816 HOWARD ROAD, STE 8	MADERA	CA	93637
MADERA COUNTY TRANSPORTATION COMMISSION	COUNTY	PATRICIA TAYLOR-MALEY	1816 HOWARD ROAD, STE 8	MADERA	CA	93637
MADERA HOUSING AUTHORITY	COUNTY	CHRISTINE RICHARDS	205 NORTH G STREET	MADERA	CA	93637
MADERA PUBLIC LIBRARY (MAIN)	COUNTY		121 NORTH "G" STREET	MADERA	CA	93637
MADERA RANCHOS PUBLIC LIBRARY	COUNTY		37167 AVE 12 SUITE 4C	MADERA	CA	93638
MADERA REDEVELOPMENT AGENCY	COUNTY	JIM TAUBERT	5 EAST YOSEMITE AVE	MADERA	CA	93638
NORTH FORK PUBLIC LIBRARY	COUNTY		32908 ROAD 200	North Fork	CA	93643
OAKHURST PUBLIC LIBRARY	COUNTY		49044 CIVIC CIRCLE DRIVE	OAKHURST	CA	93644
Office of the County Counsel	COUNTY	DAVE PRENTICE	333 WEST OLIVE AVENUE	MADERA	CA	93637
SOL DEVELOPMENT ASSOC., LLC	COUNTY	AL SOLIS	2344 TULARE ST., SUITE 301	FRESNO	CA	93721
	COUNTY	DARWIN SHEBELUT	206 REDWOOD DRIVE	MADERA	CA	93637

	COUNTY	HARLEN RIPPETOE	18865 SHORE DRIVE	MADERA	CA	93638
	COUNTY	JOHN NORBY	P.O. BOX 155	NORTH FORK	CA	93643
Community Integrated Work Program	DISABLED		980 Emily Way	Madera	CA	93637
HEARTLAND OPPORTUNITY CENTER	DISABLED	BOB HAND	323 NORTH "E" STREET, STE 2	MADERA	CA	93638
HEARTLAND OPPORTUNITY CENTER	DISABLED	MAUREEN ROSIERE	324 NORTH "E" STREET	MADERA	CA	93638
CENTRAL CA IRRIGATION DISTRICT	FARM	CHRIS WHITE	P.O. BOX 1231	LOS BANOS	CA	93635
CENTRAL CA IRRIGATION DISTRICT	FARM	JOHN FAWCETT	P.O. BOX 1231	LOS BANOS	CA	93635
FRIANT WATER USER AUTHORITY	FARM	KOLE UPTON	P.O. BOX 575	CHOWCHILLA	CA	93610
MADERA COUNTY FARM BUREAU	FARM	JASON BALDWIN	1102 SOUTH PINE STREET	MADERA	CA	93637
MADERA IRRIGATION DISTRICT	FARM	SCOTT OTTEMELLER	12152 ROAD 28 1/4	MADERA	CA	93637
WATER OVERSIGHT COMMITTEE	FARM	DENNIS PROSPERI	22307 AVE. 13	Madera	CA	93637
OFFICE OF THE GOVERNOR	FED/STATE REPS	ARNOLD SCHWARTZENEGGER	2550 MARIPOSA MALL, STE 3013	FRESNO	CA	93721
	FED/STATE REPS	BARBARA BOXER	1130 "O" STREET, STE 2450	FRESNO	CA	93721
	FED/STATE REPS	CHARLES POOCHIGIAN	4974 E. CLINTON, STE 100	FRESNO	CA	93727
	FED/STATE REPS	DAVID COGDILL	1912 STANDIFORD AVE, STE 4	MODESTO	CA	95350
	FED/STATE REPS	DENNIS CARDOZA	1321 "I" STREET, STE 1	MODESTO	CA	95354
	FED/STATE REPS	DIANE FEINSTEIN	1130 "O" STREET, STE 2446	FRESNO	CA	93721
	FED/STATE REPS	GEORGE RADANOVICH	2350 WEST SHAW AVE, STE 137	FRESNO	CA	93711
	FED/STATE REPS	JEFF DENHAM	1620 N. CARPENTER ROAD, STE A-4	MODESTO	CA	95351
	FED/STATE REPS	STEVE SAMUELIAN	83 EAST SHAW AVE., STE 202	FRESNO	CA	93710
Alternative Child Care Program	HEALTH		1930 Modoc Street	Madera	CA	93637
AMERICAN CANCER SOCIETY	HEALTH	DOREEN MURPHY	425 N. GATEWAY, SUITE C	MADERA	CA	93637
DARIN M. CAMARENA HEALTH CENTER	HEALTH	MARY MURPHY	344 EAST 6TH STREET	MADERA	CA	93637
DARIN M. CAMARENA HEALTH CENTERS, INC.	HEALTH	MARY MURPHY	201 SOUTH "B" STREET	MADERA	CA	93638
DARIN M. CAMARENA HEALTH CENTERS, INC.	HEALTH	PAMELA RANK	P.O. BOX 299	MADERA	CA	93639
KINGS VIEW	HEALTH	JOSEPH SEBASTIAN	P.O. BOX 1288	MADERA	CA	93639
MADERA CO. DEPT. OF SOCIAL SERVICES	HEALTH	KAY HAWORTH	629 E. YOSEMITE AVE	MADERA	CA	93639
MADERA CO. PUBLIC HEALTH DEPT.	HEALTH	CAROL BARNEY	114215 ROAD 28	MADERA	CA	93638
MADERA COUNSELING SERVICES	HEALTH	DALE LEWIS	14277 ROAD 28	MADERA	CA	93638
MADERA COUNTY DEPT. OF SOCIAL SERVICES	HEALTH	JANET KEEZER	P.O. BOX 569	MADERA	CA	93638
MADERA COUNTY MENTAL HEALTH DEPT.	HEALTH	JANICE MELTON	14277 ROAD 28	MADERA	CA	93638
MADERA COUNTY PUBLIC HEALTH DEPT.	HEALTH	BRIANA GROGG	14215 ROAD 28	MADERA	CA	93638
MADERA COUNTY SOCIAL SERVICES DEPT.	HEALTH	SUSAN ARTEAGA	629 E. YOSEMITE AVE.	MADERA	CA	93637
MCH HOME HEALTH AGENCY	HEALTH	JAN DAHLKE	360 E. ALMOND AVE. #101	MADERA	CA	93638
PACIFIC FAMILY HEALTH	HEALTH	MADERA DIALYSIS	2666 N. GROVE INDUSTRIAL DRIVE	FRESNO	CA	93727
Self Help Enterprises	HEALTH		2413 West Cleveland Ave	Madera	CA	93638
Yosemite Women's Center	HEALTH		424 N. Gateway Drive	Madera	CA	93637
	INDIVIDUAL	CHUCK LEAVITT	42651 SPRINGWOOD	OAKHURST	CA	93644

	INDIVIDUAL	DALE EVANS	29539 HIGHWAY 145	MADERA	CA	93637
	INDIVIDUAL	DINO PETRUCCI	13571 ROAD 23 1/2	MADERA	CA	93637
	INDIVIDUAL	FREDERIC MARTIN	966 SUMMER SET LANE	MADERA	CA	93637
	INDIVIDUAL	GLORIA MEDINA	P.O. BOX 1115	MADERA	CA	93639
	INDIVIDUAL	GWEN GADBERRY	40239 REDBUD DR.	OAKHURST	CA	93644
	INDIVIDUAL	ISABEL RAJAN	36660 HIGHWAY 41	COARSEGOLD	CA	93614
	INDIVIDUAL	LORETTA CASTRO	323 S. "L" STREET	MADERA	CA	93637
	INDIVIDUAL	MERLE ANDERSON	37020 AVE 12 1/4	MADERA	CA	93638
	INDIVIDUAL	MODESTA AVILA	1160 IOWA STREET	MADERA	CA	93638
	INDIVIDUAL	NOREEN MCDONALD	19 COTTON MT. ROAD	WOLFEBORO	NH	03894
	INDIVIDUAL	RON GEORGE	45144 MOCKINGBIRD LANE	OAKHURST	CA	93644
CALIFORNIA HIGHWAY PATROL	LAW	LT. DAVE PARIS	P.O. BOX 217	MARIPOSA	CA	95338
CALIFORNIA HIGHWAY PATROL	LAW	OFFICER CROSSON	3051 AIRPORT DRIVE	MADERA	CA	93637
CRLA	LAW	MARTHA MORENO	1001 YOSEMITE, DEPARTMENT 11	MADERA	CA	93638
United Way of Madera County	LOW INCOME		1834 Howard Road, Ste. 8	Madera	CA	93637
CITY OF MADERA	MADERA	ANTHONY DOCTO	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	BOB BROWN	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	GARY SVANDA	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	GORDON SKEELS	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	JOHN WELLS	205 WEST 4TH STREET	MADERA	CA	93637
City of Madera	MADERA	Larry Red	205 West 4TH Street	Madera	CA	93637
CITY OF MADERA	MADERA	LES JORGENSON	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	MJ NABORS	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA	MADERA	SAM ARMENTROUT	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA ADMINISTRATION	MADERA	DAVE TOOLEY	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA FINANCE	MADERA	WAYNE PADILLA	205 WEST 4TH STREET	MADERA	CA	93637
CITY OF MADERA PUBLIC WORKS DEPT.	MADERA	MARK ETHRIDGE	130 S. GATEWAY DRIVE	MADERA	CA	93637
CHOWCHILLA NEWS	MEDIA		340 W. ROBERTSON BLVD.	CHOWCHILLA	CA	93610
MADERA RANCHOS INDEPENDENT	MEDIA	WILLIAM BELL	34686 AVE. 15	MADERA	CA	93638
MADERA TRIBUNE	MEDIA		100 EAST 7TH STREET	MADERA	CA	93637
SIERRA STAR	MEDIA		P.O. BOX 305	OAKHURST	CA	93644
FRESNO BEE	MEDIA	ATTN: JIM ORR	1626 "E" STREET	FRESNO	CA	93786
American Association of Retired Persons	OLDER ADULT	Pauline Werner	2713 Monocott Drive	Madera	CA	93637
Chowchilla Senior Center	OLDER ADULT	Shirley Hunter	820 Robertson Blvd.	Chowchilla	CA	93610
Coarsegold Community Center	OLDER ADULT	Wanda Stevens	35610 Hwy 41	Coarsegold	CA	93614
Frank A. Bergon Senior Center	OLDER ADULT	Corinee Long-Folk	238 South "D" Street	Madera	CA	93637
FRESNO/MADERA AGENCY ON AGING	OLDER ADULT	BILL DAILEY	1011 EAST ASHLAN, APT. 105	FRESNO	CA	93704
FRESNO/MADERA AGENCY ON AGING	OLDER ADULT	JO JOHNSON	2220 TULARE STREET, STE 1200	FRESNO	CA	93721
Madera Adult Day Care & Respite Center	OLDER ADULT	Corinee Long-Folk	322 W. 6th Street	Madera	CA	93637

MADERA CO. COUNCIL ON AGING	OLDER ADULT	GUY WARTON JR.	1030 S. GATEWAY DRIVE	MADERA	CA	93637
North Fork Community Center	OLDER ADULT	Betty Lyons	56446 Road 200	North Fork	CA	93647
OAKHURST SIERRA SENIOR CARE	OLDER ADULT	JOANNE FOSTER	P.O. BOX 122	OAKHURST	CA	93644
Pan-Am Communtiy Center	OLDER ADULT	Jennifer Clark	703 E. Sherwood Way	Madera	CA	93638
RANCHOS HILLS SENIORS	OLDER ADULT	ETHEL PRONIN	37300 BERSHIRE DRIVE	MADERA	CA	93638
Ranchos/Hills Senior Center	OLDER ADULT	Joann Blancett	37330 Berkshire Drive	Madera	CA	93638
Sierra Senior Center-Oakhurst	OLDER ADULT	JoAn Foster	49111 Cinder Lane	Oakhurst	CA	93644
CA DEPT. OF FORESTRY	PARKS	STAN CRAIG	14225 ROAD 28	MADERA	CA	93638
CALIFORNIA DEPARTMENT OF FORESTRY	PARKS		14225 ROAD 28	MADERA	CA	93638
MADERA PARKS AND COMMUNITY SERVICES	PARKS	DIANE LEWIS	1030 SOUTH GATEWAY DRIVE	MADERA	CA	93637
COUNCIL OF FRESNO COUNTY GOVERNMENTS	RTPA	BARBARA GOODWIN	2100 TULARE STREET, STE 619	FRESNO	CA	93721
COUNTY OF FRESNO	RTPA	PHIL DESATOFF	2220 TULARE STREET, 6TH FLOOR	FRESNO	CA	93720
KERN COUNCIL OF GOVERNMENTS	RTPA	RON BRUMMETT	1401 19TH STREET, SUITE 300	BAKERSFIELD	CA	93301
KINGS CO. ASSOC. OF GOVERNMENTS	RTPA	BILL ZUMWALT	1400 WEST LACY BLVD.	HANFORD	CA	93230
KINGS CO. ASSOC. OF GOVERNMENTS	RTPA	TERRY KING	1400 WEST LACY BLVD.	HANFORD	CA	93230
MERCED CO. ASSOC. OF GOVERNMENTS	RTPA	JESSE BROWN	369 WEST 18TH STREET	MERCED	CA	95340
SAN JOAQUIN COUNCIL OF GOVERNMENTS	RTPA	JULIA GREENE	6 SOUTH EL DORADO, SUITE 400	STOCKTON	CA	95202
STANISLAUS COUNCIL OF GOVERNMENTS	RTPA	GARY DICKSON	900 "H" STREET, STE D	MODESTO	CA	95354
TULARE COUNTY ASSOC. OF GOVERNMENT	RTPA	GEORGE FINNEY	COUNTY CIVIC CENTER ROOM 10	VISALIA	CA	93291
BASS LAKE SCHOOL DISTRICT	SCHOOL	DR. MCCHESEY	40096 INDIAN SPRINGS ROAD	OAKHURST	CA	93644
GOLDEN VALLEY UNIFIED SCHOOL DISTR.	SCHOOL		37479 AVENUE 12	MADERA	CA	93638
MADERA CO. SUPERINTENDENT OF SHOOLS	SCHOOL	SALLY FRAZIER EDD.	28123 AVENUE 14	MADERA	CA	93638
MADERA UNIFIED SCHOOL DISTRICT	SCHOOL	JULIA O'KANE EDD	1902 HOWARD ROAD	MADERA	CA	93637
MADERA UNIFIED SCHOOL DISTRICT	SCHOOL	LARRY RISINGER	1902 HOWARD ROAD	MADERA	CA	93637
MINARETTES SCHOOL DISTRICT	SCHOOL	PHIL PINLEY	33173 ROAD 222	NORTH FORK	CA	93643
STATE CENTER COMMUNITY COLLEGE DIST.	SCHOOL	DON C. YEAGER, PH.D.	30277 AVENUE 12	MADERA	CA	93638
STATE CENTER COMMUNITY COLLEGE DIST.	SCHOOL	RICHARD HOFFMAN EDD	P.O. BOX 1910	OAKHURST	CA	93644
YOSEMITE HIGH SCHOOL	SCHOOL	BILL MCCABE	50200 ROAD 427	OAKHURST	CA	93644
CALIFORNIA AIR RESOURCES BOARD	STATE/ FED GOV'T	DOUG ITO	P.O. BOX 2815	SACRAMENTO	CA	95812
FEDERAL TRANSIT ADMINISTRATION	STATE/ FED GOV'T	PAUL PAGE	201 MISSION STREET, ROOM 2210	SAN FRANCISCO	CA	94105
FHWA	STATE/ FED GOV'T	LEIGH LEVINE	980 9TH STREET, STE 400	SACRAMENTO	CA	95814
FHWA	STATE/ FED GOV'T	MICHELLE FULLER	980 9TH STREET, STE 400	SACRAMENTO	CA	95814
FRESNO COUNTY B.O.S.	STATE/ FED GOV'T	BOB WATERSTON	2281 TULARE ST. ROOM 301	FRESNO	CA	93721
MERCED B.O.S.	STATE/ FED GOV'T	DEIDRE KELSEY	2222 M. STREET	MERCED	CA	95340
OFFICE OF FEDERAL TRANSP. --FTIP BRANCH	STATE/ FED GOV'T	RAMBABU BAVIRISETTY	P.O. BOX 942874-MS 82	SACRAMENTO	CA	94274

S.J.V.A.P.C.D	STATE/ FED GOV'T	DAVE CROW	1990 E. GETTYSBURG AVE.	FRESNO	CA	93726
S.J.V.A.P.C.D	STATE/ FED GOV'T	RENEE DEVERE	1990 E. GETTYSBURG AVE.	FRESNO	CA	93726
S.J.V.A.P.C.D	STATE/ FED GOV'T	TOM JORDAN	1990 . GETTYSBURG AVE.	FRESNO	CA	93726
U.S. EPA MOBILE SOURCE SECTION	STATE/ FED GOV'T	MARK BRUCKER	75 HAWTHORNE STREET, A-2-1	SAN FRANCISCO	CA	94105
CATX	TRANSIT	SUNNIE DIXON	145 ROBERTSON BLVD.	CHOWCHILLA	CA	93610
LAIDLAW TRANSIT	TRANSIT	MANNY VALDEZ	123 NORTH "E" STREET, #102	MADERA	CA	93638
NORTH FORK MONO RANCHERIA	TRIBAL	ALEX FLOREZ	P.O. BOX 929	NORTH FORK	CA	93643
NORTH FORK MONO RANCHERIA	TRIBAL	DELORIS ROBERTS	P.O. BOX 929	NORTH FORK	CA	93643
NORTH FORK MONO RANCHERIA	TRIBAL	TOM PISANO	P.O. BOX 929	NORTH FORK	CA	93643
NORTH FORK MONO TRIBE	TRIBAL	HONORABLE RON GOODE	133 SIERRA	CLOVIS	CA	93612
PICAYUNE RANCHERIA	TRIBAL	HONORABLE DIXIE JACKSON	46575 ROAD 417	COARSEGOLD	CA	93614
PICAYUNE RANCHERIA	TRIBAL	SAMUEL ELIZONDO	46575 ROAD 417	COARSEGOLD	CA	93614
PICAYUNE RANCHERIA	TRIBAL	YVONNE MUMA-MCCARTY	P.O. BOX 269	COARSEGOLD	CA	93614
SIERRA MONO INDIAN MUSEUM	TRIBAL		P.O. BOX 275	NORTH FORK	CA	93643

## 2011 RTP & EIR Circulation and Consultation; Public Participation Plan; Measure T; San Joaquin Valley Blueprint Consultation – Resource Agency Consultation Workshop Invitation List

### Federal Bureau of Reclamation

Klamath Basin Area Office	660 Washburn Way	Klamath Falls, OR 97603	541-883-6935	<a href="http://www.usbr.gov/mp/kbao/">www.usbr.gov/mp/kbao/</a>
Northern California Area Office	16349 Shasta Dam Blvd. 705 N. Plaza Street, Room 320	Shasta Lake, CA 96019	530-2751554	<a href="http://www.usbr.gov/mp/ncao/">www.usbr.gov/mp/ncao/</a>
Lahontan Basin Area Office	7794 Folsom Dam Rd	Carson City, NV 89701	775-882-3436	<a href="http://www.usbr.gov/mp/lbao/">www.usbr.gov/mp/lbao/</a>
Central California Area Office	7794 Folsom Dam Rd	Folsom, CA 95630	559-487-5116	<a href="http://www.usbr.gov/mp/ccao/">www.usbr.gov/mp/ccao/</a>
South-Central California Area Office	1243 N. Street	Fresno, CA 93721-1813	559-487-5116	<a href="http://www.usbr.gov/mp/sccao/">www.usbr.gov/mp/sccao/</a>
Southern Calif. Area Office	27708 Jefferson Ave., Suite 202	Temecula, CA 92590	951-695-5310	<a href="http://www.usbr.gov/lc/socal/">www.usbr.gov/lc/socal/</a>

### Federal Bureau of Land Management

California State Office	2800 Cottage Way 708 W. 12th Street	Sacramento, CA 95825 Alturas, CA 96101	916-978-4630 530-233-4666	<a href="http://www.blm.gov/ca/">www.blm.gov/ca/</a> <a href="http://www.blm.gov/ca/alturas/">www.blm.gov/ca/alturas/</a>
Alturas Field Office	1695 Heindon Road	Arcata, CA 95521-4573	707-825-2300	<a href="http://www.blm.gov/ca/arcata/">www.blm.gov/ca/arcata/</a>
Arcata Field Office	3801 Pegasus Drive 2601 Barstow Road	Bakersfield, CA 93308-6837 Barstow, CA 92311	661-391-6000 760-251-4800	<a href="http://www.blm.gov/ca/bakersfield/">www.blm.gov/ca/bakersfield/</a> <a href="http://www.blm.gov/ca/barstow/">www.blm.gov/ca/barstow/</a>
Bakersfield District Office	351 Pacu Lane, Suite 100 6221 Box Springs Blvd.	Bishop, CA 93514 Riverside, CA 92507	760-872-5050 909-697-5200	<a href="http://www.blm.gov/ca/bishop/">www.blm.gov/ca/bishop/</a> <a href="http://www.blm.gov/ca/cdd/">www.blm.gov/ca/cdd/</a>
Barstow Field Office				
Bishop Field Office				
California Desert District Office				

Eagle Lake Resources Area	2950 Riverside Drive	Susanville, CA 96130	530-257-0456	<a href="http://www.blm.gov/ca/eaglelake/">www.blm.gov/ca/eaglelake/</a>
El Centro Field Office	1661 South Fourth Street	El Centro, CA 92243	760-337-4400	<a href="http://www.blm.gov/ca/elcentro/">www.blm.gov/ca/elcentro/</a>
Folsom Field Office	63 Natoma Street	Folsom, CA 95630	916-985-4474	<a href="http://www.blm.gov/ca/folsom/">www.blm.gov/ca/folsom/</a>
Hollister Field Office	20 Hamilton Court	Hollister, CA 95023	831-630-5000	<a href="http://www.blm.gov/ca/hollister/">www.blm.gov/ca/hollister/</a>
Needles Field Office	101 W. Spikes Road	Needles, CA 92363	760-326-7000	<a href="http://www.blm.gov/ca/needles/">www.blm.gov/ca/needles/</a>
Palm Springs South Coast Field Office	690 W. Garnet Ave.	North Palm Springs, CA 92258	760-251-4800	<a href="http://www.blm.gov/ca/palmsprings/">www.blm.gov/ca/palmsprings/</a>
Redding Field Office	355 Hemsted Drive	Redding, CA 96002	530-224-2100	<a href="http://www.blm.gov/ca/redding/">www.blm.gov/ca/redding/</a>
Ridgecrest Field Office	300 S. Richmond Road	Ridgecrest, CA 93555	760-384-5400	<a href="http://www.blm.gov/ca/ridgecrest/">www.blm.gov/ca/ridgecrest/</a>
Surprise Field Office	602 Cressler Street	Cedarville, CA 96104	530-279-6101	<a href="http://www.blm.gov/ca/surprise/">www.blm.gov/ca/surprise/</a>
Ukiah Field Office	2550 North State Street	Ukiah, CA 95482	707-468-4000	<a href="http://www.blm.gov/ca/ukiah/">www.blm.gov/ca/ukiah/</a>

**U.S. Fish & Wildlife Service**

Klamath Fish and Wildlife Office	6610 Washburn Way	Klamath Falls, ORE 97603	541-885-8481	<a href="http://www.fws.gov/klamathfallsfwo">http://www.fws.gov/klamathfallsfwo</a>
Ventura Fish and Wildlife Office	2493 Portola Road, Suite B	Ventura, CA 93003-7726	805-644-1766	<a href="http://www.fws.gov/ventura/">www.fws.gov/ventura/</a>
Carlsbad Fish and Wildlife Office	2730 Loker Avenue West	Carlsbad, CA 92008-6603	760-431-9440	<a href="http://www.fws.gov/carlsbad/">www.fws.gov/carlsbad/</a>
Aracta Fish and Wildlife Office	1655 Heindon Road	Aracta, CA 95521-5585	707-822-7201	<a href="http://www.fws.gov/arcata/">www.fws.gov/arcata/</a>
Sacramento Fish and Wildlife Office	2800 Cottage Way, Room W-2605	Sacramento, CA 95825-1846	916-414-6600	<a href="http://www.fws.gov/sacramento/">www.fws.gov/sacramento/</a>
Red Bluff Fish and Wildlife Office	10950 Tyler Road	Red Bluff, CA 96080	530-527-3043	<a href="http://www.fws.gov/redbluff/">www.fws.gov/redbluff/</a>
Yreka Fish and Wildlife Office	1829 South Oregon Street	Yreka, CA 96097	530-842-5763	<a href="http://www.fws.gov/yreka/">www.fws.gov/yreka/</a>



Stockton Fish and Wildlife Office	4001 N. Wilson Way	Stockton, CA 95205	209-946-6400	<a href="http://www.delta.dfg.ca.gov/usfws/">www.delta.dfg.ca.gov/usfws/</a>
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### **U.S. Army Corps of Engineers**

Los Angeles District	911 Wilshire Blvd.	Los Angeles, CA 90053-2325	213-452-3425	<a href="http://www.spl.usace.army.mil/">www.spl.usace.army.mil/</a>
Sacramento District	1325 J Street	Sacramento, CA 95814-2922	916-557-5100	<a href="http://www.spk.usace.army.mil/">www.spk.usace.army.mil/</a>
San Francisco District	333 Market Street	San Francisco, CA 94105	415-977-4862	<a href="http://www.spn.usace.army.mil/">www.spn.usace.army.mil/</a>

### **NOAA National Marine Fisheries Service**

Southwest Regional	501 West Ocean Blvd.	Long Beach, CA 90802-4213	562-980-4000	<a href="http://swr.nmfs.noaa.gov/">http://swr.nmfs.noaa.gov/</a>
Santa Rosa	777 Sonoma Ave, Room 325	Santa Rosa, CA 95404	707-575-6050	<a href="http://swr.nmfs.noaa.gov/sroprd.htm">http://swr.nmfs.noaa.gov/sroprd.htm</a>
Arcata	1655 Heindon Road	Arcata, CA 95521	707-825-5163	
Sacramento	650 Capitol Mall, Suite 6070	Sacramento, CA 95814-4706	916-930-3600	<a href="http://swr.nmfs.noaa.gov/sac/index.htm">http://swr.nmfs.noaa.gov/sac/index.htm</a>

### **National Parks**

Redwood National Park	1111 Second Street	Crecent City 95531	707-464-6101	<a href="http://www.nps.gov/redw">http://www.nps.gov/redw</a>
Lava Beds National Monument	1 Indian Wells HQTRS	Tulelake 96134	530-667-8100	<a href="http://www.nps.gov/labe">http://www.nps.gov/labe</a>
Lassen National Park	PO Box 100	Mineral 96063	530-595-4444	<a href="http://www.nps.gov/lavo">http://www.nps.gov/lavo</a>
Point Reyes National Seashore	1 Bear Valley Road	Point Reyes Station 94956	415-464-5100	<a href="http://www.nps.gov/pore">http://www.nps.gov/pore</a>
Yosemite National Park	PO Box 577 Muir Woods	Yosemite 95389	209-372-0200	<a href="http://www.nps.gov/yose">http://www.nps.gov/yose</a>
Muir Wood National Monument	National Monument	Mill Valley 94941	415-388-2596	<a href="http://www.nps.gov/jomu/">http://www.nps.gov/jomu/</a>

Devils Postpile National Monument	PO Box 3999	Mammoth Lakes 93546	760-934-2289	<a href="http://www.nps.gov/depo">http://www.nps.gov/depo</a>
Death Valley National Park	PO Box 579	Death Valley 92328	760-7863200	<a href="http://www.nps.gov/deva">http://www.nps.gov/deva</a>
Kings Canyon - Sequoia National Parks	47050 Generals Highway	Three Rivers 93271	559-565-3341	<a href="http://www.nps.gov/seki">http://www.nps.gov/seki</a>
Pinnacles National Monument	5000 Highway 146	Paicines 95043	831-389-4485	<a href="http://www.nps.gov/pinn">http://www.nps.gov/pinn</a>
East Mojave National Park	2701 Barstow Road	Barstow 92311	760-252-6100	<a href="http://www.nps.gov/moja">http://www.nps.gov/moja</a>
Joshua Tree National Park	74485 National Park Drive	Twentynine Palms 92277	760-367-5502	<a href="http://www.nps.gov/jotr">http://www.nps.gov/jotr</a>
Channel Islands National Park	1901 Spinnaker Drive	Ventura 93001	805-658-5730	<a href="http://www.nps.gov/chis">http://www.nps.gov/chis</a>
Cabrillo National Monument	1800 Cabrillo Memorial Drive	San Diego 92106	619-557-5450	<a href="http://www.nps.gov/cabr">http://www.nps.gov/cabr</a>
<b>San Francisco Bay Conservation and Development Commission</b>	50 California Street, Suite 2600	San Francisco, CA 94111	415-532-3600	<a href="http://www.bcdc.ca.gov/">http://www.bcdc.ca.gov/</a>
<b>California Air Resources Board</b>	1001 I Street	Sacramento, CA 95812	916-322-2990	<a href="http://www.arb.ca.gov/homepage.htm">http://www.arb.ca.gov/homepage.htm</a>
<b>California Coastal Commission</b>				
North Coast District Office	710 E Street, Suite 200 45 Fremont Street, Suite 2000	Eureka, CA 95501	707-445-7833	<a href="http://www.coastal.ca.gov/web/index.html">http://www.coastal.ca.gov/web/index.html</a>
North Central Coast District Office	725 Front Street, Suite 300	San Francisco, CA 94105	415-904-5260	
Central Coast District Office	89 South California Street, Suite	Santa Cruz, CA 95060	831-427-4863	
South Central Coast District Office	Street, Suite	Ventura, CA 93001	805-585-1800	

South Coast District Office	200 Oceangate, 10th Floor 7575	Long Beach, CA 90802	562-590- 5071	
San Diego Coast District Office	Metropolitan Drive, Suite 103	San Diego, CA 92108	619-767- 2370	
<b>California State Lands Commission</b>	100 Howe Ave., Suite 100 South	Sacramento, CA 95825	916-574- 1900	<a href="http://www.slc.ca.gov/">http://www.slc.ca.gov/</a>
<b>Native American Heritage Commission</b>	915 Capitol Mall, Room 364	Sacramento, CA 95814	916-653- 4082	<a href="http://www.ceres.ca.gov/nahc/">http://www.ceres.ca.gov/nahc/</a>
<b>California Office of Historic Preservation</b>	P.O. Box 942896, Room 1442-7	Sacramento, CA 95814	916-653- 6624	<a href="http://ohp.parks.ca.gov/">http://ohp.parks.ca.gov/</a>
<b>California Environmental Protection Agency</b>	1001 I Street	Sacramento, CA 95812	916-323- 2514	<a href="http://www.calepa.ca.gov/">http://www.calepa.ca.gov/</a>
<b>State Water Resources Control Board</b>				
North Coast Region	5550 Skylane Blvd. Suite A	Santa Rosa, CA 95403	707-576- 2220	<a href="http://www.waterboards.ca.gov/northcoast">http://www.waterboards.ca.gov/northcoast</a>
Central Valley - Redding Office	415 Knollcrest Drive 11020 Sun Center Drive	Redding, CA 96002 Rancho Cordova, CA	530-224- 4845	<a href="http://www.waterboards.ca.gov/centralvalley/">http://www.waterboards.ca.gov/centralvalley/</a>
Central Valley- Sacramento Office	#200	95670	916-464- 3291	<a href="http://www.waterboards.ca.gov/centralvalley">http://www.waterboards.ca.gov/centralvalley</a>
Central Valley- Fresno Office	1685 E Street	Fresno, CA 93706	559-445- 5116	<a href="http://www.waterboards.ca.gov/centralvalley/">http://www.waterboards.ca.gov/centralvalley/</a>
Lahontan	2501 Lake Tahoe Blvd.	South Lake Tahoe, CA 96150	530-224- 4845	<a href="http://www.waterboards.ca.gov/lahontan">http://www.waterboards.ca.gov/lahontan</a>

Lahontan Region- Victorville Office	14440 Civic Drive, Suite 200 1515 Clay Street, Suite 1400	Victorville, CA 92392	760-241- 6583	<a href="http://www.waterboards.ca.gov/lahontan/">http://www.waterboards.ca.gov/lahontan/</a>
San Francisco Bay	895 Aerovista Place, Suite 101	Oakland, CA 94612	510-622- 2300	<a href="http://www.waterboards.ca.gov/sanfranciscobay">http://www.waterboards.ca.gov/sanfranciscobay</a>
Central Coast Region	73-720 Fred Warning Drive, Suite 100	San Luis Obispo, CA 93401	805-549- 3147	<a href="http://www.waterboards.ca.gov/centralcoast">http://www.waterboards.ca.gov/centralcoast</a>
Colorado River Region	320 West 4th Street, Suite 200	Palm Desert, CA 92260	760-346- 7491	<a href="http://www.waterboards.ca.gov/coloradoriver">http://www.waterboards.ca.gov/coloradoriver</a>
Los Angeles Region	3737 Main Street, Suite 500	Los Angeles, CA 90013	213-576- 6600	<a href="http://www.waterboards.ca.gov/losangeles">http://www.waterboards.ca.gov/losangeles</a>
Santa Ana Region	9174 Sky Park Court, Suite 100	Riverside, CA 92501-3348	909-782- 4130	<a href="http://www.waterboards.ca.gov/santaana">http://www.waterboards.ca.gov/santaana</a>
San Diego Region		San Diego, CA 92123	858-467- 2952	<a href="http://www.waterboards.ca.gov/sandiego">http://www.waterboards.ca.gov/sandiego</a>

**Tribal  
Governments**

Tribal Historic Preservation Officer - Agua Caliente Band of Cahuilla Indians	650 East Tahquitz Canyon Way, Suite D	Palm Springs, CA 92262	760-883- 1368
Tribal Historic Preservation Officer - Big Pine Tribe Paiute Tribe of the Owens Valley	P.O. Box 700	Big Pine, CA 93513	760-938- 2003
Tribal Historic Preservation Officer - Bishop Paiute Tribe	50 Tu Su Lane	Bishop, CA 93514	760-873- 3665
Tribal Historic Preservation Officer - Blue Lake	P.O. Box 428	Blue Lake, CA 95525	707-668- 5101

Rancheria

Tribal Historic  
Preservation Officer  
- Smith River  
Rancheria

140 Rowdy  
Creek Road  
Smith River, CA 95567 707-487-9255

Tribal Historic  
Preservation Officer  
- Stewart's Point  
Rancheria Kashia

Band of Pomo  
Indians 3535 Industrial  
Drive, Suite B-3 Santa Rosa, CA 95403 707-591-0580

Tribal Historic  
Preservation Officer  
- Table Bluff

Reservation - Wiyot  
Tribe 1000 Wiyot  
Drive Loleta, CA 95551 707-733-5055

Tribal Historic  
Preservation Officer  
- Timbisha  
Shoshone Tribe

P.O. Box 206  
Death Valley,  
CA 92328 760-786-2374

Tribal Historic  
Preservation Officer  
- Washoe Tribe of

Nevada and  
California 919 Highway  
395 South Gardnerville,  
NV 89410 775-888-0936

Tribal Historic  
Preservation Officer  
- Yurok Tribe

15900 Highway  
101 N Klamath, CA 95548 707-482-1822

**Air Quality  
Management  
Districts**

North Coast Unified	2300 Myrtle Ave	Eureka 95501	707-443-3093
Siskiyou	525 So. Foothill Dr.	Yreka 96097	530-841-4029
Modoc	202 West 4th Street	Alturas 96101	530-233-6419

[www.ncuaqmd.org](http://www.ncuaqmd.org)

Shasta	1855 Placer Street, Ste 101	Redding 96001	530-225-5789	<a href="http://www.co.shasta.ca.us/departments/resourcemgmt/drm/aqmain.htm">www.co.shasta.ca.us/departments/resourcemgmt/drm/aqmain.htm</a>
Lassen	175 Russel Ave 1750 Walnut Street	Susanville 96130	530-251-8110	
Tehama	200 Litton Drive, Ste 320	Red Bluff 96080	530-527-3717	<a href="http://www.tehcoapcd.net">www.tehcoapcd.net</a>
Northern Sierra	2525 Dominic Drive, Ste J	Grass Valley 95945	530-274-9360	<a href="http://www.myairdistrict.com">www.myairdistrict.com</a>
Butte	306 E Gobbi Street	Chico 95928	530-891-2882	<a href="http://www.bcaqmd.org">www.bcaqmd.org</a>
Mendocino	720 North Colusa Street	Ukiah 95482	707-463-4354	<a href="http://www.co.mendocino.ca.us/aqmd/index.htm">www.co.mendocino.ca.us/aqmd/index.htm</a>
Glenn	938 14 Street	Willows 95988	530-934-6500	<a href="http://www.countyofglenn.net/air_pollution_control/home_page.asp">www.countyofglenn.net/air_pollution_control/home_page.asp</a>
Feather River	885 Lakeport Blvd.	Marysville 95901	530-634-7659	<a href="http://www.fraqmd.org">www.fraqmd.org</a>
Lake	100 Sunrise Blvd. #7	Lakeport 95453	707-263-7000	<a href="http://www.lcaqmd.net">www.lcaqmd.net</a>
Colusa	3091 County Center Drive, Ste 240	Colusa 95932	530-458-0590	<a href="http://www.colusanet.com/apcd">www.colusanet.com/apcd</a>
Placer	2850 Fairlane Ct., Bldg C	Auburn 95603	530-745-2330	<a href="http://www.placer.ca.gov/airpollution/airpolut.htm">www.placer.ca.gov/airpollution/airpolut.htm</a>
El Dorado	1947 Galileo Ct., Ste 103	Placerville 95667	530-621-6662	<a href="http://www.co.el-dorado.ca.us/emd/apcd/index.html">http://www.co.el-dorado.ca.us/emd/apcd/index.html</a>
Yolo-Solano	157 Short Street, Ste. 6	Davis 95616	530-757-3650	<a href="http://www.ysaqmd.org">www.ysaqmd.org</a>
Great Basin Unified	150 Matheson Street	Bishop 93514	760-872-8211	<a href="http://www.gbuapcd.org">www.gbuapcd.org</a>
Northern Sonoma		Healdsburg 95448	707-433-5911	
Bay Area	939 Ellis Street	San Francisco Street 94109	415-749-5000	<a href="http://www.baaqmd.gov">www.baaqmd.gov</a>
Sacramento Metro	777 12th Street, 3rd Floor	Sacramento 95814	916-874-4800	<a href="http://www.airquality.org">www.airquality.org</a>
Amador	665 New York Ranch Road, #4	Jackson 95642	209-257-0112	<a href="http://www.amadorapcd.org/">www.amadorapcd.org/</a>
Calaveras	891 Mountain	San Andreas	209-754-	

	Ranch Road	95249	6504	
Tuolumne	22365 Airport 1990 E	Columbia 95310	209-533- 5693	
San Joaquin Valley	Gettysburg	Fresno 93726	559-230- 6000	<a href="http://www.valleyair.org">www.valleyair.org</a>
Mariposa	P.O. Box 5	Mariposa 95338	209-966- 2220	
Monterey Bay Unified	24580 Silver Cloud Ct.	Monterey 93940	831-647- 9411	<a href="http://www.mbuapcd.org">www.mbuapcd.org</a>
Mojave Desert	14306 Park Ave	Victorville 92392	760-245- 1661	<a href="http://www.mdaqmd.ca.gov">www.mdaqmd.ca.gov</a>
Kern	2700 M Street, Ste. 302	Bakersfield 93301	661-862- 5250	<a href="http://www.kernair.org">www.kernair.org</a>
San Luis Obispo	3433 Roberto Court	San Luis Obispo 93401	805-781- 4805	<a href="http://www.slocleanair.org">www.slocleanair.org</a>
Santa Barbara	260 North San Antonio Road, Ste. A	Santa Barbara 93110	805-961- 8800	<a href="http://www.sbcapcd.org">http://www.sbcapcd.org</a>
Ventura	669 County Square Drive, 2nd Floor	Ventura 93003	805-645- 1400	<a href="http://www.vcapcd.org">www.vcapcd.org</a>
Antelope Valley	43301 Division Street, Ste. 206	Lancaster 93535	661-723- 8070	<a href="http://www.avaqmd.ca.gov">www.avaqmd.ca.gov</a>
South Coast	21865 E Copley Drive	Diamond Bar 91765	909-396- 2000	<a href="http://www.aqmd.gov">www.aqmd.gov</a>
Imperial	150 South 9th Street	El Centro 92243	760-482- 4606	<a href="http://www.imperialcounty.net">www.imperialcounty.net</a>
San Diego	10124 Old Grove Road	San Diego 92131	858-586- 2600	<a href="http://www.sdapcd.org">www.sdapcd.org</a>

**Metropolitan  
Planning  
Organizations**

Madera County Transportation Commission	1816 Howard Road	Madera 93637	559-675- 0721	<a href="http://www.maderactc.org/">http://www.maderactc.org/</a>
Kings County Association of Governments	1400 W. Lacey Blvd	Hanford 93230	559-584- 8989	<a href="http://www.countyofkings.com/kcag/">http://www.countyofkings.com/kcag/</a>

Shasta County Regional Transportation Planning Agency	1855 Placer Street	Redding 96001	530-225- 5654	<a href="http://www.scrtpa.org/">http://www.scrtpa.org/</a>
Butte County Association of Governments	2580 Sierra Sunrise Terrace	Chico 95928	530-879- 2468	<a href="http://www.bcag.org/">http://www.bcag.org/</a>
Sacramento Area Council of Governments	1415 L Street	Sacramento 95814	916-321- 9000	<a href="http://www.sacog.org/">http://www.sacog.org/</a>
Tahoe Metropolitan Transportation Planning Organization	128 Market Street	Stateline, NV 89449	775-588- 4547	<a href="http://www.trpa.org">www.trpa.org</a>
Metropolitan Transportation Commission	101 8th Street	Oakland, CA 94607	510-464- 7700	<a href="http://www.mtc.ca.gov/">http://www.mtc.ca.gov/</a>
San Joaquin Council of Governments	555 E Weber Ave.	Stockton 95202	209-468- 3913	<a href="http://www.sjcog.org">http://www.sjcog.org</a>
Stanislaus Council of Governments	900 H Street	Modesto 95354	209-558- 7830	<a href="http://www.stancog.org/">http://www.stancog.org/</a>
Merced County Association of Governments	369 West 18th Street	Merced_95340	209-723- 3153	<a href="http://www.mcag.cog.ca.us/">http://www.mcag.cog.ca.us/</a>
Council of Fresno County Governments	2035 Tulare Street	Fresno 93721	559-233- 4148	<a href="http://www.fresnocog.org/">http://www.fresnocog.org/</a>
Association of Monterey Bay Area Governments	445 Reservation Road	Marina 93933	831-883- 3750	<a href="http://www.ambag.org/">http://www.ambag.org/</a>
Tulare County Association of Governments	5961 Mooney Blvd.	Visalia 93277	559-733- 6291	<a href="http://www.tularecog.org/">http://www.tularecog.org/</a>
Southern California Association of Governments	818 W. Seventh Street	Los Angeles 90017	213-236- 1800	<a href="http://www.scag.ca.gov/">http://www.scag.ca.gov/</a>
Kern Council of Governments	1401 19th Street	Bakersfield 93301	805-861- 2191	<a href="http://www.kerncog.org/">http://www.kerncog.org/</a>



San Luis Obispo Council of Governments Santa Barbara County Association of Governments San Diego Association of Governments	1150 Osos Street 222 E. Anapamu Street  401 B Street	San Luis Obispo 93401  Santa Barbara 93101  San Diego 92101	805-781- 4219  805-568- 2546  619-595- 5300	<a href="http://www.slocog.org/ecm/Home.html">http://www.slocog.org/ecm/Home.html</a>  <a href="http://www.sbcag.org/default.htm">http://www.sbcag.org/default.htm</a>  <a href="http://www.sandag.cog.ca.us/">http://www.sandag.cog.ca.us/</a>
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**Regional  
Transportation  
Planning Agencies  
(that prepare  
RTPs)**

Del Norte County Transportation Commission	879 J Street	Crescent City 95531	707-465- 3878	<a href="http://www.co.del-norte.ca.us">http://www.co.del-norte.ca.us</a>
Siskiyou County Transportation Commission	305 Butte Street	Yreka 96097	530-842- 8250	<a href="http://www.bcag.org">http://www.bcag.org</a>
Modoc County Transportation Commission	111 W. North Street	Alturas 96101	530-233- 3132	<a href="http://www.modocounty.us">http://www.modocounty.us</a>
Trinity County Transportation Commission	190 Glen Road	Weaverville 96093	530-623- 1351	<a href="http://www.shastanet.org/trintrans">http://www.shastanet.org/trintrans</a>
Lassen County Transportation Commission	707 Nevada Street	Susanville 96310	530-251- 8288	<a href="http://www.co.lassen.ca.us">http://www.co.lassen.ca.us</a>
Tehama County Transportation Commission	9380 San Benito Ave	Gerber 96035	530-385- 1462	<a href="http://www.tehamacounty.com">http://www.tehamacounty.com</a>
Plumas County Transportation Commission	1834 E. Main Street	Quincy 95971	530-283- 6492	<a href="http://www.countyofplumas.com">http://www.countyofplumas.com</a>
Mendocino Council of Governments	367 N. State Street	Ukiah 95482	707-463- 1859	<a href="http://www.mendocinocog.org">http://www.mendocinocog.org</a>
Glenn County Transportation	125 S. Murdock Ave	Willows 95988	530-934- 6540	<a href="http://www.countyofglenn.net/default.asp?www.countyofglenn.net">http://www.countyofglenn.net/default.asp?www.countyofglenn.net</a>

Commission

Sierra County Transportation Commission	101 Courthouse Sq.	Downieville 95936	530-289- 2848	<a href="http://www.sierracounty.ws">http://www.sierracounty.ws</a>
Lake County/City Area Planning Council	367 N. State Street	Ukiah 95482	707-263- 7799	<a href="http://www.co.lake.ca.us">http://www.co.lake.ca.us</a>
Nevada County Transportation Commission	101 Providence Mine Road	Nevada City 95959	530-823- 4030	<a href="http://www.mynevadacounty.com/Home/Index.cfm">http://www.mynevadacounty.com/Home/Index.cfm</a>
Colusa County Transportation Commission	1215 Marke Street	Colusa 95932	530-458- 0466	<a href="http://www.colusacountyclerk.com">http://www.colusacountyclerk.com</a>
Placer County Transportation Planning Agency	299 Nevada Street	Auburn 95603	530-823- 4030	<a href="http://www.pctpa.org/index.htm">http://www.pctpa.org/index.htm</a>
El Dorado County Transportation Commission	2828 Easy Street	Placerville 95667	530-642- 5260	<a href="http://www.edctc.org">www.edctc.org</a>
Alpine County Transportation Commission	50 Diamond Valley Road	Markleeville 96120	530-694- 2140	<a href="http://www.alpinecountyca.gov">http://www.alpinecountyca.gov</a>
Mono County Transportation Commission	437 Old Mammoth Road	Mammoth Lakes 93546	760-924- 1800	<a href="http://www.monocounty.ca.gov">http://www.monocounty.ca.gov</a>
Amador County Transportation Commission	11400 American Legion Dr	Jackson 95642	209-267- 2282	<a href="http://www.co.amador.ca.us">http://www.co.amador.ca.us</a>
Calaveras County Council of Governments	692 Marshall	San Andreas 95249	209-754- 2094	<a href="http://www.co.calaveras.ca.us">http://www.co.calaveras.ca.us</a>
Tuolumne County/Cities Area Planning Council	2 South Green Street	Sonora 95370	209-533- 5601	<a href="http://www.tuolumnecounty.ca.gov">http://www.tuolumnecounty.ca.gov</a>
Mariposa County Transportation Commission	4639 Ben Hur Road	Mariposa 95338	209-966- 5151	<a href="http://www.mariposacounty.org">http://www.mariposacounty.org</a>
Inyo County Transportation	PO Box Drawer Q	Independence 93526	760-878- 0201	<a href="http://www.countyofinyo.org">http://www.countyofinyo.org</a>

Commission

Santa Cruz County

Regional

Transportation Commission      1523 Pacific Ave      Santa Cruz 95060      831-460-3200      [www.sccrtc.org](http://www.sccrtc.org)

Council of San

Benito County Governments      3216 Southside Road      Hollister 95023      831-637-7665      [www.sanbenitocog.org](http://www.sanbenitocog.org)

Transportation

Agency For Monterey County      55-B Plaza Circle      Salinas 93901      831-775-0903      [www.tamcmonterey.org](http://www.tamcmonterey.org)

## **APPENDIX I – PUBLIC NOTICE**

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**NOTICE OF PUBLIC HEARING ON THE  
DRAFT 2011 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM,  
THE DRAFT 2011 REGIONAL TRANSPORTATION PLAN,  
THE DRAFT ENVIRONMENTAL IMPACT REPORT AND  
CORRESPONDING DRAFT CONFORMITY ANALYSIS**

NOTICE IS HEREBY GIVEN that the Madera County Transportation Commission (MCTC) will hold a public hearing on May 19, 2010 at 3 p.m. at 2001 Howard Road, Suite 201, Madera, CA 93637 regarding the Draft 2011 Federal Transportation Improvement Program (2011 FTIP), the Draft 2011 Regional Transportation Plan (2011 RTP), the Draft Environmental Impact Report (EIR) and corresponding Draft Air Quality Conformity Analysis for the 2011 FTIP and 2011 RTP. The purpose of this combined public hearing is to receive public comments on these documents.

- The 2011 FTIP is a near-term listing of capital improvement and operational expenditures utilizing federal and state monies for transportation projects in Madera County during the next four years.
- The 2011 RTP is a long-term strategy to meet Madera County transportation needs out to the year 2035.
- The Program EIR provides an analysis of potential environmental impacts related to the implementation of the RTP as required by the California Environmental Quality Act.
- The Conformity Analysis contains the documentation to support a finding that the 2011 FTIP and 2011 RTP meet the air quality conformity requirements for ozone and particulate matter.

A concurrent 45-day public review and comment period will commence on April 30, 2010 and conclude on June 14, 2010. The draft documents are available for review at the MCTC offices, located at 2001 Howard Road, Suite 201, Madera, CA 93637 and on the MCTC website at <http://www.maderactc.org/>.

Public comments are welcomed at the hearing, or may be submitted in writing by 5 p.m. on June 14, 2010 to Richard Poythress at the address below.

After considering the comments, the documents will be considered for adoption, by resolution, by the MCTC at a regularly scheduled meeting to be held on July 21, 2010. The documents will then be submitted to state and federal agencies for approval.

Contact Person:       Richard Poythress, Transportation Planner  
                              2001 Howard Road, Suite 201  
                              Madera, CA 93637  
                              559-675-0721  
                              richard@maderactc.org



## **APPENDIX J – RESPONSE TO COMMENTS**

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**DEPARTMENT OF TRANSPORTATION**

1352 WEST OLIVE AVENUE  
P.O. BOX 12616  
FRESNO, CA 93778-2616  
PHONE (559) 445-5285  
FAX (559) 488-4088  
TTY (559) 488-4066



*Flex your power!  
Be energy efficient!*

June 14, 2010

Mr. Richard Poythress, Transportation Planner  
Madera County Transportation Commission  
2001 Howard Road, Suite 201  
Madera, CA 93637

Dear Mr. Poythress:

Thank you for the opportunity to review the Madera County Transportation Commission (MCTC) Draft 2011 Regional Transportation Plan.

Caltrans, at both District 6, and various divisions within the Department has reviewed the Draft 2011 RTP of the Madera County Transportation Commission. We collectively offer the following comments, suggestions and questions on the following:

**District 6 – Planning**

Madera County Transportation Commission has provided current projects, future proposals and a thorough analysis of their region. MCTC's RTP must be consistent with the Regional Transportation Improvement Plan (RTIP) to program projects for the State Transportation Improvement Plan (STIP). Madera County Transportation Commission has incorporated a 25 year planning process of projects.

Corridor preservation of State Highways and intersecting roadways is important to Caltrans. The District will continue to work on developing corridor preservation strategies with the local jurisdictions and Madera County Transportation Commission, including the development of conceptual alignments of corridors and footprints of interchanges (for planning purposes) on facilities that will require expansion in the foreseeable future. Caltrans believes that preserving and protecting the needed right-of-way for future expansion of State facilities will greatly benefit the State, local communities and the public with regard to a logical and orderly process for subsequent delivery of projects.

Madera County Transportation Commission's RTP addresses Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, which specifies that by the year 2020 greenhouse gas emissions within the state must be at 1990 levels. Caltrans encourage your continue effort to provide a proactive plan for the implementation of land use planning measures that can produce substantive reduction in GHG emissions. This sets the framework for addressing the provisions of Senate Bill (SB) 375 and a Sustainable Communities Strategy (SCS) or Alternate Planning Strategy (APS) in MCTC's next RTP Update in 2014.

In preparing to meet the requirements of SB 375, it is recommended that MCTC staff actively participate in two modeling activities that recently received funding. One of the modeling activities will be funded with Proposition 84 Modeling Incentive funds. These funds were allocated to the Strategic Growth Council by the Legislature to improve modeling capacity of Metropolitan Planning Organizations (MPOs) to meet the requirements of SB 375. The San Joaquin Valley MPOs were awarded \$2.5 million of Proposition 84 funds, which will be administered by Fresno COG in coordination with the other San Joaquin Valley MPOs.

The second modeling activity is the Central Valley MPOs I-Place<sup>3</sup>s Pilot Project, funded with \$350,000 in State Planning and Research funds to develop a current conditions layer in the I-Place<sup>3</sup>s parcel-based model using UPLAN data sets from the Blueprint planning process. The MPOs modeling staff will also receive valuable training with the I-Place<sup>3</sup>s Program. The funding will also be administered by Fresno COG in coordination with the other valley MPO's

Caltrans completed its Complete Streets Implementation Action Plan in February 2010, which is a significant milestone in implementing Caltrans' Deputy Directive 64-R1 "Complete Streets – Integrating the Transportation System," which was signed in October 2008. Caltrans is committed to providing for the needs of all travelers in all planning, programming, design, construction, operations, and maintenance activities and products on the State highway system. Caltrans views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers and recognizes bicycle, pedestrian and transit modes as integral elements of the transportation system.

This effort of implementing complete streets supports the local agencies' efforts required by the California Complete Streets Act of 2008 (AB 1358). It also supports the goals of reducing greenhouse gas emissions set out by AB 32 and SB 375, which further requires development of sustainable communities' strategies. It is also expected that Complete Streets will be included in our next federal transportation reauthorization bill.

#### **State Highways, page 2-10 (State Route 41 and State Route 99)**

Caltrans District 6 recently completed a Corridor System Management Plan (CSMP) for a portion of SR 99. The CSMP was prepared to meet the requirements of the Proposition 1b funding. A CSMP provides one unified concept for managing, operating, improving, and preserving the corridor across all modes and jurisdictions for the highest productivity, mobility, reliability, accessibility, safety, and preservation outcomes. This CSMP includes the sections of SR 99 from American Avenue in Fresno County to SR 152 in Madera County and required a commitment by all partners, including MCTC, to apply the principles and practices of system and corridor management.

On State Route 41, Caltrans District 6 is currently preparing a CSMP to facilitate future planning. This CSMP will include the entire length of the SR 41 corridor, including the section in Madera County.

**State Highways, page 2-11 (State Route 152)**

The Santa Clara Valley Transportation Authority (VTA) is coordinating with Caltrans Districts 4, 5, 6, 10, Santa Clara County, and San Benito County on a study of SR 152. The study will evaluate highway improvements and financing strategies that could benefit the movement of goods throughout the corridor, from SR 101 to SR 99. The study includes an evaluation of SR 152 realignment alternatives between U.S. 101 and State Route 156 to enhance travel safety and improve travel times while also upgrading to expressway standards. While the study concentrates on the portions of SR 152 outside of Madera County, the consultant intends to consult with MCTC on some possible alternatives.

**District 6 – Native American Liaison**

**Chapter 3, Policy Element, page 3-1:**

District 06 recommends a Tribal Consultation & Coordination goal within the Policy Element of the Draft 2011 Madera COG RTP. The work conducted as part of the Central Valley Tribal Collaboration Transportation Planning Project points to some of the successful tribal consultation and coordination efforts as mentioned in the section on the RTP Update, Page 1-23. Work is already being conducted for tribal consultation and the accomplishments could be readily acknowledged within the Policy Element of the document.

**2011 RTP Update, page 1-23:**

It should also be noted that the Central Valley Tribal Collaboration Transportation Planning Project also involves the federally unacknowledged tribal communities and could be stated within the Environmental Justice section. Outreach has not been limited to the federally acknowledged tribal governments.

**Chapter 6, Blueprint Planning, page 6-1:**

There could be some mention about the Central Valley Tribal Collaboration Transportation Planning Project and the outreach to tribal governments and communities for the San Joaquin Valley Regional Blueprint.

**District 6 – Office of Traffic Operations**

The District 6 Office of Traffic Operations has completed its review of Madera County Transportation Commission's Draft 2011 RTP. The planning document relied on the use of Florida Tables as the method for projecting a roadway segment's level-of-service. It is concurred that the determination of level-of-service by this methodology is adequate for a planning document such as this.

A review of Exhibits 4-4A & 4-4B indicates that virtually all of the segments on Routes 41, 49, and 99 are projected to operate with unsatisfactory levels-of-service by the Year 2035. The segments of Route 145 that are situated east of Route 99 are also projected to operate with an unsatisfactory level-of-service by 2035. Only a short segment of Route 233 that is situated on its southern end is projected to operate with an unsatisfactory level-of-service. Table 4-5 (with financially constrained projects) continues to show Routes 41 and 99 operating with unsatisfactory levels-of-service in the year 2035. Nevertheless, the RTP (Major

Corridor Deficiencies, Needs, Actions, page 4-18) acknowledges the deficiencies with the constrained scenario, and it discusses required improvements beyond the constrained projects.

The RTP has an extensive discussion on land use. On page 1-19, the RTP summarizes the San Joaquin Valley Regional Blueprint. It is described as a planning process that is a joint effort by the eight valley MPOs to provide a framework for implementation of land use planning measures that can produce substantive reductions in GHG emissions. The MCTC staff has apparently already developed a comprehensive strategy for the implementation of smart growth planning over the next 40 years. Chapter IV includes an extensive discussion of the Blueprint efforts already undertaken in Madera County, and offers several alternative scenarios for future growth.

The RTP (page 4-23) acknowledges the physical constraint of the lack of adequate crossing capacity across the San Joaquin River. The RTP indicates that this ongoing issue is being studied and will need to be addressed in order to accommodate the projected demand. One of the alternatives includes development of the proposed new Route 65.

Thanks for the opportunity to review this document. If you have any questions regarding our comments, you may contact David Garza at (559) 445-5999 or via email at David\_Garza@dot.ca.gov.

#### **Division of Aeronautics:**

We compliment the MCTC for the inclusion of their airports on the various regional maps of the plan area. This seemingly simple exercise is too often overlooked which makes planning for airport surface transportation needs difficult.

#### **Aviation, page 1-5**

The text references 120 and 34 “fixed-base operators” for Madera County and Chowchilla airports, respectively. We recommend changing this to “fixed-base aircraft” to avoid confusion with business entities known as Fixed Base Operators (FBOs) that provide aviation services to GA aircraft.

#### **Aviation Needs, pages 1-13, 4-34, 4-35, and 4-43**

The text refers to facility needs at Madera County and Chowchilla airports. The Division of Aeronautics maintains a list of priority airport needs in their System Needs Assessment (SNA) element. The next edition of the SNA is expected to be released in summer 2010. This paragraph of the RTP should reflect that the airport managers will work with the Division to ensure that their priority infrastructure needs are reported on not less than an annual basis. Specifically, those projects listed in the Airport Master Plan Improvement Projects list should be reviewed with the Division annually.

#### **Goods Movement, page 1-14**

The text refers to the questionable feasibility of transporting goods via air cargo. While this is an understandable statement, moving goods via air freight through a cooperative collaboration of nearby regional airports may make this type of goods movement possible, at least on a limited scale.

We encourage the addition of text that promotes the concept of holding inter-regional communications to evaluate the viability of limited inter-regional air cargo operations. Notwithstanding the above discussion, we request that the airport managers continue to be invited to goods movement discussions, particularly during the update of the Ground Access Improvement Program.

#### **Airport Land Use Commission, page 4-35**

We appreciate the text explaining the purpose of the ALUC. Our experience tells us there is sufficient confusion regarding the authority of ALUC reviews, Airport Land Use Compatibility Plans (ALUCP's), and local planning processes. We recommend expanding the paragraph to explain how land use policies contained in the ALUCP are reconciled with your RTP transportation and land use policies. To further avoid incompatible land uses that could affect aviation, we recommend amending the sentence "...and proposed land use changes near the airports." with "...and proposed land use changes *within two-miles* of the airports.". This change will help ensure the safety of aircraft as they approach and depart the airports from potential vertical obstructions and other new forms of development.

Comments on the EIR will be provided directly to the CEQA lead agency per standard State Clearinghouse procedures, and copied to the District. Please provide a copy to us of the Final RTP when it becomes available. Feel free to contact me with any questions at 916-651-0597 or [Derek.kantar@dot.ca.gov](mailto:Derek.kantar@dot.ca.gov).

#### **Division of Mass Transportation**

The Division of Mass Transportation would like to commend the Commission on the following items:

For planning and establishing a comprehensive transit system through efforts such as:

Establishing effective transportation demand management strategy programs such as a ridesharing, park-and-ride, and alternative fuels; and

Collaborating with the public, transit agencies, and surrounding San Joaquin Valley governments (e.g., San Joaquin Valley Intelligent Transportation Systems Strategic Deployment Plan)

We would like to offer the following comments for your consideration:

Under the Regional Transportation Plan Goals and Objectives, page 3-2: Please consider creating a specific stakeholder outreach goal by separating Goal #1, Objective 3, "Promote and conduct effective regular dialogue with users or potential users to help guide investment decisions and maintain and improve the effectiveness of the transportation system." By creating a specific outreach goal, it will highlight the Commission's effort to involve all stakeholders.

Mr. Richard Poythress

June 14, 2010

Page 6

Please consider including a description of Madera's demographic population to provide a more comprehensive view of the recipients (young, elderly, etc.) of the outreach efforts.

In addition, please consider replacing the term "disabled" with "people with disabilities" as it may be offensive to some individuals and appears throughout the document, e.g. page 12, 54, 104, 118, 178, etc. The United States Department of Labor's Office of Disability Employment Policy suggests addressing members of this community with people's first language. Please visit the following website for more information:

<http://www.dol.gov/odep/pubs/fact/comucate.htm>

For questions or concerns regarding the listed comments, please contact me at (916) 653-3186, or via email at [Ryan.Ong@dot.ca.gov](mailto:Ryan.Ong@dot.ca.gov).

### **Division of Transportation Planning - Office of Goods Movement**

Goods movement discussion and awareness throughout the document is very good. Valleywide coordination is significant for all planning organizations to maximize their networks with regard to freight movement. There is solid discussion of multimodal rail freight and trucking issues, particularly in chapter 4. A table of contents item to identify where the goods movement content is located in this 291 page document would have made review significantly easier and quicker.

### **Division of Transportation Planning -Office of Regional & Interagency Planning, Regional Outreach Branch**

We offer comments, suggestions and questions on the following sections:

#### **Chapter 4:**

Please include a statement that the RTP is consistent with the Public Transit-Human Services Transportation Plan.

Please include a discussion of the long-range and short-range strategies/actions (23 CFR 450.322 (b)).

Please further clarify the regionally significant projects as identified on Table 4-4.

Please provide a statement of the consistency between the projects in the RTP and the first four years of the State Transportation Improvement Program (STIP). Consistency between the RTP and the STIP is required per the 2006 State Transportation Improvement Program Guidelines, section 19.

#### **Chapter 7:**

We would suggest expanding the discussion of the public participation and interagency coordination process in Chapter 7 to demonstrate clearly how MCTC's public outreach and interagency coordination process meets the requirements of 23 CFR 450.316(3)(b) and 23 CFR 450.322(g), 23

Mr. Richard Poythress

June 14, 2010

Page 7

CFR 450.316(1)(i-x), CFR 450.316(c), and 23 CFR 450.316(i). We recommend that MCTC include documentation that supports public outreach efforts and coordination for the RTP.

The regional air quality planning authorities in the region should be identified in your discussion of public participation.

**Valleywide Chapter:**

We would like to encourage MCTC to continue regional coordination with local jurisdictions, and continue coordination with San Joaquin Valley MPOs in preparation for SB 375 compliance, which will require the region to meet a regional greenhouse gas emissions reduction target which ARB is statutorily required to provide to each region by September 30, 2010. We encourage extensive communication and collaboration amongst all the agencies within the San Joaquin Valley regarding the development of a sustainable communities strategy to meet the requirements of SB 375.

**RTP Checklist:**

Environmental, Question 4: We were not able to locate the section discussing mitigation activities in the RTP and how those measures would or could be implemented. Federal regulations require MPOs to include a discussion on the potential environmental mitigation activities and the potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the RTP, as stated in 23 CFR Part 450.322(f)(7). FHWA would like to see the discussion in the RTP, and not just in the environmental document.

**General Comments:**

To facilitate timely review and comment on the RTP please ensure that specific page numbers are correct when demonstrating compliance with various provisions on the RTP Checklist. Please include a signed 2007 RTP Checklist with the final RTP. This will provide consistency between the RTP, RTP Guidelines, and Checklist.

If you have any questions, please feel free to contact me at (916) 653-4097 or via email at [Kevin.tucker@dot.ca.gov](mailto:Kevin.tucker@dot.ca.gov).



Mr. Richard Poythress

June 14, 2010

Page 8

If you have any questions, call me at (559) 445-5285.

Sincerely,

A handwritten signature in cursive script that reads "Cathy Rodriguez".

CATHY RODRIGUEZ

*Transportation Planning North Branch*

District 06

cc: Sharri Bender-Ehlert, Paul-Albert Marquez, Marta Frausto, Albert Lee, Dara Wheeler, Kevin Tucker, Todd LaCasse, Sue Kiser, Ray Sukys, Ryan Ong, Gary Cathey, Derek Kantar,

## **Response to Comments Submitted by Caltrans – June 14, 2010**

### District 6 – Planning:

General Comments, pages 1-2

**MCTC is an active partner in the development of Corridor Management Plans for State Highway facilities. AB 32 and SB 375 implementation will play a key role in MCTC planning activities in the lead up to the next RTP update. MCTC will continue to participate in all State and regional planning efforts, including Prop 84 and I-Place<sup>3</sup>'s modeling activities and the Caltrans Complete Streets program.**

State Highways, pages 2-3

**MCTC is an active partner in the CSMP development process for both SR 99 and SR 41. MCTC is also an active participant in the SR 152 Corridor study.**

### District 6 – Native American Liaison, page 3:

**Tribal coordination and consultation is an important plank of the MCTC Public Participation Plan (PPP), which governs the development of the RTP. The PPP is included in Appendix H of the 2011 RTP.**

**The text relating to the Central Valley Tribal Collaboration Transportation Planning Project has been updated to include the participation of non-federally recognized tribes.**

### District 6 – Office of Traffic Operations, pages 3-4:

**MCTC will continue to coordinate with Caltrans to find solutions to the ongoing level of service deficiencies on State Highway corridors.**

### Division of Aeronautics:

Aviation & Goods Movement, pages 4-5

**Page 1-5 has been updated to reflect requested editorial changes. MCTC will continue to facilitate contact between regional airport managers and Caltrans.**

Airport Land Use Commission, page 5

**Page 4-35 has been updated to reflect requested editorial changes. MCTC will continue to consult and collaborate with the local ALUC in the development of the RTP.**

### Division of Mass Transportation, pages 5-6:

**The 2011 RTP includes a detailed discussion of population demographics in Chapters 2 and 7.**

**The text has been updated throughout to incorporate the more appropriate phrase “people with disabilities”.**

Division of Transportation Planning – Office of Goods Movement, page 6:

**A detailed listing of page numbers for all required RTP components, including goods movement, can be found in Appendix F of the 2011 RTP.**

Division of Transportation Planning – Office of Regional & Interagency Planning, Regional Outreach Branch:

Chapter 4, page 6

**A statement of consistency with the MCTC Human-Services Public Transit Coordinated Transportation Plan has been added to page 2-22.**

**Discussion of long-range and short-range strategies/actions is included throughout the Action Element of the 2011 RTP (Chapter 4).**

**Table 4-4 includes all available data on financially-constrained, regionally significant capacity increasing projects in Madera County.**

**A statement of consistency with the STIP has been added to page 5-3.**

Chapter 7, pages 6-7

**The MCTC Public Participation Plan (PPP) has been included in Appendix H along with a list of private citizens, businesses, community groups, public agencies, and tribal governments that are involved in public outreach efforts and coordination for the 2011 RTP.**

Valleywide Chapter, page 7

**The 2011 RTP reflects MCTC’s strong commitment to inter- and intra-county coordination and cooperation.**

RTP Checklist, page 7

**A discussion of potential mitigation activities for the 2011 RTP has been added to page 4-49. Please see the 2011 RTP EIR for an exhaustive listing of potential impacts and mitigation activities that were studied in the development of the RTP.**



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Federal Highway Administration  
California Division**

June 21, 2010

650 Capitol Mall, Suite 4-100  
Sacramento CA 95814  
(916) 498-5001  
(916) 498-5008 fax

In Reply Refer To:  
HDA-CA

Ms. Patricia Taylor  
Executive Director  
Madera County Transportation Commission  
2001 Howard Road, Suite 201  
Madera, CA 93637

SUBJECT: MCTC Draft FY 2011 FTIP/RTP Comments

Dear Ms. Taylor:

Thank you for submitting MCTC's Draft 2011 FTIP and RTP for our comments.

Federal Transportation Improvement Program

23 CFR 450.324 Development and content of the transportation improvement program

- On page 8 in the section "Consistency With Other Documents" a statement is made that FHWA approves the RTP. This is not accurate; FHWA's approval action is not taken on the RTP but on the FTIP upon which it is based and, in the San Joaquin Valley, on the accompanying air quality conformity analysis. FHWA requires the development of the RTP as part of the planning process and as a basis for developing the FTIP. A similar statement on federal approval of the 2011 RTP in November 2010 on the bottom on page 12 is also not accurate for the above reason.
- In the Financial Plan starting on page 11, good bullet list summary of the assumptions used to develop the Financial Plan. Good practice on showing all the growth rates for revenues and inflation rates for projects on page 12.
- Appendix F provides comprehensive backup documentation of how the financial plan was developed. One minor improvement MCTC should consider for its next FTIP would be either moving or duplicating the Operations and Maintenance discussion to the main part of the FTIP document. Maintaining the transportation system in a good state of repair and operation is just as important as building new facilities and should receive equal consideration in the Financial Plan discussion.



### 23 CFR 450.316 Interested parties, participation and consultation

- The bottom of page 7 includes a brief reference to public involvement opportunities and MCTC's process in FTIP development and includes an Appendix H – Public Notice and Response to Comments to document comments received on the FTIP. FHWA believes that the future FTIP document could be improved by including a more robust discussion of the public involvement process either in the main body of the FTIP document, or, to take advantage of the Appendices to include, for example, the adopted MCTC Public Participation Plan (as other San Joaquin Valley MPOs have done).
- Will Appendix H include a narrative description of the public comment process – meetings held, notices issued, and results/responses to comment – when the FTIP is finalized?

### Other FTIP comments

- Excellent use of graphics to visualize communicate transportation planning information throughout the document and particularly in Appendix F which contains the financial plan assumptions; also good practice to cross-reference the financial plan assumptions from the 2011 RTP in Appendix F.
- Good practice of including the financial templates in the Financial Plan section of the main document rather than breaking them out as a separate section.
- Good practice of using the unitary Valley-wide format for project listing information.

### Regional Transportation Plan

#### 23 CFR 450.322 Development and content of the metropolitan transportation plan

- Excellent and comprehensive Executive Summary. The entire planning process is well-documented; in particular, public participation efforts that have taken place in regional planning since 2001 (including Blueprint Planning, which was a state initiative).
- Good use of graphics and tables in showing the Level-of-Service Analysis starting on page 2-6. This highly technical information from the Highway Capacity Manual is presented in a straightforward manner that is easy to read and understand. The subsequent section on transit needs is also well-written.
- On page 3-1 it is noted that the RTP Steering Committee evaluated the SAFETEA-LU planning factors in developing the Policy Element. For future RTP updates, MCTC may wish to consider including a matrix that shows how the Policy Elements, Goals and Objectives are linked to a given federal planning factor. We do note that page 3-12 features a matrix showing the relationship of Goals and Objectives to Actions in regards to the 2011 MCTC RTP, and this could be further built upon.

- Table 4-1 “Madera County 2011 RTP Performance Measures” is a good practice example of how performance measures can be used in project selection. MCTC is commended for taking current trends in transportation planning into account by using performance measures in the transportation planning process and measures that take into account emerging issues Environmental Justice, Sustainability and Environmental Quality.
- Financial plan includes a very complete evaluation of revenues and shows a 3% inflation rate for Year of Expenditure. Nice discussion of funding programs in Appendix E.
- FHWA commends MCTC on including a comprehensive section on Blueprint Planning in the RTP.

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- Good documentation Valley wide EJ efforts with Tribal Governments in Appendix G (starting on page 6-42 “California Central Valley Tribal EJ Collaborative Grant Project”).

#### Other RTP Comments

- MCTC is commended for working with the 7 other Valley MPOs to develop the comprehensive and detailed Valley-Wide chapter. This work, in combination of what has been undertaken for Blueprint planning, is a best practice moving towards a better and more integrated local and regional planning process.
- Appendix C groups capacity increasing projects by type and shows in the tables what performance criteria (primarily Level-of-Service (LOS) were used to evaluate the projects for inclusion in the RTP. This is good practice and a performance measure planning approach that could be used in other non-TMA MPOs. Appendices A&B also provide the necessary background information for a reader to understand how the LOS methodology was used in evaluating and developing the projects for the RTP.
- In congruence with our FTIP comment on inclusion of the MCTC PPP in an Appendix in the FTIP, we also feel the final RTP would be improved by including the PPP in an Appendix for interested members of the public, as other Valley MPOs have done in their draft RTPs and FTIPs.

To follow up on the above comment regarding regional integration, FHWA commends MCTC and the other 7 San Joaquin Valley (SJV) MPOs on the hard work and efforts that you have put forth collectively in improving the entire transportation planning process across the Valley since adoption of the last FTIP and RTP. The Interagency Consultation (IAC) email process for

project-level conformity, and periodical SJV IAC conference calls, as well as other formal and informal coordination meetings and opportunities are examples of good practice.

We are also looking forward to the use of improved travel forecasting modeling tools (currently under development) for the 2014 RTP update. This enhanced modeling process may provide an opportunity for technology transfer of new modeling methods that can more accurately access the benefits of greater integration of the land-use and transportation planning processes.

If you have any questions about our comments, please call Scott Carson at 916-498-5029 or email him at [scott.carson@dot.gov](mailto:scott.carson@dot.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "W. C. Waidelich, Jr.", written in a cursive style.

For  
Walter C. Waidelich, Jr.  
Division Administrator

cc: (e-mail)

Ray Sukys, FTA

Eric Eidlin, FTA

Garth Hopkins, Caltrans Planning

Kevin Tucker, Caltrans Planning

Muhaned Aljabiry, Caltrans Programming

Lima Huy, Caltrans Programming

Steve Curti, Caltrans District

Derek Winning, MCTC

Karina O'Connor, EPA

Cari Anderson, CA Consulting

cc: (other)

MCTC FTIP/RTP Binders

scarson





U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Federal Highway Administration  
California Division**

June 21, 2010

650 Capitol Mall, Suite 4-100  
Sacramento CA 95814  
(916) 498-5001  
(916) 498-5008 fax

In Reply Refer To:  
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To follow up on the above comment regarding regional integration, FHWA commends MCTC and the other 7 San Joaquin Valley (SJV) MPOs on the hard work and efforts that you have put forth collectively in improving the entire transportation planning process across the Valley since adoption of the last FTIP and RTP. The Interagency Consultation (IAC) email process for

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If you have any questions about our comments, please call Scott Carson at 916-498-5029 or email him at [scott.carson@dot.gov](mailto:scott.carson@dot.gov).

Sincerely,

*/s/ K. Sue Kiser*

For  
Walter C. Waidehich, Jr.  
Division Administrator

cc: (e-mail)

Ray Sukys, FTA

Eric Eidlin, FTA

Garth Hopkins, Caltrans Planning

Kevin Tucker, Caltrans Planning

Muhaned Aljabiry, Caltrans Programming

Lima Huy, Caltrans Programming

Steve Curti, Caltrans District

Derek Winning, MCTC

Karina O'Connor, EPA

Cari Anderson, CA Consulting

cc: (other)

MCTC FTIP/RTP Binders

scarson

## **Response to Comments Submitted by FHWA – June 21, 2010**

**GENERAL RESPONSE: MCTC is committed to the implementation of all applicable State and federal requirements in the development of the RTP. MCTC also seeks continued coordination and collaboration with FHWA to gain insight into best practices for RTP development.**

MCTC-1      Comment suggests the development of a matrix showing how the Policy Elements, Goals and Objectives are linked to a given federal planning factor.

**This comment is noted.**

MCTC-2      Comment suggests that the MCTC Public Participation Plan (PPP) be included in the RTP Appendix.

**Pursuant to this comment, the final 2011 RTP now includes the complete MCTC PPP as Appendix H.**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX**

75 Hawthorne Street  
San Francisco, CA 94105

Richard Poythress  
Madera County Transportation Commission  
2001 Howard Road, Suite 201  
Madera, CA 93637

**Subject: U.S. EPA Comments on the Madera County Transportation Commission Regional Transportation Plan and Draft Environmental Impact Report**

Dear Mr. Poythress:

The U.S. Environmental Protection Agency (EPA) appreciates the opportunity to provide comments on the Madera County Transportation Commission (MCTC) 2011 Draft Regional Transportation Plan (RTP) and Draft Environmental Impact Report (DEIR). EPA is committed to the goal of incorporating environmental considerations early in the transportation planning process. Early coordination results in greater opportunities to avoid sensitive resources and minimize impacts associated with future transportation projects.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) directs metropolitan planning organizations (MPOs) to consult with resource agencies while developing long-range transportation plans. It also requires such plans to discuss potential environmental mitigation activities and potential locations for these activities to restore and maintain environmental functions that could be affected by the plan. While EPA did not complete a comprehensive review of the MCTC RTP, we provide the following comments in support of compliance with these requirements. While we understand some of the provided recommendations below may not be able to be incorporated into this RTP revision, we hope that the concepts and principles identified can be incorporated into the next RTP revision.

**Delineate Robust Measures to Improve Air Quality through Travel Efficiency**

Air quality in the San Joaquin Valley is among the poorest in the country, causing health and environmental impacts for its residents and costs to its economy totaling approximately \$1600 per capita annually. The valley's geography and meteorology traps pollutants, so special attention must be given to reducing the amount of pollutants emitted. Transportation within the valley contributes a significant portion of these pollutants, and conversely reduction of vehicle travel can provide reductions for all pollutants. Reducing emissions from transportation is

necessary to improving the valley's air quality. While improvements in fuel efficiency and vehicle technology will contribute to a reduction in emissions, substantial focus on and investment in travel efficiency measures (e.g. smart growth and transportation demand management (TDM)) is also needed to further reduce emissions in the San Joaquin Valley.

### **Use the RTP Process to Spur Transportation Efficient Growth That Accomplishes Multiple Objectives**

A regional transportation planning process provides an opportunity to focus growth and activity where it most benefits the region. Compact development built in infill locations shortens trip distances; transit-oriented development leads to a greater share of transit use; mixing of uses accomplishes both and also creates opportunities for active transportation modes. Such development patterns, and the transportation patterns they help create, in turn can create environmental and livability benefits. These concepts and others are included in Caltrans' recently completed *Smart Mobility 2010: A Call to Action for the New Decade*. In particular, EPA would like to call attention to its discussion of performance measures aimed at quantifying the benefits of integrated planning:

Transportation performance measures forecast, evaluate, and monitor the degree to which the transportation system accomplishes adopted public goals and mobility objectives. Smart Mobility Performance Measures demonstrate the relationship between integrated transportation and land use decisions and the consequent effects on the full range of economic, social, and environmental conditions. (p. 50)

As detailed in the document, EPA recommends incorporation of carefully chosen performance measures to inform and guide planning efforts.

EPA, the US Department of Housing and Urban Development (HUD) and the US Department of Transportation (DOT) recently joined in a partnership to support measures to improve livability and sustainability. We encourage you to consider the principles identified through this partnership when working to integrate the regional blueprint concept into regional planning. More information on this partnership, including grant opportunities, can be found at <http://www.epa.gov/smartgrowth/partnership/>. Programs offered by the partnership, including funding opportunities, can be found at [http://www.epa.gov/smartgrowth/pdf/2010\\_0506\\_leveraging\\_partnership.pdf](http://www.epa.gov/smartgrowth/pdf/2010_0506_leveraging_partnership.pdf).

### **Clarify in the RTP How the Ongoing Regional Blueprint Effort Influenced Any Current Design and Route Network Location Decisions.**

EPA recognizes that San Joaquin Valley MPOs intend to apply the ongoing regional blueprint process to identify preferred growth scenarios for the future which will serve as the foundation for determining a Sustainable Community Strategy. EPA recommends that, from a regional perspective, the RTP identify how proposed transportation projects have been planned to (1) more efficiently use existing infrastructure, for example by incorporating intelligent transportation systems or improving transit service, rather than adding new infrastructure; (2) satisfy regional residents' need for efficient access to goods and services in the way that causes the least environmental and social harm; and (3) avoid and minimize harm to high quality



resources and habitat. The RTP should also identify what design and route network location decisions were proposed in order to avoid and/or minimize impacts to resources. It should be clear how information about resources, including information from existing resource documents, has informed decisions about the route network.

In the next RTP cycle, SB 375 will require the preparation of a Sustainable Communities Strategy (SCS). In a growing region, the SCS provides an excellent opportunity to consider land use and environmental implications of transportation network improvements and integrate smart growth opportunities into the RTP. In its SCS, EPA recommends that including discussions of the other goals and criteria of the regional blueprint and how each relates to and/or influences the RTP. EPA also encourages providing support and resources to local jurisdictions to make their general plans and proposed projects consistent with the RTP and the San Joaquin Valley Blueprint (<http://www.valleyblueprint.org/>).

EPA, the US Department of Housing and Urban Development (HUD) and the US Department of Transportation (DOT) recently joined in a partnership to support measures to improve livability and sustainability. We encourage MCTC to consider the principles identified through this partnership when working to integrate the blueprint concept into regional planning. As mentioned above, more information on this partnership, including grant opportunities, can be found at <http://www.epa.gov/smartgrowth/partnership/>. A summary of Sustainability Programs at HUD, DOT, and EPA is enclosed.

### **Discuss Greenhouse Gas Implications and Preparation for a Carbon Constrained Future Transportation Network.**

Many factors influence transportation greenhouse gas emissions. While population and employment growth drive transportation activity, a number of other factors also influence travel behavior, many of which MPOs are in a position to influence directly or indirectly.

A significant fraction of the built environment that will exist in the area affected by this RTP has yet to be built. Thus, significant opportunity exists to make substantial changes to land use development patterns. Because land use has significant direct influence on factors such as mode choice and average trip distance, and therefore indirect influence on factors such as air quality and greenhouse gas emissions, opportunity exists for significant change from current trends. EPA recommends including a discussion of estimates of the range of possibility with respect to these factors, and a discussion of the factors limiting these possibilities (e.g. funding, institutions).

EPA recognizes that MPOs do not have direct land use control. They can, however, facilitate local jurisdictions in the region, coordinating and building consensus through blueprint planning. A number of incentive programs are available to help fund such coordination (see attachment). Further, an MPO can use its role in transportation network planning to influence growth.

EPA recommends including discussion of both near-term transportation demand management strategies and more aggressive potential future solutions. While we recognize there may not be an opportunity to include a comprehensive discussion and analysis of these measures in this RTP update, we recommend expanding this discussion as feasible in this RTP with an eye toward the next RTP cycle. We recommend such a discussion focus primarily on opportunities and secondarily on constraints.

### **Discuss Impacts to Critical Habitat Areas and Connect It to a Broader Regional Mitigation Strategy in the RTP.**

EPA strongly recommends avoiding biologically sensitive habitats when planning a regional transportation network. Where applicable open space plans, conservation areas, mitigation banks, conservation plans (such as Habitat Conservation Plans (HCPs) and Natural Community Conservation Planning programs), and high value resource areas should be identified and avoided at the regional transportation planning phase, rather than waiting until project implementation. Choices involving both roadway network placement and land use are decided or highly influenced by the regional transportation planning process and can have large implications for biologically sensitive areas.

The following are EPA's recommendations for biological and sensitive habitat mitigation:

- Use resource data to inform transportation decision-making.
- Use watershed, conservation, and recovery plans to identify important environmental considerations for the region, such as critical wildlife corridors, the most important areas to protect for sensitive species, and areas with a high concentration of resources.
- Give conservation plans as much weight as General Plans when planning transportation investments.
- Incorporate concepts such as 100 to 200 foot buffers for stream corridors, and identification and improvement of priority culverts that currently restrict wildlife corridors and natural processes of stream and river systems.
- Use parcel maps to identify larger, undivided parcels for ease of acquisition and preservation, and designate areas as potential future mitigation sites.
- Consider the resource, "Eco-logical: An Ecosystem Approach to Developing Infrastructure Projects" (2006)<sup>1</sup> which encourages Federal, State, Tribal and Local partners involved in infrastructure planning, design, review, and construction to use flexibility in regulatory processes. Specifically, Eco-Logical puts forth the conceptual groundwork for integrating plans across agency boundaries, and endorses ecosystem-based mitigation - an innovative method of mitigating infrastructure impacts that cannot be avoided.

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<sup>1</sup> Eco-logical is available on-line at: [http://www.environment.fhwa.dot.gov/ecological/eco\\_index.asp](http://www.environment.fhwa.dot.gov/ecological/eco_index.asp). Information on pilots using Eco-logical principals is available on-line at: [http://www.trb.org/StrategicHighwayResearchProgram2SHRP2/Public/Pages/capacitypilottests\\_334.aspx](http://www.trb.org/StrategicHighwayResearchProgram2SHRP2/Public/Pages/capacitypilottests_334.aspx).

The Regional Mitigation Strategy contained in the RTP should also establish the foundation for innovative regional mitigation solutions:

- Identify financial mechanisms to fund mitigation, such as development fees, sales tax, or the use of funds from alternative methods to identify and protect critical resource areas.
- Establish conservation easements that connect to and expand existing conservation areas.
- Describe locally-developed measures such as county/city designation of open-space, measures requiring development set-backs near streams, etc.

**Describe the Use of Available Data to Inform Regional Transportation Planning Decisions.**

SAFETEA-LU directs MPOs to compare transportation plans with other plans, maps, and data of inventories of natural or historic resources, if available. The RTP should therefore include a discussion of other data, plans, or maps that may be useful to inform long-range transportation planning. EPA recommends that the RTP specifically describe how the proposed transportation network has been designed to avoid resources identified in data sources such as those identified below:

- U.S. Fish & Wildlife Service species recovery plans
- USDA Natural Resources Conservation Service wetland data
- Nature Conservancy data and regional planning documents
- California Department of Fish and Game Natural Diversity Database
- Local non-profit and land trust group information

EPA values the opportunity to be involved in the regional transportation planning process. When the final RTP and EIR are available, please send a copy of each to the address above (mail code CED-2). If you have any questions about our comments, please contact me at 415-947-4121 or [ganson.chris@epa.gov](mailto:ganson.chris@epa.gov).

Sincerely,



Chris Ganson  
Environmental Review Office

Enclosure: Leveraging the Partnership: DOT, HUD, and EPA Programs for Sustainable Communities

cc: Garth Hopkins, Caltrans Headquarters  
Christine Cox-Kovacevich, Caltrans Central Region  
Aimee Kratovil, Federal Highway Administration  
Eric Eidlin, Federal Transit Administration  
Roberta Gerson, US Fish and Wildlife Service



# Leveraging the Partnership: DOT, HUD, and EPA Programs for Sustainable Communities

April 2010

*This guide to federal programs is intended to help communities identify resources available to support their efforts to promote livable and sustainable communities.*

*In June 2009, the Partnership for Sustainable Communities was formed by the U.S. Department of Housing and Urban Development (HUD), the U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA).*

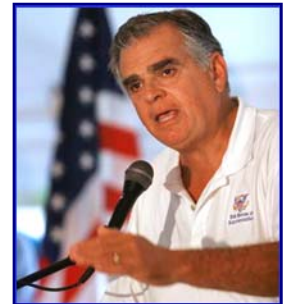
*These three agencies have pledged to ensure that housing and transportation goals are met while simultaneously protecting the environment, promoting equitable development, and helping to address the challenges of climate change.*

*The following Livability Principles are guiding their work:*

- *Provide more transportation choices.*
- *Promote equitable, affordable housing.*
- *Enhance economic competitiveness.*
- *Support existing communities.*
- *Coordinate and leverage federal policies and investment.*
- *Value communities and neighborhoods.*

## U.S. DEPARTMENT OF TRANSPORTATION

The U.S. Department of Transportation serves the United States by ensuring a fast, safe, efficient, accessible, and convenient transportation system that meets our national interests and enhances the quality of life of the American people, both today and into the future.



DOT Secretary Ray LaHood

DOT will work to promote livable communities and enhance the economic and social well-being of all Americans by creating and maintaining a safe, reliable, integrated, and accessible transportation network. A multimodal transportation system increases choice, provides easy access to employment opportunities and other destinations, and improves the surrounding community. DOT will work to build on innovative ways of doing business that promote mobility and enhance the unique characteristics of our neighborhoods, communities, and regions.

**Transportation Investment Generating Economic Recovery (TIGER):** The TIGER Discretionary Grant Program was included in the American Recovery and Reinvestment Act to spur a national competition for innovative, multimodal, and multi-jurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation. In February 2010, DOT selected 51 projects to be funded with the \$1.5 billion allocated in the Recovery Act, including improvements to roads, bridges, rail, ports, transit and intermodal facilities. In FY 2010, DOT will be competitively selecting a second round of projects under the TIGER program. Up to \$600 million will be funded, including up to \$35 million set aside for planning projects. The solicitation is expected later in FY 2010.

<http://www.dot.gov/recovery/>

**Transportation and Climate Change Clearinghouse:** This is US DOT's one-stop source of information on transportation and climate change issues. It includes information on greenhouse gas (GHG) inventories, analytic methods and tools, GHG reduction strategies, potential impacts of climate change on transportation infrastructure, and approaches for integrating climate change considerations into transportation decision making. <http://climate.dot.gov/>

### **Joint Federal Transit and Federal Highway Administration Programs**

**Transportation Planning Capacity Building Program:** This FHWA/FTA comprehensive program provides training, technical assistance, and support to help decision makers,

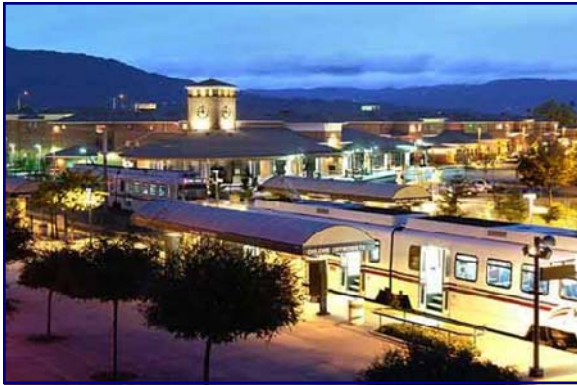
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#### **Please Note:**

The following funding and technical assistance programs are not a complete list of DOT, HUD, and EPA grant and technical assistance programs. These programs are included here because of their connection to the principles of the Partnership for Sustainable Communities.



## Leveraging the Partnership: DOT, HUD, and EPA Programs



transportation officials, and staff resolve the increasingly complex issues they face when addressing transportation needs in their communities. Resources available through this program address topics such as land use, scenario planning, transit-oriented development, non-motorized transportation, safety, community impact assessments, operations and management strategies, and analysis methods. This program is targeted to tribal, regional, state, and local governments; transit operators; and community leaders. <http://www.planning.dot.gov>

### **Metropolitan & Statewide Planning Formula Grant**

**Programs:** These programs, jointly administered by FTA and FHWA, provide formula funding to support cooperative, continuous, and comprehensive planning for making transportation investment decisions in metropolitan areas and statewide. Eligible recipients include state departments of transportation and metropolitan planning organizations.

[http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3563.html](http://www.fta.dot.gov/funding/grants/grants_financing_3563.html) and <http://www.fhwa.dot.gov/planning/>

### **Federal Transit Administration — <http://www.fta.dot.gov/livability>**

A safe, reliable, integrated, and accessible transportation system supports communities, expands business opportunities, and improves people's quality of life while also creating jobs. FTA programs offer different opportunities for funding transportation planning and projects that can assist your community's development and stimulate America's neighborhoods to become safer, healthier, and more environmentally sustainable. FTA provides stewardship of combined formula and discretionary programs totaling more than \$10 billion to support a variety of locally planned, constructed, and operated public transportation systems throughout the United States. Public transportation systems typically include buses, subways, light rail, commuter rail, streetcars, monorail, passenger ferry boats, inclined railways, or people movers.

### **Formula Funding Programs for Transit**

**Urbanized Areas Formula Grant Program:** This program makes federal resources available via formula allocation to transit agencies in urbanized areas over 200,000 in population and to governors for transit capital and operating assistance in urbanized areas between 50,000 and 200,000 in population. Funding can be used for planning, engineering design and evaluation of transit projects, and other technical transportation-related studies. Funding can also be used for capital investments in bus and bus-related activities such as replacement, overhaul, and rebuilding of buses. For urbanized areas with populations of 200,000 or more, at least one percent of the funding apportioned to each area must be used for transit enhancement activities such as historic preservation, landscaping, public art, pedestrian access, bicycle access, and enhanced access for persons with disabilities. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3561.html](http://www.fta.dot.gov/funding/grants/grants_financing_3561.html)

**Rail and Fixed Guideway Modernization Formula Program:** This program provides funding via formula allocation to transit agencies with a fixed guideway transit system. A "fixed guideway" refers to any transit service that uses exclusive or controlled rights-of-way or rails, entirely, or in part. The term includes heavy rail, commuter rail, light rail, monorail, trolleybus, aerial tramway, inclined plane, cable car, automated guideway transit, ferryboats, that portion of motor bus service operated on exclusive or controlled rights-of-way, and high-occupancy-vehicle (HOV) lanes. Funds can be used to modernize or improve existing fixed guideway systems. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3558.html](http://www.fta.dot.gov/funding/grants/grants_financing_3558.html)



**Rural and Small Urban Area Formula Grant Program:** This program provides critical transit access to residents in nonurbanized areas to employment, health, educational, and other important human services and opportunities. Via formula-based funding to states, this program supports public transportation in areas of less than 50,000 in population. Funds may be used for capital, operating, and administrative assistance to state agencies, local public bodies, Indian tribes, nonprofit organizations, and operators of public transportation services. The Intercity Bus program (5311(f)) under this program supports the connection between nonurbanized areas and the larger regional or national system of intercity bus service. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3555.html](http://www.fta.dot.gov/funding/grants/grants_financing_3555.html)

**Rural Transit Assistance Program (RTAP):** RTAP provides funding to assist in the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in nonurbanized areas. RTAP has both state and national program components. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3554.html](http://www.fta.dot.gov/funding/grants/grants_financing_3554.html)

### Competitive Funding Programs for Transit

**Bus and Bus Facilities Discretionary Grant Program:** This program provides capital assistance for new and replacement buses, related equipment, and facilities, as well as intermodal transit centers. Funding is available to states for rural and small urban bus and bus facility projects and to transit agencies for projects in urban areas greater than 200,000 in population. While often earmarked by Congress, this program does have competitive opportunities to provide funding for the purchase of bus and bus facilities, which are announced in the Federal Register. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3557.html](http://www.fta.dot.gov/funding/grants/grants_financing_3557.html)

**New Starts/Small Starts Discretionary Grant Program:** These discretionary programs are the federal government's primary financial resource (49 U.S.C. 5309) for supporting the planning, development, and construction of major transit fixed guideway capital projects. New Starts and Small Starts have helped make possible dozens of new or extended transit fixed guideway systems across the country – heavy rail, light rail, commuter rail, bus rapid transit, and ferries. New Starts projects are typically greater than \$250 million in total project cost, requesting greater than \$75 million in New Starts funding. The Small Starts program supports fixed guideway projects smaller than the New Starts cost thresholds. Participation in the New Starts and Small Starts programs requires completion of a legislatively directed process for planning and project development. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3559.html](http://www.fta.dot.gov/funding/grants/grants_financing_3559.html)

**Public Transportation on Indian Reservations Discretionary Grant Program:** Based upon an annual national competitive selection process, FTA awards Tribal Transit grants directly to federally-recognized Indian tribes. Recipients of Tribal Transit Program grants may use these funds for planning, capital and operating assistance for rural public transit services, and support for rural intercity bus service. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3553.html](http://www.fta.dot.gov/funding/grants/grants_financing_3553.html)

**Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER) Program:** TIGGER grants are awarded to public transit agencies for the implementation of new strategies for reducing greenhouse gas emissions or reducing energy usage from their operations. These strategies can be implemented through operational or technological enhancements or innovations. <http://www.fta.dot.gov/tigger>



**Paul S. Sarbanes Transit in the Parks Discretionary Grant Program:** This program protects environmentally

*(Continued on page 4)*

## Leveraging the Partnership: DOT, HUD, and EPA Programs

sensitive national parks, forests, wildlife refuges, and other federal lands while improving visitor experience through funding for public transportation and other alternative transportation. Administered by FTA in partnership with the Department of the Interior and the Forest Service, the program funds capital and planning expenses for alternative transportation systems such as shuttle buses and bicycle trails in national parks and public lands. The goals of the program are to conserve natural, historical, and cultural resources; reduce congestion and pollution; improve visitor mobility and accessibility; enhance visitor experience; and ensure access to all, including persons with disabilities. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_6106.html](http://www.fta.dot.gov/funding/grants/grants_financing_6106.html)



### Funding Programs for Transit Serving Target Populations

FTA believes that all segments of the population should have safe, reliable access to public transportation. FTA offers several grant programs tailored to target populations such as the elderly, Americans with disabilities, and low-income workers who face particular challenges with access to critical services. FTA programs provide lifeline services through a “mobility management” approach to ensure access for all Americans to public transportation. FTA is also committed to maintaining affordable transportation services for all communities.

**Transportation for Elderly Persons and Persons with Disabilities:** This program provides formula funding to states to help private nonprofit groups meet the transportation needs of the elderly and persons with disabilities when transportation service is unavailable or insufficient. Funds are apportioned based on each state’s share of population for these groups of people. For persons with mobility limitations related to advanced age, persons with disabilities, and persons struggling for self-sufficiency, transportation within and between communities needs to be as available and affordable as possible. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3556.html](http://www.fta.dot.gov/funding/grants/grants_financing_3556.html)

**The Job Access and Reverse Commute Program (JARC):** JARC provides low-income workers and students with transportation services to jobs, employment centers, and educational institutions. A recent study of the economic benefits of employment-related transportation services concluded that transportation funded through the JARC program provided access to approximately 43.4 million jobs, including 21.2 million low-wage jobs. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3550.html](http://www.fta.dot.gov/funding/grants/grants_financing_3550.html)

**The New Freedom Formula Grant Program:** This program aims to provide additional tools to overcome barriers that Americans with disabilities face when seeking integration into the work force and full participation in society. Lack of adequate transportation is a primary barrier to work for individuals with disabilities. The 2000 Census showed that only 60 percent of people between the ages of 16 and 64 with disabilities are employed. The New Freedom formula grant program seeks to reduce barriers to transportation services and expand the mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990. [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3549.html](http://www.fta.dot.gov/funding/grants/grants_financing_3549.html)

### **Federal Highway Administration — <http://www.fhwa.dot.gov>**

FHWA has broad responsibility for improving mobility and safety on our nation’s roads and highways through national leadership, innovation, and program delivery. Although state, local, and tribal governments own most of the nation’s highways, FHWA provides financial and technical support to these governments for constructing, improving, and preserving America’s highway system. Its annual budget of more than \$30 billion is funded by fuel and motor vehicle excise taxes. The budget is primarily divided between two programs: Federal-aid funding to state and local governments; and Federal Lands Highways funding for national parks, national forests, Indian lands, and other land under federal stewardship.





The Federal-Aid Highway Program provides federal financial resources and technical assistance to state and local governments for constructing, preserving, and improving the National Highway System and resources for urban and rural roads that are not on the National Highway System, but that are eligible for federal aid. Below are a few of FHWA's programs that can be used to promote livable community projects.

**Pedestrian and Bicycle Safety Program:** The goal of this program is to reduce pedestrian and bicyclist fatalities, injuries and crashes and make the Nation's roads safer for these vulnerable road users. This is achieved through conducting research and developing guidelines, tools, and safety countermeasures. In addition, program members focus on crash data to identify crash hot spots and determine lower cost measures to improve safety. Part of the effort includes trying to aggressively reduce pedestrian deaths by focusing extra resources on the states (Arizona, California, Florida, Georgia, Hawaii, Illinois, Nevada, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, Texas) and cities (Los Angeles, Phoenix, Chicago, New York City, Washington DC) with the highest pedestrian fatalities and/or fatality rates. [http://safety.fhwa.dot.gov/ped\\_bike/](http://safety.fhwa.dot.gov/ped_bike/)



**Recreational Trails Program (RTP):** This program provides funds to states to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. Federal transportation funds benefit recreation, including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or other off-road motorized vehicles. <http://www.fhwa.dot.gov/environment/rectrails/>

**Transportation Enhancement (TE) Program:** TE activities offer opportunities to help expand transportation choices and enhance the transportation experience through activities related to surface transportation, including pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, and environmental mitigation. TE projects must relate to surface transportation and must qualify under one or more of the eligible categories. <http://www.fhwa.dot.gov/environment/te>

**Context Sensitive Solutions (CSS):** While not a funding program, CSS is a collaborative, interdisciplinary approach that involves all stakeholders in developing a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility. CSS considers the total context within which a transportation improvement project will exist. CSS principles include the employment of early, continuous, and meaningful involvement of the public and all stakeholders throughout the project development process. The project is designed and built with minimal disruption to the community. <http://www.fhwa.dot.gov/context/>

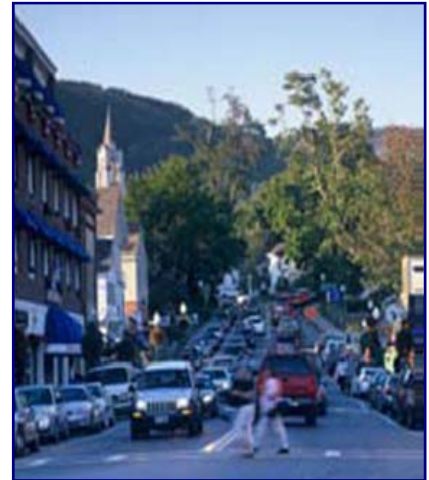
**National Scenic Byways Program:** Grants and technical assistance are provided to states and Indian tribes to implement projects on highways designated as National Scenic Byways, All-American Roads, America's Byways, and state scenic or Indian tribe scenic byways and to plan, design, and develop a state or Indian tribe scenic byway program. Funds shall be available for an activity related to the planning, design, or development of a state or Indian tribe scenic byway program; development and implementation of a byway corridor management plan; safety improvements to accommodate increased traffic; improvements that enhance access; protection of resources adjacent to the byway; development and implementation of a marketing program; development and provision of tourist infrastructure; and construction of bicycle and pedestrian facilities, interpretive facilities, overlooks, and other enhancements for byway travelers. <http://www.fhwa.dot.gov/HEP/byways/index.htm>

(Continued on page 6)

## Leveraging the Partnership: DOT, HUD, and EPA Programs

**Safe Routes to School Program:** For infrastructure-related projects, eligible activities are the planning, design, and construction of projects that will substantially improve the ability of students to walk and bike to school. These include sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, secure bike parking, and traffic diversion improvements in the vicinity of schools (within approximately two miles). Such projects may be carried out on any public road or any bicycle or pedestrian pathway or trail in the vicinity of schools.

Each state must set aside from its Safe Routes to School apportionment not less than 10 percent and not more than 30 percent of the funds for non-infrastructure-related activities to encourage walking and bicycling to school. These include public awareness campaigns and outreach to press and community leaders; traffic education and enforcement in the vicinity of schools; student sessions on bicycle and pedestrian safety, health, and environment; and training of volunteers and managers of Safe Routes to School programs. <http://safety.fhwa.dot.gov/saferoutes/>



**Transportation, Community, and System Preservation Program (TCSP):** These discretionary funds, usually earmarked by Congress, may be used to carry out eligible projects to integrate transportation, community, and system preservation plans and practices that improve the efficiency of the transportation system of the United States; reduce the impacts of transportation on the environment; reduce the need for costly future investments in public infrastructure; provide efficient access to jobs, services, and centers of trade; examine community development patterns; and identify strategies to encourage private-sector development. <http://www.fhwa.dot.gov/tcsp/>

Towns and cities should contact the Metropolitan Planning Organization (MPO) for their area for prospective projects. A list of MPOs can be found at <http://www.ampo.org/directory/index.php>. For additional information, towns and cities can contact their state department of transportation.

### Flexible Programs Under the Federal Highway Administration

Many Federal-Aid Highway programs have specific eligible transit activities identified in legislation. In addition, funds from other programs that do not have specific transit eligibility may be transferred by states to other Federal-Aid Highway programs that do have such eligibility. If funds are transferred from one Federal-Aid Highway program to another, those funds then have the same eligibility as the program that they are transferred to. For example, Interstate Maintenance (IM) funds transferred to the Surface Transportation Program (STP) would have the same eligibility as STP funds.

To transfer funds from FHWA to FTA, the state department of transportation must request that the funds be transferred, with the concurrence of the MPO if the project is within a metropolitan planning area, in a letter to the FHWA Division Office. Funding transfers are permitted only for projects contained in an approved metropolitan transportation improvement program (TIP) and/or statewide transportation improvement program (STIP). [http://www.fta.dot.gov/funding/grants/grants\\_financing\\_3545.html](http://www.fta.dot.gov/funding/grants/grants_financing_3545.html)

**Congestion Mitigation and Air Quality (CMAQ) Program:** The CMAQ program supports transportation projects or programs that will improve air quality and relieve congestion in areas that do not meet National Ambient Air Quality Standards. Reducing pollution and other adverse environmental effects of transportation projects and transportation system inefficiency have been long-standing DOT objectives. CMAQ funds may be used to establish new or expanded transportation projects or programs that reduce emissions, including capital investments in transportation





infrastructure, congestion relief efforts, and diesel engine retrofits. Other CMAQ projects include operating assistance for new transit services, travel demand management strategies, traffic flow improvement programs that reduce emissions, and bicycle/pedestrian facilities and programs. <http://www.fhwa.dot.gov/environment/cmaqpgs/>

**Surface Transportation Program:** The Surface Transportation Program provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including the National Highway System, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. It can be used for a broad array of highway purposes and flexibly used for major transit purposes as well. A few examples include buying buses or rail vehicles or constructing fixed guideway systems like light rail or heavy rail.

<http://www.fhwa.dot.gov/safetealu/factsheets/stp.htm>

**National Highway System (NHS) Program:** The NHS Program provides flexible funding that may be used by states and localities for projects to make improvements to rural and urban roads that are part of the NHS, including the

## U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT



HUD Secretary Shaun Donovan

The Department of Housing and Urban Development’s mission is to increase homeownership, support community development, and increase access to affordable housing free from discrimination

HUD promotes sustainable communities by coordinating federal housing and transportation investments with local land use decisions in order to reduce transportation costs for families, improve housing affordability, save energy, and increase access to housing and employment opportunities. By ensuring that housing is located near job centers and affordable, accessible transportation, we will nurture healthier, more inclusive communities—which provide opportunities for people of all ages, incomes, races, and ethnicities to live, work, and learn together.

### Sustainable Communities — <http://www.hud.gov/sustainability>

HUD’s 2010 appropriations include \$150 million for a Sustainable Communities Initiative to improve regional planning efforts that integrate housing and transportation decisions and increase the capacity to improve land use and zoning, and \$50 million for an Energy Innovation Fund to enable the Federal Housing Administration and the Office of Sustainable Housing and Communities to catalyze innovations in the residential energy efficiency sector that have promise of replicability and help create a standardized home energy efficient retrofit market. These funds will be allocated as follows:

#### Sustainable Communities Initiative

- \$100 million for Regional Integrated Planning Grants to support linking integrated housing, transportation, economic development and other land use planning.
- \$40 million for Community Challenge Grants to foster reform and reduce barriers to achieve affordable, economically vital, and sustainable communities.
- \$10 million for joint HUD/DOT research efforts that shall include a rigorous evaluation of the Regional Integrated Planning Grants and Community Challenge Grants Programs.

#### Energy Innovation Fund

- \$25 million for an Energy Efficient Mortgage Innovation pilot program directed at the single family housing market.
- \$25 million for a Multifamily Energy Pilot directed at the multifamily housing market.

(Continued on page 8)



### Public and Indian Housing

**HOPE VI:** The Hope VI Program provides competitive funding for the elimination or reclamation of severely distressed public housing developments. Funds can be used for demolition, major rehabilitation, and new construction of public housing; acquisition of sites in other locations for private new construction and supportive services for those relocated by the program. The HOPE VI program promotes the creation of mixed-income communities that are pedestrian-friendly, and transit-accessible. It also encourages high standards of green building for new construction projects through regulation and the prioritization of proposals with green features.



<http://www.hud.gov/offices/pih/programs/ph/hope6/index.cfm>

**Public Housing:** The Public Housing Program provides funding to local housing agencies for operating expenses and repairs to public housing developments. Funds are allocated based on the continuing needs of the authorities, especially the number of units they own. Public Housing Authorities (PHAs) are encouraged to use environmentally responsible practices through regulations, guidance, and incentive programs like Energy Performance Contracting (EPC). The EPC program provides funding to make public housing units more resource efficient through the implementation of energy and water conservation measures and the installation of renewable energy systems. By freezing utility subsidies for the length of an EPC contract, PHAs are able to utilize the monetary savings that result from resource-efficiency improvements to repay the upfront costs of those improvements. Historically, the EPC program has generated over \$2 in savings for every \$1 in investment.

<http://www.hud.gov/offices/pih/programs/ph>

**Housing Choice and Project-Based Vouchers:** Housing Choice and Project-Based Voucher Programs provide funding to local public housing agencies for rental subsidies for units that are chosen by the tenant in the private market (Housing Choice Vouchers) or for use in specific developments or units (Project-Based Vouchers). Housing Choice Vouchers allow tenants more flexibility in deciding the location of their residence, giving them more of an opportunity to live closer to work, family, amenities, or services. <http://www.hud.gov/offices/pih/programs/hcv/about/index.cfm>

### Community Planning and Development

**Community Development Block Grants (CDBG):** The CDBG Program provides formula funding directly to larger cities and counties and through state governments for small units of local government. Funds can be used for most kinds of development as long as it meets one of the following national objectives: 1) benefits low- and moderate-income persons; 2) aids in the prevention or elimination of slum and blight; or 3) meets certain community development needs having a particular urgency. CDBG is a flexible program that provides resources to address a wide range of community and economic development needs, including decent housing, a suitable living environment, and expanded economic opportunity. <http://www.hud.gov/offices/cpd/communitydevelopment/programs>

**Section 108** is the loan guarantee provision of the CDBG program that provides public entities loan funds for businesses or other entities to carry out approved economic development, housing, and public facility projects. The public entity may carry out eligible projects itself.

<http://www.hud.gov/offices/cpd/communitydevelopment/programs/108/>

**Brownfields Economic Development Initiative (BEDI):** BEDI is a competitive program used to spur the return of brownfields to productive economic reuse. BEDI grants must be used in conjunction with a new Section 108 loan. Both Section 108 loan proceeds and BEDI grant funds are initially made available by HUD to public entities approved for assistance. <http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm>





## Federal Housing and Urban Development Programs, continued

**HOME Investment Partnership:** The HOME Program provides formula funding directly to larger cities and counties, to consortia of local governments, and to state governments. The HOME program is designed to create affordable housing for low-income households and can take the form of direct assistance or loan guarantees. Funds can be used for most kinds of housing development, including acquisition and rehabilitation in the creation of low-income housing. Additionally HOME program funds can be used for homebuyer assistance and for Tenant-Based Rental Assistance. <http://www.hud.gov/offices/cpd/affordablehousing/programs/home>

**Housing Opportunities for Persons with AIDS:** HOPWA provides formula funding and competitively-awarded grants to states, cities, and nonprofit organizations. Funds can be used to develop and support housing for people with AIDS and may be used for certain supportive services. <http://www.hud.gov/offices/cpd/aidshousing/index.cfm>

**Neighborhood Stabilization Program (NSP):** NSP comprised two one-time only grants, in 2008 and 2009, to states, local governments, and selected non-profit organizations to help communities address their serious housing foreclosure problems. Funds are being used to acquire and rehabilitate abandoned or foreclosed housing in distressed neighborhoods. [http://portal.hud.gov/portal/page/portal/RECOVERY/programs/NEIGHBORHOOD\\_STABILIZATION](http://portal.hud.gov/portal/page/portal/RECOVERY/programs/NEIGHBORHOOD_STABILIZATION)

**Homeless Programs:** Homeless Programs provide formula and competitive funding to state and local governments and private nonprofit organizations. Competitive funds are awarded in connection with the Continuum of Care planning group, a community-wide group that plans for and provides services to homeless people. Funds can be used for services and for development of emergency shelters and transitional and permanent housing to serve the homeless. <http://www.hud.gov/offices/cpd/homeless/index.cfm>

**Rural Innovation Fund:** HUD's FY 2010 appropriations include \$25 million for a new Rural Innovation Fund to address the problems of concentrated rural housing distress and community poverty.



### Housing Programs and FHA Mortgage Insurance Resources

**Supportive Housing for the Elderly (Section 202) and Supportive Housing for Persons with Disabilities (Section 811):** These programs provide competitive funding to nonprofit agencies developing housing for the elderly and persons with disabilities. Funds consist of capital grants to assist in the original construction and annual project rental assistance to support operating and maintenance costs to ensure that rents remain affordable to very low-income people. <http://www.hud.gov/offices/hsg/mfh/progdsc/eld202.cfm>  
<http://www.hud.gov/offices/hsg/mfh/progdsc/disab811.cfm>

**Mortgage Insurance for Rental Housing:** Several FHA mortgage insurance programs can be used to facilitate the new construction and substantial rehabilitation of multifamily rental projects. Some FHA programs can be used to refinance and acquire existing multifamily projects not requiring substantial rehabilitation. These programs include:

- Mortgage insurance pursuant to Section 220 may be used to insure loans for multifamily housing projects in designated urban renewal areas, code enforcement areas, and other areas that local governments have designated for revitalization. <http://www.hud.gov/offices/hsg/mfh/progdsc/renturbanhsg220.cfm>

(Continued on page 10)



## Leveraging the Partnership: DOT, HUD, and EPA Programs

- Mortgage insurance pursuant to Section 221(d)(4) and Section 221(d)(3) may be used to insure mortgages used to construct or substantially rehabilitate multifamily rental housing. The former program may be used by for-profit sponsors and the latter by nonprofit sponsors.  
<http://www.hud.gov/offices/hsg/mfh/progdesc/rentcoopshg221d3n4.cfm>
- Mortgage insurance pursuant to Section 207/223(f) may be used to insure mortgages made for the purpose of acquiring or refinancing existing multifamily rental housing. Projects requiring substantial rehabilitation are not eligible for the program. <http://www.hud.gov/offices/hsg/mfh/progdesc/purchrefi223f.cfm>
- Eligible owners and purchasers utilizing the above programs apply for the FHA insurance through HUD-approved lenders. The programs have differing maximum mortgage limitations and requirements.

**Mortgage Insurance for Condominium Units:** FHA also insures mortgages on condominium units in developments that are proposed or under construction, existing projects, or conversions. Generally, approval of the condominium project must be obtained from an authorized lender.

<http://www.hud.gov/offices/adm/hudclips/letters/mortgagee/files/09-46aml.pdf>

<http://www.hud.gov/offices/adm/hudclips/letters/mortgagee/files/09-46bml.pdf>

**Housing Finance Agency Risk Sharing Program:** Under this program, HUD provides credit enhancement on loans underwritten and closed by a state or local housing finance agency (HFA). Loans made pursuant to Section 542(c) are for affordable housing which includes new construction, substantial rehabilitation, elderly housing, and refinancing. Eligible owners and purchasers apply for the program through the appropriate HFA.

<http://www.hud.gov/offices/hsg/mfh/progdesc/riskshare542b.cfm>

## U.S. ENVIRONMENTAL PROTECTION AGENCY

The U.S. Environmental Protection Agency's mission is to protect human health and the environment. Where and how we build communities has a major impact on the environment and on public health. By promoting more environmentally, economically, and socially sustainable communities, EPA can help protect our nation's air, water, land, and people. A clean, green, healthy community is a better place to buy a home and raise a family, it's an appealing place for businesses to locate, and it has the foundations it needs for prosperity. Many EPA programs are aimed at helping tribal, state, and local governments support activities that build more sustainable communities and protect human health and the environment.



EPA Administrator Lisa Jackson

In addition to the resources listed here, EPA programs offer many tools on a variety of topics that communities may find useful.

<http://www.epa.gov/smartgrowth/partnership/tools.html>

### Brownfields Remediation and Redevelopment

EPA has a variety of programs to help eligible entities assess, remediate, and restore brownfields sites to productive use and revitalize affected neighborhoods. <http://www.epa.gov/brownfields>

**Assessment Grant Program:** These grants provide funding to inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites. Grants are for up to \$200,000 to address sites contaminated by hazardous substances, and up to \$200,000 to address sites contaminated by petroleum. Applicants can also apply as an Assessment Coalition (a group of three or more eligible entities) for up to \$1 million.

[http://www.epa.gov/brownfields/assessment\\_grants.htm](http://www.epa.gov/brownfields/assessment_grants.htm)



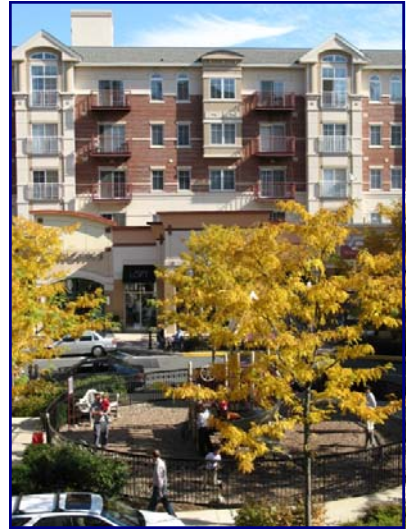
**Revolving Loan Fund (RLF) Grant Program:** These grants of up to \$1 million provide funding to capitalize a revolving loan fund. Revolving loan funds can be used to provide no-interest or low-interest loans and subgrants to eligible entities who own the site to carry out cleanup activities at brownfield sites. RLF grants require a 20 percent cost share.

<http://www.epa.gov/brownfields/rflfst.htm>

**Cleanup Grant Program:** These grants provide funding for a recipient to carry out cleanup activities at brownfields sites that it owns. Sites may be contaminated by hazardous substances and/or petroleum. Grants are up to \$200,000 per site and require a 20 percent cost share.

[http://www.epa.gov/brownfields/cleanup\\_grants.htm](http://www.epa.gov/brownfields/cleanup_grants.htm)

**Brownfields Job Training Grant Program:** These grants provide funding to eligible entities and nonprofit organizations to help communities take advantage of jobs created by the assessment and cleanup of brownfields. The Job Training Grant Program's goals are to prepare trainees for future employment in the environmental field and to facilitate cleanup of brownfield sites contaminated with hazardous substances. Grants are for up to \$200,000. <http://www.epa.gov/brownfields/job.htm>



**Targeted Brownfields Assessments:** These assessments are conducted by an EPA contractor, and services can include site assessments, cleanup options and cost estimates, and community outreach. Sites for this program are selected by EPA regional offices. Services can range from several thousand dollars to as much as \$100,000.

[http://www.epa.gov/brownfields/grant\\_info/tba.htm](http://www.epa.gov/brownfields/grant_info/tba.htm)

**Technical Assistance to Brownfields (TAB) Program:** TAB services are provided to communities, regional entities, and nonprofits who need technical assistance dealing with brownfield sites. The program can also assist communities with applying for EPA brownfields grants or identifying other resources to address their brownfield sites.

[http://epa.gov/brownfields/tools/tab\\_bifold.pdf](http://epa.gov/brownfields/tools/tab_bifold.pdf)

### Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across the nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

<http://www.epa.gov/environmentaljustice/>

**Environmental Justice Small Grants Program:** This program provides financial assistance to eligible organizations to build collaborative partnerships, to identify the local environmental and/or public health issues, and to envision solutions and empower the community through education, training, and outreach.

<http://www.epa.gov/environmentaljustice/grants/ej-smgrants.html>

**Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program:** This program provides financial assistance to eligible organizations working on or planning to work on projects to address local environmental and/or public health issues in their communities, using EPA's "Environmental Justice Collaborative Problem-Solving Model." <http://www.epa.gov/environmentaljustice/grants/ej-cps-grants.html>

(Continued on page 12)

## Leveraging the Partnership: DOT, HUD, and EPA Programs

**State Environmental Justice Cooperative Agreements Program:** This program provides funding so that eligible entities may work collaboratively with affected communities to understand, promote, and integrate approaches to provide meaningful and measurable improvements to the public health and/or environment in the communities. <http://www.epa.gov/environmentaljustice/grants/ej-sejca-grants.html>

**Environmental Justice Showcase Communities Project:** This project provides EPA regional office funding to bring together governmental and non-governmental organizations to pool their resources and expertise on the best ways to achieve real results in communities. The successes and lessons learned in these demonstration projects will be used to help guide the design and implementation of future environmental justice projects and will help EPA increase its ability to address local environmental challenges in more effective, efficient, and sustainable ways. <http://www.epa.gov/environmentaljustice/grants/ej-showcase.html>

### Toxic Pollution Reduction

**Community Action for a Renewed Environment (CARE):** CARE is a competitive grant program that offers an innovative way for a community to organize and take action to reduce toxic pollution in its local environment. Through CARE, a community creates a partnership that implements solutions to reduce releases of toxic pollutants and minimize people's exposure to them. By providing financial and technical assistance, EPA helps CARE communities get on the path to a renewed environment. <http://www.epa.gov/care/>

**Lead Grants:** EPA awards grants aimed at reducing childhood lead poisoning in communities with older housing through the National Community-Based Lead Grant and the Targeted Lead Grant Programs. The projects supported by these grant funds are an important part of EPA's lead program to eliminate childhood lead poisoning as a major public health concern. <http://www.epa.gov/lead/pubs/grantmap.htm>



### Energy Conservation and Renewable and Clean Energy

**Energy Efficiency at the State and Local Levels:** The State and Local Climate and Energy Program provides technical assistance, analytical tools, and outreach support to state, local, and tribal governments. Specific assistance includes identifying and documenting cost-effective policies and initiatives; measuring and evaluating the benefits of clean energy initiatives; offering tools, guidance, and outreach support; and fostering peer exchange opportunities. The program's web site provides state and local governments with information on energy efficiency and clean energy, including webcasts on a variety of topics. <http://epa.gov/statelocalclimate>

**National Clean Diesel Campaign (NCDC):** NCDC offers a comprehensive program to help fleet owners clean up their diesel fleets. The campaign awards competitive grants through the Diesel Emissions Reduction Act to public agencies, eligible nonprofits, and private entities, such as school bus contractors, who partner with eligible entities. NCDC's rigorous verification program evaluates the performance and durability of retrofit technologies and provides a path to verification for emerging technologies. The campaign's innovative programs, such as Clean School Bus USA, Clean Ports USA, and Clean Construction USA, provide sector-specific information, including case studies, technology options, and publications. NCDC's tools and resources include the web-based Diesel Emissions Quantifier to help evaluate the cost-effectiveness of various retrofit options and the State and Local Toolkit to help design, fund, and evaluate emission-reduction programs. In addition, NCDC supports regional private-public collaboratives whose members coordinate to implement a wide array of activities to reduce diesel emissions. <http://epa.gov/cleandiesel/>





**SmartWay Transport Partnership:** Under SmartWay, EPA provides web-based analytical tools, technical assistance, innovative financing options, air quality planning guidance, product and vehicle verification and certification, and recognition incentives to help states and municipalities support cleaner goods movement in their communities. SmartWay partners learn how to shrink their carbon footprints and reduce emissions of air pollutants while saving fuel and expanding their businesses. SmartWay's innovative financial options can help trucking firms, municipal fleet managers, and owner-operators serving communities across the country overcome financial obstacles to cleaner, fuel-saving vehicle retrofits and upgrades. Cities can partner with EPA regional offices to recruit city-based freight shippers and carriers into the program, organize events or pilot tools/resources for the local business community, use locomotive and truck idle-reduction strategies to achieve clean air goals, and let businesses and consumers know about lower-polluting, fuel-saving, SmartWay-designated passenger vehicles and commercial trucks.  
<http://www.epa.gov/smartway>

### Smart Growth

EPA's Smart Growth Program offers case studies, research, tools, and publications to help communities learn about and implement smart growth solutions to a wide range of development-related challenges, including transportation and parking, affordable housing, stormwater runoff, zoning codes, infill and redevelopment, and many other issues.  
<http://www.epa.gov/smartgrowth/>



**Smart Growth Implementation Assistance (SGIA) Program:** Through the SGIA program, EPA solicits applications from state, local, regional, and tribal governments (and non-profits that have partnered with a governmental entity) that want to incorporate smart growth techniques into their future development. Once selected, communities receive direct technical assistance from a team of national experts in one of two areas: policy analysis (e.g., zoning codes, school siting guidelines, transportation policies) or public participatory processes (e.g., visioning, design workshops, alternatives analysis). EPA tailors the assistance to the community's unique situation and priorities and provides the contractor team. This is not a grant. Through a site visit and a report, the multidisciplinary teams help the community achieve its goal of encouraging growth that fosters economic progress and environmental protection. The SGIA Request for Applications is usually open in the first quarter of the year. <http://www.epa.gov/smartgrowth/sgia.htm>

**Funding Resources:** The Smart Growth Program occasionally offers competitive grants. It has also compiled lists of federal, regional, and state resources for communities and non-governmental organizations that are seeking funding to address various aspects of smart growth. <http://www.epa.gov/smartgrowth/grants/index.htm>

### Water Quality

In urban and suburban areas, much of the land surface is covered by buildings, pavement, and compacted landscapes that do not allow rain and snowmelt to soak into the ground, which greatly increases the volume and velocity of stormwater runoff. Upgrading water infrastructure and using green infrastructure techniques can help improve stormwater management to better protect our nation's drinking water and lakes, rivers, streams, and other water bodies. <http://www.epa.gov/owow/nps/urban.html>

**State Revolving Loan Funds:** The Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Programs are federal/state partnerships designed to finance the cost of infrastructure needed to achieve compliance with the Clean Water Act. Through the SRFs, states maintain revolving loan funds to provide low-cost financing for a wide range of water quality infrastructure projects, such as traditional municipal wastewater treatment and collection systems, nonpoint source program implementation projects, wetlands restoration, groundwater protection, innovative stormwater runoff and estuary management projects, drinking water treatment and conveyance systems, and source water protection. Funds to establish or capitalize the SRF programs are provided through

*(Continued on page 14)*

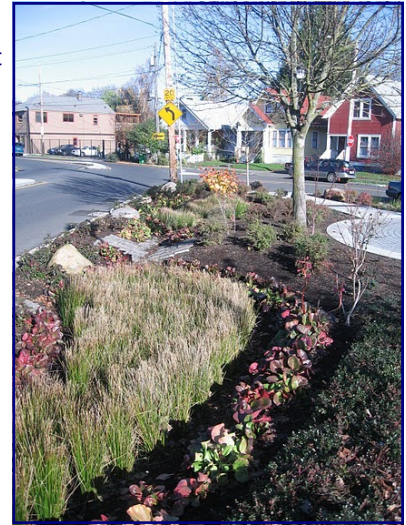
## Leveraging the Partnership: DOT, HUD, and EPA Programs

EPA grants to the states, along with state matching funds (equal to 20 percent of federal government grants). Under the American Recovery and Reinvestment Act stimulus funding, in FY 2010, 20 percent of the federal funds must be targeted to green infrastructure, water-efficiency improvements, energy-efficiency improvement, and environmentally innovative approaches to water quality improvement.

<http://www.epa.gov/owm/cwfinance/cwsrf/> and  
<http://www.epa.gov/safewater/dwsrf/>

**Green Infrastructure:** Green infrastructure is an approach to wet weather management that is cost effective, sustainable, and environmentally friendly. Green infrastructure management approaches and technologies infiltrate, evapotranspire, capture, and reuse stormwater to maintain or restore natural hydrology. Many of these approaches, including green roofs, rain gardens, green streets, and other innovative stormwater management techniques, can also make neighborhoods safer, healthier, and more attractive. EPA has compiled a list of funding resources to help communities fund green infrastructure projects.

<http://cfpub.epa.gov/npdes/greeninfrastructure/fundingopportunities.cfm>



**Asset Management:** As communities undertake the task of renewing their water infrastructure systems, EPA can offer a suite of practices and approaches to ensure that water infrastructure both supports sustainable communities and can be supported by the communities it serves. One of the keys to sustainable infrastructure is the practice of Asset Management (AM), which provides a platform for making the best, most effective infrastructure investments. EPA offers AM training and a suite of tools to promote adoption and improvement of AM implementation. Multisector AM integrates investments in water, transportation, and housing infrastructure and is being promoted through a Memorandum of Understanding between EPA and DOT.

<http://www.epa.gov/owm/assetmanage/>

**Nonpoint Source Management Grants:** Under Section 319 of the Clean Water Act, states receive grant money to support a wide variety of activities to reduce nonpoint source pollution, including techniques related to agriculture, urban runoff, forestry, and the physical modification of water bodies. States directly implement projects as well as provide funds to organizations and local governments to carry out projects that reduce nonpoint source pollution through best management practices, outreach and education, and demonstration of new approaches to improve water quality. These grant monies may not be used to fund activities currently required in a stormwater permit issued under the authority of the Clean Water Act. Each state publishes an annual request for proposals.

<http://www.epa.gov/nps/cwact.html>

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## U.S. DEPARTMENT OF TRANSPORTATION: FEDERAL TRANSIT ADMINISTRATION

**Region 1 (CT, MA, ME, NH, RI, VT)** Kendall Square, 55 Broadway, Suite 920, Cambridge, MA 02142-1093, Tel: 617-494-2055

**Region 2 (NJ, NY)** One Bowling Green, Room 429, New York, NY 10004-1415, Tel: 212-668-2170

**Region 3 (DC, DE, MD, PA, VA, WV)** 1760 Market Street, Suite 500, Philadelphia, PA 19103-4124, Tel: 215-656-7100

**Region 4 (AL, FL, GA, KY, MS, NC, PR, SC, TN, VI)** 230 Peachtree Street, NW, Suite 800, Atlanta, GA 30303, Tel: 404-865-5600

**Region 5 (IL, IN, MI, MN, OH, WI)** 200 West Adams Street, Suite 320, Chicago, IL 60606, Tel: 312-353-2789

**Region 6 (AR, LA, OK, NM, TX)** 819 Taylor Street, Room 8A36, Ft. Worth, TX 76102, Tel: 817-978-0550

**Region 7 (IA, KS, MO, NE)** 901 Locust Street, Room 404, Kansas City, MO 64106, Tel: 816-329-3920

**Region 8 (CO, MT, ND, SD, UT, WY)** 12300 West Dakota Avenue, Suite 310, Lakewood, CO 80228-2583, Tel: 720-963-3300

**Region 9 (AZ, CA, HI, NV, American Samoa, Guam, Northern Mariana Islands)** 201 Mission Street, Room 1650, San Francisco, CA 94105-1926, Tel: 415-744-3133

**Region 10 (AK, ID, OR, WA)** Jackson Federal Building, 915 Second Avenue, Suite 3142, Seattle, WA 98174-1002, Tel: 206-220-7954

## U.S. DEPARTMENT OF TRANSPORTATION: FEDERAL HIGHWAY ADMINISTRATION

The Federal Highway Administration field offices are organized by state. For efforts related to the Partnership for Sustainable Communities, specific FHWA Division Offices have assumed leadership roles for facilitating and organizing efforts within the DOT/HUD/EPA regions. Below is their contact information.

**Region 1 (CT, MA, ME, NH, RI, VT)** - Massachusetts Division: 55 Broadway, 10th Floor, Cambridge, MA 02142, Tel: 617-494-2419

**Region 2 (NJ, NY)** - New York Division: Leo O'Brien Federal Building, Clinton Avenue & North Pearl Street, Room 719, Albany, NY 12207, Tel: 518-431-4125

**Region 3 (DC, DE, MD, PA, VA, WV)** - Pennsylvania Division: 228 Walnut Street, Room 536, Harrisburg, PA 17101-1720, Tel: 717-221-3703

**Region 4 (AL, FL, GA, KY, MS, NC, PR, SC, TN, VI)** - Georgia Division: 61 Forsyth Street SW, Suite 17T100, Atlanta, GA 30303, Tel: 404-562-3659

**Region 5 (IL, IN, MI, MN, OH, WI)** - Illinois Division: 3250 Executive Park Drive, Springfield, IL 62703, Tel: 217-492-4642

**Region 6 (AR, LA, OK, NM, TX)** - Texas Division: Federal Office Building, 300 East 8th Street, Austin, TX 78701, Tel: 512-536-5952

**Region 7 (IA, KS, MO, NE)** - Missouri Division: 3220 West Edgewood, Suite H, Jefferson City, MO 65109, Tel: 573-638-2620

**Region 8 (CO, MT, ND, SD, UT, WY)** - Colorado Division: 12300 W. Dakota Avenue, Suite 180, Lakewood, CO 80228, Tel: 720-963-3016

Also, FHWA's Resource Center staff are available for assistance:

- Atlanta, Georgia: 61 Forsyth Street, Suite 17T26, Atlanta, GA 30303, Tel: 404-562-3667
- Lakewood, Colorado: 12300 W. Dakota Avenue, Suite 340, Lakewood, CO 80228, Tel: 720-963-3072
- San Francisco, California: 201 Mission Street, Suite 1700, San Francisco, CA 94105, Tel: 415-744-2628





## U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

**Region 1 (CT, MA, ME, NH, RI, VT)** 10 Causeway Street, Room 301, Boston, MA 02222-1092, Tel: 617-994-8200

**Region 2 (NJ, NY)** 26 Federal Plaza, Suite 3541, New York, NY 10278-0068, Tel: 212-264-8000

**Region 3 (DC, DE, MD, PA, VA, WV)** 100 Penn Square East, Philadelphia, PA 19107-3380, Tel: 215-656-0500

**Region 4 (AL, FL, GA, KY, MS, NC, PR, SC, TN, VI)** 40 Marietta Street, Atlanta, GA 30303-2806, Tel: 404-331-5001

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**Region 6 (AR, LA, OK, NM, TX)** 801 Cherry Street, Unit #45, Suite 2500, Ft. Worth, TX 76102, Tel: 817-978-5965

**Region 7 (IA, KS, MO, NE)** 400 State Avenue, Room 507, Kansas City, KS 66101-2406, Tel: 913-551-5462

**Region 8 (CO, MT, ND, SD, UT, WY)** 1670 Broadway, 25th Floor, Denver, CO 80202, Tel: 303-672-5440

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**Region 10 (AK, ID, OR, WA)** 909 First Avenue Suite 200, Seattle, WA 98104-1000, Tel: 206-220-5101

## U.S. ENVIRONMENTAL PROTECTION AGENCY

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**Region 2 (NJ, NY, PR, VI)** 290 Broadway, New York, NY 10007-1866, Tel: 212-637-3000

**Region 3 (DC, DE, MD, PA, VA, WV)** 1650 Arch Street, Philadelphia, PA 19103-2029, Tel: 215-814-5000

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**Region 5 (IL, IN, MI, MN, OH, WI)** 77 West Jackson Boulevard, Chicago, IL 60604-3507, Tel: 312-353-2000

**Region 6 (AR, LA, NM, OK, TX)** Fountain Place, 12th Floor, Suite 1200, 1445 Ross Avenue, Dallas, TX 75202-2733, Tel: 214-665-2200

**Region 7 (IA, KS, MO, NE)** 901 North 5th Street, Kansas City, KS 66101, Tel: 913-551-7003

**Region 8 (CO, MT, ND, SD, UT, WY)** 1595 Wynkoop Street, Denver, CO 80202-1129, Tel: 303-312-6312

**Region 9 (AZ, CA, HI, NV, Pacific Islands)** 75 Hawthorne Street, San Francisco, CA 94105, Tel: 415-947-8000

**Region 10 (AK, ID, OR, WA)** 1200 Sixth Avenue, Suite 900, Seattle, WA 98101, Tel: 206-553-1200



## Response to Comments Submitted by U.S. EPA – June 15, 2010

**GENERAL RESPONSE: MCTC is committed to the implementation of all applicable environmental requirements in the development of the RTP and RTP EIR. Chapter 6 of the 2011 RTP details the smart growth strategies developed by MCTC in the Regional Blueprint Planning Process. MCTC is committed to implementation of the San Joaquin Valley Blueprint. Comments germane to the environmental review process have also been addressed in the Final 2011 RTP EIR.**

MCTC-1 Delineate Robust Measures to Improve Air Quality through Travel Efficiency

**This comment is noted.**

MCTC-2 Use the RTP Process to Spur Transportation Efficient Growth That Accomplishes Multiple Objectives

**This comment is noted.**

MCTC-3 Clarify in the RTP How the Ongoing Regional Blueprint Effort Influenced Any Current Design and Route Network Location Decisions

**This comment is noted.**

MCTC-4 Discuss Greenhouse Gas Implications and Preparation for a Carbon Constrained Future Transportation Network

**This comment is noted.**

MCTC-5 Discuss Impacts to Critical Habitat Areas and Connect It to a Broader Regional Mitigation Strategy in the RTP

**This comment is noted.**

MCTC-6 Describe the Use of Available Data to Inform Regional Transportation Planning Decisions

**This comment is noted.**

## **APPENDIX K – RESOLUTION**

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BEFORE  
THE COMMISSIONERS OF THE MADERA COUNTY TRANSPORTATION COMMISSION  
COUNTY OF MADERA, STATE OF CALIFORNIA

In the matter of ) Resolution No. 10-12  
**APPROVING THE 2011 RTP,** )  
**2011 FTIP AND AIR QUALITY** )  
**CONFORMITY ANALYSIS** )  
\_\_\_\_\_ )

**WHEREAS,** the Madera County Transportation Commission (MCTC) is a Regional Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal designation; and

**WHEREAS,** federal planning regulations require Metropolitan Planning Organizations to prepare and adopt a long range a Regional Transportation Plan (RTP) for their region; and

**WHEREAS,** Section 65080 of the California Government Code requires each regional transportation planning agency to prepare a regional transportation plan and update it for submission to the governing Policy Board for adoption; and

**WHEREAS,** a 2011 Regional Transportation Plan (2011 RTP) has been prepared in full compliance with federal guidance; and

**WHEREAS,** a 2011 Regional Transportation Plan has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

**WHEREAS,** federal planning regulations require that Metropolitan Planning Organizations prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and

**WHEREAS,** the 2011 Federal Transportation Improvement Program (2011 FTIP) Amendment has been prepared to comply with Federal and State requirements for local projects through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through the Madera County Transportation Commission forum and general public involvement; and

**WHEREAS,** the 2011 FTIP program listing is consistent with: 1) the 2011 Regional Transportation Plan, 2) the 2010 State Transportation Improvement Program; and 3) the Corresponding Conformity Analysis; and

**WHEREAS,** the 2011 FTIP contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

**WHEREAS,** the 2001 FTIP meets all applicable transportation planning requirements per 23 CFR Part 450.



1  
2       **WHEREAS**, projects submitted in the 2011 FTIP must be financially constrained and the financial plan  
3 affirms that funding is available; and

4  
5       **WHEREAS**, the 2011 RTP and 2011 FTIP includes a new Conformity Analysis; and

6  
7       **WHEREAS**, the MPO must demonstrate conformity per 40 CFR Part 93 for the RTP and FTIP; and

8  
9       **WHEREAS**, the 2011 RTP and 2011 FTIP do not interfere with the timely implementation of the  
10 Transportation Control Measures; and

11  
12       **WHEREAS**, the 2011 RTP and 2011 FTIP conforms to the applicable SIPs; and

13  
14       **WHEREAS**, the documents have been widely circulated and reviewed by MCTC advisory  
15 committees representing the technical and management staffs of the member agencies; representatives of  
16 other governmental agencies, including State and Federal; representatives of special interest groups;  
17 representatives of the private business sector; and residents of Madera County consistent with public  
18 participation process adopted by MCTC; and

19  
20       **WHEREAS**, a public hearing was conducted on May 19, 2010 to hear and consider comments on the  
21 2011 RTP, 2011 FTIP, and Corresponding Conformity Analysis; and

22  
23       **NOW, THEREFORE, BE IT RESOLVED**, that MCTC adopts the 2011 RTP, 2011 FTIP, and  
24 Corresponding Conformity Analysis.

25  
26       **BE IT FURTHER RESOLVED**, that the MCTC finds that the 2011 RTP and 2011 FTIP are in  
27 conformity with the requirements of the Federal Clean Air Act Amendments and applicable State  
28 Implementation Plans for air quality.

29  
30 The foregoing resolution was adopted this 21st day of July, 2010 by the following vote:

31  
32 Commissioner Rodriguez voted:                   Yes  
33 Commissioner Bigelow voted:                    Absent  
34 Commissioner Armentrout voted:                Yes  
35 Commissioner Wheeler voted:                   Yes  
36 Commissioner Poythress voted:                 Yes  
37 Commissioner Kopshever voted:                Yes

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41 \_\_\_\_\_  
42 Chairman, Madera County Transportation Commission

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46 \_\_\_\_\_  
47 Executive Director, Madera County Transportation Commission  
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