FINAL
2007 DESTINATION 2030
REGIONAL TRANSPORTATION PLAN

May 17, 2007

Preparation of this report has been financed in part through grants from the U.S. Department of Transportation. Contents of this report do not necessarily reflect the official view or policies of the U.S. Department of Transportation.
Kern Council of Governments
Board of Directors

Kern Council of Governments is the regional planning agency as well as the technical and informational resource, and ride share administrator for the area’s 11 incorporated cities and the County of Kern. Following Board direction, staff coordinates between local, state, and federal agencies to avoid overlap or duplication of programs. This intergovernmental coordination enables staff to work with many public agencies to ensure that planning and implementation of programs proceed in a coordinated manner.

Chairman: Philip Smith
Vice Chairman: David Couch
Secretary/ Executive Director: Ronald E. Brummett

**City of Arvin**  
John Olivares

**City of Bakersfield**  
David Couch

**City of California City**  
Nicholas Lessenevitch

**City of Delano**  
Art Armendariz

**City of Maricopa**  
Aileen Throop

**City of McFarland**  
Ralph Melendez

**City of Ridgecrest**  
Ron Carter

**City of Shafter**  
Garry Nelson

**City of Taft**  
Ray Hatch

**City of Tehachapi**  
Philip Smith

**City of Wasco**  
Cheryl Wegman

**County of Kern**  
Jon McQuiston

**County of Kern**  
Raymond A. Watson

**Ex-Officio Members:**

**Caltrans**  
Alan McCuen

**Military Joint Planning Policy Board**  
Bill Shelton

**Golden Empire Transit District**  
Howard Silver

**Kern Council of Governments Staff:**

Darrel Hildebrand, Asst. Director  
Peter W. Smith, Senior Planner  
Marilyn J. Beardslee, Senior Planner  
Robert Ball, Senior Planner  
Joe Stramaglia, Senior Planner  
Ed Flickinger, Regional Planner III  
Bill Larsen, Regional Planner III  
Bob Snoddy, Regional Planner III  
Michael Heimer, Regional Planner III  
Raquel Carabajal, Regional Planner II  
Vincent Zhe Liu, Regional Planner II  
Troy Hightowwer, Regional Planner I  
Greg Palomo, Administrative Assistant  
Robert Phipps, Administrative Analyst  
Laurie Collins, Executive Secretary  
Fasika Montalvo, Secretary
# TABLE OF CONTENTS

EXECUTIVE SUMMARY................................................................................................................. 1

CHAPTER 1 – INTRODUCTION..................................................................................................... 1-1
  Regional Planning Process................................................................................................. 1-1
  SAFETEA-LU...................................................................................................................... 1-2
  Overview of State Requirements.................................................................................... 1-3
  Public Outreach............................................................................................................... 1-4
  Transportation Planning in the Kern Region............................................................... 1-5

CHAPTER 2 – TRANSPORTATION PLANNING POLICIES....................................................... 2-1
  Introduction...................................................................................................................... 2-1
  Goals/Policies............................................................................................................... 2-1
  Performance Monitoring............................................................................................... 2-7

CHAPTER 3 – PLANNING ASSUMPTIONS................................................................................. 3-1
  Growth Trends............................................................................................................... 3-1
  Demographics............................................................................................................... 3-2
  Housing, Households and Group Quarters................................................................. 3-3
  Mobility and Air Quality............................................................................................... 3-4
  Land Use Nexus............................................................................................................ 3-4

CHAPTER 4 – STRATEGIC INVESTMENTS............................................................................ 4-1
  Introduction...................................................................................................................... 4-1
  Regional Streets and Highways Action Element....................................................... 4-2
  Existing Streets and Highways System....................................................................... 4-2
  Accomplishments Since 2000..................................................................................... 4-2
  Needs and Issues........................................................................................................... 4-3
  Deferred Local Maintenance Needs........................................................................... 4-3
  Level of Service............................................................................................................ 4-4
  Regional Transportation Impact Fees (TIFs)............................................................... 4-11
  Intergovernmental Partnership Planning..................................................................... 4-11
  Roads and Streets Monitoring...................................................................................... 4-11
  Proposed Capital Improvements............................................................................... 4-11
  Proposed Actions......................................................................................................... 4-12
  Near Term, 2007-2010.................................................................................................. 4-12
  Long Term, 2011-2030.................................................................................................. 4-12
  Major Highway Improvement Maps (Constrained 2007-2030 and Unconstrained, without time allotment)................................................................................. 4-21
  Public Transportation Action Element....................................................................... 4-33
  Existing Transit Services............................................................................................. 4-33
  Accomplishments Since 2000..................................................................................... 4-35
    Golden Empire Transit District (GET)........................................................................... 4-35
    Consolidated Transportation Service Agency (CTSA)................................................. 4-36
    Kern Regional Transit.................................................................................................. 4-36
    Amtrak – San Joaquin Service Improvements.............................................................. 4-36
  Transit Needs and Issues............................................................................................. 4-37
    Limited Transit Dollars.............................................................................................. 4-37
    Short-Range Transportation Development Plans (TDPs).............................................. 4-37
    Senior/Mobility-Disabled Public Transportation......................................................... 4-38
    Population Residing More Than 1.4 Mile From Transit Route.................................... 4-38
  Recent Transit Planning Activities................................................................................ 4-38
    Eastern Sierra Public Transportation Study............................................................... 4-38
Proposed Actions ........................................................................................................... 4-58
TCM Coordination ..................................................................................................... 4-59
TCM Implementation ................................................................................................. 4-59
TCM Education .......................................................................................................... 4-60
Land Use Action Element ......................................................................................... 4-61
Major Transportation Investment Study ................................................................ 4-61
Land Use Decisions Outside Kern County ................................................................ 4-62
Regional Housing Allocation Plan ........................................................................... 4-62
A New Vision .............................................................................................................. 4-62
Near Term Actions 2007-2010 ................................................................................ 4-63
Long Term Actions 2011-2030 ................................................................................ 4-63
Intelligent Transportation Systems Action Element ................................................. 4-65
Kern EDP Needs and Issues ...................................................................................... 4-65
Kern ITS Programs .................................................................................................... 4-65
ITS Benefits ................................................................................................................ 4-66
San Joaquin Valley ITS Plan ..................................................................................... 4-67
Short- and Long-Term Actions – 2007-2030 ............................................................ 4-67
San Joaquin Valley ITS Architecture Maintenance Plan .......................................... 4-67
Congestion Management Program Element ............................................................. 4-68
Purpose ....................................................................................................................... 4-68
Contents ...................................................................................................................... 4-69
Monitoring and Implementation Process ................................................................. 4-69
Designated Regional Transportation System .......................................................... 4-70
Highways ..................................................................................................................... 4-71
Principal Arterials ..................................................................................................... 4-71
Level of Service Standards ....................................................................................... 4-73
Adopted Level of Service Standard .......................................................................... 4-73
Performance Standards ............................................................................................ 4-74
Transit Services in Kern County ............................................................................... 4-75
Transit Coordination ................................................................................................ 4-75
Interim Frequency and Routing Standards for General Public Rural Operators .... 4-76
Demand Responsive/Rural Transit Operations ......................................................... 4-76
Transit Coordination in the Local Jurisdiction EIR Process ..................................... 4-76
Arvin Transit ................................................................................................................ 4-76
California City Transit ............................................................................................... 4-77
Delano Transit ............................................................................................................ 4-77
McFarland Transit ..................................................................................................... 4-77
Ridgecrest Transit ...................................................................................................... 4-77
Shafter Transit ........................................................................................................... 4-77
Taft Transit ................................................................................................................ 4-77
Tehachapi Transit ..................................................................................................... 4-77
Wasco Transit ............................................................................................................ 4-78
Kern Regional Transit ............................................................................................... 4-78
Multimodal System Performance Measures ............................................................ 4-78
Land Use Analysis Program ...................................................................................... 4-78
Transportation Demand Management/Trip Reduction ............................................ 4-79
City and County Development Review Process ....................................................... 4-80
Transit ......................................................................................................................... 4-80
Trip Reduction Programs .......................................................................................... 4-80
Regional Traffic Model .............................................................................................. 4-81
Trip Generation Model ............................................................................................... 4-81
Road Network Model ............................................................................................... 4-82
Assignment Validation ............................................................................................... 4-82
Capital Improvement Program ................................................................................... 4-82
Flexible Congestion Relief Projects ......................................................................... 4-83
Traffic Systems Management Projects .................................................................... 4-83
CHAPTER 8 – MONITORING PROGRESS

Federal Transportation Improvement Program (FTIP).................................8-1
Regional Transportation Improvement Program (RTIP)..............................8-2
TIP Database Management.............................................................................8-2
Air Quality Conformity Monitoring..............................................................8-2
  Conformity Requirements........................................................................8-2
  Results of the Conformity Analysis..........................................................8-4
California Clean Air Act Transportation Performance Standards..............8-4
  Highway Performance Monitoring System (HPMS)................................8-4
Congestion Management Process (CMP).....................................................8-5
Intergovernmental Review............................................................................8-5
Transportation Planning Studies.................................................................8-6
  Roads to Ruin.........................................................................................8-6
  Metro Bakersfield Major Transportation Investment Strategy (MTIS).........8-6
  Regional Rural Transit Strategy..............................................................8-7
  Eastern Sierra Public Transportation Plan.............................................8-7
Traffic Model Forecasting..........................................................................8-7
California Clean Air Act Transportation Performance Standards..............8-9
TABLES

CHAPTER 2
Table 2.1 Destination 2030 Goals and Policies

CHAPTER 4
Table 4.1 – Constrained Program of Projects
Table 4.2 – Unconstrained Program of Projects
Table 4-3 Public Transit Operators Within Kern County
Table 4-4 Passengers Transported by Kern County Transit Operators
   FY 2001/02 – FY 2003/04
Table 4-5 Examples of ITS Benefits

CHAPTER 5
Table 5-1 Revenue Forecast 2006-2030
FIGURES

CHAPTER 4
Figure 4-1 Levels of Service 1998
Figure 4-2 Metropolitan Bakersfield Levels of Service 1998
Figure 4-3 Levels of Service 2030
Figure 4-4 Metropolitan Bakersfield Levels of Service 2030
Figure 4-5 Levels of Service 2030 No Build
Figure 4-6 Metropolitan Bakersfield Levels of Service 2030 No Build
Figure 4-7 Metropolitan Bakersfield Near-Term Projects (2007-2010)
Figure 4-8 Near-Term Projects In Outlying Areas (2007-2010)
Figure 4-9 Metropolitan Bakersfield Long-Term Projects (2011-2030)
Figure 4-10 Long-Term Projects in Outlying Areas (2011-2030)
Figure 4-11 Financially Unconstrained Projects
Figure 6-1 Kern County Congestion Management Program

CHAPTER 5
Figure 5.1 Transportation Revenues 2007-2030
Figure 5.2 Transportation Investments by Mode 2007-2030
Figure 5.3 Financial Resources for Non-Transit Transportation Control Measures
Figure 5.4 Financial Resources for Public Airport Projects
Figure 5.5 Financial Resources for Bus Projects
Figure 5.6 Financial Resources for Road Rehabilitation and Safety Projects
Figure 5.7 Financial Resources for Non-Motorized Projects
Figure 5.8 Financial Resources for Highway, Street, Interchange and Rail Crossing Projects
Figure 5.9 Investment Shortfall

CHAPTER 8
Figure 8-1 Kern County Air Quality Planning Areas
Figure 8-2 Transportation Control Measure Funding in the Destination 2030 RTP
APPENDICES

APPENDIX A
San Joaquin Valleywide Regional Transportation Overview
   Executive Summary
   Valleywide Planning
   San Joaquin Valley Profile

APPENDIX B
Transportation Planning Priorities: A Hierarchy for Land Use Decisions

APPENDIX C
Public Participation Plan

APPENDIX D – GAP ANALYSES
   Kern MPO Gap Analysis
   Environmental Documentation Compliance with Planning Requirements of
   SAFETEA-LU

APPENDIX E
Regional Transportation Plan Checklists

APPENDIX F
Response to Comments (included in Final RTP)

APPENDIX G
RTP Resolution (included in Final RTP)
EXECUTIVE SUMMARY

Destination 2030, Kern County’s Regional Transportation Plan (RTP), is a planning guide over the next 24 years. It provides transportation and air quality goals, policies and actions for now and into the future, and includes programs and projects for congestion management, transit, airports, bicycles and pedestrians, roadways, and freight. It also provides a discussion of all mechanisms used to finance transportation and air quality program implementation.

The Destination 2030 RTP is a multi-modal plan representing Kern COG’s vision for a better transportation system to the planning horizon of 2030. The Destination 2030 RTP provides the basic policy and program framework for long-term investment in Kern’s vast regional transportation system in a coordinated, cooperative and continuous manner. Transportation investments in the Kern region that receive state and federal transportation funds must be consistent with the RTP and must be included in the Regional Transportation Improvement Program (RTIP) when ready for funding.

Destination 2030 RTP is a regional long-range and comprehensive plan that coordinates local transportation plans for all communities within the Kern region. Each community has a different transportation emphasis in their local planning documents, which Destination 2030 RTP brings together under one plan.

With adoption of the Destination 2030 RTP, proposed multimodal facilities can be constructed and transportation services can be implemented at a level consistent with projected funding. Projects funded in this RTP are based on the assumption that the successor of TEA-21 (federal Transportation Equity Act for the 21st Century) will continue through the 26-year planning period.

Chapter 2 - Transportation Planning Policies provides Table 2-1 in which the seven goals of the Destination 2030 RTP are linked to the policies for each transportation mode. The seven goals are:

1. **Accessibility**: the ease of reaching destinations as measured by the percent of commuters who can get to work within a given period of time;
2. **Mobility**: the ability to move throughout the region and reach desired destinations within a reasonable amount of time;
3. **Environment**: enhancing the existing transportation system while improving the environment;
4. **Cost-effectiveness**: maximizing the return on transportation investments;
5. **Reliability**: percentage of on-time arrivals by both transit and automobiles;
6. **Safety**: minimizing risk of accidents/injuries as measured by accident rates;
7. **Equity**: equitable distribution of transportation investment benefits.

**Chapter 3 - Planning Assumptions** describes Kern County’s geographic setting and its demographic profile.

The Destination 2030 RTP is required to include an Action Element, to which Chapter 4 responds. **Chapter 4 - Strategic Investments** describes by transportation mode: (1) the existing system; (2) accomplishments since 2000, when the previous Regional Transportation Plan was adopted; (3) needs and issues; (4) current activities; and (5) proposed actions. These actions are designed to implement the goals and policies described in Chapter 2.

A complete listing of planned improvements by mode is provided in Tables 4-1 and 4.2 at the end of Chapter 4 - Strategic Investments. The Constrained Program of Projects is provided in Table 4-1 and graphic displays of projects are consistent with those projects that have been found to not inhibit regional air quality efforts and progress in attaining federal air quality standards. Table 4-2 provides the Unconstrained Program of Projects, the region’s unbudgeted “vision” for transportation projects. These projects represent alternatives that could be moved to the constrained program if support for an individual project remains strong and if project funding is identified.

Chapter 4 also addresses land use issues, intelligent transportation investments, and Kern COG’s Congestion Management Program.

The Destination 2030 RTP is required to include a Financial Element that identifies resources to implement the plan. **Chapter 5 - Financing Transportation** responds to this requirement by providing a cost analysis for implementing the projects included in Chapter 4 - Strategic Investments.

**Chapter 6 - Environmental Justice** is an important inclusion in the Destination 2030 RTP. The goal of Kern COG’s environmental justice process is to ensure that all people, regardless of race, color, national origin or income, are protected from disproportionate negative or adverse impacts caused by the Destination 2030 Program of Projects outlined in Tables 4-1 and 4-2. This chapter examines the methodology Kern COG uses to determine whether all neighborhoods have reasonable shares of the benefits from the Destination 2030 RTP.

It is important to identify and preserve transportation corridors needed to expand or enhance transportation for Kern County’s future. **Chapter 7 - Future Links** discusses the difficulties that Kern region’s local governments could face in ensuring optimal locations for such activities as the proposed high speed rail, as well as high-priority interregional routes such as the proposed south, west, and east beltways, the Union Pacific/Burlington Northern rail corridor between
Bakersfield and Tehachapi, and other key projects. Air quality contingencies are also discussed.

As the designated Metropolitan Planning Organization (MPO) for the Kern region, Kern COG monitors transportation plans, projects and programs for consistency with regional plans. Kern COG also monitors the performances of the transportation system. Chapter 8 - Monitoring Progress describes the importance of performance monitoring in informing future RTPs. Regional transportation problems cannot be solved until they are identified and measured. Chapter 8 outlines several significant tools used by Kern COG to monitor regional progress in advancing the Destination 2030 RTP.

Chapter 9 - References provides definitions of transportation terms used within this document as well as a list of acronyms found herein.

Appendices within this document include: (A) the Valleywide Regional Transportation Plan adopted by Councils of Government for the eight San Joaquin Valley counties; (B) Transportation Planning Priorities: A Hierarchy of Land Use Decisions; (C) Public Participation Program; (D) Kern MPO Gap Analyses; and (E) RTP Checklists.

The Destination 2030 RTP can be downloaded from www.kerncog.org.

Conclusion

Destination 2030 RTP provides a comprehensive and multimodal regional transportation plan that is responsive to public input, as well as local, regional, state and federal governmental input. The Plan meets the state and federal requirements and reflects a vision for the Kern region that balances land use with transportation investments in a way that is complementary to existing investments. In addition, the RTP addresses the goals and policies established by Kern COG that are assessed based on a number of key performance measures.

In light of significant funding issues within the region over the duration of the 2030 Destination RTP, some innovative funding concepts are discussed that would enable the region to invest in additional programs and projects to meet transportation needs over the next 24 years.
CHAPTER 1 INTRODUCTION

Destination 2030 is a 24-year regional transportation plan that establishes a set of regional transportation goals, objectives, policies and actions intended to guide development of the planned multimodal transportation systems in Kern County. It was developed through a continuing, comprehensive and cooperative planning process, and provides for effective coordination between local, regional, state and federal agencies. The Congestion Management Program (CMP) is designed to ensure that a balanced transportation system is developed, relating population and traffic growth, land use decisions, performance standards and air quality improvements.

Kern Council of Governments (Kern COG) is a federally-designated Metropolitan Planning Organization (MPO) and a State-designated Regional Transportation Planning Agency (RTPA). These designations formally establish Kern COG’s role in transportation planning. Kern COG’s Board of Directors comprises elected representatives from the eleven incorporated cities and two members of the County Board of Supervisors. A Memorandum of Understanding between Kern COG and Caltrans District 6 also provides for a Transportation Planning Policy Committee, which is the existing Board plus ex officio members from Caltrans, Kern’s military bases, and Golden Empire Transit. The Transportation Technical Advisory Committee (TTAC), composed of technical staff from member agencies, other interested agencies, public members, Caltrans, and the San Joaquin Valley and Kern County Air Districts, provides support to the Board of Directors. In addition, the Social Services Transportation Advisory Committee also provides support to the Board by focusing on the needs of transit-dependent and transit disadvantaged persons, including the elderly, disabled and persons of limited means.

Regional Planning Process

Regional transportation planning is a dynamic process requiring periodic refinement, monitoring and amendment. The planning program for the next three-year period will continue with extensive evaluation of the RTP and the elements required by SAFETEA-LU, the Safe, Accessible, Flexible, Efficient Transportation Equity Act: A Legacy for Users, (the successor of TEA-21 - (Transportation Equity Act for the 21st Century). Each component will be studied and modified consistent with RTP priorities as Kern County moves toward an integrated and multimodal transportation system.

Public participation is encouraged at every stage of the planning process, and all meetings are open to the public. A thorough discussion of Kern COG’s public participation activities is provided in Chapter 6 - Environmental Justice. Kern COG’s Public Participation Program and relevant activities for the Destination 2030 Regional Transportation Plan are documented in Appendix C.

The adopted RTP establishes a basis on which funding applications are evaluated. Use of any state or federal transportation funds by local governments must conform with the RTP, the State Implementation Plan (SIP) for air quality improvements, and the Federal Transportation Improvement Program (FTIP).

Kern COG has prepared an RTP that includes the Congestion Management Program (CMP) within Chapter 4, Strategic Investments. A Program Environmental Impact Report (PEIR) was prepared as part of the 2007 Destination 2030 Plan update pursuant to the requirements set forth in state and federal RTP guidelines, State CMP legislation, and the California Environmental Quality Act (CEQA). It is provided as a stand-alone document. Incorporated by reference are the Metropolitan Bakersfield General Plan Update Environmental Impact Report adopted December 2002; the Kern County General Plan Environmental Impact Report adopted June 2004; the current Kern County Emergency Management and Terrorism Response Plans; and the State Strategic Highway Safety Plan.
As a regional transportation planning agency, Kern COG is mandated by California Government Code Section 65080 to prepare and periodically update the RTP. This Code section also specifies that actions by transportation agencies, such as Caltrans, the County of Kern, incorporated cities and Golden Empire Transit District, must be consistent with the RTP. Land use decisions must consider and accommodate transportation facilities and programs specified in the RTP whenever possible. The facilities listed in the RTP must be incorporated into city and county General Plans. Local transportation projects must be consistent with the RTP in order to obtain state or federal funding.

Based on the Destination 2030 RTP, multimodal facilities will be constructed, and transportation services implemented, on a level consistent with projected funding. Funding projections are based on the assumption that current levels and sources of funding will continue throughout the planning timeframe.

Using projected funding levels, each jurisdiction within Kern County, as well as Caltrans, the Air Districts, and other agencies will implement transportation projects or transportation demand management (TDM) strategies consistent with the goals and policies set forth in the Destination 2030 RTP. The RTP supports maintaining the existing multimodal transportation system, improving the safety of the system, and increasing the system's capacity.

The Constrained Program of Projects, a complete list of planned improvements by mode, is provided in Table 4-1. The Constrained Program of Projects is consistent with those projects that have been evaluated according to Air Quality Conformity guidelines and have been found to improve air quality in Kern County. Table 4-2 provides the Unconstrained Program of Projects; these projects are important to the development of Kern County’s transportation system but funding is not identified or available, and they are not included in the Air Quality Conformity model.

**SAFETEA-LU**

On August 10, 2005, President George W. Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU is the most recent federal transportation bill, following upon the 1998 Transportation Equity Act for the 21st Century and the 1991 Intermodal Surface Transportation Equity Act.

In addition to reauthorizing the funding levels for the various federal transportation programs, SAFETEA-LU also established new transportation planning and programming requirements that impact the Regional Transportation Plan and Federal Transportation Improvement Program. This section discusses the chronology of developing the 2007 Destination 2030 Regional Transportation Plan to address these requirements, provides an overview of how Kern COG and the San Joaquin Valley COGs as a whole, coordinated in a good faith effort to comply with the requirements by the statutory deadline of July 1, 2007, and includes several specific discussions addressing SAFETEA-LU requirements that are not included elsewhere in this Plan.

**Chronology**

Although SAFETEA-LU was signed into law in August 2005 and federal guidance for implementing the new provisions began trickling out shortly thereafter, it wasn’t until the Notice of Proposed Rulemaking (NPRM) was published in the Federal Register in June 2006 that large-scale efforts to understand the planning impacts of SAFETEA-LU were able to begin.

The June 2006 NPRM was immediately followed by federally-sponsored webcasts and panel question and answer opportunities in a wide variety of forums. Kern COG staff participated in many of these, including:

- Sessions at the California Transportation Planning Conference (June 2006);
- Federal webcast Q&A opportunities (June and July 2006);
• Statewide NPRM Workshop sponsored by Caltrans (August 2006)
• NARC conference calls to discuss NPRM comments (August 2006).

In addition, recognizing the significant impact the new SAFETEA-LU requirements would have on San Joaquin Valley COG efforts to update their Regional Transportation Plans and Federal Transportation Improvement Programs, San Joaquin COG hosted the San Joaquin Valley 2007 Regional Transportation Plan Workshop in August 2006. The intent of this workshop was to bring together all of the relevant regional, State, and federal agencies to determine the appropriate course of action for the Valley to achieve SAFETEA-LU compliance by July 1, 2007. The workshop was well attended, with over 25 agencies participating. Kern COG staff attended via teleconference.

The discussion at the workshop was productive, and as a result of the workshop and follow-up meetings, the San Joaquin Valley COGs added RTP-related issues to the monthly Model Coordinating Committee (MCC) and the Programming Coordination Group (PCG) agendas.

Comments regarding the NPRM were due on September 7, 2006. Kern COG staff participated in national, statewide, and valleywide discussions regarding the comments, and submitted comments to the docket by the September deadline.

Between the publication of the NPRM in June 2006 and the publication of the Final Rule in February 2007, Kern COG staff worked diligently toward a SAFETEA-LU compliant RTP and FTIP. Much of the work effort was based on the August 2006 RTP workshop discussions, San Joaquin Valley Directors Association guidance, and ongoing discussions with State and federal agencies, both on an individual basis and within the context of the MCC and PCG conference calls.

Gap Analysis

On November 15, 2006, the Federal Highway Administration, California Division, issued a letter requesting development of a Gap Analysis that would compare existing planning and programming activities against the requirements of SAFETEA-LU. The intent of this analysis is to identify SAFETEA-LU compliance items and describe either how they are currently being addressed or how Kern COG intends to address them. The 2007 Destination 2030 Regional Transportation Plan and its associated documents address many of the SAFETEA-LU requirements. The Gap Analysis included as Appendix D is the most recent version at the time of the Draft RTP publication. The initial version was submitted to Caltrans and FHWA by the Valley COG directors in January 2007, and was subsequently revised based on comments received from the Federal Highway Administration.

Overview of State Requirements

California adopted extensive RTP guidelines that largely mirror federal requirements. Transportation plans must comply with the California Environmental Quality Act (CEQA) and the Destination 2030 Regional Transportation Plan meets that requirement. In addition, the first four years of plans must be consistent with the four-year State Transportation Improvement Program (STIP), which includes the Kern COG Regional Transportation Improvement Program (RTIP). State guidelines call for program-level performance measures that include objective criteria to reflect the RTP’s goals and policies. State guidelines also require regional plans to contain three specific chapters: a policy element (Chapter 3 - Transportation Planning Policies), an action element (Chapter 4 - Strategic Investments), and a financial element (Chapter 5 - Financing Transportation).

1 The RTIP is the formal presentation of projects to the State that local agencies wish to implement within the next four years. Once projects are approved and presented in the STIP, the projects are then incorporated into the Federal Transportation Improvement Program (FTIP).

1-3
Public Outreach

As the MPO, Kern COG is required to implement a public involvement process to provide complete information, timely public notice and full public access to key decisions and to support early and continuing public involvement in developing its regional plans.

Kern COG formally adopted a Public Participation Program in May 2001. This program Title VI of the Civil Rights Act of 1964 and associated regulations and policies, including President Clinton’s 1994 Executive Order 12898 on Environmental Justice, seek to assure that minority, senior and low-income populations are involved in the planning process. The Public Participation Program has been updated to comply with the requirements of SAFETEA-LU, and is incorporated herein as Appendix C.

To fulfill these expectations, Kern COG has used a combination of methods to stimulate public involvement. For the 2007 Destination 2030 RTP development, numerous public outreach methods were used, including:

- RTP presentations to community-based organizations;
- RTP-specific public workshops throughout the Kern region;
- Posting of all public outreach events on the Kern COG website;
- Direct outreach to minority, senior and low-income populations;
- Written and visual materials to communicate the status and content of the RTP, including fact sheets and presentations. A public comment form was used throughout the outreach program at public meetings as well as online;
- Kern COG’s website, featuring a section dedicated to the Destination 2030 RTP, including public meeting notices and the latest written information on the RTP;
- Outreach to media, including frequent press releases and interviews;
- A dedicated phone line (661/326-RIDE) and a dedicated e-mail address (rtp@kern cog.org).

In addition to these targeted outreach efforts, all regular and special meetings of the Transportation Technical Advisory Committee, Social Services Technical Advisory Committee, as well as the Kern Transportation Planning and Policy Committee and Board of Directors are publicly noticed and opportunities for public comment are provided. Specific public comments on the RTP are being recorded and considered by Kern COG in the RTP’s development.

Transportation Planning in the Kern Region

Kern COG is responsible for developing, coordinating, monitoring and updating the RTP for Kern County. Kern COG develops the RTP in coordination with the eleven cities of Kern County and the County of Kern, transit operators, and other transportation stakeholders. This section summarizes the planning environment and discusses how Kern COG integrates the planning activities of each of the cities and County of Kern to ensure a balanced, multi-modal plan that meets regional as well as county-specific goals.

The Kern region comprises two air basins and two air quality non-attainment or maintenance areas. Federal law requires that transportation and air quality planning are coordinated in these non-attainment and maintenance areas. In addition, the Kern region is part of California Department of Transportation District 6.
CHAPTER 2 - TRANSPORTATION PLANNING POLICIES

Introduction

The 2007 Destination 2030 is Kern County’s Regional Transportation Plan - the blueprint to address the mobility challenges created by our region’s growth. This long-range plan contains an integrated set of public policies, strategies and investments to maintain, manage, and improve the transportation system in the Kern region through 2030.

The Policy Element's purpose is to address legislative, planning, financial, and institutional issues and requirements, as well as any areas of regional consensus (e.g., land use policies). The Policy Element provides guidance to decision-makers regarding the implications, impacts, opportunities, and foreclosed options that will result from implementation of the Regional Transportation Plan. In addition, the Policy Element is a resource that provides input and promotes consistency of actions taken by state, regional and local agencies, such as transit agencies, congestion management agencies, and the California Highway Patrol.

The policies of the RTP by goal and transportation mode are provided in Table 2.1. This table is followed by a Performance Monitoring section containing a system-wide set of measures to monitor progress toward these goals. A description of the issues, needs, and actions is included in Chapter 4 - Strategic Investments for each transportation mode.

Goals, policies and actions are defined as follows:

A “goal” is the end toward which effort is directed; it is general in application and timeless.

A “policy” is a direction statement that guides present and future decisions on specific actions. Policies support the attainment of goals. In this document policies have been merged with objectives to streamline the policy element.

An “action” is a specific activity in support of the policy. Actions are detailed in Chapter 4 - Strategic Investments (Action Element).

In accordance with Government Code 65080(b)(1), all policy/objectives are relevant for both the near- (6-year) and long-term (20-year). Short- and long-range actions implementing these policies are identified in Chapter 4.

Goals/Policies

At the core of the Destination 2030 RTP are seven goals:

1. **Mobility** - Improve the mobility of people and freight;
2. **Accessibility** - Improve accessibility to major employment and other regional activity centers;
3. **Reliability** - Improve the reliability and safety of the transportation system;
4. **Efficiency** - Maximize the efficiency of the existing and future transportation system;
5. **Livability** - Promote livable communities;
6. **Sustainability** - Minimize effects on the environment;
7. **Equity** - Ensure an equitable distribution of the benefits among various demographic and user groups.

While all goals are considered interrelated and important, mobility is considered the Plan’s highest goal. Identified in Table 2.1 are policy objectives categorized by the goals they help to advance.
<table>
<thead>
<tr>
<th>Goal(s)</th>
<th>Policy</th>
<th>Mode(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility, Accessibility</td>
<td>Encourage additional air carrier service at Meadows Field and Inyokern Airport</td>
<td>Aviation</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Assist Kern County Airports in expanding facilities to meet growing general aviation demands</td>
<td>Aviation</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Continue to work with privately owned airports and local jurisdictions to support their operations and to maintain compatible uses with in the airport area of influence</td>
<td>Aviation</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Identify opportunities for truck-to-rail and truck-to-intermodal mode shifts, and evaluate the contributions of different types of truck traffic on regional air quality</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability</td>
<td>Continue to seek funding to help maintain existing bikeways.</td>
<td>Bike, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability</td>
<td>Continue to seek funding for bicycle projects from local, state and federal sources.</td>
<td>Bike, TCM</td>
</tr>
<tr>
<td>Mobility, Sustainability</td>
<td>Upgrade the present highway maintenance system whenever feasible.</td>
<td>Highways</td>
</tr>
<tr>
<td>Mobility, Sustainability</td>
<td>Investigate federal, state and local funding opportunities to maintain the current transportation system and promote future transportation development.</td>
<td>Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Encourage COG member jurisdictions to implement their adopted local bicycle plans and to incorporate bicycle facilities into local transportation projects.</td>
<td>Bike, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Periodically update the bicycle plan.</td>
<td>Bike, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Provide technical and planning assistance to local jurisdictions for industrial and wholesale land use and transportation planning</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Encourage the use of rail and air for the transportation of goods to reduce impacts to state and inter-county routes, and reduce air quality impacts</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Encourage coordination and consultation between the public and private sectors to explore innovative strategies for the efficient movement of goods</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>Policy</td>
<td>Mode(s)</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Identify alternatives that would improve the overall quality of transit service in Kern County</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Identify alternatives to traditional transit addressing Kern County’s regional rural mobility needs</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Develop coordination alternatives that realize an improvement over the way transit is currently operated</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Review, identify, and discuss alternative administrative and oversight models for transit services in Kern County</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Create a strategy for increasing the visibility and importance of transit in Kern County</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Create partnerships between transit and non-transit organizations in addressing Kern County's transit needs</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Enhance the current lifeline intercity services available throughout the Eastern Sierra</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Improve intercity connections and provide new services to expand the transportation alternatives in the Eastern Sierra</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility</td>
<td>Determine the feasibility of passenger rail service in the Eastern Sierra</td>
<td>Transit, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility, Efficiency</td>
<td>Support the intermodal linkage of all freight transportation</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Efficiency</td>
<td>Coordinate planning efforts to ensure efficient, economical and environmentally sound movement of goods</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Equity</td>
<td>Support the creation of an effective Valleywide truck model to track regional commodity flows and to identify critical economic trends that will drive truck flows on regionally significant truck routes</td>
<td>Freight</td>
</tr>
<tr>
<td>Mobility, Accessibility, Livability</td>
<td>Study parking for long distance trips including a review of available rest areas, layover lots, and truck stops to determine needs for more parking</td>
<td>Freight, Highways, TCM</td>
</tr>
<tr>
<td>Mobility, Accessibility, Reliability</td>
<td>Support a higher safety level requirement for hazardous material transportation programs</td>
<td>Freight, Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability</td>
<td>Maintaining Existing Roadway Infrastructure and use it efficiently.</td>
<td>Highways</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>Policy</td>
<td>Mode(s)</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability</td>
<td>Work with Caltrans, COG member agencies and other interested parties to prepare environmental studies and design engineering work</td>
<td>Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability</td>
<td>Provide input to neighboring regions conducting Studies for corridors that have significance to the Kern region.</td>
<td>Highways</td>
</tr>
<tr>
<td>Mobility, Accessibility, Sustainability, Livability</td>
<td>Oppose higher axle load limits for the trucking industry on general purpose roadways</td>
<td>Freight, Highways,</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Build upon the momentum and stakeholder coalition generated through the San Joaquin Valley Goods Movement Study to pursue ITS commercial vehicle projects.</td>
<td>ITS</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Investigate how ITS can support other efforts to improve east-west travel between the inland areas and the coastal communities.</td>
<td>ITS</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Use momentum from the Valleywide ITS planning effort in conjunction with proposed federal rules (ITS architecture and standards conformity and statewide and metropolitan planning).</td>
<td>ITS</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Build upon the existing extensive Caltrans District 6 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.</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Capitalize on the extensive ITS technology testing and standards development conducted by Caltrans by using, where appropriate, Caltrans approaches for local traffic management systems.</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Build upon lessons learned from past and current transit ITS deployment experience in the San Joaquin Valley (Fresno Area Express, GET, San Joaquin Regional Transit).</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Build upon Caltrans District 6 experience with co-location and coordination between traffic management and Highway Patrol staff.</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Provide traveler information for commercial vehicle operators at truck rest stops. As new laws require longer off-duty periods, demand for rest areas and for access to services will increase.</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Improve the visibility of the access to existing Caltrans Valleywide alternate route plans.</td>
<td>ITS, TCM</td>
</tr>
<tr>
<td>Goal(s)</td>
<td>Policy</td>
<td>Mode(s)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Coordinate Bakersfield area TMC with Caltrans' District 6 TMC</td>
<td>ITS,</td>
</tr>
<tr>
<td></td>
<td>via satellite.</td>
<td>TCM</td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Look for ways to integrate the ITS capabilities being implemented</td>
<td>ITS,</td>
</tr>
<tr>
<td></td>
<td>at Golden Empire Transit (GET) with the developing Bakersfield</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>traffic management system, including sharing of information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>between the two centers during emergencies.</td>
<td></td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Facilitate the transfer of lessons learned from GET ITS</td>
<td>ITS,</td>
</tr>
<tr>
<td></td>
<td>deployment now beginning, to other area transit operators, and</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>look for opportunities for those agencies to better coordinate with</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GET using GET's new ITS capabilities.</td>
<td></td>
</tr>
<tr>
<td>Mobility, Efficiency</td>
<td>Expand upon the accident reduction success of Route 46 Safety</td>
<td>ITS,</td>
</tr>
<tr>
<td></td>
<td>Coalition Program and the South Kern Corridor Safety Program.</td>
<td>TCM</td>
</tr>
<tr>
<td>Mobility, Reliability,</td>
<td>Provide heavy truck access planning guidance including a review</td>
<td>Freight,</td>
</tr>
<tr>
<td>Livability, Livability,</td>
<td>of the current Surface Transportation Assistance Act route system,</td>
<td>TCM</td>
</tr>
<tr>
<td>Sustainability</td>
<td>review of geometric issues and signaling for all routes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>identified as major local access routes, and the development of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>standards</td>
<td></td>
</tr>
<tr>
<td>Accessibility, Efficiency,</td>
<td>Encourage land use decisions by local government member</td>
<td>Land use,</td>
</tr>
<tr>
<td>Livability, Sustainability</td>
<td>agencies that promote pedestrian, bike and transit oriented mixed</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>use and infill development.</td>
<td></td>
</tr>
<tr>
<td>Accessibility, Efficiency,</td>
<td>Promote land use patterns that support current and future</td>
<td>Land use,</td>
</tr>
<tr>
<td>Livability, Sustainability</td>
<td>investments in bus transit and that might one-day support</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>commuter rail alternatives.</td>
<td></td>
</tr>
<tr>
<td>Accessibility, Efficiency,</td>
<td>Promote increased communication with neighboring jurisdictions</td>
<td>Land use,</td>
</tr>
<tr>
<td>Livability, Sustainability</td>
<td>on interregional land use issues.</td>
<td>TCM</td>
</tr>
<tr>
<td>Livability</td>
<td>Encourage the coordination of land use decisions and</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>transportation systems.</td>
<td></td>
</tr>
<tr>
<td>Livability</td>
<td>Support goals contained in city and county general plans that</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>strive to enhance urban and community centers, promote the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>environmentally sensitive use of lands in Kern County, revitalize</td>
<td></td>
</tr>
<tr>
<td></td>
<td>distressed areas, and ensure that new growth areas are planned</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in a well-balanced manner.</td>
<td></td>
</tr>
<tr>
<td>Livability</td>
<td>Achieve the national and state air quality standards for healthy air</td>
<td>TCM</td>
</tr>
<tr>
<td></td>
<td>by the mandated deadlines.</td>
<td></td>
</tr>
<tr>
<td>Goal(s)</td>
<td>Policy</td>
<td>Mode(s)</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Livability</td>
<td>Coordinate with all responsible agencies necessary to implement all feasible transportation control measures to limit harmful air emissions.</td>
<td>TCM</td>
</tr>
<tr>
<td>Livability</td>
<td>Promote implementation of all feasible and cost effective transportation control measures to achieve air quality emissions by the mandated deadlines.</td>
<td>TCM</td>
</tr>
<tr>
<td>Livability</td>
<td>Provide necessary support and education to member agencies and other responsible entities on all feasible control measure.</td>
<td>TCM</td>
</tr>
<tr>
<td>Livability</td>
<td>Delay the need for future increases in highway capacity and congestion relief through the implementation of transportation control measures.</td>
<td>TCM, Highways</td>
</tr>
<tr>
<td>Livability</td>
<td>Promote sustainable community design that supports transit use and increases nonmotorized transportation while still meeting the mobility needs of residents and employees.</td>
<td>Transit, Bike, TCM</td>
</tr>
<tr>
<td>Equity</td>
<td>Avoid, minimize or mitigate disproportionately high and adverse human health or environmental effects, including social and economic impacts, on traditionally disadvantaged communities, especially racial minority and low-income communities.</td>
<td>Environ. J ustice</td>
</tr>
<tr>
<td>Equity</td>
<td>Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.</td>
<td>Environ. J ustice</td>
</tr>
<tr>
<td>Equity</td>
<td>Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.</td>
<td>Environ. J ustice</td>
</tr>
</tbody>
</table>

**Performance Monitoring**

Performance monitoring: (1) provides current and ongoing information on how well the transportation system is performing; (2) identifies opportunities for near-term improvements; and (3) assesses the impacts of future improvements.

In the past, Kern COG and other transportation operators have conducted performance monitoring, though not always on a consistent or ongoing basis. Consistency and frequency of data collection are key to tracking how well the transportation system is performing. This section outlines the status of current or near-term regional transportation system performance monitoring efforts.

The primary tool for Kern COG’s Transportation Monitoring System is the Kern Regional Transportation Model. The model uses monitoring data and growth assumptions to track the
Since the adoption of the 2004 RTP, Kern COG has continued to examine the California RTP Guidelines for performance monitoring and considered the following issues: What types of data are best suited to assess the performance of the multimodal transportation system? How can Kern COG build upon its existing data collection efforts? What is the best way to collect these data, and how often? Who should be responsible for the data collection and monitoring, and how should it be financed? How will this information be used?

Based on this analysis, the following necessary improvements in performance monitoring were identified:

1. Performance monitoring needs to reflect the multimodal nature of Kern County’s transportation system by focusing on all modes of transportation.
2. Freeway data collection and reporting activity needs to be expanded to include freeway onramps, conventional highways, principal arterials, and transit.
3. Data collection in support of performance monitoring needs to be:
   a. Automated – this will reduce costs and provide more frequent data collection;
   b. Uniform – If system performance is to be monitored over time, then data collection efforts must be consistent year to year;
   c. Reported – Performance monitoring information needs to be regularly reported to decision-makers to assist in project selection and programming decisions, and to the general public to assist them in making travel route and mode choices.
4. The most useful indicators of how well Kern County’s transportation system is performing should include:
   a. Travel Time – The average time it takes to complete a trip;
   b. Travel Speed – The average speed of a trip;
   c. Usage – Changes in traffic, transit ridership, or bicycle facility use.

   These basic data can be combined to generate other indicators; for example, speed and traffic volume are used to determine roadway level of service, an indicator of congestion.

5. Augmenting these automated data collection efforts should be periodic surveys to assess customer satisfaction and to identify other needed improvements from a user perspective.

These identified improvements provide the basis for the following recommended action:

- Implement a Regional Transportation Monitoring Improvement Plan that recommends and prioritizes the following:
  - Improve/consolidate collection of traffic count information;
  - Improve truck counts along key corridors;
  - Develop a more regular traffic speed survey program;
  - Improve transit ridership information.
CHAPTER 3 - PLANNING ASSUMPTIONS

Kern Council of Governments oversees transportation plans, programs, and transportation-related projects for its eleven cities: Arvin, Bakersfield, California City, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi, and Wasco. In addition, Kern COG has oversight of similar plans, programs, and projects within the unincorporated areas of Kern County.

Chapter 3 Growth Trends

Population in the 8,200 square mile County of Kern has surpassed 750,000 and was in the top six fastest growing counties in California in 2004-05. About one in every 50 people in California lives in Kern County. The Kern region grew by 90,000 persons during the first half of this decade and is now California’s thirteenth most populated of 58 counties. Figure 3-1, Growth Trends, illustrates anticipated population and housing forecasts for Kern County and its incorporated cities through 2030.

Over the past decade, growth has concentrated in metropolitan Bakersfield and the communities of Rosamond, Greater Tehachapi, and Frazier Park. In addition, the communities of California City, Delano, McFarland, Taft, and Wasco experienced significant population growth because of prison construction. Delano’s population surpassed Ridgecrest, making it the second largest city in Kern County.

In metropolitan Bakersfield, approximately 80 percent of the new housing has been built on the west side, with approximately 40 percent north of the Kern River and another 40 percent in the southwest. The northeast has begun to see activity with completion of a new water delivery system. Over the past decade, Kern workers commuting to Los Angeles County (3 percent) have kept pace with the County’s growth rate. Most of the Los Angeles commuters are in communities along the southern edge of the County, such as Lebec and Frazier Park. However, more commuters work in Kern and live in Los Angeles County than the reverse. Most of the imported workers commute to Edwards AFB, Kern’s largest employer with over 20,000 jobs.

California Department of Finance estimated that population in the Kern region increased at a compounded annual rate of 2.7 percent between April 2000 and January 2005, one percentage point higher than the rate for California as a whole (1.7 percent). During this period, the region gained 19,000 people annually, up from 12,000 annually during the 1990s. Kern County has gained 10,400 jobs since 2000 and has experienced an increase in per capita income. However, the unemployment rate in the Kern region in 2004 (9.8 percent) was significantly higher than the state average (6.2 percent).
### Figure 3-1 Growth Trends
Kern County Population and Households (Occupied Housing)

<table>
<thead>
<tr>
<th>Year</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>2006</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>Rate Increase</th>
<th>Rate Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kern County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>403,089</td>
<td>543,477</td>
<td>661,653</td>
<td>779,869</td>
<td>845,600</td>
<td>1,010,800</td>
<td>1,208,200</td>
<td>2.5%</td>
<td>14,492</td>
</tr>
<tr>
<td>Households</td>
<td>139,881</td>
<td>181,480</td>
<td>208,655</td>
<td>237,524</td>
<td>260,700</td>
<td>316,700</td>
<td>381,700</td>
<td>2.0%</td>
<td>3,756</td>
</tr>
<tr>
<td>Metro Bakersfield</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>228,000</td>
<td>329,100</td>
<td>409,800</td>
<td>497,000</td>
<td>534,700</td>
<td>641,200</td>
<td>775,100</td>
<td>3.0%</td>
<td>10,346</td>
</tr>
<tr>
<td>Households</td>
<td>89,500</td>
<td>120,000</td>
<td>134,100</td>
<td>158,500</td>
<td>172,200</td>
<td>209,900</td>
<td>255,800</td>
<td>2.2%</td>
<td>2,654</td>
</tr>
<tr>
<td>Arvin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>6,863</td>
<td>9,286</td>
<td>12,956</td>
<td>15,027</td>
<td>17,200</td>
<td>24,100</td>
<td>33,700</td>
<td>3.0%</td>
<td>314</td>
</tr>
<tr>
<td>Households</td>
<td>1,946</td>
<td>2,385</td>
<td>3,010</td>
<td>3,379</td>
<td>3,900</td>
<td>5,600</td>
<td>8,000</td>
<td>2.1%</td>
<td>55</td>
</tr>
<tr>
<td>Bakersfield</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>105,611</td>
<td>174,820</td>
<td>246,899</td>
<td>311,824</td>
<td>342,700</td>
<td>433,800</td>
<td>549,100</td>
<td>4.1%</td>
<td>7,931</td>
</tr>
<tr>
<td>Households</td>
<td>39,602</td>
<td>62,516</td>
<td>83,445</td>
<td>102,335</td>
<td>113,300</td>
<td>146,100</td>
<td>188,400</td>
<td>3.6%</td>
<td>2,413</td>
</tr>
<tr>
<td>California City</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>2,743</td>
<td>5,955</td>
<td>8,385</td>
<td>12,048</td>
<td>12,048</td>
<td>12,048</td>
<td>12,048</td>
<td>5.5%</td>
<td>358</td>
</tr>
<tr>
<td>Households</td>
<td>990</td>
<td>2,119</td>
<td>3,067</td>
<td>3,349</td>
<td>3,800</td>
<td>5,200</td>
<td>7,100</td>
<td>2.3%</td>
<td>55</td>
</tr>
<tr>
<td>Delano</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>16,491</td>
<td>22,762</td>
<td>39,499</td>
<td>49,359</td>
<td>54,000</td>
<td>67,500</td>
<td>84,300</td>
<td>4.1%</td>
<td>1,264</td>
</tr>
<tr>
<td>Households</td>
<td>4,912</td>
<td>6,236</td>
<td>8,411</td>
<td>9,669</td>
<td>10,600</td>
<td>13,500</td>
<td>17,100</td>
<td>2.6%</td>
<td>183</td>
</tr>
<tr>
<td>Maricopa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>946</td>
<td>1,193</td>
<td>1,111</td>
<td>1,137</td>
<td>1,230</td>
<td>1,490</td>
<td>1,800</td>
<td>0.7%</td>
<td>7</td>
</tr>
<tr>
<td>Households</td>
<td>338</td>
<td>416</td>
<td>404</td>
<td>403</td>
<td>430</td>
<td>500</td>
<td>580</td>
<td>0.7%</td>
<td>3</td>
</tr>
<tr>
<td>McFarland</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>5,151</td>
<td>7,005</td>
<td>9,835</td>
<td>12,538</td>
<td>13,700</td>
<td>17,100</td>
<td>21,400</td>
<td>3.4%</td>
<td>284</td>
</tr>
<tr>
<td>Households</td>
<td>1,399</td>
<td>1,685</td>
<td>1,989</td>
<td>2,527</td>
<td>2,800</td>
<td>3,800</td>
<td>5,100</td>
<td>2.2%</td>
<td>43</td>
</tr>
<tr>
<td>Ridgecrest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>15,929</td>
<td>28,295</td>
<td>24,927</td>
<td>26,515</td>
<td>27,900</td>
<td>31,800</td>
<td>36,200</td>
<td>1.9%</td>
<td>407</td>
</tr>
<tr>
<td>Households</td>
<td>5,762</td>
<td>10,349</td>
<td>9,826</td>
<td>10,089</td>
<td>10,700</td>
<td>12,500</td>
<td>14,600</td>
<td>2.1%</td>
<td>166</td>
</tr>
<tr>
<td>Shafter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>7,010</td>
<td>8,409</td>
<td>12,731</td>
<td>14,501</td>
<td>16,700</td>
<td>23,900</td>
<td>34,200</td>
<td>2.8%</td>
<td>288</td>
</tr>
<tr>
<td>Households</td>
<td>2,284</td>
<td>2,558</td>
<td>3,292</td>
<td>3,641</td>
<td>4,300</td>
<td>6,500</td>
<td>9,800</td>
<td>1.8%</td>
<td>52</td>
</tr>
<tr>
<td>Taft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>5,316</td>
<td>5,902</td>
<td>8,811</td>
<td>9,147</td>
<td>9,800</td>
<td>11,700</td>
<td>14,000</td>
<td>2.1%</td>
<td>147</td>
</tr>
<tr>
<td>Households</td>
<td>2,096</td>
<td>2,209</td>
<td>2,233</td>
<td>2,276</td>
<td>2,400</td>
<td>2,800</td>
<td>3,300</td>
<td>0.3%</td>
<td>7</td>
</tr>
<tr>
<td>Tehachapi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>4,126</td>
<td>5,791</td>
<td>11,125</td>
<td>12,610</td>
<td>13,900</td>
<td>17,800</td>
<td>22,800</td>
<td>4.2%</td>
<td>326</td>
</tr>
<tr>
<td>Households</td>
<td>1,534</td>
<td>2,335</td>
<td>2,533</td>
<td>2,848</td>
<td>3,200</td>
<td>4,200</td>
<td>5,600</td>
<td>2.4%</td>
<td>51</td>
</tr>
<tr>
<td>Wasco</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>9,613</td>
<td>12,412</td>
<td>21,263</td>
<td>24,288</td>
<td>26,800</td>
<td>34,200</td>
<td>43,600</td>
<td>3.5%</td>
<td>564</td>
</tr>
<tr>
<td>Households</td>
<td>3,001</td>
<td>3,471</td>
<td>3,971</td>
<td>4,566</td>
<td>5,200</td>
<td>7,100</td>
<td>9,700</td>
<td>1.6%</td>
<td>60</td>
</tr>
<tr>
<td>Unincorporated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>223,290</td>
<td>261,647</td>
<td>264,111</td>
<td>290,875</td>
<td>308,070</td>
<td>329,010</td>
<td>342,200</td>
<td>3.0%</td>
<td>2,599</td>
</tr>
<tr>
<td>Households</td>
<td>75,947</td>
<td>85,201</td>
<td>86,474</td>
<td>92,442</td>
<td>100,070</td>
<td>108,900</td>
<td>112,420</td>
<td>0.8%</td>
<td>634</td>
</tr>
</tbody>
</table>

Over the next 25-30 years, growth in the Kern region could vary widely based on a host of factors, including spillover from southern California, water availability, employment opportunities, housing costs, interest rates, high-speed rail, air quality regulations and land availability. The combined General Plans within the Kern region designate sufficient land to absorb growth at current rates to beyond 2070, assuming water and urban services are available. Past growth in the region and in southern California would indicate that the question is not “if” but “when” Kern’s population will double.

Kern COG’s policy is to revise the regional growth forecast every 3 to 5 years to adjust for major changes in regional growth trends. The most recently adopted growth forecast from July 2005 expects population to increase conservatively by approximately 500,000 by 2030, and doubling to 1.5 million by 2043. The State Department of Finance’s most recent interim forecast released in 2004 indicates that the population would double around 2048. This was revised from a previous forecast by the Department of Finance that anticipated doubling as early as 2028.

In the near term, children of existing residents will fuel this population growth; soon, Kern’s population will consist of more than 50 percent Hispanic ethnicity. At the same time, a huge “baby boomer” population group is retiring and has set the stage for conversion of existing second and vacation homes in the mountain areas to become primary residences. The increase of telecommuting workers will also allow more remote locations to become primary residences. At some point, significant spillover from the Southland will be felt first in the Rosamond and Frazier Park areas. Centennial -- a new proposed community on Tejon Ranch of 30,000 housing units in northern Los Angeles County -- may siphon some of the anticipated growth from southern Kern in the near term; however, this project will likely have growth-inducing effects. The most recent forecast assumes that growth’s positive and negative factors will ultimately cancel each other out, causing long-term growth to reflect historic boom/bust trends.

Much of Kern’s employment is dispersed. Consequently, the metropolitan Bakersfield area experiences a “reverse commute” whereby a segment of workers commute to outlying areas such as farm fields and food processing facilities, warehousing, oil fields, prisons, powerplants and government installations. This reverse commute creates a centrifugal force on metropolitan Bakersfield’s housing development where purchasing housing on the urban fringe often reduces a commuter’s trip. For those working in the metropolitan area, growth in the suburban areas may also be fueled by the attractiveness of newer and perceived better schools. This centrifugal growth fuels the conversion of farmland to urban uses and affects both the region’s air quality and economic base. It also creates hot spots of traffic congestion in outlying areas.

**Demographics**

The Kern region will soon have no racial or ethnic majority. In 2000, Whites made up 50 percent of the population, down from 63 percent in 1990. During the same decade, Hispanics grew from 28 to 38 percent. The rise and shift in population makeup in the Kern region is primarily because of births along with an influx of new immigrants. The next largest non-Hispanic population groups - Black (6 percent), Asian (4 percent), and American Indian (2 percent) - each increased by 1 percent over the past decade as reported by the DOF. This population growth mirrors the rest of the state, which is one of the most diverse in the nation. Population growth resulted from large net increases in three population groups: aging Baby Boomers, their young children - the echo-boomers -- and immigrants, mostly from Mexico and Central America. Natural increase (births minus deaths) accounted for most of the population gain between 1990 and 2002. Natural increase accounted for 61 percent of the population gain and net migration --those moving in minus those moving out of the region -- accounted for 39 percent. Nearly two-thirds of the net migration was the result of immigration from outside the United States.
Housing, Households and Group Quarters

Nearly 23,000 housing units were added between 2000 and 2005. This brought the housing stock in the Kern region up to 254,000 units. During this time the vacancy rate increased from 8.6 to 9.9 percent. Population growth exceeded household growth and the average persons per unit rose from 2.92 in 1990 to 3.14 persons in 2005. This was in sharp contrast to a decade-to-decade drop in household size experienced by the nation overall. In addition, housing construction gains outpaced the net job increase in the region, while 34,200 jobs were added from 1990 to 2002. The job to household ratio dropped from 1.3 jobs per household in 1990 to 1.2 jobs per household by 2002.

Contrary to a decreasing trend at the national level, the percentage of housing considered crowded increased in the Kern region over the past decade. Almost 8 percent of the households lived in crowded housing in 2000, compared to only 4.6 percent in 1990. Nationally, overcrowding was at 6 percent in 2000. Kern still maintains the most affordable housing stock for any Metropolitan Statistical Area in California; however, high unemployment and relatively low paying jobs appear to be fueling an increase in overcrowded conditions.

Eleven percent of Kern’s population growth was in group quarters between 1990 and 2003. This growth was fueled by the opening and/or expansion of eight federal, state and privately operated prisons in the outlying communities of Delano, California City, McFarland, Shafter, Taft, Tehachapi and Wasco. Group-quartered residents grew from 3 to nearly 5 percent of Kern’s total population. Even with this population increase in the outlying communities, the metropolitan Bakersfield planning area grew from 60 to 62 percent of the total County population during the same period. Also included in group quarters growth is an increased nursing home and dormitory population.

Mobility and Air Quality

Since 1990, the region’s congestion as measured by vehicle miles traveled (VMT) has increased at a faster rate (25 percent) than the population (21 percent) and maintained road miles (3 percent). Some positive signs were noted, however. During the 1990s, the average annual growth in vehicle miles traveled (VMT) slowed from the 1980s 750,000 VMT per year to 500,000 VMT per year. Transit commuters now account for a modest 1.4 percent of all workers, which is notably a 40 percent increase between the 1990 and 2000 Census figures. The overall mode choice to work revealed a decrease in single-occupant vehicles of 1 percent and a similar increase in carpoolers.

During the 1990s, the Kern region achieved consistent improvements in the number of days exceeding federal or state standards for ozone and particulate matter 10 microns or smaller (PM10), generally defined as “fine dust”. The San Joaquin Valley Air Basin exceeded the federal one hour standard for ozone for 46 days in 1990, dropping to 31 days in 2002. While the Air Basin exceeded the federal PM10 standard for 60 days in 1990, it dropped to 8 days in 2002. A region cannot have more than 3 exceedances per year for 3 consecutive years to comply with the standard. New 8 hour ozone and a PM2.5 standards were released by the federal government that will be more difficult for the Valley to achieve in light of the current growth forecast. These new standards will be a problem for the mountain and desert areas of the region as well.

On-road mobile sources create approximately 30 percent of the ozone-precursor emissions and 40 percent of the PM-10 emissions in Kern County. Cleaner burning fuels and zero emission vehicles will likely solve the ozone emission problems from mobile sources, but not for several decades. PM10 and PM2.5, however, are more problematic. As VMT increases so does on-road dust, especially after a rainstorm when dirt, washed onto the roadway, subsequently dries. One of Kern’s long-range air quality challenges will be to sustain the forecasted population and
employment growth while controlling fine dust particles in order to meet the evolving federal standards.

**Chapter 3 Land Use Nexus**

The Metropolitan Bakersfield General Plan Land Use Element contains a program that encourages infill development and designates key transportation corridors that support land use intensification, thereby allowing transit-compatible development. The livable community component identifies specific incentives to encourage infill development and a more flexible mix of land uses that reduce the overall number of vehicle trips as well as the average length of trips. The component also distinguishes geographic limits (i.e., service area boundaries) that GET serves in the metropolitan area.

Sprawling low-density development, with widely separated land uses, creates extra vehicular trip-making and longer trip lengths for all trip categories. For the most part, residents in these low-density areas are unable to walk to shopping, recreation, or entertainment; they must use their automobiles for these trips. This extra travel also has detrimental effects on the community’s air quality and livability. Residents will spend more time in traffic and have less time for more enjoyable activities.

For additional discussion, see Chapter 4 - Land Use Action Element subsection.
CHAPTER 4 STRATEGIC INVESTMENTS

Introduction

This chapter sets forth plans of action for the region to pursue and meet identified transportation needs and issues. Planned investments must be consistent with the goals and policies of the Plan, and must be financially constrained. These projects are listed in the Constrained Program of Projects (Table 4-1) and are modeled in the Air Quality Conformity Analysis.

Forecasting methods in this Regional Transportation Plan primarily use the “market-based approach” based on demographic data and economic trends. For best results, this Plan also uses the “build out” method, providing the best estimates for growth in all areas of the County. Within each element, assumptions are made that guide the goals, policies and actions. Those assumptions include: demographic projections, land use forecasts, air quality models, performance indicators, capital/operations costs, cost of alternatives, timeframe (short- and long-term), environmental resources and methodology.

Alternative scenarios are not addressed in this document; they are, however addressed and analyzed for their feasibility in the Environmental Impact Report prepared for the 2006 Regional Transportation Plan, as required by California Environmental Quality Act (15126(d), 15125.6(a)). From this point, the alternatives have been pre-determined and projects that deliver the most benefit were selected.

The Destination 2030 Regional Transportation Plan promotes a “balanced” transportation system. It calls for increased investments in alternative transportation modes, while accommodating a necessary amount of new highway capacity. Heavier emphasis on alternative modes, above and beyond those already incorporated in this Plan, may be desired or preferred but because of financial constraints, alternative mode additions are not financially feasible in the timeframe of this Plan.

The Constrained Program of Projects (Table 4-1) includes projects that will move the region toward a financially constrained and balanced system. Constrained projects have undergone air quality conformity analyses to ensure that they contribute to the Kern region’s compliance with state and federal air quality rules. The Unconstrained Program of Projects (Table 4-2) incorporates the region’s unbudgeted “vision”. These projects represent alternatives that could be moved to the constrained program if support for an individual project remains strong and if project funding is identified. Tables 4-1 and 4-2 are provided at the end of this chapter.

Status as an unconstrained project does not imply that the project is not needed; rather, it simply cannot be accomplished given the fiscal constraints facing Kern County. Kern COG will be vigilant in search for funding to support these projects.

No unconstrained projects are included in the air quality conformity analysis. In the future, as the funding picture changes and community values and priorities for transportation projects become redefined and honed, unconstrained projects may be moved to the constrained program. Should this occur, the Destination 2030 RTP would be amended and a new assessment of the Plan’s conformity with state and federal air quality rules and standards would be made.

For this Destination 2030 Regional Transportation Plan, the Unconstrained Program of Projects reflects the vision for Kern County’s ideal system. Dialogue is ongoing with numerous individuals representing business, government, social services and agriculture to improve everyone’s understanding of how the transportation system impacts the region’s quality of life.
The participation process sheds light on important values such as mobility choice and accessibility, travel time reliability, cost effectiveness, and environmental sensitivity.

The planning process is iterative. System-wide performance measures have been developed and will be used to help policy makers and the community-at-large evaluate trade-offs among transportation improvement alternatives. Performance measures will also be used to help evaluate how the Destination 2030 Regional Transportation Plan contributes to the Kern region’s quality of life.

Each element in this chapter addresses proposed actions to implement the goals and policies of Chapter 2. These actions outline specifically how the goals of the Plan will be accomplished.

**REGIONAL STREETS AND HIGHWAYS ACTION ELEMENT**

A system of safe and efficient highways, streets and roads is essential to the movement of people, vehicles and goods in and through Kern County. Public vehicles, private automobiles, and commercial shippers all share the same transportation network. Providing a system of state and federal highways and regionally significant arterials that can meet this variety of needs is critical to the Plan’s goal of enhancing the quality of life for Kern County’s residents.

**Existing Streets and Highways System**

Streets and highways relevant to this element are the state and interstate highways in the County. These projects are federally funded and/or considered “regionally significant”. This element also recognizes principal arterials as important to the movement of goods and people in the region. Interstate highways in Kern County relevant to the Destination 2030 Plan include I-5 and US Highway 395. Relevant to this Plan are State Routes 14 (Midland Trail and Antelope Valley Freeway), 33 (Westside Highway), 43 (Central Valley Highway), 46 (Famoso Highway), 58 (Rosedale Highway/Mojave Freeway), 65 (Porterville Highway), 99 (Golden State Highway), 119 (Taft Highway), 155 (Delano Woody Highway), 166 (Maricopa Highway), 178 (Crosstown Freeway/Kern River Canyon Road/Isabella Walker Pass/Inyokern Road), 184 (Weedpatch Highway), 202 (Cummings Valley Road), 204 (Golden State Avenue/Union Avenue), and 223 (Bear Mountain Boulevard). Figure 1-1 illustrates the streets and highways system. It includes interstate and state highway routes as well as some of the major arterials and regionally significant roadways. “Regionally significant” is defined as a facility with an arterial or higher functional classification, and any other facility that serves regional travel needs including local roads (such as access to and from areas outside of the Kern region; to major activity centers in the region; or to transportation terminals) and normally would be included in the travel demand model.

**Accomplishments Since 2000**

Achievements related to the region’s network of highways, streets and roads are listed below.

The following major state highway projects have been completed:
- Route 58 - Mojave Freeway
- Route 99 - widening in Bakersfield
- Route 99 - widening near Delano
- Route 202 - new bridge near Route 58 at Tehachapi
- Route 58 Mojave Freeway – frontage road
- White Lane - bridge widening in Bakersfield

The following regionally significant roadway projects are programmed for construction and/or are under construction:
- Route 14 - widening from Mojave to California City
• Westside Parkway - Bakersfield
• Calloway Drive grade separation - Bakersfield
• Coffee Road grade separation - Bakersfield
• Morning Drive improvements - Bakersfield
• Seventh Standard Road widening – three segments in Shafter, Bakersfield, and County
• Route 178 at Fairfax Road – new interchange.

The following regionally significant roadway projects are undergoing necessary environmental review, right-of-way acquisition and/or design work:
• Route 14 – west of Ridgecrest
• Route 46 – west Kern County and Wasco
• Route 119 – east of Taft
• Route 184 – east of Bakersfield
• Route 58 – interchange at Dennison Road in Tehachapi
• Hageman Road extension – Bakersfield
• Oak Street interchange – Bakersfield
• Downtown Parkway – Bakersfield
• Route 178 - widening near Oak Street – Bakersfield
• Route 223 – widening west of Arvin
• US Highway 395 – widening south of Ridgecrest
• West Ridgecrest Blvd - widening

Needs and Issues

Deferred Local Maintenance Needs

Maintaining the local transportation infrastructure is of critical importance for the entire region. Deferred maintenance costs are estimated to exceed $359 million over the RTP period, according to Roads to Ruin: Transportation Funding Options for Kern County, a report prepared by Kern COG in January 2002 and to be updated in 2007. Failure to attend to these deferred needs will result in costly repairs when the facility fails; it is more cost effective to apply preventive maintenance treatments and extend a facility’s life than to reconstruct once it has completely failed. Funds to handle the backlog of needs simply have not been available. Funding from the State gas tax has traditionally been used to support the maintenance of these facilities; over time, however, gas tax revenues have failed to keep up with inflation.

Given ongoing concern regarding deferred maintenance, the Policy Element recognizes the need to maintain and upgrade the present system whenever feasible. Also included is a policy to investigate federal, state and local funding opportunities that would maintain the current transportation system and promote future transportation development.

Maintenance of state highways also requires considerable investment. State highway maintenance and safety project expenditures are generally funded as part of the State Highway Operation and Protection Program (SHOPP), which do not require local matching dollars. Caltrans prepares a 10-year SHOPP for the rehabilitation and reconstruction of all state highways and bridges that recognizes the growing inventory of deferred maintenance needs.

Table 5-1 (Chapter 5 – Financing Transportation) provides a revenue forecast for local, state and federal funding, includes a specific revenue forecast for the maintenance of state highways in the Kern region. All other funding for local maintenance and transit operations are combined by funding type in the Table. Figure 5-6 provides a general overview of financial resources expected for local road rehabilitation, state highway rehabilitation, and transit operations and maintenance.
Level of Service

Implementation of the 2006 Destination 2030 RTP will result in improvements to existing transportation systems and will meet required regional transportation needs. Proposed street and highway programs are aimed at reducing existing traffic, improving safety and resolving other circulation conflicts. Implementation of planned improvements to the street and highway network, improvement of county airports, provision of mass transportation services and facilities, identification of additional bikeways and pedestrian improvements, and improved transportation systems that accommodate goods movement, will have beneficial effects on a region-wide basis.

Level of Service (LOS), according to the Transportation and Traffic Engineering Handbook, is a "qualitative (performance) measure that represents the collective factors of speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operation costs provided by a highway facility under a particular volume condition." LOS measurement is used to assess the regionally significant system of streets and highway facilities. Proposed projects for the highway system use LOS values to determine and rank the type and number of transportation projects necessary to accommodate current and expected future growth.

Level of Service values range from A to F representing various levels of traffic flow from “free flow” for A to “stop-and-go gridlock” traffic for F. Additional variations for LOS values are based on the road type; interrupted traffic flow facilities that include stop signs and signals have a modified version for LOS steps. Uninterrupted traffic flow facilities would include freeways and other highway facilities that do not have fixed traffic elements such as stop signs or signals. LOS A through F are described in more detail in Chapter 6 – Environmental Justice.

LOS values are integrated with Kern COG’s transportation model by assessing final traffic volumes against specific capacity values. These volume-over-capacity values are then related to LOS values based on accepted industry standards for transportation models. The transportation model network reflects capital improvements from Table 4-1 and resulting traffic volumes. Figures 4-1, 4-2, 4-3 and 4-4 reflect “build” scenario LOS values because the network includes the Constrained Program of Projects. Figures 4-5 and 4-6 reflect the “no build” scenarios in that the network only reflects current system improvements while future growth values are used to generate future vehicle miles traveled without the proposed improvements.
1998
Levels of Service
Figure 4-1
See Figure 4-4
See Figure 4-6

Levels of Service
2030 No Build

Figure 4-5
Metropolitan Bakersfield Levels of Service 2030 No Build

Figure 4-6
Regional Transportation Impact Fees (TIFs)

Kern COG is continuing its studies regarding the possibility of raising the fees levied on new development to maintain the transportation infrastructure. Continued funding shortfalls are highlighting the need to investigate all possible revenue sources. Two transportation impact fee (TIF) programs are already in place within Kern County. The Rosamond TIF is $1,461 per new housing unit, while Wasco’s is $685. Tehachapi has recently adopted a fee of $4,772 per residential unit. The metropolitan Bakersfield TIF assesses $6,826 on every new housing unit built within the city or unincorporated areas. The metropolitan Bakersfield fee has been raised several times since its inception. A recent revision to the ordinance created a core area with a fee that is half the normal rate, the intent of which is to encourage infill development.

Kern COG prepared the Southeast Kern Transportation Impact Fee Nexus Study to assess impacts and benefits of an impact fee for that portion of Kern County. The City of Tehachapi and county areas comprising “Greater Tehachapi” have adopted a fee program resulting from that study. Similar studies will be performed for other sub-regions of the county to establish the relationship between increased travel demand associated with new development and the transportation infrastructure improvements necessary to meet this demand at an acceptable level of service.

Interregional Partnership Planning

Kern COG has embarked on an interregional partnership effort with the regional planning agencies of San Bernardino, Los Angeles, Inyo and Mono. Executive directors and staff from all member agencies meet frequently to discuss transportation and economic development projects of mutual benefit. Of particular interest are multi-modal transportation plans for U.S. Highway 395 and State Routes 14 and 58 corridors, including truck movement studies.

Roads and Streets Monitoring

On an ongoing basis, Kern COG collects data collection and monitors roadway conditions throughout the County for road and street maintenance purposes. This effort includes providing input to the Federal Highway Administration Highway Performance Monitoring System, as well as conducting traffic counts and vehicle occupancy counts at various locations in the County. In addition to highway performance monitoring, Kern COG will undertake an analysis of Pavement Management Systems for each jurisdiction within Kern County as well as a cumulative analysis of pavement conditions and recommendations for addressing funding issues. See Chapter 8 – Monitoring Progress – for a discussion of the Roads to Ruin analysis that was prepared in 2002 and is currently being updated. A draft for public review and discussion is anticipated in Spring/Summer 2007.

Pavement Management Systems are used by incorporated cities to develop better ways to measure serviceability and life cycles, and is used to determine the most appropriate time to rehabilitate pavement, what the most cost-effective method is, and what the cost will be to maintain a roadway system at a desirable condition.

Proposed Capital Improvements

The Destination 2030 RTP includes all of the Metropolitan Bakersfield transportation impact fee (TIF) projects, as well as regionally significant street and roadway improvements identified by other Kern COG member jurisdictions. In addition, state highway projects, coordinated and prioritized locally, are a significant component of the Capital Improvement Program. These highway projects are also coordinated with Caltrans District 6.
Proposed Actions

Near Term, 2007-2010

Work with Caltrans, COG member agencies and other interested parties to prepare environmental studies, right-of-way acquisitions and design engineering work to:

- Widen Route 46 from San Luis Obispo county line to I-5.
- Widen Route 119 near Taft.

Provide input to neighboring regions’ transportation studies and projects for corridors that have significance to the Kern region. In particular:

- Participate in San Bernardino County’s study for the U.S. Hwy 395 corridor.
- Update and revise Congestion Management Program.
- Maintain Regional Traffic Models to aid in traffic and air quality analyses.
- Prepare a systems-level planning analysis of various transportation system alternatives using multimodal performance measures.
- Pursue ground access improvements for Meadows Field.
- Pursue a permanent regional funding source via a regional traffic mitigation fee, and/or transportation impact fees by individual communities.
- Implement the capital improvements for highways, regional roads, and interchanges for this time period.
- Place sales tax ballot measure on November 2007 or November 2008 ballot.

Long Term, 2011-2030

- Maintain existing roadway infrastructure.
- Implement as appropriate and feasible the recommendations of the completed studies.
- Pursue and implement the recommendations from earlier studies.
- Prepare studies and/or Project Study Reports for: (1) Routes 99/65/Seventh Standard Road interchange; (2) Route 58 West future alignment; (3) Route 58 West route adoption.
- Implement capital improvements for highways, regional roads, and interchanges for this time period.
- Review and revise countywide transportation impact fees.

In the following Constrained Program of Projects, major highways improvements are divided into five chronological groupings to facilitate estimations of project completion. Highway improvements that cannot be constructed within the financial constraint of any one group may be repeated in later groups. If a project is not fully funded within the five-year timeframe, it would require phasing over a longer timeframe. The entire corridor, however, would be environmentally assessed during the preliminary engineering phase.
### TABLE 4.1 - Constrained Program of Projects

#### 2007 through 2010 - Major Highway Improvements (Cost X 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Environmental Review, Design and Rights-of-way Only</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Jumper Ave to Rt 43 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - SR 43 to SR 99 - widen to four/six lanes</td>
<td>$11,250</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Tupman Rd - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Drive - new interchange widen to four lanes</td>
<td>$4,500</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd to Rancheria Rd - new four/six-lane freeway</td>
<td>$28,500</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Mesa Marin to Rancheria Rd - widen to four/six lanes</td>
<td>$4,500</td>
</tr>
<tr>
<td>Route 184</td>
<td>Lamont</td>
<td>Rt 223 to Panama Ln - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 395</td>
<td>Ridgecrest</td>
<td>China Lake Blvd To Rt 178 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Bakersfield</td>
<td>(South) Oak St to Rt 178 - new six/eight lane freeway</td>
<td>$90,000</td>
</tr>
<tr>
<td>Oak St Interchange</td>
<td>Bakersfield</td>
<td>Rt 178 (24th St) and Oak St - construct interchange</td>
<td>$6,750</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204 - construct four lane extension</td>
<td>$3,000</td>
</tr>
<tr>
<td>24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 Elm St to D St - widen to four/six lanes</td>
<td>$3,750</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Review, Design and Rights-of-Way Only Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
</tr>
<tr>
<td>Route 46</td>
</tr>
<tr>
<td>Route 119</td>
</tr>
<tr>
<td>Route 178/204</td>
</tr>
<tr>
<td>Route 184</td>
</tr>
<tr>
<td>Route 395</td>
</tr>
<tr>
<td>Cecil Ave</td>
</tr>
<tr>
<td>West Beltway</td>
</tr>
<tr>
<td>South Beltway</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Phase - Included in 2006 FTIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-5</td>
</tr>
<tr>
<td>Route 14</td>
</tr>
<tr>
<td>Route 46</td>
</tr>
<tr>
<td>Route 178</td>
</tr>
<tr>
<td>Westside Parkway</td>
</tr>
<tr>
<td>7th Standard Rd</td>
</tr>
<tr>
<td>7th Standard Rd</td>
</tr>
<tr>
<td>7th Standard Rd</td>
</tr>
</tbody>
</table>
**TABLE 4.1 - Constrained Program of Projects (Cont’d)**

*2007 through 2010 - Major Highway Improvements (Cont’d) (Cost X 1,000)*

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Phase</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 1)</td>
<td>$35,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO County Line to I-5 - widen to four lanes (Phase 3)</td>
<td>$68,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Tehachapi</td>
<td>Dennison Rd - construct interchange and bridge</td>
<td>$10,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Rt 43 to SR 99 - widen to four/six lanes</td>
<td>$34,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Snow Road - construct new interchange</td>
<td>$40,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Hosking Road - reconstruct interchange</td>
<td>$40,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Drive - new interchange widen to four lanes</td>
<td>$13,544</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Road to Rancheria Rd - new four/six lane freeway</td>
<td>$85,846</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Mesa Marin to Rancheria Rd - widen to four lanes</td>
<td>$13,544</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>SR 43 to Santa Fe Way - widen to four lanes</td>
<td>$19,654</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Metro Bkfd</td>
<td>SR 99 to SR 178 - construct six/eight lane local freeway</td>
<td>$218,750</td>
</tr>
<tr>
<td>Allan Road</td>
<td>Metro Bkfd</td>
<td>Brimhall Rd to Stockdale Hwy - widen to six lanes</td>
<td>$7,000</td>
</tr>
<tr>
<td>Oak St Interchange</td>
<td>Bakersfield</td>
<td>Rt 178 (24th St) and Oak St - construct interchange</td>
<td>$22,591</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204 - construct four lane extension</td>
<td>$8,300</td>
</tr>
<tr>
<td>24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 Elm St to D St - widen to four/six lanes</td>
<td>$11,295</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td>$1,298,308</td>
</tr>
</tbody>
</table>

*2011 through 2015 - Major Highway Improvements (Cost X 1,000)*

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction Phase</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>$35,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Olive Drive - reconstruct interchange (All phases)</td>
<td>$50,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Tupman Rd - widen to four lanes</td>
<td>$60,000</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>$10,000</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>SR 119 to 7th Std Rd - new four/six-lane freeway (12.5 miles)</td>
<td>$189,000</td>
</tr>
<tr>
<td><strong>Environmental Review, Design and Rights-of-Way Only</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>$33,500</td>
</tr>
<tr>
<td>Cal City Blvd</td>
<td>Cal City</td>
<td>Rt 14 east six miles - widen to four lanes</td>
<td>$1,000</td>
</tr>
<tr>
<td>Cecil Ave</td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane fwy (28 miles) (Design / RW)</td>
<td>$62,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td>$444,500</td>
</tr>
</tbody>
</table>
### TABLE 4.1 - Constrained Program of Projects (Cont'd)

#### 2016 through 2020 - Major Highway Improvements (Cost X 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 178/204</td>
<td>Metro Bkfd</td>
<td>SR 99 to Centennial Corridor - six/eight-lane freeway 2.8 miles</td>
<td>$200,000</td>
</tr>
<tr>
<td>Cecil Ave</td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes; reconstruct</td>
<td>$15,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 1)</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

**Environmental Review, Design and Rights-of-Way Only**

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>$35,000</td>
</tr>
</tbody>
</table>

**Sub-total $400,000**

#### 2021 through 2025 - Major Highway Improvements (Cost X 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 43 to Rt 99 - widen to four lanes (Phase 1)</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Jumper Ave (North) to Rt 43 - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>Metro Bkfd</td>
<td>S. Beltway to I-5 - extend freeway</td>
<td>$80,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 2)</td>
<td>$160,000</td>
</tr>
</tbody>
</table>

**Environmental Review, Design and Rights-of-way Only**

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Beltway-North</td>
<td>Regional</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>Metro Bkfd</td>
</tr>
<tr>
<td>East Beltway</td>
<td>Metro Bkfd</td>
</tr>
</tbody>
</table>

**Sub-total $325,000**

#### 2026 through 2030 - Major Highway Improvements (Cost X 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 43 to Rt 99 - reconstruct interchange (Phase 2)</td>
<td>$45,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 99 to Cottonwood Rd. - widen to six lanes</td>
<td>$30,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Ming Ave to Bear Mountain Blvd - widen to eight lanes</td>
<td>$50,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Metro Bkfd</td>
<td>Centennial Corridor to Oswell St - widen to eight lanes</td>
<td>$29,000</td>
</tr>
<tr>
<td>Route 184</td>
<td>Lamont</td>
<td>Rt 223 to Panama Ln - widen to four lanes</td>
<td>$48,000</td>
</tr>
<tr>
<td>Route 395</td>
<td>Ridgecrest</td>
<td>China Lake Blvd To Rt 178 - widen to four lanes</td>
<td>$57,000</td>
</tr>
<tr>
<td>Cal City Blvd</td>
<td>Cal City</td>
<td>Rt 14 east six miles - widen to four lanes</td>
<td>$10,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 3)</td>
<td>$140,000</td>
</tr>
</tbody>
</table>

**Environmental Review, Design and Rights-of-way Only**

<table>
<thead>
<tr>
<th>Project</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>$35,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Kern</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
</tr>
</tbody>
</table>

**Sub-total $455,000**
### TABLE 4.1 - Constrained Program of Projects (Cont’d)

#### 2007 through 2030 - Local Streets and Roads (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various Locations</td>
<td>Metro Bkfd</td>
<td>Bridge and street widening; reconstruction</td>
<td>$338,000</td>
</tr>
<tr>
<td>Various Locations</td>
<td>Metro Bkfd</td>
<td>Signalization</td>
<td>$2,000</td>
</tr>
<tr>
<td>Various Locations</td>
<td>Rosamond</td>
<td>Street widening; signalization</td>
<td>$14,000</td>
</tr>
<tr>
<td>Various Locations</td>
<td>Countywide</td>
<td>Traffic Control Measures</td>
<td>$86,000</td>
</tr>
<tr>
<td>Various Locations</td>
<td>Countywide</td>
<td>Bridge and street widening; reconstruction; signalization</td>
<td>$460,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$900,000</strong></td>
</tr>
</tbody>
</table>

#### 2007 through 2030 – Transit (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro Bkd</td>
<td>Full size natural gas buses - 120 replacement buses</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Metro Bkd</td>
<td>Full size natural gas buses - 120 new buses</td>
<td>$45,000</td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>Midsize natural gas buses - 120 replacement buses</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>Midsize natural gas buses - 120 new buses</td>
<td>$6,000</td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>Mini van / buses - 45 replacement buses</td>
<td>$1,800</td>
<td></td>
</tr>
<tr>
<td>Metro Bkd</td>
<td>2 transfer stations</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Metro Bkd</td>
<td>ITS Related Improvements / Upgrades</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td>Various</td>
<td>Park and Ride Lots (750 spaces)</td>
<td>$3,000</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$112,800</strong></td>
</tr>
</tbody>
</table>

#### 2007 through 2030 - Non-motorized (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various locations</td>
<td>Metro Bkfd</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$5,000</td>
</tr>
<tr>
<td>Various locations</td>
<td>County</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$1,800</td>
</tr>
<tr>
<td>Various locations</td>
<td>Cal City</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$1,700</td>
</tr>
<tr>
<td>Various locations</td>
<td>Delano</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$500</td>
</tr>
<tr>
<td>Various locations</td>
<td>Ridgecrest</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$1,600</td>
</tr>
<tr>
<td>Various locations</td>
<td>Taft</td>
<td>Construct Class I or Class III Bike Path; striping; signage</td>
<td>$400</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$11,000</strong></td>
</tr>
</tbody>
</table>

#### 2007 through 2030 - Passenger Rail (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unknown</td>
<td></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$0</strong></td>
</tr>
</tbody>
</table>
TABLE 4.1 - Constrained Program of Projects (Cont'd)

Summary of Constrained Projects (Cost x 1,000)

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Highway Improvements 2007-2010</td>
<td>$1,298,308</td>
</tr>
<tr>
<td>Major Highway Improvements 2011-2030</td>
<td>$1,624,500</td>
</tr>
<tr>
<td>Local Streets and Roads</td>
<td>$900,000</td>
</tr>
<tr>
<td>Transit</td>
<td>$112,800</td>
</tr>
<tr>
<td>Non-motorized</td>
<td>$11,000</td>
</tr>
<tr>
<td>Passenger Rail</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$3,946,608</strong></td>
</tr>
</tbody>
</table>
### TABLE 4.2 - Unconstrained Program of Projects

**Major Highway Improvements (Cost x 1,000)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>$40,000</td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>7th Standard Road Interchange - reconstruction</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 33</td>
<td>Maricopa</td>
<td>Welch St to Wood St - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 33</td>
<td>Taft</td>
<td>Wood St to 10th St - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>Route 33</td>
<td>Taft</td>
<td>10th St to Midway Rd - widen to four lanes</td>
<td>$12,000</td>
</tr>
<tr>
<td>Route 43</td>
<td>Shafter</td>
<td>7th Standard Rd to Euclid Ave - widen to four lanes</td>
<td>$17,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>I-5 to Jumper Ave - widen to four lanes</td>
<td>$55,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Near General Beale Rd - new truck weigh station</td>
<td>$5,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern/Tehachapi</td>
<td>East of Tehachapi to General Beale Rd - truck auxiliary lanes</td>
<td>$40,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>General Beale Rd - construct new interchange</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern</td>
<td>Rosedale Highway - I-5 to Rt 43 - widen to four lanes</td>
<td>$37,000</td>
</tr>
<tr>
<td>Route 65</td>
<td>Kern</td>
<td>7th Standard Rd to County Line - widen to four lanes</td>
<td>$100,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Rt 33 to Cherry Ave - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Tupman Rd to I-5 - widen to four lanes</td>
<td>$28,000</td>
</tr>
<tr>
<td>Route 155</td>
<td>Delano</td>
<td>Rt 99 to Browning Rd - four lanes; reconstruct</td>
<td>$15,000</td>
</tr>
<tr>
<td>Route 166</td>
<td>Maricopa</td>
<td>Basic School Rd - reconstruct intersection grade</td>
<td>$240</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Fairfax Blvd to China Grade - new four lane freeway</td>
<td>$120,000</td>
</tr>
<tr>
<td>Route 184</td>
<td>Arvin</td>
<td>Panama Lane to Rt 178 - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tehachapi-Woodford Rd to Cummings Valley Rd four lane</td>
<td>$22,000</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tucker to Tehachapi Woodford Rd - four lane</td>
<td>$4,500</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>SR 99 to Comanche Rd - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>Comanche Rd to Rt 184 - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>Arvin city limits Rt 58 - widen to four lanes</td>
<td>$30,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Johannesburg</td>
<td>San Bdo County Line to Searles Rd - widen to four lanes</td>
<td>$28,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Searles Rd to Randsburg Rd - widen to four lanes</td>
<td>$17,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>BR 395 to South China Lake Blvd - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Inyokern</td>
<td>Rt 178 to Rt 14 - widen to four lanes</td>
<td>$26,000</td>
</tr>
<tr>
<td>Santa Fe Way</td>
<td>Bakersfield</td>
<td>Hageaman to Los Angeles Ave - widen to four lanes</td>
<td>$59,000</td>
</tr>
<tr>
<td>Twenty Mule Team Rd</td>
<td>California City</td>
<td>California City Blvd to SR 58 - widen to four lanes</td>
<td>$10,000</td>
</tr>
<tr>
<td>North Gate Road</td>
<td>California City</td>
<td>California City Blvd to North Edwards - new four lane road</td>
<td>$28,000</td>
</tr>
<tr>
<td>Woolomes Ave.</td>
<td>Delano</td>
<td>Rt 99 - widen bridge to four lanes; reconstruct ramps</td>
<td>$13,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Hiett Ave to Rt 99 - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Rt 43 to Hiett Ave - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Wildwood to Rt 43 - widen to four lanes</td>
<td>$18,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Corcoran to Wildwood - widen to four lanes</td>
<td>$33,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Corcoran to I-5 - construct four lanes</td>
<td>$63,000</td>
</tr>
<tr>
<td>Red Apple Rd.</td>
<td>Kern</td>
<td>Tucker Rd to Westwood Blvd - widen to four lanes</td>
<td>$2,000</td>
</tr>
<tr>
<td>Sierra Way</td>
<td>Kern</td>
<td>Lake Isabella at South Fork Bridge - reconstruct bridge</td>
<td>$24,000</td>
</tr>
<tr>
<td>Frazier Park</td>
<td>Kern</td>
<td>Park and Ride facility near Frazier Park Blvd</td>
<td>$6,000</td>
</tr>
<tr>
<td>Wheeler Ridge Rd.</td>
<td>Kern</td>
<td>I-5 to Rt 223 - widen to four lanes</td>
<td>$60,000</td>
</tr>
<tr>
<td>Rosamond Blvd</td>
<td>Kern</td>
<td>Rosamond Blvd at UP Railroad - grade separation</td>
<td>$15,000</td>
</tr>
<tr>
<td>K Street</td>
<td>Kern</td>
<td>Mojave - extend K St to SR 14</td>
<td>$6,000</td>
</tr>
</tbody>
</table>
TABLE 4.2 - Unconstrained Program of Projects (Cont’d)

Major Highway Improvements (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teh. Willow Springs Rd.</td>
<td>Tehachapi</td>
<td>Rt 58 to Rosamond Blvd - widen to four lanes</td>
<td>$70,000</td>
</tr>
<tr>
<td>Valley Blvd</td>
<td>Tehachapi</td>
<td>Tucker Rd to Curry - widen to four lanes</td>
<td>$11,000</td>
</tr>
<tr>
<td>Kern Ave.</td>
<td>McFarland</td>
<td>Reconstruct pedestrian bridge at Rt 99</td>
<td>$250,000</td>
</tr>
<tr>
<td>Mahan St.</td>
<td>Ridgecrest</td>
<td>Inyokern to South China Lake - widen to four lanes</td>
<td>$15,000</td>
</tr>
<tr>
<td>Richmond Rd.</td>
<td>Ridgecrest</td>
<td>E Ridgecrest Blvd - widen to four lanes</td>
<td>$3,000</td>
</tr>
<tr>
<td>Bowman Rd.</td>
<td>Ridgecrest</td>
<td>China Lake to County Line Rd - reconstruction</td>
<td>$2,000</td>
</tr>
<tr>
<td>S. China Lake Blvd.</td>
<td>Ridgecrest</td>
<td>Rt 395 to College Heights - reconstruction</td>
<td>$17,000</td>
</tr>
<tr>
<td>College Heights</td>
<td>Ridgecrest</td>
<td>China Lake Blvd to Jarvis</td>
<td>$17,000</td>
</tr>
<tr>
<td>7th Standard Rd.</td>
<td>Shafter</td>
<td>Palm Ave to I-5 - widen to four lanes</td>
<td>$22,000</td>
</tr>
<tr>
<td>7th Standard Rd.</td>
<td>Shafter</td>
<td>Palm Ave to Rt 43 - widen to four lanes</td>
<td>$20,000</td>
</tr>
<tr>
<td>Zachary Rd.</td>
<td>Shafter</td>
<td>7th Standard Rd to Lerdoy Hwy - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>East Beltway</td>
<td>Bakersfield</td>
<td>South Beltway to SR 178 - new expressway</td>
<td>$50,000</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>Regional</td>
<td>South Beltway to I-5 - extend freeway</td>
<td>$45,000</td>
</tr>
<tr>
<td>West Beltway-North</td>
<td>Regional</td>
<td>7th Standard Rd to SR 99 - extend freeway</td>
<td>$45,000</td>
</tr>
</tbody>
</table>

Sub-total $1,713,740

Local Streets and Roads (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various Locations</td>
<td>Region</td>
<td>Bridge and street widening; reconstruction; signalization</td>
<td>$500,000</td>
</tr>
</tbody>
</table>

Sub-total $500,000

Transit (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Transit Services</td>
<td>Region</td>
<td>80 new buses</td>
<td>$28,000</td>
</tr>
<tr>
<td>All Transit Services</td>
<td>Region</td>
<td>15 replacement gas/diesel minibuses</td>
<td>$1,000</td>
</tr>
<tr>
<td>All Transit Services</td>
<td>Region</td>
<td>1 transfer station</td>
<td>$1,000</td>
</tr>
<tr>
<td>All Transit Services</td>
<td>Region</td>
<td>2 maintenance stations</td>
<td>$10,000</td>
</tr>
<tr>
<td>All Transit Services</td>
<td>Region</td>
<td>Park and ride lots (750 spaces)</td>
<td>$3,000</td>
</tr>
</tbody>
</table>

Sub-total $43,000

Passenger Rail (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield Amtrak Station</td>
<td>Phase II Construction</td>
<td>$13,000</td>
</tr>
</tbody>
</table>

Sub-total $13,000

Non-motorized (Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various locations</td>
<td>Region</td>
<td>Class II or Class III improvements; striping; signage</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

Sub-total $4,000
### TABLE 4.2 - Unconstrained Program of Projects (Cont'd)

#### Aviation (Cost x 1,000)

<table>
<thead>
<tr>
<th>Airport</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delano Municipal</td>
<td>Capital Improvements</td>
<td>$180</td>
</tr>
<tr>
<td>Elk Hills - Buttonwillow</td>
<td>Capital Improvements</td>
<td>$930</td>
</tr>
<tr>
<td>Inyokern</td>
<td>Capital Improvements</td>
<td>$2,651</td>
</tr>
<tr>
<td>Kern Valley</td>
<td>Capital Improvements</td>
<td>$3,672</td>
</tr>
<tr>
<td>Lost Hills</td>
<td>Capital Improvements</td>
<td>$1,300</td>
</tr>
<tr>
<td>Meadows Field</td>
<td>Capital Improvements</td>
<td>$7,250</td>
</tr>
<tr>
<td>Mojave</td>
<td>Capital Improvements</td>
<td>$3,388</td>
</tr>
<tr>
<td>Poso</td>
<td>Capital Improvements</td>
<td>$2,045</td>
</tr>
<tr>
<td>Shafter - Minter Field</td>
<td>Capital Improvements</td>
<td>$3,630</td>
</tr>
<tr>
<td>Taft</td>
<td>Capital Improvements</td>
<td>$5,498</td>
</tr>
<tr>
<td>Tehachapi Municipal</td>
<td>Capital Improvements</td>
<td>$6,212</td>
</tr>
<tr>
<td>Wasco</td>
<td>Capital Improvements</td>
<td>$1,315</td>
</tr>
<tr>
<td>California City</td>
<td>Capital Improvements</td>
<td>$6,607</td>
</tr>
</tbody>
</table>

Sub-total $44,678

#### Summary of Unconstrained Projects (Cost x 1,000)

<table>
<thead>
<tr>
<th>Program Category</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Highway Improvements</td>
<td>$1,713,740</td>
</tr>
<tr>
<td>Local Streets and Roads</td>
<td>$500,000</td>
</tr>
<tr>
<td>Transit</td>
<td>$43,000</td>
</tr>
<tr>
<td>Passenger Rail</td>
<td>$13,000</td>
</tr>
<tr>
<td>Non-motorized</td>
<td>$4,000</td>
</tr>
<tr>
<td>Aviation</td>
<td>$44,678</td>
</tr>
</tbody>
</table>

Grand Total $2,318,418
MAJOR HIGHWAY IMPROVEMENT MAPS
(CONSTRANDED 2007 – 2030
AND UNCONSTRANDED, without time allotment)
### METRO BAKERSFIELD NEAR-TERM
#### MAJOR HIGHWAY IMPROVEMENTS (2007-2010)

(Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 Elm St to D St - widen to four/six lanes</td>
<td>$3,750</td>
</tr>
<tr>
<td>24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 Elm St to D St - widen to four/six lanes</td>
<td>$11,295</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Metro Bkfd</td>
<td>Coffee Rd to Rt 99 - construct interchange; four/six lanes</td>
<td>$13,000</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Metro Bkfd</td>
<td>Rt 99 to Wings Way - widen to four/six lanes</td>
<td>$2,500</td>
</tr>
<tr>
<td>Allan Road</td>
<td>Metro Bkfd</td>
<td>Brimhall Rd to Stockdale Hwy - widen to six lanes</td>
<td>$7,000</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Bakersfield</td>
<td>(South) Oak St to Rt 178 - new six/eight lane freeway</td>
<td>$90,000</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Metro Bkfd</td>
<td>SR 99 to SR 178 - construct six/eight lane local freeway</td>
<td>$218,750</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204 - construct four lane extension</td>
<td>$3,000</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204 - construct four lane extension</td>
<td>$8,300</td>
</tr>
<tr>
<td>Oak St Interchange</td>
<td>Bakersfield</td>
<td>Rt 178 (24th St) and Oak St - construct interchange</td>
<td>$6,750</td>
</tr>
<tr>
<td>Oak St Interchange</td>
<td>Bakersfield</td>
<td>Rt 178 (24th St) and Oak St - construct interchange</td>
<td>$22,591</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Drive - new interchange widen to four lanes</td>
<td>$4,500</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd to Rancheria Rd - new four/six-lane freeway</td>
<td>$28,500</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Mesa Marin to Rancheria Rd - widen to four/six lanes</td>
<td>$4,500</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Fairfax Road - construct interchange and widen to four lanes</td>
<td>$15,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Drive - new interchange widen to four lanes</td>
<td>$13,544</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Road to Rancheria Rd - new four/six lane freeway</td>
<td>$85,846</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Mesa Marin to Rancheria Rd - widen to four lanes</td>
<td>$13,544</td>
</tr>
<tr>
<td>Route 178/204</td>
<td>Metro Bkfd</td>
<td>SR 99 to Centennial Corridor- new four/six lane freeway</td>
<td>$26,250</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - SR 43 to SR 99 - widen to four/six lanes</td>
<td>$11,250</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Rt 43 to SR 99 - widen to four/six lanes</td>
<td>$34,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Snow Road - construct new interchange</td>
<td>$40,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Hosking Road - reconstruct interchange</td>
<td>$40,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - new six/eight-lane freeway - (Route Adoption &amp; Env.)</td>
<td>$15,000</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>SR 119 to 7th Std Rd - construct new four/six-lane freeway</td>
<td>$30,000</td>
</tr>
<tr>
<td>Westside Parkway</td>
<td>Metro Bkfd</td>
<td>SR 99 / Oak St to Heath Rd - construct local freeway</td>
<td>$175,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$923,870</strong></td>
</tr>
</tbody>
</table>
Figure 4-7

Metropolitan Bakersfield Near-Term Projects (2007-2010)
## OUTLYING AREAS NEAR-TERM
### MAJOR HIGHWAY IMPROVEMENTS (2007-2010)

(Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cecil Ave</td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes (EIR Only)</td>
<td>$500</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes</td>
<td>$14,000</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 1)</td>
<td>$35,000</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>I-5</td>
<td>Kern</td>
<td>Interchange improvements at Laval Rd</td>
<td>$7,000</td>
</tr>
<tr>
<td>Route 184</td>
<td>Lamont</td>
<td>Rt 223 to Panama Ln - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 184</td>
<td>Lamont</td>
<td>Rt 223 to Panama Ln - widen to four lanes</td>
<td>$7,000</td>
</tr>
<tr>
<td>Route 14</td>
<td>Mojave</td>
<td>Rt 58 to Cal City Blvd - widen to four lanes / interchange</td>
<td>$45,284</td>
</tr>
<tr>
<td>Route 395</td>
<td>Ridgecrest</td>
<td>China Lake Blvd To Rt 178 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 395</td>
<td>Ridgecrest</td>
<td>China Lake Blvd to Rt 178 - widen to four lanes</td>
<td>$10,000</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>Santa Fe Way to Coffee Rd - widen to four/six lanes</td>
<td>$18,000</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>SR 43 to Santa Fe Way - widen to four lanes</td>
<td>$19,654</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Tupman Rd - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Tupman Rd - widen to four lanes</td>
<td>$14,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Tehachapi</td>
<td>Dennison Rd - construct interchange and bridge</td>
<td>$10,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Jumper Ave to Rt 43 - widen to four lanes (EIR)</td>
<td>In Progress</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Jumper Ave (North) to Rt 43 - widen to four lanes</td>
<td>$7,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO County Line to I-5 - widen to four lanes (Phases 1 &amp; 2)</td>
<td>$115,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO County Line to I-5 - widen to four lanes (Phase 3)</td>
<td>$68,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$374,438</strong></td>
</tr>
</tbody>
</table>
Near-Term Projects In Outlying Areas (2007-2010)
## METRO BAKERSFIELD LONG-TERM MAJOR HIGHWAY NETWORK IMPROVEMENTS (2011-2030)

(Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>2011 - 2015</th>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>2021-2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Olive Drive - reconstruct interchange (All phases)</td>
<td>$ 50,000</td>
<td>West Beltway-South</td>
<td>Metro Bkfd</td>
<td>S. Beltway to I-5 - extend freeway</td>
<td>$ 80,000</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>SR 119 to 7th Std Rd - new four/six-lane freeway (12.5 miles)</td>
<td>$ 189,000</td>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 2)</td>
<td>$ 160,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane fwy (28 miles) (Design / RW)</td>
<td>$ 62,000</td>
<td>West Beltway-South</td>
<td>Metro Bkfd</td>
<td>S. Beltway to I-5 - extend freeway</td>
<td>$ 7,500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>East Beltway</td>
<td>Metro Bkfd</td>
<td>South Beltway to SR 178 - new expressway</td>
<td>$ 20,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>2016-2020</th>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>2026-2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 178/204</td>
<td>Metro Bkfd</td>
<td>SR 99 to Centennial Corridor - six/eight-lane freeway 2.8 miles</td>
<td>$ 200,000</td>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 99 to Cottonwood Rd. - widen to six lanes</td>
<td>$ 30,000</td>
</tr>
<tr>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 1)</td>
<td>$ 150,000</td>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Ming Ave to Bear Mountain Blvd - widen to eight lanes</td>
<td>$ 50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Route 178</td>
<td>Metro Bkfd</td>
<td>Centennial Corridor to Oswell St - widen to eight lanes</td>
<td>$ 29,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>South Beltway</td>
<td>Metro Bkfd</td>
<td>I-5 to SR 58 - construct new six/eight-lane freeway (Phase 3)</td>
<td>$ 140,000</td>
</tr>
</tbody>
</table>

**Total** $ 896,500
Metropolitan Bakersfield Long-Term Projects (2011-2030)
## OUTLYING AREAS LONG-TERM MAJOR HIGHWAY NETWORK IMPROVEMENTS (2011-2030)

(Cost x 1,000)

### 2011 - 2015

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>35,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Tupman Rd - widen to four lanes</td>
<td>60,000</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>10,000</td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>33,500</td>
</tr>
<tr>
<td>Cal City Blvd</td>
<td>Cal City</td>
<td>Rt 14 east six miles - widen to four lanes</td>
<td>1,000</td>
</tr>
<tr>
<td>Cecil Ave</td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes</td>
<td>4,000</td>
</tr>
</tbody>
</table>

### 2016 - 2020

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cecil Ave</td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes; reconstruct</td>
<td>15,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO County Line to I-5 - interchange upgrade at I-5 (Phase 4)</td>
<td>35,000</td>
</tr>
</tbody>
</table>

### 2021 - 2025

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 43 to Rt 99 - widen to four lanes (Phase 1)</td>
<td>25,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Jumper Ave (North) to Rt 43 - widen to four lanes</td>
<td>25,000</td>
</tr>
<tr>
<td>West Beltway-North</td>
<td>Regional</td>
<td>N. Beltway to SR 99 - extend freeway</td>
<td>7,500</td>
</tr>
</tbody>
</table>

### 2026 - 2030

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost (in $1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 43 to Rt 99 - reconstruct interchange (Phase 2)</td>
<td>45,000</td>
</tr>
<tr>
<td>Route 184</td>
<td>Lamont</td>
<td>Rt 223 to Panama Ln - widen to four lanes</td>
<td>48,000</td>
</tr>
<tr>
<td>Route 395</td>
<td>Ridgecrest</td>
<td>China Lake Blvd To Rt 178 - widen to four lanes</td>
<td>57,000</td>
</tr>
<tr>
<td>Cal City Blvd</td>
<td>Cal City</td>
<td>Rt 14 east six miles - widen to four lanes</td>
<td>10,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO County Line to I-5 - interchange upgrade at I-5 (Phase 4)</td>
<td>35,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Kern</td>
<td>Near Rancheria Rd to China Garden - new freeway EIR/EIS</td>
<td>10,000</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>Rt 184 to Rt 99 - widen to four lanes</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**Total** $457,000
## UNCONSTRAINED MAJOR HIGHWAY IMPROVEMENTS

(Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 184</td>
<td>Arvin</td>
<td>Panama Lane to Rt 178 - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>SR 99 to Comanche Rd - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>Comanche Rd to Rt 184 - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Route 222</td>
<td>Arvin</td>
<td>Arvin city limits Rt 58 - widen to four lanes</td>
<td>$30,000</td>
</tr>
<tr>
<td>East Beltway</td>
<td>Bakersfield</td>
<td>South Beltway to SR 178 - new expressway</td>
<td>$50,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Fairfax Blvd to China Grade - new four lane freeway</td>
<td>$120,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Near General Beale Rd - new truck weigh station</td>
<td>$5,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>General Beale Rd - construct new interchange</td>
<td>$25,000</td>
</tr>
<tr>
<td>Santa Fe Way</td>
<td>Bakersfield</td>
<td>Hageman to Los Angeles Ave - widen to four lanes</td>
<td>$59,000</td>
</tr>
<tr>
<td>North Gate Road</td>
<td>California City</td>
<td>California City Blvd to North Edwards - new four lane road</td>
<td>$28,000</td>
</tr>
<tr>
<td>Twenty Mule Team Rd</td>
<td>California City</td>
<td>California City Blvd to SR 58 - widen to four lanes</td>
<td>$10,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>H 43 to H 99 - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Wildwood to Rt 43 - widen to four lanes</td>
<td>$18,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Corcoran to Wildwood - widen to four lanes</td>
<td>$33,000</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Corcoran to I-5 - construct four lanes</td>
<td>$63,000</td>
</tr>
<tr>
<td>Route 155</td>
<td>Delano</td>
<td>Rt 99 to Browning Rd - four lanes; reconstruct</td>
<td>$15,000</td>
</tr>
<tr>
<td>Woolomes Ave.</td>
<td>Delano</td>
<td>Rt 99 - widen bridge to four lanes; reconstruct ramps</td>
<td>$13,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Inyokern</td>
<td>Rt 178 to Rt 14 - widen to four lanes</td>
<td>$26,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Johannesburg</td>
<td>San Bdo County Line to Searles Rd - widen to four lanes</td>
<td>$28,000</td>
</tr>
<tr>
<td>Frazier Park</td>
<td>Kern</td>
<td>Park and Ride facility near Frazier Park Blvd</td>
<td>$6,000</td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>$40,000</td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>7th Standard Road Interchange - reconstruction</td>
<td>$25,000</td>
</tr>
<tr>
<td>K Street</td>
<td>Kern</td>
<td>Mojave - extend K St to SR 14</td>
<td>$6,000</td>
</tr>
<tr>
<td>Red Apple Rd.</td>
<td>Kern</td>
<td>Tucker Rd to Westwood Blvd - widen to four lanes</td>
<td>$2,000</td>
</tr>
<tr>
<td>Rosamond Blvd</td>
<td>Kern</td>
<td>Rosamond Blvd at UP Railroad - grade separation</td>
<td>$15,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern</td>
<td>Rosedale Highway - I-5 to Rt 43 - widen to four lanes</td>
<td>$37,000</td>
</tr>
<tr>
<td>Route 65</td>
<td>Kern</td>
<td>7th Standard Rd to County Line - widen to four lanes</td>
<td>$100,000</td>
</tr>
<tr>
<td>Sierra Way</td>
<td>Kern</td>
<td>Lake Isabella at South Fork Bridge - reconstruct bridge</td>
<td>$24,000</td>
</tr>
</tbody>
</table>
## UNCONSTRAINED MAJOR HIGHWAY IMPROVEMENTS (continued)

(Cost x 1,000)

<table>
<thead>
<tr>
<th>Project</th>
<th>Locale</th>
<th>Scope</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheeler Ridge Rd.</td>
<td>Kern</td>
<td>I-5 to Rt 223 - widen to four lanes</td>
<td>$60,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern/Tehachapi</td>
<td>East of Tehachapi to General Beale Rd - truck auxiliary lanes</td>
<td>$40,000</td>
</tr>
<tr>
<td>Route 166</td>
<td>Maricopa</td>
<td>Basic School Rd - reconstruct intersection grade</td>
<td>$240</td>
</tr>
<tr>
<td>Route 33</td>
<td>Maricopa</td>
<td>Welch St to Wood St - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Kern Ave.</td>
<td>McFarland</td>
<td>Reconstruct pedestrian bridge at Rt 99</td>
<td>$250,000</td>
</tr>
<tr>
<td>West Beltway-North</td>
<td>Regional</td>
<td>7th Standard Rd to SR 99 - extend freeway</td>
<td>$45,000</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>Regional</td>
<td>South Beltway to I-5 - extend freeway</td>
<td>$45,000</td>
</tr>
<tr>
<td>Bowman Rd.</td>
<td>Ridgecrest</td>
<td>China Lake to County Line Rd - reconstruction</td>
<td>$2,000</td>
</tr>
<tr>
<td>College Heights</td>
<td>Ridgecrest</td>
<td>China Lake Blvd to Jarvis</td>
<td>$17,000</td>
</tr>
<tr>
<td>Mahan St.</td>
<td>Ridgecrest</td>
<td>Inyokern to South China Lake - widen to four lanes</td>
<td>$15,000</td>
</tr>
<tr>
<td>Richmond Rd.</td>
<td>Ridgecrest</td>
<td>E Ridgecrest Blvd - widen to four lanes</td>
<td>$3,000</td>
</tr>
<tr>
<td>S. China Lake Blvd.</td>
<td>Ridgecrest</td>
<td>Rt 395 to College Heights - reconstruction</td>
<td>$17,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>BR 395 to South China Lake Blvd - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Searles Rd to Randsburg Rd - widen to four lanes</td>
<td>$17,000</td>
</tr>
<tr>
<td>7th Standard Rd.</td>
<td>Shafter</td>
<td>Palm Ave to I-5 - widen to four lanes</td>
<td>$22,000</td>
</tr>
<tr>
<td>7th Standard Rd.</td>
<td>Shafter</td>
<td>Palm Ave to Rt 43 - widen to four lanes</td>
<td>$20,000</td>
</tr>
<tr>
<td>Route 43</td>
<td>Shafter</td>
<td>7th Standard Rd to Euclid Ave - widen to four lanes</td>
<td>$17,000</td>
</tr>
<tr>
<td>Zachary Rd.</td>
<td>Shafter</td>
<td>7th Standard Rd to Lerdo Hwy - widen to four lanes</td>
<td>$16,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Rt 33 to Cherry Ave - widen to four lanes</td>
<td>$25,000</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Tupman Rd to I-5 - widen to four lanes</td>
<td>$28,000</td>
</tr>
<tr>
<td>Route 33</td>
<td>Taft</td>
<td>Wood St to 10th St - widen to four lanes</td>
<td>$4,000</td>
</tr>
<tr>
<td>Route 33</td>
<td>Taft</td>
<td>10th St to Midway Rd - widen to four lanes</td>
<td>$12,000</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tehachapi-Woodford Rd to Cummings Valley Rd four lane</td>
<td>$22,000</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tucker to Tehachapi Woodford Rd - four lane</td>
<td>$4,500</td>
</tr>
<tr>
<td>Teh. Willow Springs Rd.</td>
<td>Tehachapi</td>
<td>Rt 58 to Rosamond Blvd - widen to four lanes</td>
<td>$70,000</td>
</tr>
<tr>
<td>Valley Blvd</td>
<td>Tehachapi</td>
<td>Tucker Rd to Curry - widen to four lanes</td>
<td>$11,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>I-5 to Jumper Ave - widen to four lanes</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

**Total**                           |                  |                                                | **$1,713,740** |
PUBLIC TRANSPORTATION ACTION ELEMENT

Existing Transit Services

Within Kern County, existing public transportation services include public transit, Amtrak, and other private carriers such as Greyhound. Local and regional public transit is available within and between sixteen Kern County communities. In 2004-2005, public transit services carried over 8.1 million passengers in Kern County. Transit services include intercity, intracity, demand responsive and fixed route operations.

The County of Kern operates Kern Regional Transit that provides service to the unincorporated communities of Buttonwillow, Lamont, Kern River Valley, Frazier Park, Rosamond and Mojave. In addition, the County has agreements with several small cities to share the cost of providing transit service to county areas surrounding incorporated places, i.e., Delano, Ridgecrest, Shafter, Taft, Tehachapi and Wasco. Kern Regional Transit also provides intercity service between Lamont/Bakersfield; Lake Isabella/Bakersfield; Frazier Park/Bakersfield; and California City/ Mojave/ Rosamond/ Lancaster/Palmdale.

Golden Empire Transit (GET) has provided public transit service for the metropolitan Bakersfield area since 1973. Today, GET operates 18 fixed routes with a fleet of 80 buses. GET’s service area covers 156 square miles and serves approximately 422,000 residents. GET-A-Lift provides complementary paratransit service within metropolitan Bakersfield for those who are physically unable to use the fixed route service. Elderly and disabled services are also provided by the Consolidated Transportation Service Agency (CTSA).

GET has determined that within metropolitan Bakersfield, the east and southeast areas exhibit the highest service potential. This analysis is based on population density, income, auto ownership, and age. Other areas with high transit potential are portions of Oildale and central Bakersfield. The lowest potential rider areas include most of the southwest, northwest, Greenacres, and Greenfield.

Table 4-3 summarizes public transportation services operated within Kern County, with a description of services provided by each rural public transit provider, including hours of operation, type of service provided.

Transit ridership in Kern County has been slightly decreasing over the past four years as shown in Table 4-4, and GET experienced the highest patronage ever in 2001/02. Largely because of service expansion, transit ridership on Kern Regional Transit increased by almost 70% between 1997 and 2003. In 2006, GET began preparation of a study to analyze possible reasons why transit ridership is falling at the same time gasoline prices are steadily increasing.
<table>
<thead>
<tr>
<th>Operator</th>
<th>Area Served</th>
<th>Service Type</th>
<th>Days of Service</th>
<th>Fare Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arvin</td>
<td>Arvin, Lamont</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.50 seniors, disabled, &amp; youth 5-15</td>
</tr>
<tr>
<td>California City</td>
<td>California City</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.075 seniors, disabled, ages 5-14</td>
</tr>
<tr>
<td>CTSA</td>
<td>Metro Bakersfield</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$2.00</td>
</tr>
<tr>
<td>Delano</td>
<td>Delano and adjacent unincorporated area</td>
<td>Fixed route</td>
<td>Mon-Sat</td>
<td>$0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dial-a-ride</td>
<td></td>
<td>$.35 seniors/disabled</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.50 students 5-18</td>
</tr>
<tr>
<td>McFarland</td>
<td>McFarland</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.50 seniors, disabled</td>
</tr>
<tr>
<td>Ridgecrest</td>
<td>Ridgecrest and adjacent unincorporated area</td>
<td>Dial-a-ride</td>
<td>Mon-Sat</td>
<td>$2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1 seniors, disabled</td>
</tr>
<tr>
<td>Shafter</td>
<td>Shafter &amp; adjacent unincorporated area</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors, disabled</td>
</tr>
<tr>
<td>Taft</td>
<td>Greater Taft (city, Taft Hts, South Taft, Ford City)</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.00 (seniors, disabled, students)</td>
</tr>
<tr>
<td>Tehachapi</td>
<td>Tehachapi &amp; unincorporated adjacent Golden Hills area</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.00 (City-County trips)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors, disabled, children</td>
</tr>
<tr>
<td>Wasco</td>
<td>Wasco and adjacent unincorporated area</td>
<td>Dial-a-ride</td>
<td>Mon-Fri</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors &amp; youth</td>
</tr>
<tr>
<td>Kern Regional</td>
<td>Bkfd-Frazier Park</td>
<td>Intercity</td>
<td>Mon-Sat</td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td>Transit</td>
<td>Bkfd-Lake Isabella</td>
<td>Intercity</td>
<td>Mon-Sat</td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td></td>
<td>Bakersfield-Taft</td>
<td>Intercity</td>
<td>Mon-Fri</td>
<td>$2.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$2.00</td>
</tr>
<tr>
<td></td>
<td>Bkfd-Tehachapi</td>
<td>Intercity</td>
<td>Mon-Fri</td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td></td>
<td>Buttonwillow-Bkfd</td>
<td>Intercity</td>
<td>Tue, Thu</td>
<td>$1.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.75</td>
</tr>
<tr>
<td></td>
<td>Bkfd-Lamont</td>
<td>Intercity</td>
<td>Mon-Sat</td>
<td>$2.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.50</td>
</tr>
<tr>
<td></td>
<td>Lost Hills/Wasco</td>
<td>Intercity</td>
<td></td>
<td>$2.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1.50</td>
</tr>
<tr>
<td></td>
<td>Cal City-Palmdale</td>
<td>Intercity</td>
<td>Mon-Sat</td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td></td>
<td>Bkfd-Delano</td>
<td>Intercity</td>
<td>Mon-Sat</td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td></td>
<td>Mojave-Cal City-Ridgecrest</td>
<td>Intercity</td>
<td></td>
<td>Varies with origin and destination</td>
</tr>
<tr>
<td></td>
<td>Kern River Valley</td>
<td>Dial-a-ride</td>
<td>Mon-Sat</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75</td>
</tr>
<tr>
<td></td>
<td>Kern River</td>
<td>Fixed route</td>
<td></td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75</td>
</tr>
<tr>
<td></td>
<td>Boron</td>
<td>Dial-a-ride</td>
<td></td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors, disabled &amp; youth</td>
</tr>
<tr>
<td></td>
<td>Kern River</td>
<td>Dial-a-ride</td>
<td></td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors, disabled &amp; youth</td>
</tr>
<tr>
<td></td>
<td>Frazier Park</td>
<td>Dial-a-ride</td>
<td>Mon-Sat</td>
<td>$1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.75 seniors, disabled &amp; youth</td>
</tr>
<tr>
<td></td>
<td>Lamont</td>
<td>Fixed route</td>
<td>Mon-Sat</td>
<td>$0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$.50 seniors, disabled &amp; youth</td>
</tr>
</tbody>
</table>
### Fare Structure

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area Served</th>
<th>Service Type</th>
<th>Days of Service</th>
<th>Regular</th>
<th>Discount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mojave</td>
<td>Dial-a-ride</td>
<td>Mon-Sat</td>
<td>$1.00</td>
<td>$.75 seniors, disabled &amp; youth</td>
<td></td>
</tr>
<tr>
<td>Rosamond</td>
<td>Dial-a-ride</td>
<td>Mon-Sat</td>
<td>$1.00</td>
<td>$.75 seniors, disabled &amp; youth</td>
<td></td>
</tr>
<tr>
<td>GET</td>
<td>Metro Bakersfield</td>
<td>Fixed route</td>
<td>Daily</td>
<td>$.90</td>
<td>$.35 seniors &amp; disabled</td>
</tr>
<tr>
<td>GET-A-Lift</td>
<td>Metro Bakersfield</td>
<td>Dial-a-ride</td>
<td>Daily</td>
<td>$1.50</td>
<td>--</td>
</tr>
</tbody>
</table>

---

**Table 4-4**

**Passengers Transported by Kern County Transit Operators**

<table>
<thead>
<tr>
<th>Operator</th>
<th>2001/02</th>
<th>2002/03</th>
<th>2003/04</th>
<th>2004/05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arvin</td>
<td>82,393</td>
<td>90,421</td>
<td>103,066</td>
<td>77,943</td>
</tr>
<tr>
<td>California City</td>
<td>25,131</td>
<td>21,523</td>
<td>21,011</td>
<td>20,307</td>
</tr>
<tr>
<td>CTSA</td>
<td>41,035</td>
<td>36,126</td>
<td>29,043</td>
<td>31,123</td>
</tr>
<tr>
<td>Delano</td>
<td>170,173</td>
<td>137,114</td>
<td>118,723</td>
<td>135,657</td>
</tr>
<tr>
<td>GET &amp; GET-A-Lift</td>
<td>7,213,693</td>
<td>7,019,175</td>
<td>6,975,168</td>
<td>6,976,447</td>
</tr>
<tr>
<td>Kern Regional Transit</td>
<td>411,268</td>
<td>637,932</td>
<td>493,242</td>
<td>481,350</td>
</tr>
<tr>
<td>McFarland</td>
<td>21,681</td>
<td>25,717</td>
<td>17,636</td>
<td>18,388</td>
</tr>
<tr>
<td>Ridgecrest</td>
<td>50,637</td>
<td>43,201</td>
<td>38,775</td>
<td>40,374</td>
</tr>
<tr>
<td>Shafter</td>
<td>27,205</td>
<td>34,090</td>
<td>35,747</td>
<td>36,453</td>
</tr>
<tr>
<td>Taft</td>
<td>55,497</td>
<td>62,179</td>
<td>72,118</td>
<td>67,781</td>
</tr>
<tr>
<td>Tehachapi</td>
<td>10,283</td>
<td>10,938</td>
<td>17,779</td>
<td>8,587</td>
</tr>
<tr>
<td>Wasco</td>
<td>22,654</td>
<td>24,860</td>
<td>22,160</td>
<td>22,640</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>8,279,178</td>
<td>8,109,188</td>
<td>7,944,468</td>
<td>7,917,050</td>
</tr>
</tbody>
</table>


---

**Accomplishments Since 2000**

### Golden Empire Transit District (GET)

In response to customer requests, GET began offering Sunday and evening service to 11 routes in 1999; Sunday and evening service had not been available since 1981. In 2001, GET’s fixed route operation achieved its highest ridership level ever with 7,157,418 riders. Over the last several years, GET-A-Lift’s ridership has remained constant, with a small upsurge in 2004.

GET has made a commitment to improving Kern County’s air quality by purchasing compressed natural gas (CNG) buses. By early 2006, GET’s entire fleet, including those assigned to staff, was CNG-fueled.

In 2004, GET made a capital investment in automatic vehicle location (AVL) technology. Once installed, AVL will provide GET dispatchers the precise location of every bus in service. GET dispatchers will be able to observe service problems in real time and react accordingly. AVL systems generate data designed to: 1) identify inefficient scheduled running times; 2) recognize inactive or nonproductive stops allowing route planners the ability to actuate more productive routing; and 3) lower operational costs.
GET has installed bike racks on all of its buses to facilitate intermodal trips, which provides an ancillary improvement to air quality.

Consolidated Transportation Service Agency (CTSA)

North Bakersfield Recreation and Park District (NOR) was designated as the CTSA in 1999. CTSA uses FTA Section 5310 funds to purchase vans and buses.

In response to a ridership drop from 2000 to 2003, CTSA made several service improvements including wheelchair accessibility on 50 percent of its fleet and the hiring of additional drivers. Ridership dropped by approximately 20 percent in 2004 as a result of a fare increase to $1.50 in September 2003 and then to $2.00 in June 2004. However, ridership increased by 6.7 percent in 2005 and 5.9 percent in 2006.

Kern Regional Transit

Kern Regional Transit continues to increase mobility within Kern County with its Express intercity services. Two service expansion projects were introduced in 2001:

1) Intercity service between Ridgecrest and Mojave. The schedule is designed primarily for commuting workers and students, with additional midday trips for shopping and medical purposes;

2) Intercity service between California City and Palmdale. The schedule, similar to the Ridgecrest service extension, accommodates commuting workers and students with additional trips for shopping and medical purposes. The California City service to Palmdale also provides Kern County transit users a connection with Metrolink rail service to the Los Angeles area.

In addition, KRT is considering expansion of the Frazier Park route to Pine Mountain Club, as well as offering Sunday dial-a-ride service in Arvin and Lamont.

In early 2002, KRT joined with Inyo Mono Transit to provide CREST (Carson Ridgecrest Eastern Sierra Transit), from which transit users can connect in Ridgecrest to points north, including Lone Pine, Independence, Bishop, and Mammoth. The need for this intercity route was brought about by the cancellation of Greyhound’s commercial intercity service along the US 395 corridor, which was suspended in August 2001. Communities and cities in the eastern Sierra, north of Mojave, were left without frequent and effective public or commercial service upon the demise of Greyhound service.

CREST is critical to meeting the transportation needs of people living and traveling along US 395 and State Route 14. It provides the vital linkage to existing public and commercial transportation services currently serving the counties of Kern, Los Angeles, Inyo and Mono, including demand response services operated by Ridgecrest, California City, Mojave and Rosamond; Antelope Valley Transit Authority and Metrolink in Lancaster/Palmdale; Santa Clarita Transit in Palmdale and Santa Clarita communities; intercity service to Bakersfield with connections to Greyhound and Airport Bus of Bakersfield; Amtrak; and connections to regional air service in Inyokern and Bakersfield.

KRT has implemented state and federal grants to acquire capital items such as replacement diesel buses, replacement CNG buses, a CNG fueling site and bus shelters.

Amtrak – San Joaquin Service Improvements

The state-supported Amtrak San Joaquin service presently extends 362 rail miles between Oakland and Bakersfield and 314 miles between Sacramento and Bakersfield. Six round-trip trains operate daily, and three of these train sets are stored overnight in Bakersfield. Bakersfield represents both the end of the line for the current rail service and the stepping-off point for further travel to southern California and Nevada. Growing demand for rail service on the San Joaquin line prompted Caltrans to add a second
train from Stockton to Sacramento in March 2003. Amtrak continues to provide a prompt, inexpensive service in the Central Valley where airlines do not.

In FY 2005-06, the Bakersfield station handled 369,959 passengers (boardings and alightings) and was second only to Sacramento as the busiest Amtrak station on the San Joaquin route. In FY 2004-05, the Bakersfield station was ranked eighth busiest among all Amtrak stations in California.

Caltrans anticipates that demand will warrant eight round-trips on the San Joaquin Amtrak service by 2010. Start up dates for service are based on projected service needs; demonstrated ridership demand, institutional barriers, availability of operating funding and equipment, availability of capital funding for capacity improvements requested by operating railroads, and technical issues outside Caltrans’ control will affect when service improvements can be implemented.

Caltrans’ proposed expansion of the San Joaquin Route includes:

- 2010-11 Sacramento – Bakersfield, third train to extend from Stockton to Sacramento (seventh round-trip on route).
- 2014-15 Oakland – Bakersfield, fifth train to extend from Stockton to Oakland (eighth round-trip on route).

This commitment to the San Joaquin route is well founded by the growth forecast for the Central Valley over the next two decades.

**Transit Needs and Issues**

**Limited Transit Dollars**

Financial resources for public transportation are limited while demand for those resources continues to increase. Traditional public transportation revenue sources do not support the increasing need for public mass transportation to help mitigate population increases, clean air mandates, and trip reduction programs. Should a countywide transportation sales tax measure be implemented, a portion of this revenue would provide capital and operating revenues for all public transit providers.

Kern County is the only major urbanized California county without a dedicated sales tax to support both highway and transit improvements. The expansion of public transportation services in the County is predicated on an aggressive financial plan. Chapter 7 - Future Links provides a discussion of the benefits Kern County’s infrastructure would have from a dedicated revenue source.

**Short-Range Transportation Development Plans (TDPs)**

Transportation Development Plans for Kern transit agencies are usually updated every five years and are used as planning tools focusing on short-term transit needs and improvements. TDPs provide recommendations for improving existing service, identify the transit agencies’ roles and responsibilities for better coordination of transit services, and identify possible future transit expansion or revision.

A five-year Transportation Development Plan was prepared for the City of Delano’s transit services in early 2005 to respond to its population boom that will likely reach 50,000 within the scope of this Plan. Two key recommendations were that the City retain a full-time Transit Supervisor and that a bilingual marketing program be developed.

In early 2006, a Transportation Development Plan was prepared for the Frazier Park / Bakersfield corridor that looked at future service changes and improvements, concentrating on public transit services provided by Kern Regional Transit. Of particular concern was whether residential development on Tejon Ranch, both at Frazier Park and at Quail Lake in Los Angeles County would trigger the need for additional and expanded service. Also discussed were various recommendations for improved marketing.
As this update to the Regional Transportation Plan is being written, two more Transportation Development Plans are being prepared. The Ridgecrest short-range plan will specifically evaluate whether changing the current demand-response system to a fixed-route and complementary paratransit system is warranted, as well as assess the system’s connectivity with intercity service provided by Kern Regional Transit and the Carson Ridgecrest Eastern Sierra transit service, co-operated by Kern Regional Transit and Inyo/Mono Transit.

The Western Kern Transportation Development Plan will focus on enhancing mobility for the cities of Shafter, Wasco, and McFarland, as well as to ensure that connections are available to Kern Regional Transit for access between these cities, as well as Delano, Bakersfield, and other places people go for services and employment.

**Senior/Mobility-Disabled Public Transportation**

The senior and mobility-disabled populations in Kern County have limited access to public transportation. Differing fare structures, trip priorities, and limited service hours inhibit a coordination of efforts among operators of senior and disabled transportation. A countywide Consolidated Transportation Service Agency (CTSA) could be developed to incorporate all public operators of disabled and senior transportation. Expanding the CTSA would provide a means for coordination of services and efforts.

**Population Residing More Than ¼ Mile From Transit Route**

GET District policy is for 90 percent of residents within metropolitan Bakersfield to be within one-quarter mile of an existing route; however, within the District, several populated areas are more than one-quarter mile from a transit route. Currently, GET serves about 75 percent, or 15 percent less than the District goal. Most of this population is on the periphery of metropolitan Bakersfield, with some areas that form “holes” in the one-quarter mile buffer around the routes. While some of the unserved areas may not have high transit potential, portions of the southwest do have high transit potential, but are currently underserved.

Continued development around the urban fringe presents many difficulties in meeting route coverage standards. Much of the new development is low density; middle and upper income housing that tends to generate little transit ridership. Furthermore, new development is not always contiguous to existing development causing transit services to cover unproductive miles in outlying areas that generate low ridership. However, urban fringe development may generate levels of transit ridership to justify express bus service, such as is offered by GET between Bakersfield College and California State University Bakersfield.

**Recent Transit Planning Activities**

**Eastern Sierra Public Transportation Study**

Completed in June 2005, the Eastern Sierra Public Transportation Study focused on public transportation services in Mono, Inyo and eastern Kern Counties. The study represented a comprehensive effort to address short-term interregional transit demands, identify strategies to enhance intra-regional mobility, and present a preliminary feasibility analysis of longer-term passenger rail service between Mammoth Lakes and the Los Angeles region.

The Eastern Sierra study area consists of numerous rural communities, resort towns, and a few urban centers clustered along the Highway 395 corridor in Inyo and Mono counties, and along State Route 14 in Kern County. Given the varied geography, sparse populations and long distances that buses must travel, the study found that transit operations through the Eastern Sierra region provide exceptionally good coverage. Nearly all communities within the study area have some level of transit service, offering basic mobility to meet some travel demands.
Regional Rural Transit Strategy

Kern COG initiated a study to evaluate alternatives to its current network of rural transit services. Nelson\Nygaard consultants, working with Kern COG and a project advisory committee representing transit providers and social services throughout Kern County, inaugurated this effort, the Regional Rural Transit Strategy (RRTS), in Spring 2002.

The first report of the RRTS inventoried existing public transit services in rural Kern County. The second report identifies possible alternatives to existing public transit service and the third report recommends strategies to improve the rural Kern County public transit system. The first report provided the following as areas of focus:

- To identify alternatives that would improve the overall quality of transit service in Kern County;
- To identify alternatives to traditional transit addressing Kern County’s regional rural mobility needs;
- To develop coordination alternatives that realize an improvement over the way transit is currently operated;
- To review, identify, and discuss alternative administrative and oversight models for transit services in Kern County;
- To create a strategy for increasing the visibility and importance of transit in Kern County;
- To create partnerships between transit and non-transit organizations in addressing Kern County’s transit needs.

The second report provided a series of alternatives for further consideration.

The final RRTS produced recommendations for alternative methods of countywide public transit service focusing on improving efficiency, effectiveness and cost savings. A cost benefit analysis is necessary to fully assess which recommendations should be given priority.

High Speed Rail Authority

Established in 1996, the California High-Speed Rail Authority is charged with the planning, designing, constructing and operating a state-of-the-art high speed train system. The proposed system stretches from San Francisco, Oakland and Sacramento in the north -- with service to the Central Valley -- to Los Angeles and San Diego in the south. With bullet trains operating at speeds up to 220 mph, the express travel time from downtown San Francisco to Los Angeles would be just under 2 ½ hours. Intercity travelers (trips between metropolitan regions) along with longer-distance commuters would enjoy the benefits of a system designed to connect with existing rail, air and highway systems.

The recommended high speed rail network would be approximately 676 miles long, and would serve over 90 percent of the state’s population. The system would be completely grade-separated, double-tracked and electrified, with speeds exceeding 200 mph.

The major challenge to the Authority is to secure financing in order to implement the system. Detailed financial projections show that farebox and other revenue will be insufficient to finance construction costs of a high speed rail system. A voter approved public funding source (such as a statewide bond measure) will be needed to provide a stable source for construction. While the Authority’s 2006-07 budget provides $14.3 million to begin project implementation, bond funding for the project still must be authorized by voters and AB 713’s enactment has delayed the $10 billion bond measure to November 2008.

Proposed Actions

Near-Term, 2007-2010

- Assist local transit agencies in marketing their services.
• Prepare a countywide transit marketing brochure.
• Update the Transportation Resource Directory in consortium with CTSA.
• Update the Social Services Transportation Action Plan.
• Replace full- and mid-size diesel buses with alternative fuel buses within both metropolitan Bakersfield and rural communities, as funding becomes available.
• Construct transfer stations, as identified in Table 4-1.
• Determine appropriate locations for park-and-ride lots; construct as funding becomes available.

**Long-Term, 2011-2030**

• Replace all full- and mid-size diesel buses with alternative fuel within both metropolitan Bakersfield and rural communities, as funding becomes available.
• Construct transfer stations, as identified in Table 4-1.
• Determine appropriate locations for park-and-ride lots; construct as funding becomes available.
Kern County's airports address a variety of local and regional services. The aviation system connects the traveling public and freight and cargo movers with California’s major metropolitan airports. The aviation system serves the U.S. military directly or in an auxiliary fashion. Many of the airports support local farmers as well as police and medical services. Aviation activities also provide recreational opportunities for the citizens of Kern County. Together, the airports provide a viable mobility option for the County’s residents and businesses.

Existing Aviation System

Kern County’s regional airport system includes a diverse range of aviation facilities. It is comprised of seven airports operated by the Kern County Department of Airports, four municipally owned airports, three airport districts, two privately owned public-use airports, and two military facilities (Figure 4-9).

Scheduled air carrier and commuter airline service is provided at Meadows Field, which serves metropolitan Bakersfield and surrounding communities. Scheduled commuter services are also provided at Inyokern Airport, which serves communities in the Mojave desert and eastern Sierra regions.

General aviation needs are served by public use airports, both publicly and privately owned, throughout the County. These serve the full range of business, agriculture, recreation, and personal aviation activities.

Kern County’s aviation system includes 14 publicly owned airports that are open for use by the general public:

- Meadows Field
- Elk Hills/Buttonwillow
- Kern Valley Airport
- Lost Hills Airport
- Poso Airport
- Wasco Airport
- Taft Airport
- Bakersfield Municipal Airport
- California Municipal Airport
- Delano Municipal Airport
- Tehachapi Municipal Airport
- Mojave Airport
- Inyokern Airport
- Minter Field.

Characteristics of Kern County’s public access airports vary significantly, from size and number of operations to their types of activities and to their expected growth and impact on their local economies. As a group, the airports combine a range of services designed to meet the passenger, business, agricultural, recreational and emergency service needs for the region.

County of Kern Airports

Meadows Field. located on 1,107 acres four miles northwest of central Bakersfield, is classified as a commercial service primary airport under the National Plan of Integrated Airport Systems. This facility serves both commercial and general aviation needs for Bakersfield and the southern San Joaquin Valley region.

The airfield consists of two parallel runways and associated taxiways. The main runway (12L/30R) was extended over 7th Standard Road to a length of 10,857 feet in 1987. This is a Category I Instrument Landing System runway with a Medium Intensity Approach Lighting System with Runway Indicator Lights,
Precision Approach Path Indicator, and Medium Intensity Runway Lighting System. Airport Surveillance Radar is located northeast of runway 12L/30R.

The airport terminal is a 16,400 square-foot complex of two-story buildings. First floor activities include boarding gate access, passenger ticketing, baggage, and waiting areas, gift shop and FAA offices. County airport administrative offices and equipment are based on the second floor. Office space, a training room, and a control tower are also located onsite. A new traffic control tower located 1,600 feet northeast of the threshold of runway 30R provides air and ground communications and is staffed 17 hours per day.

Meadows Field, established in 1927, was the first airport for the Bakersfield area. By 1930, the airport handled over 12,000 passengers and close to 7,000 operations annually; by 2006, Meadows Field handled over 345,000 passengers with a total of 98,886 annual operations. America West Express, Continental Airlines, United Express, and Delta Airlines currently provide passenger services: America West provides direct service to Phoenix; Continental Airlines provides direct flights to Houston; United Express provides direct flights to Los Angeles and San Francisco; and Delta provides direct flights to Salt Lake City.

Meadows Field is an active general aviation airport with numerous Kern-based corporations using the facility for their operations. General aviation is served on approximately 35 acres both northwest and southwest of the terminal area. A full range of fixed-base services is available.

Air cargo operations for the Kern region are conducted primarily at Meadows Field, with an projected increase in activity from 964 tons in 1995 to an anticipated 1700 tons by 2030. Federal Express, DHL/Arbore, and UPS currently provide air cargo service from Meadows Field.

While the potential for air cargo growth has not been fully studied, initial assessment does not preclude the establishment of domestic or international air cargo services at Meadows Field. As Los Angeles region airports reach saturation, Meadow’s should be considered a prime contender for increased air freight shipment. The Draft Meadows Field Airport Master Plan 2005 addresses the need for a land use plan that would consider reserving adequate runway frontage to develop a dedicated air cargo facility. Additionally, Meadows Field’s Airport Master Plan allows for the construction of a third runway (east of the existing runways) to meet any resulting air freight capacity expansion.

Elk Hills/Buttonwillow Airport serves seasonal agricultural aircraft and personal aviation needs of western Kern County. It is located near the intersection of Interstate 5 and Route 58, a highway-oriented commercial area.

The airport has a 3,260 foot unlighted runway, paved aircraft tiedown space for twelve aircraft, and ten automobile parking spaces. Existing land use in the vicinity of the airport is agriculture.

Kern Valley Airport serves commercial, recreational, and occasional fire suppression activities in the Lake Isabella/Kern River Valley area, and is on lease from the U.S. Forest Service. The airport is located south and east of the community of Kernville, with other nearby communities including Wofford Heights, Lake Isabella, Bodfish, Mountain Mesa, Onyx, and Weldon. Outdoor recreation is the prime attraction in this region, and aviation activity continues to increase.

The airport has a 3,500-foot runway and 30 aircraft tiedowns, 15 hangar spaces, and parking for 20 automobiles. Other facilities include gasoline sales, a fixed-base operator and a restaurant. The airport is situated on 51.5 acres leased from the National Forest Service; a Forest Service fire-fighting base is adjacent to the airport on 3.5 acres.

Existing land use includes a small residential area northeast of the airport, farm and rangeland to the east and south, and Lake Isabella on the west. A fly-in campground is available on the west side of the airport.
Kern County Department of Airports completed a Draft Airport Master Plan for Kern Valley Airport in 2005. Short-term (2006-2010) airport improvements recommend in the Master Plan include: constructing a 500-foot unpaved overrun for Runway 35; relocating the northern portion of the parallel taxiway; installing an Automated Weather Observation Station; and other service-related improvements. Long-term (2007-2025) improvements include: widening and extending the runway; widening the parallel taxiway; widening the connector taxiway; and land acquisition to accommodate these projects.

Lost Hills Airport serves local and regional agricultural, business, and personal aviation needs in northwestern Kern County, and is located near the intersection of I-5 and Route 46. This intersection is developing as a highway-oriented commercial area. Route 46 is the primary access to the central coast area from the southern San Joaquin Valley. The airport is an important base for agricultural aircraft operating over the area’s extensive cropland.

The airport currently has a 3,020-foot runway, 12 aircraft tiedowns, and four hangar spaces. Existing land use around the airport is predominantly agriculture, with a small residential area northwest of the runway. The community of Lost Hills is west of the airport.

Kern County Department of Airports completed a Draft Airport Master Plan for Lost Hills Airport in 2005. Short-term (2006-2010) airport improvements recommended in the Master Plan includes installation of an Automated Weather Observation System. Long-term (2011-2025) airport improvements include: installation of Precision Approach Path Indicators for both ends of the runway; provision for a Global Positioning System based instrument approach procedure; extension of the existing runway; and construction of a full-length parallel taxiway.

Poso Airport, located approximately 20 miles north of Bakersfield, is used primarily for agricultural and training aircraft. Airport access is via Route 99 and Route 46 East. The airport is also used for recreational purposes in conjunction with drag racing events at an adjacent paved strip. Poso has a 3,000-foot runway and 20 aircraft tiedowns. No other services or facilities are available. Adjacent land use is agriculture, with a small highway oriented commercial development to the northwest of the airport.

Taft Airport serves business and personal aviation needs for the City of Taft and southwestern Kern County, an area of intensive oil production and processing. While significant demand has been voiced for an airport in this region, the existing facility has been considered unsatisfactory for some years. The runway heading is poorly oriented to wind direction; the runway gradient of 2.2 percent exceeds FAA standards, and insufficient land is available for improvements. Kern County is evaluating available options for improving the airport. Existing facilities include two runways, 7/25 and 3/21, with 3 and 7 used for take-offs downhill and 21 and 25 used for landings uphill. Eighteen aircraft tiedowns, 22 T-hangars, and five hangar spaces are available. Runway 7/25 has medium intensity runway lighting and the airport has a beacon. Adjacent land uses consist primarily of oilfield-type activities to the north, east, and south with the urban area of the City of Taft to the west.

Wasco Airport serves agricultural, business, and personal needs for the area around the City of Wasco. The airport is located one mile north of Wasco and 22 miles northwest of Bakersfield. The airport is an important base for agricultural aircraft operations. The airport has a 3,380-foot runway, 36 aircraft tiedowns, six shelters, 11 T-hangars, and four hangar spaces. The main runway has a medium intensity runway lighting system and the airport has a beacon. Existing land use in the vicinity of the airport is agriculture.

Kern County Department of Airports completed a Draft Airport Master Plan for Wasco Airport in 2005. Short-term (2006-2010) airport improvements included: rehabilitation of the aircraft parking pavement; purchase of land or acquisition of avigation easements northeast of the airport to accommodate future runway/taxiway extension; installation of an Automated Weather Observation System; and installation of Precision Approach Path Indicators for both ends of the runway. Long-term (2011-2025) airport improvements include: extension of the runway/taxiway to 3900 feet; installation of taxiway lights;
installation of Runway End Identifier Lights; provision for a Global Positioning System-based instrument approach procedure; and other projects designed to improve service to airport users.

**Municipal Airports**

In addition to the airports operated by Kern County, four airports are owned and operated by municipalities located in three geographic subregions of the County: San Joaquin Valley, Southern Sierra/Tehachapi Mountains, and Mojave Desert. In the Valley, the Cities of Bakersfield and Delano operate municipal airports.

The City of Tehachapi operates a municipal airport in the mountain area, and California City Municipal Airport is located west of that desert community.

**Bakersfield Municipal Airport** serves business, personal, and recreational aviation needs in the Bakersfield metropolitan area. The airport has completed an ambitious development program, including land acquisition, and construction of a 4,000-foot runway, associated taxiways, and support facilities. Bakersfield Municipal is located in southeast Bakersfield, approximately 1.5 miles south of Route 58 and about two miles east of Route 99.

Existing land use in the vicinity of the airport consists of industrial to the west and north, low-density and rural residential to the northeast and east, and rural/agricultural to the east and south. Planned land use for the area adjacent to the airport, as depicted in the Casa Loma Specific Plan, continues the current pattern, with some extensions of industrial activity in existing undeveloped areas.

**California City Municipal Airport** is used for various general aviation activities, especially recreational aviation. The airport is located northwest of California City approximately eight miles east of Route 14 and two miles north of California City Boulevard. The airport consists of a single 6,035-foot runway with medium intensity runway lighting and a 5,010-foot parallel taxiway. Two dirt glider landing strips and a parachute drop zone are located ¾ mile south of the airport. Existing land use in the immediate area is predominantly undeveloped desert, with developed portions of the City east of the airport.

**Delano Municipal Airport** serves business, personal and recreational aviation activity in the north-central part of the County. Extensive crop dusting and helicopter operations, as well as ultralight activities, are accommodated at this airport. The airport is located just east of Route 99 approximately two miles southeast of central Delano. Existing facilities consist of a main runway that is 5,650-feet long. A secondary runway is 3,500-feet long and is a converted taxiway used by agricultural crop dusting aircraft. The main runway has medium intensity runway lights and precision approach path indicators on both ends. A displaced threshold on the secondary runway with 4,010-feet is available for aircraft landings.

Existing land use consists of mixed urban uses to the northwest; a golf course and park area to the northeast; industrial uses to the east and south; and Route 99 to the west.

**Tehachapi Municipal** is a general aviation airport providing business, personal and recreational aviation services. The airport is located between Route 58 and Tehachapi Boulevard. The airport is also adjacent to the Union Pacific Railroad, but a railroad spur into the airport is not currently available. Existing airport facilities include a 4,035-foot runway equipped with low intensity lighting and precision approach path indicators, as well as displaced thresholds, on both ends of the runway.

Existing land uses consist of industrial to the west, east and south, urban residential to the south, and Route 58 freeway on the north. North of the freeway is developing as primarily commercial and office.

**Airport Districts**

Three airport districts operate in Kern County; each is organized as a special district, with a board of directors and an airport manager. Minter Field is located within the City of Shafter. East Kern and Indian Wells airport districts are in eastern Kern County.
Indian Wells Airport District/Inyokern Airport serves the China Lake Naval Air Weapons Station, the community of Inyokern, and the City of Ridgecrest with scheduled airline service to Los Angeles International. It also serves local general aviation needs for personal, business and recreational flying. Several fixed-base operators provide services at the airport. The airport is located northwest of the small community of Inyokern.

Existing facilities consist of three runways, longest of which is the 7,344-foot runway 15-33. This runway and runways 2-20 (6,275-feet length) and 10-28 (4,153-feet length) are equipped with medium intensity runway lights and precision approach path indicators on runways 20 and 33. Displaced thresholds are located on both ends of runway 15-33 and runway 20.

Skywest operates a fleet of turbo-prop aircraft, and began air carrier service from Inyokern to Los Angeles International February 1951. Skywest currently provides three daily flights to LAX. Given the proximity to Reno and Las Vegas, service to these cities may be considered at some future date.

A fixed-base operator currently provides aircraft maintenance and flight instruction service. The airport provides both automated and full service jet fueling. Federal Express currently provides air cargo service, moving over 500 tons annually.

Other activities at Inyokern include based and itinerant soaring activity, film production, and Sheriff’s department search and rescue activities. The airport hosts annual air shows and drag races. The airport is in the process of acquiring fire-fighting equipment for aircraft crash protection.

East Kern Airport District/Mojave Airport currently offers fixed-base operator facilities for airport users from Edwards Air Force Base, Rosamond, Mojave, Tehachapi, California City, and Boron. The airport serves as a civilian flight test center for business, military, civil, and home-built aircraft being development testing. It also serves as a base for modification of major military and civilian aircraft. The airport is located northeast of the community of Mojave and is within one mile of Routes 14 and 58. A rail spur from Union Pacific Railroad leads into the airport.

Existing airport facilities include a 9,600-foot runway 12-30 and two crosswind runways 7-25 and 4-22. Runway 12-30 is equipped with high intensity runway lights and 7,040-foot runway 7-25 is equipped with medium intensity runway lights. Runway 4-22 is 4,900-feet long but has no lighting.

Existing land use in the vicinity consists of mixed urban use to the east and south in the community of Mojave, industrial and highway commercial uses to the northwest, and undeveloped desert to the north and east. The airport itself includes a substantial area devoted to aviation related industrial uses.

Minter Field Airport District/Shaftier Airport serves general aviation activities at the junction of Route 99 and Lerdo Highway. Minter Field has two main runways and one crosswind runway. Runway 12/30 is 4,520-feet long, has both Very High Frequency Omni-directional Range non-precision and Global Positioning System-based instrument approaches and is equipped with a precision approach path indicator and landing lights.

A third runway is being reconstructed to serve as a general aviation crosswind landing alternative. One of the benefits of this runway would be to offer students pilots the opportunity to practice crosswind approaches and departures.

Minter Field is surrounded primarily by agricultural uses with a housing development and commercial area and campground to the south, and industrial uses to the south. The airport owns three miles of rail spur connected to the Union Pacific railroad and is served directly by Kern Regional Transit.
Military Aviation Facilities

China Lake Naval Air Weapons Station (NAWS) and Edwards Air Force Base (EAFB) are located in an area referred to as “the R-2508 complex”, which is used for the advancement of weapons systems technology and tactical training. The R-2508 complex consists of several restricted airspace areas; it is approximately 110 miles wide and 140 miles long, and covers approximately 20,000 square miles in eastern Kern, San Bernardino, Los Angeles, Ventura, Tulare, and Inyo counties. However, the nature of operations conducted within this airspace creates a flight hazard to non-military aircraft.

In addition to NAWS and EAFB, other military installations use this air space, including Fort Irwin Military Reservation near Barstow and Air Force Plant 42 at Palmdale.

Needs and Issues

Demand

In general, demand for aviation services appears to be met within Kern County. Most of the capital improvement projects for Kern County airports focus on maintenance of existing runways and taxiways with an occasional need to improve navigational aids. However, Kern County Airports’ staff is working toward qualifying Meadows Field as a reliever airport for Los Angeles International Airport.

Given aviation forecasts for Los Angeles International Airport, at some time over the next twenty years air traffic for the region may reach saturation. Shafter Airport, Delano Municipal, and Bakersfield Municipal have all recently invested in above ground automated fueling systems to reduce staff cost and improve fueling service hours to local and non-based pilots. Over the next 5 to 10 years, Kern County airports along with airports across the nation, may be investing in navigational equipment designed to allow instrument approaches using global positioning system technology.

Airport Ground Access/Intermodal Connectivity

Regional passenger air service and its intermodal connectivity to ground transportation systems is a key federal transportation planning goal. Just as land use should be designed to take maximum advantage of the existing transportation infrastructure capacity, the transportation infrastructure should be also designed to maximize access to key intermodal passenger hubs such as regional airports, transit and rail. Existing transportation infrastructure includes two regional airports with passenger service in Kern County. Meadows Field is the primary regional facility for metropolitan Bakersfield and the southern San Joaquin Valley. Inyokern Airport services the Ridgecrest/Indian Wells Valley in northeast Kern.

The new terminal at Meadows Field provides good access to State Route 99 via Seventh Standard Road, and improvements to this access route are scheduled in the 2006 Federal Transportation Improvement Program. The potential for Meadows Field to serve as an overflow facility for Southern California’s air traffic may create the need for improvements to ground access. Improvements to Airport Drive, Snow Road, Seventh Standard Road and Route 65 near the airport may be necessary. Better connectivity with the existing Amtrak station in downtown Bakersfield and the potential for high speed rail to connect San Francisco with Los Angeles could result in the need for a transit shuttle, bus rapid transit, light rail, or spur connection between downtown Bakersfield and the airport. A ballot initiative on high speed rail may go to the voters in November 2008.

Ground access to Inyokern Airport is adequate for the foreseeable future. The potential for air taxi service to smaller airports could increase traffic at these facilities. Corporate jets are increasingly using the Internet to pick-up additional travelers headed in the same direction and provide a supplemental funding source for their operation. This capability to book a small aircraft while in flight has transportation planners speculating that a whole industry of air taxi providers using satellite Global Positioning System (GPS) navigation could provide point to point service, maximizing the use of small airports. If this were to
occur, an increased demand for vehicle/transit/rail access to existing smaller airports may result. Efforts must be made to preserve and maintain access to all civilian airports in the region and expand that access as needed.

**Airport Land Use**

Over the past decade, former agricultural areas in Kern County have been developed for residential, commercial or industrial use. Since many of the region’s public access airports are in agricultural areas or in the urban fringe, much of the new growth is moving closer to the airports. Assuring that the areas around Kern County’s airports are devoted to compatible uses has become a more challenging task in this environment of growth pressures.

Noise issues are generally a function of urban encroachment in the vicinity of an airport. In Kern County, virtually all airports were originally developed in areas that were some distance from other development. Frequently, the very success of the airport served as the catalyst for adjacent development. Since the purpose of an airport is to facilitate the take-off and landing of aircraft, and since aircraft make noise, conflicts over noise are an early indicator that an airport is facing the broader issue of urban encroachment.

Noise contours maps have been prepared through various programs for all of the airports in Kern County, using the FAA Integrated Noise Model. For the more active airports, the noise analysis has been part of preparing an Airport Master Plan. Noise contours were also prepared for airports as part of various ALUC studies. A Comprehensive Land Use Plan has been prepared that includes land use analysis, noise contours, airspace plans and layout plans for all Kern County airports.

**Recent Aviation Planning Activities**

Kern County Department of Airports opened the new Meadows Field William M. Thomas Air Terminal northeast of the former terminal in February 2006. The building has been designed to be expandable to meet future air service demands. The building currently accommodates up to six jet-boarding gates and can be expanded to add six additional bridges. The terminal also has been designed to allow another wing to be constructed that would accommodate an additional 12 jet-boarding gates. Ground area to accommodate additional parking facilities has been reserved.

The Department of Airports anticipates the following activities over the near-term:

- complete renovations to the Customs and Borders office (former terminal);
- continue marketing Meadows Field for international air cargo service;
- upgrade the lights and signs for Runway 30R;
- initiate environmental review and project approvals for the Meadows Field, Wasco, Lost Hills and Kern County Airport Master Plans.

In June 2004, East Kern Airport District/Mojave Airport became the first civilian airport to be certified as an inland spaceport by the Federal Aviation Administration. Later the same year, aircraft manufacturer Scaled Composite launched their first sub-orbital aircraft from Mojave Airport, ushering in the age of privately-owned manned space programs.

**Homeland Security**

Following the events of September 11, 2001, the Department of Homeland Security made airport security a top funding priority. Meadows Field and Inyokern airport have constructed security fences and staffed security checkpoints to improve passenger-boarding security and reduce threats of terrorism. It is imperative that Kern County’s public access airports meet all Homeland Security directives.
Proposed Actions

Near-Term 2007-2010

- Work with Meadows Field and Inyokern Airport to obtain funding from the state and federal governments for their respective development programs.
- Work with local and regional transit providers to increase alternative mode ground access options at Meadows Field.
- Assist Meadows Field with planning related to high-speed rail connections.
- Work with public airports to increase their access to state and federal funds.

Long Term, 2012-2030

- Continue to work with the public access airports to increase their access to state and federal funds.
- Update the Regional Transportation Plan to be consistent with the California Aviation System Plan, and regional aviation systems plans, as necessary.
- Implement the Action Plan of the Central California Aviation System Plan.
- Participate in Master Plan updates for various Kern County airports.
FREIGHT MOVEMENT ACTION ELEMENT

Efficient freight transportation is critical to the economic health of the Kern region. As one of the prime agricultural regions in the nation, the intra-county road linkage of goods to processing plants, and the inter-county linkage of goods to other regions, manufacturers, and shipping ports is essential. Not only is Kern County a leading agricultural producer, it is also a prominent producer of oil and other minerals. These industries rely heavily on bulk movement by truck, rail and pipeline.

San Joaquin Valley is also becoming a prominent location for regional distribution centers of consumer products, providing service to coastal population centers as well as a growing internal population. In addition, the manufacturing and employment base of the Valley is increasing. All these factors contribute to increasing demand for freight transportation.

Existing System

Trucks

Trucking is the most commonly used mode for transporting freight; its popularity stems from its flexibility, timely delivery and efficiency for haul distances up to 600 miles. Trucking, however, can be more expensive than rail for longer hauls because of its higher energy costs. In addition, trucking is a major cause of street- and highway-surface failures, necessitating a high level of road maintenance.

Heavy trucks contribute to roadway deterioration much faster than do automobiles; however, deferred maintenance and water intrusion in the roadbed continue to be additional causes of road damage. As a result, Kern County streets and highways are subject to rapid deterioration and failure. According to the American Association of Highway Officials, a fully loaded 80,000-pound truck has an impact on roads equal to the passage of approximately 9,000 cars.

Trucking is the dominant mode of freight transport, accounting for 87 percent of outbound tonnage and 81 percent of inbound tonnage (San Joaquin Valley Goods Movement Study, September 2000). Commodity movements by truck also indicate a strong relationship with the rest of the state with shipments to/from southern California and the Bay Area, constituting the greatest percentage of total tonnage to and from the San Joaquin Valley (18 and 14 percent of the total, respectively).

To respond to the fastest growing segment of California’s economy, the California Legislature approved SCR 96 in April 2000 to create a Global Gateways Development Program, with Caltrans as the lead. The purpose of this program is to identify and implement transportation infrastructure improvements to facilitate international trade and goods movement. These improvements will enhance overall mobility and increase access at and through international ports of entry, international airports, seaports, other major Intermodal transfer facilities and distribution centers, as well as trade corridors within the state.

Major interregional highway corridors handle relatively high volumes of heavy (3- to 5- axle) truck traffic, usually between 16-24 percent of the annual average daily traffic (AADT). By their very size and slower speed, trucks lead to congestion and reduced levels-of-service on rural highways and local streets. In addition, emissions from trucks, like automobiles and trains, have an adverse affect on air quality. While current legislation focuses on implementing Transportation Control Measures for passenger vehicles, TCMs do not specifically address trucking.

While San Joaquin Valley’s major trucking corridors (Interstate 5 and State Route 99) run north/south, other state highways, such as Routes 46 and 58, play key distribution roles as well. As Kern County expands its population and employment base, the need for direct, high-capacity east/west truck corridors becomes increasingly crucial. Special attention must be given to the interregional routes to ensure that they remain in serviceable condition and that major reconstruction costs are minimized.
Cooperative efforts are needed between the trucking industry, the driving public, and local officials to assess the impacts that trucks have on local streets, and to create regulatory guidelines for trucks in urban areas. Alternative transportation modes for long-haul goods movement are being explored and supported. These include improved Intermodal freight transfer facilities and access at major airports and rail terminals.

In 2000, the counties of the San Joaquin Valley, in conjunction with Caltrans, hired Cambridge Systematics consultants to conduct the San Joaquin Valley Goods Movement Study. This study found 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 had difficulty locating sufficient boxcars to meet their needs. The study also noted a transition with higher-value shipments to alternative modes that provided greater reliability and faster transit times than rail. Food processors in the San Joaquin Valley continue to show strong interest in rail as a preferred shipping mode, and both Union Pacific and Burlington Northern Santa Fe are taking steps to maintain market share in the Valley. For the future, it is expected that rail shipment volumes in the Valley will increase, although market share may continue to decline as demand for shorter-haul service increases and the quality of rail intermodal facilities improves.

**Rail**

Trains provide an economical means of transporting bulk goods. Although these engines demand heavy fuel consumption, their ability to haul large amounts of cargo makes for an overall low energy requirement per unit of weight when compared to truck or air transport.

Two major rail companies, Union Pacific (UP) and Burlington Northern Santa Fe (BNSF), serve Kern County. UP representatives report that they operate an average of 19 trains per day through the San Joaquin Valley carrying food products, general freight, grain, and lumber (San Joaquin Valley Goods Movement Study, 2000). UP and CSX Transportation have teamed to offer perishable goods service, and Express Lane offers refrigerated service from the San Joaquin Valley to New York and Boston.

The San Joaquin Valley Railroad operates a regional freight service between Tulare, Fresno, and Kern Counties on leased Union Pacific branch lines connecting outlying areas to mainline carriers, moving freight primarily comprised of agricultural products, throughout the Valley.

Most cargoes shipped by rail are bulk items such as grains, food products, vehicles, and fuels. Rail transport provides the option of specialized rail cars such as flatbeds, refrigerated boxcars, fuel tankers, and piggyback cars. These specialized rail cars allow transport to move a large variety of goods, giving rail an advantage over other transportation modes for distances over 500 miles. Transport by rail is generally less expensive for long hauls than air or truck transport; however, rail is limited by speed and by fixed rail track. A major example of rail limitation is the route over Tehachapi Summit. Part of the route is single track, and although tunnels have been modified to allow double-stacked containers to pass through, traffic in the opposite direction is often diverted to sidings, creating a congested bottleneck. An estimated 65 trains pass through the Summit daily, with a forecasted increase of up to 100 trains per day over the next five years.

Greater coordination and integration of the various freight transportation modes is becoming increasingly important. Limited resources and intense pressure on existing transportation systems have brought broad-based support for intermodal transportation systems. Kern COG promotes public/private cooperation between modes to increase goods movement efficiency while maintaining a reasonable highway level of service.
Rail Intermodal Facilities

Intermodal terminals are critical to the success of intermodal services. Terminals are the starting and ending points for trains, as well as the sites of crucial distribution between modes. Terminals also function as equipment storage, maintenance and dispatching centers, and as focal points for the flow of information. Terminals vary widely in configuration, capacity, and operations, and only a few have been built from the ground up as intermodal facilities.

In the 1980s, railroads consolidated their intermodal service networks into fewer, larger hubs. Railroads saw an opportunity to consolidate facilities with mergers, and a need to consolidate sufficient volume in one location to justify lift machines. The recent rapid growth of intermodal traffic, the enormous influx of double-stacked container trains, and the current entry and rapid growth of rail/truck trailer initiatives all raise questions about the adequacy of intermodal terminals to handle rail traffic increases efficiently and effectively.

Union Pacific Railroad has intermodal facilities in Fresno and Lathrop. Intermodal facilities for Burlington Northern Santa Fe are located in Bakersfield, Fresno, Modesto and Stockton. Construction of the new Mariposa yard in Stockton by BNSF is one example of direct investment by Class 1 carriers aimed at meeting growing demand for intermodal service. Increased intermodal service will create potential for local truck congestion problems and access to intermodal facilities could become a critical issue.

Air Freight Service

Air freight service is characterized by the fast shipment of small items of high value over long distances for high cost. Goods movement by air is an emerging element of freight activity in the San Joaquin Valley. Statewide, 23 out of 43 commercial air carrier airports account for almost 3 million tons of freight transported by air. While air freight is a specialized transportation mode, it accounts for an estimated 60 percent of the export values in California. Air carriers depend heavily on truck transportation to deliver goods for transport. A significant feature of air shipment is its dependability and very short in-transit time. Air freight has not played a large role in the Kern area, but with Meadows Field’s expansion and the continued growth of the Los Angeles basin, it is feasible that air freight carriers would consider Kern a favorable alternative location.

Inland Port

An inland port would serve as a cargo facilitation center, where a number of import, export, manufacturing, packing, warehousing, forwarding, customs, and other activities (such as Foreign Trade Zone and/or Enterprise Zone) could take place in close proximity or at the same site. This facility could function as an inland sorting and depository center for ocean containers transported to the inland port via truck or rail. Further study will be required to fully analyze the functions and parameters of an inland port.

The City of Shafter has proposed a commerce facility at its International Trade and Transportation Center to foster inland port status. The facility’s first phase would include a container hub allowing distributors to drop empty trailers at the site that other drivers can pick up. This has the potential of eliminating a large number of truck trips over the Grapevine and through the Los Angeles basin. The plan would benefit regional air quality in addition to creating jobs.

Pipelines

Various pipelines carry natural gas, crude oil and other petroleum products throughout Kern County. Storage, pumping and branch lines are used to distribute those products. Pacific Gas and Electric is responsible for the maintenance and operation of the natural gas line, while major petroleum corporations are responsible for the crude oil pipelines throughout the region.
Hazardous Material Movement

Because more than 50 percent of all goods transported throughout the world are hazardous to some degree, human life and property is potentially endangered. Each year, more than 4 billion tons of hazardous products and waste are transported throughout the United States. Hazardous materials are typically transported by rail, small or large trucks, but are also transported by air and pipeline.

Within the Kern region, emphasis is placed on hazardous materials routing and training of emergency personnel in the event of an accidental spill. Interstate transportation of hazardous products and waste through the Kern region on Interstate 5 and State Route 99 increases the probability of dangerous spills. The County of Kern and the City of Bakersfield maintain Hazardous Material Response Units.

Potentially adverse effects associated with transporting hazardous materials can be partially mitigated by restricting roads available to these shipments. Under California law, transportation of hazardous waste must be carried out via the most direct route over interstate highways whenever possible. Exceptions to this general rule are such occasions when it is necessary to avoid highly congested and densely populated areas.

Kings County, northwest of Kern County, is the site of a Class 1 hazardous waste facility. The facility, located at Kettleman Hills, draws trucks carrying hazardous materials from all western states. The presence of these trucks on regionally significant routes increases the probability of dangerous spills.

Needs and Issues

Agriculture and the food processing industry provide a stable base to the economy of Kern County. Population and economic growth pressures have resulted not only in the loss of agricultural land, but also an increase in traffic congestion on the rural roadways that facilitate the “farm to market” goods movement. This congestion affects the safe and timely delivery of fresh produce to market and processing plants.

Farm-related transportation also involves the need to move farming equipment along rural roadways. These roadways are usually single-lane with limited shoulders. Heavy, slow-moving farm equipment along these roads conflict with commuter travel requirements and creates unsafe travel conditions.

The evolving freight movement industry has introduced the concept of “just-in-time delivery,” which replaces warehouses with freight haulers. With just-in-time delivery, the efficient and timely movement of freight along highways and railways becomes ever more essential to the regional economy’s growth and development.

Proposed Actions

Near Term, 2007-2010

- Develop an annual Freight Movement Symposium for decision-makers.
- Maintain liaison with Southern California Association of Governments and all San Joaquin Valley Councils of Government for efficient coordination of freight movement between regions and counties.
- Construct truck climbing lanes on eastbound Route 58 from General Beale Road to the Bena Road undercrossing.
- In response to proposed freight movement activities at Shafter’s International Trade and Transportation Center and Meadows Field, three highway projects are proposed: (1) Seventh
Standard Road and Route 99 Interchange; (2) widen Seventh Standard Road from Coffee Road to Route 99; (3) widen Seventh Standard Road to four lanes from Santa Fe Way to Route 99.

- Continue development of Shafter Intermodal Facility for freight transfer activities.
- Improve Laval Road and I-5 Interchange as part of the Tejon Industrial Park improvements.

**Long-Term, 2011-2030**

- Widen Weedpatch Highway (Route 184) to four lanes to respond to increasing agricultural trucking activity.
- Widen Wheeler Ridge Road to four lanes as a gap-closure measure to tie I-5 to Route 58 via Route 184.
- Construct new Route 58 freeway through metropolitan Bakersfield from existing Route 58 at Union Avenue to Route 99 near Golden State Avenue (Route 204), continuing west to I-5. This freeway component would relieve some of the congested truck movement.
- The proposed South Beltway Corridor will also relieve a significant portion of congestion caused by truck traffic.
BICYCLE AND PEDESTRIAN ACTION ELEMENT

Kern County is especially well-suited for bicycle facilities that make a meaningful contribution to the overall transportation system. The climate and terrain of the region is favorable for bicycling, with many clear, dry days and moderate temperatures. For short trips, the bicycle can serve as an alternative to the automobile. Because the bicycle is non-polluting and energy efficient, it is an element in the region’s multi-modal transportation system that leads to a more efficient transportation network.

While this section focuses on bicycle travel, it should not been overlooked that walking is also a viable travel mode. Residential developments are often within walking distance of commercial centers; however, design considerations show allow for ready ingress/egress of subdivisions. Mild weather, coupled with safely-designed sidewalks and paths, can make walking an enjoyable activity.

Existing Systems

Bicycle facilities generally fall into three distinct categories: Class I, and variations of Class I, bike facilities are the first category. Class I facilities provide a means of safe and reliable transportation for those wishing to cycle or walk to their destinations. Several jurisdictions have variations on Class II facilities, which provide optional striping scenarios to allow on-street parking. The County also has a Class III variation that provides a four foot delineated shoulder and bicycle route signage in rural areas.

Accomplishments Since 2000

Bicycle Facilities Plan

In October 2001, Kern COG adopted the Kern County Bicycle Facilities Plan, which provided a compendium of bicycle transportation facilities, both constructed and planned. Its intent is to serve as the guide to developing bicycle facilities in an orderly and timely fashion within the region.

In the transportation planning profession, more emphasis is being placed on “soft” solutions to transportation control and traffic congestion. The trend toward solving traffic issues without resorting to expansion of highway and freeway facilities has been evident over the last decade. Kern County has many notable success stories where more effective management of the existing transportation system has reduced or eliminated the need for costly and disruptive expansions. Providing alternatives to automobile travel is a central tenet for smart growth.

The Kern County Bicycle Facilities Plan is incorporated by reference as a part of the Destination 2030 RTP.

Class II Bikeway Facilities Constructed

- University Street Bike Lanes (Bakersfield)
- Paladino Bike Lanes Extension (Bakersfield)
- Southwest Bike Path Extension (Bakersfield)
- Redwood Boulevard Bike Lanes (California City)
- Upjohn Avenue Bike Lanes (Ridgecrest)
- Leroy Jackson Park Bike Path (Ridgecrest)
- Bike lanes in various locations (Shafter)
- Main/Gardner Road Bike Lanes (Taft)
- Valley Boulevard Bike Lanes (Tehachapi)
- Snyder Avenue Bike Lanes (Tehachapi)
- “E” Street/City Park Bike Path (Tehachapi)
- Lake Ming Bike Path (Kern County)
Pedestrian Enhancements

- Tucker, “A”, and Plumtree Streets sidewalks (Arvin)
- Santa Rosa Street sidewalks (Arvin)
- Civic Center sidewalks (California City)
- Sidewalks at various locations (Delano)
- Hall Road between San Diego Street and Main Street (Lamont)
- Mount Vernon Street sidewalk (County pocket within Bakersfield)
- Lerdo Avenue sidewalks (Shafter)
- Tehachapi Boulevard sidewalks (Tehachapi)
- Downtown sidewalks (Tehachapi)
- Sidewalks between Griffith Street and “G” Street on 7th Avenue (Wasco).

Needs and Issues

Maintenance Issues

Maintenance of bicycle facilities has always been an issue for local agencies. Roadway maintenance backlogs in nearly every jurisdiction are increasing annually. As the roadway network expands, maintenance efforts and pavement conditions fall further behind. Commitments for investment into new bicycle facilities cannot guarantee a continuing revenue source for upkeep, particularly for bicycle paths on separate rights-of-way. Rather than diminishing bicycle improvements, however, new funding sources or ways to deal with maintenance should be pursued. Alternative and innovative measures will be studied in order to update the bike master plan.

Public Support

For a number of reasons, bicycling has not realized its full potential as a transportation mode within the Kern region. Primarily, they are related to: (1) ease of short-distance travel via automobile; (2) lengthy distances between residences and work sites; (3) relatively inexpensive and widely available sources of automobile fuel; (4) lack of shower and/or locker facilities at employment centers; and (5) a general aging of the population that may reduce the number of persons who are inclined to take bicycle trips.

General attitudes toward bicycling also present issues. Many area residents do not view cycling as a real transportation mode. These attitudes can be attributed to factors such as:

- Many urban roads do not provide adequate shoulders, causing some cyclists to ride within the flow of traffic;
- Lack of adequate bicycle facilities, such as lockers or alternative means of securing a bicycle;
- Decentralization of employment centers, residential areas, and retail facilities;
- Lack of knowledge regarding the benefits of bicycling.

Motorists are occasionally unwilling to share the roadways with bicycles, and this may lead to antagonistic situations in the street. Education regarding the transportation system must include cyclists, pedestrians, motorists, and transit passengers.

Current Planning Activities

These activities include implementing the existing Kern County Bicycle Facilities Plan and promoting more pedestrian and bike uses throughout the county as an alternative to driving.
Proposed capital bicycle and pedestrian projects for the Destination 2030 Regional Transportation Plan are listed in Tables 4-1 and 4-2. Specific projects identified include those that have recently received funding commitments as well as those that have been identified by COG-member jurisdictions in their capital improvement plans.

**Proposed Actions**

**Lake Ming Bike Path**

The City of Bakersfield is in the process of extending the bike path along Lake Ming. The eastern extension of the bike path will tie the existing trail to the planned Lake Ming Loop. This three-mile section will afford breathtaking views of the Kern River with the Greenhorn Mountains as a backdrop. An added notable feature of this expansion is the construction of a branch of the bike path between Morning Drive and Alfred Harrell Highway. This segment of the bike path will overlay the 54-inch water pipeline carrying Kern River water for delivery to the soon-to-be constructed Northeast Bakersfield water treatment plant.

Kern COG will assist in seeking the necessary funding to implement the bike path’s routing through the county.

**Near-Term 2007- 2010**

- Encourage COG member jurisdictions to implement their adopted local bicycle plans and to incorporate bicycle facilities into local transportation projects.
- Continue to seek funding for bicycle projects from local, state and federal sources.
- Continue to seek funding to maintain existing bikeways.
- Promote the purchase and construction of bicycle racks and lockers for Kern County multimodal stations.
- Promote the inclusion of bike tie-downs and racks on commuter trains and buses.

**Long Term 2011- 2030**

- Periodically update the bicycle plan.
- Continue to seek funding for bicycle projects from local, state and federal sources.
- Continue to seek funding to help maintain existing bikeways.
TRANSPORTATION CONTROL MEASURES ACTION ELEMENT

Transportation Control Measures (TCM) have received a high level of attention since the passage of the State and Federal Clean Air Acts and congestion management legislation. As a result, air quality planning areas for the entire San Joaquin Valley, Mojave Desert and Indian Wells Valley have been designated as “non-attainment” for at least one harmful pollutant (See Chapter 8 – Findings of Air Quality Conformity). According to state and federal Clean Air Acts, the worst non-attainment areas must ensure that “all feasible measures” be implemented to reduce harmful air emissions. A goal of the Destination 2030 RTP focuses on carrying out these requirements to achieve required standards for healthy air.

Existing System

Kern COG’s existing TCM activity has focused on four areas:

- Alternative Fuels
- Traffic Flow Improvements
- Paving Dirt Roads
- Transportation Demand Management.

Kern COG’s efforts in these areas, in combination with State and Federal implementation of control measures, have been successful in reducing overall emission levels. These reductions have been realized, in part, by the following TCM accomplishments.

Accomplishments Since 2000

**Alternative Fuels**

Since 1990, Kern COG has allocated more than $20 million to replace over 120 transit vehicles with alternative fueled vehicles and create a network of alternative fueling stations, resulting in a 1/3rd ton reduction in daily ozone-related emissions. Golden Empire Transit, Kern’s largest transit provider, will operate a 100-percent compressed natural gas (CNG) fixed route fleet (65 buses) by 2005. Other alternative fueled transit fleets include Kern Regional Transit and Arvin.

**Traffic Flow Improvements**

Kern Council of Governments has invested significant resources in signalization of four-way stops, signal synchronization, traffic monitoring and a metropolitan traffic operations center. Significant reductions in vehicle emissions resulting from unnecessary idling and acceleration have been realized.

**Paving Dirt Roads**

Kern COG’s TIP/RTP has funded for dirt-road paving in the Indian Wells Valley Air Basin, an area in nonattainment for particulate matter.

**Kern Commuter Connection/Public-Employer Outreach**

Since the early 1980s, Kern COG has operated the Kern Commuter Connection rideshare program and 832-RIDE phone line to promote vanpooling, telecommuting, ridesharing, walking and biking to work. In 2003, Kern COG began a public and employer educational campaign as a part of its commitment to implement all Reasonably Available Control Measures (RACM) for the San Joaquin Valley Ozone Attainment Demonstration Plan. The program featured the slogan “Once a week makes a difference” and complemented public education programs by the Air District. The program included billboards, radio advertisements and a break-room poster/information mailer to all employers with more than 20 employees.
employees to encourage biking, walking, telecommuting, transit use, and ridesharing one day each week. In 2006, Kern COG updated the campaign message to “Connect the dots for cleaner air,” encouraging trip linking to reduce motor vehicle emissions. The campaign ran in English and Spanish on radio, in print, and online at the Kern COG website.

Needs and Issues

In response to Vision 2020’s activities and to comments provided by the general public at Kern COG’s workshops, reducing unhealthy air emissions is a primary goal of the Destination 2030 RTP. Recent polls on issues facing Kern consistently rank air quality as the greatest concern for our region’s residents. Reducing ozone and particulate matter emissions as outlined in the San Joaquin Valley Air Pollution Control District’s attainment plans presents a major challenge. Several issues must be weighed:

- **Cost effectiveness** – Limited funding exists to clean air emissions resulting directly or indirectly from transportation. Maximizing funding is a critical component to successfully achieve air quality goals.
- **Alternative-fuel fleets** – Between 2007 and 2010, California’s clean diesel fuel standards will be implemented, reducing the effectiveness of compressed natural gas- (CNG) fueled fleets from 6-times less polluting to half as polluting and requiring a systems approach for diesel vehicles to conform to the standards. This may reduce the need to fund alternative fuel fleets. However, diesel exhaust still has a toxicity component that may warrant continued conversion of fleets, especially school buses.
- **Indirect source emissions from new development** – A major long-range challenge in non-attainment areas is controlling offsite (indirect source) emissions generated from housing and commercial development in the region. Kern COG’s transportation model indicates that each new house generates an average of 60-70 daily vehicle miles traveled. As new gasoline-electric hybrids and zero emission hydrogen-fuel-cell vehicles become commonplace, ozone-related emissions from transportation sources may someday be negligible. However, particulate matter in exhaust and fugitive dust kicked-up by moving vehicles increases as VMT increases. New housing developments need to fully mitigate their indirect source impact to air quality, especially for particulate matter.

Current Activities

The following TCM-related activities are being promoted by Kern COG and its member agencies:

- Alternative-fuels station and fleet are being implemented by Kern Superintendent of Schools and a consortium of school districts;
- GET’s alternative fueled transit fleet has replaced the diesel-fueled fleet, operating 100% of the fleet on CNG in 2006;
- Commuting alternatives are being promoted by public and employer outreach programs, such as Kern COG’s Kern Commuter Connection;
- GET, City of Bakersfield and County of Kern are coordinating signal preemption to improve on-time service for existing GET fixed routes;
- Traffic flow improvements, park & ride lots, public transit, bicycling and walking are being added throughout the Kern region.

Proposed Actions

Proposed actions for transportation control measures can be divided into three areas or policies:

- **TCM Coordination** - Coordinate with all responsible agencies necessary to implement all feasible measures that control harmful air emissions.
- **TCM Implementation** - Promote implementation of all feasible, cost effective TCMs to achieve air quality emissions by mandated deadlines.
- **TCM Education** - Provide necessary support and education to member agencies on all feasible control measures.

In the San Joaquin Valley, the San Joaquin Valley Air Pollution Control District and the eight Regional Transportation Planning Agencies/Metropolitan Planning Organizations have jointly prepared TCMs as a part of the air district’s State Implementation Plans for the pollutants Ozone and Particulate Matter smaller than 10 microns in diameter (PM-10). These mutual efforts are the result of a Memorandum Of Understanding signed by all of the agencies to coordinate air quality and transportation planning activities.

**TCM Coordination**

The following TCM Coordination activities are being undertaken for the Kern region:

- Maintaining Air Quality Coordination MOU with the eight San Joaquin Valley Metropolitan Planning Organizations, San Joaquin Valley Air Pollution Control District and Caltrans Districts 6 and 10.
- Maintaining air quality coordination Memorandum of Understanding with the Kern County Air Pollution Control District.

**TCM Implementation**

TCMs generally fall into two categories:

- **Transportation Demand Management (TDM)** – Activities that will reduce the demand for the fossil-fueled, single-occupancy vehicles as a mode of travel, such as ridesharing/vanpooling, increased parking fees, decreased parking supply, park and ride lots, bus transit, rail transit, and bicycle and pedestrian facilities;

- **Transportation System Management (TSM)** – Activities that increase the efficiency of the existing transportation system without adding new travel lanes, thus reducing the amount of energy required to make the system function, such as traffic signalization, ramp metering, truck auxiliary lanes on major inclines, intersection turning lanes, railroad grade separations, and replacing four-way stop signs with traffic signals.

TDMs and TSMs also benefit mobility and congestion relief by reducing demand and maintaining system efficiency, thereby delaying the need for capacity increasing highway projects.

The Destination 2030 RTP discusses the air quality requirements faced by the Kern region (See Chapter 8 – Findings of Air Quality Conformity), as well as demand management strategies, including bus and rail services (Chapter 4 - Transit Action Element), bicycle facilities (Chapter 4 - Bicycle and Pedestrian Action Element), and grade separation (Chapter 4 - Freight Movement Action Element).

TCMs being implemented by the Destination 2030 RTP and 2006 Federal Transportation Improvement Program include the following strategies for reducing vehicle related emissions:

- Public transit
- Alternative-fuel fleets
- Ridesharing and voluntary employer-based incentives
- Traffic flow improvements/railroad grade separations
- Park-and-ride lots
- Bicycle and pedestrian travel
- Controlling extended vehicle idling
- Smart growth and transit/pedestrian oriented development
- Paving/controlling dust from streets and shoulders
- PM-10 efficient street sweeping
- Funding options for Congestion Mitigation Air Quality Program (CMAQ), AB 2766 Motor Vehicle Emissions Reductions Program, and other sources that allow TCM allocations.

Three control measures are not being implemented through the TIP/RTP: voluntary removal of pre-1980 vehicles and engines, controlling extended vehicle idling, and high-occupancy vehicle (HOV) lanes. However, it should be noted that Kern County’s Project Clean Air removed over 1000 pre-1980 gross-polluting vehicles between 1991 and 1999. And, in January 2007, the San Joaquin Valley Air Pollution Control District initiated Phase I of their grant program, “REMOVE II: Gross Polluting Vehicle Replacement Program.” Recent environmental mitigations at new truck stops and warehousing operations include electric hook-ups to reduce idling of heavy-duty diesel trucks.

In 1996, Kern COG prepared a study of HOV (high occupancy vehicle) lanes as a part of the Tier I EIR for the Kern River/Downtown Parkway (Centennial Corridor). The study found that an HOV lane during peak period would only carry 2 vehicles per minute. California currently allows single-occupancy vehicles with a PZEV (Partial Zero Emissions Vehicle) emissions rating to use HOV lanes. Future studies should consider an HOV system that would include a beltway system and ramp metering.

**TCM Education**

The following educational activities are being undertaken in the Kern region:

- Identification of all Reasonably Available Control Measures (RACM) for ozone and all Best Available Control Measures (BACM) for PM-10 by Kern COG’s member agencies;
- Special presentations and workshops for member agencies on transportation related control measure strategies for air pollution emissions as new standards, technology and funding opportunities evolve;
- Media campaigns promoting the various TCMs listed above.
LAND USE ACTION ELEMENT

Land use is one of the most important elements of effective transportation planning. Policy for transportation projects depends on effective and efficient land use policies. While Kern COG does not have jurisdiction over land use planning, Kern COG does advise and encourage dialogue among those involved in the decision making process. As part of this land use action element Kern COG will continue to use the CEQA (California Environmental Quality Act) and NEPA (National Environmental Policy Act) processes to promote dialogue with its member agencies on land use, transportation and air quality issues, to ensure that land use projects are environmentally sound. Also, the San Joaquin Valley Unified Air Pollution Control District will ensure that air quality standards are upheld, bringing the Valley into acceptable emission attainment levels.

Major Transportation Investment Study

In 1997, Kern COG completed the Metropolitan Bakersfield Major Transportation Investment Strategy (MTIS). The MTIS was jointly conducted by the following agencies:

- City of Bakersfield
- County of Kern
- Golden Empire Transit
- Kern COG
- Caltrans, District 6
- San Joaquin Valley Unified Air Pollution Control District.

The strategy developed by the participating agencies contained eight components, including land use. The land use planning component encourages mixed-use, infill, and other balanced land development to minimize concomitant vehicular traffic increases. Developer incentives for mixed-use and infill have been instituted. Large developments proposed as an amendment to the metropolitan Bakersfield General Plan trigger the requirement for a traffic impact analysis that uses the Kern COG regional transportation model. Developments with a balanced mix of residential income housing and commercial/industrial will show less of an impact than strictly residential development, thereby reducing the traffic impact fee that a development must pay.

To encourage infill development, the City of Bakersfield and the County of Kern have jointly adopted a two-tiered traffic impact fee for metropolitan Bakersfield. The fee is half of the $5,200 per house fee in the “core area” of Bakersfield. The core area is primarily the older “built out” portions of the community that have the infrastructure in place. The logic behind the lower core area fee is that housing in these areas should not have to pay as high a fee because the transportation infrastructure is already in place. The result is a fee structure that promotes infill and increased densities in areas with readily-available bus transit and pedestrian access.

Regarding light and heavy rail, the MTIS indicated that even with an optimistic growth rate, light rail would not be viable in metropolitan Bakersfield before 2014. As the land use program is implemented, however, infill projects could eventually provide sufficient density to support such a system. In addition, the MTIS developed a sketch plan for a heavy commuter rail network connecting Metro Bakersfield to outlying communities. The development of a feeder rail network using existing spur lines in support a potential high-speed rail connection to Los Angeles and San Francisco would require future study should funding be approved for the proposed high-speed rail system. The viability of either system is dependent on a pattern of development that is much more dense than is being implemented currently. Land used development patterns should include dense, pedestrian-oriented future transit hubs that could support viable alternatives to single occupancy vehicle travel. The MTIS concluded that, for the near term, transportation investment should focus on increasing and expanding the existing bus service. This strategy has the added potential of one day providing a feeder network that would increase the viability of
other modes such as pedestrian, bike and rail service.

**Land Use Decisions Outside Kern County**

Land use decisions in neighboring jurisdictions can greatly impact Kern’s regional transportation system, as is being experienced at the northern end of San Joaquin Valley. Spillover development from the coastal areas will be a primary-source driver for development in the Kern region. However, the percent commuting to Los Angeles County from 1990 to 2000 remained unchanged at 3 percent of the total households in Kern, indicating that the main wave of urbanization has yet to reach this county. Kern COG and Southern California Association of Governments (SCAG) meet bi-annually to discuss inter-regional planning issues such as land use, transportation strategies, and regional housing needs. Recent meetings have been held to discuss the proposed Centennial new town development on Tejon Ranch property just south of the Kern County line near Interstate 5 and State Route 138. Kern COG is providing modeling information on the transportation impacts of this development to the Kern region. In addition, Kern COG has agreements in place with the eight San Joaquin Valley metropolitan planning organizations and the four-county Eastern Sierra planning partnership.

**Regional Housing Allocation Plan**

As required by the California Department of Housing and Community Development (HCD), Kern COG prepares a Regional Housing Allocation Plan (HCP) to provide for adequate low and very low income housing throughout all jurisdictions in the region. The distribution of low income housing is becoming more of an issue as pressures from the southern California housing market drive housing prices up in Kern. The increasing need for lower income housing may result in an increase in higher densities for new housing.

**A New Vision**

In response to the challenge of building and maintaining a transportation network that works, many professionals have proposed a variety of alternative land use designs to more effectively reduce urban sprawl, make more efficient use of transportation and infrastructure systems, and enhance the livability of Kern’s communities. These visions have been given different names, such as new urbanism, transit-oriented development, traditional neighborhood development; whatever the name, they share the common goal of making communities more environmentally sound and accessible within today’s financial, physical and environmental limits.

How to apply this vision differs amongst stakeholders. Elected officials and planners should tailor programs to the character and context of their individual communities. The goal should be to develop a comprehensive strategy that includes a range of mutually supportive actions.

One of the best statements of this new vision was developed by a number of designers, activists and local government officials as the “Ahwahnee Principles,” which established a set of community, regional and implementation approaches for creating more livable communities. These principles call for leaders to:

- Plan for complete communities that integrate housing, jobs, shopping, recreation, and civic uses essential to the daily life of residents;
- Size and arrange communities so that jobs, housing and other uses are within walking distance of transit stops and of each other;
- Create a well-connected circulation system that provides direct and interesting paths for pedestrians and bicyclists and organize land uses so that they can be well-served by transit;
- Provide a community center and an ample supply of squares, greens and parks;
- Establish a well-defined edge for the community through permanent open space and incorporate existing natural areas into the community’s design;

4-62
• Organize the regional network of urban places around a regional system of transit rather than freeways;
• Locate regional institutions and services within major urban centers;
• Take charge of planning these communities to avoid piecemeal development and encourage infill and redevelopment.

Overall, these principles are designed to help communities become more livable and environmentally sustainable. See Appendix B, “Transportation Planning Priorities: A Hierarchy for Land Use Decisions”, for an expanded discussion of this issue.

Near Term Actions 2007-2010

• Encourage land uses decisions by member agencies that promote pedestrian, bike and transit oriented mixed use and infill development.

• Review and comment on environmental documents and their identified transportation impacts, recommending pedestrian, bike and transit oriented development strategies

• Track progress on the MTIS Land Use strategy in metropolitan Bakersfield in the MTIS annual report

• Promote increased communication with neighboring jurisdictions on interregional land use issues.

• Coordinate regularly with SCAG on interregional land use and transportation planning issues.

• Coordinate with the eight San Joaquin Valley Metropolitan Planning Organizations on interregional land use and transportation planning issues.

• Coordinate with the Eastern Sierra Transportation Planning Partnership on interregional land use and transportation planning issues.

Long Term Actions 2011-2030

Encourage land uses decisions by local government member agencies that promote pedestrian, bike and transit oriented mixed use and infill development.

• Encourage local government agencies to plan for high density, pedestrian oriented transit hubs that support the current and planned investment in alternative transportation modes such as bus transit.

• Encourage higher densities by member agencies in with the Regional Housing Allocation Plan.

Promote land uses patterns that support current and future investments in bus transit and may one-day support commuter rail alternatives.

• Re-evaluate feasibility or commuter rail alternatives and intermodal connections after 2014 and in light of potential high-speed rail service.

• Promote increased communication with neighboring jurisdictions on interregional land use issues.

• Coordinate regularly with the SCAG on interregional land use and transportation planning issues.

• Coordinate with the eight San Joaquin Valley Metropolitan Planning Organizations on interregional land use and transportation planning issues.
• Coordinate with the Eastern Sierra Transportation Planning Partnership on interregional land use and transportation planning issues.

• Continue coordination activities with San Luis Obispo and Santa Barbara COGs on interregional land use and transportation planning issues for State Routes 33, 41, 46, 58 and 166.
INTELLIGENT TRANSPORTATION SYSTEMS ACTION ELEMENT

Intelligent Transportation Systems (ITS) apply advanced information processing, communications, vehicle sensing and traffic control technologies to the surface transportation system. Its objective is to promote more efficient use of the existing highway and transportation network, increase safety and mobility, and decrease the environmental impacts of congestion. Federal Highway Administration sponsored the preparation of Early Deployment Plans (EDPs) to identify ITS application opportunities.

The EDP’s primary focus for the Kern County region is the maximization of safety, traffic flow, and efficiency in both rural and urban areas. It presents an integrated, multi-modal, phased strategic plan to address the surface transportation needs and problems of the Kern region through the use of ITS. By preparing the EDP, Kern County will be in a position to take advantage of federal and other funding opportunities and implement various components of ITS.

Kern COG was the lead agency for this study, with key participation from Caltrans District 6 and Caltrans New Technology and Research Program, as well as various cities and transportation agencies within the Kern region. The overall goal of Kern’s ITS EDP was to develop a multi-year strategic deployment plan that would result in a well-balanced, integrated, intermodal transportation system. Transportation needs that have the potential of being addressed by ITS technologies have been identified and ITS elements that would be beneficial, cost-effective, and implementable have been evaluated. The strategic plan facilitates the integration and coordination of ITS applications valley- and state-wide in conjunction with other EDPs conducted throughout California.

Kern EDP Needs and Issues

Poor visibility because of fog and blowing dust, large percentages of truck traffic, high winds in eastern Kern County, steep grades, snow and ice, rockfalls, and red-light violations all contribute to the growing concerns about highway safety. Tule fog, a problem throughout the entire Central Valley region, has caused some of the worst accidents in the state involving dozens of vehicles and closing Interstate 5, the main artery through the valley, for hours at a time. Fog in Kern’s mountains causes similar serious incidents along Route 58. Blowing dust, related directly to seasonal agricultural activities, causes similar difficulties for travelers. In the urban areas, red-light violations are an issue. In eastern Kern County, high winds can cause high-profile vehicles to overturn, and snow, ice, and rockfalls can make travel unpredictable in rural areas. This EDP places traveler safety first in determining ITS solutions for Kern.

Additional issues addressed in the EDP include:
- Improved information sharing among agencies;
- Improved traffic progression across jurisdictional boundaries;
- Reduction in delays due to incidents;
- More informed traveler decision making through improved traveler information systems;
- Improved data collection through expanded coverage of information sources;
- Increased transit ridership;
- Enhanced transit coverage and efficiency;
- Improved air quality analysis; and
- Improved commercial vehicle operations.

Kern ITS Programs

Six programs were developed that integrate existing ITS efforts underway in the Kern region and will incrementally develop a sound basis for future expansion of ITS in the region. These programs are:
- Communication Network Development Program – Connects different agencies within the region to allow coordination in operating and managing the transportation system. Examples include building communication links with Bakersfield SONET ring and developing smart call boxes.
• Traffic and Incident Management Program – Integrates various state, regional, and local agencies serving Kern into a comprehensive, region-wide approach to traffic and incident management. Examples include census stations, system and/or incident detectors; coordinated incident management procedures; and freeway changeable message signs.

• Kern Traveler Safety Program – Combines applications that address safety, such as weather stations, smart studs; and rock-fall detection systems.

• Kern Informed Traveler Program – Uses advanced warning systems for the reduction of accidents and congestion. Examples include advanced traveler information system development; Bakersfield’s transportation operations center upgrades; and interactive commuter kiosks.

• Kern Smart Transit Program - Increases transit’s share of the commuting market by providing an alternative mode that is flexible, convenient, and responsive to customer demand. Examples include upgrading Golden Empire Transit service and coordinating Golden Empire Transit and Kern Regional Transit schedules.

• Enhanced Emergency Response Program – Provides police, sheriff, fire, ambulance, and other service providers with tools that determine quickly and accurately which routes will be most beneficial. Examples include workstations for emergency response providers and establishing emergency corridor routes.

Implementation of these programs will make transportation throughout Kern County safer, more efficient, and noticeably more pleasant for travelers. These programs were developed specifically for the Kern region, but each was developed as a part of an open, expandable plan, in order to provide a starting point for valley-wide integration of ITS. This means that other Central Valley counties with similar problems and needs will benefit from this plan and can combine ITS programs. Regional integration will provide further opportunities for cost sharing and funding that will result in cost savings to all agencies involved.

**ITS Benefits**

Over the past decade, deployment of ITS in the United States has resulted in substantial, quantifiable benefits. Several measured benefits of ITS are summarized in Table 4-5 to demonstrate its potential for improvements within the Kern region.

**Table 4-5**  
**Examples of ITS Benefits**

<table>
<thead>
<tr>
<th>Freeway Management</th>
<th>Reduced accidents by 15% - 62% while handling 8% - 22% more traffic at 16% - 62% greater speeds compared to pre-existing congested conditions (quantified benefit through the use of ramp metering).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incident Management</td>
<td>By providing video feeds from the field into a Traffic Management Center, the responding towing concession yielded a clearance reduction of 5 - 8 minutes.</td>
</tr>
<tr>
<td>Traffic Signal Control</td>
<td>Implementation of a transit signal priority system yielded a 5% - 8% decrease in transit run times.</td>
</tr>
<tr>
<td>Transit Management</td>
<td>On-time performance yielded improvements of 12% - 28% while reducing costs to generate a positive return on investment in as little as three years.</td>
</tr>
<tr>
<td>Signal Coordination</td>
<td>Has resulted in an average of 20% reduction in travel times in various locations throughout California.</td>
</tr>
</tbody>
</table>

San Joaquin Valley ITS Plan

Using a federal planning grant, the eight San Joaquin Valley counties formed an ITS committee focused on solving transportation problems within the region. The vision for the San Joaquin Valley ITS Strategic Deployment Plan is to enhance the quality of life, mobility, and environment through coordination, communication, and integration of ITS technology for the Valley’s transportation systems. The ITS plan includes major local elements developed by each of the eight counties. The plan coordinates architecture, standards and the institutional issues and also provides a framework for deploying ITS.

The San Joaquin Valley Intelligent Transportation Systems Strategic Deployment Plan was adopted by Kern Council of Governments in November 2001 and is incorporated within the Destination 2030 RTP by reference. The plan was federally approved January 8, 2002.

Short- and Long-Term Actions – 2007-2030

- Continue stakeholder outreach.
- Demonstrate the benefits to member agencies of the Regional Transportation Planning Agencies and Metropolitan Planning Organizations.
- Mainstream ITS into program and project prioritization.
- Mainstream and update regional architecture.
- Form public/private partnership task force (on project-by-project basis).

San Joaquin Valley ITS Architecture Maintenance Plan

While the San Joaquin Valley Regional ITS Architecture is included in the San Joaquin Valley ITS Strategic Deployment Plan, it is considered a process that will be maintained, revised, and validated as needed. The Architecture is a set of rules that facilitates the building of systems and allows these systems to communicate and inter-operate when built. Changes to the Regional ITS Architecture, such as new ITS regional needs, plans and priorities, projects, scope, and stakeholders, will be documented through updates to the Deployment Plan. The San Joaquin Valley ITS Architecture Maintenance Plan, including revised management procedures, was adopted by the Kern Council of Governments on April 21, 2005, and is incorporated within the Destination 2030 RTP by reference. The plan was federally accepted July 14, 2005.
CONGESTION MANAGEMENT PROGRAM ELEMENT

As with TEA-21 and ISTEA, under SAFETEA-LU (Section)(s) 1107, 6001), all urbanized areas larger than 200,000 population are required to have a Congestion Management System (CMS), Program, or Process. Kern Council of Governments (Kern COG) has chosen to continue referring to its congestion management activities as a Program. The federal Congestion Management System requirements are similar to the optional California requirements; in fact, the CMS was largely modeled after the California Program. Both processes are structured around the identification and monitoring of a system, the establishment of performance standards, and the identification and correction of congestion problems.

The Final Rule for the Federal Management and Monitoring Systems defines an effective Congestion Management System (Program) as a systematic process for managing congestion that provides information on: (1) transportation system performance, and (2) alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs.

Pursuant to California Government Code Section 65089(a), Kern COG was designated as the Congestion Management Agency by the majority of the cities representing the majority of the population and the Kern County Board of Supervisors. Kern COG consists of representatives from the eleven incorporated cities and two representatives from the County of Kern. The Golden Empire Transit District, Joint Planning Policy Board, and Caltrans are ex-officio representatives on the Agency Board. The Congestion Management Agency is responsible for developing, adopting, and biennially updating a Congestion Management Program. The Program is developed in consultation with, and cooperation of, regional transportation providers, local, state and federal governments, including California Department of Transportation, and both the Kern County and San Joaquin Valley air pollution control districts.

Because the Congestion Management Program can be amended and updated as frequently as annually, it can be modified to reflect local conditions in traffic congestion and transportation funding. This document fulfills the statutory requirements for the Congestion Management Program as required under State law and for the Congestion Management Process under federal law.

Government agencies under jurisdiction of this Program comprise:

<table>
<thead>
<tr>
<th>City of Arvin</th>
<th>City of Maricopa</th>
<th>City of Taft</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Bakersfield</td>
<td>City of McFarland</td>
<td>City of Tehachapi</td>
</tr>
<tr>
<td>California City</td>
<td>City of Ridgecrest</td>
<td>City of Wasco</td>
</tr>
<tr>
<td>City of Delano</td>
<td>City of Shafter</td>
<td>County of Kern</td>
</tr>
</tbody>
</table>

Purpose

The purpose of the Congestion Management Program is to help ensure that a balanced transportation system is developed that relates population growth, traffic growth and land use decisions to transportation system level of service (LOS) performance standards and air quality improvement. The Program is an effort to more directly link land use, air quality, transportation, and the use of new advanced transportation technologies as an integral and complementary part of this region's plans and programs.
Local jurisdictions are required to:

- Use consistent level of service methodologies, performance standards, and travel forecasting techniques;
- Adopt and implement a land use analysis program, which includes acting as lead agency for Traffic Impact Reports;
- Participate in annual monitoring activities, maintain acceptable performance levels on the system, or if necessary, designate individual segments or intersections deficient through adoption and submission of a Deficiency Plan to Kern COG;
- Adopt a Transportation Demand Management ordinance prior to their Program conformity findings.

Failure of a local jurisdiction to fulfill these responsibilities could engender loss of a portion of the state gas tax funding.

Contents

The Congestion Management Program includes the following six elements:

- **Land Use Impact Analysis:** Establishes a process to evaluate the impacts of proposed local land use decisions on Kern County’s transportation system, including an estimate of the costs associated with mitigating requirements.

- **Multi-modal Performance Standards:** Determines how much traffic, during peak hours, is acceptable on state freeways, highways and major streets within Kern County. These standards do not replace adopted city or county traffic goals, which generally establish more stringent standards. In addition, identify frequency and routing of bus service, and coordinate of transit service provided by separate operators throughout Kern County.

- **Regional Traffic Model:** Predicts level-of-service exceedances, prioritizes the Capital Improvement Program, and analyzes the impacts of land use on the Congestion Management system.

- **Transportation Demand Management:** Describes programs to promote alternatives to driving alone. These include such activities as carpools, vanpools, transit, bicycles, and park-and-ride lots. These programs will improve air quality in the County and help meet the goals of the Air Quality Attainment Plans.

- **Capital Improvement Program:** Establishes transportation improvements that can be expected to improve traffic conditions over the next seven years. This program has been developed to make the best use of the funds currently available.

- **Deficiency Plan:** Prepares a plan of remedial actions when a roadway level of service standard is not maintained on the designated Congestion Management roadway system.

In addition to these components and as a part of the process of developing and monitoring the Program, the implementing agency is required to develop and maintain a traffic data base for use in a countywide model and to monitor the implementation of the Program elements.

Along with State-level requirements, federal transportation funding legislation requires each state to develop and implement a traffic Congestion Management Process that will be incorporated into the regional planning
process, comply with the intent of the federal requirement, and be considered a part of Kern County's Congestion Management Program. The Program identifies areas where congestion occurs or may occur, identify the causes of the congestion, evaluate strategies for managing congestion and enhancing mobility, and develop a plan for implementation of the most cost effective strategies. Strategies regarding congestion management include:

- Transportation demand management measures;
- Traffic operations improvements;
- Measures to encourage high occupancy vehicle (HOV) use;
- Congestion pricing;
- Land use management and activity center strategies;
- Incident management strategies;
- Application of intelligent transportation systems (ITS) technology; and
- Addition of general purpose (mixed flow) traffic lanes.

Kern region’s Congestion Management Program will be revised as necessary to reflect all federal congestion management requirements.

Advances in telecommunications technology and networks provide an additional opportunity to further mitigate congestion by reducing the need for travel both within the region and between regions. To an extent, these telecommunications advances are occurring within the private sector without public sector initiatives. However, Kern COG is evaluating a potential public sector role.

Monitoring and Implementation Process

To ensure the Congestion Management Program is being implemented, the cities and County provide the Congestion Management Agency considerable information annually, primarily in the form of technical data, as well as policy and planning summaries, including the following:

- Traffic Level of Service - Each city, the County and Caltrans must provide peak hour traffic counts and level of service calculations on their designated streets and intersections.

- Local Traffic Models - Kern COG is required to approve any traffic models used by the cities and the County to evaluate impacts of proposed land use development on the transportation system. After the model has been initially approved by the Congestion Management Agency, only changes to the model will need to be submitted.

- Land Use Database - Kern COG is required to establish and maintain a uniform land use database for the development and monitoring of the Program. All current and future land use projections must be included in the database. Any changes to the land use database must be submitted to Kern COG.

- Local Capital Improvement Program - Statute requires the Program to include a seven-year Capital Improvement Program to maintain or improve the level of service on the Congestion Management system and transit performance standards, and to mitigate regional transportation impacts identified through the Congestion Management Program’s land use analysis element.

Designated Regional Transportation System

The purpose of defining the Congestion Management Program network is to establish a system of roadways that will be monitored in relation to established level-of-service standards. At a minimum, all State highways and principal arterials must be designated as part of the Congestion Management System of Highways and
Roadways. Kern County has 18 designated State highways. The roads selected as principal arterials by the Congestion Management Agency serve inter-regional traffic traveling between State highways and also complete gaps in the Congestion Management network.

California Government Code Section 65089(b)(A) requires that the Congestion Management Agency establish a system of highways and roadways that includes all of the State highways and principal arterials. Once a roadway is included in the network, it cannot be removed. All new State highways and principal arterials must be included in the system. If in the future, however, an existing segment of State highway is replaced by a new alignment, the new alignment would be added to the Congestion Management network while the old alignment would be dropped from the network.

Figure 6-1 provides a graphic display of the Congestion Management System of highways and roadways. A listing of State highways and principal arterials on the designated Congestion Management System is provided below:

**Highways**

- Interstate 5
- Route 14
- Route 33
- Route 43
- Route 46
- Route 58
- Route 65
- Route 99
- Route 119
- Route 155
- Route 166
- Route 178
- Route 202
- Route 204
- Route 223
- U.S. 395

**Principal Arterials**

- China Lake Boulevard - Route 178 to Route 395
- Rosamond Boulevard - Tehachapi-Willow Springs Road to Route 14
- Seventh Standard Road - Route 99 to Route 5
- Tehachapi-Willow Springs Road - Route 58 to Rosamond Boulevard
- Wheeler Ridge Road - Route 5 to Route 223
Level of Service Standards

The purpose of this section is to establish Level of Service standards for the Congestion Management road network in Kern County. California Government Code Section 65089(b)(1)(B) requires that Level of Service standards be established at no worse than LOS E, or LOS F if that is the current level of service.

Level of Service, according to the Transportation and Traffic Engineering Handbook, is a "qualitative measure that represents the collective factors of speed, travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs provided by a highway facility under a particular volume condition." Level of Service is ranked from A to F, with A being best and F being worst and wherein:

<table>
<thead>
<tr>
<th>Level of Service “A”</th>
<th>Free flow: no approach phase is fully used by traffic and no vehicle waits longer than one red indication. Insignificant delays.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Service “B”</td>
<td>Stable operation: an occasional approach phase is fully used. Many drivers begin to feel somewhat restricted within platoons of vehicles. Minimal delays.</td>
</tr>
<tr>
<td>Level of Service “C”</td>
<td>Stable operation: major approach phase may become fully used and most drivers feel somewhat restricted. Acceptable delays.</td>
</tr>
<tr>
<td>Level of Service “D”</td>
<td>Approaching unstable: drivers may have to wait through more than one red signal cycle. Queues develop but dissipate without excessive delays.</td>
</tr>
<tr>
<td>Level of Service “E”</td>
<td>Unstable operation: volumes at or near capacity. Vehicles may wait through several signal cycles and long queues form upstream from intersection. Significant delays.</td>
</tr>
<tr>
<td>Level of Service “F”</td>
<td>Forced flow: represents jammed conditions. Intersection operates below capacity with several delays that may block upstream intersections.</td>
</tr>
</tbody>
</table>

Adopted Level of Service Standard

One of the most important elements of the congestion management process is to establish traffic Level of Service standards to decide how much traffic, during peak hours, is acceptable. LOS is a way of measuring the amount of traffic congestion.

Level of Service "E" has been established as the minimum systemwide LOS traffic standard in the Kern County Congestion Management Plan. Those roads currently experiencing worse traffic congestion have been accepted at their existing traffic level of LOS F. By so doing, cities and the County will not be penalized through loss of gas tax funds for not meeting the new Congestion Management Program LOS E standard. Existing LOS F locations are listed below:
• Rosamond Blvd – 10th St West to Lancaster Blvd
• SR 99 NB – White Ln to Wilson Rd
• SR 58 – SR 99 to Cottonwood Rd
• SR 58/Rosedale Hwy – SR 99 to Main Plaza Dr
• 24th St (SR 178) – Oak St to N St
• Seventh Standard Rd to Coffee Rd

These LOS F designations are considered temporary. As improvements are built, and congestion reduced, the designations will be upgraded to the systemwide standard of LOS E.

In addition to the LOS standards of the Congestion Management Program, some cities and the County of Kern have adopted policies to help maintain their own LOS standards. In most cases, these local policies are aimed at maintaining LOS C. These standards are not intended to replace local policies by allowing greater congestion; they serve a very different purpose. The locally adopted LOS standards are tied to the city’s and County’s authority to approve or deny development, require mitigation measures, and construct roadway improvements. The Level-of-Service standard is a planning tool to be used in the development review process. Failure to meet the standard does not have direct negative financial impacts.

Kern COG, as the Congestion Management Agency, does not have development review and implementation responsibilities; these are up to the various cities and County. The Agency’s authority is limited to establishing and monitoring a countywide Level-of-Service standard, and withholding state gas tax funds if the standard is not met. Because of these differences, the Congestion Management Program standard is not viewed as being in conflict with locally-adopted LOS standards.

It is the Congestion Management Agency's responsibility to ensure that all cities and the County are following the Congestion Management Program. Of particular importance is the establishment of traffic counts. Kern Council of Governments completes one coordinated and comprehensive review each year; each city and the County is evaluated in the same manner. The cities, County and Caltrans undertake traffic counts on their roads annually. Use of recent peak hour traffic counts eliminates much of the "guesswork" and ensures that the review is based on actual traffic conditions, not estimates or forecasts.

Provisions include:
• All roadway segments on the Congestion Management network shall maintain a level of service of "E" or better.
• Any roadway segments on the Congestion Management network that are operating at a level of service worse than "E" on the adoption of the first Congestion Management Program shall not further degrade.

PERFORMANCE STANDARDS

This element sets forth performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance standards are to incorporate highway and roadway system performance, measure the frequency and routing of public transit, and coordinate transit services provided by separate operators. These measures support mobility, air quality, safety, land use and economic objectives and are used in the development of the Capital Improvement Program, deficiency plans and the land use impact analysis program.
Transit Services in Kern County

State law requires the Congestion Management Program to adopt standards for routing, fixed route frequency and coordination with other operators. Jurisdictions that do not meet transit standards may be considered in violation of the Program. Unlike traffic level of service standards, jurisdictions may not prepare deficiency plans if transit standards are not met.

The Action Plan for the metropolitan Consolidated Transportation Service Agency included no plans for the implementation of social service transportation for the rural portions of Kern County, which includes ten incorporated cities and several unincorporated communities. However, public transit coverage is extensive and is provided by nine of the cities and Kern (County) Regional Transit. All of these operations are accessible to elderly and disabled riders, and all provide at a minimum curb-to-curb service.

To meet the Statute’s requirements, the following are specific standards for the frequency and routing of public transit, as well as coordination standards between providers in Kern County. Although Kern County supports several transit operators, most of them operate on a demand-responsive basis and are not subject to frequency and routing standards. These operations are run largely to meet the needs of transit dependent residents rather than to relieve congestion. Public transit in rural areas of Kern County will not be subject to frequency and routing standards, but may be subject to coordination standards. Rural operators are encouraged to pursue desirable operating standards as defined by Transportation Development Plans, Transportation Development Act requirements, and transit management.

Interim Frequency and Routing Standards for Golden Empire Transit District

The following standards shall apply to fixed route transit service operated by the Golden Empire Transit District. Should Golden Empire Transit District not comply with these standards, the District will have a period of five years from the finding of non-compliance with the Congestion Management Program to conform to these standards.

<table>
<thead>
<tr>
<th>Headways</th>
<th>Ninety (90) minutes shall be the maximum amount of time between buses on all routes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Availability</td>
<td>Eighty percent of service area population shall be within 1/4 mile of a route.</td>
</tr>
<tr>
<td>Directness of Service</td>
<td>No more than 50 percent of the total system riders shall be required to transfer in order to reach their destination.</td>
</tr>
</tbody>
</table>

Transit Coordination

All rural transit operations that provide service into Bakersfield will stop at one of the following Golden Empire Transit transfer points:

- GET Downtown Transfer Facility
- Southwest Transfer Site
- Bakersfield College (Panorama Campus)
- California State University, Bakersfield
- East Hills Mall.
Exempt from this requirement are transit systems that are operated solely to carry medical patients to medical appointments.

**Interim Frequency and Routing Standards for General Public Rural Operators**

The following general public rural operators currently provide service into Bakersfield and are subject to the transit coordination standards described above:

- Arvin Transit
- Delano Transit
- Kern Regional Transit
- Taft Transit
- Wasco Transit.

**Demand Responsive/Rural Transit Operations**

Except for the standards required for GET above, the following transit operations will be operated under the provisions of the Transportation Development Act and are not subject to frequency, routing, or coordination standards:

- Arvin Transit
- California City Transit
- Consolidated Transportation Services Agency (CTSA)
- Delano Transit
- GET-A-Lift
- Kern Regional Transit
- Ridgecrest Transit
- Shafter Transit
- Taft Transit
- Tehachapi Transit
- Wasco Transit.

**Transit Coordination in the Local Jurisdiction EIR Process**

Affected transit operators must be consulted regarding the potential impacts of proposed development projects on transit services. All development projects/programs for which an Environmental Impact Report (EIR) is prepared will be required to consult with affected transit operators through the California Environmental Quality Act (CEQA) process. This responsibility strengthens the existing environmental analysis link between the development process and transportation planning. This is incorporated into the local jurisdiction's land use process.

Below are descriptions of services provided by the rural public transit providers. The descriptions include hours of operation, type of service provided, and number of vehicles used in the operation. Also included are the most currently available ridership figures.

**Arvin Transit**

Arvin Transit operates a demand responsive service within city limits from 8 a.m. to 5 p.m. Intercity service is operated from Arvin to Bakersfield once daily. A route-deviated service is operated from Arvin to Lamont four times daily. Ridership in fiscal year 2004-05 was 77,943. Arvin Transit operates six vehicles. Intercity
service is provided by Kern Regional Transit between Arvin, Weedpatch, Lamont, and Bakersfield seven
times daily Monday through Saturday, and six times on Sunday.

**California City Transit**

This service is operated Monday through Saturday from 8:30 am to 3:15 pm. Intercity service is provided
three times weekly to Mojave and once to Lancaster. California City Transit carried 20,307 passengers in
fiscal year 2004-05. California City Transit operates three vehicles.

**Delano Transit**

Delano Transit operates a fixed route and a complementary demand-responsive service daily within the city
limits and in the unincorporated areas surrounding the City. Delano also operates a medical transportation
van Monday through Friday between Delano, McFarland, and Bakersfield. Delano operates four buses and
eleven vans, and carried 155,423 passengers in 2004-05. Kern Regional Transit provides intercity service
seven times daily Monday through Friday and five times daily on Saturday and Sunday between Delano,
McFarland, Wasco, Shafter and Bakersfield.

**McFarland Transit**

McFarland operates one demand-responsive van within their city limits only, operating Monday through
Friday. McFarland Transit carried 18,388 passengers during fiscal year 2004-05

**Ridgecrest Transit**

The Ridgecrest Transit System operates a demand-responsive service within and around the City of
Ridgecrest. Ridgecrest Transit operates Monday through Saturday. Intercity service is offered between
Ridgecrest and Inyokern and between Ridgecrest and Randsburg on Fridays. Ridgecrest operates four
vehicles and carried 40,374 passengers during the 2004-05 fiscal year.

**Shafter Transit**

The City of Shafter operates a demand-responsive service within the city limits. Shafter Transit operates
Monday through Friday from 7:30 a.m. to 4:30 p.m. with two vehicles in service. In fiscal year 2004-05,
Shafter Transit carried 36,453 passengers.

**Taft Transit**

The City of Taft operates a demand-responsive transit service Monday through Friday both within the city
limits and in the surrounding unincorporated communities of Ford City, Taft Heights and South Taft. Taft
Transit operates seven vans and one station wagon, and carried 67,781 passengers during the 2004-05
fiscal year. Kern Regional transit provides intercity service five times per day Monday through Friday, and
three times per day on Saturday between Taft and Bakersfield.

**Tehachapi Transit**

Tehachapi operates a demand-responsive transit service both within city limits and the adjacent
unincorporated communities of Old Towne and Golden Hills. This system maintains two vehicles Monday
through Friday. During fiscal year 2004-05, approximately 8,587 passengers used the service.
Wasco Transit

Wasco operates a demand-responsive transit service within the city limits using two vehicles. This service operates Monday through Saturday. During fiscal year 2004-05, Wasco Transit carried 22,640 passengers.

Kern Regional Transit

The County of Kern operates Kern Regional Transit that includes service to the unincorporated communities of Lamont, Kern River Valley and Mojave. In addition, the County has service agreements with several cities to provide service in unincorporated areas surrounding their city limits. In fiscal year 2004-05, Kern Regional Transit carried 481,350 passengers throughout the county.

Multimodal System Performance Measures

Performance measures for Kern County’s multimodal network have been defined as: (1) Accessibility; (2) Mobility; (3) Cost-effectiveness; (4) Reliability; (5) Consumer Satisfaction; and (6) Safety. These aspects are fully described and analyzed in Section 6, Environmental Justice, of this Destination 2030 Regional Transportation Plan. Implementation measures are also discussed.

LAND USE ANALYSIS PROGRAM

State law requires that Congestion Management Programs include analysis of the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. In addition, the Code requires that each local jurisdiction adopt and implement a land use analysis program.

All of the cities within Kern County and the County itself are required to adopt and implement the land use analysis program outlined below. The Congestion Management Agency is required to monitor program implementation.

Local jurisdictions catalog on a quarterly basis all approved general plan amendments and submit them to the Agency. Each General Plan Amendment submittal includes the following information:

- Initial environmental study;
- Vicinity map(s);
- Map identifying specific land uses proposed within and adjacent to the GPA location;
- Traffic impact analyses, if prepared;
- For residential uses: density of development and total planned population; and
- For nonresidential uses: density of development and gross acreage of each proposed use.

Agency staff incorporates this information into the existing Congestion Management transportation model database. At least annually, the Agency prepares a transportation model run with level of ultimate growth for all new general plan amendments to analyze the traffic impacts on the network. Based on the model analysis, Agency staff notifies local jurisdictions of potentially deficient segments within the network.

The local jurisdiction responsible for the potentially deficient segment will determine the current level of service of that segment. If the deficient segment is on a State route, the local jurisdiction, with the cooperation of Caltrans, will determine the current level of service for that segment. If the responsible local jurisdiction determines that all or part of the deficient segment is below the adopted level of service standard, the responsible jurisdiction may designate individual deficient segments or intersections after the
local jurisdiction has prepared and adopted a deficiency plan at a noticed public hearing. Deficiency plans are discussed at the end of this element.

If the local jurisdiction determines that the level of service is above the adopted LOS standard, the local jurisdiction will submit a report describing the methodology for calculating LOS along the segment in question. This report would be submitted to the Agency in lieu of a deficiency plan.

The Land Use Analysis Program is designed to meet the following goals:

- Identify local land use decisions that have a significant impact on the Congestion Management system and establish a process that mitigates these impacts;
- Meet the legal requirements of the Congestion Management Program relating to land use impact analysis;
- Provide information that is useful to local jurisdictions; and
- Facilitate interjurisdictional cooperation in analyzing and mitigating the impact of land use decisions when necessary.

The Land Use Analysis Element of the Congestion Management Program establishes three tiers of analysis:

- General Plan Amendments that generate 1,000-plus average daily vehicle trips above the number that would be produced by the land uses allowed under the adopted General Plan;
- General Plan updates; and
- Cumulative analysis of all General Plan Amendments.

In addition, the Congestion Management Agency reviews new information that affects land use assumptions incorporated in the Regional Traffic Model.

**TRANSPORTATION DEMAND MANAGEMENT/TRIP REDUCTION**

This element of the Congestion Management Program satisfies the requirements of State law that mandate inclusion of a trip reduction and travel demand element to promote alternative transportation modes and methods. Transportation Demand Management programs are designed to reduce the need, or demand, for automobile trips, especially during congested commute times. Demand management strategies reduce the number of cars driven, which generally results in less congestion and improved air quality.

Conditions that lead motorists to view carpooling and vanpooling as attractive options to driving alone are not as prevalent in Kern County as they are in more metropolitan counties. Traffic congestion is generally light, although certain roads are congested during rush hours, and parking at work sites is typically free. However, recent housing costs within the city of Bakersfield have driven population growth to the city’s outskirts and to smaller Kern County cities; this has resulted in longer commute trips and increased traffic congestion. Increased gas prices have also heightened interest in commute alternatives. Local television stations and websites (see: http://cad.chp.ca.gov) now feature traffic reports, reflecting the need and interest in the County.
Commute trip distances and times are not lengthy for most commuters in Kern County. Work commute trip times are shorter on the average compared to the Los Angeles metropolitan area, and fewer work commute trips are of 30 minutes or longer. This difference is significant, since persons commuting over 30 minutes each day are more likely to consider carpooling and vanpooling as an alternative to driving alone.

City and County Development Review Process

As part of their development review process, cities may establish Transportation Demand Management goals for proposed new developments. For example, the City of Bakersfield has required developers of master planned communities to design and implement transportation demand management programs as a condition to obtain project approvals.

Transit

One of the most important strategies of the Transportation Demand Management element is the development of public transit service improvements in the County. The importance of transit stems from its ability to provide a reliable and inexpensive alternative to driving alone. Without increased transit services, it will be difficult for Kern County to reach its trip reduction goals. See the Public Transportation Element of this Section for further discussion.

Trip Reduction Programs

Kern Commuter Connection provides trip reduction programs funded through Caltrans and administered by Kern COG and actively promotes trip reduction in several ways.

Through Kern COG’s website www.kerncoq.org, commuters can find information regarding alternatives to commuting by single occupant vehicle. These include carpools, vanpools, bicycling, telecommuting, transit, and walking, as well as flexible work-week schedules.

In late 2006, Kern Commuter Connection licensed the Greenride division of Ecology and Environment, Inc. to provide online, bilingual to Spanish, GIS-based carpool matching and vanpool administration programs. Their software provides special features including transit map overlays on individualized commute maps, mile tracking, air quality tracking, prize drawing, and employer records.

Kern Commuter Connection markets trip reduction programs through media, special events, local college outreach projects, and workshops for employers, as well as meeting with worksite groups and/or interested employees. Kern Commuter Connection also assists companies with worksites in outlying areas to establish shuttle buses and identify park-and-ride facilities for employees who commute to and from these worksites.

These programs have aided many employers in the County to establish carpooling and vanpooling programs. Individual employers often offer their own incentive programs that may include Commuter Choice income tax benefits, parking cash-out, or a Guaranteed Ride Home program.

Transportation Demand Management/Trip Reduction has at least five functions:

- To **improve system efficiency** by developing measures that will increase the capacity of persons trips on the system with a minimum of capital improvements;

- To **integrate modal options** by ensuring that measures chosen are supportive of alternative mode choices;
• To reduce vehicle trips and vehicle miles traveled by encouraging alternative choices;

• To improve system LOS by reducing vehicle demand; and

• To integrate air quality planning requirements with the transportation planning and programming functions.

San Joaquin Valley Air Pollution Control District released its Draft 2007 Ozone Plan in January 2007, which will be presented to the District’s Governing Board for final action at a public hearing in April 2007. In its draft document (Chapter 8.2.3), the District is proposing to adopt an Employer Based Trip Reduction rule that will further decrease Vehicle Miles Traveled within the Valley by:

• Adopting a rule requiring businesses with at least 100 employees to establish rideshare programs;

• Scheduling rule development and implementation as follows: adoption by the fourth quarter 2009, and compliance/reductions to begin by 2010;

• Implementing trip reduction programs following U.S. EPA guidelines for improving air quality (also known as the State Implementation Plan);

• Exploring the applicability of State laws governing parking payout programs and strengthening enforcement of those laws within the Valley.

The Air District adopted Rule 9510: Indirect Source Review in December 2005, the purpose of which is to achieve emission reductions from the construction and use of development projects through design features and onsite measures. The rule also allows for offsite mitigation measures. Either one of these aspects of the rule may result in trip reduction programs. This rule also applies to any transportation or transit project where construction exhaust emissions equal or exceed 2 tons of nitrogen oxide or 2 tons of particulate matter.

Kern Commuter Connection’s outreach efforts will share local trip reduction success stories that don’t always fall in the usual realm of projects. For example, two large employers (more than 450 employees at each site) have plants near each other on State Route 58 near Buttonwillow. The two companies have staggered their work schedules resulting in reduced traffic congestion during shift changes.

### REGIONAL TRAFFIC MODEL

Congestion Management Program statute requires the development of a Countywide transportation model and database to quantify congestion impacts on the roadway system. The model is used for countywide planning to look at how various highway, transit, and Transportation Demand Management improvements will assist in addressing countywide congestion. The model also enables Kern COG to conduct air quality analysis on a recommended program of projects, to ensure that Kern COG is recommending a Transportation Improvement Program that works toward air quality goals.

Kern COG maintains a sophisticated transportation modeling program supported by local agencies and Caltrans that provides the technical basis for all transportation planning activities in the Kern region.

### Trip Generation Model

Kern COG has developed a detailed socioeconomic database to support its transportation planning effort. Drawing on information provided by the 2000 U.S. Census, 2003 Info USA employer listings, and locally adopted population projections, Kern COG has developed population, housing and employment projections to 2020 for each of the region’s 1300 Transportation Analysis Zones (TAZs). Smaller than census tracts,
TAZs were developed from Census base maps. The data collected include retail employment, non-retail employment, households and auto availability.

Socioeconomic data within each TAZ determines the amount of internal-internal (i-i) generated trips. The trip generation model provides person trip productions and attractions by the following trip types: (1) Home-based work (HBW); (2) Home-based other (HBO); (3) Non home-based (NHB).

External to external trips (x-x) trips for gateways or external cordons were developed from the latest available Caltrans Statewide Model. These x-x trips were used to compute the percentages of x-x trips to the traffic count at the cordon and distributed across the model to simulate through-county trips. The Statewide model was also used to calculate external to internal (x-i) productions and internal to external (i-x) attractions.

The trip generation model was derived from the National Cooperative Highway Research Program Report 187 and adjusted for the Kern region. Caltrans 2003 survey data provided the percentage breakdowns for trips produced and attracted for each trip type. The HBW trips are normalized by multiplying productions by the ratio of total attractions and total productions. The HBO and NHB trips are normalized by multiplying attractions by the ratios of total productions and total attractions.

The objective of trip distribution is to create, by trip type, a person trip table, which is a TAZ-to-TAZ table of trip values. This is done by connecting the productions and attractions between TAZs. These trip connections are based on the relative degree of attractiveness compared to those of all TAZs and the relative degree of travel time between TAZs.

**Road Network Model**

The Road Network Model includes all freeways, expressways, major arterials, minor arterials and a number of collectors sufficient to serve the travel patterns of the region and relevant to the number and size of the TAZ system. The road network contains streets represented by intersection points and curve points called nodes and by connections between the nodes called links. The network also contains centroids, which are special nodes that contain trip data and socioeconomic data of TAZ’s. The centroids are then connected to the rest of the network by centroid connectors which represent a series of local streets. All trips (i-i, x-i, i-x and x-x) are distributed over the capacity constrained network by the model.

**Assignment Validation**

More than one thousand traffic counts from streets and highways throughout the region were used to validate assigned vehicle volumes on the network. Individual street volumes were examined for reasonableness to the associated counts. An acceptability range of traffic volumes within certain percent differences of the traffic count was established using Caltrans standards. The model’s daily Vehicle Miles Traveled (VMT) of 14,865,009 when compared to the Highway Performance Monitoring System of 15,069,000 Vehicle Miles Traveled was also very close and reasonable (within 1.4 percent).

**CAPITAL IMPROVEMENT PROGRAM**

California Government Code Section 65089(b)(5) requires the Congestion Management Program to include a seven-year Capital Improvement Program to maintain or improve the traffic level of service and transit performance standards developed in Sections 6.3 and 6.4 of this Program. The Capital Improvement Program also mitigates regional transportation impacts identified by the land use analysis program, as described earlier in this element. The Capital Improvement Program must conform to vehicle emission-related air quality mitigation measures.
The Capital Improvement Program is composed of projects along the Congestion Management system that are to be financed with federal, state, local, or private funding over the next seven year period. Most of these projects are currently programmed in the State Transportation Improvement Program, though some additional projects along designated principal arterials are programmed with local and/or private funds.

Section 4.0, Table 4-1, of the Action Element contains a list of these projects by transportation mode.

Flexible Congestion Relief Projects

Flexible congestion relief projects are defined as those that reduce or avoid congestion on existing routes by increasing the capacity of the transportation system, including new facilities. Projects may be on city streets, county roads, state highways, and commuter rail and urban rail corridors.

Traffic Systems Management Projects

Traffic systems management projects are those that increase the number of person trips on the highway system in the peak period without significantly increasing the design capacity of the system (as measured by vehicle trips) and without increasing the number of through traffic lanes.

It should be noted that a traffic systems management project off the State Highway network is not required to be a part of the congestion management principal arterial network; however, Government Code requires that it “maintain or improve traffic level of service and transit performance standards developed in the Congestion Management Program.”

Funding Sources

Public funding for Congestion Management projects includes a variety of local, state and federal sources. State and federal programs available for streets and highway projects include: Flexible Congestion Relief, Interregional Road System, as well as State and Local Partnership programs. These funding programs are subject to the annual budget process of the California Transportation Commission and the legislature. The Flexible Congestion Relief and State and Local Partnership programs must be included in the Regional Transportation Improvement Program.

Local funds that can be used include: impact fees, Surface Transportation program funds, gas tax revenues, and Transportation Development Act funds. Revenues from a local option sales tax could also be used for projects identified in the Congestion Management Program.

Transit funding includes Section 5307 (metropolitan operating assistance), Section 5311 (rural operating assistance, and Section 5310 (senior, low income, and mobility challenged).

DEFICIENCY PLANS

Because of the complexity involved in measuring and meeting traffic level of service standards, the Congestion Management Program allows local jurisdictions to prepare Deficiency Plans. Specifically, California law states that “a city or the County may designate individual road segments or intersections (as being deficient) which do not meet the established level of service standards...if the city or the County has adopted a Deficiency Plan,” which outlines the means to improve level of on the specific roadway or congestion management system.
In effect, the deficiency plan statutes mean that failure to meet the level-of-service standard at any given location does not automatically require a finding of nonconformance by Kern COG and the withholding of gas tax funds. A local jurisdiction with a location operating below the level-of-service standard could remain in conformance with the Congestion Management Program if they have adopted, and Kern COG has accepted, a deficiency plan.

Required elements of the deficiency plan are summarized as follows:

- An analysis of the causes of the deficiency;
- A list of improvements necessary for the deficient segment or intersection to achieve the adopted level-of-service standard and the estimate costs of the improvements;
- A list of improvements, programs or actions, and estimates of costs, that will measurably improve the level of service of the congestion management network;
- A list of improvements, programs or actions that will contribute to significant improvements in air quality. The improvements, programs or actions shall be taken from the approved list established by the Air Pollution Control District. The list will include measures such as improved public transit service and facilities, improved nonmotorized transportation facilities, high occupancy vehicle facilities, and transportation control measures;
- An action plan consisting of improvements identified in Item 2, or improvements, programs and actions identified in Items 3 and 4, that are found to be in the interest of the public's health, safety and welfare. The action plan shall also include a specific implementation schedule and identify a specific funding program.

In those cases where the deficiency plan involves more than a single jurisdiction, Items 1 and 4 above should clearly address the traffic and financial responsibilities of each entity.

**Deficiency Planning Responsibilities**

The preparation of a deficiency plan is required when the annual review of traffic circulation indicates that a location is operating below its adopted level of service. Responsibility for the preparation and adoption of a deficiency plan lies with the jurisdiction within which the deficient segment or intersection is located. In some cases, however, a location in one city or the County will be deficient because of traffic generated entirely or in part from another city. If this occurs, the responsibility for preparing and adopting the deficiency plan still remains with the city in which the problem is located. Nevertheless, the plan should be developed cooperatively by all of the jurisdictions contributing to the problem. The result should be a deficiency plan that identifies the needed improvements and the "fair share" financial responsibility of each jurisdiction.

Caltrans' participation and cooperation is essential for freeway or state highway locations.

**Multi-Jurisdictional Deficiency Plans**

In those cases where a deficient location in one jurisdiction is caused in part by traffic generated in another jurisdiction, it is suggested that the deficiency plan be prepared cooperatively. At the request of the local jurisdictions, Kern COG would be available to assist in the development of the plan. Kern COG will provide trip data from the countywide transportation model and any other information that would contribute to a
mutually acceptable deficiency plan. Kern COG staff, at the request of the local jurisdictions, would also assist in the development of the plan.

Although the deficiency plan must be adopted only by the jurisdiction in which the problem is located, it is strongly recommended that all jurisdictions which participated in its development, and would fund a share of the recommended improvements, adopt the deficiency plan prior to submittal to Kern COG.

If the affected local jurisdictions cannot reach agreement as to the recommended improvements and/or financial participation, or any other element of the plan, the jurisdiction in which the problem is located must still adopt and submit a plan per the schedule described above. Kern COG, following a public hearing, will then make a determination as to the acceptability of the deficiency plan. The COG’s acceptance, or its findings along with its rejection, of the plan will serve to resolve outstanding local issues.

**Deficiency Plan Approval Process**

If, following a noticed public hearing, the Congestion Management Agency determines that a local jurisdiction is not conforming to the adopted level-of-service standard, the local jurisdiction will be given written notice of the specific area(s) of nonconformance. The local jurisdiction will then have 90 days to prepare and adopt a deficiency plan for submittal to the Agency.

Within 60 days of receipt of the deficiency plan, the Agency will hold a public hearing and either accept or reject the deficiency plan in its entirety. If the plan is rejected, the local jurisdiction will be given written notice of the reasons for that rejection.

The local jurisdiction will then have 60 days to revise, adopt and resubmit the deficiency plan to the Agency. The Agency will again hold a public hearing and either accept or reject the deficiency plan. If the revised deficiency plan is rejected, the Agency will notify the State Controller to withhold gas tax funding from the responsible local jurisdiction. The Agency will not reconsider the deficiency plan for 180 days following notification of the State Controller.

The timelines included in the deficiency plan preparation and approval process have been largely prescribed by state law. However, it is very possible that a deficiency plan would include improvements that require California Environmental Quality Act review. If this occurs, it would be impossible to complete the environmental review prior to submittal of the deficiency plan to the Agency. In this instance, the deficiency plan must include a specific schedule for completion of the environmental review process.

Similarly, it is possible that a deficiency plan would include improvements that are subject to preparation of a *Project Study Report* for Caltrans. If this occurs, the deficiency plan should include a schedule for preparation of the Report, and a schedule for construction of whatever improvements are expected to be recommended in the Report.
CONFORMANCE MONITORING

This section identifies specific conformance monitoring procedures to determine if the local jurisdictions are complying with the traffic level of service standards, the interim transit frequency, routing, and coordination requirements, adoption and implementation of the program to analyze the impacts of land use decisions on the Congestion Management System, and compliance with the Transportation Demand Management/Trip Reduction Element.

California Government Code Section 65089.3(a) states that, “The agency (CMA) shall monitor the implementation of all elements of the Congestion Management Program. Annual, the agency shall determine if the county and the cities are conforming to the Program, including, but not limited to, all of the following:

- Consistency with levels of service and performance standards, except as provided in subdivisions (b) and (c);
- Adoption and implementation of a transportation demand management/trip reduction ordinance;
- Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

Determination of Nonconformance

If, pursuant to the annual monitoring process, the Congestion Management Agency finds that a local jurisdiction is not conforming with the provisions of the Congestion Management Program, the Agency shall hold a noticed public hearing for the purpose of determining conformance. Further, the Agency shall notify the nonconforming jurisdiction in writing of the specific areas of nonconformance. A nonconforming jurisdiction may appeal the determination of nonconformance for the purpose of scheduling a re-hearing before the Agency within 100 days of the initial notice of nonconformance.

The nonconforming jurisdiction shall have 90 days from the date of the receipt of the written notice on nonconformance to come into conformance with the Congestion Management Program, in accordance with Section 65089.4(a). If the nonconforming jurisdiction has not come into compliance with the Congestion Management Program, the Congestion Management Agency shall make a finding of nonconformance and shall submit the finding to the California Transportation Commission and the State Controller.

In accordance with Government Code Section 65089.4(b), the State Controller will withhold apportionments of funds required to be apportioned to that nonconforming jurisdiction by Section 2105 of the Streets and Highways Code, until the Controller is notified by the Agency that the city or county is in conformance. If, within the 12-month period following the receipt of a notice of nonconformance, the Controller is notified by the agency that the city or county is in conformance, the Controller shall allocate the apportionments withheld pursuant to this section to the city or county.

If the Controller is not notified by the Congestion Management Agency that the city or county is in conformance pursuant to paragraph (2), the Controller shall allocate the apportionments withheld to the Agency. The Agency shall use the funds apportioned for projects of regional significance that are included in the Capital Improvement Program required in Section 6.8 of this document. The funds may also be used for projects identified in a deficiency plan that has been adopted by the Agency. The Agency cannot use the funds for administrative or planning purposes.
Appeals Process

A local jurisdiction found to be in nonconformance with a provision of the Congestion Management Program may file a written request of appeal within 90 days of the date of the receipt of the written Notice of Nonconformance. Within 100 days of receipt of the written Notice of Appeal from a local jurisdiction previously found to be in nonconformance, the Congestion Management Agency will schedule a Noticed Public Hearing for the purpose of reconsidering the finding of nonconformance.

Within 60 days of the date the appeal is filed, the local jurisdiction filing the appeal may submit information pertaining to the written Notice of Nonconformance. After the public hearing on the Appeal of the Finding of Nonconformance is concluded, the Congestion Management Agency will:

• Notify the local jurisdiction that, because of the information considered at the Appeal Hearing, the Finding of Nonconformance is being withdrawn, or

• Notify the California Transportation Commission and the Controller’s Office that the local jurisdiction has not come into conformance with the Congestion Management Program.

SAFETY ELEMENT

SAFETEA-LU added a new stand-alone factor to “increase the safety of the transportation system for motorized and non-motorized users.” Kern COG is committed to promoting increased safety, and the performance measures of the Regional Transportation Plan include safety as a critical factor.

Caltrans published the final version of the statewide State Highway Safety Plan (SHSP) in September 2006. The Safety Plan guides safety activities regarding all users on all public roadways. Key points of the Safety Plan include:

• Highlighting challenges to roadway user safety on California’s roads;
• Painting the picture of fatalities experienced on California’s roads;
• Proposing high-level strategies to reduce fatalities for each challenge;
• Guiding implementation of specific projects and activities through 2010.
Regional transportation plans must include a financial element that identifies monetary resources to implement the plan (23 USC 134(h)(2)(B)). This chapter serves as the Financial Element to fulfill the federal requirement that the Destination 2030 RTP be financially “constrained,” (i.e., budgeted) and provides a cost analysis for implementing the program of projects included in the Strategic Investments (Action Element). It describes the financial situation that will exist between FY 2006 and FY 2030, the implementation period for this Destination 2030 RTP.

Financial Analysis Process

Kern COG has estimated the revenues that are reasonably expected to be available from known federal, state, local and private sources of transportation funding to implement the projects. Funding assumptions are limited to those programs distributed by formula or by a fair-share regional target. Some funding programs are sporadic and cannot be constrained within the 24-year RTP. Thus, Kern COG has responsibilities for the allocation of funds and the approval of transportation projects each year that represent tens of millions of dollars. These responsibilities involve the use of federal, state and local transportation funds, each of which may have different requirements, limitations and schedules.

Projecting revenues and expenditures over this length of a planning period is difficult at best. The analysis relies on historical funding patterns from state and federal sources, though effort has been made to account for new methods of allocating state transportation funds since the passage of Senate Bill 45 (Government Code Chapter 622), effective January 1, 1998.

Even for existing funding sources, understanding and implementing the complex array of local, state and federal programs is not easy. Some of the programs rely on allocations; others on apportionments; and others are matching programs. Different combinations of apportioned, allocated or matched dollars from local, state and federal sources can be applied to one project. Many of the projections included in the Destination 2030 RTP rely on simplified financial assumptions upon which programming assumptions are then based.

Therefore, the best use of a comparison of revenues and expenditures is for broad, suggestive purposes about Kern COG’s future financial situation rather than as an exact budget of revenues and expenditures for the FY 2006-2030 planning period covered by this RTP.

Revenue Projection Assumptions

- National Highway System (NHS) and Surface Transportation Program (STP) dollars are combined with State Highway Account (SHA) dollars to fund the State Transportation Improvement Program (STIP). Total funding available for STIP is apportioned as county shares. The STIP is then divided into two funding groups: (1) the Regional Improvement Program (RIP), which programs 75% of STIP funding; and (2) the Interregional Improvement Program (IIP), which programs the remaining 25%. Of the IIP funding, only 10% can be used in urban areas; the rest is for rural highway projects and other programs, such as rail.

- County-share estimates to fund state highway projects are based on Caltrans’ projections of Kern County’s share and are projected over a 20-year period. Inflation rates were not applied. The first five years of revenue estimates assumed current FTIP project funding plus an additional $45 million. The second five years assumed a RIP rate of $45 million per year for five years and $20 million per year from the discretionary IIP source. The final 10 years assumed $45 million for RIP and $20 million for IIP per year.

- The assumption for the State Highway Operations and Protection Program funding projection was to calculate the last five years of SHO P P projects based on the FTIP.
Safety Program dollars were programmed in two separate lump sums: Highway Bridge Replacement and Rehabilitation program and Local (Section 130) At-Grade Crossing. These were averaged over the last five years and extrapolated based on FTIP analysis. No inflation factors were applied.

For the Regional Surface Transportation Program, annual apportionments were averaged and projected over 20 years. Inflation factors were not applied.

For the Congestion Mitigation and Air Quality (CMAQ) Program, annual apportionments were averaged and projected over 20 years. Inflation factors were not applied.

The Bakersfield Transportation Impact Fee and Rosamond Transportation Impact Fee programs are based on residential, commercial and industrial development and are difficult to predict. An average was determined to have been collected over the last several years. Amounts were then projected linearly with growth and inflation factors applied.

FTA Funding Section 5307 (Urbanized Area Formula Apportionments for Transit) was projected using annual inflation and growth factors and past FTIP programming.

FTA Funding Section 5309 (New Starts/Major Investments for Transit) was projected using annual inflation and growth factors and past FTIP programming.

FTA Funding Section 5310 (Elderly and Disabled Persons Transit) was projected using annual inflation and growth factors and past FTIP programming.

FTA Funding Section 5311 (Nonurbanized/Rural Transit Assistance) was projected using annual inflation and growth factors and past FTIP programming.

Local Transportation Fund (LTF) was projected using annual inflation and growth factors and past FTIP programming.

Transportation Enhancement (TE) federal fund is 10 percent of the estimated county share. That value was projected without inflation factors.

Revenue Sources

Revenues identified in the Destination 2030 RTP financial forecast are those that have been provided for the construction, operation, and maintenance of the current roadway, transit and airport systems in the Kern region. Baseline revenues include existing local, state, and federal transportation funding sources. As Table 5-1 and Figure 5.1 summarize below, revenue forecasts for the Kern region are estimated to be approximately $6.3 billion for the RTP period. Revenue levels identified in Table 5-1 reflect reasonably available funding and include estimates for funding programs used over the last several years.

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Regional Total $</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Transportation Funds</td>
<td>460,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Bus Farebox</td>
<td>171,000,000</td>
<td>3</td>
</tr>
<tr>
<td>Local Agency Funds/Developer Fees/Regional Fees/Other</td>
<td>1,274,000,000</td>
<td>20</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>1,905,000,000</strong></td>
<td><strong>30</strong></td>
</tr>
<tr>
<td><strong>State Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STIP (Regional and Interregional)</td>
<td>1,797,000,000</td>
<td>28</td>
</tr>
<tr>
<td>State Transit Assistance (STA)</td>
<td>460,500,000</td>
<td>7</td>
</tr>
<tr>
<td>State Highway Operation and Protection Program (SHOPP)</td>
<td>1,000,000,000</td>
<td>16</td>
</tr>
<tr>
<td>State Aid to Airports</td>
<td>3,000,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>3,260,500,000</strong></td>
<td><strong>52</strong></td>
</tr>
</tbody>
</table>
Local Revenue

Funding from local sources contributes nearly one-third of the revenues to this RTP. Major contributions to local revenue include: Local Transportation Funds (8%), bus transit farebox (3%) and other local funding such as developer fees and general funds (23%).

Local Transportation Funding Sources

One potential local revenue source not identified in Table 5-1 is a dedicated sales tax measure to fund transportation infrastructure. As the largest county in the state without a separate sales tax for transportation, Kern could generate approximately $900 million over 20 years, which would finance many necessary transportation improvements. Sales tax monies are also used throughout the state to leverage state and federal transportation dollars to construct improvements on the state highway system. Unlike general tax increases, these dollars would remain in Kern County and would be used for specific highway, transit and air quality improvements. A sales tax measure was placed on the November 2006 ballot but was defeated. The measure will likely be brought back to the voters of Kern County on the 2008 ballot.
Another potential source of local funding for Kern County are transportation impact fees (TIFs). Outside metropolitan Bakersfield, most developments currently do not pay a fare-share impact fee to offset the costs of constructing regional street or highway improvements. The impact fee is designed to collect the difference between the cost of the new roads attributable to new development and the amount of gas tax revenues that the new development will produce for the County or cities to use in road construction. Kern COG has undertaken a series of studies to assess the potential for future TIF programs within unincorporated county areas and small cities. Several small cities have implemented new TIFs including Tehachapi and McFarland; Delano, Shafter and Wasco are close to adopting new TIFs. The County of Kern has adopted a new TIF for the greater Tehachapi area, and the County will continue to review growing unincorporated areas and develop identical programs when appropriate.

**State Revenue**

State funding sources constitute about 58% of the total 24-year transportation budget. Most of these monies come from the State Transportation Improvement Program (STIP) (32%) and the State Highway Operation and Protection Program (SHOPP) (18%). State Transit Assistance funds make up the remaining 18%.

The 2006 state elections produced positive results for statewide infrastructure bond measures. The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006, approved by the voters as Proposition 1B on November 7, 2006, includes a program of funding from $4.5 billion to be deposited in the Corridor Mobility Improvement Account (CMIA). Other bond opportunities include the State Route 99 Program, Trade Corridor Program and a State-Local Partnership Program. Kern COG will participate in the submittal of candidate projects beginning with the CMIA. Some of the candidate projects are already part of Table 4.1; others are listed in Table 4.2. Should Kern be successful in receiving new programming under any of these new bond programs, the Destination 2030 will be updated as required.

**Federal Revenue**

Approximately 8% of the transportation funds for the Destination 2030 RTP program of projects come from federal funding sources. For purposes of discussion in this document, the STIP and SHOPP programs were considered as state revenue programs; however, their funding is approximately 80% federal highway funds or 40% of the estimated state revenues discussed above. Federal Transit Administration dollars constitute approximately 2% of all RTP funds. These funds are generally used to support transit capital and operating needs. Federal sources also include flexible funding programs such as Surface Transportation Program (STP), Congestion Mitigation / Air Quality Improvement Program (CMAQ), and Transportation Enhancement (TE). In the Destination 2030 RTP, STP, CMAQ and TE total approximately 4% of anticipated funds. The remaining 2% includes 1% for safety projects and another 1% for aviation funding.

Federal revenue estimates in Table 5-1 are consistent with federal fund estimates resulting from the passage of SAFETEA-LU (August 10, 2005), or Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users. Since its enactment, Caltrans has distributed information with regard to annual estimates for use in the programming of new transportation projects. Also included in the table are SAFETEA-LU federal earmarks from Sections 1301, "Projects of National and Regional Significance, Section 1302 – National Corridor Infrastructure Improvement Program and Section 1701 – High Priority Projects Programming, totaling $720 Million. These earmarks are considered a one-time revenue opportunity and are not extended throughout the 24-year life of this document.
Baseline Expenditures

Given the Destination 2030 RTP’s baseline cost estimate of $6.3 billion, Figure 5.2 illustrates the mode split for the region. The data show that about 80% of the region’s baseline costs are dedicated to street and highway improvements or maintenance. Twenty percent of expenditures are for transit operating and capital needs. The remaining 3% of RTP expenditures are for transportation control measures, aviation, and non-motorized projects.

Figure 5.2 Transportation Investments by Mode 2007-2030

![Pie chart showing transportation investments by mode]

Financial Constraint Demonstration

Kern COG has assembled a comprehensive inventory of the transportation revenue programs currently in use by all governmental entities (federal, state and local) and has projected these revenues based on historical averages over the life of the RTP. The financial revenue projections are based on the best available data from existing sources (i.e., FHWA, Caltrans, Kern COG historical programming data, member agency information). Following are a series of graphs (Figure 5.3 through Figure 5.8) that illustrate, by mode, how the revenues could be constrained and balanced with anticipated investments.
Figure 5.3 Financial Resources for Non-Transit Transportation Control Measures

- CMAQ: 90%
- Local Match: 10%

Figure 5.4 Financial Resources for Public Airport Projects

- Federal Aid to Airports: 94%
- State Aid to Airports: 6%
**Figure 5.5 Financial Resources for Bus Projects**

- Regional Service – 120 Replacement Buses
  - 2 Percent - $1.8 Million
- Regional Service – 120 New Service Buses
  - 5 Percent - $6 Million
- Metro Bakersfield – 120 Replacement Buses
  - 39 Percent - $45 Million
- Metro Bakersfield – 120 New Services Buses
  - 40 Percent - $45 Million
- Intelligent Transportation Systems
  - 3 Percent - $3 Million
- Park and Ride Lot Improvement
  - 3 Percent - $3 Million
- Transfer Stations
  - 3 Percent - $3 Million

**Figure 5.6 Financial Resources for Road Rehabilitation and Safety Projects**

- Regional Streets and Roads
  - 24 Percent - $550 Million
- State Highway Maintenance
  - 45 Percent - $1 Billion
- Transit Operations & Maintenance
  - 31 Percent - $709 Million
Funding Shortfall of $2.3 Billion

To further assess the region’s financial outlook, baseline revenues were matched against a program of projects that have been divided into two groups: constrained and unconstrained. The Unconstrained Program of Projects (Table 4.2) lists projects considered necessary for development of Kern County’s transportation infrastructure, but for which funding cannot be reasonably expected within the timeframe of this RTP. This comparison clearly indicated that the Kern region will experience funding deficits to operate, maintain, and rehabilitate its existing transportation system over the Destination 2030 RTP timeframe. While the shortfall is shown as approximately $2.3 billion, it is actually much greater because some projects do not as yet have actual cost estimates. Such projects as high-speed rail improvements and grade-separation...
projects (over- and under-crossings) do not have identified funding. Some grade separations have been included as components of street widenings, while many are stand-alone projects. Costs will vary based on right-of-way purchase in addition to construction costs. A baseline cost estimate on the order of an additional $8 million per project for grade separation projects could be added to the $2.3 billion identified shortfall.

The extensive list of unconstrained projects, including regionally significant highway improvements, interchanges, regional roadway improvements, rail and bus service, railroad grade crossings, transportation control measures and deferred roadway maintenance paints a vivid picture of Kern County's need for additional revenue.

Funds to support operations and maintenance - whether it be street and highway, bus and rail, or transportation demand management programs - are the most difficult to find. Historically, the Kern region has relied heavily on local monies for these operating funds.

Operating funds for streets and road maintenance have been available traditionally through gas taxes, Transportation Development Act (TDA) funds and flexible federal transportation funds; however, TDA funds in support of street and road maintenance projects are not expected to continue. With increasingly fuel-efficient vehicles and the rising cost of gasoline, revenues from gas taxes are not expected to increase at more than a nominal rate.

For transit, some relief is available in the form of operating subsidies, which SAFETEA-LU has increased moderately. No alternative funding source has been identified to augment these funds. Thus, the Kern region's shortfall could easily double over the amount of constrained funding.
Future Revenue Shortfalls for Transportation Maintenance and Expansion

**Problem: Federal Energy/Environmental Policies Undermining Transportation Goals** - The recent increase of supplemental gas tax funding sources such as toll freeways in southern California, sales tax measures, and transportation impact fees on new development may be symptomatic of a much larger issue. Federal transportation, energy and environmental policies are linked by the use of federal tax law involving motor fuels to advance national objectives. However, these tax policies are often debated and decided on separately, resulting in policies that sometimes contradict goals and objectives in another policy areas.

In 1956, the federal Highway Trust Fund was established to ensure that America would have a "pay-as-you-go" system for funding needed highway and bridge improvements. The principle was: The more you drive or use the roads, the more you pay to build and maintain them. Congress, in its 2004 transportation-funding bill, reaffirmed this principle. However, current public investment in road, bridge and mass transit improvements financed by highway user fees is not sufficient to maintain the system's physical condition and has left local governments scrambling to find alternative funding sources to fund their transportation infrastructure. Two specific issues exacerbate this situation.

**Cause: Improved Fuel Economy Threatens Highway Trust Fund Revenue** - Since the 1970s, vehicle manufacturers have struggled to meet federal requirements for fuel economy. While improvements to fuel economy allow more travel on the overall transportation system, lower tax revenues generated per mile of travel result in increased wear and tear on the system. From 1970 to 2000, the average vehicle fuel economy (for all cars and trucks) has improved 42% (from 12 mpg to 17 mpg). If today’s vehicle fleet had remained at 12 mpg, gas tax revenues would be $46 billion higher than the current $110 billion per year (federal, state and local). If this trend continues over the next 30 years, the potential loss in gas tax revenue per vehicle mile traveled could drop by a third, furthering problems in maintaining the system. The vehicle manufacturers’ commitment toward providing more fuel-efficient gasoline-electric hybrids; the promise of hydrogen fuel cell technology; increased fuel costs that motivate consumers to purchase these vehicles will likely accelerate this trend. A more fuel-efficient national vehicle fleet is a worthy national policy to reduce dependence on foreign oil, but a mechanism is needed to preserve the nation’s transportation infrastructure investment.

**Cause: Use of Gas Tax Revenue to Promote Alternative Fuels/Modes** - In addition to highway maintenance and expansion, small portions of the gas tax are used for programs like deficit reduction and improved air quality. The Congestion Management and Air Quality (CMAQ) Program uses 3% of federal gas tax funds to reduce transportation-related emissions in areas that do not attain federal clean air standards. Projects using CMAQ funds are required to demonstrate a reduction in emissions, usually by reducing gasoline/diesel fuels consumption through the use of alternative fuels. Many of the projects result in a reduction in gas sales and subsequent loss of tax revenue. CMAQ is an effective program that provides funds to help clean the air in non-attainment areas and has only a relatively minor impact on gas tax revenue; however, it is one of many instances of federal energy and environmental policies undermining the “pay-as-you-go” policy of the transportation systems.

**Possible Solution: Transportation Funding Overhaul Needed** Many revenue mechanisms are being considered to augment the gas tax. They include: gas tax increases, sales tax measures, transportation impact fees on new development, and tolls. One system to consider for augmenting or replacing the current flat rate gas tax system has been implemented for trucking in Europe. The Swiss version of the system uses satellite Global Positioning Systems (GPS) technology and tachometer data that is uploaded to the Internet to create a travel log for calculating a toll fee based on the vehicle’s location.
Alternative transportation funding mechanisms would provide incentives to carry out national policies for cleaning the air and conserving fuel while reducing deterioration of the existing transportation infrastructure and providing increased capacity where needed. A variable toll rate based on weight per tire is an example of an incentive that would promote the reduction of wear and tear on the highway system. With such a variable rate, trucking companies might consider adding more axles to reduce per tire weight (and subsequent road wear) to reduce their toll fees.

With a toll-based system, congestion pricing becomes an option. Trips in heavily congested areas during peak hours could also be billed a higher toll to fund increased transportation capacity and provide an incentive for drivers to seek alternative modes at these times.

Implementing a toll-based system would have some significant hurdles. The public often view tolls as double taxation; that is, tolls being paid in addition to the gas tax. In addition, toll plazas are not viewed as convenient. However, a toll-based system for trucks could eliminate the passenger vehicle subsidy for maintenance on highways created by trucking. Eighty percent of the wear and tear on the nation’s roads is attributed to heavy trucks while they only account for approximately 20 percent of the total fuel tax revenue and 8 percent of the total vehicle miles traveled. Despite this, in southern California, the trucking industry is advocating incentives such as using the toll funds to build commercial “All-Truck” toll facilities. The advantage to the trucking industry is that the lanes could be built to allow heavier loads and longer train sets (triple trailers) that cannot currently operate in California. In the interim, local governments will have to focus more on local funding sources to make up the funding shortfall in the face of ever-increasing vehicle use and congestion.
Chapter 6  ENVIRONMENTAL JUSTICE

Planning Approach

The goal of Kern COG’s Environmental Justice process is to ensure that all people, regardless of race, color, national origin or income, are protected from disproportionate negative or adverse impacts caused by the Destination 2030 RTP Program of Projects.

This chapter examines the methodology Kern COG uses to determine whether all neighborhoods have reasonable shares of the benefits from the Destination 2030 RTP. Chapter 6 incorporates by reference Kern Council of Governments’ Environmental Justice Report dated November 2003, and adopted at its January 15, 2004 public hearing, as well as Kern Council of Governments’ Environmental Justice Policies and Procedures, adopted at the same public hearing. This chapter has been updated with a revised analysis using the latest planning assumptions as of August 2006 and using the same adopted procedures.

Background

The legal basis for environmental justice (EJ) is rooted in the United States Constitution of the United States and civil rights laws. Title VI of the Civil Rights Act of 1964 provides protection from discriminatory actions or results from programs or activities receiving federal financial assistance. Title VI not only bars intentional discrimination, but it also prohibits unjustified and disparate-impact discrimination, i.e., a neutral policy or practice that has a disparate impact on protected groups. As a governmental agency receiving federal funding, Kern Council of Governments is responsible for implementing Title VI and conforming to federal environmental justice principles.

President Clinton signed Executive Order 12898 in February 1994 that considered Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Population. EO 12898 requires that federal agencies shall, to the greatest extent allowed by law, administer and implement their programs, policies, and activities that affect human health or the environment so as to identify and avoid disproportionately high and adverse effects on minority and low-income populations.

Kern COG’s environmental justice principles are:

1. To avoid, minimize or mitigate disproportionately high and adverse human health or environmental effects, including social and economic impacts, on traditionally disadvantaged communities, especially racial minority and low-income communities;
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 populations and low-income populations.

Demographic Profile

Kern County is California’s third largest county, encompassing approximately 8,200 square miles. Kern County comprises 11 incorporated cities and a federally recognized urban area, Metropolitan Bakersfield, with a population of just over 400,000 (2000 Census), as well as 42 Census-recognized unincorporated communities.

Federal environmental justice guidelines call for identification of traditionally under-represented populations, including classified minorities such as those of Hispanic/Latino descent, African-Americans, Asian-Americans, Native Americans and others, as well as low-income populations. To these groups, Kern COG added seniors of 65 and older, and the disabled.
Kern County Population = 780,000

<table>
<thead>
<tr>
<th>Percentage of Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
</tr>
<tr>
<td>Hispanic / Latino</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Native American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

Approximately 17% of households and 21% of individuals live below the federal poverty line, generally defined as $16,090 for households (of three members) and $9,570 for individuals.

In addition, 9.4% of the county’s population identify themselves as seniors age 65 and older, while 22.4% of the civilian non-institutionalized population is considered to have a disability.

Kern County has experienced a rapid population growth in the past decade. Census data indicates that the county has gained more than 118,000 persons from 2000 to 2006, which translates to a 15% increase. However, this population growth is not equally distributed among racial groups. Racial minorities experience a much faster population growth rate, based on the data from the 2000 Census. Countywide, the proportion of whites declined noticeably in the past decade, down from 63% in 1990 to 50% in 2000. All racial minorities except Asians have experienced gains in the population share. It is likely that the racial composition of the population growth will follow this pattern in the near future, mirroring the general population growth pattern for the State. Consequently, addressing these racial minority neighborhoods’ special transportation needs becomes even more urgent and significant in Kern COG’s transportation planning efforts.

From 1990 to 2000, the Hispanic population grew from 28% to 38% of Kern County’s total population. The rise and shift in Kern County’s population is primarily because of births within the Hispanic population, along with an influx of new immigrants. The next largest non-Hispanic population groups (Black: 6%; Asian: 4%; and American Indian: 2%) each increased by 1% over the past decade, according to the California Dept. of Finance. This population growth mirrors the rest of the state, which is one of the most diverse in the nation. Population growth resulted from large net increases in three population groups: aging baby boomers, their young children (echo boomers) and immigrants, mostly from Mexico and Central America.

Natural increase (births minus deaths) accounted for most of the population gain between 1990 and 2002. Natural increase accounted for 61% of the population gain and net migration, that is, those moving in minus those moving out of the region, accounted for 39%. Nearly two-thirds of the net migration was the result of immigration from outside the U.S.

Kern County’s changing demographics necessitate a shift in the manner environmental justice concerns are received and addressed.

**Environmental Justice Process**

In January 2002, Kern COG appointed representatives from 22 government and community-based agencies to serve on an environmental justice task force. In addition to the environmental justice populations identified by FHWA and FTA - non-white and low-income groups - Kern COG added senior citizens and transportation-disabled individuals to its list of “targeted” groups. The agencies were chosen based on the services they provided to environmental justice populations.

Participating agencies included:
- Native American Heritage Council
- Kern County Economic Opportunity Corporation
- Kern Senior Collaborative/Center for Living and Learning
The task force was provided an overview of requirements that government agencies such as Kern COG must meet to conform to federal mandates as well as graphic representations of the environmental justice populations using 2000 Census data for the county as a whole and metropolitan Bakersfield in particular. Distributions included:

- Non-white people
- People age 65 and older
- Transit-disabled people (defined as those who declared themselves unable to go outside the home alone to shop or attend appointments because of a disability)
- Hispanics/Latinos
- Low-income households (defined as households at or below the federal poverty level)
- Zero car households.

Population Concentrations

The challenge was to identify all populations within the Kern region that qualify as “traditionally disadvantaged” without counting the same people more than once. In addition, because of Kern County’s farm- and oil-based economies, significant portions of both its rural and urban regions would qualify under one or more of the criteria if population “floors” were not established to represent minimum concentrations.

To account for these issues, Kern COG limited its inquiry to four populations: low-income, non-white, seniors and transit-disabled. Specific demographic groups, such as the homeless or migrant farm workers, were discussed as particularly identifiable. Because these groups often share characteristics with other groups already identified as traditionally disadvantaged, Kern COG determined that they were already being considered in the process.

Population concentrations of traditionally disadvantaged groups were established to better focus the examination onto particular neighborhoods rather than attempting to look at the entire county en masse. The maps showed significant concentrations of environmental justice populations outside more densely populated areas, but near major transportation facilities, such as Routes 46 (Wasco) and 178 (Lake Isabella).

Transportation System Criteria

For its environmental justice program, Kern COG assessed environmental justice impacts using the same criteria identified in Destination 2030’s Transportation Planning Policies Element. Eight criteria were used to assess environmental justice impacts. They comprised:

- Accessibility – the ease of reaching destinations as measured by the percent of commuters who can get to work within a given period of time;
- Mobility – the ability to move throughout the region and the time it takes to reach desired destinations within a reasonable amount of time;
• Environment – enhancing the existing transportation system while improving the environment;
• Cost-effectiveness – maximizing the return on transportation investments;
• Reliability – percentage of on-time arrivals by both transit and automobiles;
• Safety – minimizing risk of accidents/injuries as measured by accident rates;
• Equity – equitable distribution of transportation investment benefits;
• Consumer satisfaction – conditions under which users agree that their transportation needs are being met in a safe, reliable, efficient and cost-effective manner.

Transportation System Objectives

This set of objectives is intended to define measurable outputs that ensure transportation system investments benefit all populations, without consistently burdening any single one.

Because Kern COG’s transportation model was not calibrated to address rural transit operations, it was difficult to establish specific, time-constrained goals for transit that could be measured effectively. The transportation model is a computerized database that assimilates data from physical traffic counts to establish baseline travel patterns. By adding past and current Census data to the model, travel pattern projections can be forecasted to 2030. Census data that addresses such issues as the number of miles traveled to work, how many vehicles per household, and the number of drivers per household are particularly germane in modeling transportation behavior.

With the model’s inability to reliably test transit travel times, Kern COG worked to broaden its Destination 2030 RTP goals and policies to ensure that EJ populations fared no worse than the region as a whole for accessibility and mobility. Furthermore, because the model is incapable of predicting such factors as accident rates, project impacts on the environment, and transportation system investments, Kern COG chose to compare countywide averages versus identified EJ areas for each of the eight criteria. This level of analysis demonstrates whether EJ areas fare better or worse than the general population.

Objectives for the eight criteria include:

Accessibility
a. Projects in the Destination 2030 RTP will bring services for environmental justice populations up to countywide average.
b. If already maintaining countywide average, projects in the Destination 2030 RTP will show no degradation of service.

Mobility
a. Projects in the Destination 2030 RTP will bring services for environmental justice populations up to countywide average.
b. If already maintaining countywide average, projects in the Destination 2030 RTP will show no degradation of service.

Environment
Projects in the Destination 2030 RTP will demonstrate no difference in unmitigated impacts between environmental justice populations and the Kern region as a whole.

Cost-Effectiveness
In environmental justice areas, projects in the Destination 2030 RTP will show an average cost per passenger mile for both auto and transit that is no less than the countywide average.

Reliability
1. Projects in the Destination 2030 RTP will provide 85% on-time arrivals (transit).
2. Environmental justice areas will suffer the same or less congestion in vehicle hours traveled as Kern County as a whole (auto).

**Safety**
On new facilities inside environmental justice areas, projects in the Destination 2030 RTP will demonstrate no more accidents than the Kern County average.

**Equity**
Accounting for context-sensitive design factors, projects in the Destination 2030 RTP will show an equitable distribution of transportation expenditures, inside and outside environmental justice areas.

**Consumer Satisfaction**
Projects in the Destination 2030 RTP will maintain delay times for environmental justice areas that are less than or meet the Kern County average.

**Measurement of Objectives**
Kern COG’s transportation model was used to develop tangible Environmental Justice measures that would assist the agency in meeting its objectives. The model’s limitations necessitated a substantial financial investment for upgrades to measure accurately transit trip times and lengths, as well as to compare all trip times and lengths between metropolitan Bakersfield and more rural areas of the county.

For criteria whose objectives the model was unable to quantify (such as environment, reliability, safety and equity), Kern COG developed other measures based on Census and accident data. Measurements for the eight criteria include:

**Accessibility**
1. Average automobile trip time to major job centers (from target urban neighborhoods to major job centers)
2. Average transit travel time to major job centers (from target urban neighborhoods to major job centers)
3. Average automobile trip time to major job centers (from target rural neighborhoods to major job centers)
4. Average transit time to major job centers (from target rural neighborhoods to major job centers)

**Mobility**
1. Average travel time for all trips by automobile (urban)
2. Average travel time for all trips by transit (urban)
3. Average travel time for all trips by automobile (rural)
4. Average travel time for all trips by transit (rural)
5. Average travel time for all trips by automobile (countywide)
6. Average travel time for all trips by transit (countywide)

**Environment**
1. Conformity with the Clean Air Act Amendments of 1990 according to measures of pollutants such as nitrous oxide and reactive organic gases

**Cost-Effectiveness**
1. Average cost per passenger mile (urban, auto, countywide)
2. Average cost per transit trip mile (urban, transit, countywide)
3. Average cost per passenger mile (urban, auto, EJ target areas)
4. Average cost per transit trip mile (urban, transit, EJ target areas)
5. Average cost per passenger mile (rural, auto, EJ target areas)
6. Average cost per transit trip mile (rural, transit, EJ target areas)

**Reliability**
1. Reasonably dependable levels of service as measured by percent of on-time arrivals
2. Reasonably dependable levels of service as measured by congestion on highways

**Safety**
1. Number of high crash locations improved

**Equity**
1. Investment comparisons across modes of transportation, including livable and/or walkable communities
2. Distribution of planned transportation expenditures inside and outside of target-communities/neighborhoods

**Consumer Satisfaction**
1. Average trip delay time (urban, auto, countywide)
2. Average trip delay time (rural, auto, countywide)
3. Average trip delay time (urban, auto, EJ area)
4. Average trip delay time (rural, auto, EJ area)
5. Average trip delay time (urban, transit, countywide)
6. Levels of service on roads countywide (A-F)
7. Levels of service on roads in EJ target areas (A-F).

Level of Service (LOS) is the standard "yardstick" to categorize the flow and efficiency of highways, roads, and intersections.

<table>
<thead>
<tr>
<th>LOS</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS A</td>
<td>Free flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection)</td>
</tr>
<tr>
<td>LOS B</td>
<td>Generally stable traffic flow conditions</td>
</tr>
<tr>
<td>LOS C</td>
<td>Occasional back-ups may develop, but delay to vehicles is short-term and still tolerable</td>
</tr>
<tr>
<td>LOS D</td>
<td>During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e., vehicle delayed one cycle or less at signal)</td>
</tr>
<tr>
<td>LOS E</td>
<td>Intersections operate at or near capacity, with long queues developing on all approaches, and long delays</td>
</tr>
<tr>
<td>LOS F</td>
<td>Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times</td>
</tr>
</tbody>
</table>

**Project-Level Evaluation**

General funding priorities addressing equity across transportation modes are handled primarily through the RTP. Because capital projects identified in this RTP will be funded and move toward completion by the time they are included in the short-range Federal Transportation Improvement Program (FTIP), EJ concerns at the later stage will address project-specific issues.

Fundamental questions about whether a specific project should be prioritized over any other or generally where the project should be located are decided through the RTP process; attempting to do so at the FTIP level is too late. Conversely, the RTP cannot hope to answer environmental questions or aesthetic issues about a specific project. Those project-level questions will be addressed at Caltrans’ and/or local agency workshops as projects move forward.
Modeling Results

Once EJ populations were identified and mapped – and criteria, measures and goals established – Kern COG used the transportation model to determine whether the goals for mobility, accessibility, cost-effectiveness, consumer satisfaction, reliability and safety were being met.

The process involved preparing and testing a series of “scripts” or small programs that allow the model to run projections for the 1998 base year and future years on measures established for environmental justice criteria. Specific model scripts requested were:

- **Accessibility** – Calculate average trip time by mode (auto and transit) to major job centers from a group of approximately 600 Traffic Analysis Zones (TAZs).
- **Mobility** – Calculate average trip time by mode (auto and transit) from environmental justice TAZs and countywide.
- **Cost-effectiveness** – Passenger miles traveled. Calculate passenger miles traveled by both vehicle and transit networks for current and planned transit projects (increased headway, new routes) and capacity increasing road projects links in future years, inside EJ TAZs and countywide. These figures are divided by the total investment in these projects and used to calculate their cost-effectiveness.
- **Reliability** – Calculate the distance of level of service D through F links inside environmental justice TAZs and countywide.
- **Consumer satisfaction** – Calculate the average trip delay after feedback between constrained and unconstrained road ways on links inside EJ TAZs and countywide.\(^1\)
- **Safety** – Calculate the percentage increase between property damage, injury and fatal accident rates between base year 1998 and 2030.

The model base year for this analysis is 1998. A new model base year validation is underway but was not completed in time for this analysis. Since the model being used was validated to 1998 counts, interpolating a more recent base year would not likely alter the results because it is still using the same base year data.

Environment was not included in the model because it is not a component the model can measure readily. The model generated several factors, including: travel times, vehicle miles traveled, passenger miles traveled, transit boardings, transit trip hours, transit trip distance and miles of LOS C or worse roads for 1998 (base year), 2030 build scenario, and the 2030 no-build scenario. The 2030 build scenario assumes all projects listed in Table 4-1 of the Destination 2030 Regional Transportation Plan will have been completed, whereas the no-build scenario assumes 2030 traffic on the same network used in 1998. An additional assumption was that funding sources and technology will remain constant. The model also stratified its factors along three separate lines: All of metropolitan Bakersfield (urban); all other areas of Kern County, including the 10 other incorporated cities (rural); and countywide. Kern COG paid particular attention to the accessibility and mobility criteria because they represented overall system performance now and in the future.

**Mobility**

Mobility is defined as the ability to move throughout the region, and the time it takes to reach desired destinations. The criterion is measured by calculating average travel times during the base year 1998, in 2030 when all RTP projects are completed, and in a 2030 no-build scenario where none of the RTP projects are completed. The goal for mobility is to demonstrate that EJ TAZs perform better, or at least no worse, than the countywide average. Peak highway and transit trip periods (evening commute times) were used to demonstrate the worst-case scenario.

\(^1\) Delay refers to the amount of additional time a vehicle spends on the road because of congestion. Constrained and unconstrained roads refer to those streets, highways or freeways where congestion is either typical or atypical.
Metropolitan Bakersfield’s average travel time in 1998 for all trips was 15.17 minutes, compared to a rural time of 17.25 for a countywide average of 16.15. In considering just metro Bakersfield’s EJ TAZs, the average travel time was 14.68, versus rural EJ TAZs at 14.43, for a countywide average of 14.6 minutes. During the 1998 base year, EJ TAZs throughout the county enjoyed shorter average travel times than the county as a whole. As depicted in the chart below, that trend is maintained over both the 2030 build and the 2030 no-build scenario. On the whole, people living in EJ TAZs will have shorter average travel times anywhere within the county than the county will have as a whole.

**Average Travel Time – Peak Highway Trips (in minutes)**

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>15.17</td>
<td>16.27</td>
<td>18.67</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>17.25</td>
<td>16.07</td>
<td>16.76</td>
</tr>
<tr>
<td>Countywide</td>
<td>16.15</td>
<td>16.18</td>
<td>17.77</td>
</tr>
</tbody>
</table>

**EJ TAZs Average Travel Time – Peak Highway Trips**

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>14.68</td>
<td>15.47</td>
<td>16.32</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>14.43</td>
<td>16.1</td>
<td>16.91</td>
</tr>
<tr>
<td>Countywide</td>
<td>14.6</td>
<td>15.68</td>
<td>16.51</td>
</tr>
</tbody>
</table>

Because rural transit ridership comprises such a small percentage of trips throughout the county as a whole, and because no data is kept by rural transit agencies regarding trip lengths and travel times, staff is unable to compare the rural transit network to the Golden Empire Transit system in metro Bakersfield. However, in judging average travel times for transit trips between EJ TAZs in Bakersfield and the rest of Bakersfield as a whole, EJ TAZs also continue to fare better in this category across the board. In 1998, the average peak hour transit trip took 46.33 minutes in Bakersfield. However, transit trips emanating from EJ TAZs were clocked at 46.21 minutes. In 2030, the model estimates the difference to increase from 48.34 minutes in Bakersfield as a whole to 46.71 minutes in Bakersfield EJ TAZs.

**Average Travel Time – Peak Transit Trips**

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>46.33</td>
<td>48.34</td>
<td>45.84</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>46.33</td>
<td>48.34</td>
<td>45.84</td>
</tr>
</tbody>
</table>

**EJ TAZs Average Travel Time – Peak Transit Trips**

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>46.21</td>
<td>46.71</td>
<td>45.11</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>46.21</td>
<td>46.71</td>
<td>45.11</td>
</tr>
</tbody>
</table>

No data are maintained on average travel times for rural fixed route and dial-a-ride services. The countywide average listed under Average Travel Time – Peak Transit Trips and EJ TAZs Average Travel Time – Peak Transit Trips reflects statistics on the Golden Empire Transit network only. Rural transit ridership is a small percentage of countywide and would result in a negligible increase.
Accessibility

Accessibility differs from mobility in that it is measured by commuter trip times to major job centers rather than overall trip times. Major job centers are defined as those TAZs containing employment sites with 75 or more workers. Specifically, accessibility is defined as the ease of reaching destinations as measured by the percent of commuters who can get to work within a given period of time. As with mobility, the goal is to ensure that commuters in EJ TAZs throughout the county have average trip times that are shorter, or at least no longer, than the county as a whole.

In 1998, the average trip length from anywhere in Bakersfield to a major job center was 15.64 minutes. For areas outside Bakersfield, the time was approximately five minutes longer – 20.73 minutes. The average commute time to a major job center in Kern County was 18.03 minutes in 1998. This compares to 15.55 minutes for all commutes from EJ TAZs to major job centers throughout the county in 1998.

EJ TAZs generally fare better across the board against urban, rural and countywide averages for commutes to major job centers, under the 2030 build and 2030 no-build scenarios. This is true for both private vehicle trips countywide and transit trips in Bakersfield. Rural transit data are unavailable.

### Average Travel Time to Major Job Centers - Highway

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>15.64</td>
<td>16.22</td>
<td>19.28</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>20.73</td>
<td>21.8</td>
<td>23.06</td>
</tr>
<tr>
<td>Countywide</td>
<td>18.03</td>
<td>18.86</td>
<td>21.07</td>
</tr>
</tbody>
</table>

### Average Travel Time from EJ TAZs to Major Job Centers - Highway

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>14.96</td>
<td>14.92</td>
<td>15.91</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>16.77</td>
<td>18.84</td>
<td>19.92</td>
</tr>
<tr>
<td>Countywide</td>
<td>15.55</td>
<td>16.21</td>
<td>17.23</td>
</tr>
</tbody>
</table>

### Average Travel Time to Major Job Centers - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>46.87</td>
<td>48.98</td>
<td>46.91</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>46.87</td>
<td>48.98</td>
<td>46.91</td>
</tr>
</tbody>
</table>

### Average Travel Time from EJ TAZs to Major Job Centers - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030 Build</th>
<th>2030 No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>47.64</td>
<td>47.91</td>
<td>46.67</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>47.64</td>
<td>47.91</td>
<td>46.67</td>
</tr>
</tbody>
</table>

---

3 No data are maintained on average travel times for rural fixed route and dial-a-ride services. The countywide average listed under Average Travel Time – Peak Transit Trips and EJ TAZs Average Travel Time – Peak Transit Trips reflects statistics on the Golden Empire Transit network only.
Cost-Effectiveness

Cost-effectiveness is measured by maximized returns on transportation investments. Staff calculated this criterion by dividing the average daily investment from the RTP projects through 2025 by the average number of daily passenger miles traveled (PMT) on the transportation network, both inside and outside of EJ TAZs.

In the metropolitan Bakersfield area, the average daily investment in roads will amount to $.0019 per PMT versus $.0023 per PMT in Bakersfield EJ TAZs. In rural areas outside Bakersfield, the cost is $.0022 versus $.0025 in rural EJ TAZs. For transit service in Bakersfield, the daily investment per PMT is $.0724, versus $.0723 in Bakersfield EJ TAZs. While the daily investment per PMT for roads indicates that the transportation system will meet the goal of spending more money per PMT in EJ areas than in the county as a whole, the transit system does not measure up to that criterion, with all factors constant. However, more funding will be spent per PMT in EJ TAZs than the county as a whole, and mobility and accessibility for EJ TAZs will also be higher. Because the cost-effectiveness criterion assumes that RTP projects will be built, the no-build scenario is not displayed.

Average Daily Investment per Passenger Mile Traveled - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>$.0019</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>$.0022</td>
</tr>
<tr>
<td>Countywide</td>
<td>$.0021</td>
</tr>
</tbody>
</table>

Average Daily Investment per Passenger Mile Traveled - Highways: EJ TAZs

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>$.0023</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>$.0025</td>
</tr>
<tr>
<td>Countywide</td>
<td>$.0024</td>
</tr>
</tbody>
</table>

Average Daily Investment per Passenger Mile Traveled - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>$.0724</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Average Daily Investment per Passenger Mile Traveled - Transit: EJ TAZs

<table>
<thead>
<tr>
<th>Region</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>$.0723</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
</tr>
</tbody>
</table>

---

4 Because Kern COG’s regional transportation model cannot estimate passenger miles traveled for rural transit services, estimates for daily investment per PMT countywide are unable to be made.
Equity

Equity is defined as a fair and reasonable distribution of transportation investment benefits (as a share of benefits). Kern COG took a similar approach to equity as with cost-effectiveness, comparing the total investment in roads and transit through 2030 with total passenger miles traveled in Bakersfield, rural areas and the county as a whole. All numbers were converted to percentages for simplicity.

In 2030, Bakersfield EJ TAZs will account for 39% of all passenger miles traveled in the region. However, approximately 47% of transportation expenditures will go directly into the metropolitan EJ TAZs. Similarly, rural EJ TAZs, will represent 18.2% of countywide PMT; however, 20.6% of all transportation funding will be spent in those areas. Countywide, approximately 26% of all passenger miles traveled will occur in EJ TAZs, which will collect 30% of funding and projects.

Although Kern COG cannot reliably project the number of passenger miles traveled by rural transit agencies in 2030, the model does predict that EJ TAZs in the metro Bakersfield region will make up approximately 61% of transit PMT. Those same TAZs, however, will receive 73% of all transit funding attributable to the metropolitan area. Stratification between metro and rural transit services is impractical because of the lack of a rural transit Passenger Miles Traveled variable.

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>22,214,339</td>
<td>$1,820,370,000</td>
<td>40.2</td>
<td>68.6</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>33,155,676</td>
<td>$831,438,000</td>
<td>59.8</td>
<td>31.4</td>
</tr>
<tr>
<td>Countywide</td>
<td>55,307,015</td>
<td>$2,651,808,000</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>8,229,806</td>
<td>$202,995,526</td>
<td>56.2</td>
<td>47.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>6,405,808</td>
<td>$162,630,218</td>
<td>43.8</td>
<td>20.6</td>
</tr>
<tr>
<td>Countywide</td>
<td>14,635,654</td>
<td>$365,265,744</td>
<td>26.4</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Percent of Expenditures versus Passenger Miles Traveled in 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>104,192</td>
<td>$96,000,000</td>
<td>N/A</td>
<td>85.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$16,800,000</td>
<td>N/A</td>
<td>14.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$112,800,000</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>58,088</td>
<td>$48,800,000</td>
<td>N/A</td>
<td>73.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$17,986,300</td>
<td>N/A</td>
<td>26.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$66,786,500</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Consumer Satisfaction

Consumer satisfaction is defined as the condition where consumers can largely agree that their transportation needs are being met in a safe, reliable, efficient and cost-effective manner. The criterion is measured by the daily amount of trip delay in hours. On roadways, trip delay refers the difference between the time a trip should take and the time it actually requires, or the difference between free-flow traffic and some level of congestion.

For example, between 1998 and 2030, Kern COG’s traffic model estimates the number of daily trip delay hours to rise from 43,724 to 104,022 - a 138 percent increase. However, in Bakerfield’s EJ TAZs, the number would increase from 26,164 to 49,212, an 88% rise. While neither scenario is desirable, EJ TAZs within Bakersfield continue to perform better than the area as a whole. The same situation is found in rural Kern County, where the delay goes from 19,971 delay hours to 51,537 by 2030, a 158% increase. Nevertheless, in rural EJ TAZs, delay time increases by 106% - from 6,906 hours in 1998 to 14,260 hours in 2030.

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030</th>
<th>Percent increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>43,724</td>
<td>104,022</td>
<td>138</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>19,971</td>
<td>51,537</td>
<td>158</td>
</tr>
<tr>
<td>Countywide</td>
<td>63,696</td>
<td>155,459</td>
<td>144</td>
</tr>
</tbody>
</table>

Average Trip Delay Time in Hours

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030</th>
<th>Percent increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>26,164</td>
<td>49,212</td>
<td>88</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>6,906</td>
<td>14,260</td>
<td>106</td>
</tr>
<tr>
<td>Countywide</td>
<td>33,070</td>
<td>63,473</td>
<td>91</td>
</tr>
</tbody>
</table>

Reliability

Reliability is the percentage of on-time arrivals for both transit and highway trips. For highways, it is measured by the number of hours daily that passengers spent in congestion. Congestion is measured by levels of service (LOS) on roadways and also by the amount of time in hours that a vehicle is not able to reach the speed limit on a given roadway segment. For transit, reliability is judged by the percent of on-time arrivals for each operator.

Golden Empire Transit District in Bakersfield has developed its own environmental justice analysis, “Title VI Update” last produced in April 2001 and updated in 2004. Based on observation through February 2004, GET estimates its on-time arrival rate at 92% of all trips. It does not stratify by EJ TAZ.

Congestion levels, measured by Kern COG’s traffic model in vehicle hours, show the worst degradation in rural EJ TAZs by 2030. According to the model, all rural roads outside metropolitan Bakersfield experienced a cumulative total of 18 hours of congestion daily or .04 percent. By 2030, that number will have risen to 17,103 hours or 17% of the total daily hours traveled.

5 In 1998, Rosamond Blvd., which leads to Edwards Air Force Base, was the only roadway outside metropolitan Bakersfield to report LOS D or worse traffic during peak commutes. In 2030, portions of at least 11 roads outside the metro area are expected to suffer LOS D traffic delays.

6 GET acknowledges potential bias in its observation system. Global positioning system hardware was installed on all GET buses in Winter 2003 ensuring a more accurate assessment of on-time arrivals.
By contrast, metropolitan Bakersfield will see the number of hours spent in congested traffic rise from 25,194 in 1998 to 151,789 in 2030. However, its 31% level of congestion to begin with is far greater than the rest of the county combined at 25%. Relative to increases regionally, EJ TAZs in Bakersfield, rural areas, and countywide still see lower levels of congestion than average by 2030.

### Average Level of Congestion in Hours

<table>
<thead>
<tr>
<th>Region</th>
<th>1998 Total Hours</th>
<th>1998 Congested Hours</th>
<th>Percent Congested Travel</th>
<th>2030 Total Hours</th>
<th>2030 Congested Hours</th>
<th>Percent Congested Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>218,544</td>
<td>25,194</td>
<td>12%</td>
<td>496,605</td>
<td>151,789</td>
<td>31%</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>208,265</td>
<td>7,014</td>
<td>3%</td>
<td>487,789</td>
<td>93,169</td>
<td>19%</td>
</tr>
<tr>
<td>Countywide</td>
<td>426,809</td>
<td>32,209</td>
<td>8%</td>
<td>984,394</td>
<td>244,958</td>
<td>25%</td>
</tr>
</tbody>
</table>

### Average Level of Congestion in Hours - EJ TAZs

<table>
<thead>
<tr>
<th>Region</th>
<th>1998 Total Hours</th>
<th>1998 Congested Hours</th>
<th>Percent Congested Travel</th>
<th>2030 Total Hours</th>
<th>2030 Congested Hours</th>
<th>Percent Congested Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>109,439</td>
<td>14,622</td>
<td>13%</td>
<td>197,171</td>
<td>54,182</td>
<td>27%</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>48,107</td>
<td>18</td>
<td>0.4%</td>
<td>99,554</td>
<td>17,103</td>
<td>17%</td>
</tr>
<tr>
<td>Countywide</td>
<td>157,547</td>
<td>14,622</td>
<td>9%</td>
<td>296,725</td>
<td>71,285</td>
<td>24%</td>
</tr>
</tbody>
</table>

### Safety

For Kern COG’s environmental justice policy purposes, safety is considered to be the minimal risk of accident or injury as measured by reduced accidents. While the model does make predictions regarding the number of accidents that cause property damage, injury and fatalities, it cannot stratify that information specifically by project, as the environmental justice safety goal requires. On new facilities inside environmental justice TAZs, projects outlined in the Destination 2030 RTP will demonstrate no more accidents than countywide average.

Despite the model’s inability to predict accident rates on specific projects, it does provide an aggregate look at annual accidents in 1998 compared to 2030. Results show that injury accidents in particular will rise sharply throughout the county by 2030; however, EJ TAZs will see half the rate increase for injury accidents as countywide. For example, in rural Kern County, the injury accident rate is predicted to rise from 996 in 1998 to 2,239 in 2030, a 124.8% increase. In rural EJ TAZs, however, the same type of accident will go from 214 to 425, a 49.65% rise.

### Annualized Accident Statistics for Annual Average Daily Traffic

<table>
<thead>
<tr>
<th>Region</th>
<th>1998</th>
<th>2030</th>
<th>Percent increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property damage</td>
<td>1,207</td>
<td>2,798</td>
<td>131.8</td>
</tr>
<tr>
<td>Injury</td>
<td>690</td>
<td>1,599</td>
<td>131.7</td>
</tr>
<tr>
<td>Fatality</td>
<td>43</td>
<td>101</td>
<td>134.9</td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property damage</td>
<td>1,742</td>
<td>4,176</td>
<td>139.7</td>
</tr>
<tr>
<td>Injury</td>
<td>996</td>
<td>2,387</td>
<td>139.7</td>
</tr>
</tbody>
</table>
Environment

Environment is defined as enhancing the existing transportation system while improving the environment. It is the one factor in Kern COG’s environmental justice criteria set that the transportation model cannot measure. Environmental effects vary wildly among different transportation projects, and can only be determined meaningfully on a project-by-project basis. The goal is for projects in the Destination 2030 RTP to demonstrate no difference in unmitigated impacts between environmental justice populations and the region as a whole. This goal is measured through conformity with the Clean Air Act Amendments of 1990 according to measures of certain pollutants such as nitrous oxide and reactive organic gases.

Both Kern COG’s long-range Destination 2030 RTP and the short-term Federal Transportation Improvement Program (FTIP) require a demonstration of air quality “conformity” prior to being adopted by Kern COG and the federal government. This conformity process is necessary because of the San Joaquin Valley air basin’s designation as non attainment for ozone and particulate. The process ensures that new transportation projects will either benefit, or at least have no negative effect on air quality. Kern COG’s conformity analysis for its most recent FTIP, was approved by the U.S. Department of Transportation in October 2006. A revised conformity analysis has been undertaken to support the Destination 2030 RTP and the 2007 FTIP.

Conclusion

Ideally, transportation projects not only achieve immediate transportation goals (such as congestion relief) but contribute to the betterment of our physical and socioeconomic environment. It is inevitable, however, that some transportation projects generate negative impacts as well. This chapter identifies the methodology used to determine the Destination 2030 RTP projects’ equitability and their overall cost and benefit to the residents of Kern County, particularly on traditionally-disadvantaged neighborhoods.
From a public information perspective, Kern COG’s commitment to environmental justice is demonstrable through its efforts at gathering public input. These efforts include broadcasting its monthly meetings on television; using display advertising and flyers to announce workshops and public hearings; and developing radio advertisements for long-range planning efforts. Kern COG staff has been visible in every community over the last two years during city council meetings, street fairs and community festivals. Press releases are generated at project milestones. Kern COG’s quarterly newsletter is distributed to over 1,000 organizations and individuals.

From a planning standpoint, the transportation model indicates that, with few exceptions, Kern COG has and will continue to divide its resources equitably, with no single population group suffering disproportionate and adverse effects from agency activity. Analyses demonstrated some shortcomings that will be addressed, however. For example, in Bakersfield during 1998, average transit commute times to major job centers took approximately 7% longer (about one minute) in metropolitan EJ Areas than in the city as a whole. The model predicts that this situation will be reversed by 2030, assuming all constrained RTP projects are completed.

Kern COG’s position that it is meeting the rigors of environmental justice is based largely on averages, and in some cases predicated on a worst-case scenario for every portion of the Kern region. The fact that delay times will rise by only 300 percent in EJ Areas versus 765% countywide over the long-term is nothing to trumpet; however, it does demonstrate that despite substantial financial commitments, and with all issues remaining constant, the Kern region’s transportation network will continue to deteriorate for every segment of the population. The transportation model simply shows that the transportation network will not deteriorate in EJ Areas as quickly as in the county as a whole.

Kern COG expects to re-evaluate its environmental justice policies and procedures at least every three to five years. In its initial analysis, Kern COG determined that several of the criteria were measured redundantly. For example, consumer satisfaction is measured in delay time whereas reliability is measured in the number of vehicle hours spent in congestion. The two measures, while different, may be similar enough to use one or the other, though not both.

Similarly, cost-effectiveness and equity both attempt to determine how expenditures are being divided between EJ Areas and the region as a whole. While each measure uses a different analysis method, the conclusions appear to be the same. Because environmental issues such as noise, air quality, wildlife disturbances, and context-sensitive design must be addressed through the mitigation process on a project-by-project basis, no substantive means are available to measure environmental effects as a criterion in this analysis.

Considering all the analyses as a whole, it is sufficient to conclude that the Destination 2030 RTP meets the environment justice requirements by ensuring that all of the population is subject to proportionate benefits and detriments. It also must be understood that environmental justice does not create an entitlement; however, it does attempt to assure that transportation projects do not have discriminatory effects or disparate impacts on any segment of the population, especially those traditionally disadvantaged groups such as racial minorities and low-income communities. The above analyses demonstrate that the Destination 2030 RTP has met those expectations.
Chapter 7  FUTURE LINKS

Corridor Preservation

It is important to identify and preserve transportation corridors needed to expand or enhance transportation for Kern County’s future. Kern region’s local governments will find it difficult to obtain optimal locations for these corridors unless efforts to preserve them are made early.

The American Association of State Highway and Transportation Officials (AASHTO) report on corridor preservation states that early efforts provide the following benefits:

- prevent inconsistent development;
- minimize or avoid environmental, social and economic impacts;
- prevent loss of desirable corridor locations;
- allow for orderly assessment of impacts;
- permit orderly project development; and
- reduce costs.

Ideally, planners and policy makers will begin preparing strategies for preserving corridors now as part of the long-range planning process. Planning prevents losing right-of-way that will become necessary for transportation beyond 2030. The County and cities can adopt a specific plan line to preserve open land in undeveloped and rural areas. More opportunities to capitalize on preservation are available in less urban areas, where local governments have an opportunity to obtain available land for new transportation facilities.

The first step to identify potential long-range corridors and determine that a need exists to preserve them. This will require intergovernmental coordination and should include a funding component. Next, criteria to evaluate and prioritize the selected corridors must be developed. Once a corridor is selected, environmental studies will be needed. Traditional preservation techniques include purchasing land and using government statutes to place a corridor alignment on a general plan land use and/or circulation map. Other state and federal funds can be used to assist in acquiring land for long-range corridors.

The following High Emphasis Interregional Routes are identified by Kern COG and Caltrans as high priority corridors. These corridors are also identified as future circulation needs in the respective city or county General Plan Circulation Elements.
High Speed Rail

California High Speed Rail Authority is proposing a high-speed train (HST) system for intercity travel between the major metropolitan centers of Sacramento and the Bay Area, through the San Joaquin Valley, to Los Angeles and San Diego. The HST system is projected to carry as many as 68 million passengers annually. The Authority adopted a final Business Plan in June 2000 that examined the economic viability of a train system capable of speeds in excess of 200 mph on a fully grade-separated track, with state-of-the-art safety, signaling, and automated control systems. Following adoption of the Business Plan, the Authority initiated an environmental review process as required by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), which was released to the public in early 2004.

The purpose of the proposed HST system is to provide a reliable mode of travel, which links the major metropolitan areas of the state and delivers predictable and consistent travel times. Further objectives are: (1) to provide an interface with commercial airports, mass transit, and the highway network; (2) to relieve capacity constraints of the existing transportation system as intercity travel demand in California increases; (3) to construct the proposed HST system in a manner sensitive to and protective of California’s unique natural resources. The system needs to be practicable and feasible as well as economically viable. The system should maximize the use of existing transportation corridors and rights-of-way, be implemented in phases, and be completed by 2020.

The state’s population is projected to increase by 31% by 2020, with the highest growth rate expected in the San Joaquin Valley and the greatest increase expected in the Los Angeles metropolitan area. The need for improved intercity transportation is demonstrated by the insufficient capacity of the existing transportation system to meet current and expected future travel demand. The need is also reflected in poor air quality, impaired travel reliability, and increased travel congestion and longer travel times. The interstate highway system and

---

<table>
<thead>
<tr>
<th>Post-2030 Long Range Corridors</th>
<th>Corridor</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inter- Regional Corridors</strong></td>
<td>Route 46 (New Alignment through Wasco)</td>
<td>City of Wasco; Caltrans; Kern COG</td>
</tr>
<tr>
<td></td>
<td>Route 58 (New Alignment - Route 99 west to I-5)</td>
<td>Caltrans; Kern COG</td>
</tr>
<tr>
<td></td>
<td>Willow Springs Expressway</td>
<td>Rosamond TIF; Kern COG; Caltrans</td>
</tr>
<tr>
<td><strong>Passenger Rail</strong></td>
<td>Link to Mammoth / Reno</td>
<td>Eastern Sierra Planning Partnership</td>
</tr>
<tr>
<td><strong>Kern County</strong></td>
<td>Centennial Corridor (Routes 58 &amp; 178)</td>
<td>City of Bakersfield; Kern County; Kern COG</td>
</tr>
<tr>
<td></td>
<td>South Beltway</td>
<td>City of Bakersfield; Kern County; Kern COG</td>
</tr>
<tr>
<td></td>
<td>West Beltway</td>
<td>City of Bakersfield; Kern County; Kern COG</td>
</tr>
<tr>
<td></td>
<td>East Beltway</td>
<td>City of Bakersfield; Kern County; Kern COG</td>
</tr>
<tr>
<td><strong>Intermodal Corridors</strong></td>
<td>Route 58 (Bakersfield to Tehachapi)</td>
<td>Caltrans; Kern COG</td>
</tr>
<tr>
<td></td>
<td>UP/BNSF Rail Corridor (Bakersfield to Tehachapi)</td>
<td>Caltrans; Kern COG</td>
</tr>
</tbody>
</table>
commercial airports serving the intercity travel market are operating at or near capacity in major parts of the system. In order to meet travel demand and future growth over the next 20 years and beyond, highway and airport systems will require large public investment for maintenance and expansion.

Electrically powered, high-speed, steel-wheel-on-steel-rail technology is being considered for the proposed system that would serve the major metropolitan centers of California, extending from the Bay Area and Sacramento, through the San Joaquin Valley, to Los Angeles and San Diego. By 2020, the proposed service would include approximately 86 weekday trains in each direction to serve the intercity travel market, with 64 of the trains running between northern and southern California, and the remaining 22 trains serving shorter-distance markets. Most passenger service is assumed to run between 6 a.m. and 8 p.m. The proposed system would be capable of speeds in excess of 200 mph, and the projected travel times would be designed to compete with air and auto travel. For example, the projected travel time by HST between San Francisco and Los Angeles would be just under 2 hours and 30 minutes, and between Los Angeles and San Diego, it would be just over one hour.

The cost to implement the HST system is estimated to range between $33 billion and $37 billion (at 2003 dollars), depending on the alignment and station options selected. The cost estimate includes right-of-way, track, guideway, tunneling, stations, and mitigation. The Authority has indicated that private funds would be sought for the train sets and operating costs.

High-speed rail would provide a new intercity, interregional, and regional passenger mode that would improve connectivity and accessibility to other transit modes and airports compared to the other alternatives. High speed rail over and above automobile and airline travel would improve the travel options available in the San Joaquin Valley and other areas of the state with limited bus, passenger rail, and air service for intercity trips.

**High Speed Rail Terminal Impact Analysis**

The High Speed Rail Terminal Impact Analysis was prepared to determine a community-preferred site for Bakersfield’s future high speed rail station. Three sites within metropolitan Bakersfield had been previously identified: Meadows Field vicinity, Golden State/“M” Street, and Truxtun/“S” Street.

Kern COG commissioned this study to recommend a locally preferred station site to be forwarded to the California High Speed Rail Authority. This study was not intended to include final station design concepts or cite specific environmental impacts, but rather as a tool for CHRSRA to understand the Bakersfield community’s concerns as well as to explain potential partnering opportunities.

The study evaluated the sites for the concerns regarding mobility, access and intermodal connectivity, cost, user convenience, impact on built environment, air quality, economic development and environmental impacts.

A series of outreach meetings was undertaken in order to compile and understand various objectives and preferences for a station site.

On July 1, 2003, the Kern County Board of Supervisors adopted Resolution 2003-290 in support of the Truxtun Avenue terminal site. On July 9, 2003, the Bakersfield City Council voted to adopt Resolution 118-03 endorsing the Truxtun Avenue site as their preferred site. And on September 18, 2003, Kern Council of Governments adopted Resolution 03-23 to designate the Truxtun Avenue terminal site as “the preferred base system local alternative site for the Metropolitan Bakersfield high-speed rail terminal.”
The Truxtun site is located within the vicinity of the current Amtrak station. It is west of Union Avenue and east of Chester Avenue along the BNSF corridor. The High Speed Rail Environmental Impact Report has identified the station site between S Street and Sonora Street as the most promising area, but has indicated a possible alternative with a north/south orientation along Union Avenue. The Truxtun Station is located within walking distance of the downtown area including two hotels, the convention center, many government office buildings and Bakersfield’s new Ice Center and McMurtrey Aquatic Center.

Connections to other modal uses would be effortless. Amtrak and Greyhound connections have existing facilities at or near the Truxtun Station while Golden Empire Transit and Kern Regional Transit also have regular stops at the Amtrak station. This proximity would facilitate passenger transfer connections, sharing of the Amtrak feeder bus terminal and possibly even sharing of an expanded station.

**Need for Constrained Project Development**

Under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), regional transportation plans must demonstrate all proposed projects are capable of being fully funded within the RTP’s timeframe. This requirement has constrained regions to spotlight and prioritize high performing, cost-effective projects. This approach enables the Kern region to focus on immediate transportation priorities.

If new funds are identified, then projects in the unconstrained Program of Projects (Table 4.2) can be amended into the constrained Program of Projects (Table 4.1) via the amendment process. Under this arrangement, decision-makers would have flexibility to consider new projects and to respond to funding opportunities that may present themselves in the future.

**Unconstrained Projects/Unmet Transportation Needs**

Beyond the Destination 2030 RTP, an estimated $2.3 billion in unmet transportation needs within the Kern Region for capital improvements, operation and maintenance, remain unfunded because of lack of federal, state and local monies. Kern COG, in cooperation and coordination with its stakeholders, maintains a list of capital projects that are financially unconstrained (see Table 4.2). Conceivably, as the future funding picture changes, some of these projects could be advanced to the “constrained” status in future RTP updates.

**TIFs, Bonds and Sales Tax**

Kern County continues to experience strong growth, adding more traffic and taxing the capacities of the street and highway system. In an effort to expand needed transportation facilities before traffic congestion causes the roads system to fail, Kern COG has proposed that the cities and County of Kern implement a transportation impact fee (TIF) to pay for needed transportation facility improvements. Kern COG is developing a series of subregional traffic impact fee studies throughout the County, with the initial study focusing on southeast Kern (Tehachapi, California City, and Mojave). Kern COG anticipates completing the studies by mid-2008.

The focus of the needed transportation improvements is on regional roads of significance. At this time, only metropolitan Bakersfield, Wasco, greater Tehachapi and unincorporated Rosamond have adopted TIFs.

Adopting a new transportation impact fee will require working closely with both the local development community and the Kern community at large to gain acceptance to fund needed rights-of-way and widening improvements to transportation facilities that are deemed deficient.

Issuance of bonds to finance and deliver projects more rapidly is a common practice. Under a Federal Highway Administration program, Garvee Bonds are being considered for some of the
larger corridor projects within the Kern region. The minimum covered for Garvee Bond projects is such that only the largest corridor projects would be eligible.

Bonding for projects from a sales tax measure is another strategy commonly used for finance “early delivery” of transportation projects. A countywide sales tax measure is being proposed for the November 2007 or 2008 ballot that would allow many of the projects discussed in the Destination 2030 RTP to be constructed much sooner. A draft list of projects under consideration for funding by the one-half cent sales tax measure follows.

**Transportation Projects Proposed by Countywide Sales Tax Measure (STM)**

RTP projects that could be advanced by STM funding:

**Financially Constrained**

- Route 14 from Route 178 to Red Rock Canyon - widen to four lanes
- Route 46 from SLO County line to I-5 - widen to four lanes
- Route 46 from Route 99 to Wasco - widen to four lanes
- Route 58 at Dennison Road - construct interchange and bridge
- Route 99 at Olive Drive interchange - construct capacity-increasing improvements
- Route 178/24th Street at Oak Street - construct interchange
- Route 178 from Morning Drive to Rancheria Road - construct freeway
- Route 223 from Comanche Road to Route 99 - widen to four lanes
- Seventh Standard Road from Route 43 to Route 99 - widen to four lanes
- Downtown Parkway in Bakersfield - construct local freeway
- Hageman Extension Knudsen Drive to Route 204 - construct four-lane extension

**Financially Unconstrained**

- Route 58 from I-5 to Route 99 - construct freeway/expressway
- Route 65 - widen various segments to four lanes
- Route 119 from I-5 to Tupman Road - widen to four lanes
- Red Apple Avenue from Tucker Road to Westwood Blvd - construct new two-lane road
- Wheeler Ridge Road from (Route 23 to I-5 - widen segments to four lanes)

**Non RTP Projects Proposed for STM funding**

- Route 178 - 24th Street Improvements in Bakersfield
- Route 202 from Woodford-Tehachapi Road to Old Town Road - widen to four lanes
- Route 395 South of South China Lake Blvd - construct passing lanes
- Route 14 - Extend K Street north to connect (Midland Trail)
- Kern Canyon Road - (old 178)
- North Gate Road from California City to North Edwards - construct two lane road
- Rosamond Blvd - grade separation over Union Pacific tracks
- Twenty Mule Team Road from California City to Route 58 - construct two lane road
- Lake Isabella - capacity increasing project
- Frazier Park - capacity increasing project

**Air Quality Contingencies**

Air quality uncertainties could play a critical role in future funding linkages. In areas such as San Joaquin Valley that may fail to attain federal clean air standards by the mandated deadlines, the federal Clean Air Act Amendments of 1990 (CAA) can require withholding funding for capacity increasing transportation projects, including projects funded from non-federal sources. In the San
Joaquin Valley, up to $2 billion in transportation funds could be at stake. A variety of mechanisms in the CAAA can require withholding transportation funds, including highway sanctions, conformity lapses and conformity freezes. Should one of these occur, Kern COG may be required to amend its TIP and RTP to fund additional projects that are proven to reduce emissions and/or improve safety. With federal highway sanctions, the U.S. Environmental Protection Agency would prepare a Federal Implementation Plan (FIP) that would reprogram TIP funding to projects that improve air quality and allow the region to demonstrate attainment of federal clean air standards.

Transit improvements, intermodal freight facilities, transportation related air quality control measures and safety projects can be exempt from federal highway sanctions, lapses and freezes. It is prudent to consider studying these types of projects as funding becomes available, to provide local policy makers with a complete range of options should funding interruptions become imminent. Many of these project types are already funded through a mix of resources. Every effort is made to attain federal standards by identifying and implementing cost-effective methods that reduce transportation related emissions from single occupancy vehicles.

**Air Quality-Related Projects For Future Study**

- MetroLink Commuter Rail (Rosamond to L.A.)
- Eastern Sierra Passenger Rail Corridor (Reno to L.A.)
- Major Transportation Investment Study (MTIS) long-range transit improvements - passenger light-rail (Metro Bakersfield) and passenger heavy-rail (connecting outlying valley communities)
- Bakersfield High Speed Rail Station - Airport Bus Rapid Transit (BRT) Shuttle
- Shafter Intermodal Trade and Transportation Center (ITTC) expansion
- Shafter Airport/Union Pacific Intermodal Freight Facility expansion
- Laval Road Industrial Complex - new freight rail line and intermodal facility
- Freeway ramp metering
- High occupancy/zero-low emission vehicle (HOV/ZEV/LEV) lanes
- Toll lane/facility congestion pricing
- Paving and sweeping shoulders and dirt roads
- Alternative fuel fleets and infrastructure
- Incentives for increasing land use densities.

**Safety Projects For Future Study**

- Route 58 from General Beale Road to Tehachapi Blvd offramp - truck auxiliary lane
- I-5 from Route 99 split to Kings County line - truck auxiliary lane
- Network of dedicated truck lanes
- Route 178 from Lake Isabella to Ridgecrest - realign and add passing lane

**Valleywide Chapter**

Included as Appendix A, the Valleywide Regional Transportation Plan provides an interregional perspective for transportation planning throughout the San Joaquin Valley. It presents an overview of cross-jurisdictional issues facing the eight related counties and regional transportation planning agencies within central California.

---

1 Highway sanctions, conformity lapses, and conformity freezes are mechanisms in the federal Clean Air Act Amendments of 1990 that are triggered when a region fails to demonstrate attainment of federal clean air standards by required deadlines.
Chapter 8  Monitoring Progress

As the designated MPO for the Kern region, Kern COG monitors transportation plans, projects and programs for consistency with regional plans. Kern COG also monitors the performances of the transportation system. This performance monitoring is especially important to inform the planning process for future RTPs. Regional transportation problems cannot be solved until they are identified and measured.

Kern COG is required to prepare the RTP using performance-based measures that allow public officials to better analyze transportation options and trade-offs. By examining performance of the existing system over time, the RTPA can monitor trends and identify regional transportation needs that may be considered in the RTP. Performance measurement helps to clarify the link between transportation decisions and eventual outcomes, thereby improving discussion of planning options and communication with the public. This may also help determine which improvements provide the best means for maximizing the system's performance within cost and other constraints.

Kern COG has developed performance measures (see Chapter 6 – Environmental Justice) for the regional transportation system. In addition, new tools are being developed that will help Kern COG to monitor system performance over time. The Freeway Performance Measurement System (PeMS), being developed by U.C. Berkeley in cooperation with Caltrans, has the ability to measure and track freeway speeds, delay and reliability for the regional freeway system.

Transportation planning for the Kern region requires continually improved information on the condition and use of the transportation system. Special reports are prepared periodically by Kern COG to demonstrate highway infrastructure conditions and to monitor the Kern region's overall traffic. The Highway Performance Monitoring System (HPMS) is a federally-mandated program designed by FHWA to assess the performance of the nation's highway system. Under the Clean Air Act Amendments of 1990, Kern COG and its member agencies are required to report periodically on vehicle miles traveled in each air basin to determine whether traffic growth is consistent with the projections on which the State Implementation Plans (SIPs) are based.

The following sections outline several significant tools used by Kern COG to monitor regional progress in advancing the Destination 2030 RTP.

Federal Transportation Improvement Program (FTIP)

As the designated Metropolitan Planning Organization (MPO), Kern COG is charged with developing and maintaining the Federal Transportation Improvement Program (FTIP). The FTIP is a financially constrained (i.e., budgeted) multi-modal transportation planning program, developed by the MPO through its member agencies and in cooperation with state and federal agencies. The basic premise of a TIP is that it is the incremental implementation of the long-range RTP. The TIP presents federal funding agencies with manageable components for funding long-range plans.

The FTIP is a compilation of project lists from the State Transportation Improvement Program (STIP), State Highway Operations and Protection Program (SHOPP) and other federal-aid programs. The FTIP is composed of two parts: (1) a priority list of projects and project segments to be carried out in a three-year period; and (2) a financial plan that demonstrates how the FTIP can be implemented. The financial plan is also required to indicate all public and private resources and financing techniques that are expected to carry out the program.
Regional Transportation Improvement Program (RTIP)

Every odd-numbered year, Kern COG prepares a Regional Transportation Improvement Program (RTIP), the short-term implementation tool for transportation goals described in this Destination 2030 RTP.

The RTIP provides a listing of projects proposed for implementation within the Kern region during its five-year period. Transportation projects are described in detail, with funding allocated by source and fiscal year. RTIP projects are categorized according to the transportation system to which they apply, i.e., state highways, local highways/expressways, or local streets and roads. Although eligible, transit projects are not included in the RTIP; rather, they are funded by other federal aid programs and included in the FTIP.

During each RTIP development cycle, Kern COG provides member agencies with adopted RTIP Policies and Procedures in order that Caltrans, as well as local agencies can initiate project delivery. The Policies and Procedures manual defines the prioritized project candidates, which are then incorporated as the RTP's Capital Improvement Program (CIP) (see Section 4, Tables 4-1 and 4-2). Only after projects are included in the CIP can they then be funded and advanced as part of the RTIP.

TIP Database Management

Kern COG maintains its own database in order to track project status. TIP data for the Kern region is entered directly into the California Transportation Improvement Program System (CTIPS), which allows an efficient and accurate record of current programming needs. The monitoring process compares project needs with current programming as it advances. When the need arises to modify a project, or when delays are anticipated, Kern COG can recommend amendments to CTIPS.

Air Quality Conformity Monitoring

Before federal approval of the RTP and TIP, the federal Clean Air Act Amendments of 1990 require Kern COG to make a finding of the documents' conformity with the State Implementation Plan's air quality goals as established by the responsible air district. The Conformity Analysis for the Destination 2030 RTP and the 2004 FTIP are hereby included by reference; Resolution 04-23 adopting the Destination 2030 RTP is included in the final document. This analysis demonstrates that the criteria specified in the federal transportation conformity determination rule are satisfied by the TIP and RTP.

A new conformity finding must also be made anytime the TIP and/or RTP are adopted or significantly amended. Kern COG performs specific project-level monitoring of both the TIP and RTP and monitors socioeconomic changes on an ongoing basis.

Summarized below are the applicable federal criteria for conformity determinations, and the results of the conformity assessment of the TIP and RTP. Additional information on air quality impacts can be found in the Destination 2030 RTP’s environmental documentation.

Conformity Requirements

The federal transportation conformity rule (40 Code of Federal Regulations Parts 51 and 93) specifies criteria and procedures for transportation plans, programs, and projects, and their respective amendments. The transportation conformity rule and court opinions are summarized in Chapter 1 of the conformity analysis for the TIP and RTP.

The conformity rule applies nationwide to "all nonattainment and maintenance areas for transportation-related criteria pollutants for which the area is designated nonattainment or has a
maintenance plan” (40 CFR 93.102). Currently, San Joaquin Valley (or portions thereof) is designated as nonattainment with respect to federal air quality standards for three criteria pollutants: carbon monoxide (CO), ozone, and particulate matter under ten microns in diameter (PM-10).

Eastern Kern County is non-attainment or has a maintenance plan for two separate planning attainment areas or basins. These basins are defined by mountain ranges. Conformity for eastern Kern includes analysis of existing and future air quality impacts for ozone in the Mojave Desert Air Basin (MDAB) and PM-10 in the Indian Wells Valley Planning Area (IWVPA). Figure 8-1 illustrates the air basins and districts for Kern County.

FIGURE 8-1  KERN COUNTY AIR QUALITY PLANNING AREAS

Under the federal transportation conformity rule, the principal criteria for transportation plans’ and programs’ conformity determination are such that:

1) The TIP and RTP must pass an emissions budget test with a budget that has been found to be adequate by EPA for transportation conformity purposes, or an emissions reduction test;

2) The latest planning assumptions and emission models specified for use in conformity determinations must be employed;

3) The TIP and RTP must provide for the timely implementation of transportation control measures (TCMs) specified in the applicable air quality implementation plans; and

4) Inter-agency consultation occurs at the beginning and end of the conformity analysis process.
Results of the Conformity Analysis

A regional emissions analysis was conducted for the years 2005, 2008, 2010, 2013, 2020, and 2030 for each pollutant. All analyses were conducted using the latest planning assumptions and emissions models. Major conclusions of the 2004 Kern Council of Governments Conformity Analysis are as follows:

Carbon Monoxide (CO) - San Joaquin Valley Portion of Kern County

The total regional vehicle-related emissions associated with implementation of the TIP/RTP for the analysis years are projected to be less than the approved emissions budget established in the 1996 Carbon Monoxide Re-designation Request and Maintenance Plan. The applicable conformity test for carbon monoxide is, therefore, satisfied.

Ozone - San Joaquin Valley and Mojave Desert Portions of Kern County

The total regional vehicle-related emissions (VOC and NOx) associated with implementation of the TIP/RTP for all years tested are projected to be less than the adequate emissions budgets specified in the Amended 2002 and 2005 Ozone Rate of Progress Plan for the San Joaquin Valley, and less than budgets for the Mojave Desert Planning Area Attainment Maintenance Demonstration Plan. The conformity tests for ozone are, therefore, satisfied.

PM-10 - San Joaquin Valley and Indian Wells Valley Portions of Kern County

The total regional vehicle-related emissions (PM-10 and NOx) associated with implementation of the TIP/RTP for all years tested are either: (1) projected to be less than the approved emissions budgets; or (2) less than the emission budgets using the approved PM-10 and NOx trading mechanism for transportation conformity purposes from the Amended 2003 PM-10 Plan for the San Joaquin Valley and the Indian Wells Valley Attainment Maintenance Demonstration Plan. The conformity tests for PM-10 are, therefore, satisfied.

The latest conformity determination did not require credit for emission reductions from the TCMs being implemented by Kern COG and its member agencies. However, to expedite the region’s air quality attainment goals, every effort will be made to expedite implementation of TCMs identified in the TIP/RTP.

Federal standards for the 8-hour ozone and PM-2.5 are currently being studied for future implementation. These standards will require a revised conformity determination.

California Clean Air Act Transportation Performance Standards

The California Clean Air Act provides the basis for air quality planning and regulation independent of federal regulations. The Act specifically requires that local air districts in violation of the California Ambient Air Quality Standards prepare attainment plans. The plans must identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date. Implementation of TCMs in the Destination 2030 RTP help to further progress toward attainment of these standards and require that they continued and expanded even after all federal standards are met.

Highway Performance Monitoring System (HPMS)

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 provides data to the U.S. Environmental Protection Agency (EPA) to assist in monitoring air
quality conformity, and to support the *Biennial Report to Congress On the Status of the Nation's Highways*.

In California, the HPMS program is implemented annually by Caltrans. Kern COG’s responsibility is to assist Caltrans in collecting data from local jurisdictions. Kern COG’s responsibility also includes distribution, collection and administration of all HPMS survey packages in the Kern region.

To facilitate the HPMS program locally, Kern COG is developing a regional traffic monitoring program. The program will provide regular traffic counts and speed surveys across all jurisdictions in the region. The collected data will assist in setting policies, forecasting future transportation needs, and monitoring air quality conformity.

**Congestion Management Process (CMP)**

State Proposition 111, passed by voters in 1990, requires urbanized areas to prepare and regularly update a Congestion Management Program. SAFETEA-LU updated this requirement for Transportation Management Areas, of which Kern is considered to be. The purpose of the CMP is to: (1) monitor the performance of the transportation system; (2) develop programs to address near-term and long-term congestion; and (3) better integrate transportation and land use planning.

As the designated Congestion Management Agency, Kern COG must establish a system of roadways that will be monitored in relation to established level of service standards. The goal of the CMP is to identify a regional network and work toward maintenance of level of service D or better on the highways and roads that are identified in this network.

The CMP requirement was born of the realization that large capital projects alone cannot solve congestion problems and that local land use decisions contribute to roadway congestion. Kern COG, as the designated Congestion Management Agency (CMA) for the Kern region, adopts and updates the CMP.

Up to now, metropolitan Bakersfield and other urbanizing areas have been able to absorb increased traffic and have met these communities’ transportation needs by adding some local roads, the Mojave Bypass and a few more buses. But the Kern region can no longer assimilate additional traffic because of this continuing growth. Kern COG estimates that the population of metropolitan Bakersfield alone will increase by more than 60 percent. Congestion on arterial roadways and city streets will become intolerable unless significant new transportation facilities and services are provided.

The Congestion Management Program should stay in place in order to respond to the anticipated problems. The Program is provided as a separate element of Chapter 4 - Strategic Investments.

**Intergovernmental Review**

Under federal law, Kern COG is designated as the Areawide Clearinghouse for review of all submitted plans, change changes, projects and programs for consistency with adopted regional plans and policies. Regionally significant transportation projects reviewed for consistency with regional plans are defined as: construction or expansion of freeways; state highways; principal arterials; routes that provide primary access to major activity centers, such as amusement parks, regional shopping centers, military bases, airports, as well as potential high speed rail. Any project involving transportation improvements is reviewed to determine whether such improvements are included in the RTIP.
Transportation Planning Studies

Roads to Ruin

Kern COG prepared Roads to Ruin: Transportation Funding Options for Kern County in early 2002 to educate decision-makers and the public regarding the “dire straits” of Kern County’s roads and public transportation systems. An updated document is in process, with an anticipated draft document available to the public in Spring 2007.

As described in the document, Kern’s cities and the county are falling further behind in maintaining already beleaguered roads, while agencies such as Golden Empire Transit have no operating monies to meet growing demands for its services. In addition, the pace of new capital transportation projects cannot hope to meet anticipated needs under current funding projections.

Roads to Ruin discusses potential revenue sources available to assist Kern County’s growing transportation needs. Among the possibilities, voters could approve a countywide, special transportation-related sales tax ballot measure; a “special district“ sales tax measure; a countywide parcel-based tax; a gasoline tax increase; a regional transportation impact fee; or a combination of these.

Regardless of which strategy appears the most viable, however, the consequences of continuing to rely solely on traditional funding are abundantly clear: the regional transportation system for Kern County will continue to deteriorate on an increasingly rapid scale and will become increasingly congested. Drivers will pay more and wait longer to commute; public transportation operators will be unable to provide for the additional demands for service; and capital project construction will take too long to provide meaningful congestion relief.

The question no longer is whether additional transportation revenue is necessary to ensure a properly maintained and functioning transportation system, but rather will be the infrastructure last until new revenue arrives?

Metro Bakersfield Major Transportation Investment Strategy (MTIS)

In 1997, Kern COG completed the Metropolitan Bakersfield MTIS Action Plan. The MTIS considered nine alternatives including various combinations of increased bus service, a cross-town freeway, a beltway system, super arterials, enhanced transportation system management (TSM) and passenger light rail service (found not be financially viable until sometime after 2015). The preferred option focused on growing the transit bus fleet to 200 vehicles, and building a crosstown freeway. Increased transit operations will someday provide a feeder network for future passenger rail options. The MTIS transit action plan includes additional bus transfer stations, bus automatic vehicle location (AVL) system and additional routes and increased headways. GET is deploying AVL, automated fare box and passenger count systems.

The 2001 Bakersfield System Study developed regional consensus on the road system improvements. The MTIS formed the Inter-agency Metropolitan Transportation Committee (IMTC) to monitor the progress of the MTIS action plan. The IMTC publishes an annual report on the action plan progress.

The sixth annual report was published in November 2003, which included transportation projects under development in 2002-2003, including changes in legislation, planning and projects, as well as a “report card” identifying those transportation projects delivered in the second phase (2003-2006) of the Action Plan.

The MTIS Action Plan is structured to be responsive to future budgetary, political and economic changes affecting local, state and federal funding levels. The MTIS is modified and updated annually to accommodate changing priorities.
Regional Rural Transit Strategy

Implementation of the Destination 2030 RTP requires changes in the operating practices of transit agencies. In spring 2002, Kern COG initiated a process to evaluate alternatives to its current network of rural transit services. Two interim reports were produced identifying existing services and a variety of service, administration, and coordination alternatives. Through refinement of the alternatives, the final report outlined a series of recommended steps for Kern County’s transit providers, describing a process for enhanced coordination as well as the potential for eventual consolidation of services within the County.

Eastern Sierra Public Transportation Plan

In early 2004, Kern COG in partnership with Inyo and Mono Counties, hired a consultant to prepare an Eastern Sierra Public Transportation Plan. Key objectives of this study are to identify transportation alternatives and recommend solutions for: (1) enhancing the current lifeline intercity services available throughout the Eastern Sierra; (2) improving intercity connections and providing new services to expand the transportation alternatives in the Eastern Sierra; (3) coordinating transportation services by existing providers, social service agencies, and private operators; and (4) determining the feasibility of passenger rail service in the Eastern Sierra.

Some of the critical transportation challenges in the Eastern Sierra include finding solutions to address the needs of current and potential transit markets, such as: (1) senior citizens who live in remote locations and have difficulty accessing transit; (2) intercity transit that does not operate frequently enough to provide realistic transportation options; (3) Greyhound’s departure in 2000 that left a void in public transportation options; (4) economic development opportunities; and (5) challenge of providing information and marketing for transit service.

Kern COG anticipates the Eastern Sierra Public Transportation Plan to be completed by November 2004.

Traffic Model Forecasting

Kern COG maintains and runs a regional travel demand forecast model for the Kern County region. The model is used to forecast the demand for future transportation infrastructure by predicting future travel patterns based on factors including locally approved general plan land use entitlements, input from local planning departments on socio-economic growth areas, and state and federal data sources. Some of the forecast input variables include populations, households, employment, school enrollment, income, traffic counts, speeds, intersection configuration, existing and planned transportation networks, etc. These variables are maintained for approximately 1000 transportation analysis zones covering the 8,200 square mile Kern region. One of the primary purposes of the model is to demonstrate conformity with the Federal Clean Air Act goals requiring substantial reductions from all pollution sources, including air pollutants from the transportation sector called mobile source emissions. Travel Demand Forecast Modeling is also used in support of the RTP/TIP processes, CMP, and numerous environmental documents prepared for locally identified projects throughout the region. Kern COG’s Regional Transportation Model provides a savings to its member agencies that without the regional model, would be required to maintain duplicate, overlapping, and potentially conflicting transportation forecasts.

Oversight for the model is provided by the Kern Regional Transportation Modeling Committee. The committee operates under an MOU between the City of Bakersfield, Caltrans District 6, the County of Kern and Kern COG.

Kern COG and the Kern Regional Transportation Modeling Committee have adopted the following policies and procedures for maintaining the regional transportation model used in air quality and congestion management planning:
1. **Model Base Year Validation** - Network-based travel models must be validated against observed counts for a base year from which future projections will be made:
   a. Observed counts used in base year validation shall not be more than 10 years prior to the date of a conformity determination.
   b. Base year validation shall take place after the release of the decennial Federal Bureau of Transportation Statistics, Census Transportation Planning Package (CTPP), which is approximately 4 years after the date of the most recent decennial Census.
   c. Revalidations prior to release of the next CTPP should be spaced a minimum of three years apart to allow conformity review agencies time to complete state and federal review processes and develop air quality budgets using the modeling results. A minimum of three years between revalidations is also needed to allow responsible state and federal agencies to complete their review of large environmental documents without major changes to transportation circulation modeling results.

2. **Land Use Data** - General Plan land use capacity data or "Build-out capacity" is used to distribute the forecasted County totals, and may be updated as new information becomes available, and is revised in regular consultation with local planning departments.

3. **Socio-Economic Forecast Data** - Countywide forecasts for households, employment and other socio-economic data shall be updated not less than 3 years from the time of the Socio-economic forecast. A minimum of three years between Countywide forecast revisions is needed to allow responsible state and federal agencies time to complete their review of large environmental documents without major changes to transportation circulation modeling results. Redistribution of forecasts for sub county areas may be made on an as needed basis to better reflect existing general plan land entitlements as long as Countywide forecast totals remain unchanged.

4. **Highway Performance Monitoring System (HPMS) data collection and reporting** shall be performed annually in the Spring and submitted to the California Department of Transportation prior to June 15.

5. **Network Updates** - Added as needed to model existing, planned and proposed future transportation facilities.

6. **Transportation Analysis Zone Updates** - Added as needed in response to additional network to allow appropriate loading of trips on the network.

7. **Local Scenario Modeling** - Due to the scale and complexity of a countywide model, not all network links can be validated and calibrated adequately. For links that are not calibrated, an adjustment factor may be applied to future years based on how far off the model assigns trips in comparison to the actual count. In addition, alternative models may be developed for community and site specific analysis on behalf of a member agency. Local scenario models may not be used for determining air quality conformity of a project, or FTIP/RTIP and RTP project rankings.

*The RTP will not impede and will support timely implementation of the TCMs that have been adopted as part of applicable air quality implementation plans. The current status of TCM implementation is documented in Chapter 5 of the conformity analysis. Figure 8-2 presents the total funding programmed in the RTP for transportation projects that implement or provide for the timely implementation of transportation control measures and other air quality measures.*
Since the local SJV procedures (Rule 9120) have not been approved by EPA, consultation has been conducted in accordance with federal requirements.

**California Clean Air Act Transportation Performance Standards**

The California Clean Air Act was passed in 1988 to provide the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local air districts in violation of the CAAQS must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date. Implementation of TCMs in the Destination 2030 RTP help to further progress toward attainment of these standards and require that they be continued and expanded even after all federal standards are met.
GLOSSARY

Alternatives Analysis (AA) – Analysis of the engineering and financial feasibility of alternatives under consideration for major transit construction projects; this step is required before federal monies can be allocated to a project.

Accessibility – The extent to which facilities are barrier free and usable by persons with disabilities, including wheelchair users.

ADA - Americans with Disabilities Act - Federal civil rights legislation that prohibits discrimination against all individuals with disabilities. With certain statutory exceptions, public and private entities providing fixed route or demand responsive transportation services must acquire accessible vehicles or provide equivalent service to individuals with disabilities.

Air Pollution Control District (APCD) - Also referenced as the Air Quality Management District (AQMD), the APCD is responsible for emissions regulations and attainment of federal and state air quality standards in a predefined region. The APCD deals with issues such as the Employer Trip Reduction Program.

Air Quality Attainment Plan (AQAP) - Plan for attainment of the state air quality standards, as required by the California Clean Air Act of 1988. It is adopted by APCDs and AQMDs and is subject to approval by the California Air Resources Board.

Alternative Fuels - Low-polluting fuels that are used to propel a vehicle instead of high-sulfur diesel or gasoline. Examples include methanol, ethanol, propane or compressed natural gas, liquid natural gas, low-sulfur or "clean" diesel, and electricity.

Apportionment - Federal budgetary term that refers to a statutorily prescribed division or assignment of funds. It is based on prescribed formulas in the law and consist of dividing authorized obligation authority for a specific program among transit systems.

Appropriation - Legislation that allocates budgeted funds from general revenue to programs that have been previously authorized by other legislation. The amount of money appropriated may be less than the amount authorized.

American Public Transit Association (APTA) – National, nonprofit trade association representing the public transit industry.

Authorization - Federal legislation that creates the policy and structure of a program including formulas and guidelines for awarding funds. Authorizing legislation may set an upper limit on program spending or may be open ended. General revenue funds to be spent under an authorization must be appropriated by separate legislation.

Automatic Vehicle Location System (AVLS) – This computerized system employs satellites and other technologies to track vehicles, such as truck fleets.

Best Available Control Measures - (See Reasonably Available Control Measures (RACM))

Blueprint Legislation - Statewide funding package developed by the California Legislature in 1989 and approved by voters in 1990. The legislation, also known as Proposition 111, raised state
gas and diesel taxes by 9 cents per gallon to pay for numerous transportation projects, and added
requirements for county-level Congestion Management Programs. The Blueprint Legislation also
included three $1 billion bond measures for rail projects; only one of the three won voter approval

**California Alliance for Advanced Transportation Systems (CAATS)** - Public/private partnership
formed to foster the development and deployment of Intelligent Transportation Systems.

**California Air Resources Board (CARB)** - Designated by EPA as having responsibility for the
implementation of the federal Clean Air Act, State Implementation Plan, and approving air quality
attainment plans as required by the State Clean Air Act of 1988. Under State law, CARB
establishes state air quality standards and vehicle emissions requirements.

**California Clean Air Act (CCAA) (AB 2595, Sher)** - Enacted in 1988, the Act: (1) established a
legal mandate to achieve California's ambient air quality standards by the earliest practicable date;
(2) prescribes a number of emission reduction strategies and requires annual progress in cleaning
up the air; and (3) grants authority to the state's local air pollution control districts to adopt and
enforce transportation control measures (TCMs).

**California Energy Commission (CEC)** - Established by the State Legislature in 1974, the CEC is
the State's principal energy planning and policy making organization. The CEC is charged with
ensuring a reliable and affordable energy supply for the State. CEC policies are consistent with
protecting the State's environment and its public health, safety, and general welfare.

**California Environmental Quality Act (CEQA)** - Enacted in 1970, CEQA provides the State's
environmental guidelines on which land use development and management decisions are
premised. CEQA specifies the State's environmental review process and applicable environmental
policies.

**California Highway Patrol (CHP)** - Agency responsible for enforcing the State's traffic and safety
laws on State highways and by contract, county roads. The CHP also jointly operates Traffic
Operation Centers with Caltrans.

**California Public Utilities Commission (CPUC)** - Regulator of utility and transportation
companies in the state that are privately owned and operated. The CPUC sets rates, regulates
service standards, and monitors utility operations for safety; it does not regulate municipal or
district-owned utilities. The CPUC also develops policies promoting competition among utilities and
acts as an intermediary between the public and private utilities.

**California State Department of Transportation (Caltrans)** - As owner/operator of the state
highway system, responsible for its safe operation and maintenance. Proposes projects for Intercity
Rail, Interregional Roads, and soundwalls in the PSTIP. Caltrans is also responsible for the
HSOPP, Toll Bridge, and Aeronautics programs. The TSM and State/Local Partnership Programs
are administered by Caltrans. Caltrans is the implementing agency for most state highway projects
regardless of program, and for the Intercity Rail program.

**California Transportation Commission (CTC)** - Nine-member board appointed by the Governor
and confirmed by the Legislature that reviews Regional Transportation Improvement Programs
(RTIPs) and the PSTIP, and forwards some transportation projects from these programs into the
State Transportation Improvement Program (STIP); this qualifies the projects for state funding. The
CTC also has financial oversight of the major programs authorized by Propositions 111 and 108.

**Capital Improvement Program (CIP)** - An element of the Congestion Management Program
(CMP), the CIP is a seven year program of projects to maintain or improve traffic level of service
and transit performance standards developed by the CMP, as well as the regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to transportation-related vehicle emissions air quality mitigation measures.

**Changeable Message Signs (CMS)** – Electronic signs that can change the message displayed. Often used on highways to warn and redirect traffic. Also referred to as variable or electronic message signs.

**Clockface headway** – Any headway that is ten minutes or more and divides evenly into sixty minutes.

**Commuter Rail** – Form of passenger transportation characterized by medium distance home-to-work passenger travel, multiple ride ticketing, recurring peak-hour travel and use of high-density seating. Commuter rail uses diesel electric or overhead electrically powered locomotives. Examples are the Caltrains operated by Caltrans from San Jose to San Francisco, and GO Transit in Toronto.

**Comprehensive Transportation Plan (CTP)** – Long-range framework for the planning, development, operation, and maintenance of California’s statewide transportation system that proposes an intermodal system which is integrated, both in form and function, and which offers mobility while supporting economic and environmental goals. The plan is multimodal, addressing all transportation modes. It outlines a series of goals, policies, strategies and recommendations drawn from State and federal transportation law.

**Conformity** – Ongoing process that ensures the planning for highway and transit systems, as a whole and over the long term, is consistent with the state air quality plans for attaining and maintaining health-based air quality standards; conformity is determined by metropolitan planning organizations (MPOs) and the U.S. DOT, and is based on whether transportation plans and programs meet the provisions of a State Implementation Plan (SIP). The conformity determination must be based on recent estimates of emissions, and such estimates must be based on the most recent population, employment, travel and congestion estimates as determined by the MPO.

**Congestion Management Agency (CMA)** – Kern COG serves as the countywide organization responsible for preparing and implementing the CMP. CMA s came into existence as a result of State legislation and voters’ approval of Proposition 111 in 1990.

**Congestion Management Program (CMP)** – Multi-jurisdictional program with the goals of reducing traffic congestion, researching land use decision impacts, and improving air quality. State law requires the RTPA of every county with an urbanized area of at least 50,000 people to prepare and maintain this program.

**Congestion Mitigation/Air Quality Improvement Program (CMAQ)** – Funding program established by ISTEA specifically for projects and programs that will contribute to the attainment of a national ambient air quality standard. Funds are available to non-attainment areas for ozone and carbon monoxide based on population and pollution severity. The approved State Implementation Program (SIP) defines eligible projects.

**Corridor** – Any major transportation route including various modes such as parallel limited access highways, major arterials, or transit lines that, while not necessarily adjacent to each other, connect significant activity centers. With regard to traffic incident management, a corridor may include more distant transportation routes that can serve as viable alternatives in the event of traffic incidents.

**County Minimums** – Instituted in 1983 by SB 215 (Foran), it represents the minimum share of programming each county should receive. Under this statute (Section 188.8, Streets and Highways
Code), 70 percent of the capital outlay funds must be expended in each county according to a formula based 75 percent on county population and 25 percent on centerline state highway miles in the county. The county minimum is accounted for over a fixed five-year period.

**Council of Governments (COG)** - Regional planning agency that serves a specific geographic area (e.g., Kern County) and addresses issues such as transportation, air quality, and land use. Council membership is drawn from the county, city and other government bodies within its area.

**Deadhead** - The movement of a transit vehicle without passengers aboard; often to and from a garage or to and from one route to another.

**Demand-Responsive Transit** - Non-fixed-route service using vans or buses with passengers boarding and disembarking at pre-arranged times at any location within the system’s service area. Also called Dial-A-Ride (DAR).

**Department of Transportation (DOT)** - Federal department that includes the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and the Federal Aviation Administration (FAA). DOT is headed by the Secretary of Transportation, a cabinet-level post. Most states also have DOTs; California’s is referred to as Caltrans.

**Dial-A-Ride (DAR)** - See Demand-Responsive Transit.

**Environmental Protection Agency (EPA)** - Federal agency, the mission of which is to “protect human health and the natural environment.” It is the source agency for air quality control regulations affecting transportation.

**Environmental Impact Report / Environmental Impact Statement (EIR/EIS)** - Analysis of the environmental impacts of proposed land development and transportation projects. An EIR is conducted in response to the California Environmental Quality Act (CEQA) and an EIS is conducted for federally funded or approved projects per the National Environmental Policy Act (NEPA). A draft EIR or EIS (often they are prepared simultaneously) is circulated to the public and agencies with approval authority for comment. A final document is certified after public comment has been solicited and mitigations have been developed for adverse impacts.

**Farebox Recovery Ratio** - Measure of the proportion of operating expenses covered by passenger fares; found by dividing farebox revenue by total operating expenses for each mode, and/or systemwide.

**Farebox Revenue** - Value of cash, tickets, tokens and pass receipts given by passengers as payment for rides; excludes charter revenue.

**Fare Structure** - System set up to determine how much is to be paid by various passengers using a transit vehicle at any given time.

**Federal Clean Air Act Amendments of 1990 (FCAA)** - Legislation that renews the Federal Clean Air Act and makes significant program changes. For the transportation sector, significant changes included a definition of conformity and requirement for the formulation by EPA and DOT of regulations regarding conformity, and requirements for the use and development of alternative fuels and vehicles.

**Federal Highway Administration (FHWA)** - Agency responsible for the approval of transportation projects that affect the federal highway system. Administratively, it is under DOT and is the sister agency of FTA.
Federal Transit Administration (FTA) - Federal Department of Mass Transportation (formerly UMTA), which is under DOT, and is the sister agency of FHWA.

Fixed Route - Transit service provided on a repetitive, fixed-schedule basis along a specific route with vehicles stopping to pick up and deliver passengers to specific locations; each fixed-route trip serves the same origins and destinations, unlike demand responsive and taxicabs.

Flexible Congestion Relief (FCR) - State funding programs for local or regional transportation projects to reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible.

Flexible Funds - Federal funds that can be used for highway, transit or other transportation projects, as determined by regional MPOs and state governments. Examples of such funds are the Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality (CMAQ) fund.

Fund Estimate - The STIP cycle begins with the development of a State Fund Estimate by Caltrans, which compares existing commitments against total estimated revenue expected from state and federal sources. Caltrans estimates state and federal funds "reasonably expected" in annual increments for five years (the STIP period). The calculation of existing capital program commitments is based on Caltrans' Project Delivery Report, while non-capital expenditures of operation and administration costs are estimated based on current spending and projected needs. This comparison of revenues to commitments results in an estimate of total uncommitted funds that are available for programming and prorated to each program category. The Fund Estimate is required by law to be submitted by July 15 of odd-numbered years, and to be adopted by the CTC within thirty days after submittal. CTC adopts a "Fund Estimate Methodology" to guide Caltrans in formulating the Fund Estimate.

Headway - Time interval between transit vehicles moving in the same direction on a particular route.

Heavy Rail - Heavy rail vehicles cannot operate on surface streets but must have exclusive grade protected guideways, such as subway, at surface or aerial configuration. Heavy rail vehicles can operate in pairs or trained up to ten cars and powered by third rail or overhead catenary. Heavy rail systems must have platforms for boarding passengers. A heavy rail system can carry up to 40,000 passengers per hour in each direction.

Intelligent Transportation Systems (ITS) - ISTEA established an IVHS (Intelligent Vehicle and Highway System) Program, which was subsequently modified to ITS. The program's function is to enhance the capacity, efficiency, and safety of the federal-aid highway system and to serve as an alternative to additional physical capacity. Automated highways and vehicles are one component of this approach. ITS includes development of application of electronics, communications or information processing (including advanced traffic management systems, commercial vehicle operations, advanced traveler information systems, commercial and advanced vehicle control systems, advanced public transportation systems, satellite vehicle tracking systems, and advanced vehicle communications systems) used singly or in combination to improve the efficiency and safety of surface transportation systems.

Intercity Rail - Operated by common carriers and uses fixed guideways. The service is characterized by inter-regional passenger travel provision for personal carry-on baggage, and possible use of specialized cars for food service, sleeping accommodations, checked baggage, and package express.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) - Enacted in 1991, this Act provided authorization for highways, highway safety and mass transportation through 1997, with
total funding of $155 billion. The purpose of ISTEA was “to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the Nation to compete in the global economy and will move people and goods in an energy efficient manner.” A few examples of provisions under the Act include: a National Highway System (NHS), new technologies, such as intelligent vehicle highway systems and prototype magnetic levitation systems, as well as the requirement of state uniformity in vehicle registration and fuel tax reporting. This Act was superceded by TEA-21 in 1998 and TEA-LU in 2005.

**Intermodal** - A unifying, integrated national network of travel modes emphasizing connections between modes, choices among them, and coordination and cooperation among transportation interests.

**Inter-Regional Road System (IRRS)** - In February 1990, Caltrans submitted a plan to the State legislature that identified a set of projects to provide the most adequate interregional road system to all economic centers in the State. Statute defined eligible routes that were included, and specified that these be located outside the boundaries of urbanized areas with over 50,000 population, except as necessary to provide connection of the routes within urban areas. From this plan, Caltrans included projects, consistent with the Fund Estimate, in its PSTIP to the CTC for programming in the STIP.

**Interstate Completion** - TEA-21 declared the 42,500-mile Federal Interstate Highway System launched in 1956 by the Eisenhower Administration to be completed with the final authorizations contained in the bill. Based on the Interstate Cost Estimate (ICE), specific segments of the Interstate System are still to be completed, and funds are included in TEA-21 to do so.

**Interstate Maintenance** - TEA-21 established a funding category for maintenance of the Interstate system that specifically limits use of these funds for capacity increasing projects that are not high occupancy vehicle lanes or auxiliary (merging) lanes. Eligible activities include reconstruction of bridges, interchanges and grade separations along existing interstate routes, including the acquisition of right-of-way where necessary and preventive maintenance.

**Level of Service (LOS)** - A measure of congestion that compares actual or projected traffic volume with the maximum capacity of the intersection or road in question.

**Light Rail** - Light rail vehicles can operate as single vehicles or can be trained and frequently do operate on surface streets as well as on exclusive rights-of-way, and draw electric power from an overhead catenary system. Light rail systems can have passenger boarding at surface as in San Diego and Sacramento or from elevated platforms as in Los Angeles. Maximum capacity of a light rail system is generally regarded as 10,000 passengers in each direction.

**Local Transportation Commission (LTC)** - Body composed of members of boards of supervisors, mayors’ select committees of counties, transit districts and other transit operators for areas not within the jurisdiction of an “RTPA”. Kern COG works closely with the LTCs in Mono and Inyo Counties.

**Long-Range Transit Plan** - This plan represents a long-range evaluation of transit needs and proposes recommendations for implementing long-range objectives over a 20-year timeframe. The Plan provides direction for coordinating implementation of goals and policies identified in the Plan.

**Maglev** - Magnetic levitation (maglev) trains carry passengers in a manner similar to that of intercity rail (Amtrak). Maglev prototypes in Germany and Japan have logged thousands of miles at speeds of up to 260 miles per hour. Maglev technology has several possible benefits, including: (a) environmentally acceptable; (b) fuel efficiency (electric power); (c) possibility of relieving highway and airport congestion; (d) ability to cover short distances in roughly the same amount of time as
airplane travel; (e) considered safer than other kinds of trains because the train wraps around the rail and is difficult to derail; (f) non-contact levitation system (no friction and less wear); (g) offers high sustained maximum speeds, capable of speeds over 300 mph; and (h) elevated guideway uses less space.

**Management Systems in TEA-21** - The Act requires each state to develop and implement the following management systems: (a) highway pavement of federal-aid highways; (b) bridges on and off federal-aid highways; (c) highway safety; (d) traffic congestion; (e) public transportation facilities and equipment; (f) intermodal transportation facilities and systems. In metropolitan areas, these systems are to be developed and implemented in cooperation with the MPO. Management system products are to be considered by the State and MPOs in their planning processes. The U.S. Department of Transportation issued guidelines for these systems.

**Metropolitan Planning Organizations (MPOs)** - Federally designated organizations for urbanized areas of greater than 50,000 population mandated to carry out transportation planning as required by ISTEA and its subsequent legislations. Kern COG is the MPO for Kern County.

**Metropolitan Transportation Investment Studies (MTIS)** - Considered an important provision under the Metropolitan Planning regulations, MTIS is a high-type highway or transit improvement of substantial cost that is expected to have a significant effect on capacity, traffic flow, LOS, or mode share at the transportation corridor or subarea scale. The primary purpose of an MTIS study is to create a decision-making process for determining transportation investment strategies. Projects funded or approved by the Federal Highway Administration and/or Federal Transportation Administration are subject to the Metropolitan Planning regulations and requirements under MTIS.

**Model** - An analytical tool (often mathematical) used by transportation planners to assist in making forecasts of land use, economic activity, travel activity and their effects on the quality of resources such as land, air and water.

**Multimodal** - Refers to the availability of multiple transportation options, especially within a system or corridor. A concept embraced by TEA-21, a multimodal approach to transportation planning focuses on the most efficient way of getting people or goods from place to place, be it truck, train, bicycle, automobile, airplane, bus, boat, foot, or even a computer modem.

**National Environmental Policy Act (NEPA)** - Passed by Congress in 1969, NEPA established the Council on Environmental Quality and required the preparation of environmental impact statements for federal projects. NEPA requires that an Environmental Impact Assessment (EIA) describe current conditions, identify alternative means of accomplishing the objective, enumerate the likely impacts of each alternative, identify the preferred alternative and the method used to select it, describe the impact of the selected alternative in detail, and list possible actions to minimize negative impacts of the selected alternative. See also Environmental Impact Report/Environmental Impact Statement.

**National Highway System (NHS)** - ISTEA established a 155,000-mile NHS to provide an interconnected system of principal arterial routes to serve major travel destinations and population centers, international border crossings, as well as ports, airports, public transportation facilities, and other intermodal transportation facilities. The NHS must also meet national defense requirements and serve interstate and interregional travel. Eligible projects include new construction, reconstruction, and rehabilitation of highways, operational improvements, mass transit projects in an NHS corridor, safety improvements, transportation planning, traffic management and control, parking facilities, carpool projects, and bicycle and pedestrian projects. In areas not meeting federal clean air standards, up to 100 percent of NHS funding is transferable to the STP upon request of the State.
Nonattainment Area – Any geographic region of the U.S. that the U.S. EPA has designated as not attaining the federal air quality standards for one or more air pollutants, such as ozone and carbon monoxide. This includes the San Joaquin Valley, the Mojave Desert Air Basin, and the Indian Wells Valley/Searles Air Basin.

North/South Split - California law (Section 188, Streets and Highways Code) requires programming (i.e., “funding”) to be balanced so that 60 percent of the capital outlay is spent in the 11 southern counties, and 40 percent is spent in the 45 northern counties. This balance must occur for the period July 1, 1989 to June 30, 1993, and for each subsequent five-year period. This rule has a serious impact on the type of projects programmed for all counties. Rehabilitation and safety funds tend to be spent roughly 60 percent in northern counties, and only 40 percent in southern counties, because of worse weather conditions and more mountainous roads in northern counties. In addition, engineering costs are relatively higher in northern than in southern counties, and Caltrans’ project support costs for locally funded projects, of which the North has a disproportionate share, is also included. Thus, funds for capacity-increasing projects need to be weighted toward southern counties, so that the overall balance remains 60/40.

Off-Peak Period – Non-rush periods of the day when travel activity is generally lower.

Operational Improvement - A capital improvement for installation of traffic surveillance and control equipment, computerized signal systems, motorist information systems, integrated traffic control systems, incident management programs, and transportation demand management facilities, strategies, and programs and such other capital improvements to public roads as the Secretary may designate, by regulation. The term does not include resurfacing, restoring, or rehabilitating improvements, construction of additional lanes, interchanges, grade separation, or the construction of a new facility at a new location.

Operating Assistance – Financial assistance for transit operating expenses (not capital costs); such aid may originate with federal, local or state governments.

Paratransit – Comparable transportation service required by the Americans with Disabilities Act (ADA) of 1990 for individuals with disabilities who are unable to use fixed-route transportation systems.

Pavement Management System (PMS) - Required by Section 2108.1 of the Streets and Highways Code, any jurisdiction that wishes to qualify for funding under the STIP must have a PMS that is in conformance with the criteria adopted by the Joint City/County/State Cooperation Committee. At a minimum, the PMS must contain: (1) An inventory of the arterial and collector routes in the jurisdiction that is reviewed and updated at least biennially; (2) An assessment of pavement condition for all routes in the system, updated biennially; (3) An identification of all sections of pavement needing rehabilitation or replacement; and (4) A determination of budget needs for rehabilitation or replacement of deficient pavement sections for the current and upcoming biennial periods.

Peak Period – Morning and afternoon time periods when all modes of travel are highest.

Principal Arterial - The functional classification system at the federal level defines principal arterials for rural areas, urbanized areas, and small urban areas. In urbanized areas, the principal arterial system can be identified as unusually significant to the area in which it lies in terms of the nature and composition of travel. Principal arterials derive their importance from service to rural oriented traffic and/or from service for major movements within the urbanized area. The principal arterial system should carry the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central city. Frequently, the principal arterial system will carry important intra-urban as well as intercity bus routes. In small urban and
urbanized areas, this system should provide continuity for all rural arterials which intercept the urban boundary. Because of the nature of the principal arterial system, almost all fully and partially controlled access facilities will be part of this functional system; however, it is not restricted to controlled access routes. The spacing of urban principal arterials will be closely related to the trip-end density characteristics of particular portions of the urban areas.

**Program** - (1) verb: to assign funds to a project that has been approved by Kern COG, the state or other agency; (2) noun: a system of funding for implementing transportation projects or policies, such as through the State Transportation Improvement Program (STIP).

**Program of Projects (POP)** - Defines projects to benefit from federal transit funding provided to Kern County agencies by formula for each fiscal year from FTA Section 5311 and Congestion Mitigation/Air Quality (CMAQ) program. Kern COG, as the RTPA, and its member agencies work together to ensure that the funds listed in the POP are programmed and included in the Federal Transportation Improvement Program (FTIP).

**Project Study Report (PSR)** - Chapter 878 of 1987 Statutes requires that any capacity-increasing project on the state highway system have a completed PSR prior to programming the STIP. The PSR must include a detailed description of the project scope and estimated costs. This legislation's intent is to improve the accuracy of the schedule and costs shown in the STIP, and thus improve the overall accuracy of the STIP delivery and cost estimates.

**Proposed State Transportation Improvement Program (PSTIP)** - Seven-year program based on the currently adopted STIP and the most recent Project Delivery Report. It may include additional schedule changes and/or cost changes, plus new projects that Caltrans proposed for the inter-regional road system, retrofitted soundwalls, and toll bridge and aeronautics programs, as well as the intercity rail program. Caltrans may also propose alternative FCR projects to those proposed in the RTIPs; this is the only overlap with the RTIPs. The PSTIP is due to the CTC on December 1 of odd numbered years.

**Public Transportation** - Transportation by bus, rail or other conveyance, either publicly- or privately-owned, that provides to the public general or special service on a regular and continuing basis. Also known as “mass transportation,” “mass transit,” and “transit.”

**Rate Of Progress Plan (ROP Plan)** - Identifies progress toward attainment of state and local air quality standards, and is incorporated in the State Implementation Plan (SIP). The Plans have been prepared by the Air Districts and reflect expected improvements and emissions reductions between 1990 and 1996, and between 1996 and 1999.

**Reasonably Available Control Measures** - (See Best Available Control Measures (BACM))

**Regional Transportation Improvement Program (RTIP)** - List of proposed transportation projects submitted to the CTC by the RTPA as a request for state funding. Individual projects are first proposed by local jurisdictions, then evaluated and prioritized by the regional agency for submission to the CTC. The RTIP has a five-year planning horizon and is updated every two years.

**Regional Transportation Plan (RTP)** - A comprehensive 20-plus year blueprint for the region, updated every two years by the regional transportation planning agency. The RTP includes goals, objectives, and policies, and recommends specific transportation improvements.

**Regional Transportation Planning Agency (RTPA)** - Agencies responsible for the preparation of RTPs and RTIPs and designated by the State Business, Transportation and Housing Agency to allocate transit funds. RTPAs can be local transportation commissions, COGs, MPOs, or statutorily created agencies. Kern COG is the RTPA for Kern County.
**Reverse Commuting** - Travel in a direction opposite the main flow of traffic, such as from the central city to a suburb during the morning peak period.

**Ridesharing** - A form of transportation, other than public transit, in which more than one person shares the use of the vehicle, such as a van or car, to make a trip. Also known as “carpooling” or “vanpooling”.

**Safety Programs** - ISTEA sets aside ten percent of the Surface Transportation Funds and five percent of the reimbursement funds for programs related to railway-highway crossings and hazard elimination as defined by Sections 130 and 152 of the Act. Subsequent legislation, TEA-21 and TEA-LU, have continued this program.

**Service Authority for Freeways and Expressways (SAFE)** - Administers roadside callboxes and roving tow truck patrols (FSP) that assist stranded motorists to get SAFELY off the highways.

**Short-Range Transit Plans (SRTP)** - A nine-year comprehensive plan required of all transit operators by federal and regional transportation funding agencies. The plans must define the operator's mission, analyze past and current performance, and plan specific operational and capital improvements to realize short-term objectives.

**Shuttle** - A public or private vehicle that travels back and forth over a particular route, especially a short route or one that provides connections between transportation systems, employment centers, and the like.

**Single-Occupant Vehicle (SOV)** - A vehicle with one occupant, the driver, who is sometimes referred to as a “drive-alone”.

**Southern California Association of Governments (SCAG)** - A six-county planning and coordinating agency, similar to Kern COG, that deals with transportation, water quality, housing and land use. Also reviews and comments on applications for a variety of federal and state assistance programs.

**State Highway Account** -

**State Highway Operations and Protection Plan (SHOPP)** - A program created by state legislation that includes state highway safety and rehabilitation projects, seismic retrofit projects, land and buildings projects, landscaping, some operational improvements, and bridge replacement. 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 recent State gas tax increase partially funds the program, but it is primarily funded through the “old” nine-cent State gas tax and from federal funds. To be compatible with the Fund Estimate, a formula based on pavement condition and safety concerns is used to estimate an additional three years of the SHOPP program.

**State Highway Terminal Access Routes (SHTAR)** - Any route meeting minimum guidelines as set forth in Section 3401.5 of the California Vehicle Code for specific truck combinations requiring access to facilities for fuel, food, lodging and repairs. These truck sites must be within one road mile to and from specified highways at identified points of ingress and egress. Roads and ramps from highways to terminals or services must be evaluated for safety by Caltrans and incorporated into the existing Terminal Access Route system.

**State Implementation Plan (SIP)** - State plan required by the Federal Clean Air Act to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.
**State/Local Partnership** - Originally created by SB 140, and subsequently funded by the passage of Proposition 111 in June 1990, the State/Local Partnership program provides state matching funds for locally funded and constructed highway and exclusive public mass transit guideway projects. Some $2 billion has been designated for this program over 10 years. Eligible projects are defined by the legislation and clarified by guidelines published by the Caltrans Division of Local Streets and Roads. Applications are submitted annually to Caltrans by June 30 for the following fiscal year. The amount of State match available in a given year is dependent on the number of eligible applicants and the size of the appropriation to the program by the legislature during the budget process. The state match cannot exceed 50 percent. For the first three years of the program, the match ratio has been 21 percent, 18 percent, and 15 percent, respectively.

**State Transit Assistance (STA)** - This program provides funding for mass transit and transportation planning. With half of the revenues transferred to the TP&D Account and appropriated to STA. STA apportionments to regional transportation planning agencies are determined by two formulas: 50 percent by populations and 50 percent by the amount of operator revenues (fares, sales tax, etc.) for the prior year. STA funds may be used for transit capital or operating expenditures. Passage of Proposition 116 disallows use of STA funds for streets and roads in non-urban counties.

**State Transportation Improvement Program (STIP)** - A list of transportation projects, proposed in RTIPs and the PSTIP, which are approved for funding by the CTC.

**Surface Transportation Program (STP)** - Funding program established by ISTEA, and continued under subsequent federal transportation legislation that is very flexible, in that many types of mass transit and highway projects are eligible for funding under this program. Ten percent of the projects funded under this program must be transportation enhancement activities and 10 percent for safety projects.

**Surface Transportation Policy Project - (STPP)** - A diverse coalition representing transportation, planning, architectural, energy, environmental and historic preservation interests whose goal is to develop a national transportation policy that, in its words, “better serves the environmental, social and economic interests of the nation.” STPP was a key player in crafting federal transportation legislation.

**Traffic Operations Centers (TOC)** - Computer-based traffic signal control system that monitors traffic conditions and system performance, selects appropriate signal timing (control) strategies, and performs equipment diagnostics and alert functions. Sensors in the signals detect the passage of vehicles, vehicle speed, and congestion levels. Kern County’s TOC is located within the Bakersfield City Hall.

**Traffic Systems Management Program (TSM Program)** - A new state-funded program that funds those projects which "increase the number of person trips on the highway system in a peak period, without significantly increasing the design capacity of the system, measured by vehicle trips, and without increasing the number of through traffic lanes" (TSM Guidelines adopted by the CTC in October 1989). This program is funded outside of the STIP process, through direct application to Caltrans. The CTC allocates funds to the projects from a prioritized list submitted by Caltrans. Statute requires that priority be given to projects from counties with adopted CMPs.

**Transit Capital Improvement Program (TCIP)** - An annual State program, funded primarily from the TP&D account for transit capital projects. All State funds must be matched by 50 percent local funds.
Transportation Control Measures (TCMs) - Strategies to reduce driving or smooth traffic flows in order to cut auto emissions and resulting air pollution. Examples of TCMs include roving tow truck patrols to clear stalled vehicles and accidents from congested roadways, new or increased transit service, or a program to promote carpools and vanpools.

Transportation Demand Management (TDM) - "Demand-based" techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules, that enable employees to commute to and from work outside of peak hours.

Transportation Enhancement - TEA-21 defines transportation enhancement for the purpose of funding under the STP as “the provision of facilities for pedestrians and bicycles, acquisition of scenic easements and scenic or historic sites, scenic or historic highway programs, landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, facilities and canals, preservation of abandoned railway corridors including the conversion and use thereof for pedestrian or bicycle trails, control and removal of outdoor advertising, archaeological planning and research, and mitigation of water pollution due to highway runoff.”

Transportation Improvement Program (TIP) - A federally required document produced by the regional transportation planning agency that states the investment priorities for transit and transit-related improvements, mass transit guideways, general aviation and highways. The State is also required to produce a federal TIP which includes all projects proposed for federal funding.

Transportation Systems Management - Low-cost improvements to make the transportation system work more efficiently, such as traffic signal coordination.

Urban Mass Transportation Administration (UMTA) - Defunct agency. See “Federal Transit Administration” (FTA).

Urbanized Area - An area with a population of 50,000 or more designated by the U.S. Census Bureau, within boundaries to be fixed by responsible state and local officials, subject to approval by the Secretary of Transportation.

Vanpool - An arrangement in which a group of passengers share the use and cost of a van in traveling to and from pre-arranged destinations together.

Vehicle Miles Traveled (VMT) - Travel demand forecasting (modeling) is used to generate the average trip lengths for a region. The average trip length measure can then be used in estimating vehicle miles of travel, which in turn is used in estimating gasoline usage or mobile source emissions of air pollutants. Reducing VMT can help ease traffic congestion and improve air quality.

ACRONYMS

AA - Alternatives Analysis
AADT - Annual Average Daily Traffic
AASHTO - American Association of State Highway & Transportation Officials
ADA - Americans with Disabilities Act
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APCD</td>
<td>Air Pollution Control District</td>
</tr>
<tr>
<td>APTA</td>
<td>American Public Transit Association</td>
</tr>
<tr>
<td>AQAP</td>
<td>Air Quality Attainment Plan</td>
</tr>
<tr>
<td>AQMD</td>
<td>Air Quality Management District</td>
</tr>
<tr>
<td>ASR</td>
<td>Airport Surveillance Radar</td>
</tr>
<tr>
<td>AVLS</td>
<td>Automatic Vehicle Location System</td>
</tr>
<tr>
<td>AVR</td>
<td>Average Vehicle Ridership</td>
</tr>
<tr>
<td>AVTTAC</td>
<td>Aviation Transportation Technical Advisory Committee</td>
</tr>
<tr>
<td>BACM</td>
<td>Best Available Control Measure</td>
</tr>
<tr>
<td>BARCT</td>
<td>Best Available Retrofit Control Technology</td>
</tr>
<tr>
<td>BSC</td>
<td>Bakersfield Senior Center</td>
</tr>
<tr>
<td>CAATS</td>
<td>California Alliance for Advanced Transportation Systems</td>
</tr>
<tr>
<td>CALTRANS</td>
<td>California Department of Transportation</td>
</tr>
<tr>
<td>CARB</td>
<td>California Air Resources Board</td>
</tr>
<tr>
<td>CCAA</td>
<td>California Clean Air Act</td>
</tr>
<tr>
<td>CEC</td>
<td>California Energy Commission</td>
</tr>
<tr>
<td>CEQA</td>
<td>California Environmental Quality Act</td>
</tr>
<tr>
<td>CHP</td>
<td>California Highway Patrol</td>
</tr>
<tr>
<td>CIP</td>
<td>Capital Improvement Program</td>
</tr>
<tr>
<td>CMA</td>
<td>Congestion Management Agency</td>
</tr>
<tr>
<td>CMAQ</td>
<td>Congestion Management/Air Quality (funding program)</td>
</tr>
<tr>
<td>CMP</td>
<td>Congestion Management Program</td>
</tr>
<tr>
<td>CMS</td>
<td>Changeable Message Signs; Congestion Management System</td>
</tr>
<tr>
<td>COG</td>
<td>Council of Governments</td>
</tr>
<tr>
<td>CPUC</td>
<td>California Public Utilities Commission</td>
</tr>
<tr>
<td>CTC</td>
<td>California Transportation Commission</td>
</tr>
<tr>
<td>CTP</td>
<td>California Transportation Plan</td>
</tr>
<tr>
<td>CTSA</td>
<td>Consolidated Transportation Services Agency</td>
</tr>
<tr>
<td>CVWP</td>
<td>Central Valley Water Project</td>
</tr>
<tr>
<td>DAR</td>
<td>Dial-A-Ride</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Energy (federal)</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation (federal)</td>
</tr>
<tr>
<td>DTIM</td>
<td>Demand Travel Impact Model</td>
</tr>
<tr>
<td>EAFB</td>
<td>Edward Air Force Base</td>
</tr>
<tr>
<td>EIR/EIS</td>
<td>Environmental Impact Report (state;) Environmental Impact Statement (federal)</td>
</tr>
<tr>
<td>EMM</td>
<td>Environmental Enhancement and Mitigation Program</td>
</tr>
</tbody>
</table>
MTS – Metropolitan Transportation System
NAFTA – North American Free Trade Agreement
NAHC – Native American Heritage Commission
NAWS – (China Lake) Naval Air Weapons Station
NEPA – National Environmental Policy Act
NIMBY – Not In My Back Yard
NHS – National Highway System
NTS – National Transportation System
NO – nitric oxide
NO₂ – nitrogen dioxide
NOP – Notice of Preparation
OAA – Older Americans Act
OPR – Office of Planning and Research
OWP – Overall Work Program
O₃ – ozone
PAC – Project Advisory Committee
PAPI – Precision Approach Path Indicator
PM₁₀ – Particulate Matter (less than 10 microns in size); PM₂.₅ (less than 2.5 microns)
PMS – Pavement Management System
POP – Program of Projects
pphm – parts per hundred million
PSR – Project Study Report
PSTIP – Proposed State Transportation Improvement Program
PTA – Public Transportation Account
PUC – Public Utilities Commission
ROC – Reactive Organic Compounds
ROP – Rate of Progress Plan
ROW – Right(s)-of-Way
RSTP – Regional Surface Transportation Program
RTIP – Regional Transportation Improvement Program
RTP – Regional Transportation Plan
RTPA – Regional Transportation Planning Agency
SB – Senate Bill
SHA – State Highway Account
SHOPP – State Highway Operations and Protection Plan
SHPO – State Historic Preservation Office
SHRP - Strategic Highway Research Program
SHTAR - State Highway Terminal Access Routes
SIP - State Implementation Plan
SLTPP - State and Local Transportation Partnership Program
SJ VAB - San Joaquin Valley Air Basin
SJ VAPCD - San Joaquin Valley Air Pollution Control District
SR - State Route
STA - State Transit Assistance
STAA - Surface Transportation Assistance Act
STAF - State Transit Assistance Fund
STIP - State Transportation Improvement Program
STP - Surface Transportation Program
TAC - Technical Advisory Committee
TAZ - Traffic Analysis Zone
TCI - Transit Capital Improvement Program
TCM - Transportation Control Measure
TDA - Transportation Development Act
TDM - Transportation Demand Management
TEA - Transportation Enhancement
TEA-21 - Transportation Enhancement Act for the 21st Century
TIF - Transportation Impact Fee
TMA - Transportation Management Area and/or Association
TOG - Total Organic Gases
TPPC - Transportation Planning Policy Committee
TSMP - Transportation System Management Program
TTAC - Transportation Technical Advisory Committee
US DOT - Department of Transportation (federal)
USTIP - Updated State Transportation Improvement Program
VMT - Vehicle Miles Traveled
VT - Vehicle Trips
1.1 Executive Summary

This chapter provides an interregional perspective to transportation planning within the San Joaquin Valley of California, consisting of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and the San Joaquin Valley portion of Kern County. 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.

1.1.1 Valleywide Planning

The recently approved Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) replaced the 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 (RSTP), Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancements, Safety Program, Rail Program and Emergency Relief Programs. Previous federal legislation included the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). Transportation planning efforts are directed to be coordinated in geographically defined air basins. The eight counties mentioned above 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, San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Federal Highway Administration.

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, California Air Resources Board (CARB), the Environmental Protection Agency 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.
1.2 San Joaquin Valley Profile

The San Joaquin Valley is the southern portion of the Great Central Valley of California. Geographically, the San Joaquin Valley is long and relatively narrow. 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 reach elevations of over 14,000 feet, while the western boundary is the lower coastal ranges. Total land area is approximately 23,720 square miles.

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 are Interstate 5, State Route 99, Union Pacific Railroad, Burlington Northern Santa Fe Railroad, numerous oil and natural gas pipelines, a myriad of telecommunication facilities, and air travel corridors. East to west transportation facilities are less numerous but critical to the Interregional transportation network of the West Coast and the western United States. Numerous highways and rail lines cross the Valley, including State Routes 58, 46, 152, 198, and 120 among others.

For the purposes of this report, the San Joaquin Valley is considered to include the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. Kern County straddles the Sierra Nevada Mountains and occupies a portion of the Mojave Desert. The desert portion of Kern County is within the Southeastern Desert Air Basin (see Exhibit 1-1).

One issue that the eight counties have in common is a rapidly expanding population. In 1960, the eight San Joaquin Valley counties had a population of just over 1.4 million. By 1990, their population more than doubled to nearly 3.0 million. The region experienced a 34.0 percent increase in population over the 1980s and grew at 20.4 percent in the 1990-2000 period. The San Joaquin Valley has grown faster than the state of California in each calculation period since 1960 and accounted for about 10.3 percent of the population of California in 2006 (see Exhibit 1-2).

The San Joaquin Valley will continue to develop and become more populated. Both ends of the Valley are under growth pressures from huge metropolitan areas. Kern County population growth is being influenced by the Los Angeles area, while growth in Stanislaus, San Joaquin, and Merced counties is partially due to overflow growth from the San Francisco Bay Area. Much of the residential growth observed has been caused by people searching for affordable owner-occupied housing within automobile commuting range of the large metropolitan areas.

Future population growth is also expected to be sustained and significant. Population in the eight Valley counties is projected to exceed 6 million by the year 2030, using recently released growth projections from the California State Department of Finance and other sources (see Exhibit 1-3 and Exhibit 1-4).

Air quality is a major issue in the region. Many sections of the Valley are non-attainment areas for a number of pollutants. Geographical situation, economic activity and population pressures tend to exacerbate air pollution within the region.

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 (Fresno, Tulare, Kern, Merced, Stanislaus, San Joaquin and Kings). Urban areas tend to be widely separated from each other and are developed at low densities. A majority of the locally developed road and rail network serves farm-to-market activity. Major transportation facilities serve as conduits between major metropolitan areas, and national recreation areas.
Exhibit 1-1
The San Joaquin Valley Counties Within the Western US

1. San Joaquin County
2. Stanislaus County
3. Merced County
4. Madera County
5. Fresno County
6. Kings County
7. Tulare County
8. Kern County
Economically, the region is tied to primary production. Agriculture production will always be a major industry because of the physical characteristics of the Valley. According to the U.S. Census Bureau’s American Community Survey, the 2005 work force is structured as displayed in Exhibit 1-5. Agricultural activities, service occupations, and retail trade occupations account for over half of the employment in the San Joaquin Valley. However, direct employment in agriculture and other primary production (such as oil production - Kern County oil fields produce two-thirds of the on-shore oil recovered in California.) will continue to drop as production becomes more automated.

Educational attainment for San Joaquin Valley residents is outlined in Exhibit 1-6. San Joaquin Valley household income distribution is described in Exhibit 1-7. San Joaquin Valley age structure is outlined in Exhibit 1-8.

### Exhibit 1-2
San Joaquin Valley Counties Population Growth

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>COUNTY SEAT</th>
<th>1970 POPULATION</th>
<th>1980 POPULATION</th>
<th>1990 POPULATION</th>
<th>2003 POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresno</td>
<td>Fresno</td>
<td>413,053</td>
<td>514,621</td>
<td>667,490</td>
<td>836,100</td>
</tr>
<tr>
<td>Kern</td>
<td>Bakersfield</td>
<td>339,162</td>
<td>402,089</td>
<td>543,477</td>
<td>698,000</td>
</tr>
<tr>
<td>Kings</td>
<td>Hanford</td>
<td>64,610</td>
<td>73,738</td>
<td>101,469</td>
<td>135,100</td>
</tr>
<tr>
<td>Madera</td>
<td>Madera</td>
<td>41,519</td>
<td>63,116</td>
<td>88,090</td>
<td>129,500</td>
</tr>
<tr>
<td>Merced</td>
<td>Merced</td>
<td>104,629</td>
<td>134,560</td>
<td>178,403</td>
<td>223,800</td>
</tr>
<tr>
<td>San Joaquin</td>
<td>Stockton</td>
<td>290,208</td>
<td>347,560</td>
<td>480,628</td>
<td>607,800</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>Modesto</td>
<td>194,506</td>
<td>265,900</td>
<td>370,522</td>
<td>477,900</td>
</tr>
<tr>
<td>Tulare</td>
<td>Visalia</td>
<td>168,322</td>
<td>245,738</td>
<td>311,821</td>
<td>383,100</td>
</tr>
<tr>
<td>San Joaquin Valley Total</td>
<td>1,626,009</td>
<td>2,047,322</td>
<td>2,742,000</td>
<td>3,491,300</td>
<td></td>
</tr>
<tr>
<td>California Total</td>
<td>19,053,134</td>
<td>23,667,902</td>
<td>29,760,021</td>
<td>35,336,000</td>
<td></td>
</tr>
</tbody>
</table>

| S.J. VALLEY % CALIFORNIA | 8.53% | 8.65% | 9.21% | 9.88% |

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresno</td>
<td>102.42%</td>
<td>2.14%</td>
<td>62.47%</td>
<td>2.11%</td>
</tr>
<tr>
<td>Kern</td>
<td>112.05%</td>
<td>2.29%</td>
<td>73.59%</td>
<td>2.40%</td>
</tr>
<tr>
<td>Kings</td>
<td>109.10%</td>
<td>2.24%</td>
<td>83.22%</td>
<td>2.64%</td>
</tr>
<tr>
<td>Madera</td>
<td>211.91%</td>
<td>3.48%</td>
<td>105.18%</td>
<td>3.14%</td>
</tr>
<tr>
<td>Merced</td>
<td>113.90%</td>
<td>2.31%</td>
<td>66.32%</td>
<td>2.21%</td>
</tr>
<tr>
<td>San Joaquin</td>
<td>109.44%</td>
<td>2.25%</td>
<td>74.88%</td>
<td>2.43%</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>145.70%</td>
<td>2.74%</td>
<td>79.73%</td>
<td>2.55%</td>
</tr>
<tr>
<td>Tulare</td>
<td>103.43%</td>
<td>2.16%</td>
<td>55.90%</td>
<td>1.93%</td>
</tr>
<tr>
<td>San Joaquin Valley Total</td>
<td>114.72%</td>
<td>2.32%</td>
<td>70.53%</td>
<td>2.32%</td>
</tr>
<tr>
<td>California Total</td>
<td>85.46%</td>
<td>1.88%</td>
<td>49.30%</td>
<td>1.74%</td>
</tr>
</tbody>
</table>

### Exhibit 1-3
San Joaquin Valley Counties Land Use and Population Density

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>LAND USE 2003</th>
<th>POPULATION DENSITY 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresno</td>
<td>5,963</td>
<td>140.21</td>
</tr>
<tr>
<td>Kern</td>
<td>8,073</td>
<td>86.46</td>
</tr>
<tr>
<td>Kings</td>
<td>1,392</td>
<td>97.05</td>
</tr>
<tr>
<td>Madera</td>
<td>2,147</td>
<td>60.32</td>
</tr>
<tr>
<td>Merced</td>
<td>1,984</td>
<td>112.80</td>
</tr>
<tr>
<td>San Joaquin</td>
<td>1,440</td>
<td>422.08</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>1,521</td>
<td>314.20</td>
</tr>
<tr>
<td>Tulare</td>
<td>4,863</td>
<td>78.78</td>
</tr>
<tr>
<td>San Joaquin Valley Total</td>
<td>27,383</td>
<td>127.50</td>
</tr>
<tr>
<td>California Total</td>
<td>155,973</td>
<td>226.55</td>
</tr>
</tbody>
</table>

Sources:
1. U.S. Bureau of the Census, April 1
2. State of California Department of Finance, July 1, 2003
Exhibit 1-3
San Joaquin Valley Counties Population Growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresno County</td>
<td>365,945</td>
<td>413,329</td>
<td>514,621</td>
<td>667,490</td>
<td>799,407</td>
<td>992,351</td>
<td>1,185,150</td>
<td>1,402,349</td>
</tr>
<tr>
<td>Kern County</td>
<td>291,984</td>
<td>330,234</td>
<td>403,089</td>
<td>544,981</td>
<td>661,645</td>
<td>845,600</td>
<td>1,010,800</td>
<td>1,208,200</td>
</tr>
<tr>
<td>Kings County</td>
<td>49,954</td>
<td>66,717</td>
<td>73,738</td>
<td>101,469</td>
<td>129,461</td>
<td>156,334</td>
<td>184,751</td>
<td>223,767</td>
</tr>
<tr>
<td>Madera County</td>
<td>40,468</td>
<td>41,519</td>
<td>63,116</td>
<td>88,090</td>
<td>123,109</td>
<td>175,132</td>
<td>224,567</td>
<td>281,300</td>
</tr>
<tr>
<td>Merced County</td>
<td>90,446</td>
<td>104,629</td>
<td>134,560</td>
<td>178,403</td>
<td>210,554</td>
<td>276,200</td>
<td>340,800</td>
<td>417,200</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>249,989</td>
<td>291,073</td>
<td>347,342</td>
<td>480,628</td>
<td>563,598</td>
<td>708,364</td>
<td>888,536</td>
<td>1,117,006</td>
</tr>
<tr>
<td>Stanislaus County</td>
<td>157,294</td>
<td>194,506</td>
<td>265,900</td>
<td>370,522</td>
<td>446,997</td>
<td>567,645</td>
<td>693,600</td>
<td>821,963</td>
</tr>
<tr>
<td>Tulare County</td>
<td>168,403</td>
<td>188,322</td>
<td>245,738</td>
<td>311,921</td>
<td>368,021</td>
<td>433,868</td>
<td>521,300</td>
<td>620,605</td>
</tr>
<tr>
<td>San Joaquin Valley Counties</td>
<td>1,414,483</td>
<td>1,630,329</td>
<td>2,048,104</td>
<td>2,743,504</td>
<td>3,302,792</td>
<td>4,155,494</td>
<td>5,049,504</td>
<td>6,092,390</td>
</tr>
</tbody>
</table>

Sources: 1 U.S. Bureau of the Census  
2 Central California Futures Institute  
3 Kern Council of Governments, adopted July 2005  
4 State of California Department of Finance, Interim projection released June 2001  
5 State of California Department of Finance, Final projection released November 1998, and MCTC interpolation  
6 State of California Department of Finance, Interim projection released June 2001, and addition for UC Merced-related growth  
7 San Joaquin Council of Governments  
8 Association of Bay Area Governments (ABAG)  
9 U.S. Department of Finance
### Exhibit 1-5
San Joaquin Valley Counties Employment by Industry, 2005

<table>
<thead>
<tr>
<th>Industry</th>
<th>Fresno County</th>
<th>Kern County</th>
<th>Kings County</th>
<th>Madera County</th>
<th>Merced County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Forestry and Mining</td>
<td>28,142 8%</td>
<td>40,213 14%</td>
<td>6,667 16%</td>
<td>7,411 14%</td>
<td>8,724 9%</td>
</tr>
<tr>
<td>Construction</td>
<td>26,668 7%</td>
<td>23,169 8%</td>
<td>2,707 6%</td>
<td>4,421 8%</td>
<td>7,486 8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>25,399 7%</td>
<td>14,143 5%</td>
<td>3,260 8%</td>
<td>5,343 10%</td>
<td>14,192 15%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>18,967 5%</td>
<td>12,452 4%</td>
<td>810 2%</td>
<td>1,784 3%</td>
<td>3,469 4%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>39,477 11%</td>
<td>37,655 13%</td>
<td>5,351 13%</td>
<td>5,662 10%</td>
<td>12,031 13%</td>
</tr>
<tr>
<td>Transportation, Warehousing and Utilities</td>
<td>16,032 5%</td>
<td>14,393 5%</td>
<td>1,985 5%</td>
<td>1,135 2%</td>
<td>4,372 5%</td>
</tr>
<tr>
<td>Information</td>
<td>6,108 2%</td>
<td>4,232 1%</td>
<td>372 1%</td>
<td>493 1%</td>
<td>2,419 3%</td>
</tr>
<tr>
<td>Finance, Insurance and Real Estate</td>
<td>20,822 6%</td>
<td>12,497 4%</td>
<td>932 2%</td>
<td>2,233 4%</td>
<td>2,783 3%</td>
</tr>
<tr>
<td>Professional, Management and Waste Management Services</td>
<td>30,456 9%</td>
<td>22,290 8%</td>
<td>1,506 4%</td>
<td>3,843 7%</td>
<td>4,075 4%</td>
</tr>
<tr>
<td>Education, Health Care and Social Assistance</td>
<td>75,411 21%</td>
<td>54,541 19%</td>
<td>8,447 20%</td>
<td>10,997 20%</td>
<td>20,437 22%</td>
</tr>
<tr>
<td>Arts, Recreation, Accommodation and Food Services</td>
<td>26,038 7%</td>
<td>22,284 8%</td>
<td>2,791 7%</td>
<td>4,130 8%</td>
<td>4,949 5%</td>
</tr>
<tr>
<td>Other Services, except Public Administration</td>
<td>17,295 5%</td>
<td>13,273 5%</td>
<td>1,475 5%</td>
<td>1,790 3%</td>
<td>2,952 3%</td>
</tr>
<tr>
<td>Public Administration</td>
<td>24,997 7%</td>
<td>22,734 8%</td>
<td>6,416 15%</td>
<td>5,431 10%</td>
<td>4,150 5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Civilian Labor Force</th>
<th>389,290</th>
<th>324,182</th>
<th>51,171</th>
<th>61,101</th>
<th>105,884</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Employment</td>
<td>355,812</td>
<td>293,969</td>
<td>42,719</td>
<td>54,673</td>
<td>92,061</td>
</tr>
<tr>
<td>Civilian Unemployment</td>
<td>33,478</td>
<td>30,213</td>
<td>8,452</td>
<td>6,428</td>
<td>13,823</td>
</tr>
<tr>
<td>Civilian Unemployment Rate</td>
<td>8.6%</td>
<td>9.3%</td>
<td>16.5%</td>
<td>10.5%</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

| Source: 2005 American Community Survey, U.S. Census Bureau |

### Exhibit 1-6
Percent Distribution of Educational Attainment of Persons 25 Years of Age and Older San Joaquin Valley, California and United States 2005

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>San Joaquin Valley Counties</th>
<th>California</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th grade</td>
<td>336,997 16.0%</td>
<td>2,341,399 10.5%</td>
<td>12,092,849 6.4%</td>
</tr>
<tr>
<td>9th to 12th grade, no diploma</td>
<td>251,688 12.0%</td>
<td>2,096,110 9.4%</td>
<td>17,950,322 9.5%</td>
</tr>
<tr>
<td>High school graduate</td>
<td>547,600 26.1%</td>
<td>4,861,191 21.8%</td>
<td>55,929,425 29.5%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>459,680 21.9%</td>
<td>4,682,799 21.0%</td>
<td>37,979,103 20.1%</td>
</tr>
<tr>
<td>Associates's degree</td>
<td>167,954 8.0%</td>
<td>1,717,026 7.7%</td>
<td>13,982,356 7.4%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>233,179 11.1%</td>
<td>4,214,519 18.9%</td>
<td>32,499,531 17.2%</td>
</tr>
<tr>
<td>Graduate or professional degree</td>
<td>103,508 4.9%</td>
<td>2,363,698 10.6%</td>
<td>18,895,076 10.0%</td>
</tr>
</tbody>
</table>

Source: 2005 American Community Survey, U.S. Census Bureau
Exhibit 1-7
San Joaquin Valley Counties Median Household Income, 1989 and 1999

Exhibit 1-8
San Joaquin Valley Counties Age Structure, 2000

Source: 2000 U.S. Census
1.2.1 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 automated, requiring less human labor to accomplish more production. Services, wholesale trade and retail trade 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 percent 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, and particulate matter 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 and Sacramento. Amtrak and Caltrans will continue their 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.

1.3 **San Joaquin Valley Policy Element**

This Policy Element has been developed to set forth the common transportation goals, objectives, and policies as expressed in the existing eight Regional Transportation Plans of the San Joaquin Valley counties. Effective cooperation and defined areas of focus are established by the eight agencies to enable the next step of defining specific objectives and policies. This version of the Policy Element is only designed to achieve the first objective, noting the areas of cohesion. Staff members of the eight agencies will then work progressively toward developing individual RTP updates to address specific objectives of the individual counties. Also included in the updates will be a full discussion of financial resources required to meet the individual county needs.

This cooperative effort as mandated by two separate memorandums of understanding among the eight agencies demonstrates that the eight counties are coordinating their programs and plans in a two-fold effort:

1. To meet the requirements of federal legislation, specifically SAFETEA-LU and its extending legislation, ISTEA, TEA-21, as well as the Federal Clean Air Act Amendments; and more importantly,

   2. To address the issues that impact the overall Valley as well as issues that directly impacts each of the eight counties.

Before listing the goals, objectives, and policies, it is important to have a broad understanding of the intent behind each of the terms. These terms are defined in the adopted California Regional Transportation Plan Guidelines.

A "**goal**" is the end toward which effort is directed; it is general in application and timeless.

An "**objective**" provides clear, concise guidance to attaining the goal. Objectives are successive levels of achievement in movement toward a goal. They are results to be achieved by a stated point in time. Individual objectives are capable of being quantified and realistically attained.

A "**policy**" is a direction statement that guides present and future decisions on specific actions. Policies should support the attainment of objectives.

1.3.1 **Transportation Goals, Objectives, and Policies**

**GOAL:** Design, develop and maintain a multimodal transportation system that efficiently and safely moves people and goods; serves the social, economic, and physical needs of Valley residents while enhancing the quality of life.

**Objectives:**

- A multimodal circulation network which is convenient, safe and efficient;
- A multimodal circulation network which is both cost effective and environmentally sound; and
- A transportation system that meets the travel demands of both citizens and businesses.

**Policies:** Facilitate a cooperative effort between the public and private sectors to integrate transportation modes through a coordinated transportation planning process, carried out by the eight regional transportation planning agencies.
Work with public transit and social service agencies to assist in implementing short and long range transit development plans.

Involve citizens as well as businesses in planning transportation facilities and services. Special efforts should be made to include those individuals and groups who may not have been included in the past. These groups may include the elderly, infirm, and racial/ethnic minorities, including Native Americans. Working with these and other groups, strategies that address transportation issues of importance to under-served groups will be developed. Direct involvement by under-represented groups will be promoted in transportation planning, project selection, and other transportation issues that affect them.

Support transportation planning and programming efforts.

Minimize conflicts between modes.

Assure that the existing transportation facilities are maintained and repaired as necessary to continue usability.

Emphasize improvement of existing facilities, thereby increasing capacity and flow.

Cooperatively work toward a transportation system that will widen the mode choice available to travelers and shippers.

Support the implementation of Transportation System Management, Transportation Demand Management and Transportation Control Measures that reduce emissions from the circulation system. This support shall include consultation with the San Joaquin Valley Air Pollution Control District.

Support transportation systems that have the lowest levels of energy consumption while meeting mobility needs by promoting clean, alternative and renewable energy sources.

Promote the development of the high-speed rail alignment along the State Route 99 corridor with at least one stop in each of the Central Valley counties.

Support alternative land use patterns that will facilitate walking, biking and transit modes of transportation.

**GOAL:** Develop and finance multimodal transportation facilities that are consistent with regional, subregional and local growth policies that are consistent with state and federal air quality plans.

**Objectives:**

- Prepare Regional Transportation Improvement Programs that list multimodal transportation facility improvements/operations in a financially constrained manner and are in conformance with adopted California State Implementation Plans for air quality purposes.

- Work to attain and maintain National Ambient Air Quality Standards in the San Joaquin Valley.

**Policies:**

Use the Public Utilities Commission notification of any rail line abandonment proposals to facilitate the evaluation of possible impacts on the transportation system and encourage the development of alternative uses for the facilities.

Analyze the impact of all transportation proposals to ensure cost effectiveness.
Maximize use of state and federal funds available for transportation.

Make system enhancements, where warranted, when economically feasible and environmentally sound.

Maximize the use of Interregional Improvement Program (IIP) and State Highway Operational and Protection Program (SHOPP) funds through partnerships within the San Joaquin Valley counties and Caltrans.

Work directly with the San Joaquin Valley Air Pollution Control District in the developmental phases of transportation programs, air quality, transportation plans and fee schedules.

Improve air quality through a cooperative effort to dedicate Congestion Mitigation & Air Quality funding for projects that improve air quality.

Improve air quality by supporting jurisdictions that take steps to reduce VMT through compact, mixed-use land use patterns.

**GOAL:** Define, preserve and enhance Valley transportation corridors.

**Objectives:**
- Ensure that Valleywide multimodal circulation is maintained and improved; thereby serving the social, economic and physical needs of Valley residents.

**Policies:**
- Coordinate planning efforts to prioritize a system of regional corridors of importance.
- Cooperatively determine appropriate measures to pursue preservation and improvement of the defined corridor system.
- Promote the improvement of significant Valley routes as Focus Routes and High Emphasis routes as defined in the *Interregional Transportation Strategic Plan.*
- Jointly pursue funding for expansion and maintenance of significant Valleywide corridors.

**GOAL:** Promote the maintenance of the existing transportation system.

**Objective:**
- Preserve existing transportation facilities where practical, develop ways to meet transportation needs by using existing transportation facilities more efficiently.

**Policies:**
- Allocate sufficient resources to maintain current system at the current level of repair.
- Pursue additional funding to increase level of maintenance to correct deficiency.
- Encourage creative transportation demand management policies to utilize existing facilities more efficiently.

**GOAL:** Encourage land use design which is more efficient and more conducive to the use of transit, non-motorized transportation and rail alternatives.

**Objective:**
- Support land uses that are in the interest of the general community by encouraging population densities and patterns that are conducive to transit and non-motorized transportation options.

**Policies:**
- Advise decision-makers on land use issues to favor compact development.
Discourage non-contiguous development that is widely separated from existing urban services.

Promote the concept of jobs-housing balance in new and existing development.

Facilitate infill development to raise population density in existing settings.

Provide incentives to promote walkable subdivision design that is based on an interconnected grid of neighborhood streets and small blocks.

Provide incentives for the development of high density, mixed use neighborhood centers at that will promote and sustain transit ridership.

### 1.3.2 Air Quality

**Introduction**

The San Joaquin Valley faces a serious environmental problem: air quality. Both the state and federal governments set standards and monitor air quality based on the need to protect public health. Despite twenty years of legislation and regulation, many regional areas in the state of California, including the San Joaquin Valley, still do not meet all air quality standards. The three major pollutants of concern in the San Joaquin Valley are:

- Ozone
- Carbon Monoxide
- Suspended Particulate Matter (PM10 & PM2.5)

The severity of the problem is related to Valley topography and climate. The Valley has a warm, sunny climate, a relatively flat valley floor, and is surrounded by mountain ranges. Air pollutants generated from other air basins as well as activity in the Valley floor become trapped by an inversion layer caused by cool air masses, held captive by the Coastal and Sierra Nevada Mountain Ranges, and held down by the sun-warmed air expanding above the Valley.

Pursuant to Federal law, the EPA has designated the entire Valley a non-attainment area for ozone and particulate matter. In 1998, the metropolitan areas of Fresno, Modesto, Stockton and Bakersfield were redesignated to maintenance/attainment areas for carbon monoxide. In July 2006, EPA proposed that the Valley attained the National Ambient Air Quality Standards (NAAQS) for PM10. The Valley is unique within the nation and is not typical of most air basins. The ozone attainment area encompasses eight counties and contains six separate and distinct metropolitan areas amidst millions of acres of farmland. The travel patterns also vary between each metropolitan area.

**Problem Causes**

Traditionally recognized sources of air pollution are divided into two categories as follows:

**Stationary/Area Sources** - examples are:

- Fuel combustion (oil and gas production, other manufacturing/industrial/agricultural)
- Solvent use (dry cleaning, printing, de-greasing, asphalt paving)
- Industrial processes (food and agriculture, mineral processes)
- Waste burning (agricultural debris, range management)
- Petroleum processes (oil and gas extraction, petroleum refining and marketing)
- Miscellaneous processes (landfills, unplanned fires, pesticide application)

**Mobile Sources** - examples are:
- On-road vehicles (automobiles, trucks, motorcycles)
- Other mobile (off-road vehicles, trains, aircraft, utility equipment)

In addition to the sources listed above, the California Clean Air Act requires that emissions from “indirect” sources be examined and, where feasible, control measures be proposed to reduce or mitigate their impacts. The Federal Clean Air Act defines an "indirect" source as a facility, building, structure, installation, real property, road, or highway that attracts mobile sources of pollution.

**Assumptions/Future Needs and Issues**

Many of the most effective tools for reducing the impact of motor vehicle emissions are not within the control of local government agencies or regional transportation planning agencies. Local agencies do not have the authority to set vehicle exhaust standards or to determine the number of vehicles registered for use. In addition, their ability to influence the national or state production standards that would accelerate alternative fuels usage is limited. This type of authority rests at the state and federal levels. Moreover, effective economic tools such as tax incentives for low emissions vehicles, registration surcharges for high pollution vehicles, and general gasoline tax rates lie with the state and federal regulatory and legislative arenas. Local agencies cannot be expected to bear the sole responsibility for attaining air quality standards. Improving air quality will take a cooperative effort on the part of federal, state and local agencies with continued emphasis on aggressive on-board emission control measures at the state and national levels.

Local agencies can be expected to complement those measures through adoption of transportation control programs. Local decision makers need to consider the land use/transportation/air quality link.

The demand for transportation services is affected by a variety of factors:
- Per capita vehicle ownership and use (both increasing at higher rates than population);
- Regional center and facility siting decisions;
- Residential proximity to employment and commercial centers;
- Convenience and efficiency of local transportation systems, in particular those related to automobile traffic; and
- Comparative cost of each transportation alternative.

The challenge is to establish a reasonable balance between the legitimate demand for a safe and convenient transportation system with individual access to a broad range of services and equally legitimate environmental and conservation concerns. Implied is a heightened awareness of the impacts of growth and development on local conditions. The relationship of land use patterns to regional scale traffic flow must be emphasized and considered as an integral part of the process to improve air quality.

A safe and convenient transportation system must be maintained. It is important that reasonable alternatives to daily use of single-occupant vehicles be developed and made available to the public. The combination of public acceptance of the need for change and the availability of reasonable alternatives to encourage that change should lead to long-term changes in individual travel behavior.
Short-Range Strategy

The following are areas of focus with respect to the Valley’s short-range strategy:

- Support maintenance of aggressive state programs to control hydrocarbon, nitrogen oxide, and carbon monoxide emissions through on-board controls;
- Support SJVAPCD activities to ensure compliance with EPA regulations for motor vehicle inspection and maintenance programs;
- Support state and federal programs to promote development of alternative fuel sources;
- Continue the cooperative effort between the eight RTPAs and the SJVAPCD in providing coordinated transportation/air quality planning;
- Continue to cooperate/consult with the SJVAPCD in its activities aimed at achieving air quality standards; and
- Achieve air quality benefits from funding sources that target motor vehicle emission reductions.

Existing Efforts

EPA and the United States Department of Transportation, through the mechanism of transportation conformity, require a cooperative effort between themselves, Caltrans, the eight Valley RTPAs, and the San Joaquin Valley Air Pollution Control District. Currently, the eight Valley RTPAs and the SJVAPCD have entered into an MOU to ensure a coordinated transportation/air quality planning approach. The MOU defines a cooperative process aimed at maximum effectiveness and compatibility of both air quality and transportation plans. The MOU establishes a strong working relationship between the eight RTPAs and satisfies ISTEA, TEA-21, and SAFETEA-LU requirements by having a cooperative agreement between agencies located in the same non-attainment boundary.

Valley RTPAs hired an “Air Quality Coordinator” to address the logistics of valleywide coordination. The goals of the position are: to monitor compliance with federal and state clean air acts; coordinate and provide ongoing communications between valley RTPAs, FHWA, FTA, Caltrans, SJVAPCD, CARB, and EPA; provide RTPAs representation at meetings, workshops and public hearings; provide technical air quality assistance, and facilitate development of improved modeling data. In addition, air quality policy consultants have been hired to develop long-term policies to address air quality in the valley.

San Joaquin Valley Model Coordinating Committee

The San Joaquin Valley Model Coordinating Committee has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley air quality, conformity and transportation modeling issues. The committee's goal is to ensure valleywide coordination, communication and compliance with Federal and State Clean Air Act requirements. Each of the eight Valley RTPAs and the SJVAPCD are represented. In addition, FHWA, FTA, EPA, CARB and Caltrans are all represented on the committee. Information about the committee's activities is made available over the Fresno COG website [http://www.fresnocog.org/](http://www.fresnocog.org/), which includes meeting agendas and minutes; locally adopted BACM and RACM plans; and a summary of current air quality issues.

Air Quality Conformity

The November 15, 1990 Federal Clean Air Act Amendments (FCAA) placed tough new requirements on the sources and causes of air pollution in areas that fail to meet federal standards, including the San Joaquin Valley. The FCAA require substantial reductions from all pollution sources, including the
transportation sector, and establishes a conformity requirement to ensure that those reductions are achieved. Conformity has been a requirement of the 1977 Clean Air Act and was primarily a qualitative procedure. Under the FCAAA, quantification of emission sources from the transportation sector is also required.

Overall, the term “air quality conformity” refers to the process whereby transportation plans, programs and projects are shown to conform to the requirements of the FCAAA and the applicable SIP. It ensures that transportation projects contribute to improvements in air quality and not make it worse. Conformity applies to federal non-attainment areas for any air pollutant and to all RTPAs within non-attainment areas. The process is performed by designated MPOs and Caltrans on behalf of rural TPAs and some MPOs. Only FHWA has the authority to approve conformity with EPA, CARB, Caltrans and local agencies providing comment, technical resources and assumptions. Any adverse comments (public or private) can lead to disapproval by FHWA.

The interagency consultation provision of the conformity rule, §93.105, requires that general processes be established for, and specific decisions be made through, the interagency consultation. One regional emissions analysis is required for the entire San Joaquin Valley; however, separate modeling and conformity documents may be developed by each MPO. In the Valley the interagency consultation process is being used when conducting regional emissions analysis and demonstrating conformity for both the 8-hour ozone standard and the PM-2.5 standard.

EPA’s Transportation Conformity Rule (40 CFR part 51 and 93) was most recently updated on March 10, 2006, to include the July 1, 2004, final conformity rule (69 FR 40004) addressing conformity for 8-hour ozone and PM-2.5 standards; the May 6, 2005, final conformity rule (70 FR 31354), addressing PM-2.5 precursors; and the March 10, 2006, final conformity rule (71 FR 12468), addressing PM-2.5 and PM-10 “hot spot analysis”.

**Transportation Control Measures**

Transportation Control Measures (TCMs) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. States are required to show that they have included all reasonably available control measures in the State Implementation Plans, including Transportation Control Measures. The San Joaquin Valley is designated as a non-attainment air basin under both the Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA); both Acts require implementation of TCMs. Section 108(f) of the FCAA provides a list of TCMs that regions should consider implementing.

TCMs included in the SIP are discussed in the conformity documentation of each agency, which must demonstrate timely implementation of TCMs in approved SIPs. TCMs will continue to be mandated by FHWA, and will be included in the Valley’s air quality efforts.

**Ozone Attainment Demonstration Plan**

The San Joaquin Valley Air Basin has seen noteworthy air quality improvements over the past decade. However, despite a 45 percent reduction since 1989 in the number of days the Valley’s air exceeded health-based levels for ground-level ozone, also known as smog, the region still does not attain standards established by the federal EPA. The Valley’s long, hot summers; stagnant weather conditions; frequent inversions; and bowl shaped topography characterized by surrounding mountain ranges create the perfect conditions to form and trap ground-level ozone.

The San Joaquin Valley was classified as a Serious non-attainment area for the 8-hour Ozone standard under the June 15, 2004 federal 8-hour ozone standard and was given an attainment date of June 15, 2013. In addition to implementing the 8-hour ozone conformity requirements, the 1-hour ozone standard was revoked on June 15, 2005. The 8-hour ozone plan must include all Reasonably Available Control Measures (RACM), many of which are local measures best identified and evaluated by local jurisdictions.
The RACM process consists of local agencies developing lists of all measures that might be reasonable to implement and then involves evaluating measures to determine whether any should be committed to. In considering new measures, the RACM analysis must show that the measure:

- Is economically and technically feasible.
- Advances attainment. That is, if implemented, the measure could help achieve emissions reductions sooner.
- Have measurable emission reductions.
- Is available and within the jurisdiction’s authority to implement and enforce.

The Valley has discretion on how to address local RACM requirements in the SIP. Implementing agencies must either commit to implement the measures or provide reasoned justification for not implementing RACM. The commitments are critical to the success of the plan in demonstrating that RACM are being considered properly and implemented where appropriate. Once the commitments are included in the air quality plan, they become legal, binding commitments to implement measures. Failure to implement a committed measure may result in a lawsuit. Each jurisdiction decides that a new measure is not feasible for implementation. If a jurisdiction decides that a new measure is not feasible for implementation or an existing measure is not feasible for strengthening, the jurisdiction needs to justify why the measure is not feasible by citing technological and economic infeasibility. These reasons are important and may be subject to a legal challenge.

Meeting the challenge of attaining the 8-hour ozone standard in the Valley will require an innovative approach that involves every person and business in the Valley. The main focus of the Ozone Plan is the control strategy. California Air Resources Board modeling suggests that both Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) will need to decrease 60% beyond levels reflecting current control measures. A four faceted control strategy is being considered to achieve this reduction. The strategy will include regulatory components; incentive based strategies; alternative compliance; and local, state, and federal sources/partnerships.

**PM-10 Attainment Demonstration Plan**

On March 15, 2002, EPA proposed to find that the San Joaquin Valley did not attain the 24-hour and annual PM-10 NAAQS. EPA issued a “finding of failure” to attain standards in July 2002. In accordance with the Clean Air Act and the EPA finding, a new Serious PM-10 plan was required to be submitted to EPA. The Serious PM-10 plan had to include all Best Available Control Measures (BACM) as required under the Clean Air Act.

There were six local control measures that each jurisdiction within the San Joaquin Valley air basin had to adopt in order to be included in the Serious plan. They included (1) paving or stabilizing roads and alleys; (2) paving, vegetating and chemically stabilizing unpaved access points onto paved roads; (3) curbing, paving or stabilizing shoulders on paved roads; (4) frequent routine sweeping or cleaning of paved roads; (5) intensive street cleaning requirements for industrial paved roads and streets providing access to industrial/construction sites; and (6) erosion clean-up. The Air District Board adopted the Draft 2003 PM-10 Plan on June 19, 2003. Adoption by the California Air Resources Board (ARB) occurred June 26, 2003.

On May 8, 2006, the State requested that EPA find that the Valley attained the PM-10 standards based on Valley air quality data for the years 2003-2005. On October 17, 2006, EPA finalized approval of the state’s request to find the Valley in attainment of the PM-10 NAAQS. With this finding EPA also suspended the Valley’s PM-10 contingency measures requirements. Current control measures and commitments to reduce pollutants by the state and the district will continue to be implemented.
EPA’s October 17, 2006, finding would not re-designate the Valley to a PM-10 attainment/maintenance area under CAA section 107(d)(3). Redesignation would occur upon the state’s request for redesignation and submittal of a maintenance plan.

**PM 2.5**

Since the PM10 standards were established in 1987, a large number of important new studies have been published on the health effects of particulate matter. Many of these studies suggested that significant effects, such as premature mortality and respiratory illnesses, occurred at concentrations below the 1987 standards. In July 1997, EPA adopted new air quality standards for ozone and particulate matter. After reviewing hundreds of peer-reviewed scientific studies, EPA determined that these changes were necessary to protect public health and the environment. EPA established annual and 24-hour standards for the fine fraction of particulates (PM2.5). Based on health studies conducted, PM2.5 is considered to be more adverse to human health than any other pollutant. The San Joaquin Valley currently violates both standards. The Air District is scheduled to draft a State Implementation Plan (SIP) for PM2.5 due in 2008. The attainment date is 2010 with a possible 5 year extension.

**EMFAC 2002**

The EPA issued a Notice of Availability on April 1, 2003 in the Federal Register announcing the official release of the EMFAC2002 Motor Vehicle Emission Factor Model for use in the State of California. The EMFAC, short of EMission FACtor, is a computer model developed by the California Air Resources Board (CARB) that is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin or air basin within the county level.

EMFAC 2002 is used in transportation conformity for pollutants and precursors that affect transportation emissions and are identified in air quality plans as significant. The transportation conformity rule requires that analyses be based on the latest motor vehicle emissions model approved by EPA for SIP purposes. Effective July 1, 2003, EMFAC 2002 became the only approved motor vehicle emissions model for new regional and hot-spot transportation conformity analyses in California.

**EMFAC 2007**

EMFAC 2007 was released in November 2006. Although, EMFAC 2007 was released prior to the completion of the 2007 RTP update, EMFAC 2002 will be used in valley conformity determinations as EMFAC 2002 was the latest planning assumption available at the time valley conformity analysis began (§93.110). The implementation schedule for EMFAC 2007 conformity analysis is found in ARB’s January 3, 2006, “Latest Planning Assumptions” letter to EPA and FHWA. After the 2007 RTP Conformity Analysis, all future conformity determinations must use EMFAC 2007.

**1.3.3 Specific Transportation Strategies and Modal Action Plans**

**Introduction**

The specific transportation strategies used throughout the eight counties are classified under three programs: Transportation Demand Management, Transportation Control Measures, and Transportation Systems Management. Each of the eight counties is currently using a combination of the three programs to manage the vehicular flow on their streets, roads and highways.

**Transportation Demand Management**

Transportation Demand Management (TDM) consists of efforts to influence behavior regarding how, when, and where people travel. TDM strategies are designed to reduce vehicular trips during peak hours by shifting trips to other modes of transportation. TDM may also reduce trips by providing jobs and housing balance. TDM is specifically targeted at the work force that generates the majority of peak hour traffic. In each of the eight counties, a ridesharing outreach program is designed to educate employers and employees about the benefits of reducing trips. Some of the TDM strategies include the following
techniques:

- Rideshare programs
- Transit usage
- Flex hours
- Vanpools
- Bicycling & walking
- Telecommuting
- Mixed land uses

By educating people, TDM strategies can be implemented and utilized within the circulation system. However, in order to change travel habits, employers must identify transportation alternatives and encourage employees to reduce single occupant vehicle trips.

**Transportation Control Measures**

As discussed earlier, Transportation Control Measures are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. The following are examples of TCMs for implementation in the San Joaquin Valley area:

- Rideshare programs
- Park-and-ride lots
- Telecommunications
- Alternate work schedules
- Bicycle Facilities
- Public Transit
- Traffic Flow Improvements
- Passenger Rail and Support Facilities

RTPAs and local jurisdictions continue to make efforts to complete existing TCMs. New State Implementation Plans will include the evaluation of existing TCMs for potential improvements, and also determine whether new TCMs will need to be implemented to meet the requirements of the Clean Air Act.

**Congestion Management System**

As with TEA-21 and ISTEA, under SAFETEA-LU (Section(s) 1107, 6001), all urbanized areas larger than 200,000 population are required to have a Congestion Management System (CMS) or Congestion Management Process. The federal CMS requirements are similar to the optional California requirements; in fact, the CMS was largely modeled after the California program. Both programs are structured around the identification and monitoring of a system, the establishment of performance standards, and the identification and correction of congestion problems.

The Final Rule for the Federal Management and Monitoring Systems defines an effective CMS as a systematic process for managing congestion that provides information on: 1) transportation system performance, and 2) alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs. This process includes the following six elements:

1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implemented actions;

2) A definition of parameters for measuring the extent of congestion and for supporting the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies;

3) The establishment of a program for data collection and system performance monitoring to define the extent and duration of congestion, to help determine the causes of congestion, and
to evaluate the efficiency and effectiveness of implemented actions;

4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies, such as: transportation demand management measures, traffic operational improvements, Intelligent Transportation Systems technologies, and system capacity;

5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy proposed for implementation; and,

6) Implementation of a process for periodic assessment of the efficiency and effectiveness of implemented strategies, in terms of the area’s established performance measures.

**Transportation Systems Management**

Transportation Systems Management (TSM) is designed to identify short term, low cost capital improvements that improve the operational efficiency of the existing transportation infrastructure. An effective TSM program using the appropriate techniques can improve circulation and reduce automobile emissions throughout a region. TSMs are an important tool endorsed by the SJVAPCD and State to obtain air quality standards and congestion management levels-of-service. Furthermore, TSM strategies are used in coordination with TDMs and TCMs to improve our local and regional environment. Some of the TSM strategies include the following Traffic Flow Improvements:

- Traffic signal synchronization
- Traffic engineering improvements (geometric)
- Channelization
- One-way streets
- Turning and bus pocket bays
- Bus Terminals
- Removal of on street parking
- Limit arterial street access
- Street & Highway widening
- Bicycle facilities
- Pedestrian Malls

**Applicable Regions**

In the Central Valley, TSM strategies are currently in practice in all eight counties. The cities that experience severe traffic congestion during peak hours will benefit most from implementing TSMs.

**Strategies**

Transportation System Management (TSM) strategies are most effective in densely populated communities rather than on a regional Valleywide scale. However, implementing some of the applicable TSMs on a regional basis will require a cooperative effort among the eight counties. There are TSM
alternatives available for reducing traffic congestion regionally in the Central Valley (i.e. coordinate traffic signals). TSMs have several advantages that influence the environment and circulation system. By using TSM improvements, the circulation system becomes efficient and environmentally sensitive toward air quality.

1.4.1 Highway, Streets, and Roads

Introduction

The eight counties comprising San Joaquin Valley have extensively planned systems of streets and roads. Each of these single-county systems is designed to meet the demand for three types of travel: local, regional, and interregional. This section of the San Joaquin Valley Regional Transportation Plan Overview focuses on the interregional components of each system. It is important to note, however, that an effective interregional road system depends on sufficient local and regional facilities to provide access to interregional facilities and to provide sufficient capacity for local trips.

Existing Interregional Facilities

For several years, neighboring transportation planning agencies, Caltrans, and the Federal Highway Administration have coordinated single county, local and regional components of the street and road system for the counties that form San Joaquin Valley to ensure that the needs of interregional travelers have been met. In some cases, neighboring agencies have entered into more formal agreements to address multi-county problems.

Intended to serve as a long-range planning tool for the state transportation system, the Interregional Road System (IRRS) was adopted by Caltrans in 1998. The IRRS was developed to provide a highway system that was sufficient to meet the demand for travel between urban areas. Exhibit 1-11 identifies the IRRS road system within the eight-county San Joaquin Valley. This could be described as the San Joaquin Valley Interregional Road System (SJVIRRS). Facilities that are on the SJVIRRS, including the portions through urbanized areas, are those that are most important to Valleywide travel. By including the urbanized portions of IRRS routes in the conceptual SJVIRRS, the system meets the need for connectivity of roads between metropolitan areas and rural areas.

The San Joaquin Valley component of the IRRS provides access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments and historic sites and military installations. Moreover, extensions of Interstate 5, north and south of the Valley, provide access to border crossings into Canada and Mexico.

Caltrans is responsible for developing the Interregional Strategic Plan (ITSP) that identifies priorities for Interregional Improvement Program funds allocated through the State Transportation Improvement Program. This Plan is updated on a regular basis and includes specified projects in the San Joaquin Valley. Regional transportation planning agencies participate in the development of this Plan.

With respect to the movement of people and goods in the eight-county region, Interstate 5 and State Route 99 provide the most significant capacity. Many state routes provide major connections between Interstate 5 and State Route 99 as shown in Exhibit 1-9.

Interregional Issues

Each of the eight county Regional Transportation Plans address significant issues (either explicitly or implicitly) in transportation planning today. While several of these issues are local or regional in focus, three issues are significant on a Valleywide basis.
1. Aging highway network

The average design life of a state highway facility is 20 years; however, most of the facilities within the San Joaquin Valley Interregional Road System were originally constructed prior to 1970. Many do not meet today's design standards, particularly within urban areas. Others, such as Interstate 5, are deteriorating in condition.

Pursuant to Senate Bill 45, Caltrans has maintenance and operational responsibility for the State Highway System via the State Highway Operation and Protection Program (SHOPP). Regardless of how the improvements are funded, it is clear that preservation and maintenance of interregional roads is vital to the economic interests of the Valley.

In May 1999, Senate Resolution 8 was enacted by the Legislature that required the California Transportation Commission (CTC) to prepare a report documenting transportation infrastructure needs throughout the State. The report summarized the needs of San Joaquin Valley counties, highlighting the need for additional street and road maintenance and capital improvement funding.

Exhibit 1-9
Interregional Road System
2. Population growth and its implications for transportation

Each of the eight Valley counties experienced higher-than-average rates of population growth during the 1990s and into the 21st century. Projections by the California Department of Finance and local transportation planning agencies anticipate above-average population increases in the San Joaquin Valley for many years to come. This growth (past and projected) has a significant implication for interregional transportation facilities. While travel demand has risen in proportion to the increase in population, the state’s investment in the highway system has not kept pace.

3. Increased levels of truck traffic

The California economy is largely based on the efficient movement of goods, including the movement of raw materials to manufacturing and processing plants, as well as the movement of finished products to market. While goods are moved through a variety of modes (including rail, air, and pipeline), most are moved by trucks over roadways. The large-scale abandonment of railroads since 1980 and the expansion of the highway system since World War II have caused a major shift in freight movement from rail to trucks.

The increase in freight movement over State highways is now growing faster than increases in capacity. Moreover, the fastest growing segment of truck traffic is trucks with five or more axles; the State of California is under pressure to allow “triples” (trucks with three trailers) on selected state highways. With the introduction of Canadian and Mexican heavy trucks, traffic congestion will be compounded.

Truck traffic has three significant effects on highway transportation. First, high truck volumes affect pavement life and the cost of rehabilitating highway facilities. Second, the high volume of truck traffic on San Joaquin Valley roadways has increased the demand for additional roadway capacity. Third, facilities that attract large numbers of trucks are often located in or adjacent to areas with high levels of passenger vehicles and non-motorized traffic. Under these conditions, the potential for conflicts and accidents increases. Additional comments on this issue are provided in the Goods Movement section of this chapter.

4. Lack of adequate and stable State highway financing.

It is imperative that the State pursues a stable and consistent source of funding for transportation infrastructure needs. The voters, in 2003, enacted Proposition 42 that set aside transportation funds for transportation expenditures. In 2003, Governor Davis elected to override Prop. 42 and Governor Schwarzenegger is expected to do the same in 2004 to help backfill the $15 billion dollar state deficit. In conjunction with Proposition 42, the California Transportation Plan underscores that need by stating that "methods of financing the transportation system will be evaluated and recommended to achieve adequate funding levels and equity in the distribution of transportation costs and benefits.” Because of the state's stalled economy, limited funds are available for transportation improvements, bringing a close to the large budget surpluses that have made specialized funding, such as the Traffic Congestion Relief Program, available for transportation infrastructure improvements in the San Joaquin Valley.

The Traffic Congestion Relief Act (AB 2928) provided some additional funding for capital improvements in the San Joaquin Valley region prior to the suspension. Of the $5.3 billion made available throughout the State, however, about $502 million was allocated to the San Joaquin Valley. The Traffic Congestion Relief Act was not fully funded, and it did not represent a fair share allocation of funding as defined under the current formulas for the State Transportation Improvement Program. In addition, the State has continued to borrow funds from the State Highway Account to support the General Fund. The result has been a lack of any STIP funding for over four years. Repayment of the loans within the next few years is necessary if programmed projects are not to be further delayed. This infusion of the loan repayments is one of the needs if the counties within San Joaquin Valley are to be able to move forward with planned (constrained) projects.
Current State highway financing is a mix of State and federal dollars, augmented by a wide variety of local funds such as transportation sales taxes and development impact fees for some counties. The “Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users” (SAFETEA-LU) federal transportation act, approved August 10, 2005, followed several years of capital and maintenance backlog for the entire state. The last three biennial planning cycles for the State Transportation Improvement Program were exercises in project delay; these state programs will require several more years to catch up with the backlog before County shares reach full historical funding levels.

In November 2006, voters approved a number of bonds that provide funding for statewide infrastructure improvement. These include the (1) Corridor Mobility Improvement Account (CMIA), which provides $4.5 billion for congestion relief and connectivity/gap closures, (2) Highway 99 Program, which provides $1.0 billion to bring Highway 99 from Tehama to Kern County to a minimum 6 lane freeway standard. Program includes other significant capacity and operational improvements. Of the $1 billion, $850 million is for the San Joaquin Valley, (3) the Trade Corridor Program, which includes $2.1 billion to enhance important trade corridors (freeways, roadways, rail), and (4) STIP Augmentation of $2.0 billion.

Despite the recent bond approvals, the challenges to maintain a stable and consistent source of funding remain. As the State’s success with alternative fuels grows, traditional transportation improvements revenue sources, such as state and federal gasoline taxes, will grow at a much slower rate, perhaps even declining. In light of the higher than average growth in population and vehicles miles of travel projected for the San Joaquin Valley, these revenue trends are particularly alarming. Other, more significant, funding sources will have to be identified if the Valley is to adequately address its transportation needs.

5. State Route 99

State Route 99 is a major component of the California State Highway System, stretching nearly 500 miles from Red Bluff to past Bakersfield, generally parallel to Interstate 5. However, unlike Interstate 5, State Route 99 connects each of the major urbanized areas in the San Joaquin Valley, including Bakersfield, Visalia, Fresno, Modesto, Merced, and Stockton. State Route 99 attracts high volumes of inter-city commercial truck traffic serving the Valley’s economic activities. Truck traffic on State Route 99 ranges from 18 to 37 percent of total volume.

The majority of State Route 99 is currently a four-lane facility, but plans are underway to expand the route to a six-lane facility over a 15-year period. Numerous segments of State Route 99 are classified as expressway-class with at-grade intersections at rural arterials. Ultimate build-out for SR 99 is planned as a eight-lane facility. Safety and deterioration of the facility are issues of common concern to the Valley transportation planning agencies.

Highway Improvements

Each county RTP includes a funding-constrained action plan. These action plans have been prepared through extensive local and regional planning processes to best address regional needs with projected resources. This section intentionally does not address specific projects or interregional priorities. To the extent necessary, future transportation plans for the San Joaquin Valley will address project-specific actions and interregional priorities.

In the interim, county transportation planning agencies in the Valley are committed to considering the objectives, goals, and policies identified in this chapter’s Policy Element and the significant issues identified in this section when establishing regional priorities.

Relationship to Caltrans Systems Planning Process

Caltrans has been actively involved in the development of this section. Each District's System Management Plan has been reviewed and considered.
Intelligent Transportation Systems

Background

Intelligent Transportation Systems (ITS) 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 ITS to manage the transportation system in response to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles, which 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.

Using a federal planning grant, the eight counties within the San Joaquin Valley formed an ITS committee to focus on solving transportation problems within the region. The ITS vision for the San Joaquin Valley Strategic Deployment Plan is to enhance quality of life, mobility, and the environment through coordination, communication, and integration of ITS technology into the Valley’s transportation systems. The Plan includes major local elements, and coordinates architecture, standards and institutional issues as well as providing the framework for deploying an integrated ITS throughout the Valley.

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 to provide real-time information for system users on traffic conditions, incidents, accidents, events, weather and alternative routes and modes;
- Advanced Public Transportation Systems to provide the technology to implement improved dispatching of transit vehicles and enable improved demand-responsive transit services;
- Improved Commercial Vehicle Operations by deploying technologies that track vehicles through the Valley, providing improved traveler information and safety warnings.

General Opportunities

- Geographically expand the Yosemite Area Traveler Information (YATI) system and either develop additional systems for other major recreation areas or combine with YATI.
- Build on the existing extensive Caltrans District 6 and District 10 Traffic Management Systems to fill gaps and complete coverage on major facilities, including expansion of the highway closures and restrictions database to include other agencies.
- Capitalize on the extensive ITS technology testing and standards development conducted by Caltrans by using their approaches for local traffic management systems, where appropriate.
- Build on lessons learned from past and current transit ITS deployment experience (Fresno Area...
• Build on Caltrans District 6 and District 10 experience with co-location and coordination between traffic management and Highway Patrol staff.

• Build on the momentum and stakeholder coalition generated through the San Joaquin Valley Goods Movement Study to pursue ITS commercial vehicle projects.

• Traveler information for commercial vehicle operators at truck rest stop locations. As new laws require longer off-duty periods, demand for rest areas and for access to services will increase.

• Investigate how ITS can support other efforts to improve east-west travel between the Valley and the Central Coast.

• Improve the visibility of and access to existing Caltrans Valleywide alternate route plans.

• Use momentum from the Valleywide ITS planning effort in conjunction with proposed federal rules (ITS architecture and standards conformity and statewide and metropolitan planning).

**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 TMC with Caltrans’ District 6 TMC via satellite.

• Look for ways to integrate the ITS capabilities being implemented at Golden Empire Transit (GET) with the developing Bakersfield traffic management system, including sharing of information between the two centers during emergencies.

• Facilitate the transfer of lessons learned from the Golden Empire Transit (GET) ITS deployment, now beginning, to other area transit operators, and look for opportunities for those agencies to better coordinate with GET using GET’s new ITS capabilities.

• Expand upon the accident-reduction successes of the Route 46 Safety Coalition Program and the South Kern Corridor Safety Program.
**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 future 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.
- Investigate potential ITS enhancements to the planned weigh station on SR 99 at PM 2.1.
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.

Short Range/Long Range Action Plan

Federal Highway Administration

- Continue to provide funding for projects that will maintain and expand interregional routes, regional routes, and local routes.

State of California - Department of Transportation and California Transportation Commission

- Continue to program projects that will enhance interregional routes and access to interregional routes.
• Maintain and preserve interregional routes and routes that provide access to interregional routes.

• Identify and implement operational improvements on interregional routes and routes that provide access to interregional routes.

**Metropolitan Planning Organizations/Regional Transportation Planning Agencies**

• Continue to coordinate planning of interregional transportation facilities to the extent necessary and feasible.

• Continue to support efforts by state and federal agencies to program priority projects that enhance interregional transportation.

• Support and participate with Caltrans in corridor studies on State Route 99.

• Support new funding sources to fund local street and road maintenance needs.

**Local Agencies - Cities and Counties**

• Continue to maintain and improve local facilities.

• Support new funding sources to fund local street and road maintenance needs.

• Participate in the planning of regional and interregional facilities.

### 1.4.3 RAIL

**Introduction**

In general, rail facilities are privately owned. Passenger service is provided by the National Rail Passenger Corporation, referred to as Amtrak. 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, east-west lines, owned 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 in FY 2003-04 over 735,000. 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 a Strategic Growth 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:

1. Increasing service frequencies and improving on time performance;
2. Improving the utilization of equipment so as to get the maximum number of car miles from this expensive equipment;
3. Extending service to fill the gaps in the current route. The first priority is to extend through service with an existing train on an overnight schedule from Bakersfield to Los Angeles with connections to San Diego;
4. Continuing efforts to make incremental track and signal system upgrades to improve speed, efficiency, and capacity;
5. Creating a fare structure to maximize revenue per passenger mile;
6. Restructuring on board services in order to satisfy the travel needs of passenger train travelers; and
7. Increasing the level of public awareness of the *San Joaquins* so that citizens of the communities along the route think of the *San Joaquins* as their trains and communities along the route develop a pride of ownership.

The California Department of Transportation released the “California State Rail Plan 2005-06 to 2015-06” in December 2005. This Plan is to develop and implement a statewide rail blueprint that will guide future planning and investment decisions in the near and long term.

Some highlights of the plan include:

- Improve on-time performance to 90 percent by 2015-16.
- 2010-11 Bakersfield – Sacramento, third round-trip to extend from Stockton to Sacramento (seventh round-trip on route).
- Bakersfield – Oakland, fifth round-trip from Stockton to Oakland (eighth round-trip on route).

High Speed Rail

In addition to state and regional planning efforts and interest in conventional inter-city passenger rail service, the State of California has made progress in establishing High-speed Rail service. To investigate
whether high-speed rail might be appropriate for California, the Governor and Legislature authorized Senate Concurrent Resolution 6 (SCR 6) in 1993. SCR 6 established a nine-member Intercity High-speed Rail Commission to assess the feasibility of a high-speed rail system in California. The Commission determined that high-speed rail is technically, environmentally, and economically feasible once constructed, and would be operationally self-sufficient. The Commission recommended a statewide high-speed rail network 700 miles long. The network will link all of California's major population centers: Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, and San Diego. The Commission recommended that the service be routed through the Central Valley roughly parallel and adjacent to State Route 99. The construction of a high-speed rail system in California will be a public works program on the scale of the State Water Project or the creation of the state's freeway system.

Implementing the high-speed rail project is the responsibility of the California High-speed Rail Authority, created by Senate Bill 1420 in 1996 and signed by the Governor in September 1996. The Authority is required to direct the development and implementation of intercity high-speed rail service that is fully coordinated with other public transportation services. The Authority is required to prepare a plan for the construction and operation of a high-speed train network for the state capable of achieving speeds of at least 220 mph, and that is consistent with and continues the work of the Intercity High-Speed Rail Commission. The Authority has all the powers necessary to oversee the construction of a statewide high-speed rail network. Assembly Bill 1703 (Florez/Costa) authorized in 2000, extended the tenure of the Authority through 2003. In 2002 the sunset date for the Authority was repealed with SB 796 (Costa) giving the California High-Speed Rail Authority permanent authority.

The California High Speed Rail Authority completed a Business Plan in 2000 that recommended the route and alignments to be studied in the environmental clearance phase. For the San Joaquin Valley, the recommended alignment between Bakersfield and Sacramento is along the SR 99 corridor with stations at Bakersfield, Visalia, Fresno, Merced, Modesto, Stockton and Sacramento. Access to the Bay Area would be aligned from south of Merced through either the Pacheco Pass or the Altamont Pass. Access to Los Angeles is being considered on three alignments. One follows Interstate 5 over the Grapevine and the second is a line through the Antelope Valley across the Tehachapi Mountains, and the third is along the alignment of the California Aqueduct. Kern COG has supported service to the Antelope Valley along the Palmdale/Mojave alignment.

The Authority began implementation of the environmental process by preparing a Draft Program CEQA EIR and a NEPA Tier 1 EIS released on January 27, 2004. After extensive review, the Final EIR/EIS was posted on the Federal Register on September 23, 2005 and certified on November 2, 2005. The EIR/EIS identifies the preferred alignments which includes: the SR 99 corridor in close alignment with the BNSF; a broad corridor requiring further study for access to the Bay Area bound by Pacheco Pass to the south, Altamont Pass to the north, BNSF to the east, and Caltrain to the west; and an alignment through the Tehachapi Mountain Range between Los Angeles and Bakersfield via a crossing through Palmdale and the Antelope Valley. The 2005 State Budget included $1.7 million to complete the next tier in the EIR/EIS.

**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 an effort to relieve congestion on highways, streets, and roads, several planning efforts are underway to enhance the efficient movement of freight and more efficiently use existing transportation facilities.

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 with several recommendations, including "...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. There was also a transition with higher value shipments to alternative modes that provided greater reliability and faster transit times than rail. Food processors in the San Joaquin Valley continue to show strong interest in rail as a preferred shipping mode, and both UP and BNSF are taking steps to maintain market share in the Valley. In the future, it is expected that rail shipment volumes in the Valley will increase, although market share may continue to decline as demand for shorter-haul service increases and the quality of rail intermodal facilities improves.

Another collaborated effort in rail planning was conducted in 1993 and 2001 by the City of Fresno, the Union Pacific Railroad, the Burlington Northern Santa Fe Railroad, Caltrans, the Council of Fresno County Governments, Madera County Transportation Commission and Fresno County. This effort was directed at estimating the cost of consolidating the Burlington Northern Santa Fe tracks into the Union Pacific corridor to eliminate freight train travel through the center of the City of Fresno.

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 will be revisited again.

**Short Range Action Plan**

**Federal Government**

- Continue to fund Amtrak service.

**State of California**

- Continue financial support of Amtrak service.
- Implement the California State Rail Plan 2005-06 to 2015-16.
- Implement the *San Joaquins Route FFY 2005-06 Business Plan*, specifically:
  - Open new stations in Lodi and Martinez;
  - Complete final engineering for the next phase of track and signal improvements;
  - Develop a marketing/public relations program campaign for the new stations;
  - Monitor the feeder bus network and make appropriate adjustments;
  - More clearly define the checked baggage procedures and promote use of the service;
  - Explore the feasibility of providing a premium service on all trains;
Work with the San Joaquin Valley Rail Committee to coordinate with local on-line cities to increase community involvement; and

Coordinate schedules with other Amtrak services where feasible.

- 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.

### Long-Range Action Plan

#### Federal Government

- Continue to fund Amtrak service.

#### State of California

- Continue financial support of Amtrak service.

- Implement the 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.

- Support state and federal actions that would increase accessibility to Amtrak service.

### 1.4.4 Aviation

#### Introduction

Aviation facilities within the eight county San Joaquin Valley are used for the interregional movement of persons and goods. Each of the eight San Joaquin Valley counties has a system of aviation facilities designed to meet the local and regional needs of its municipalities. The eight RTPAs representing the counties participated with Caltrans in the development of the region's first Central California Aviation System Plan (CCASP). The CCASP was completed in January 1998 to include the Valley's fifty public use airports that serve the aviation needs in the Valley. Each county was responsible for preparing their CCASP document for Caltrans to use in the California Aviation System Plan (CASP). The CCASP analyzes each county's aviation system. The contents of the CCASP include an inventory of services and operations, forecasting of future needs, financial sources and needs, and systems requirements to meet
the needs of aviation over the next twenty years.

**Existing Facilities**

A variety of aviation facilities are available in the San Joaquin Valley. A few of these facilities serve interregional aviation needs. Local public use airports serve the county’s general aviation needs. Kings County’s Lemoore Naval Air Station is the only remaining military airport in the San Joaquin Valley. Castle Air Force Base in Merced and Crows Landing Naval Air Station in Stanislaus County were converted to civilian use airports in 1995. There are four facilities in the Valley that provide interregional commercial aviation service: Modesto Airport, Fresno Yosemite International Airport, Meadows Field (Kern County), and Visalia Municipal Airport. Stockton Metropolitan Airport currently does not carry commercial services, however, Farmington Fresh, a local produce packaging business, has located at the airport to transport fresh produce around the world. The remaining Valley airports offer services that include chartering, agricultural spraying, fire fighting, recreational activities, and medical emergency facilities.

**Interregional Issues**

Interregional air service for commercial service is an important issue in the Valley. High fares and inconvenient service have made commercial aviation difficult to access for the public, and commercial air service out of the Valley is perceived as inadequate. Existing services are essential for the Valley to maintain connections with the major hub airports of San Francisco and Los Angeles. Fresno Yosemite International Airport has traditionally served as the major hub airport in the Valley, but has in the past had difficulty keeping major air carriers and jet service established. Currently service has expanded to the northwest and links to other major hubs in the west. In addition, airline deregulation had an adverse effect on aviation in the San Joaquin Valley in the late 1970s resulting in decreased service and higher fares. Despite these setbacks, aviation use is expected to grow over the next twenty-five years as the Valley’s population and economy continue to expand.

**Aviation Systems**

State law PUC 21701 requires Caltrans to update the CASP every five years. Caltrans contracted with the ten transportation planning agencies in the Valley and the Sacramento area to develop the CCASP using a grant from the Federal Aviation Administration (FAA). These federal funds allowed Caltrans and the Valley agencies to prepare individual aviation plans to assist Caltrans in updating the CASP for the Valley region. The CCASP was completed with each RTPA developing and adopting their Aviation Plan, which includes the following elements:

- The Inventory Element contains the existing conditions and services at each airport.
- The Forecasts Element contains projections of future demand through the year 2020, in five year increments.
- The System Requirements Element includes projected aviation needs through the year 2020 in five year increments.
- The Action Element identifies strategies and projects to implement the plan.
- The Financial Element identifies local, state, and federal funding sources, and methods of allocating future funds.

**Airport Land Use Commissions**

Included in the individual RTPs is a status evaluation of airport land use commissions and their progress in implementing comprehensive land use plans.
Coordination

Valleywide coordination efforts have been achieved through the CCASP process with Caltrans. Components of this section are drawn from the aviation sections of each of the eight Valley RTPs, and as such are consistent with the eight RTPs. Each of the RTPs is coordinated with the appropriate airport master plans, comprehensive land use plans, regional aviation systems plans, and the California Aviation System Plan.

Short Range Action Plan

Federal Aviation Administration

- Continue to fund airport projects, including projects that enhance interregional aviation facilities.

State of California

- Implement the California Aviation System Plan.
- Continue to fund airport projects, including projects to enhance interregional aviation facilities.
- Continue to provide matching funds for federally funded airport projects.

Regional Transportation Planning Agencies

- Maintain the regional aviation system plans.
- Update Regional Transportation Plans to be consistent with the California Aviation System Plan and regional aviation system plans as necessary.

Local Agencies

- Continue to expand aviation facilities, as needed.
- Promote increased commercial air service to major Valley airports.

Long-Range Action Plan

Federal Aviation Administration

- Continue to fund airport projects, including projects to enhance interregional aviation facilities.

State of California

- Continue to fund airport projects, including projects to enhance interregional aviation facilities.
- Continue to provide matching funds for federally funded airport projects.

Regional Transportation Planning Agencies

- Update Regional Transportation Plans to be consistent with the California Aviation System Plan, and regional aviation system plans, as necessary.
Local Agencies

- Continue to expand aviation facilities, as needed.
- Promote increased commercial air service to major Valley airports.
- Support a Valley international airport with immigration services.

1.4.5 Goods Movement

Introduction

The movement of goods plays an important role in the overall economy of the San Joaquin Valley. As one of the prime agricultural regions in the nation, the intra-county road linkage of goods to processing plants, and the inter-county linkage of goods to other regions, manufacturers, and shipping ports is essential. Not only is the San Joaquin Valley a leading agricultural producer, it is also a prominent producer of oil and other minerals. These industries rely heavily on bulk movement by truck, rail and pipeline.

The regional highway system is a vital aspect in the movement of people and goods. The Valley’s transportation system serves as an east-west and north-south connection to major markets. Commodity movement is an important economic factor to Valley prosperity. Also of great significance to the transport of goods is the Port of Stockton, located in San Joaquin County at the northern end of the San Joaquin Valley. The Port is an integral part of the state transportation system and is the third largest seaport on the west coast.

Transportation planning has traditionally emphasized the movement of people; often the importance of large trucks, rail, ship, and air cargo is overlooked in the technical transportation planning process. Continuing growth in freight and goods movement traffic is beginning to cause conflicts with passenger transportation as the region is also experiencing significant population and service sector employment growth. Consideration must be given to goods movement needs and its coexistence with other modes of transportation.

The eight RTPAs in the San Joaquin Valley in conjunction with Caltrans and the San Joaquin Valley Air Pollution Control District have undertaken a series of studies to improve the understanding of truck transportation of commodities within and through the Valley. The first phase of the San Joaquin Valley Goods Movement Study was completed in 2000 and focused on documenting the freight transportation system and identifying existing issues and problems of regional goods movement. This first phase also made recommendations on future data collection and analytical tools to aid in goods movement planning. The second phase of the Study concluded in 2004, described the development of a model tool to forecast truck movement within and through the San Joaquin Valley. The truck model is intended to forecast truck trips and vehicle miles traveled, analyze air quality and emissions from heavy-duty trucks, impacts of congestion on major truck routes, and safety and road maintenance issues associated with truck activity. The third phase of the Study initiated in 2006, will provide improvements to the San Joaquin Valley truck model and integration with local models. This model will provide an analytical basis for evaluating the benefits of transportation investments that impact the movement of goods in the San Joaquin Valley.

Existing Facilities

Trucks

Trucking is the most commonly used mode for transporting freight. Goods movement by truck is popular because of its flexibility, timely delivery, and efficiency for haul distances of up to 600 miles. Trucking, however, can be more expensive than other modes for longer hauls because of its higher energy costs. Commodity movement by this mode is a major cause of street and highway surface failures necessitating a high level of street and highway network maintenance.
Heavy trucks contribute to the damage of roads much faster than do automobiles; however, deferred maintenance and water intrusion in the roadbed continue to be the primary causes of road damage. As a result, Valley streets and highways are subject to rapid deterioration and failure. According to the American Association of Highway Officials, a fully loaded truck (80,000 pounds) has an impact on roads equal to the passage of approximately 9,000 cars.

Trucking is the dominant mode of transporting freight, accounting for 87 percent of outbound tonnage and 81 percent of inbound tonnage (San Joaquin Valley Goods Movement Study, September 27, 2000). Commodity movements by truck also indicate a strong relationship with the rest of the state with shipments to/from Southern California and the Bay Area constituting the greatest percentage of total tonnage to and from the Valley (18 and 14 percent of the total, respectively). Major interregional highway corridors experience relatively high volumes of heavy (3 to 5 axle) truck traffic, usually between 16-30 percent of the annual average daily traffic (AADT). By their very size and slower speeds, trucks lead to congestion and reduced levels-of-service on rural highways and local streets. In addition, emissions from trucks, like automobiles and railroad power units, have an adverse affect on air quality.

Travel along the major corridors in the San Joaquin Valley is mostly in a north-south direction. The primary truck routes in the Valley are Interstate 5 and State Route 99, which together account for 24 of the 25 highest volume truck routes in the system. Many other state highways and county roads play major roles in distribution as well. As the Valley develops to support a more mobile and service-oriented population, the need for east-west travel corridors will become crucial. Special attention must be given to the regional routes to keep them in serviceable condition and to avoid major reconstruction costs.

Cooperative efforts are needed between the trucking industry, the driving public, and local officials to assess the impacts that trucks have on local streets and to create regulatory guidelines for trucks in urban areas. Alternative transportation modes for the long haul movement of goods should be explored and supported. These include improved intermodal freight transfer facilities and access at major airports and rail terminals. As a result of surveys conducted for the San Joaquin Valley Goods Movement Study, several significant truck operational issues were found. These trucking issues include congestion, railroad crossings, roadway geometry, parking/rest area problems, route restrictions, and signal timing. These issues must be considered throughout the transportation planning process.

The San Joaquin Valley has both agricultural and light industrial demands for trucking. The needs of individual growers and manufacturers to get their goods to major terminals, market places, and processing centers are met by trucks. In addition, trucks are used as feeder lines to distribute goods from major rail, water, and air centers as well as shopping centers. Because many Valley agricultural products are destined for world markets, efficient freight access at California export points must be ensured.

**Rail**

Trains provide an economical means of transporting bulk goods. Although each engine requires large amounts of fuel, its ability to haul large amounts of cargo makes for an overall low energy requirement per unit of weight when compared to highway or air transport.

Two major rail companies, Union Pacific and Burlington Northern Santa Fe Railroads, serve the San Joaquin Valley. UP representatives report that they operate an average of 19 trains a day through the San Joaquin Valley carrying food products, general freight, grain, and lumber (San Joaquin Valley Goods Movement Study). UP and CSX Transportation have teamed to offer a new service in the San Joaquin Valley for perishable goods. Express Lane offers two tiers of refrigerated service from the San Joaquin Valley to New York and Boston. The San Joaquin Valley Railroad (State Railways Inc.) operates a regional rail freight service between Tulare, Fresno, and Kings Counties on 125 miles of leased Union Pacific branch lines connecting outlying areas to mainline carriers. The Modesto and Empire Traction railroad connects with the UP in Modesto and with the BNSF in Empire. These rail systems and a number of local spur lines, move freight through the Valley daily.
Most cargo shipped by rail are bulk items such as grains, food products, vehicles, and fuels. Rail transport provides the option of specialized rail cars such as flatbeds, refrigerated boxcars, fuel tankers, and piggy back cars. These specialized rail cars allow transport to move a large variety of goods giving rail an advantage over other modes of transportation for distances over 500 miles or more. Transport by rail is generally less expensive for long hauls than air or truck transport; however, rail is limited by speed and by the limitation of fixed rail track. An especially acute example of rail limitation is the rail route over the Tehachapi Summit in Kern County. Some of the route is single track, and although recent work on tunnels now allows for double-stacked containers to pass over the line, opposite traffic is often diverted to sidings, creating a freight bottleneck over, into, and out of the San Joaquin Valley.

Greater coordination and integration of the various modes of freight transportation have become increasingly important in recent years. Limited resources and the intense pressure on existing transportation systems have brought broad-based support for intermodal transportation systems. In order to allow goods movement to be more efficient and maintain a reasonable highway level of service, a public/private cooperation between these modes should be encouraged.

**Rail/Truck Transfer Facilities**

Rail/Truck transfer facilities for bulk and semi-bulk commodities are often not considered in narrow definitions of goods movement, but are a growing means of combining the efficiencies of the two modes for movement other than trailers and containers. Transfer facilities are generally of two types:

- Simple facilities for direct transfer between freight cars and trucks by means of conveyors, hoses, etc. without immediate storage or handling; and
- More extensive facilities with the capability to store, sort, package, or otherwise process the commodity.

**Rail Intermodal Facilities**

Intermodal terminals are critical to the success of intermodal services. Terminals are the starting and ending points for trains and the sites of crucial distribution between modes. Terminals also function as equipment storage, maintenance and dispatching centers, and as focal points for the flow of information. Terminals vary widely in configuration, capacity, and operations. Only a small number of terminals have been built from the ground up as intermodal facilities.

In the 1980s, railroads consolidated their intermodal service networks into fewer, larger hub terminals. Railroads saw an opportunity to consolidate facilities in mergers and a need to consolidate enough volume in one location to justify lift machines. The recent rapid growth of intermodal traffic, the enormous influx of double-stack trains of containers, and the even more recent entry and rapid growth of rail-truck trailer initiatives all raise questions about the adequacy of intermodal terminals to handle traffic increases, and to do so efficiently.

Union Pacific Railroad has intermodal facilities in Fresno and Lathrop. Intermodal facilities for Burlington Northern Santa Fe Railroad are located in Stockton, Modesto, Fresno, and Bakersfield. Construction of the new Mariposa yard in Stockton by BNSF is one example of direct investment by the Class I carriers aimed at meeting growing demand for intermodal service. Increased intermodal service will create potential for local truck congestion problems and access to intermodal facilities could become a critical issue.

**Buses**

Passenger bus companies such as Greyhound and Orange Belt Stage Lines, provide carrier service in addition to their passenger service. Because of the small amounts handled, buses are a very minor contributor to goods movement in the region.
**Air Service**

Air service is characterized by the fast shipment of small bulk items of high value over long distances for high cost. Goods movement by air is an emerging element of freight movement in the San Joaquin Valley. Statewide, 23 out of the 43 commercial air carrier airports account for almost 3 million tons of freight transported by air. While air freight is a specialized mode of transportation, it accounts for an estimated 60 percent of the export values in California. Air carriers depend heavily on truck transportation to deliver goods for transport. It is important, therefore, to have adequate infrastructure in place for this significant element of the State’s economy. According to the Intermodal Transportation Management System GIS database, the commodities most typically shipped by air to and from the Valley include food and kindred products, machinery, and miscellaneous manufactured products. Of the numerous airports in the Valley, only Fresno Yosemite International airport reports cargo statistics to state and federal agencies. A significant feature of air movement is its dependability and very short in-transit time. For businesses seeking to open new markets or dealing in high value items, air shipment is an important means of providing rapid access to distant manufacturing facilities, thereby eliminating large inventory requirements. In such cases, air shipment makes it possible to establish supply lines quickly and significantly lowers the cost of carrying inventory. This offsets the higher cost of the air mode.

**Ports**

The Port of Stockton is the only significant port facility in the San Joaquin Valley. The Stockton Deepwater Channel, with a 37-foot depth at average low tide and a 40-foot depth at average high tide, could accommodate 70 percent of the World’s Bulk Fleet. Located 75 nautical miles due east of the Golden Gate Bridge, the Port of Stockton owns and operates a diversified and major transportation center that encompasses 600 acres. Port officials estimate that, on average, 150 to 200 vessels use the Port each year. Included among the commodities that the Port handles are: dry bulk commodities, neo-bulk cargo (steel coils, steel products), general cargo, and liquid bulk cargoes (fertilizers, molasses, petroleum products, etc.) The Port’s Beltline Railroad accesses all Port warehouses, transit sheds, and other facilities.

The Port of Stockton is an integral part of the state transportation system and is immediately accessible to the interstate highway system. Convenient access by surface transportation to the entire United States is provided by the two transcontinental railroads: UP and BNSF. The Port handles millions of tons of cargo that otherwise would be using the railroads or roadways; however, they continue to rely on both trucks and rail to deliver inbound cargo and distribute outbound cargo.

In 2003, Cambridge & Associates completed a planning study analyzing the growing transportation link between the San Joaquin Valley and the Port of Oakland. This “link” is growing in importance due to the substantial growth in the Valley as a regional and national distribution center for importers and exporters. This study known as the California Interregional Intermodal Shuttle Market Assessment & Public Benefit Analysis (CIRIS) study focused on examining the feasibility of running a short-haul intermodal freight rail shuttle between the Valley and the Port as one alternative to the current motor carrier drayage system. In the San Joaquin Valley, the rail shuttle would shift goods from truck to rail, which would reduce overall truck traffic volumes on key corridors resulting in reductions in congestion and emissions for the Valley. The freight rail service would also increase mobility options for shippers located in the San Joaquin Valley and could potentially increase the capture area for the Port of Oakland. The study examines the extent of the market for a CIRIS service, as well as the extent of potential benefits to the public and identifies how public sector agencies might best be able to support such a project.

**Pipelines**

Various pipelines carry natural gas, crude oil and other petroleum products through the San Joaquin Valley. Storage, pumping, and branch line facilities are used to distribute those products.

Pacific Gas and Electric (PG&E) is responsible for the maintenance and operation of the natural gas line,
while major petroleum corporations are responsible for the crude oil pipelines throughout the region.

**Hazardous Materials Movement**

Hazardous materials movement presents a potential danger to human life and property. It is estimated that 50 percent of all goods transported throughout the world are to some degree hazardous. Each year, more than 4 billion tons of hazardous products and waste are transported throughout the United States. Hazardous materials are commonly transported by rail, small or large trucks, and possibly by air or pipeline.

At present and for the foreseeable future, large trucks transport the largest volume of hazardous material. Truck transport accounts for about half of all hazardous material shipments. The types of vehicles carrying hazardous materials on the nation’s highways range from tank trucks, bulk cargo carriers, and other specially designed mobile containers, to conventional tractor trailers and flat beds that carry drums and other small containers. Rail shipments are commonly bulk commodities, such as liquid or gaseous chemicals and fuels carried in tank cars.

Potentially adverse effects associated with the transportation of hazardous material can be partially mitigated by restricting roads available for hazardous material trucking. Under California law, transportation of hazardous waste is required to be carried out via the most direct route over interstate highways whenever possible. Exceptions to this general rule are such occasions when it is necessary to avoid highly congested areas and areas of high population density. Interstate 5 and most of State Route 99 are built to full freeway standards. Interstate 5 provides the service for north-south transporters and serves the Interregional transport needs of local and long distance hazardous waste haulers. Interstate 5 has been proposed as a route for the transportation of radioactive materials. Route 99 is the major artery connecting the north and south central San Joaquin Valley areas. Route 99 passes through the more populated areas of the San Joaquin Valley, including Stockton, Modesto, Merced, Fresno, and Bakersfield.

Kings County, located in the southern region of the San Joaquin Valley, is the site of a Class I hazardous waste facility. This facility, located in Kettleman Hills, draws trucks carrying hazardous materials from all western states. The presence of these trucks on regional routes increases the probability of dangerous spills.

**Forecasts**

California’s seaports, airports, railroads, and highways together move about one billion tons of freight annually overseas, across the Canadian and Mexican borders, to and from other states, and within the state. This volume of freight places a high demand on the state’s transportation system. Much of this freight originates from, passes through, or comes to the San Joaquin Valley by various modes.

Economic development is one of the vital interests to the San Joaquin Valley. Hundreds of small and mid-sized companies are making decisions based on their own best judgments about the extent of future goods movement. Much of this judgment is proprietary. It is expected that rail transport will continue to increase because of its availability to haul large amounts of long distance cargo at lower cost. Trucking is expected to increase because of its flexibility and timeliness. Increases in fuel costs will affect all modes of transportation.

Goods movement by bus will continue to be an alternate source for moving small goods. As the population in the Valley increases, airlines serving regional airports are expected to introduce larger aircraft thereby expanding the air service area and making goods movement by air a more viable option.

Pipelines will continue to be the most effective way of moving oil and gas through the region. Fuel and natural gas use will likely increase in the future, as they are both primary sources of energy.
Assumptions/Future Needs and Issues

The movement of goods by trucks is essential to the economy of the San Joaquin Valley. Trucking will continue to be the most inexpensive form of goods movement and will continue to add highway congestion. In addition, trucks, like cars, produce an adverse effect on air quality. The presence of trucks carrying hazardous materials will continue to increases the probability of dangerous spills. As air and rail services are under developed for the movement of goods, most goods will continue to be moved by trucks.

Short Range Action Plan

State of California

- Pursue additional funding for street, road, highway, 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 axle load limits for the trucking industry;
- Encourage and support strict enforcement of transportation regulations concerning the transportation of hazardous materials;
- 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; and
- Explore all viable options to facilitate freight movement while reducing conflicts between freight and passenger traffic.

Metropolitan Planning Organizations and Regional Transportation Planning Agencies

- Continue to refine the San Joaquin Valley truck model for evaluating the benefits of transportation investments and to assess the future of goods movement within the Valley;
- Identify opportunities for truck-to-rail and truck-to-intermodal mode shifts, and evaluate the contributions of different types of truck traffic on regional air quality;
- Provide heavy truck access planning guidance including a review of the current Surface Transportation Assistance Act route system, review of geometric issues and signaling for all routes identified as major local access routes, and the development of standards;
- Study parking for long distance trips including a review of available rest areas, layover lots, and truck stops to determine needs for more parking;
- Oppose higher axle load limits for the trucking industry;
- Provide technical and planning 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;
• Support a higher safety level requirement for hazardous material transportation programs;

• Encourage the use of rail and air for the transportation of goods to reduce impacts to state and inter-county routes, and reduce air quality impacts;

• Encourage coordination and consultation between the public and private sectors to explore innovative strategies for the efficient movement of goods; and

• Support the intermodal linkage of all freight transportation.

**Counties and Cities**

• Continue to evaluate and designate truck routes;

• Coordinate and consult with private sector providers in order to identify obstacles to the efficient movement of goods, and develop alternative strategies;

• Seek strict enforcement of transportation regulations concerning the transport of hazardous substances; and

• Consider locating industrial development near rail, airports, and major highways in the land use elements of local General Plans.

**Industry**

• Increase the use of rail and air service for the movement of goods; and

• Develop hazardous material transportation plans.

**Long Range Action Plan**

• Continue to follow the objectives of the short-range plan.

1.5 **FINANCIAL ELEMENT**

The San Joaquin Valley contains urban and rural counties, self-help and non self-help counties, passenger rail and non-passenger rail counties and two Caltrans districts. Funding for transportation projects is subject to the north-south split requirements, county share requirements and availability of development or other mitigation fees, local sales taxes, state and federal gas taxes, gasoline sales tax and bond revenues. No two counties are exactly alike.

**State Route 99**

Over the last three to four years, various valley-wide efforts have been undertaken to develop guidance and planning documents for the improvement of the Route 99 corridor through the San Joaquin Valley. Highway 99 is the transportation backbone of the San Joaquin Valley. A high rate of growth in the area is quickly using and exceeding the capacity of this corridor. It is clear that to maintain the corridor’s ability to support ongoing development, facilitate efficient goods movement, and improve the quality of life in this fast-growing region, a substantial investment is needed to maintain and improve the corridor. The California Department of Transportation (Caltrans) and the Great Valley Center (GVC) have been key leaders and participants in efforts to improve the corridor. Caltrans completed a final draft Route 99 Corridor Enhancement Master Plan for the 274 mile segment of Route 99 from its junction with Interstate 5 in Kern County in the south, to the northern limits of San Joaquin County in the north. While the Master Plan focused on enhancing the appearance of the corridor and the driving experience for those using it, it also recognized the need for significant improvements to the route’s safety, capacity, operations, and
road condition. The Master Plan was developed in conjunction with the GVC, the eight Metropolitan Planning Organizations (MPOs) in the San Joaquin Valley, and the GVC Route 99 Task Force.

The overall goal of the Master Plan is to convert all existing expressway segments to freeway status, widen the facility to 6 lanes, improve the condition of the pavement and bridges, complete any needed safety improvements, improve its operational characteristics, and enhance its appearance. After the Master Plan was completed, a Business Plan was drafted to provide a road map for how the goals can be met. The Business Plan grouped projects into four Priority Categories. These categories include:

- **Priority Category 1—Freeway Conversion**
  This category consists of projects to convert the existing Route 99 expressway sections to a full 6-lane freeway. Projects in this category will close at-grade intersections and add interchanges where appropriate to maintain local circulation, as well as widen the route to 6 lanes within the projects limits.

- **Priority Category 2—Capacity-Increasing Projects**
  Priority Category 2 consists of projects that would widen Route 99 to a minimum of 6 lanes throughout the corridor. Projects to widen Route 99 to 8 lanes in some urban areas, where feasible, will also be considered for this category.

- **Priority Category 3—Major Operational Improvements**
  This category consists of projects that will improve existing outdated interchanges and construct auxiliary lanes in urban areas.

- **Priority Category 4—New Interchanges**
  Priority Category 4 consists of projects that will construct interchanges at new locations on Route 99.

Within the four Priority Categories there are 67 projects to be prioritized as a part of the Business Plan effort. They include 13 programmed projects and 54 candidate projects. The total cost for these improvements is estimated to be approximately $6 billion in 2005/06 dollars.

Understandably, the most significant obstacle facing the improvement of Route 99 and the implementation of Route 99 Master Plan is the lack of adequate funding. Neither the STIP nor the SHOPP are adequately funded to maintain and improve the route. In an attempt to address this issue, the Business Plan identifies a number of innovative funding strategies. Unfortunately, most of these are financing methods to advance future revenue streams. While these strategies can advance the delivery of improvement projects, most of them do not actually generate additional revenues.

The Business Plan does lay out a 20-year program to meet the goals stated. The program is broken down into three phases. The phases generally coincide with the Priority Categories. Phase 1 will complete Priority Category 1, and parts of Priority Categories 2 and 3. Phase 2 will complete Priority Categories 2 and 3, and Phase 3 will complete Priority Category 4. The 20-year schedule provides five years to “ramp up” the delivery effort, and then 15 years of $333 million in projects per year. While it is difficult to determine how much capacity the construction industry can handle each year and how much of the route can practically be under construction simultaneously, $333 million appears to be a reasonable target. The $333 million per year is in 2005/06 dollars; however, the effect of inflation must also be considered. The Business Plan assumes a five percent inflation rate. When calculated into this equation, each subsequent year demands additional funds, finally topping out at approximately $883 million in year 20.

**California Partnership for the San Joaquin Valley**

On June 24, 2005, through an Executive Order, Governor Arnold Schwarzenegger established the California Partnership for the San Joaquin Valley. The Partnership was created to bring state agency secretaries and Central Valley representatives together to make recommendations to the Governor regarding changes that would improve the economic well-being of the Valley and the quality of life of its residents. In its Strategic Action Proposal to the Governor, the Partnership recommended that
improvements to the Route 99 Corridor are needed. The Partnership agreed that the implementation of the Business Plan for Highway 99 will require funding of $6 billion over the next ten years. Incorporating the Partnership’s recommendations into his Strategic Growth Plan, the Governor worked with legislative leaders to sign SB 1266, by Sen. Don Perata (D-Oakland). SB 1266 is the transportation element of the Strategic Growth Plan that will help relieve traffic congestion on California's overcrowded roads, augment the state’s mass transit and rail systems and improve the air quality around the busy ports.

**Strategic Growth Plan**
The Governor’s Strategic Growth Plan (SGP) is the first installment of a 20-year investment. Phase One of the Strategic Growth Plan will ensure California’s quality of life and foster the state's continued economic growth through significant investments in infrastructure over the next ten years. The Legislature embraced this concept and approved a $115.8 billion SGP package, which includes $37.3 billion in new general obligation bonds approved by voters in November 2006, and $50.1 billion in existing funding, and $28.4 billion in new leveraged funding sources. The transportation portion of the bond package includes $19.9 billion for safety improvements and repairs to State highways, upgrades to freeways to reduce congestion, repairs to local streets and roads, improvements to the seismic safety of local bridges, expansion of public transit, reduction of air pollution, and improvements to antiterrorism security at ports. In addition, the package authorizes State and regional agencies to engage in public/private partnerships to attract billions of dollars in private investment for the development of transportation infrastructure in the State. The package also includes protection of any future Proposition 42 transfers. It would allow the State to borrow the money, but pay it back within three years. It also would restrict the State to only two such transactions every 10 years. Finally, the package includes legislation to streamline the environmental process while safeguarding environmental protections. Most importantly for the San Joaquin Valley, $1.0 billion has been planned for improvements to 400 miles of State Route 99. (It is anticipated that approximately 85% of the $1 billion will be dedicated to the 274-mile in the San Joaquin Valley from Bakersfield to Stockton). The balance of the estimated $6 billion required to improve the corridor will need to be secured from federal, state and local sources.

### 1.6 Safety

SAFETEA-LU added a new stand-alone factor to “increase the safety of the transportation system for motorized and non-motorized users.” Each of the eight San Joaquin Valley MPO’s are committed to increasing safety, and have long included safety as a primary goal. This valley-wide chapter has included the following Goal, and each of the eight San Joaquin Valley RTP’s has held a similar overarching goal:

> “**GOAL:** Design, develop and maintain a multimodal transportation system that efficiently and **safely** moves people and goods, and also serves the social, economic, and physical needs of Valley residents while enhancing their quality of life.”

> “**Objectives:** 1. A multimodal circulation network that is convenient, **safe** and efficient.”

Each RTP includes performance measures which have placed safety as a critical factor.

Caltrans recently published the final version of the statewide *State Highway Safety Plan* (SHSP) in September 2006. The SHSP guides safety activities within the State of California regarding all users on all public roadways. The SHSP key points are as follows:

- Highlighting challenges to roadway user safety on California’s roads.
- Painting the picture of fatalities experienced on California’s roads.
- Proposing high-level strategies to reduce fatalities for each challenge.
- Serves as a guide for the implementation of specific projects and activities through 2010.

The SHSP presented the fatality rates (measured as fatalities per 100 million vehicle miles traveled) in California from 1995 through 2004 as shown below and compared them to the national average. It also
identified 16 challenge areas that the State is committed to address to reduce these rates further and improve the safety of the traveling public on the State Highway System.

Exhibit 1-10
State Highway Safety Plan Fatality Rates
Exhibit 1-11
San Joaquin Valley Regional Transportation Plan Contacts

Council of Fresno County Governments
Jason Paukovits, jasonp@fresnocog.org
2100 Tulare Street, Suite 619
Fresno, CA 93728
Phone: (559) 233-4148
Fax: (559) 233-9645

Kern Council of Governments
Marilyn Beardslee, mbeardslee@kerncog.org
1401 19th Street, Suite 300
Bakersfield, CA 93301
Phone: (661) 861-2191
Fax: (661) 324-8215

Kings County Association of Governments
Terry King, king@co.kings.ca.us
1400 W. Lacey Blvd.
Hanford, CA 93230
Phone: (559) 582-3211
Fax: (559) 584-8989

Madera County Transportation Commission
Derek Winning, derek@maderactc.org
1816 Howard Road, Suite 8
Madera, CA 93637
Phone: (559) 675-0721
Fax: (559) 675-9328

Merced County Association of Governments
Marjie Kirn, mkirn@mcag.cog.ca.us
369 W. 18th Street
Merced, CA 95340
Phone: (209) 723-3153
Fax: (209) 723-0322

San Joaquin Council of Governments
Doug Ito, ito@sjcog.org
6 South El Dorado Street, Suite 400
Stockton, CA 95202
Phone: (209) 468-3913
Fax: (209) 468-1084

Stanislaus Council of Governments
Sam Kaur, skaur@stancog.org
900 H Street, Suite D
Modesto, CA 95354
Phone: (559) 558-7830
Fax: (559) 558-7833

Tulare County Association of Governments
Ted Smalley, tsmalley@co.tulare.ca.us
5961 S. Mooney Blvd.
Visalia, CA 93291
Phone: (559) 733-6291
Fax: (559) 730-2653
APPENDIX B

TRANSPORTATION PLANNING PRIORITIES: A HIERARCHY FOR LAND USE DECISIONS
APPENDIX B - TRANSPORTATION PLANNING PRIORITIES: A HIERARCHY FOR LAND USE DECISIONS

Introduction

The transportation planning discipline encompasses many separate planning arenas, differentiated by modes of transport, each with independent infrastructure funding streams. Coordinating these funding streams is difficult, and consequently, coordinating planning activities for these transportation arenas is just as difficult. Recent federal transportation spending bills have made it a goal for regions to better coordinate transportation between all modes. One of the primary factors necessary to reduce the cost of implementing transportation is the efficient distribution of land use. This document provides a framework for intermodal coordination of land uses.

To rank the importance of land use decision for transportation related infrastructure, land use planners can consider the number of site opportunities for locating a transportation mode’s infrastructure and land use, as illustrated on Figure B1.

For example, the site opportunities for a seaport are probably the most limited of transportation-related land uses; thus, it could be argued that seaports deserve the highest priority when making land use decisions that preserve the economy by providing for efficient transportation investments. Roads, however, can be engineered and placed almost anywhere, and can be moved to accommodate other land uses relatively easily. Seaports, airports, rail yards and freeways must be carefully placed to avoid conflicts with existing and future sensitive receptors such as schools,
hospitals and residential areas. Locations that provide intermodal connectivity between seaports, airports, rail and highways are limited and also require a high priority when making land use decisions.

This document covers transportation planning priorities from a land use planning perspective. The discussion is roughly organized by the suggested hierarchy on Figure 1, focusing on the relative site opportunity for each transportation-related land use, with the most important land uses discussed first. Each transportation mode discussed (seaports, rail/freight, airports, public transit, and highways/roads) will also focus on the need to preserve locations for intermodal connectivity.

Seaports and Global Gateways

Landlocked Kern County has no seaports; however, it is vitally linked to international trade through the ports of Los Angeles/Long Beach and Oakland/Stockton. The Kern region is adjacent to two of the world's largest international trade gateways. One-third of all waterborne freight container traffic at U.S. ports is handled by the twin ports of Los Angeles and Long Beach. Los Angeles/Long Beach port freight headed for destinations outside of southern California are estimated to account for 75% of total container traffic (Leachman & Associates LLC, Port and Modal Diversion for SCAG). Every state receives or sends some goods through these San Pedro Bay ports. The ports are reaching capacity, however, resulting in some consequences for Kern highways.

In 2004, the number of trucks on I-5 in Kern County increased by 400 per day. The unusual increase in trucks corresponds to an increase in goods being shipped from the Port of Oakland to southern California. Also in 2004, an estimated 300 ships bound for Los Angeles/Long Beach redirected their cargo to Oakland and trucked approximately 25 percent of their cargo to southern California using I-5 through the Kern region. In 2004, the twin ports of Los Angeles/Long Beach in San Pedro Bay reached capacity, while the Port of Oakland was only at 50 percent capacity. In 2005, the twin ports added night and weekend operating hours, adding to their container throughput capability. Figure B2 shows the forecasted increase in port traffic at the twin San Pedro Bay ports of Los Angeles and Long Beach.

Compounding this problem is the shipping industry's trend toward larger cargo vessels that allow the deepwater ports to offload larger payloads. Southern California Association of Governments (SCAG) estimates that container shipping will double in the next 15 to 20 years, driven by the doubling in size
of the average cargo vessel and the United States’ insatiable appetite for affordable and disposable foreign products.

The logistics industry is identified by SCAG as the number one growth sector for jobs in southern California, making the planning for rail infrastructure a top priority if the region is to capitalize on this opportunity. The Kern region has a strategic role in the distribution of goods by rail through California and stands to benefit from the creation of thousands of logistic jobs. Preserving this unique opportunity should be a high priority for local land use decisions.

Proposed Global Gateway Related Land Use Actions

Near Term, 2006-2010
- Use the existing California Environmental Quality Act review process to educate local land use planners and decision makers on the impacts of sensitive land use developments near vital transportation infrastructure necessary to handle increasing port activity.
- Promote a long range regional visioning process in partnership with member agencies to develop a set of regional principles for preservation of near term and long range transportation infrastructure to handle increasing port activity.

Long Term 2011-2030
- Monitor progress toward implement regional principles developed by the visioning process.
- Expand the role of the TTAC or create a new entity for collaboration on building and preserving of the region’s transportation infrastructure economic opportunities.

Other Proposed Actions

Near Term, 2006-2010 and Long Term, 2011-2030
- Coordinate with SCAG, MTC and the ports to minimize impacts of port activity through Kern County.
- Work with Kern Economic Development Corporation to promote logistics job opportunities in Kern County.

Rail Freight

Some aspects of rail freight have very limited site opportunities. Mountain passes and proximity to shipping facilities are determined by both topography and land use. This section will cover Kern’s primary intermodal rail facilities and how they can serve as a gateway for San Joaquin Valley shipments to the ports and nationwide.

Shafter Intermodal Facilities

As part of an effort to redirect this new source of freight traffic, the City of Shafter is working with the Port of Oakland to develop a freight shuttle train that would transport shipping containers as far as the northern edge of metropolitan Bakersfield. The Shafter Intermodal Facilities began construction in 2005 and is intended to serve as a northern inland “port” for southern California via the Port of Oakland. The property located on the Burlington Northern Santa Fe (BNSF) line is the longest segment of rail uninterrupted by a crossing that is closest to the Tehachapi Pass railroad bottleneck. The site is ideal for placement of a regional intermodal yard because it provides sufficient distance for trains to pick up the momentum necessary to get over the 4000-foot Tehachapi Pass with minimal effort. This site is within the International Trade and Transportation Center (ITTC) free trade zone, allowing value-added work for international cargo to be exported again without tariffs. Also located onsite are the Target Stores Distribution Center and several other smaller warehouse operations. This site is at the core of a cluster of distribution/manufacturing/processing centers for California.
Major freight-related facilities located within a 45-mile radius of the ITTC include:

- Target Stores (distribution)
- Sears (distribution)
- WalMart (distribution)
- IKEA (distribution)
- Nestle (production/distribution)
- FritoLay (production/distribution)
- Elk (roofing tile)
- CalCOT (cotton)
- SunWorld (fruit)
- Paramount Farming (nuts)
- Grimmway Farms (carrots)
- Bohlhouse Farms (carrots)
- Bear Creek Productions (roses)
- Giamarra (wine)
- San Joaquin Refining (specialty oil products)

Also operated by the City of Shafter and five miles northwest on the Union Pacific rail line is another intermodal facility near Lerdo Highway and Freeway 99. These two sites are located at the heart of southern San Joaquin Valley’s agricultural production, which allows empty shipping containers to be reloaded with product for export, decreasing the need to ship empty containers and increasing the efficiency of rail and truck freight movement.

Figure B3 - 45-Mile Radius From the Shafter Intermodal Facilities
Two San Joaquin Valley Rail Gateways

The two Shafter intermodal facilities at the southern end of the San Joaquin Valley complement the Port of Stockton and the Lathrop intermodal yard located at the northern end of Valley. These gateways serve as collection points for goods being shipped from the San Joaquin Valley region. Improvements to San Joaquin Valley Railroad’s short-haul network are needed to augment trucking goods to these collection points for shipping to California’s ports or to points east and linking all freight shipping points in the Valley. The southern gateway provides a dual role of collecting Valley-produced goods for export, and providing an inland port for imports bound for southern California and to the Midwest and the East Coast. Both of these valley rail gateways are currently under-used. This is because short-haul rail (under 500 miles) has difficulty competing with heavily subsidized passenger service and more profitable international freight on the Burlington Northern and Union Pacific lines through the Valley.

Figure B4 - San Joaquin Valley Freight Gateways

Rail Shipping Routes
Truck Shipping Routes
Other vital short-haul rail linkages include Kern's four oil refineries, the agricultural product shipping points, and various resource mining operations, including U.S. Borax, and Trona Mining Company in eastern Kern. These operations replace thousands of truck trips annually and save premature deterioration of Kern's highways. This is significant because eighty percent of highway road-wear is attributable to heavy-duty trucks.

A major rail bottleneck exists between Los Angeles and the Kern region at the Tehachapi Pass. At more than 4000 feet, much of the grade is single track and operates at full capacity. Double tracking this route is a major priority not only for shipping to the Los Angeles Basin, but for shipping goods to the east coast. Double tracking would lessen the need to ship goods by truck over the Grapevine Pass on Interstate 5 to the south. In addition, Tehachapi Pass is considerably lower than passes to the north and, therefore, takes less fuel to haul goods over the mountains.

Rail shipment will benefit the region by reducing road-wear, congestion and air emissions from throughout the San Joaquin Valley, the Bay Area and southern California. In addition, the Kern region stands to benefit significantly from the number of logistics jobs that these operations will create. To ensure that the Kern region fully benefits global trade activities, connectivity to air freight and passenger facilities should be a priority.

**Proposed Rail-Related Land Use Actions**

**Near Term, 2006-2010**
- Use the existing California Environmental Quality Act review process to educate local land use planners and decision makers on the impacts of sensitive land use developments near vital transportation infrastructure necessary to handle increased rail activity.
- Work with the City of Shafter, City of Bakersfield and County of Kern to preserve the new intermodal hub facility at Seventh Standard Road and Santa Fe Way from encroachment by sensitive land uses.
- Promote a long-range regional visioning process in partnership with member agencies to develop a set of regional principles for preservation of near term and long range transportation infrastructure to handle increasing rail activity.

**Long Term, 2011-2030**
- Monitor progress toward implement regional principles developed by the visioning process.
- Expand the role of the Transportation Technical Advisory Committee or create a new entity for collaboration on building and preserving the region’s transportation infrastructure to benefit potential economic opportunities. Add ex-officio representatives for rail, intermodal hub, and trucking, as appropriate.

**Other Proposed Actions**

**Near Term, 2006-2010**
- Coordinate with the City of Shafter, Bakersfield and County of Kern on the relocation of an intermodal hub to Seventh Standard Road and Santa Fe Way.
- Coordinate with the City of Shafter on the establishment of a rail shuttle from the Port of Oakland to the new intermodal hub at Seventh Standard Road and Santa Fe Way.
- Work with Kern Economic Development Corporation to promote logistics job opportunities in Kern County.

**Long Term, 2011-2030**
- Work with Kern Economic Development Corporation to promote logistics job opportunities in Kern County.
Airports and Global Gateways

Airports have more site opportunities than seaports but take up a very large area when the surrounding affected land uses are considered. This is especially true when taking into account future expansion potential of an airport. This section covers air freight and air passenger service.

Air Freight

Air freight, like seaport traffic, is steadily increasing. Increased levels of time-sensitive cargo has made air freight from Asia a booming business. As with seaports, southern California airports are at or near capacity for air cargo shipments because of competition with expanding air passenger service. Southern California is focusing its expansion of air freight capacity at the Southern California Logistics Center (formerly George Air Force Base) in Victorville. However, the facility’s 3000-foot elevation is more expensive to fly out of than lower altitude facilities because of low air density, especially during the summer.

Kern County’s main airport is Meadows Field adjacent to the northern edge of Bakersfield. At 500 feet, the facility requires less fuel to ascend with a full load and lies on the most direct path from southern California to Asia (see Figures B5 & B6). Meadows field has the fifth longest runway in California and plans to add international service, a third runway and cargo terminal. Meadows Field has good highway connectivity to Ventura, Los Angeles and San Bernardino Counties through State Routes 99/I-5 and 58. Meadows Field is also within 6 miles of the Shafter intermodal facilities and connected by existing rail spurs to both Burlington Northern and Union Pacific.

http://gc.kls2.com/

Figure B5 - Great Circle Route between Southern California and Asia
Mojave Airport in eastern Kern is the other operational air freight facility in within the County. The primary focus of this airport is as a civilian flight test center, and it is the only FAA recognized private spaceport in the nation. The facility contains an intermodal transfer facility with the goal of handling two flights per day. Freight service may increase as long as it does not affect the primary research role of the facility.

Preservation of these facilities is essential and should be a primary goal of land use decisions in Kern County. Moving the facilities is cost prohibitive and would likely reduce the strategic advantage the existing locations have with regard to proximity to Asia as well as connectivity to highway and rail facilities. Protecting these facilities from residential and other conflicting encroachments should be one of the highest priorities for land use decision makers.

**Air Passenger Service**

As with air freight, southern California’s runway capacity for air passenger service will not be able to keep up with demand, even with the creation of an international airport facility at Palmdale. Southern California Association of Governments’ overall plan to sustain its region’s growth in air passenger demand is to link the region’s airports with a high-speed magnetic levitation (“maglev”) train (http://www.scag.ca.gov/rtp2004/2004draft/FinalPlan.htm, ch.4, p.129). This would allow the more congested airports to ferry passengers to and from outlying airports where additional capacity is available. The goal is to create an integrated airport system for southern California that allows users
to fly into one airport, catch a train and fly out of or catch transit from another airport with no more than a 30-to-90-minute layover. Funding for the system has yet to be identified. Meadows Field should be linked into the reliever network of airports either through the maglev or the California High-Speed Rail (HSR) network. If approved by California's voters, high-speed rail would likely speed up the connectivity of Meadows Field to LAX. Currently, high-speed rail is planned to link downtown Bakersfield to Union Station in downtown Los Angeles. A subway/light rail transit route between LAX and Union Station already exists. Similar transport between downtown Bakersfield and Meadows Field would also be needed if high-speed rail service is constructed. Should this connection be established, Meadows Field will become a “front door” to southern California for passenger travel from the Far East.

At less than fifty-percent capacity, Meadows Field is the most under-used full service civilian runway in southern California. The County of Kern completed construction of a jet terminal in early 2006 to handle planned expansion, and the existing terminal is scheduled for conversion to an international airport facility. Currently, the primary destinations for travelers from Meadows Field are to Phoenix, Arizona, and Guadalajara, Mexico. Direct international service to Mexico is likely to be the initial use of the old terminal. However, future expansion as a jumping off point from southern California to Asia is possible in the near future even without high-speed rail links. The accessibility and relatively low congestion between Meadows and Ventura, Los Angeles and San Bernardino Counties would make this facility a prime location for travel to and from Asian destinations. To accommodate proposed lengthening of runways to the northwest of Meadows Field, future circulation should consider realigning Highway 65 to the west.

The burgeoning trend for air-taxi/business jet charters provides potential business for smaller airport facilities throughout the Kern region. The ability of a business traveler in a rental car to book an air-taxi or business jet while the jet is in-flight, and rendezvous with the jet at a small nearby airport, could transform activity at smaller airports. Development of a system of small, very light jet-capable airports with good freeway access could relieve congestion at overcrowded regional hub airports. It would also put most of California within a 30-minute point to point jet flight from Kern County. Facilities such as Bakersfield Municipal Airpark and general aviation airports in California City, Inyokern, Delano, Shafter, Wasco, Tehachapi, Taft, Mojave, Kern Valley, Buttonwillow, Lost Hills, Rosamond, and Famoso should be preserved for potential expansion to this type of service. The need for rental car and restaurant facilities at these locations, as well as runway expansion to a minimum of 5000 feet, should be recognized as a long-term goal.
To preserve these facilities, local general plans and concomitant land use decisions must assume that local airports may expand and runways will be lengthened. Even the smallest facility should be planning for expansion to air taxi service. Protecting these facilities from encroachment by sensitive land uses will help provide the economic engine and infrastructure to encourage job growth.

Proposed Airport Related Land Use Actions

Near Term, 2006-2010
- Use the existing California Environmental Quality Act review process to educate local land use planners and decision makers on the impacts of sensitive land use developments near vital transportation infrastructure necessary to handle increasing air traffic.
- Work with the Kern County Department of Airports, Planning and the Cities to preserve existing airports from the encroachment by sensitive land uses.
- Promote a long range visioning process with member agencies to develop a set of regional principles for preservation of near term and long range transportation infrastructure for increasing air traffic.

Long Term, 2011-2030
- Monitor progress toward implementing regional principles developed by the visioning process.
- Expand the role of the Transportation Technical Advisory Committee or create a new entity for collaboration on building and preserving regional transportation infrastructure for
economic opportunities. Add ex-officio member representatives from military and civilian airports and air traffic stakeholders, as appropriate.

**Other Proposed Actions**

**Near Term, 2006-2010**
- Coordinate with the County of Kern, City of Bakersfield and City of Shafter on the proposed expansion to Meadows Field in the County of Kern Airport Master Plan.
- Coordinate with the Kern County Department of Airports to establish intermodal connectivity for rail, trucking, transit and passenger vehicles.
- Work with KEDC to promote logistics and aerospace job opportunities in Kern County.

**Long Term, 2011-2030**
- Work with KEDC to promote logistics and aerospace job opportunities in Kern County.

**Public Transit**

In some instances, public transit is more dependent on its surroundings than roads and highways, though it can take up less room than airports with their need for surrounding clear zones, and is not as dependent as seaports, from a land use planning perspective. This section covers transit's land use linkages, transit-oriented design, as well as carefully planned parking facilities that can promote transit use.

**Transit/Land Use Linkage**

Transit has a strong linkage to land use in that its viability is closely linked to land use density and intensity within a region. Before World War II, land uses in most communities were focused on walkability and streetcar accessibility. Most communities in the Kern region have an urban core based on these concepts; historic pre-WWII Bakersfield urban core was very walkable and accessible to a streetcar system. The Southern Pacific passenger train station on Baker Street in Old Towne Kern (East Bakersfield) was connected to the Santa Fe train station in downtown Bakersfield on F Street by an electric trolley along 19th Street from 1901 to 1942. Suburban explosion since WWII has spawned a low-density development pattern that results in heavily subsidized, under-used buses traveling metropolitan Bakersfield's streets.

Valley portions of the Kern region are at a distinct disadvantage compared to other areas, such as the Bay Area, that have more successful transit systems. Kern lacks confining topographic barriers to urban growth such as shorelines and mountain ranges that channel development along a narrow corridor of flat land, keeping development from sprawling in all directions. Lacking such constraints, developing housing options with access to sustainable, viable transit alternatives is a challenge.
As metropolitan Bakersfield has grown, it has loosely developed around new centers, such as the Northwest Promenade adjacent to a 3-mile-wide low-density oil production and refining complex on the northwest side of the Kern River. No north-south connections currently cross the river through this heavily industrialized area. The result is poor transit service from the rapidly growing Northwest area to the rest of metropolitan Bakersfield. A ring of centers now includes Downtown/Westchester, California Avenue, Market Place/CSUB, Northwest Promenade, and Rosedale Hwy/SR99. Each of these centers sprawls over large areas that often lack a central focal point or pedestrian pocket for concentrating urban transit access. Beyond this ring of centers, new centers are sprawling out to the south and southwest (Valley Plaza, Panama/SR99, White Lane/Gosford) and to the northeast (Baker Street, Bakersfield College, East Hills Mall). According to guidelines developed by Peter Calthorpe for transit-oriented development and illustrated on Figure B9, these transit centers should be spaced a no closer than one mile apart with the majority of population activity within a quarter mile or ten minute walking radius. New developments on the periphery should properly space these concentrated activity centers to promote transit usage.
In the outlying communities, developing the level of density necessary for the minimum of fixed bus transit routes is a challenge. The California Air Resources Board proposed the following minimum average densities for implementing fixed route transit. These rates are subject to multiple other factors, such as income and intensity of land use, and should not be used as a goal, but as background upon which higher densities around transit centers are developed. Kern’s outlying communities will need to promote these regional hubs for eventual implementation of commuter and intercity rail options while the urban and suburban areas of metropolitan Bakersfield develop transit centers for possible future implementation of light rail service.

![Figure B9 - Proximity of Competing Retail](image)

**Minimum Average Densities to Support Various Levels of Transit Service**

<table>
<thead>
<tr>
<th>Type of Transit</th>
<th>Residential (DU/acre*)</th>
<th>Commercial/Industrial, Retail, Office (millions of sq. ft. / transit center)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum level of local bus service at 1 bus / hr.)</td>
<td>4 - 6</td>
<td>5 - 8</td>
</tr>
<tr>
<td>Minimum level of local bus service at 1 bus / 1/2 hr.)</td>
<td>7 - 8</td>
<td>8 - 20</td>
</tr>
<tr>
<td>Light rail transit w/feeder buses</td>
<td>9+</td>
<td>35 - 50</td>
</tr>
</tbody>
</table>

Source: California Air Resources Board, The Land Use - Air Quality Linkage [http://www.arb.ca.gov/ch/programs/link97.pdf](http://www.arb.ca.gov/ch/programs/link97.pdf)

Note: DU/acre = dwelling units per acre.
Phased Transit-Oriented Development (TOD)

In 1994, Kern COG completed a Major Transportation Investment Study (MTIS) that analyzed transit alternatives, including a light-rail option. The study indicated that an initial light-rail line linking the densest activity centers along the Bakersfield College to Cal State Bakersfield corridor would carry less than half the ridership needed to be economically feasible by 2015. The Study recommended a focused transit investment that improved fixed bus route service, which could serve eventually as a feeder network for a light-rail system. Securing additional funding to cover operating expenses has proven a roadblock to expansion of the existing fixed route system. A transportation bond measure for additional funding was defeated in November 2006 but it is anticipated by bond measure supporters that another attempt will be made to secure a one-half cent sales tax that would offer the benefits of being a self-help county. The additional sales tax could provide an additional one million dollars per year to purchase buses and operate an expanded transit system. However, to maximize this funding, incremental or evolving phasing of higher capacity transit modes is needed as neighborhood and regional centers gradually transform from rural to suburban to more urban-level development densities.

Slowly evolving transit intensification can be accommodated through the centers approach discussed in the previous section. The Metropolitan Bakersfield General Plan, jointly adopted by the City and County, identifies a centers approach that could lend itself well to incrementally “hardening” (i.e., intensifying) transit corridors. The Plan states:

“The 'centers' approach provides for a land use pattern consisting of several concentrated mixed-use commercial and high density residential centers surrounded by medium density residential uses. This concept encourages people to live and work in the same area and thus serves to minimize sprawl and reduce traffic, travel time, infrastructure costs, and air pollution.”

However, the plan’s implementation still lacks the density needed to significantly expand transit usage; it needs a mechanism to allow the centers to intensify use over time. The Plan could also benefit from a Circulation Element that specifically includes transit systems, as well as specific plan lines that identify transit-oriented centers, corridors and boulevards to allow for gradual higher-capacity transit modes as density and use require. A major advantage of transit over single occupancy vehicle (SOV) facilities, such as freeways, is that it is more economical to add a bus or another railcar as congestion increases than right-of-way for another roadway lane.

The Bay Area Transportation and Land Use Coalition (TALC) suggest an evolving transit strategy that promotes the concept of Express Bus/Bus Rapid Transit (BRT) as an interim step between fixed bus routes and full rail implementation. Bus rapid transit is an evolving term for a host of sophisticated technologies including articulated buses, auto drive technology, and traffic signal green-light extension used on both bus-only and mixed-flow lanes. Southern California Association of Governments offers the following definition of BRT in their 2004 Regional Transportation Plan:

“Bus rapid transit (BRT) is designed to provide fast, high-quality bus service. BRT operates in mixed traffic or in dedicated guide-ways, utilizing low-floor buses, taking advantage of signal priority at intersections, boarding and alighting passengers through streamlined processes, and improving bus stop spacing at planned stations. BRT combines the routing flexibility of bus systems with some of the features of rail transit such as limited stops and streamlined boarding and alighting procedures. It uses specially identified buses stopping only at major intersections/destinations.”

The TALC strategy focuses on a planned and evolving intensification of Transit-Oriented Development destinations for use at the BRT stops. TALC’s strategy of phased transit mode intensification, as the centers and corridors infill and ridership increases, allows the farebox revenue
to drive the building and gradual intensification of the transit corridor. The following table illustrates the evolving progression from rural to suburban to urban transit usage as the land use intensifies and the ridership warrants more intense transit modes.

**Phased Transit Intensification**

<table>
<thead>
<tr>
<th>LOCAL</th>
<th>INTERCITY</th>
<th>INTERREGIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Transit Phases</td>
<td>County Fixed Route/Senior Transit</td>
<td>Regional Bus/Greyhound</td>
</tr>
<tr>
<td>Rural Dial-a-Ride/Senior Transit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban Transit Phases</td>
<td>Intercity Commuter Heavy Rail</td>
<td>Amtrak/CalTrain</td>
</tr>
<tr>
<td>Urban Dial-a-Ride/Senior Transit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Taxi Service/Rideshare</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Route Bus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban Transit Phases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shuttle Bus/Circulator</td>
<td>High-Speed Rail/Maglev</td>
<td>High-Speed Rail/Maglev</td>
</tr>
<tr>
<td>Express Bus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Rapid Transit (BRT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Lanes/Mixed Carpool Lanes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light Rail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heavy Rail/Subway</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from the Transportation and Land Use Coalition (TALC)

TALC recommends that infill land development around the transit centers should gradually drive the intensification of transit infrastructure. As new low-density suburban development occurs, a phased land use plan is needed for the eventual densification and infill of the development to more intense urban uses around a transit center.

Historically, local general plans have approached Transit-Oriented Development in a very limited manner. As a tool for coordinating transit infrastructure, General Plan Circulation Elements are useful to begin identifying and planning for transit corridors and centers, though they have yet to be used for this purpose within the Kern region. Adoption of specific plan lines for transit corridors and centers is another tool that could be used to phase implementation of a Transit-Oriented Development. Preservation of existing rail spurs also could use a specific plan line tool. Finally, local land use elements and design guidelines should be revised to incorporate Transit-Oriented Development centers and their phased intensification. Local land use planning agencies might consider zones incorporating “form-based codes” that allow by-right infill under specified architectural design guidelines around a transit center such as the Pleasant Hill BART Station Property Code. By providing these mechanisms, a foundation can be laid to ensure that new development on the urban fringe implements these guidelines and provides the funding mitigation necessary to expand the transit system into the suburbanizing community fringe.

**Parking and Transit-Oriented Development**

Peter Calthorpe, in his 1993 book *The Next American Metropolis: Ecology, Community, and the American Dream*, proposes detailed Transit Oriented Development standards that include the concept of phased land use intensification around transit centers. The design guidelines include “surface parking redevelopment.”

“Land devoted to surface parking lots should be reduced through redevelopment and construction of structured parking facilities. The layout and configuration of the
One of the most effective methods to intensify low-density development around transit-oriented development centers is to control parking configuration. Conversion of parking lots to buildings and parking structures can add intensity around a transit center. Implementation of other parking concepts, such as joint use parking by office, carpooling, retail, entertainment, churches, and mixed use residential, can provide a more efficient and consistent usage of parking structures on weekdays, weekends and evenings. Greater pedestrian and transit activity can allow a reduction in parking near transit centers by 15 to 25 percent. Parking for carpoolers, bicyclists and transit commuters require additional consideration in this process.

Parking cost can also be used to promote development of a major transit center. By charging for parking, a disincentive is created for people to drive to the center, who would then take transit, carpool, bike or walk. In Old Town Pasadena, proceeds from the parking fees and meters were used to finance pedestrian street improvements that transformed a blighted downtown into a vibrant destination that boosted the area businesses and created an infill node for the new Gold Line transit station at Mission Park. Parking costs used to fund local projects that benefit those paying it are referred to as user-based fees. User-based fees for all forms of transportation expenditures are becoming more common and would have to be heavily relied upon to implement transit-oriented development.

**Proposed Transit Related Land Use Actions**

**Near Term, 2006-2010**
- Use the existing California Environmental Quality Act review process to educate local land use planners and decision makers on the impacts of sensitive land use developments near vital transportation infrastructure necessary to handle increasing local, intercity and interregional transit usage.
- Work with Golden Empire Transit, Kern Regional Transit and local transit providers to preserve the existing and future transit opportunities from the encroachment of low density land uses around transit oriented development centers.
- Promote a long range regional visioning process in partnership with member agencies to develop a set of regional principles for preservation of near term and long range transportation infrastructure to promote increased demand driven transit usage.
- Encourage the adoption of regional circulation elements that address transit, specific plan lines and form-based codes where appropriate to implement transit improvements along designated transit corridors connecting transit oriented development centers.
- Provide a demand driven expansion of transit usage.

**Long Term, 2011-2030**
- Monitor progress toward implement regional principles developed by the visioning process.
- Expand the role of the Transportation Technical Advisory Committee or create a new entity for collaboration on building and preserving of the region’s transportation infrastructure toward ensuring economic opportunities. Add ex-officio member representatives for land use and transit stakeholders as appropriate.
- Promote land use along transit corridors that could provide a feeder network for future implementation of on-street light rail.

**Other Proposed Actions:**

**Near Term, 2006-2010 and Long Term, 2011-2030**
- Coordinate with Golden Empire Transit on implementation of traffic signal green-light extension technology as a first step toward implementation of Bus Rapid Transit.
- Coordinate with Golden Empire Transit, Kern Regional Transit and Kern County Department of Airports to establish intermodal connectivity between transit systems and Meadows Field.

**Roads and Highways**

While roads and highways have considerably more flexibility in siting than the previously discussed air, rail, or transit modes, roads provide interconnectivity to all modes. At these intermodal connection points, road and highway land use decisions are considerably less flexible because of the limited number of site opportunities. Preserving intermodal connections while ensuring the capacity necessary to minimize congestion are two major concerns for land use planning. When siting roads and highways, local planners should always rely on special studies. The following are some ideas that specific studies might consider implementing.

**Road and Highway Grid**

A rule of thumb for transportation planners is that highways and freeways in urban areas should be spaced 3 to 6 miles apart. Recent specific plan line adoptions have resulted in a beltway system that will be more than 7 miles from the next parallel freeway facility. As new housing is built on the urban fringe, residents may strongly object to new freeways being constructed near their homes, thus potentially driving the freeway system further out; the arterial circulation system in the interior would suffer as a result. Parallel arterials halfway between two freeways spaced too far apart will be servicing greater loads than a 6-lane arterial can absorb because it must carry additional traffic that the freeway system is too far away to service.

The metropolitan Bakersfield arterial network can be characterized as a high volume, interrupted grid pattern. While many regions provide a 4-lane arterial grid, metropolitan Bakersfield is fortunate to have a 6-lane arterial network that is laid out on roughly 1-mile intervals with curvilinear deviations from the section line grid. The arterial system is interrupted by a series of railroad corridors, freeways, and a river, resulting in greater than 1.5 mile gaps between arterials, though a level of service degradation can be anticipated where arterials are spaced at greater than 1-mile intervals. The decision to allow the lower density arterial spacing was made to avoid building costly bridges or while the arterial segment was still on the fringe of any planned development and when future traffic volumes were expected to be low. As new entitlements were approved beyond these locations, level of service failures began to materialize.
In addition to arterial spacing, spacing of freeway interchanges has resulted in level of service failure. Ming Avenue, White Lane, and Panama Road, at Freeway 99, were all spaced 1.5 miles apart when Freeway 99 was designed to more rural specifications. Now that the region has urbanized, level of service degradation is common at all three locations.

Irregular spacing of arterials can make it more challenging to synchronize traffic signals in more than one direction. Arterials with signals at collectors further complicate traffic signal coordination efforts. A collector network that directs local traffic to and from the arterials commonly deviates from the grid layout in the newer suburbs, hindering traffic signal synchronization.

The silver lining of having an imperfect arterial grid is that it results in higher levels of congestion that may promote the use of transit and other alternative modes. Unfortunately, bus transit is often stuck in this same congestion, counteracting the incentive for this particular mode and emphasizing the need for choices such as light rail and bus lanes.

6.2 Transit/Pedestrian Oriented Highways, Roads

Highways and roads can be designed to optimize pedestrian, bike and transit usage to allow for phased intensification of TOD centers at greater than 1-mile intervals with regional centers approximately every 4-miles. A proposed implementation of this concept, “The Urban Network: A New Framework For Growth,” was developed by Peter Calthorpe for Chicago’s suburbs (available from website http://www.calthorpe.com). Calthorpe’s Urban Network starts with a hierarchy of TOD centers ranging from local neighborhood centers at half-mile intervals off the arterial/avenue grid and within a quarter mile’s walking distance of all housing. Village centers are spaced every other mile along the avenues and a Town Center can be found every 4 miles along a “transit boulevard.” The system includes a grid of connectors and one-eighth mile spacing crisscrossed by a diagonal network of connectors that provide for connectivity between the Town Center and smaller village centers. The diagonals make extensive use traffic circles and roundabouts to promote traffic calming. The
following strategies for laying out a road and highway network can be employed along an arterial to facilitate gradual transit intensification:

- Provide bus/transit shelters adjacent to public plazas or parks at the focal point of a pedestrian node/TOD center;
- Plan for park and ride lots at the final stop of express bus routes;
- Provide signal green-light extension override for transit buses;
- Provide a local ordinance and signage giving buses the right-of-way when pulling into traffic;
- Reserve outside lanes of an arterial as express bus priority lanes;
- Gradually evolve express bus routes to dedicated lanes for bus rapid transit and eventually for use as on-street light rail (see Section 5.2);
- Split arterials passing through TOD centers into one-way couplets. This would lessen the impact of heavy traffic on pedestrian activity along the arterial and eliminate the left turn cycle from traffic signals, thereby improving traffic flow though the TOD center.
- Use roundabouts and traffic circles that can reduce traffic signal delay by as much as 25 percent;
- Locate industrial centers along freeways and alternate throughways or expressways that provide an alternative route for trucks when freeways are congested;
- Provide Bus/High Occupancy Vehicle /Low Emissions Vehicle /Bus lanes on congested freeways.

### 6.3 Bus and Carpool Lanes

One of the most efficient uses of High Occupancy Vehicle, Low Emissions Vehicle lanes is to provide priority access to express bus service. The sight of buses speeding past congested traffic can be a strong inducement for commuters to use transit. In October 2005, Caltrans analyzed the congested portions of State Routes 58 and 99 in metropolitan Bakersfield. The findings indicated that, for the most part, High Occupancy Vehicle lanes would not provide much additional congestion relief over mixed flow lanes. This is primarily a result of the relatively short commutes, making the time savings differential less significant. However, the incorporation of an Express Bus or BRT service within the HOV lane can greatly improve the performance of transit ridership. Northbound Route 99 through metropolitan Bakersfield was identified as feasible for implementing an HOV lane; however, building a carpool lane in just one direction is not much of an incentive for carpooling. The cutoff for feasibility in the study was 400 vehicles per peak hour of travel to 1800 vehicles per lane. Route 99 southbound had a higher level of vehicle occupancy in the study – sufficiently high that a 2+ vehicle per lane facility would become saturated. No funding was identified in the study for financing the HOV lanes; however, federal Congestion Management and Air Quality (CMAQ) funds and the Air District’s new Indirect Source Review (ISR) Fee may be eligible for an express bus/HOV/LEV lane.

In 1994, HOV lanes for the Westside Parkway and Downtown Parkway (now called the Centennial Corridor south) were studied as part of the facility’s Tier 1 Environmental Impact Report. Modeling showed that the facility would carry less than 2 vehicles per minute, a third of the traffic necessary to make the facility run efficiently by 2015. However, analyzing a much longer horizon indicated that eventually the facility could benefit from an HOV/LEV/Bus lane as it became more congested. The source of the congestion is a high level of new entitlements approved on the fringe of the metropolitan area. Incorporating an express bus and future HOV/bus lane into freeways that will eventually become congested is an essential relief valve for an expanding metropolitan area.

### Park-and-Rides

Park-and-ride locations should be planned for at the terminus of an express bus/BRT/light rail line, and near major intermodal facilities such as freeway interchanges, airports, and regional rail. As the metropolitan area expands, new TOD centers will be established beyond the former terminus. At that
point, the former terminus can begin to intensify and infill, likely converting the park-and-ride facility into parking for additional office and commercial activities.

**Freight Mobility on Highways and Roads**

Truck freight mobility for highways is highly dependent on land use decisions. For this discussion, freight mobility is divided into three separate areas:

- Inter-regional thru-county, or “primary” goods movement;
- freight destined/originating locally, or “secondary” goods movement;
- local freight delivery such as Federal Express/UPS, or “tertiary” goods movement.

**Primary Goods Movement** - Of the primary or through-county goods movement, pipelines handle more tonnage than all other modes combined. These privately-operated facilities allow the inexpensive movement of liquid and gas products being produced locally or elsewhere, and planning for these facilities is strictly a private-sector endeavor. In addition to relieving a tremendous tonnage of equivalent truck and rail traffic, the pipelines have terminals that transfer cargo to rail and trucks. It is these intermodal points that have the greatest effect on the existing transportation infrastructure and need to be preserved from conflicting land uses. The propane gas terminal near Taft is one example of this type of facility, and the Flying J Oil Refinery terminal on Rosedale Highway is a distribution point for oil products by truck. Golden Bear, San Joaquin and other local refining facilities also ship oil products that originated from the local and regional pipeline networks in the region.

![Figure B11 – Existing Primary Goods Movement Facilities](image-url)
Kern lies at the crossroads for much of the trucking goods movement throughout the state. The Tejon and Tehachapi Passes are critical facilities for this activity. Preservation of these corridors for trucking is critical to Kern’s and California’s economic health. Forecasted growth along these corridors is expected to increase dramatically over the next several decades. While Caltrans has proposed additional truck passing lanes through the mountain passes, the number of lanes that can fit in the narrow canyons through the passes is limited.

Options to increase capacity through these passes include adding truck toll lanes that use congestion pricing to create an incentive for trucks to travel at off-peak times. Another option is the double tracking of the rail line over the Tehachapi Pass so that trucks could download at the Shafter Intermodal Rail facility and ship by rail to Los Angeles. This alternative would greatly increase the capacity of the corridor. Coordinating the financing of the all truck lane facilities and the double tracking of the rail corridor could result in more efficient goods delivery over the Pass.

Congestion on State Routes 99 and 58 through metropolitan Bakersfield is impeding freight traffic though the area. A system of beltways surrounding metropolitan Bakersfield will help relieve these corridors. Show on Figure B12 as the dark dashed lines, these facilities should be considered for all truck lane facilities as well.

Figure B12 - Primary Truck Goods Movement Facilities: Existing and Planned
Secondary Goods Movement - Secondary goods movement focuses on transport of goods that are originate or are destined locally. Secondary goods shipments tend to originate from industrially zoned areas. Metropolitan Bakersfield has five major industrial activity areas that generate freight movement; these areas are show on Figure B13. Connecting these areas are a series of internal arterials and collectors that must handle high volumes of truck traffic. Figure B13 shows these facilities as dark blue lines. The red dashed areas are the industrial districts. The thicker green lines are a network of major arterials and freeways that connect these districts with each other and the Shafter intermodal yard. The industrial district northwest of Bakersfield is located at the Shafter intermodal yard.
Transporting goods along these corridors requires special turning-radius considerations for longer truck trailers. National STAA truck routes must be able to handle trucks up to 53 feet in length and require special median design to accommodate the larger turning radii. Truck routes also have much heavier wear and tear on roadways that need to be accommodated.

Connections from these industrial districts to the primary or regional goods movement corridors is shown on Figure B14. The primary network in metropolitan Bakersfield is becoming heavily congested. Development of additional goods movement corridors, shown as dashed lines surrounding metropolitan Bakersfield, will help to relieve some of this congestion.

Tertiary Goods Movement

Tertiary goods movement is the distribution of goods locally. Facilities such as Federal Express and UPS use the entire local street network for delivering goods and services. This is a rapidly expanding sector for goods movement as Internet shopping has become more prevalent. Providing adequate capacity and siting for these tertiary goods movement nodes is critical for the economic viability of the region.
Figure B15 - Tertiary Goods Movement Network
It is important to note that on most major trucking facilities, 80 percent of the wear and tear on the roadways is from trucks. Caltrans has special standards for building roads to handle the heavier loads created by trucks on State Routes. Proper development and maintenance for these roadways is essential. Land use planning must take into account the positioning of new industrial areas to ensure that the infrastructure is in place to handle increased loads and wider turning movements.

**Proposed Road/Highway Related Land Use Actions**

**Near Term, 2006-2010**

- Use the California Environmental Quality Act review process to educate local land use planners and decision makers on the impacts of sensitive land use developments near vital transportation infrastructure necessary to handle increasing road and highway usage and facilitate transit and truck goods movement.
- Work with member agencies to preserve existing and future road and highway rights-of-way from the encroachment of sensitive land uses.
- Promote a long range regional visioning process in partnership with member agencies to develop a set of regional principles for preservation of transportation infrastructure.
- Encourage the adoption of regional circulation elements, specific plan lines and form-based codes, where appropriate, to implement truck-related improvements along designated corridors.
- Provide for all types of truck-related goods movement along critical trucking corridors.
Long Term 2011-2030
- Monitor progress toward implementing regional principles developed by the visioning process.
- Expand the role of the Transportation Technical Advisory Committee or create a new entity for collaboration on building and preserving the region’s transportation infrastructure toward economic opportunities. Add ex-officio member representatives from trucking stakeholders, as appropriate.
- Promote land use along freight corridors.

Mitigating Impacts of Land Use Decisions on Transportation

Conflicting Land Uses - Setback Distances

Preserving these transportation land uses is critical to the economic and environmental viability of the region. The encroachment of sensitive land uses upon airports and seaports can greatly limit the use of such facilities and eventually force a closure of such facilities. The following tables list suggested setback distances that would limit exposure to harmful air pollution. These are rough estimates and should only be used when no other data or local study is available.

Air Quality Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities

<table>
<thead>
<tr>
<th>Source Category</th>
<th>CARB Advisory Recommendations</th>
</tr>
</thead>
</table>
| Rail Yards                   | • Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard.  
                                | • Within one mile of a rail yard, consider possible siting limitations and mitigation approaches. |
| Distribution Centers, Truck Stops | • Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week).  
                                | • Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points. |
| Freeways and High-Traffic Roads | • Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. |
| Refineries                   | • Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation. |
| Gasoline Dispensing Facilities | • Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities. |

Source: California Air Resources Board, Air Quality and Land Use Handbook [http://www.arb.ca.gov/ch/landuse.htm](http://www.arb.ca.gov/ch/landuse.htm)

Note that projects subject to National Environmental Protection Act (NEPA) environmental review process must perform a project level or “hot spot” analysis for specified pollutants a region has failed to attainment. The San Joaquin Valley portion of Kern is non-attainment for carbon monoxide (CO), particulate matter (PM) 10 microns or smaller and PM 2.5 microns or smaller. Guidance for this federally required analysis can be found at Caltrans websites:
In addition to setbacks for land uses that are sensitive receptors for air pollution, noise sources should also require proper setbacks when siting future transportation facilities or when considering mitigation such as increased insulation and sound walls.

### Noise Recommendations on Siting New Sensitive Land Uses

<table>
<thead>
<tr>
<th>Source Category</th>
<th>Additional Advisory Recommendations</th>
</tr>
</thead>
</table>
| **Regional Airports, Commercial / Air Freight** | • Avoid siting new sensitive land uses within 10,000 feet of planned and existing runway approaches and 2000 feet on either side. LAX has CNEL 65dB extending 5 miles beyond the runway and up to 1 mile laterally along the departure path.  
• Within 14,000 feet in any direction of a runway observe appropriate height restrictions based on conical surface. |
| **Local Airports Very Light Jet / Air Taxi Service** | • Avoid siting new sensitive land uses within 5,000 feet of planned and existing runway approaches and 1000 feet on either side.  
• Within 14,000 feet in any direction of a runway observe appropriate height restrictions based on conical surface.  
• Local airports that may one day serve as Air Taxi Service ports should have expansion plans increasing runway length to a minimum of 5000 – 7000 feet subject to local studies to accommodate Very Light Jet, Air Taxi Service. |

Source: Kern Council of Governments, Kern County Airport Land Use Compatibility Plan, amended March 2004

### Funding Transportation Infrastructure

Mitigating transportation impacts of new development is a complicated issue. The current gasoline excise tax per gallon method needs to be overhauled. There are no easy long-term solutions. Multiple funding strategies are currently used in Kern and new ones are under consideration. All sources currently fall short of the funding for Kern’s transportation need by more than $1 billion.

#### Gasoline Tax

The gasoline tax was originally set up as a pay-as-you-go funding strategy to build the Interstate Highway system. State and federal gas taxes are a flat tax that does not increase with the price of gas. In fact, the opposite affect occurs to transportation trust fund when the price of gas increases, causing motorist to purchase more fuel efficient vehicles allow them to drive more miles per gallon of gasoline tax, thereby increasing congestion.

In 1963, state and federal gas taxes were each raised 1 cent per gallon to 7 cents federal and a matching 7 cents state to adjust for inflation over the previous decade. Since that time, the flat tax on gas has risen to 18 cents federal and 18 cents state. At the same time, if the gas tax would have kept up with inflation, the state tax should be closer to 70 cents per gallon or $1.40 for both state and federal gas taxes. Currently, customers pay a little over 36.4 cents per gallon in taxes, or 26% of what was collected in 1963.
In Europe, gas taxes are easier to raise because they are calculated based on the metric liters. A 1-cent increase per liter raises nearly 4 times the amount of revenue for roads as a 1-cent per gallon increase. This means that to achieve a significant revenue increase, voters must approve a 4-cent per gallon increase to keep up with inflation and construction costs or approve a 1-cent increase in gas every year. Unfortunately, the U.S. has abandoned its conversion to the metric system, which would have made it politically more palatable for voters to approve an effective periodic increase in the flat fuel tax.

In addition, the situation is made worse by the fact that in the early 1990s, the gas tax increases were diverted to earthquake retrofit projects after the Northridge and Loma Prieta earthquakes. In 2002, to combat the shortfall in transportation funds, California voters passed Proposition 42 to designate the sales tax collected on gasoline to go toward transportation projects rather than general funds. The proposition, however, contained a clause allowing the legislature to borrow the monies from roads in the event of a state fiscal crisis. Like 64 percent of all gas tax collected, Proposition 42 funds do not stay local; the State determines where these funds are expended. Most of the funding that has trickled through has gone to the more urban areas of the state. To date, the funding made available from this source has gone to reimburse regions with local transportation sales tax measures that loaned the state funding to keep their region’s projects on track. Kern County lacks a local
transportation mechanism to leverage state choice funding; even if Proposition 42 was fully funded, it would only be providing half of what could be purchased in 1963 dollars.

On the federal gas tax side, the Kern region has held its own. In 2005, with the re-authorization of the federal transportation bill SAFETEA-LU, $800 million was earmarked for specific transportation projects in Kern. This represents one-half to one-third of the estimated need for road construction dollars and no additional funding for maintenance and operations. The projects included a new crosstown freeway and the beginnings of a beltway system for metropolitan Bakersfield. Other transportation-related earmarks in recent years included a new air terminal for Meadows Field and a traffic signal green light extension project for Golden Empire Transit. $800 million amounts to around $3000 per Kern household, roughly equal to what Kern County households have paid in federal gas taxes over the past 30 years. In that time, however, construction costs have increased 700%.

**Local Transportation Measure**

To combat the shortfall in gas tax revenue, regions across the state are implementing local transportation sales tax measures to augment this shortfall. One potential local revenue source is a dedicated sales tax measure to fund transportation infrastructure. As the largest county in the state without a separate sales tax for transportation, the Kern region could generate approximately $900 million over 20 years, which would finance many necessary transportation improvements. Sales tax monies are also used throughout the state to leverage state and federal transportation dollars to construct improvements on the state highway system. Unlike general tax increases, these dollars would remain in Kern County and would be used for specific highway, transit, air quality and transportation enhancement improvements as designated by the local voters.

**Developer Transportation Impact Fees**

Another potential source of local funding communities are turning to is a transportation impact fee (TIF). Outside metropolitan Bakersfield, most developments currently do not pay a fare-share impact fee to offset the costs of constructing regional street or highway improvements. The impact fee is designed to collect the difference between the cost of the new roads attributable to new development and the amount of gas tax revenues that the new development will produce for the County or cities to use in road construction. Kern COG is undertaking a series of studies to assess the potential for future TIF programs within unincorporated county areas and small cities.

**Developer Funded Mitigation**

Local development projects contribute a significant amount of funding for local streets and roads that is passed on to the homebuyer. These include the funding of improvements required by the local land division ordinance, developer agreements and local transportation impact fees.

**Property Taxes**

Property taxes have not kept pace with the funds needed to maintain infrastructure. Property tax reform initiatives such as Proposition 13 have provided the state legislature with the ability to balance the state budget using local property taxes from time to time. Consequently, local communities have not been able to maintain the increasing levels of funding to maintain roads, necessitated by the continued road building associated with growth.

**Conclusion**

The linkage between transportation and land use is clear. The efficient implementation of transportation infrastructure is dependent on local land use decisions. Efforts to more closely coordinate local land use decisions and transportation planning are already underway. The Kern Regional Blueprint Project is providing a comprehensive planning approach that links transportation
planning to a host of other local land use issues. Funded by the California Department of Transportation and the Federal Highway Administration, this project will provide input at the beginning of the local general plan process: a critical step to close the gap between our region’s transportation and land use.

10.0 Resources

The Brookings Institute
http://www.brookings.edu/es/urban/urban.htm

California Air Resources Board, The Land Use – Air Quality Linkage
http://www.arb.ca.gov/ch/programs/link97.pdf

California Air Resources Board Air Quality and Land Use Handbook
http://www.arb.ca.gov/ch/landuse.htm

The Citistates Group
http://www.citistates.com/links.html

Great Valley Center, Central Valley Metropatterns Report

Form Based Codes Institute
http://www.formbasedcodes.org/

Form Based Codes Frequently Asked Questions, Redevelopment a Transit Stop in Farmers Branch, Texas
http://www.farmersbranch.info/Planning/codes7FAQs.html

Form Based Code Example: The New Pleasant Hill Bart Station Property Code
http://www.co.contra-costa.ca.us/depart/cd/charrette/outcome/PHCODE%20final.PDF

Metropolitan Area Research Corporation (MARC)
http://www.metroresearch.org/

Municipal Research and Service Center, Transit Oriented Development (TOD)
http://www.mrsc.org/Subjects/planning/transdev.aspx

The Transportation and Land Use Coalition (TALC), Bus Rapid Transit (BRT)
http://www.transcoalition.org/reports/revt/case_for.html
APPENDIX C

PUBLIC PARTICIPATION PROCESS
AND ACTIVITIES
Public Participation Process and Activities

Public involvement is integral to the regional transportation planning process. Federal regulations to implement the surface transportation funding legislation (SAFETEA-LU) call for comprehensive proactive public involvement procedures that respond not only to SAFETEA-LU but to other related acts such as the Clean Air Act and the Americans with Disabilities Act. It is also called for under the California Environmental Quality Act.

In order to build public acceptance and support, Kern COG is committed to a public participation process that is open, thorough and meaningful throughout every regional transportation planning activity. In keeping with this commitment, Kern COG adopted Public Involvement Procedures in May 2001 and an Environmental Justice Policy and Procedures document was adopted in February 2003.

Revised in October 2005, Kern Council of Governments has in place a set of Public Involvement Policies and Procedures that establish notification requirements for the products and activities of the agency. These policies and procedures are designed to ensure a clearer, more comprehensive approach to public outreach efforts. Kern COG’s Public Involvement Policies and Procedures are incorporated herein by reference.

In response to the passage of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), Kern COG will again update its Public Involvement Policies and Procedures as part of its amendment process in late 2007. They will reflect current and future public participation efforts that respond to federal guidelines and requirements, and they will be fully discussed and reviewed with the public per SAFETEA-LU guidelines.

Broad-based community participation is essential to the success of programs, plans and projects of the Kern Council of Governments. Community participation objectives include involvement of interested citizens, stakeholders, and representatives of community organizations in agency work through timely workshops on topical issues, fully noticed public hearings, and ongoing broad citizen/organization involvement in the planning and decision-making processes.

As part of Kern COG’s commitment to provide public outreach during the Regional Transportation Plan update process, numerous activities were undertaken over the past three years (since the adoption of the 2004 RTP). Of particular relevance are the community meetings held throughout the County to discuss the Regional Transportation Plan and its relation to the Kern Regional Blueprint project. More than 400 residents have participated so far, and equal participation is anticipated throughout the process over the next year. Meetings have been held in Ridgecrest, Tehachapi, Taft, Delano, Arvin, Frazier Park, Kern River Valley, Greenfield and Lamont. The meetings offer Spanish translation and handouts printed in both English and Spanish. During the meetings, participants discuss what they like about their community, what challenges it faces and what they would like to see occur over the long-term. Through structured
activities, participants are asked to rank the importance of, and potential solutions to, specific issues such as air quality, transportation, housing, agriculture, sustainable growth, and others. Additional meetings are being held in Shafter, Wasco, McFarland, and Mojave. Further, Kern COG is working with officials from Bakersfield, Kern County and Vision 2020 to coordinate the Regional Transportation Plan and Regional Blueprint project with the Metropolitan General Plan update.

Meeting summaries for the Regional Blueprint activities are included within this section.

In 2006, Kern COG developed the Kern County Transportation Expenditure Plan and Retail Transaction and Use Tax ordinance and served in a technical, advisory capacity to Kern Taxpayers for Safety and Traffic Relief, a campaign committee made up of business, development and agricultural interests advocating on the initiative’s behalf.

Measure I, as it was designated by the Kern County Elections Department, would have provided additional transportation funding and transportation improvements over and above those detailed in the Regional Transportation Plan’s Constrained Program of Projects. In November 2006, the measure failed to garner the necessary 66.7 percent voter support. Nevertheless, considerable effort was given to public outreach and education activities toward passage of what was called the “Safe Roads ordinance.”

In 2005-06, Kern COG staff conducted more than 50 workshops throughout the region to get public input on how the measure should be developed. In 2006, voters received two informational mailers that Kern COG produced to explain the measure’s benefits. Kern Cog received approximately 300 comments and surveys in response to the mailers, which were distributed to all voting households in the region, or about 160,000 in all. The vast majority of the comments came via a special website Kern COG established especially for the measure (www.saferoadskern.org). A summary of these comments is included in this section.

Kern COG has made, and will continue to make, every effort to involve Native American tribal groups and communities in the transportation planning process. Kern COG is working with the federal, state and regional governments, as well as the Native American tribal governments/groups to develop strategies that address the transportation issues of importance to Native Americans. This effort will promote direct involvement by the Native American community in transportation planning and project selection, as well as other issues that affect them. A Native American Tribal Consultation Committee has been established as part of the Regional Transportation Plan outreach as well as the ongoing Regional Blueprint project.
Kern County Transportation Expenditure Plan and Retail Transaction and Use Tax Ordinance

“Safe Road Survey Summary”
<table>
<thead>
<tr>
<th>1. How far do you travel one way to work or school each day?</th>
<th>2. What mode of travel do you use most often on a daily basis?</th>
<th>3. Does the Destination 2030/Safe Roads Measure “I” expenditure plan do a good job of addressing the transportation issues facing our region?</th>
<th>4. Please explain your answer:</th>
<th>5. What projects on the expenditure plan are most important to you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 travels 1 mile</td>
<td>1 takes Hwy 99</td>
<td>53 said yes</td>
<td>See Safe Roads Survey</td>
<td>Safe Roads Survey</td>
</tr>
<tr>
<td>1 travels 5 – 7 miles</td>
<td>1 takes Hwy 178</td>
<td>54 said no</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 7.4 miles</td>
<td>1 drives an SUV</td>
<td>7 chose not to answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 14.2 miles</td>
<td>1 drives a Windstar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 18 miles</td>
<td>2 do not drive at all</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 29 miles</td>
<td>2 drive a car or truck</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 32 miles</td>
<td>3 drive a motorcycle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 27 miles</td>
<td>3 take the GET bus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 43 miles</td>
<td>7 drive a truck</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 44 miles</td>
<td>88 drive a car</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 45 miles</td>
<td>5 chose not to answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 55 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 60 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 65 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 75 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 76 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 travels 100 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 8 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 9 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 21 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 22 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 25 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 50 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 travel 60 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 2 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 6 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 7 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 12 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 15 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 20 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 travel 30 miles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 travel 5 miles</td>
<td>4 travel 35 miles</td>
<td>5 travel 4 miles</td>
<td>6 travels 40 miles</td>
<td>7 travel 3 miles</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>-------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>6. What transit system improvements would you most like to see in your community?</td>
<td>7. How important would you say high-speed rail is to the Kern region?</td>
<td>8. Why?</td>
<td>9. What bicycle and pedestrian facilities would you like to see in your community?</td>
<td>10. What transportation projects need to be completed to help address future freight needs?</td>
</tr>
<tr>
<td>1 wants to save money</td>
<td>22 say it is somewhat important</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wants more courteous drivers</td>
<td>32 say it is not important</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wants bike lanes a car length wide on each hwy.</td>
<td>37 say it is very important</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wants commuter service to Santa Clarita</td>
<td>9 chose not to answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wants light rail service and truck-only lanes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 wants housing built on industrial work sites.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 want improvements in Greyhound bus services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 want improved GET bus and add light rail services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 want a light rail service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 want improvements in transportation mgmt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 want continued repair to surface streets &amp; hwys.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 said improvements were not needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 want improvements in</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Response</td>
<td>Sex</td>
<td>Age</td>
<td>Race</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>11. Please explain your answer:</td>
<td>2 want a parcel tax</td>
<td>female</td>
<td>32</td>
<td>1 African American</td>
</tr>
<tr>
<td>12. How do you think we should address this funding shortfall?</td>
<td>4 want a bond</td>
<td>male</td>
<td>78</td>
<td>2 Asian</td>
</tr>
<tr>
<td>13. Please explain your answer:</td>
<td>9 want toll roads</td>
<td>4 chose not to answer</td>
<td>21</td>
<td>3 American Indian</td>
</tr>
<tr>
<td></td>
<td>2 want truck toll fees</td>
<td>12</td>
<td>33</td>
<td>6 Hispanic</td>
</tr>
<tr>
<td></td>
<td>3 think all options are a waste of time</td>
<td>28</td>
<td>40</td>
<td>92 Caucasian</td>
</tr>
<tr>
<td></td>
<td>4 think rail is a waste of time</td>
<td>48</td>
<td>4</td>
<td>10 chose not to answer</td>
</tr>
<tr>
<td></td>
<td>6 want truck-only lanes and more rail</td>
<td>10</td>
<td>11 chose not to answer</td>
<td>11 chose not to answer</td>
</tr>
</tbody>
</table>
Regional Blueprint Project
Meeting Summaries
I. INTRODUCTION

On Wednesday, March 14, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Kerr McGee Center in Ridgecrest with community members from the Indian Wells Valley area of Kern County. The purpose of the meeting was: (a) to educate participants about the purpose of the Blueprint; (b) to facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) to facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will then determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint program, which will integrate the outcomes of the Blueprint programs from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit
organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of the meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

Town Hall Meeting Agenda and Format

The Indian Wells Valley meeting was held from 6:00 p.m. – 9:00 p.m. at Kerr McGee Center, 100 W. California Avenue in Ridgecrest. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A23-A25). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Over 80 community members representing residents, businesses, local government agencies and community-based organizations attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Nancy Kays from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Ridgecrest Mayor Marshall Hollaway and Ridgecrest City Councilmember and Kern COG delegate Steve Morgan then provided welcoming remarks. Kern COG Assistant Director Darrel Hildebrand then delivered brief introductory remarks describing the relationship of the Blueprint to local planning activities followed by a slideshow presentation that provided an overview of the purpose, need and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed in a latter phase of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

Ms. Kays then reviewed the format of the small group discussions before dispersing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a
range of topic areas related to regional growth and planning, identify participants’ priority areas and generate initial preferences for the development of principles and goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Andy Pendoley of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wall-graphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Following is a summary of participants’ comments:

Values

- A family-oriented, small-town community
- A rural lifestyle
- Good quality of life
- Access to a range of recreation facilities and opportunities, such as golf, community parks, public lands, hunting, fishing, off-road driving, and wilderness
- Educated community members
- A strong local education system
- Good air quality and visibility
- Little congestion from people and traffic
- Low crime rate
- Pro-active leadership and community members
- Affordable cost of living and housing
- Good climate
- Low-density development
- Accessible and safe roadways
• Centrally located to the broader region and state
• Shopping opportunities
• Public services
• Being a military town
• Businesses that support the community
• A place for retired people
• Self-sufficient energy through solar and local power sources

**Visions**

• Preserved family-oriented, prideful, and friendly nature of the community
• Continued and planned growth of our community that:
  o Emphasizes walkable, mixed-use, infill-focused development that avoids sprawl:
  o Includes adequate public infrastructure:
  o Includes public art and drought-resistant greenery;
  o Maintains low-density development and building heights;
  o Integrates with the military base;
  o Includes involvement of government and the community
• Preserved older and historic parts of town that represent the community character
• Maintained access to, preservation of, and use of open space, parks, Lake Isabella and the dessert areas
• Expanded recreation and entertainment opportunities, particularly for youth, including increased access to golf opportunities, swimming facilities, performing arts, and a connected park system
• Localized, state of the art dental and medical care services for all ages and needs
• Expanded and diversified economic development opportunities that:
  o Balance today’s military-focus with new and diverse industries;
  o Enables self-sufficiency
• Enhanced transportation network that includes:
  o Safe, improved and efficient roadways and highways;
  o Improved entrances to the community;
  o Accessible emergency routes;
  o Fewer stop signs and more signalized traffic lights;
  o New mass transit options to places such as Antelope Valley, Mammoth, and Bakersfield, Los Angeles, and the Bay Area
• Expanded continuum of community services and amenities for all community members, including shopping, restaurants, religious institutions, and cultural centers
• Enhanced education opportunities, including access to four-year universities and special education
• Increased community safety through control of gangs, illegal drugs and other crimes
• Improved levels of clean air—including dust and sandstorm impacts—that improve community health
• Cleaned of unkempt and blighted lots and properties
• Developed a new plan for efficient use of water
• Increased and frequent use of the space port with daily trips to the moon
• Protected air space
• Expanded local airport services
• Implemented new “green” infrastructure for power and reduced overhead powerlines
• Preserved access to water
• Expanded focus on tourism
• Addressed impacts of flooding on streets
• Increased appreciation of our growing diversity
• Created new ways of living in the summer heat
• Increased community involvement in creating solutions for growth management
• Protected wildlife and habitats
III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas and to generate initial preferences for the development of principles and goals for regional planning. Facilitators stressed that the purpose of the game is to evoke participant input and not prescribe what that input should be.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Economic development; growth management; water; services, safety and equity; and mobility; received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>2</td>
<td>21</td>
<td>38</td>
<td>37</td>
<td>16</td>
<td>26</td>
<td>23</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>5</td>
<td>8</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>0</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Group 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>8</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Group 5</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Group 6</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Group 7</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A22). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use to document their choices, rationale, and other comments about the issues (see pages A23-A24). A few participants played an “additional issue” card, which allowed for documentation of other key issue areas beyond the 9 offered in the game.

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
## ECONOMIC DEVELOPMENT

<table>
<thead>
<tr>
<th></th>
<th>♣ Clubs Major chnge.</th>
<th>♦ Diamonds Moderate ch.</th>
<th>♥ Hearts Some chnge</th>
<th>♠ Spades No change</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>10</td>
<td>30</td>
<td>21</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Group 5</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Group 6</td>
<td>0</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Group 7</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Many participants stressed the need to diversify the local economy with new industries to strike a better balance with and reduce dependence upon the current aerospace and military industries. Some participants suggested that this is the key local issue, and other issues would follow suit, though a few noted the need to balance economic development with other issues. Additionally, participants noted the need for more mid-level and skilled employment and education opportunities. A few participants suggested that the cards did not adequately reflect the local economic development context.

## GROWTH MANAGEMENT

<table>
<thead>
<tr>
<th></th>
<th>♣ Clubs Major chnge.</th>
<th>♦ Diamonds Moderate ch.</th>
<th>♥ Hearts Some chnge</th>
<th>♠ Spades No change</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>7</td>
<td>31</td>
<td>14</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Group 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 4</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Group 5</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Group 6</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Group 7</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>9</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Many participants suggested that growth should be managed, limited, comprehensive, high-quality and well-planned, with an emphasis on providing adequate infrastructure and uplifting blighted and abandoned areas with infill development. Additionally, growth initiatives should be sensitive to impacts on natural habitats and air quality, as well as encroachments on public and military lands and air corridors.
Many participants noted that adequate water quantity and quality are important to supporting future growth, thus should be addressed with early and comprehensive planning. Many also noted the local impacts of supplying Los Angeles with local water sources, which could be changed by encouraging coastal desalination projects. Some participants suggested considering new water quality standards, expanded use of gray water, shared costs programs, and xeriscape landscaping. Additionally, some participants noted that flood protection and water availability should be key elements addressed in new developments.

Participants indicated the need to support an array of services that keep pace with community growth and quality of life. Education initiatives should be expanded to include a wider array of service and trade skills, a local 4-year university, and upgraded facilities. Local healthcare services should be expanded to include more specialties to prevent the need to travel to other regions. Public safety suggestions include control of a growing gang presence, expanding prevention initiatives, and considering decriminalizing marijuana.
<table>
<thead>
<tr>
<th>MOBILITY</th>
<th>♣ Clubs</th>
<th>♠ Diamonds</th>
<th>♥ Hearts</th>
<th>♠ Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 5</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 6</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 7</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Most participants emphasized the need to improve local road conditions through improved maintenance, with a few participants suggesting additional or widened roads and a focus on improved access to local destination points. Other participants indicated the need for 4-lane highway access in and out of the region. Some participants suggested that public transportation options should be expanded either for new options, to reduce foreign oil consumption, or to reduce air pollution. A few participants noted that improvements would be costly.

<table>
<thead>
<tr>
<th>AIR QUALITY</th>
<th>♣ Clubs</th>
<th>♠ Diamonds</th>
<th>♥ Hearts</th>
<th>♠ Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>10</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Group 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 5</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 6</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Group 7</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants suggested that Eastern Kern currently enjoys good air quality, thus not requiring significant local changes. However, some participants noted that with local growth in the future, maintaining good air quality is an important consideration. A few participants noted that as technological advances continue to occur worldwide, local communities will be able to benefit thereafter.
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards and the “additional issue” card from the card game.

**Open space and habitats**
- Preserve natural resources
- Keep open spaces surrounding the city and avoid encroachment
- Use a limited amount of open space for growth
- Build a local golf course
- Make the dessert spaces more usable for the public
- Stop local public lands agencies from taking local funds

**Housing**
- Provide more affordable housing and a wider range of housing types
- Increase housing density in some areas to increase foot traffic
- Provide housing options for young adults
- Manage growth
- Provide more single-family housing
- Control developers from unimpeded development
- Allow individually-built houses on lots within the city limits

**Agriculture**
- Not a significant local issue

**Additional issues**
- Focus on education, which supports economic development
- Require desalination efforts in the Los Angeles area to keep local water supply
- Expand local highways to 4-lanes
- Utilize more community and volunteer law enforcement resources to address crime rates and graffiti
- Ease control of local growth by outside public lands agencies
- Address local healthcare needs and access
- Pursue alternative energy practices to reduce pollution and lower energy costs in the long term with solar panels, natural gas, and hydrogen.
- Protect local military presence and resources
- Address rising drug use with rehabilitation and law enforcement services
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

- Agenda
- Comment Form
- Wall-graphic
- Presentation Slides
- Card Game Topic Cards
- Card Game Suited Cards
- Card Game Comment Form
- Evaluation form
TOWN HALL MEETINGS  
March—April 2007

AGENDA

I. Welcome and Introductions

II. Presentation: What is the Kern Blueprint?

III. Small Group Discussions
   a. Visions and Values
   b. Card Game: Top Issues for the Future

IV. Large Group Discussion
   a. Reports from Small Group Discussions

V. Next Steps

Close
KERN REGIONAL BLUEPRINT PROGRAM
TOWN HALL MEETINGS
March—April 2007

COMMENT FORM

Thank you for participating in this process! Your comments are important to us, so please use this form to provide written comments about the discussion topics and any other issues. Please submit your completed form at the end of the meeting to the registration table. Otherwise, you may mail this form within one week of this meeting to: Becky Napier, Kern Council of Governments, 1401 19th Street, Suite 300, Bakersfield, California 93301.

Meeting Date: ________________  Meeting Location: ________________

1. Please provide any comments related to the slideshow presentation.

2. What do you like most about your community?

3. What are the major areas or issues for improvement your community?

PLEASE TURN OVER...
4. When you envision your community in the year 2050, what are some of its MOST POSITIVE aspects?

5. When you envision your community in the year 2050, what are some of its BIGGEST CHALLENGES?

6. Please share any additional comments about the project.
KERN COUNCIL OF GOVERNMENTS
KERN REGIONAL
Blueprint
Program
INDIAN WELLS VALLEY
TOWN HALL MEETING
MARCH 14, 2007

PREPARED BY MIG, INC.

KERN REGIONAL BLUEPRINT PROGRAM
Kern Regional Blueprint Project

Town Hall Meeting
Ridgecrest
March 14, 2007

Presentation Overview

• Kern COG Background
• What is the “Blueprint?”
• Why is the Blueprint Important?
• Small Group Discussions

Kern COG Background

• Association of Kern’s 11 cities including Ridgecrest and the County
• Coordinate regional and multi-jurisdictional planning issues:
  – Transportation and mobility
  – Air quality
  – Housing
  – Demographics
  – Jobs

What is the “Blueprint?”

• Our shared vision of Kern’s future and quality-of-life:
  – Values
  – Visions
• Develop “scenarios”:
  – Concepts of how our communities may change in the future
  – Share data and ideas
  – How could we make our visions and values a reality?
Thinking Globally

Global Pressures Will Drive Growth
2005-2030
32-50 million
Planning Regionally

What is the “Blueprint”?

- A long-range visioning process
- Complements local plans
- Voluntary
- Educational
- A balance of multiple of issues

Acting Locally

Base Case Scenario
Indian Wells Valley – New Urban Areas
2005-2050
Kern Blueprint Partners

You!
Kern Regional Blueprint
San Joaquin Valley Air District
FF Cities and the County
Local Elected and Interest
Kern COG

Why Is the Blueprint Important?
Kern Requires 125,000 More Homes by 2030

Why Is the Blueprint Important?
Shrinking Space for Growth...
- Over 90% of Kern’s land is affected by one of these uses:
  - Air space
  - Agriculture
  - Flood plains
  - Oil
  - Public lands
  - Steep slopes
  - Urban areas

Kern’s Population Will DOUBLE in 40 Years

Today: 800,000
2050: 1.6 Million

Year
Population
0
600,000
1,200,000
1,800,000
1980 2000 2010 2020 2030 2040 2050
Small Group Discussions

- Share your visions and values!
  - Discuss
  - Comment forms
- Part 1:
  - Open discussion: visions and values
- Part 2:
  - Priority issues
  - Goals for the future

Thank You for Participating!
<table>
<thead>
<tr>
<th>AGRICULTURE</th>
<th>AIR QUALITY</th>
<th>ECONOMIC DEVELOPMENT</th>
<th>GROWTH MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current trends:</td>
<td>Current trends:</td>
<td>Current trends:</td>
<td>Current trends:</td>
</tr>
<tr>
<td>- As the value of land increases, agricultural businesses may be inclined to sell property for different purposes. Agricultural operations and urban uses are sharing space more frequently.</td>
<td>- Air quality will continue to improve over time, but some pollutants will still not meet federal and state standards until the year 2023. Increasing vehicular traffic affects air quality. Poor air quality will continue to affect public health including higher than normal rates of asthma, respiratory diseases, heart disease, and cancer.</td>
<td>- On average, estimated personal income is increasing, but the number of people living at or below the poverty line is growing. Education levels in Kern County are below national levels. Employment opportunities are becoming more unbalanced. Minimum wage jobs and higher income jobs are increasing, but medium wage jobs are decreasing. While certain areas have new opportunities for employment, the regional economy lacks diversity and relies on a limited number of industries.</td>
<td>- Kern County's population is expected to double in 40 years. Today there are 98,000 people in Kern. In 2050 there may be 1.6 million people. The need for housing is taking up land previously used for agriculture, habitats, and open space. It is more costly to extend services sewer, roads, schools, and transit outside of town centers. Homes may not be located close to where people work. Growth is proposed on the outer edges of towns and cities. Urban growth has the potential to affect air space operations in some parts of the county.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOUSING</th>
<th>MOBILITY</th>
<th>OPEN SPACE AND HABITATS</th>
<th>SERVICES, SAFETY AND EQUITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current trends:</td>
<td>Current trends:</td>
<td>Current trends:</td>
<td>Current trends:</td>
</tr>
<tr>
<td>- By 2030, Kern needs 160,000 new housing units. Housing is becoming less affordable, and first time home buyers may need more housing options. Kern’s population is aging and may need more housing types. The number of Kern homes with children is decreasing. 87% of today’s new housing is single-family detached homes.</td>
<td>- By the year 2030, Kern will have 1,000,000 additional cars, and the number of vehicle miles traveled will increase by 74%. This projected growth in the transportation network will not meet travel demand increases. Congestion levels on roadways and commutes and daily trip times will continue to increase. The cost of road maintenance will continue to increase because improvements are delayed by lack of funding sources.</td>
<td>- Some open space, public lands and habitats may continue to be converted to other uses. Urban growth has the potential to cause problems in using aviation air space in some areas of the county. Continued loss of natural resources may cause more air and water pollution.</td>
<td>- Kern’s population is becoming more culturally and socially diverse. Social equity continues to be an important issue in the Kern region. Kern’s population is aging. Kern features a variety of recreational and cultural opportunities. Educational attainment levels remain below state averages. Vocational education opportunities are limited. Gang related crime is on the rise. Health care access and service levels are becoming more restricted in some areas.</td>
</tr>
</tbody>
</table>

<p>| WATER |
| Current trends: | - As population increases, water may become scarce. County Ordinance requires new development to be protected from flooding. Development is required to demonstrate it has adequate water supply. Current law prohibits runoff from construction of buildings, parking lots and sidewalks that could affect water quality. Open space is needed to continue to replenish groundwater basins. |</p>
<table>
<thead>
<tr>
<th>♣ Clubs – Major Change</th>
<th>♦ Diamonds – Moderate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGRICULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>Protect prime agricultural lands from development through new state or local laws.</td>
<td>Allow limited development of agricultural land through voluntary incentives and new restrictions.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
</tr>
<tr>
<td>Value of ag land may change.</td>
<td>Creates some restrictions on converting ag land to other uses.</td>
</tr>
<tr>
<td>Restrictions property rights of owners of ag land from converting to other uses.</td>
<td>Potentially reduces private property rights.</td>
</tr>
<tr>
<td>Highest costs to government through more staff and administration.</td>
<td>Value of other land may increase.</td>
</tr>
<tr>
<td>No longer able to adapt to changing market forces.</td>
<td>Higher cost to government through more staff and administration.</td>
</tr>
<tr>
<td>May increase the cost of housing.</td>
<td>Higher housing costs for individuals.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts – Some Change</th>
<th>♠ Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGRICULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>Create voluntary incentives to protect agricultural lands.</td>
<td>Continue to allow market forces and current public policy guide use of agricultural lands.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
</tr>
<tr>
<td>Ag land may be developed at a slower rate.</td>
<td>Ag land may continue to be converted to non-ag uses.</td>
</tr>
<tr>
<td>High cost is to government for incentives.</td>
<td>Existing tax incentives allow ag land to be developed in the future.</td>
</tr>
<tr>
<td></td>
<td>Developing cheaper ag land supports affordable housing.</td>
</tr>
<tr>
<td>♣ Clubs –</td>
<td>Major Change</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>AIR QUALITY</strong></td>
<td><strong>AIR QUALITY</strong></td>
</tr>
<tr>
<td>Do everything possible to achieve healthy air quality as soon as possible with strict new policies and a program of public/private incentives.</td>
<td>Create new mandatory policies and voluntary incentives that affect individuals, businesses, and government to achieve healthy air quality.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
</tr>
<tr>
<td>All business and personal travel will be restricted at certain times.</td>
<td>Impacts individuals and businesses by restricting some activities at certain times.</td>
</tr>
<tr>
<td>Some businesses may leave the region due to operating restrictions and higher costs.</td>
<td>Potential consequences for business.</td>
</tr>
<tr>
<td>Good air quality may be achieved at a faster rate.</td>
<td>Higher costs to businesses, individuals and government.</td>
</tr>
<tr>
<td>Policies may encourage less driving and a switch to more transit, walking and biking.</td>
<td>Policies may encourage less driving and a switch to more transit, walking and biking.</td>
</tr>
<tr>
<td>Highest costs to government through more staff and administration.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts –</th>
<th>Small Change</th>
<th>♠ Spades –</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIR QUALITY</strong></td>
<td><strong>AIR QUALITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create new voluntary incentives to encourage clean air actions by individuals, businesses, and government.</td>
<td>Follow the region’s current air quality plans.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through incentives encourage agriculture to comply with clean air standards earlier than required.</td>
<td>Reaching health-based air quality standards will be required by 2023, but current plans may not be adequate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through incentives encourage diesel trucks to comply with clean air standards earlier than required.</td>
<td>Business, individuals, and government are bearing the cost.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government bears the cost of incentives.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>♣ Clubs – Major Change</td>
<td>♦ Diamonds – Moderate Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggressively change Kern's economy with new industries, education programs, and job opportunities with new public and private investments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May replace or weaken agriculture, aerospace, and transportation or warehousing services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create new education programs that support new industries.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest costs to government and possibly individuals through more staff and administration.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhance Kern's economy with new industries, education programs, and job opportunities with new public and private initiatives.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible weakening of agriculture, oil, aerospace, and transportation or warehousing services.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider new education programs that support new industries.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High costs to government through more staff and administration.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts – Some Change</th>
<th>♠ Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
</tr>
<tr>
<td>Allow market forces to control Kern's economy, but take steps to encourage new industries, education programs, and job opportunities.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Most growth remains with agriculture, oil, aerospace, and transportation and warehousing services.</td>
<td></td>
</tr>
<tr>
<td>Some costs to government through incentive programs.</td>
<td></td>
</tr>
<tr>
<td>Continue to allow market forces to control Kern's economy and influence education programs and job growth.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>The difference in income levels between low-income and high-income families will increase.</td>
<td></td>
</tr>
<tr>
<td>Job growth will continue at the lower and higher ends, increasing disparity.</td>
<td></td>
</tr>
<tr>
<td>Economy remains centered around current industries.</td>
<td></td>
</tr>
<tr>
<td>Clubs – Major Change</td>
<td>Diamonds – Moderate Change</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>GROWTH MANAGEMENT</strong></td>
<td><strong>GROWTH MANAGEMENT</strong></td>
</tr>
<tr>
<td>Focus all growth in current town centers and along major streets or transit routes.</td>
<td>Focus most growth in current town centers and along major streets or transit routes.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
</tr>
<tr>
<td>Small towns may become more city-like.</td>
<td>Inward growth may increase more compact development and traffic congestion in cities, requiring new public transit options.</td>
</tr>
<tr>
<td>Traffic congestion may increase in city centers forcing more transportation by walking, biking and public transit.</td>
<td>Air quality may improve.</td>
</tr>
<tr>
<td>Less impact on land currently used for open space, habitat, agriculture and recreation.</td>
<td>New housing options may be available.</td>
</tr>
<tr>
<td>Air quality may improve.</td>
<td></td>
</tr>
<tr>
<td>New housing options may be available.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hearts – Small Change</th>
<th>Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GROWTH MANAGEMENT</strong></td>
<td><strong>GROWTH MANAGEMENT</strong></td>
</tr>
<tr>
<td>Encourage growth in town centers and along major streets and transit routes, but allow current growth patterns to continue.</td>
<td>Continue current growth trends.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td>Discussion Points:</td>
</tr>
<tr>
<td>Growth in urban areas may increase traffic congestion somewhat in town centers.</td>
<td>Greatest potential loss of land for open space, habitat, air space and recreation.</td>
</tr>
<tr>
<td>Air quality may continue to be at unhealthy levels due to increased traffic.</td>
<td>Traffic congestion may increase.</td>
</tr>
<tr>
<td>Growth may convert land currently used for open space, habitat, air space and recreation, but likely at a slower pace.</td>
<td>Air quality may continue at unhealthy levels.</td>
</tr>
<tr>
<td></td>
<td>Flood risk may increase if development is placed in a flood plain.</td>
</tr>
<tr>
<td>♣ Clubs – Major Change</td>
<td>♦ Diamonds – Moderate Change</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td><strong>HOUSING</strong></td>
<td><strong>HOUSING</strong></td>
</tr>
<tr>
<td>Develop a mix of mostly compact housing and affordability – including apartments, condos and single-family homes – but only near employment centers, shopping, services and transit.</td>
<td>Develop a mix of housing and affordability with voluntary incentives and mandatory policies to expand housing near employment centers, shopping, services and transit.</td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td><strong>Discussion Points:</strong></td>
</tr>
<tr>
<td>Traffic congestion will increase in these centers.</td>
<td>May increase traffic congestion in these centers.</td>
</tr>
<tr>
<td>Highest cost to developers and government agencies through public subsidies and more staff and administration.</td>
<td>Higher cost to developers and government agencies through public subsidies and more staff and administration.</td>
</tr>
<tr>
<td>Higher population densities in some areas.</td>
<td>Higher population densities in some areas.</td>
</tr>
<tr>
<td>Housing accessible to transit may be more affordable.</td>
<td>Some housing that is accessible to transit may be more affordable.</td>
</tr>
<tr>
<td>Increases travel options such as transit, biking and walking.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts – Some Change</th>
<th>♠ Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOUSING</strong></td>
<td><strong>HOUSING</strong></td>
</tr>
<tr>
<td>Encourage a mix of housing with new voluntary incentives to expand housing near employment centers, shopping, services and transit.</td>
<td>Continue to allow the market and current public policy to determine housing options and affordability.</td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td><strong>Discussion Points:</strong></td>
</tr>
<tr>
<td>Some cost increases to government for incentives.</td>
<td>Home ownership may become more difficult and less affordable.</td>
</tr>
<tr>
<td>More families may be able to afford a home.</td>
<td>Single-family detached housing may remain the trend.</td>
</tr>
<tr>
<td>Traffic congestion in outlying areas may get worse.</td>
<td>Traffic congestion and air quality may get worse.</td>
</tr>
<tr>
<td>Some farmland and open space may be lost to housing.</td>
<td></td>
</tr>
<tr>
<td>♣ Clubs – Major Change</td>
<td>♦ Diamonds – Moderate Change</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>MOBILITY</strong></td>
<td></td>
</tr>
<tr>
<td>Take an aggressive approach to improving all parts of the transportation system – public transit, roads, highways, bike lanes and sidewalks.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Highest cost to government and possibly to individuals through new taxes, user fees, or development fees.</td>
<td></td>
</tr>
<tr>
<td>May require changes in growth and development patterns to make transit more effective.</td>
<td></td>
</tr>
<tr>
<td>Requires an additional sales tax for transportation approved by the voters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase alternatives to driving by developing more types of public transit (such as buses, trains, and shuttles), adding routes, and extending hours, with some roadway expansion.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>High cost to government to fund expanded new public transportation programs, possibly with an additional sales tax for transportation approved by the voters.</td>
<td></td>
</tr>
<tr>
<td>Fewer new roads may be built, and road maintenance may slow down.</td>
<td></td>
</tr>
<tr>
<td>People may drive their cars less.</td>
<td></td>
</tr>
<tr>
<td>Transit trips may still take more time than driving, but will probably be shorter.</td>
<td></td>
</tr>
<tr>
<td>Will require changes in growth and development patterns to make transit more effective.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts – Some Change</th>
<th>♠ Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MOBILITY</strong></td>
<td></td>
</tr>
<tr>
<td>Improve traffic congestion by increasing public investments on roads and highways, with some expansion of public transportation.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>High cost to government to fund road and highway investments through new sources of funding.</td>
<td></td>
</tr>
<tr>
<td>Growth in traffic congestion will be slowed in the short term, but may not be improved in the long term.</td>
<td></td>
</tr>
<tr>
<td>Limits expansion of alternatives to driving.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continue current policies to improve and maintain the transportation system with an emphasis on roads.</td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Population growth will lead to worsening traffic congestion.</td>
<td></td>
</tr>
<tr>
<td>Air quality may not improve.</td>
<td></td>
</tr>
<tr>
<td>Limits expansion of alternatives to driving.</td>
<td></td>
</tr>
<tr>
<td>♣ Clubs – Major Change</td>
<td>♦ Diamonds – Moderate Change</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>OPEN SPACE AND HABITATS</strong></td>
<td></td>
</tr>
<tr>
<td>Prohibit development of open space, public land and habitat.</td>
<td></td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td></td>
</tr>
<tr>
<td>Greatly decreases land available for development.</td>
<td></td>
</tr>
<tr>
<td>Increases real estate prices.</td>
<td></td>
</tr>
<tr>
<td>Limits expansion of city boundaries.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>♥ Hearts – Small Change</th>
<th>♠ Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPEN SPACE AND HABITATS</strong></td>
<td></td>
</tr>
<tr>
<td>Allow some development of open space, public lands and habitat for housing and other uses.</td>
<td></td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td></td>
</tr>
<tr>
<td>Some loss of wildlife habitat and recreational areas.</td>
<td></td>
</tr>
<tr>
<td>Some loss of natural beauty.</td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>OPEN SPACE AND HABITATS</strong> |
| Allow limited development of open space, public land, and habitat. |
| <strong>Discussion Points:</strong> |
| May decrease land available for development. |
| May result in increased real estate prices. |
| May limit outward expansion of cities. |
| Allow development of open space, public lands and habitat for housing and other uses as needed to accommodate growth. |
| <strong>Discussion Points:</strong> |
| Loss of natural beauty. |
| Greatest loss of wildlife habitat and recreational areas. |</p>
<table>
<thead>
<tr>
<th>Clubs –</th>
<th>Major Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERVICES, SAFETY AND EQUITY</strong></td>
<td></td>
</tr>
<tr>
<td>Aggressively pursue increased public and private investment in education, public safety, health and cultural opportunities.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Greatest diversion of funds from other public priorities.</td>
<td></td>
</tr>
<tr>
<td>Highest educational attainment will provide best access to better paying jobs.</td>
<td></td>
</tr>
<tr>
<td>Access to timely quality health care may improve dramatically in some areas.</td>
<td></td>
</tr>
<tr>
<td>Crime and gang activity may decrease.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diamonds –</th>
<th>Moderate Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERVICES, SAFETY AND EQUITY</strong></td>
<td></td>
</tr>
<tr>
<td>Create new public and private initiatives and investments to enhance education, public safety, health and cultural opportunities.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Greater diversion of funds from other public priorities.</td>
<td></td>
</tr>
<tr>
<td>Higher educational attainment may provide greater access to better paying jobs.</td>
<td></td>
</tr>
<tr>
<td>Access to timely quality health care may significantly improve in some areas.</td>
<td></td>
</tr>
<tr>
<td>Crime and gang activity may continue to decrease.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hearts –</th>
<th>Some Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERVICES, SAFETY AND EQUITY</strong></td>
<td></td>
</tr>
<tr>
<td>Direct some additional public resources into addressing education, public safety, health and cultural opportunities.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Some diversion of funds from other public priorities.</td>
<td></td>
</tr>
<tr>
<td>More educational opportunities may provide better access to jobs.</td>
<td></td>
</tr>
<tr>
<td>Access to timely and quality health care may slightly improve in some areas.</td>
<td></td>
</tr>
<tr>
<td>Crime and gang activity may be controlled.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spades –</th>
<th>No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SERVICES, SAFETY AND EQUITY</strong></td>
<td></td>
</tr>
<tr>
<td>Continue to address education, public safety, health and cultural opportunities in accordance with current public policy and resources.</td>
<td></td>
</tr>
<tr>
<td>Discussion Points:</td>
<td></td>
</tr>
<tr>
<td>Limited vocational education opportunities.</td>
<td></td>
</tr>
<tr>
<td>Possible decrease in access to timely quality health care in some areas.</td>
<td></td>
</tr>
<tr>
<td>Crime and gang activity may continue to increase.</td>
<td></td>
</tr>
<tr>
<td>Clubs – Major Change</td>
<td>Diamonds – Moderate Change</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>WATER</strong></td>
<td></td>
</tr>
<tr>
<td>Aggressively pursue all actions necessary to provide flood control, clean drinking water, and an adequate water supply for all types of needs.</td>
<td></td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td></td>
</tr>
<tr>
<td>Development would be strictly limited in the floodplain – may require building of levees, etc. by developers.</td>
<td></td>
</tr>
<tr>
<td>Require new development to set aside open space for the purpose of replenishing groundwater basins.</td>
<td></td>
</tr>
<tr>
<td>Development may be reduced due to depletion of water.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hearts – Small Change</th>
<th>Spades – No Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WATER</strong></td>
<td></td>
</tr>
<tr>
<td>Improve flood protection, water supply, and water quality mainly through voluntary actions and incentive programs.</td>
<td></td>
</tr>
<tr>
<td><strong>Discussion Points:</strong></td>
<td></td>
</tr>
<tr>
<td>Government would bear the cost of incentives and grants for building of flood protection.</td>
<td></td>
</tr>
<tr>
<td>Industry and individuals may be asked to improve water conservation.</td>
<td></td>
</tr>
<tr>
<td>High density development will continue to be limited in floodplains.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WATER</th>
<th>Continue current policies and programs regarding flood protection, water supply and water quality.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discussion Points:</strong></td>
<td></td>
</tr>
<tr>
<td>Water quantity could become limited over time.</td>
<td></td>
</tr>
<tr>
<td>The cost of protecting developments from flooding will remain with developers and residents (through flood insurance).</td>
<td></td>
</tr>
<tr>
<td>High density development will be limited in floodplains.</td>
<td></td>
</tr>
</tbody>
</table>
ADDITIONAL ISSUE

Circle one:

♣ Clubs – Major Change
♥ Hearts – Some Change
♦ Diamonds – Moderate Change

Issue:
Approach:
Discussion Points:
# CARD GAME COMMENT FORM

Please use this comment form during your small group discussion to provide written comments about your choices during the card game.

Meeting Date: ________________ Meeting Location: ________________

<table>
<thead>
<tr>
<th>Theme</th>
<th>Why did you choose this suit? What are your specific concerns?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGRICULTURE</strong></td>
<td></td>
</tr>
<tr>
<td>Circle your chosen suit:</td>
<td>♣ ♦ ♥ ♠</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AIR QUALITY</strong></td>
<td></td>
</tr>
<tr>
<td>Circle your chosen suit:</td>
<td>♣ ♦ ♥ ♠</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ECONOMIC DEVELOPMENT</strong></td>
<td>Why did you choose this suit? What are your specific concerns?</td>
</tr>
<tr>
<td>Circle your chosen suit:</td>
<td>♣ ♦ ♥ ♠</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENVIRONMENT</strong></td>
<td></td>
</tr>
<tr>
<td>Circle your chosen suit:</td>
<td>♣ ♦ ♥ ♠</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Housing
Circle your chosen suit: ♠ ♥ ♡ ♣

Why did you choose this suit? What are your specific concerns?

Mobility
Circle your chosen suit: ♠ ♥ ♡ ♣

Why did you choose this suit? What are your specific concerns?

Services, Safety & Equity
Circle your chosen suit: ♠ ♥ ♡ ♣

Why did you choose this suit? What are your specific concerns?

Urban Growth
Circle your chosen suit: ♠ ♥ ♡ ♣

Why did you choose this suit? What are your specific concerns?

Water
Circle your chosen suit: ♠ ♥ ♡ ♣

Why did you choose this suit? What are your specific concerns?

What other issue areas are important to your community's future?
KERN REGIONAL BLUEPRINT PROGRAM
TOWN HALL MEETINGS
March—April 2007

MEETING EVALUATION FORM

Thank you for participating in this meeting! Your comments are important to us, so please use this form to evaluate the meeting.

Date: __________________ Meeting location: _______________________

1. What did you like about the meeting?

2. What did you not like about the meeting?

3. Please rate the following aspects of the meeting:

<table>
<thead>
<tr>
<th>A. Slideshow presentation and information</th>
<th>Excellent</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Small group open discussion: visions and values</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>C. Card game and discussion</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>D. Large group discussion and small group reports</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>E. Overall meeting design</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>F. The meeting addressed issues important to me.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>G. I was able to provide input and it was recorded.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>H. I would participate in a future meeting.</td>
<td>□ Yes □ No</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please write any additional comments on these above items on the back of this page.

4. Please help us to determine the success of our community outreach efforts by telling us a bit about yourself:

Gender
□ Female □ Male

Age group:
□ Under 18 □ 18-29 □ 30-39 □ 40-49 □ 50-59
□ 60-69 □ 70-79 □ 80-89 □ 90-99

Ethnicity:
□ White or Caucasian □ Hispanic or Latino □ Black or African American □ Two or more races □ Other:
□ Asian □ American Indian □ Pacific Islander

5. I attended this meeting and provided input primarily as a(n):
□ Resident □ Member of the business community
□ Government employee □ Other: ____________

6. I heard about this meeting through:
□ Newspaper article in: ____________
□ Email from an organization: ____________
□ Flyer received in the mail □ Newsletter article in: ____________
□ Other: ____________

Please submit your completed form at the end of the meeting to the registration table, or mail within one week of this meeting to: Becky Napier, Kern COG, 1401 10th Street, Suite 300, Bakersfield, CA 93301.
I. INTRODUCTION

On Tuesday, March 20, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at Tehachapi High School in Tehachapi with community members from the Stallion Springs area of Kern County. The purpose of the meeting was: (a) to educate participants about the purpose of the Blueprint; (b) to facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) to facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint Program, which will integrate the outcomes of the Blueprint programs from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit
organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

**Town Hall Meeting Agenda and Format**

The Tehachapi meeting was held from 6:00 p.m. – 9:00 p.m. at the Tehachapi High School Cafeteria, 801 South Dennison Street in Tehachapi. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A23-A25). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Approximately 40 community members representing residents, businesses, local government agencies, and community-based organizations attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Nancy Kays from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Ms Kays recognized local officials in attendance: Mayor Pro-Tem Deborah Hand, City of Tehachapi; Stan Beckham, Councilmember, City of Tehachapi; Jason Cautle, City Manager, City of Tehachapi; David James, Director of Planning and Community Development, City of Tehachapi; Loreli Oviatt, Chief, Division of Planning, County of Kern; and introduced Kern COG Assistant Director Darrel Hildebrand. Mr. Hildebrand then delivered brief introductory remarks describing the relationship of the Blueprint to local planning activities followed by a slideshow presentation that provided an overview of the purpose of, need for, and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

Ms. Kays then reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table...
guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what participants like about their community has been organized under the list of values, while dislikes have been extrapolated and listed as visions. Following is a summary of participants’ comments:

Values

- Small-town community
- A rural lifestyle
- Free of blighted areas
- Prime location; centrally located to the broader region yet separate from the rest of the county
- Family-oriented environment
- High quality of life
  - A safe community: low crime rate, no gangs
  - Education
- Diverse housing opportunities; affordable cost of living
- Large residential lots
• Recreational opportunities: horses, arts, music, culture, mountain park
• Limited urban blight
• Lack of commercial build out
• A safe downtown
• Unique environment
• Scenery and scenic view sheds
• Climate: visible seasons
• Open space and agriculture land
• Diverse ecosystems – desert, hills, valley
• Preservation of natural resources
  o Clean air and water
  o Wind

**Visions**
• Preserved family-oriented, prideful, and friendly nature of the community
• Continued and planned growth of our community that:
  o Emphasized walkable, infill-focused development that avoids sprawl
• Improved City/County coordination of growth and development
• Maintained access to, preservation of, and use of open space, parks, and bike trails
• Improved water management
  o Wastewater
  o Free of contaminated groundwater
• Preserved water access for community members
• Expanded recreation and entertainment facilities and opportunities that include access to swimming facilities, performing arts theater, a community/cultural center
• Localized, state of the art medical care services for all ages and needs
• Expanded diversity of job opportunities
• Expanded and diversified economic development opportunities that:
  o Enable self-sufficiency of local businesses;
  o Provide a variety of commercial options for residents; and
  o Maintain small town feeling
• Adequate provision of local services and amenities for all community members, including shopping and restaurants
• Enhanced transportation network that includes:
  o Safe, improved and efficient roadways and highways;
  o Improved access to schools and local services;
  o High speed rail;
  o New mass transit options
• Improved image of Kern County
• Improved visual appearance of City from freeway
  o Landscaping
  o Screened commercial uses
• Enhanced education opportunities, including access to four-year universities, adult and special education as well as technical schools
• Increased community safety through the control of illegal drugs
• Expanded alternative energy opportunities
  - Solar panels
• Coordinated natural resource regulations of state and federal system
• Maintained fresh, local and organic produce
• Maintain Tehachapi as a destination for tourists
• Preserved land for animals that allows for migration
• Preserved families of bobcats and wildcats
  - Free of displacement

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Air quality; open space and habitats; services, safety and equity; growth management; and water received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>12</td>
<td>9</td>
<td>13</td>
<td>7</td>
<td>3</td>
<td>17</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Group 1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Prepared by MIG, Inc.
Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A22). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use to document their choices, rationale, and other comments about the issues (see pages A23-A24). A few participants played an “additional issue” card, which allowed for documentation of other key issue areas beyond the 9 offered in the game.

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
## OPEN SPACE AND HABITATS

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>13</td>
<td>14</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Group 1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed that open space and habitats were essential to Tehachapi. Individuals shared that the natural environment was what attracted them to Tehachapi and shared that it was important that urban growth not jeopardize the presence of open space, view sheds, and habitats, such as bobcats. Participants suggested that the City and County coordinate the maintenance and protection of open spaces. Furthermore, individuals agreed that development be strategically located, so as to maintain as much open space as possible.

## WATER

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>15</td>
<td>18</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Many participants acknowledged the importance of maintaining an adequate water supply and noted that water quantity and quality are essential to supporting future growth. Participants recognized water as a limited resource and generally agreed that moderate to major change be initiated through early and comprehensive planning of future development.
<table>
<thead>
<tr>
<th>GROWTH MANAGEMENT</th>
<th>♣ Clubs</th>
<th>♦ Diamonds</th>
<th>♥ Hearts</th>
<th>♠ Spades</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>14</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>Participants agreed that urban growth should be aggressively managed, limited, and well-planned. The emphasis should be on avoiding sprawl and maintaining a small town feeling through community design and higher densities in central areas. Businesses should be consolidated in shopping districts that improve road access and create walkable environments. Additionally, growth initiatives should be sensitive to impacts on natural habitats and air quality and should encourage improved City and County integration of planning efforts.</td>
</tr>
<tr>
<td>Group 1</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIR QUALITY</th>
<th>♣ Clubs</th>
<th>♦ Diamonds</th>
<th>♥ Hearts</th>
<th>♠ Spades</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>10</td>
<td>14</td>
<td>10</td>
<td>Participants recognized the growing need to regulate air quality rules and suggested that State and Federal guidelines be coordinated in order to enforce what is currently in place. The general consensus was that regulations and costs be implemented consistently among government agencies, businesses and individuals. Participants suggested that the presence and use of public transportation and alternative fuels be expanded to support growth while maintaining air quality. While some individuals suggested that stricter laws be applied to diesel engines, others suggested that incentives be created to encourage sustainable practices.</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>SERVICES, SAFETY &amp; EQUITY</td>
<td>Clubs</td>
<td>Diamonds</td>
<td>Hearts</td>
<td>Spades</td>
<td>Summary of Comments</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------</td>
<td>----------</td>
<td>--------</td>
<td>--------</td>
<td>---------------------</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>Participants indicated the need to support an array of services that support community growth and quality of life. Education initiatives should be expanded to include a wider array of service and trade skills as well as a local 4-year university. Local healthcare services should be expanded to include a local hospital with specialties to prevent the need to travel to other regions. Additional resources should include a performing arts/cultural center.</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ECONOMIC DEVELOPMENT</th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>Participants indicated that Tehachapi has major potential to improve its local economy by using existing aerospace and agriculture industries. While participants shared that they did not want to alter the integrity of Tehachapi, they did agree that there was a striking need for more mid-level and skilled employment opportunities as well as educational opportunities to support them. A few participants suggested that the City focus on expanding its technological industry.</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>AGRICULTURE</td>
<td>Clubs</td>
<td>Diamonds</td>
<td>Hearts</td>
<td>Spades</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>-------</td>
<td>----------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants of this group agreed that the preservation of agriculture land was important for the future of Tehachapi. Some participants disapproved of any zoning changes of agriculture land and agreed that it was important to protect the ranges of Tehachapi as prime soil for agriculture.
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards and the “additional issue” card from the card game.

Housing
• Provide a wider range of adequate housing types: multi-family housing
• Manage growth so that it does not drive up real estate costs

Mobility
• Not a significant local issue

Additional issues
• Annex the entire Tehachapi Valley so as to maintain control over entire community
• Focus on education, which supports economic development
• Encourage development of education for adults:
  o Create range of degrees including AA, BA, and MA
  o Technical Education
  o Vocational Education
I. INTRODUCTION

On Wednesday, March 28, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Veterans of Foreign Wars Memorial Building in Delano with community members from the Delano, McFarland and Wasco areas of Kern County. The purpose of the meeting was to: (a) educate participants about the purpose of the Blueprint; (b) facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series occurring throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint Program, which will integrate the outcomes of the Blueprint Program from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall Meetings, which will carry and expand into future phases of the process. With
outreach and coordination support from Odyssey, a California-based nonprofit organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

**Town Hall Meeting Agenda and Format**

The North Central meeting was held from 6:00 p.m. – 9:00 p.m. at the VFW Memorial Building, 1025 Garces Hwy in Delano. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A32-A34). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Kern COG provided Spanish language versions of these handouts, and bilingual Kern COG staff availed themselves for those participants requiring simultaneous translation during the presentation and large group discussion portions of the meeting. Approximately 40 community members representing residents, businesses, and local government agencies attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Esmeralda García from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Ms García recognized local officials in attendance, some of whom personally addressed the participants and thanked them for their participation. Local officials included: Pedro Ríos, Mayor Pro Tem, City of Delano; Abdel Salem, City Manager, City of Delano; Sam Ramirez Councilmember, City of Delano and Kern COG Representative for Delano; Michael McCabe, Senior Planner, City of Delano.

Ms. García then introduced Kern COG Assistant Director Darrel Hildebrand. Mr. Hildebrand delivered brief introductory remarks describing the relationship of the Blueprint to local planning activities followed by a slideshow presentation that provided an overview of the purpose of, need for, and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and

Prepared by MIG, Inc.
purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

Following the presentation, Ms. García reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report. Bilingual Kern COG staff availed themselves as facilitators and recorders for Spanish-language-only small groups. The card game materials featured English and Spanish language on opposing sides of each card.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what individuals like about their community has been organized under the list of values while dislikes have been extrapolated and included under visions. The following is a summary of participants’ comments:

**Values**
- Centralized location
  - Gateway community
Close proximity to desert, ocean, and mountains
Close proximity to open space and rural environment
Desirable size and scale in comparison to Metropolitan Bakersfield
Small-town atmosphere
A slower pace of life relative to Metropolitan Bakersfield
Tranquility of area
Limited congestion
Traffic
Development
Accessibility
Convenient access by highways
Convenient commutes
Sense of safety / security
Strong sense of community
A close knit community with a shared sense of values
Residents are neighborly and friendly
A shared respect for institutions
Hardworking community members who strive for self-improvement using the resources available
A shared commitment to improve the lives of children
An entrepreneurial spirit of population
A culturally and racially diverse population
A young population that is full of energy and potential
Affordable real estate and low cost of housing
Availability of community parks and recreational space
Camp space
Opportunity for significant economic growth
Delano is the “center spoke of a good hub”
Many investment opportunities
An adequate local education system
Availability of local colleges, new schools, and job training
Adequate medical services for residents
Child care services for middle class residents
Drinking water services
Minimal vandalism, especially in Westside of Delano
Approachable local law enforcement

Visions
Enhance quality of life for community members
An agreed upon pace for growth
Thoughtfully manage development and code enforcement
Manage housing growth to reduce housing on agriculture land
Implement Smart Growth principles
Reduce trip times between housing and jobs
Focus local effort on redevelopment
Revitalize the local downtown
• Balanced land uses that respond to the needs of the community
  o Limit the number of dairies
  o Develop mixed-use housing (apartments/condominiums and retail)
  o Reduce the presence of prisons and group homes
• Develop a retirement/assisted living community
• Maintain agricultural land around the edges of the community
• Create a walkable community
• Expand McFarland / Delano corridor
• Expand public transportation
  o Transportation to McFarland and Bakersfield
  o High speed rail
  o Amtrak service
  o Bullet train
• Improve initiative and action by leaders
  o Stronger leadership
• Increase community involvement with local improvement
  o Encourage local interest and engage community members
• Improve relations/communication with county government and other local, state, and federal governments
• Develop an effective communication channel between the government and the community
  o Utilize newspapers, radio stations, and mailers from local government to inform community members
  o Overcome the language (English/Spanish) barrier in local / community communications
• Increase community unity and pride
  o More residential participation and sense of responsibility
  o Reduce local litter
• Increase joint/shared responsibility for local issues
• Improve/strengthen local infrastructure: local roadways and highways (Hwy 99)
  o Improve transitions / (dead) spaces between cities along Highway 99
  o Improve freeway interchanges
  o Develop land adjacent to highways to attract travelers
• Improve maintenance of structures
  o Public buildings
  o Personal property
• Beautify (landscape) the community
  o More trees, lawns, flowers, etc.
• Increase signage
• Increase the size of law enforcement
  o Improve local security / safety, especially for children
  o Reduce influence and presence of gangs, crime, and violence
• Diversify the local economy
  o Grow beyond a solely agriculture based economy
• Increase local revenue through local commercial / sales tax
Increase local quality retail
- Preserve locally owned and serving stores
- Limit / avoid big box retail
- Increase the diversity of stores and businesses
- Local outlet stores
- A movement away from becoming a bedroom / commuter community

Increase job opportunities
- Secure, year round jobs with opportunities for advancement
- Increase skill level required for jobs – Maker North Central Bakersfield a place for educated individuals to work and utilize their degree

Expand the local education system
- Elementary and high school
- Local community college
- Cal state extension
- Improve partnership with local university

Improve / expand local educational services
- Professional training opportunities
- SAT, GMAT, GRE, etc., classes

Maintain local medical services

Increase recreational activities / facilities for adults, seniors, and youth
- Ex. Boys & Girls Club, dance studio, art studio, miniature golf, bowling alley, movie theater, water park, sports park, swimming pool, community concert hall / amphitheater
- Joint activities with McFarland and Bakersfield

Increase availability of and access to community parks and recreational space
- Golf course
- Bike and walking trails
- Mountain visibility

Enhance / further develop the vegetation of local parks

Improve air quality

Maintain water conservation

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic development; growth management; housing; mobility; open space and habitats;
services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Housing; economic development; growth management; services, safety & equity; and air quality received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>22</td>
<td>28</td>
<td>13</td>
<td>15</td>
<td>6</td>
<td>23</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Group 1</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>8</td>
<td>11</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A31). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use.
to document their choices, rationale, and other comments about the issues (see pages A32-A33).

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
## Economic Development

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>14</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Group 2</td>
<td>10</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Group 4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

### Summary of Comments

Most participants agreed with the need to develop a plan to facilitate significant change to the economy of the North Central Kern Region. Participants indicated that their community would benefit from an increased diversity of retail and job opportunities but suggested that this growth should occur while maintaining a small town feel. The general desire was to attract more industries to the area (while protecting agricultural land) in an effort to close the gap between those of high and low income levels. Participants identified challenges such as attracting new employers and protecting available green space.

## Water

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>9</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### Summary of Comments

Participants identified the importance of increasing awareness about the need to preserve water resources. Participants suggested that more water education for community members occur and stressed that the quantity and quality of available water be studied when considering future development. Participants stressed the prohibition of development in flood plains and suggested that water usage be more closely metered in an effort to regulate unnecessary waste.

## Services, Safety & Equity

### Summary of Comments
<table>
<thead>
<tr>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>20</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants stressed the need to create a shared sense of inclusion for all members of the community, including those with a language barrier. Participants identified a need to engage members of the community who feel their needs are insignificant and not addressed specifically by community leaders. Participants also suggested that the school system expand efforts to provide students with the knowledge and training necessary to attend college or specialize in a skilled trade. This would involve improving the management of money for the funding of programs. Furthermore, participants expressed the need to provide more healthcare options and increase the number of available police officers in an effort to reduce crime and gang activity.

<table>
<thead>
<tr>
<th>AIR QUALITY</th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>11</td>
<td>17</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants agreed with the need to address air quality in an effort to improve the health of the community, though they also recognized that major changes could limit opportunities for economic growth. Participants suggested the importance of maintaining this balance while also maintaining green spaces and increasing the use of public transit. Understanding the large cost of long term plans to clean the air, participants suggested that effort be spent on preventing the further degradation of air quality by limiting industries and encouraging development that will improve air quality.
## Summary of Comments

### MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>11</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants suggested that significant changes to mobility should focus on improving current infrastructure and expanding the availability of public transit options. Participants understood improved mobility to be essential to the growth of North Central Kern and cited various infrastructure issues in need of attention. Concerns included: creating more roads to accommodate future growth; fixing off-ramps to improve safety; building sidewalks; and making streets pedestrian, bike, and wheelchair accessible and friendly. Participants agreed that more public transit is needed to improve access to jobs and schools, and also expressed support for the use of alternative fuels, including CNG (compressed natural gas) school buses.

### HOUSING

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants who promoted significant change to the housing in Kern emphasized the need to provide options for members of all economic segments, especially families of low income. As an example, some participants noted that in Wasco new housing is too expensive for many members of the community. With a large segment of the population working in the agriculture industry, participants agreed that it is important to provide more housing throughout North Central Kern that is affordable to rent or purchase.
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards.

*Growth Management*
- Reduce sprawl
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

- Agenda
- Comment Form
- Wallgraphic
- Presentation Slides
- Card Game Topic Cards
- Card Game Suited Cards
- Card Game Comment Form
- Evaluation form
I. INTRODUCTION

On Thursday, March 29, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Veterans Hall in Arvin with community members from the Arvin, Bakersfield, and Shafter areas of Kern County. The purpose of the meeting was to: (a) educate participants about the purpose of the Blueprint; (b) facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series occurring throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint Program, which will integrate the outcomes of the Blueprint Program from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall
Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

**Town Hall Meeting Agenda and Format**

The North Central meeting was held from 6:00 p.m. – 9:00 p.m. at the Veterans Hall, 414 4th Street in Arvin. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A32-A34). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Kern COG provided Spanish language versions of these handouts, and bilingual Kern COG staff availed themselves for those participants requiring simultaneous translation during the presentation and large group discussion portions of the meeting.

Approximately 40 community members representing residents, businesses, and local government agencies attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Esmeralda García from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Ms García recognized local officials in attendance, some of which personally addressed the participants and thanked them for their participation. Local officials included: Tim Tarver, Mayor, City of Arvin; Councilmember Jose Flores; and Councilmember Joet Stoner.

Ms. García then introduced Kern COG Assistant Director Darrel Hildebrand. Mr. Hildebrand delivered brief introductory remarks describing the relationship of the Blueprint to local planning activities followed by a slideshow presentation that provided an overview of the purpose of, need for, and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

*Prepared by MIG, Inc.*
Following the presentation, Ms. García reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report. Bilingual Kern COG staff availed themselves as facilitators and recorders for Spanish-language-only small groups. The card game materials featured English and Spanish language on opposing sides of each card.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what individuals like about their community has been organized under the list of values while dislikes have been extrapolated and included under visions. The following is a summary of participants’ comments:

**Values**

- A close knit / united community
  - Family oriented values
  - Charitable
  - Friendly / neighborly community
• People and community pride
  • Strong local communication, action, and motivation
  • Strong sense of faith / values
    o Presence of church fellowships
  • A diversity community
    o Cultural presence
  • Desirable small size of community
    o Quiet
  • Walkable environment
    o Ability to walk to stores
  • Lack of congestion
    o Traffic
  • Community / Public Safety
  • Agriculture industry
  • Environmental beauty
    o Appreciation for the outdoors
  • A local education system
    o Accessible
    o Community involvement

Visions
• Improve public perception of community
  o Community no longer feels “overlooked”
• Localize economic development
• Increase job opportunities
  o Technology
  o Job (vocational) training
• Increase commercial resources
  o More shopping, restaurants, and local convenience opportunities
    (i.e. A cleaners, Denny’s)
• Improve local industry
  o Green and clean
• Increase the rate of development
  o Focus effort downtown
  o Improve balance between development and open space
  o Infill development
  o Mixed use development
• Provide affordable, quality housing
  o Multi-family, high density housing
  o Controlled and maintained housing
  o “No ghettos”
• Improve general maintenance of community
  o Improved drainage
  o Improved recycling process
  o Beautification of streets to create “curb appeal”
• Improve public health
• Clean safe air and water
• Reduce “bowl effect”
• No more toxic waste dumps
• Develop green beltways that define cities
• Provide adequate mass transit
  • High speed light rail
• Improve public safety
  • Reduced / eliminated presence of drugs and graffiti
• Improve infrastructure
  • Safety of roads and sidewalks
• Increase the number and improve quality of community parks and recreation space
  • More sports parks and bike paths
  • Improve maintenance
  • More trees / ‘wind breaks’
• Increase resources for children
  • After school and enrichment programs
  • Child care
• More educational options for children and adults
  • A local college
• Create ways to empower children
• Improve the level of help / funding from the State to educational system
  • A local high school
  • Improve the number and quality of teachers
  • Improve the quality of special education
  • Improve the quality of food
• Improve medical services / programs
  • Provide a local hospital
  • Employ more doctors at local clinics
  • Provide more pharmacies
  • Provide adequate medical programs for non-citizens
• Nurture an innovative local government
• Prohibit the development of more prisons
• Provide for an environment where residents are not fearful of police enforcement question their immigration status

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic...
development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Housing; economic development; growth management; services, safety & equity; and air quality received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>28</td>
<td>24</td>
<td>8</td>
<td>16</td>
<td>10</td>
<td>7</td>
<td>22</td>
<td>20</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>9</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A31). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants
also utilized a separate comment form, which the facilitator asked that they use to document their choices, rationale, and other comments about the issues (see pages A32-A33).

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
**AIR QUALITY**

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>11</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed with the need to address local air quality issues in order to improve the health of the community. Participants understood that current air quality levels are damaging to their quality of life and are especially detrimental to families with small children. Some participants suggested that larger communities, such as Bakersfield, initiate air quality improvement because they have greatly contributed to the poor quality of air in smaller communities. Others suggested that higher taxes be imposed in an effort to create funding to improve air quality in all communities. While most participants were concerned with air quality they also understood that improvement measures should be balanced with the desire for overall growth.

**ECONOMIC DEVELOPMENT**

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>10</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed with the need to initiate moderate to major changes in the way of localized economic development. Participants were in favor of creating additional retail and job opportunities for the community in an effort to retain future generations. Such opportunities should be based on market forces and supportive of fostering a healthy environment. For example, one suggestion proposed that local communities increase efforts to attract job opportunities based on technological services and to provide skilled job training for those entering the workforce.
### SERVICES, SAFETY & EQUITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>13</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed that services in need of attention include healthcare, law enforcement, and social activities for students. Participants voiced the need for more primary care facilities for children and families, especially for those of a lower income and/or are not legalized citizens. Other suggestions included increasing the number of law enforcement officers in an effort to reduce crime and gang activity. As a more proactive measure, participants suggested that after school activities and a community center for youth be provided for children whose parents are working during these hours.

### WATER

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Group 1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants discussed the importance of maintaining an adequate supply of healthy water, particularly with the projected population growth in the region. Participants identified water as a basic human need and suggested that any measures chosen to improve the quality and quantity of the local water supply should be applied to all communities.
## Summary of Comments

### HOUSING

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants in favor of significant changes to addressing housing issues emphasized the need to provide affordable housing options for families and seniors/retirees of low/fixed income. Participants suggested locating housing near employment and retail centers to increase opportunities for living close to work and shopping areas. Additionally, participants expressed interested in reducing the level of crime in local neighborhoods.

### MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants who promoted significant change to mobility in Kern emphasized the need to improve and expand the local mass transit system as well as improve the safety of local roads and sidewalks. Participants suggested that more transportation opportunities be provided for students attending and commuting to CSUB. In addition, participants expressed interest in exploring the possibility of high-speed rail that would connect community members to areas in and around Kern County. Some considered the possibility of using preexisting rail lines for a high speed commuter rail line.
### OPEN SPACE & HABITATS

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Summary of Comments

Participants who promoted significant change to open space and habitats were concerned with the provision of open space for recreational uses. Participants were not in favor of more agriculture / grazing land for cattle, attributing these uses to the current problems with air quality.
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards.

Agriculture
- A low priority for many community members
- A growing concern for retiring farmers who would like to sell their land at a premium price but find that many cannot afford to purchase their land.

Additional Issues
- The local school district needs assistance/support with its capacity for growth
- Plant windbreaks (rows of trees) to reduce wind and flying dust and retain soil
- Preserve craftsman homes on Comanche, below DiGiorgio
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

• Agenda
• Comment Form
• Wallgraphic
• Presentation Slides
• Card Game Topic Cards
• Card Game Suited Cards
• Card Game Comment Form
• Evaluation form
I. INTRODUCTION

On Tuesday, April 10, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Frazier Park Recreation Building with community members from the Frazier Park and Pine Mountain Club areas of Kern County. The purpose of the meeting was to: (a) educate participants about the purpose of the Blueprint; (b) facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series occurring throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint Program, which will integrate the outcomes of the Blueprint Program from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

**Town Hall Meeting Agenda and Format**

The meeting was held from 6:00 p.m. – 9:00 p.m. at the Frazier Park Recreation Building, Frazier Mt. Park, Glendale Trail & Park Drive in Frazier Park. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A23-A25). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Kern COG provided Spanish language versions of these handouts, and bilingual Kern COG staff availed themselves for those participants requiring simultaneous translation during the presentation and large group discussion portions of the meeting. Approximately 38 community members representing residents, businesses, and local government agencies attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Andy Pendoley from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview.

Mr. Pendoley then introduced Kern COG Assistant Director Darrel Hildebrand. Mr. Hildebrand delivered a slideshow presentation that provided an overview of the purpose of, need for, and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.
Following the presentation, Mr. Pendoley reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what individuals like about their community has been organized under the list of values while dislikes have been extrapolated and included under visions. The following is a summary of participants’ comments:

**Values**
- Local rural, small-town atmosphere
- Unique community character
- Neighborly community
- Preservation of the small town values
- A slower pace
- Local safety values
- Low crime rate
- Location in relation to larger cities
• It takes an effort to live in Frazier Park
• Affordable cost of living
  o You get more for your money
• Controlled growth due to lack of available land
• Limited traffic congestion
• Natural beauty of area
  o Presence of nature, wildlife, mountains
  o Connection with wildlife
• Clean air
  o Clear blue skies – no particles
• No light pollution
  o “You can see the stars” at night
• Local biodiversity
• Weather – Ability to view the four seasons
• Small local schools
• Local recreational opportunities
  o Access to the forest

Visions
• Maintain a strong community spirit
• Encourage harmonious, respectful, social interaction
• Serve as a gateway community
• Preserve a retreat-like, rural atmosphere
• Establish more political representation
  o Diminish the neglect felt by community members of Frazier Park and Pine Mountain Club
  o Provide a voice for the community regarding growth and development
• Encourage cross-county communication and cooperation regarding growth and planning
  o Los Angeles, Ventura & Kern
• Limit the growth of Fort Tejon
• Plan for impending growth
  o Implement smart growth principles
  o Limit sprawl before proper planning
  o Improve local infrastructure
    – Develop a central sewage connection/septic
    – Pave dirt roads
    – Improve traffic control system
    – Improve garbage removal
    – Develop more public parking (to support local eco-tourism)
    – Walkable streets - Beautification of sidewalks
    – Bikeways
• Develop local town center
  o Restaurants, cafes
• Shorten commutes to work, commercial, and service areas
• Expand transportation services and facilities
  o Ex. Regional public transit (bus, shuttles, rail), public parking facilities, snow removal
  o Provide public transit for senior and low income individuals and/or families
  o Encourage a non-polluting system
• Use alternative energy sources
  o Ex. Solar, vegetable oil
• Seek out alternative methods for moving goods
  o Consider more ocean corridors, rather than highways
• Limit congestion caused by tourists
• Provide more affordable housing
  o Seniors
  o Low income individuals/families
• Provide rest homes
• Strengthen the local economy
  o Encourage/support local, specialized businesses
  o Limit big box retail
• Foster eco-tourism opportunities
• Capitalize on unique environment without damaging it
• Address economic disparities
  o Provide job opportunity through the development of eco-tourism
  o Bridge the economic gap
• Strengthen natural resource management
  o Improve the local air quality
    – Limit the air pollution/emissions from diesel trucks
  o Improve local water system and management
    – Reduce dependence on ground water
    – Maintain an adequate, clean water table
• Preserve open spaces including green pastures and mountains
• Encourage the investment of green building and clean business practices
• Improve public educational opportunities and funding
  o Provide more higher education and educational programs
• Provide more facilities and services for youth members - younger and older
  o Ex. Community pool, youth center, off-roading
• Provide more civic uses of land
  o Ex. Parks, library
• Provide more cultural venues
  o Ex. Arts, theater, galleries
• Provide family-oriented parks and recreation activities program in the local county park
• Improve local services
  o Emergency response
  o Fire protection
  o More healthcare and emergency services
More medical facilities and services
  - Ex. Specialty care, small local hospital
- Improve traffic control
- Improve the enforcement of laws
  - Address the ambulance ordinance
  - Improve response from Kern County, the Business Improvement District, and code enforcement
- Address violations of: signs, lot lines, setbacks through improved code enforcement
- Provide adequate resources that match the needs of the community

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Open space and habitats; water; economic development; growth management; services, safety & equity; mobility; and air quality received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>4</td>
<td>18</td>
<td>15</td>
<td>23</td>
<td>5</td>
<td>18</td>
<td>30</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A22). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use to document their choices, rationale, and other comments about the issues (see pages A23-A24).

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
### OPEN SPACE & HABITATS

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>20</td>
<td>8</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants who selected open space and habitats as a top priority recognized it as one of the area's most important and unique assets. Preserving these areas are important to preserving the unique culture and character of the area. Understanding the inevitability of population growth, participants expressed concern with the potential loss of open space due to development. Rather than prohibiting all growth, participants suggested that growth be limited to specific areas and uses that do not threaten habitat sensitive areas.

### WATER

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>13</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants understood water to one of the most valuable natural resources and expressed concern about the potential loss of the local supply due to population growth and development. Recognizing the limited supply of groundwater, participants agreed that water be more closely managed and that further regulation be implemented so as to maintain a high level of quality. Additionally, participants suggested that developers directly pay for the costs of treating and/or importing more water to accommodate new development. Other suggestions were that more regional studies be done to learn of ways to use resources more wisely.
### Growth Management

<table>
<thead>
<tr>
<th>Summary of Comments</th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>9</td>
<td>9</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

While participants were not in favor of the large-scale urbanization of their community, they agreed that infill development be encouraged in an effort to balance outlying growth. By implementing smart growth principles, the community would strive to preserve the natural environment by increasing density levels and providing more public transit options. Participants also supported maintaining local control of growth.

### Services, Safety & Equity

<table>
<thead>
<tr>
<th>Summary of Comments</th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group 4</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Most participants agreed with the need to improve the local services provided in their area including emergency response; fire protection; healthcare and emergency services and facilities; and social services. In general, participants were interested in bridging the gap among residents of various income levels and agreed that additional services be provided to ensure that youth have equal opportunities for success.
### AIR QUALITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>5</td>
<td>12</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Most participants agreed that current air quality levels were positive. Looking ahead, however, most agreed that there is a potential threat to air quality if more is not done to encourage businesses and truck companies to reduce harmful emissions on the nearby Interstate 5 corridor. This potential decrease in quality is likely to be intensified by the inevitable growth in population. Many participants commented that businesses would not voluntarily change and suggested that the government initiate such changes.

### MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed that alternative methods of public transportation should be provided to the Frazier Park/Pine Mountain Club area. This would be done to increase accessibility to other areas as well as reduce traffic congestion and, thereby, improve air quality. Many agreed with the development of a high speed rail and the provision of more buses and shuttles. Some suggested that partnerships be created with developers so that development pays for and will be located near public transit options. Looking in the more immediate future, some participants thought that time and effort should be spent on improving current roads and highways. In addition to mobility of community members, participants suggested that more emphasis be on moving freight on rail and off of trucks to address growing congestion levels on Interstate 5.
### Summary of Comments

Participants agreed with the need to strengthen their local economy in a manner that maintains the spirit of a small town community. Participants suggested promoting local, specialized businesses and discouraging big box retail stores. Capitalizing on their unique environment, participants also suggested promoting eco-tourism to improve the local economy and alleviate local economic disparity through the provision of job opportunities.

<table>
<thead>
<tr>
<th>ECONOMIC DEVELOPMENT</th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>Participants agreed with the need to strengthen their local economy in a manner that maintains the spirit of a small town community. Participants suggested promoting local, specialized businesses and discouraging big box retail stores. Capitalizing on their unique environment, participants also suggested promoting eco-tourism to improve the local economy and alleviate local economic disparity through the provision of job opportunities.</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards.

Additional Issues
- Incorporate Frazier Park so as to maintain more control of local tax revenues
- Improve public educational opportunities and funding
  - Provide more higher education and educational programs
- Provide more facilities and services for youth members - younger and older
  - Ex. Community pool, youth center, off-roading
- Provide more civic uses of land
  - Ex. Parks, library
- Provide more cultural venues
  - Ex. Arts, theater, galleries
- Provide family-oriented parks and recreation activities program in the local county park
- Improve the enforcement of laws
- Native American heritage areas and other cultural groups should be included in planning processes
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

- Agenda
- Comment Form
- Wallgraphic
- Presentation Slides
- Card Game Topic Cards
- Card Game Suited Cards
- Card Game Comment Form
- Evaluation form
I. INTRODUCTION

On Wednesday, April 11, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Veterans Hall in Lake Isabella with community members from the Kern River Valley area of Kern County. The purpose of the meeting was to: (a) educate participants about the purpose of the Blueprint; (b) facilitate discussion and collect input about participants’ visions and values related to their community’s and Kern’s future; and (c) facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within the Kern Region.

The Town Hall Meeting is one of a series throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint Program, which will integrate the outcomes of the Blueprint Program from the seven other Central California counties. The Kern visioning process will continue through December 2007.
Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

Town Hall Meeting Agenda and Format
The Kern River Valley meeting was held from 6:00 p.m. – 9:00 p.m. at the Kern River Veteran’s Senior Building, 6405 Lake Isabella Boulevard in Lake Isabella. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A23-25). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Kern COG provided Spanish language versions of these handouts, and bilingual Kern COG staff availed themselves for those participants requiring simultaneous translation during the presentation and large group discussion portions of the meeting. Approximately 25 community members representing residents, businesses, and local government agencies attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Andy Pendoley from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Mr. Pendoley recognized Kern County Planner Cheryl Casdorph who personally addressed the audience and briefed participants on the current status of the Kern River Valley Specific Plan and to explain the linkages and differences with the Blueprint Program.

Mr. Pendoley then introduced Becky Napier, Regional Planner III of Kern COG. Ms. Napier delivered brief introductory remarks followed by a slideshow presentation that provided an overview of the purpose of, need for, and process for developing the Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population,
housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

Following the presentation, Mr. Pendoley reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report.

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what individuals like about their community has been organized under the list of values while dislikes have been extrapolated and included under visions. The following is a summary of participants’ comments:

Values
• Small town feel – everyone knows me
• Local ambiance
• Historic roots
Strong sense of community
Diverse population
Family friendly
  - Good place to raise kids
Local geography and natural features
  - Lake Isabella
  - Many trees
  - River
  - Animals
  - Nature
  - Open Space
Climate range from desert to snow
Rural – agriculturally oriented
View corridors
Access to big cities – centrally located
Location away from the City
  - Solitude
  - Quiet
  - Preserved personal space
Diverse environment
No light, noise or traffic pollution
Clear view of the stars and dark skies at night
Clean water
Peaceful – lack of traffic
Diverse – landscape
Presence of federal land that limits growth/development
Local schools
  - California Distinguished Schools
  - Small, many activities
  - High test scores
  - Extracurricular activities
  - Largest FFA in the state
  - Ongoing improvements
Local tourism
Local activities
  - Ranching, rodeo and happy cows
  - Arts
  - Hiking on public land
No development on hillsides
Preserved larger lots – no condominiums
Local safety
  - Low crime and no gangs
Limited negative effects from Bakersfield “escapees” in terms of creating more traffic

Visions
• Provide bike paths around the lake
• Maintain slopes
• Provide higher density housing near services and shopping areas
• Develop housing for:
  o Elderly
  o Disabled
• Provide and encourage a diverse, clean environment
  o Improved minimum water level on Lake Isabella
  o Give community the “right” to store water for themselves
  o Trees – Orange Groves at the mouth of the canyon
  o Clean air
  o Clear view of the night skies, stars, and Milky Way
  o Big ranches remain in the valley
  o Eco-friendly conference center
  o Multi-purpose trails
  o Healthy forests
• Provide more water in the lake and river
• Remove the dam
• Expand recreation facilities
  o Children
    - Teeter totters
    - Soccer fields
  o Campground facilities that are well maintained
  o Maintained recreational, small-size airport
• Prohibit industrial / commercial shores along Lake Isabella
• Prohibit big box development and maintain mom and pop stores
• Maintain a healthy balance of agriculture and ranching
• Create distinct separations between communities
  o Open space between Weldon, Lake Isabella, Boofish, etc.
• Create buffer zones around waters
• Expand local hospital
• Expand sewer system
• Provide hi-tech – water – sewer- septic protection
• Promote a hi-tech community – “A wired community”
• Provide a university for post-education, especially for biological sciences

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic
development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Water; open space and habitats; air quality; agriculture; and economic development received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>11</td>
<td>19</td>
<td>12</td>
<td>10</td>
<td>7</td>
<td>4</td>
<td>20</td>
<td>8</td>
<td>21</td>
</tr>
<tr>
<td>Group 1</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A31). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use.
to document their choices, rationale, and other comments about the issues (see pages A32-A33).

The following tables outline participants’ choices for each issue from each group and a summary of comments recorded on flip chart pages and submitted on comment forms.
### Summary of Comments

#### Open Space and Habitats

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>15</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Most participants agreed with the need for long-term measures that protect open space, habitats, and public lands that they enjoy today, as well as the need to restrict development in the Kern River Valley. Understanding the pressures of future growth and development, participants stressed the need to maintain their current quality of life and suggested that the area grow in a manner that is “intelligently sustainable.” Participants suggested that rural land should be protected and that development take place on large lots that are not located in physically constrained areas, such as the river. Furthermore, participants suggested that growth should not threaten local habitats such as birds and other wild animals.

#### Water

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>8</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants stressed the need for farms to practice sound water conservation measures. Additionally, participants suggested that water export practices are unfairly restricting local supplies, and the County could invest in harvesting rainwater to increase supply. Other participants expressed concern with the local water management practices and system reliability, and some suggested that more effort focus on addressing price inflation issues for low and fixed income community members.
### Economic Development

<table>
<thead>
<tr>
<th>Clubs Club Major change</th>
<th>Diamonds Moderate change</th>
<th>Heats Some change</th>
<th>Spades No change</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants who identified economic development as a topic of concern suggested that more be done to improve the economic status of lower income families and seniors. While economic development may potentially equate to unwanted change and/or trade-offs, participants understood it as essential to the overall growth of the community, highlighting the need for more diverse job opportunities. Some participants suggested promoting eco-tourism, while others suggested the need for more local educational opportunities to train those seeking skilled positions. Some participants suggested addressing the current local challenges with communication infrastructure to bridge local economies and spark economic growth.

### Air Quality

<table>
<thead>
<tr>
<th>Clubs Club Major change</th>
<th>Diamonds Moderate change</th>
<th>Heats Some change</th>
<th>Spades No change</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>11</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants agreed that local communities enjoy good air but are also becoming more concerned about the future. Some suggested that man made dams have created health problems with arsenic dust being blown throughout the community. Participants also expressed concern about bad air quality traveling from neighboring communities and the potential health effects on children and seniors. Some participants suggested addressing this problem by increasing regulations in Metropolitan Bakersfield, while others suggested dedicating more resources to education about energy efficient practices, such as solar energy for residents and businesses.
### AGRICULTURE

<table>
<thead>
<tr>
<th></th>
<th>♣ Clubs Major change</th>
<th>♦ Diamonds Moderate change</th>
<th>♥ Hearts Some change</th>
<th>♠ Spades No change</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>Participants who voted for agriculture suggested that moderate to major changes are necessary to protect present agriculture land, but done so with a healthy balance of land uses. Some participants explained that they would only further support agricultural uses if such businesses used sound water practices, such as drip irrigation.</td>
</tr>
<tr>
<td>Group 1</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### GROWTH MANAGEMENT

<table>
<thead>
<tr>
<th></th>
<th>♣ Clubs Major change</th>
<th>♦ Diamonds Moderate change</th>
<th>♥ Hearts Some change</th>
<th>♠ Spades No change</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>Participants suggested that long term planning should focus on providing adequate infrastructure and services including improved sidewalks and bike lanes, as well as expanded public transit. Participants suggested focusing development on a town center that accommodates senior housing and creates a walkable community. Other participants suggested expanding community activities and facilities, such as an interactive museum.</td>
</tr>
<tr>
<td>Group 1</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
## Services, Safety & Equity

<table>
<thead>
<tr>
<th></th>
<th>♣  Clubs (Major change)</th>
<th>♦  Diamonds (Moderate change)</th>
<th>♥  Hearts (Some change)</th>
<th>♠  Spades (No change)</th>
<th>Summary of Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>8</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>Participants agreed that the community should maximize</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>their use of existing resources to maintain the low crime</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>rate and safe environment from families, children and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>seniors.</td>
</tr>
<tr>
<td><strong>Group 1</strong></td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>Participants also emphasized the need to maintain high</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>standards for education and social services.</td>
</tr>
<tr>
<td><strong>Group 2</strong></td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Group 3</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards.

Housing
• A local need to improve housing for low income families and seniors

Additional Issues
• Promote a high technology community that is connected with the rest of the County
  o Local internet and cellular service is poor
• A need for more cultural diversity
• Provide a local university
• Improve code enforcement – mediate inconsistencies, such as signage
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

- Agenda
- Comment Form
- Wallgraphic
- Presentation Slides
- Card Game Topic Cards
- Card Game Suited Cards
- Card Game Comment Form
- Evaluation form
KERN REGIONAL BLUEPRINT PROGRAM
TOWN HALL MEETING

SUMMARY REPORT

WESTSIDE KERN COUNTY
March 21, 2007

I. INTRODUCTION

On Wednesday, March 21, 2007, Kern Council of Governments (COG) hosted a Town Hall Meeting for the Kern Regional Blueprint Program at the Historic Fort in Taft with community members from the Taft and nearby unincorporated areas of Kern County. The purpose of the meeting was: (a) to educate participants about the purpose of the Blueprint; (b) to facilitate discussion and collect input about participants' visions and values related to their community's and Kern's future; and (c) to facilitate discussion and collect input about key issue areas related to achieving a regional vision.

Background
Kern COG is an association of city and county governments primarily created to address regional transportation issues. Its member agencies include the County of Kern and the eleven incorporated cities within Kern County.

The Town Hall Meeting is one of a series throughout the Kern Region as part of the Kern Regional Blueprint Program, which is designed to engage policymakers and citizens to create a regional vision and growth principles for the integration of transportation, housing, land use, economic development and environmental protection that will inform local decision-making and guide growth over the next 50 years. Elected officials from the County and each city throughout the Kern region will determine how their jurisdictions will accommodate the regional vision through local decision-making and planning efforts. The Kern Regional Blueprint will also be included as part of the Central California Blueprint program, which will integrate the outcomes of the Blueprint programs from the seven other Central California counties. The Kern visioning process will continue through December 2007.

Community Outreach
To build community awareness of and involvement in the Blueprint Program, Kern COG initiated an extensive outreach program as part of these Town Hall
Meetings, which will carry and expand into future phases of the process. With outreach and coordination support from Odyssey, a California-based nonprofit organization focused transportation policy improvements, Kern COG implemented a number of outreach measures to advertise the meeting, including:

- Direct phone calls to a broad range of community-based organizations including business, social service, cultural, and other interests
- Targeted mail and email of a meeting notice
- Coordination with government agencies’ outreach efforts and networks
- Inserts in local and community-based newsletters and media publications
- Media campaign

These efforts will continue to build Kern COG’s outreach database over time, leading to ever-expanding outreach measures in future phases of the process.

**Town Hall Meeting Agenda and Format**
The Taft meeting was held from 6:00 p.m. – 9:00 p.m. at the Historic Fort, 915 N. 10th Street in Taft. Upon entering the meeting facility, participants signed-in and received a nametag and handout materials including an agenda, comment form, card game comment form, and evaluation form (see pages A2-A4 and A23-A25). Participants were then asked to place red and green dots on an aerial photograph to locate where they lived and worked, respectively. Kern COG provided Spanish language versions of these handouts, and bilingual Kern COG staff availed themselves for those participants requiring simultaneous translation during the presentation and large group discussion portions of the meeting. (None were required for this meeting.) Approximately 40 community members representing residents, businesses, and local government agencies attended the meeting.

Participants then reviewed the “open house” portion of the meeting, which featured display materials of local area maps and data related to existing conditions and future growth projections, as well as other general information from Kern COG. Nancy Kays from Moore Iacofano Goltsman, (MIG) Inc. served as the meeting facilitator and initiated the meeting with brief welcoming remarks and an agenda overview. Ms Kays recognized local officials in attendance, some of which personally addressed the audience and thanked them for their participation. Local officials included: Paul Linder, Mayor, City of Taft; Cliff Thompson, Councilmember, City of Taft and Boardmember, Kern COG; Randy Miller, Councilmember, City of Taft; Dave Noerr, Councilmember, City of Taft; Barry Jamison, Planning Commissioner, City of Taft; Craig Lauren, Planning Commissioner, City of Taft; Bob Gorson, City Manager, City of Taft; Mike Lee, Director of Planning, City of Taft.

Ms. Kays then introduced Kern COG Assistant Director Darrel Hildebrand. Mr. Hildebrand delivered brief introductory remarks describing the relationship of the Blueprint to local planning activities followed by a slideshow presentation that provided an overview of the purpose of, need for and process for developing the
Blueprint (see pages A6-A11). The slideshow included data projections for the Kern region over the next 30-50 years about population, housing, mobility, and other issues. The slideshow also displayed an example of the structure and purpose of “scenarios” that will be developed as part of the Blueprint process, as well as a diagram of the process steps over the next 6-8 months.

Following the presentation, Ms. Kays reviewed the format of the small group discussions before disbursing participants to their randomly assigned groups. After brief introductions among the participants, a facilitator at each small group table guided participants through an open discussion of participants’ visions and values related to their community’s and the Kern region’s future. The facilitator then guided the group through a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, identify participants’ priority areas, and generate initial preferences for the development of goals for regional planning. The small group facilitators recorded participants’ discussion points during the small group discussion on flip chart pages, and participants also recorded comments on their own comment forms, all of which are summarized in the following pages of this report. Bilingual Kern COG staff availed themselves as facilitators and recorders for Spanish-language-only small groups. The card game materials featured English and Spanish language on opposing sides of each card. (None were required for this meeting.)

Following the small group discussions, participants reconvened in the large group format to hear brief summary reports from a volunteer from each group. Jenna Monterrosa of MIG recorded a summary of the reports on large wallgraphic paper at the front of the meeting room, which is attached to this report as photo-reduced copy on page A5.

The following pages summarize comments captured on the wallgraphic and flip chart pages from the small group discussions, as well as those submitted by participants on comment forms. Original copies of these documents are on file with Kern COG.

II. DISCUSSION: VISIONS AND VALUES

Participants discussed their visions and values related to their community’s and the Kern region’s future. The small group facilitators asked participants to describe what they like and dislike, as well as what they most value and what is most important to them about their community. The facilitators also asked participants to imagine floating in a balloon above their community 40 years from now and to describe their visions of what they hope to see. Information addressing what individuals like about their community has been organized under the list of values while dislikes have been extrapolated and included under visions. The following is a summary of participants’ comments:
Values

- Central location
  - Close proximity to mountains, oceans (the coast), airport (LAX)
  - Close proximity to recreational opportunities
- A desirable distance from Metropolitan Bakersfield
- A rural atmosphere
- High quality of life
  - Small-town community / atmosphere
  - Local charm
  - A caring community
  - Safety / security
  - Low crime rate
- Strong local community values
  - A close knit community
  - Supportive neighbors
- Walkable community size and design
- Affordability of real estate
- An adequate local education system
  - Availability of local community colleges
  - “Best high school and athletes”
- Accessibility of local services and amenities
  - Child care center
  - Recreation Department
  - Community services
  - DMV
  - Churches
- Community activities – social
- Strong and present history of community
- No graffiti
- High quality of air and water
- Availability of parks
- Limited traffic congestion
- Approachable local government officials

Visions

- Improved perception of Taft
- Implemented smart growth development approaches with well planned and organized communities
  - Improved local infrastructure: local roadways, highways, sidewalks, curbs & gutters
  - Infill commercial development
  - Vibrant retail centers
  - Revitalized downtown corridor
  - Pedestrian friendly / walkable community
  - Planned industrial park
  - Improved look of areas surrounding Taft
• Expanded and efficient transportation system
  o “High speed” train to small communities and Bakersfield
• Increased housing stock
  o Diversified housing (condominiums, apartment, lofts, estates, etc.)
• A local retirement community
• Economic sustainability
  o Enhanced shopping opportunities
  o Diversified local job opportunities: Oxy/Chevron corporate offices in Taft
• Strengthened code enforcement that eliminates blighted areas
  o Improved property maintenance
  o Free of sub-standard housing and abandoned cars
  o Increased local presence of landlords to reduce absenteeism
  o Removed vacant buildings
• Localized, 24 hour health care services
• Expanded school system that keeps pace with community growth
• Expanded recreational activities for children and teens
• Expanded child care services
• Improved local animal control
• Preserved natural resources
  o Open space
  o Trees, vegetation, private yards
• Improved access to local parks and walking trails
• Established a local golf course
• Preserved air quality
• Maintained ample water supply
• Expanded opportunities for alternative energy, such as solar
• Preserved historic buildings
• Improved local airport facility
• Limited visible affects from oilfields
• Increased local safety through the elimination of illegal drugs
• Annexed Ford City, South Taft, Taft Heights into the City of Taft

III. CARD GAME: TOP ISSUES FOR THE FUTURE

The small group facilitators then introduced a “card game,” which is designed to introduce a range of topic areas related to regional growth and planning, to identify participants’ priority areas, and to generate initial preferences for the development of goals for regional planning.

Each participant received a stack of 9 topic cards, each containing data about current trends for the following topic areas: agriculture; air quality; economic development; growth management; housing; mobility; open space and habitats; services, safety and equity; and water (see page A12). The facilitator explained that each participant could select 5 topic areas that they believe to be the most
important to addressing their community’s future in the next 40 years. After making their selections, the facilitator took a “straw poll” to tally the group’s top 5 topic areas, which are noted in the following table. Housing; economic development; growth management; services, safety & equity; and air quality received the most votes as the top 5 issues.

<table>
<thead>
<tr>
<th>Number of participants who chose each topic as one of the top five issues related to the Kern region’s future.</th>
<th>Agriculture</th>
<th>Air Quality</th>
<th>Economic Development</th>
<th>Growth Management</th>
<th>Housing</th>
<th>Mobility</th>
<th>Open Space &amp; Habitats</th>
<th>Services, Safety &amp; Equity</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>16</td>
<td>19</td>
<td>17</td>
<td>21</td>
<td>14</td>
<td>7</td>
<td>17</td>
<td>11</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Group 4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Facilitators then provided each participant with a set of four “suited” cards for each of the group’s top 5 issues (see pages A13-A22). The facilitator then explained that the suited cards represent a varying level of intensity of approaching the issues, which generally followed this pattern:

- **Spades**: Maintaining today’s current approach, plans and conditions
- **Hearts**: Some change; providing new levels of incentives and/or voluntary measures to encourage change
- **Diamonds**: Moderate change; establishing new levels of regulations and dedicating significant public resources to manage the issue
- **Clubs**: Major change; aggressively managing the issue through a stronger regulatory framework and incentives with major resource impacts on the public and private sector.

The cards also included “discussion points” associated with each choice such as restrictions on activities, or higher costs to public and/or private entities that could result as part of each choice.

Participants reviewed the suited cards for each topic area and made individual choices for each topic, which the facilitators collected and organized by suit on flip chart pages. The facilitator asked participants to share their rationale about their choices, which the recorder documented on the wallgraphic. Participants also utilized a separate comment form, which the facilitator asked that they use to document their choices, rationale, and other comments about the issues (see pages A23-A24). A few participants played an “additional issue” card, which

---

*Prepared by MIG, Inc.*
allowed for documentation of other key issue areas beyond the 9 offered in the
game.

The following tables outline participants’ choices for each issue from each group
and a summary of comments recorded on flip chart pages and submitted on
comment forms.
## Housing

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major change</td>
<td>Moderate change</td>
<td>Some change</td>
<td>No change</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>5</td>
<td>19</td>
<td>10</td>
</tr>
<tr>
<td>Group 1</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>1</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Group 3</td>
<td>0</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Group 4</td>
<td>1</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants agreed with the need to increase the diversity of available housing types. Housing types should include both single and multi family choices and should provide options for seniors, low-income families, and the local workforce. Furthermore, participants indicated that affordable housing should not be substandard and should maintain the unique, small town and safe community character of Taft and the Westside region. Participants also expressed a desire to not become a bedroom community, but also to not become a "mega-tropolis." Additionally, participants suggested locating more housing close to public transportation and commercial corridors so as to avoid the potential increase of traffic congestion.

## Economic Development

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major change</td>
<td>Moderate change</td>
<td>Some change</td>
<td>No change</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>0</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Group 1</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Group 2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Group 4</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants identified the role of economic development throughout their discussions and shared that it was a key component to the growth of Kern County. Participants indicated that it is important for Taft to seek out additional industries aside from oil and technology to diversify the economy and stable job opportunities. Participants favored the concept of market control and did not favor additional government regulations. Some participants were interested in learning the ways in which the oil industry may benefit the local community (ie. golf courses) and others agreed that growth should not reduce agriculture land.

## Growth Management

<table>
<thead>
<tr>
<th>Clubs</th>
<th>Diamonds</th>
<th>Hearts</th>
<th>Spades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major change</td>
<td>Moderate change</td>
<td>Some change</td>
<td>No change</td>
</tr>
<tr>
<td><strong>Summary of Comments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Prepared by MIG, Inc.
Participants agreed with the concept of smart growth and agreed that growth management should allow the local community to flourish while still maintaining its unique character and strong values. Participants focused on the importance of developing a well-planned city through infill development that avoids sprawl and maintains a small town, walkable environment. Participants indicated that as growth occurs, local services should maintain the capacity to serve the community.

### Services, Safety & Equity

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOTAL</strong></td>
<td>14</td>
<td>18</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Group 1</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group 3</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Participants indicated the need to provide basic community services that are able to support growth and maintain a high quality of life. Participants also indicated the need to maintain and improve the local education system as well as improving police and fire services. Furthermore, participants expressed a strong desire for the development of local healthcare services that include a local emergency room. With regards to safety, individuals recognized the need to eliminate the drug problems in Westside Kern as well as to prevent the emergence of gangs.
### AIR QUALITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>11</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Group 1</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Group 2</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Group 3</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Group 4</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants indicated that air quality affects many peoples’ health and agreed that moderate changes would improve the air quality of West Kern. Some participants cited the example of Los Angeles Olympics in which trucks were not allowed on the road at night as a possible solution. Some participants expressed fear that additional regulation would eliminate commercial growth opportunities. Government incentives should be provided and any other regulations should begin with voluntary compliance. Participants suggested that the expansion of public transportation and clean burning vehicles would serve to maintain air quality, though these options may be costly.

### MOBILITY

<table>
<thead>
<tr>
<th></th>
<th>Clubs Major change</th>
<th>Diamonds Moderate change</th>
<th>Hearts Some change</th>
<th>Spades No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Group 1</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 2</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Group 3</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Group 4</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Summary of Comments**

Participants who voted for mobility suggested it to be important to the growth of Taft and the rest of West Kern County. Participants indicated the need to provide public transportation that reaches areas throughout Kern County and beyond. Participants recognized that public transit would support the growth of commerce in Taft and the Westside region, and also agreed that it would provide new job opportunities.
ADDITIONAL ISSUES AND COMMENTS
Participants provided additional comments via comment cards and the “additional issue” card from the card game.

Open Space & Habitats
• Both should be included as an important part of future growth
• Parks and trails should be protected for the families of Taft

Water
• Water protection and conservation is very important to West Kern County – would like to avoid becoming an excessively dry environment

Additional issues
• Annexation of Ford City, South Taft, Taft Heights in an effort to manage growth in these areas
APPENDIX

The following pages contain handouts and presentation materials featured at the meeting and described in the summary report.

- Agenda
- Comment Form
- Wallgraphic
- Presentation Slides
- Card Game Topic Cards
- Card Game Suited Cards
- Card Game Comment Form
- Evaluation form
APPENDIX D

GAP ANALYSES
### NOTE: Columns 1, 2, and 3 provided by FHWA Headquarters

<table>
<thead>
<tr>
<th>Statutory Planning and Programming Requirements</th>
<th>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</th>
<th>Potential SAFETEA-LU “Closing the Gap” Steps</th>
<th>Kern COG MPO Gap Closure Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UPDATE CYCLES</strong></td>
<td>Long-range statewide transportation plan</td>
<td>◆ State DOT should review and/or establish a regular update cycle.</td>
<td>◆ Not Applicable</td>
</tr>
<tr>
<td>• Long-range statewide transportation plans [23 U.S.C. 135/49 U.S.C. 5304(f)(1)]</td>
<td>◆ No key change in update cycle (as needed or appropriate).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Metropolitan transportation plans [23 U.S.C. 134/49 U.S.C. 5303(i)(1)]</td>
<td>Metropolitan transportation plans in air quality nonattainment and maintenance areas ◆ To be updated every four years (as opposed to the former requirement of every three years).</td>
<td>◆ No additional steps for update cycles are likely necessary for MPOs in attainment areas.</td>
<td>◆ Not Applicable</td>
</tr>
<tr>
<td>• TIPs and STIPs [23 U.S.C. 134/49 U.S.C. 5303(j)(1)(D) and 23 U.S.C. 135/49 U.S.C. 5304(g)(1)]</td>
<td>Metropolitan transportation plans in air quality attainment areas ◆ No key change (to be updated every five years).</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation Improvement Program (TIP) ◆ To be updated every four years (as opposed to the former requirement of every two years). ◆ Span of TIP increased from 3 to 4 years</td>
<td>◆ Develop an approvable TIP with projects/project phases covering four years.</td>
<td>◆ Kern MPO 2007 TIP contains 3 federally approved program years, with 2 additional informational years. A SAFETEA-LU compliant TIP will be submitted in conjunction with the 2007 RTP Update to meet the SAFETEA-LU Compliance deadline of July 1, 2007.</td>
</tr>
<tr>
<td></td>
<td>Statewide Transportation Improvement Program (STIP) ◆ To be updated every four years or more frequent if Governor so elects (as opposed to the former requirement of every two years). ◆ Span of STIP increased from 3 to 4 years</td>
<td>◆ Develop an approvable STIP with projects/project phases covering four years.</td>
<td>◆ Kern MPO 2007 TIP contains 3 federally approved program years, with 2 additional informational years. A SAFETEA-LU compliant TIP will be submitted in conjunction with the 2007 RTP Update to meet the SAFETEA-LU Compliance deadline of July 1, 2007.</td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>ANNUAL LISTING OF PROJECTS</strong> [23 U.S.C. 134/49 U.S.C. 5303(j)(7)(B) and 23 U.S.C. 135/49 U.S.C. 5304(g)(4)(B)]</td>
<td>◆ New project element to be specifically included (pedestrian walkways and bicycle transportation facilities).</td>
<td>◆ Publish list identifying all bicycle/pedestrian projects for which Federal funds were obligated in the preceding program year.</td>
<td>◆ Annual Listing of Projects is due to FHWA in early 2007 and will include obligated bike/pedestrian projects. ◆ The Annual Listing of Projects will also include programmed but not yet obligated projects as reflected in the Kern MPO 2007 FTIP.</td>
</tr>
<tr>
<td></td>
<td>◆ Added requirement for cooperative development by MPO partners (i.e., State and public transportation operators).</td>
<td>◆ MPO (with State(s) and public transportation operator(s)) should review existing process for developing the Annual Listing.</td>
<td>◆ Documentation of the process to develop the Annual Listing of Projects will be included in the final reports due to FHWA in early 2007.</td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>METROPOLITAN AND STATEWIDE TRANSPORTATION PLANNING FACTORS</strong>&lt;br&gt;[23 U.S.C. 134/49 U.S.C. 5303(h)(1) and 23 U.S.C. 135/49 U.S.C. 5304(d)(1)]</td>
<td>♦ Added a new stand-alone factor “increase the safety of the transportation system for motorized and non-motorized users.”</td>
<td>♦ Review current safety goals, objectives, performance measures, and strategies. ♦ Ensure that adequate safety data are available to support development of a safety element in statewide and metropolitan transportation plans. ♦ Ensure outreach to and input from safety stakeholders. ♦ Incorporate the SHSP element into statewide and metropolitan transportation plans (for metropolitan transportation plans, use the portion of the SHSP related to the MPO region). ♦ Incorporate the transit System Safety Program Plan (if available) into statewide and metropolitan transportation plans. ♦ Review TIP/STIP project selection criteria to ensure they reflect safety priorities (e.g., SHSP and/or MPO region’s priorities).</td>
<td>♦ Kern MPO conducted a comprehensive update of the goals, policies, performance measures, and strategies as part of the 2007 RTP Update. This includes a review of the safety-related performance measures and data availability. ♦ The Kern MPO is updating its Public Participation Process to include a wide variety of new stakeholders as required under SAFETEA-LU. ♦ Kern MPO 2007 RTP will document consistency with the State’s Strategic Highway Safety Plan and transit System Safety Program Plan, as applicable. ♦ Kern COG incorporates safety as one of the key criterion in the ranking of its Capital Improvement Program and uses state and local accident data by project location to assess project safety issues.</td>
</tr>
</tbody>
</table>

♦ Kern COG MPO  conducted a comprehensive update of the goals, policies, performance measures, and strategies as part of the 2007 RTP Update. This includes a review of the safety-related performance measures and data availability.

♦ The Kern MPO is updating its Public Participation Process to include a wide variety of new stakeholders as required under SAFETEA-LU.

♦ Kern MPO 2007 RTP will document consistency with the State’s Strategic Highway Safety Plan and transit System Safety Program Plan, as applicable.

♦ Kern COG incorporates safety as one of the key criterion in the ranking of its Capital Improvement Program and uses state and local accident data by project location to assess project safety issues.
<table>
<thead>
<tr>
<th>Statutory Planning and Programming Requirements</th>
<th>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</th>
<th>Potential SAFETEA-LU “Closing the Gap” Steps</th>
<th>Kern COG MPO Gap Closure Efforts</th>
</tr>
</thead>
</table>
| ♦ Added a new stand-alone factor “increase the security of the transportation system for motorized and non-motorized users.” | ♦ Review current statewide and metropolitan transportation plans for emergency planning/security elements.  
♦ Incorporate the transit System Security Program Plan (required for rail systems) into statewide and metropolitan transportation plans.  
♦ Define the role of the public transportation operators/MPO/State in promoting security (e.g., review State/local legislation for roles and responsibilities).  
♦ Identify critical facilities and transportation system elements (e.g., transit system, rails, ports, Interstate system, NHS routes, and STRAHHNET routes).  
♦ Develop security goals and appropriate strategies (this may be an important role for MPOs and/or States that are near or on the Mexico/Canada borders). | ♦ The 2007 RTP Update documenta efforts to review and incorporate emergency planning and security issues.  
♦ Kern County Emergency Management and Terrorism Response Plans are incorporated by reference. Kern COG was a key participant in the creation of the Kern County Emergency Management Plan.  
♦ In FY 07-08 the 2007 RTP Update will be amended to further discuss its most current efforts in incorporating emergency planning and security issues in the Public Transportation Element. August 2006 Valley RTP Update Workshop  
♦ 2007 RTP will be amended in FY 07-08 to further discuss policies and strategies related to the referenced State Strategic Highway Safety Plan. |
<table>
<thead>
<tr>
<th>Statutory Planning and Programming Requirements</th>
<th>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</th>
<th>Potential SAFETEA-LU “Closing the Gap” Steps</th>
<th>Kern COG MPO Gap Closure Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Expanded the environmental factor by adding the phrase “promote consistency of transportation plan and transportation improvements with State and local planned growth and economic development patterns.”</td>
<td>♦ MPOs/State DOTs review current process to coordinate transportation and land use/economic development planning. ♦ Where needed, consider methods to improve or expand coordination. ♦ Identify implementation timeframes. ♦ Include appropriate activities in statewide/metropolitan transportation planning work programs, as well as in MPO Participation Plans.</td>
<td>♦ Kern MPO’s 2007 RTP Update I documents efforts to coordinate and improve transportation and land use/economic development planning, included as Appendix B. ♦ Kern MPO updated its Public Participation Program to include expanded interagency coordination and public outreach efforts, including agencies involved in local planned growth and economic development. ♦ Kern – Chapter 4 (Strategic Investments) of Kern Destination 2030 RTP discusses “A New Vision” for land use/transportation link. Appendix B discusses land use planning issues at greater length. ♦ In Kern County, the San Joaquin Valley Blueprint Planning Process is discussed in the RTP Update as just one example of this coordination. As progress in the Blueprint Planning Process is made, recommendations and highlights will be amended into future RTP updates. On March 2, 2007, an early consultation meeting is scheduled for participants including state and federal resource agencies, as well as other interested parties, to discuss the environmental impact of future urbanization. This information will be incorporated into the current and future RTP Land Use Assumptions.</td>
<td></td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>FISCAL CONSTRAINT</strong></td>
<td>✦ No significant changes in SAFETEA-LU.</td>
<td>✦ Review and reaffirm fiscal constraint of transportation plans and programs as they are updated or amended.</td>
<td>✦ Fiscal constraint is documented in Kern MPO’s 2007 RTP(Ch 5) and 2007 FTIP.</td>
</tr>
<tr>
<td>23 U.S.C. 134/49 U.S.C. 5303(i)(2)(C); (j)(1)(C); (j)(2)(B); and (j)(3)(D) and 23 U.S.C. 135/49 U.S.C. 5304(f)(5); (g)(4)(E); and (g)(4)(F)]</td>
<td>✦ Confirm revenues and costs related to system operations and maintenance activities covered in transportation plans and programs.</td>
<td>✦ Revenues and costs associated with maintenance and operations activities are reflected in the fiscal constraint demonstration. Per follow-up with FHWA staff from the August 2006 Valley RTP Workshop, the State’s annual expenditure report will be used at the minimum to estimate local agency maintenance and operations costs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✦ Refer to the FHWA/FTA Interim Guidance on Fiscal Constraint of Transportation Plans and Programs (<a href="http://www.fhwa.dot.gov/planning/fcindex.htm">http://www.fhwa.dot.gov/planning/fcindex.htm</a> or <a href="http://www.fta.dot.gov">www.fta.dot.gov</a> Grant Programs Transportation Planning &amp; Environment Statewide &amp; Metropolitan Planning)</td>
<td>• In response to FHWA’s comments at the August 2006 Valley RTP Workshop, the Kern MPO 2007 RTP Chapters 4 and 5 reflect the fact that there is more need out there than can be funded.</td>
<td></td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>ENVIRONMENTAL MITIGATION ACTIVITIES</strong></td>
<td>♦ Metropolitan and statewide transportation plans shall include “discussion” of environmental mitigation activities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Compare transportation plans with available State conservation plans, maps, and inventories.</td>
<td>♦ Environmental mitigation strategies are documented in part through the 2007 RTP Programmatic Environmental Impact Report prepared per the California Environmental Quality Act.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Metropolitan and statewide transportation plans shall include “discussion” of environmental mitigation activities.</td>
<td>♦ On March 2, 2007, an early consultation meeting is scheduled for participants including state and federal resource agencies, as well as other interested parties, to discuss the environmental impact of future urbanization, per state and federal conservation plans, maps, and inventories. This information will be incorporated into the current and future RTPs.</td>
<td>♦ Consultation with appropriate State agencies occurs as part of RTP and EIR process. Both are fully reviewed by all appropriate state agencies, with their comments incorporated in the Final EIR.</td>
</tr>
<tr>
<td></td>
<td>♦ This “discussion” shall be developed with Federal, State, and Tribal wildlife, land management, and regulatory agencies.</td>
<td>♦ Kern COG and its member agencies will continue to have discussions with the other Valley MPOs as well as state and federal resource agencies regarding efforts to compare the 2007 RTP with currently available conservation plans, maps, and other related resources. Kern MPO’s 2007 RTP will be amended to incorporate revised conservation plans, maps and other related documents as appropriate.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Compare transportation plans with available State conservation plans, maps, and inventories.</td>
<td>In response to FHWA comments at the August 2006 Valley RTP Update Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ Metropolitan and statewide transportation plans shall include “discussion” of environmental mitigation activities.</td>
<td>• A gap analysis was conducted and is incorporated in Appendix D of the Kern 2007 RTP.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>♦ This “discussion” shall be developed with Federal, State, and Tribal wildlife, land management, and regulatory agencies.</td>
<td>• VRPA Technologies completed a gap comparison of the current CEQA process and references to environmental mitigation throughout the NPRM. No requirements in SAFETEA-LU are not currently addressed (aside from expanding consultation and public involvement with Resource Agencies). Draft documentation was prepared and is included in the Kern MPO 2007 RTP.</td>
<td></td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------</td>
</tr>
</tbody>
</table>
| **CONSULTATION AND COOPERATION**              | • Consultation with non-metropolitan local officials and Tribal governments in the development of the long-range statewide transportation plan and STIP.  
• MPOs and State DOTs shall consult with local/Stare land use management, natural resource, historic and other agencies in the development of transportation plans. | • Continuing consultation with partners (i.e., State, MPOs, non-metropolitan local officials, and Tribal government) [no change].  
• Compare transportation plans with available conservation plans and maps and/or compare with available inventories of historic or natural resources. | • The 2007 RTP includes greatly expanded consultation efforts. The process is documented in the Kern MPO 2007 RTP, and is reflected in updated Public Participation Program. The 2007 RTP also includes listings of the agencies, organizations, and stakeholders contacted as part of the expanded consultation process.  
• Documentation of the 2007 RTP comparison with conservation plans, maps, and/or available inventories of historic or natural resources is included in the 2007 RTP Programmatic Environmental Impact Report.  
At the August 2006 Valley RTP Update Workshop  
• FHWA stated that consultation involves seeking out comment from resource agencies and comparing maps, plans, etc. While direct contact needs to be documented, there is no requirement to obtain concurrence from other agencies. Consultation agencies should not have the ability to hold up the Plan due to lack of response. The consultation requirement emphasizes more communication between agencies, and that FHWA is looking for MPOs and the planning community to be leaders in identifying agencies to contact and the process for consulting. In addition, the consultation and public participation requirements in SAFETEA-LU is being addressed as part of the Public Participation Program update.  
• Garth Hopkins (Caltrans) developed and provided a list of the resources agencies at the State and Federal levels for consultation purposes and is being used as part of the review process. |
<p>| <strong>Transportation Plans</strong>                       | [23 U.S.C. 134/49 U.S.C. 5303(g) and (i)(4) and 23 U.S.C. 135/49 U.S.C. 5304(f)(2)] | | |</p>
<table>
<thead>
<tr>
<th>Statutory Planning and Programming Requirements</th>
<th>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</th>
<th>Potential SAFETEA-LU “Closing the Gap” Steps</th>
<th>Kern COG MPO Gap Closure Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIR QUALITY CONFORMITY [23 U.S.C. 134(i)(3)]</td>
<td>Requirement to determine conformity is now every four years (instead of every three years).  Allowance of a 1 year “grace period” before conformity lapse (in certain instances).</td>
<td>Determine conformity on a SAFETEA-LU compliant transportation plan and TIP (beginning on and after July 1, 2007).</td>
<td>The 2007 RTP Update includes a SAFETEA-LU compliant Air Quality Conformity Determination.</td>
</tr>
<tr>
<td>PUBLIC TRANSIT ELEMENT</td>
<td>Coordinated Public Transit-Human Services Transportation Plan (per 49 U.S.C. 5310, 5316, and 5317).</td>
<td>Entity responsible for developing the Coordinated Public Transit-Human Services Transportation Plan is not defined in SAFETEA-LU. Solicitation for projects from plan to be done in cooperation with MPO.</td>
<td>The Kern MPO 2007 RTP documents the region's efforts, progress, and schedule for developing and completing the SAFETEA-LU required Coordinated Public Transit-Human Services Transportation Plan. Preparation of Kern Coordinated Human Services Transportation Plan has begun and will be prepared and adopted by June 30, 2007. NOTE: There is no language in the interim guidance or follow-up information that has been provided from FHWA CA division that indicates this item needs to be “developed, adopted, and implemented” prior to the adoption of the RTP.</td>
</tr>
<tr>
<td>SJ V Addition</td>
<td>Two additional criteria added to Basic criteria for rating projects: 4) Economic Development Potential 5) Reliability of Ridership and Cost Forecasts</td>
<td>“Economic Development” should be added as a criterion for application and selection of New Starts projects. An analysis of the reliability of ridership and cost forecasts is required. Alternatives Analysis” is defined in SAFETEA-LU as a study using an established planning process. Note: The “Small Starts” set-aside is reserved for projects that use less than $75 million in Federal funds and have a total cost of less than $250 million. The Small Starts program has a simplified selection criteria and implementation process.</td>
<td>Local transit will be modifying their Long Range Transit Plans and grant applications to address the new criteria as appropriate.</td>
</tr>
</tbody>
</table>

---

1 Section 6011 of SAFETEA-LU contained other transportation conformity provisions. USDOT and USEPA issued joint “Interim Guidance for Implementing the Transportation Conformity Provisions in the SAFETEA-LU” on February 14, 2006. The Interim guidance is available at: http://www.fhwa.dot.gov/environment/conformity/sec6011guidmemo.htm
<table>
<thead>
<tr>
<th>Statutory Planning and Programming Requirements</th>
<th>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</th>
<th>Potential SAFETEA-LU “Closing the Gap” Steps</th>
<th>Kern COG MPO Gap Closure Efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRANSPORTATION FACILITIES</strong>&lt;br&gt;[23 U.S.C. 134/49 U.S.C. 5303(i)(2)(D); 23 U.S.C. 134/49 U.S.C. 5303(k)(3); 23 U.S.C. 135/49 U.S.C. 5304(i)(7); and 23 U.S.C. 135/49 U.S.C. 5304(i)]</td>
<td>✦ Operations and management strategies in metropolitan transportation plans and long-range statewide transportation plans.</td>
<td>✦ Determine if the current transportation plan adequately address operations and management strategies (for both the transit and highway network).&lt;br&gt;✦ Develop/confirm performance measures for the transportation system operations and management, with the focus on mobility and safety.&lt;br&gt;✦ Consider and develop strategies and costs (capital and operational investment) to preserve the existing transportation system.</td>
<td>✦ The 2007 RTP will include determinations from local agencies that the operations and management strategies included in the 2007 RTP are adequate. Operations and management strategies were addressed in the “Roads to Ruin” report, which was incorporated in Chapter 5 of the RTP by reference. The report calls for a local transportation bond measure to ensure adequate funding for operations and maintenance over the timeframe of the 2007 RTP. Additionally, the “Roads to Ruin” report is currently being revised, with an anticipated release for public review date of Summer 2007, prior to placing the bond measure on the ballot.&lt;br&gt;✦ Performance measures included in the 2007 RTP reflect measures that address operations and maintenance issues, as well as mobility and safety.&lt;br&gt;✦ Costs to preserve the existing transportation system is reflected in the fiscal constraint documentation, based on State expenditure reports on how much cities and counties spend on local street maintenance.&lt;br&gt;✦ Strategies to preserve the existing transportation system are discussed in the RTP, and based on city and county input as derived from Kern MPO’s capital improvement program.&lt;br&gt;✦ Chapter 4, Strategic Investments, of 2007 Destination 2030 RTP incorporates this discussion.&lt;br&gt;✦ Kern MPO will specifically coordinate discussion with its respective local agencies to determine if the operation and management strategies included in the 2007 RTP Update are adequate. Efforts will be made to include any additional strategies that are suggested in this process.</td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>♦ Congestion Management Process in Transportation Management Areas (formerly known as Congestion Management System (CMS) in ISTEA/TEA-21).</td>
<td>♦ Review the existing CMS and its application within the TMA planning process and the metropolitan transportation plan(s). ♦ Review State laws, rules, and regulations to ensure consistency with the SAFETEA-LU revised statutory language on the Congestion Management Process. ♦ Identify operations partners (e.g., traffic operations centers, ITS, and traffic engineers). ♦ Identify travel demand reduction and operation management strategies to be implemented. ♦ Work with partners to develop projects, priorities and schedule for implementation.</td>
<td>♦ The 2007 RTP includes the existing Congestion Management Program, an assessment of its consistency with SAFETEA-LU, and the schedule for implementation. ♦ The 2007 CMP also identifies the relevant stakeholders in the CMP. ♦ The 2007 Destination 2030 RTP Congestion Management Plan states that member agencies (as relevant stakeholders) have adopted the document. The Destination 2030 RTP evaluates the existing CMP incorporating the items in the left column and notes those that are already adequately addressed. Some level of update may be required as an amendment in FY 2007-08. ♦ Additionally, Kern MPO’s 2007 RTP Environmental Justice section (Chapter 6) incorporates a process developed by elderly, disabled, minority, and low income stakeholders to provide input to the development of the 2007 RTP. One of the criteria is the level of congestion in environmental justice target areas.</td>
<td></td>
</tr>
<tr>
<td>Statutory Planning and Programming Requirements</td>
<td>Key Changes Between ISTEA/TEA-21 and SAFETEA-LU</td>
<td>Potential SAFETEA-LU “Closing the Gap” Steps</td>
<td>Kern COG MPO Gap Closure Efforts</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>INTERESTED PARTIES AND PARTICIPATION [23 U.S.C. 134/49 U.S.C. 5303(i)(5), (i)(6), and (j)(4) and 23 U.S.C. 135/49 U.S.C. 5304 (f)(3) and (g)(3)]</td>
<td>♦ Definition of “interested parties” to be engaged in statewide and metropolitan transportation planning has been expanded. ♦ Participation Plan (required for MPOs) - Shall be developed in consultation with “interested parties.” - Publish or make available for public view transportation plans, STIPs and TIPs. - Hold public meetings at convenient and accessible times and locations. ♦ Publication of statewide and metropolitan transportation plans, and TIP... to the maximum extent practicable. - Make information available in electronically accessible formats (e.g., world wide web). ♦ Employ visualization techniques to depict statewide and metropolitan transportation plans.</td>
<td>♦ State DOTs and MPOs should review current public involvement plan/procedures and make necessary changes to reflect SAFETEA-LU provisions. ♦ Confirm that stakeholders, interest groups, general public had/have opportunity to comment on public involvement plans and transportation plans/programs. ♦ Where not apparent, give groups/general public opportunity to review/comment; update or amend participation plan, as needed. ♦ To maximum extent practicable, statewide and metropolitan transportation plans and programs (with the exception of the STIP) shall be available in electronic formats (e.g., on a website). ♦ Refer to FHWA Scenario Planning website (<a href="http://www.fhwa.dot.gov/planning/scenplan/index.htm">www.fhwa.dot.gov/planning/scenplan/index.htm</a>) or Land Use/Transportation Tool Kit and (<a href="http://www.fhwa.dot.gov/planning/landuse/tools.cfm">www.fhwa.dot.gov/planning/landuse/tools.cfm</a>) for examples of visualization techniques.</td>
<td>♦ The Kern MPO is updating their Public Participation Program (PPP) to comply with SAFETEA-LU requirements. ♦ The updated Public Participation Program includes documentation of the process and stakeholders involved in developing and commenting on the PPP. ♦ The process for updating the PPP includes opportunities for agencies and the public to comment prior to the required 45-day comment period. ♦ All materials associated with the 2007 RTP are available in electronic format and posted on Kern MPO’s website (<a href="http://www.kerncog.org">www.kerncog.org</a>) in an easily accessible format. ♦ Kern COG makes extensive use of visualization techniques, from maps created using geographic information systems, which show the location of projects, to sophisticated 3D animation of major projects, such as the Westside Parkway (see <a href="http://www.bakersfieldfreeways.us/">http://www.bakersfieldfreeways.us/</a>). August 2006 Valley RTP Update Workshop • In response to FHWA comments, Kern COG’s process demonstrates a good faith effort, and the updated PPP includes general language on the approaches Kern COG uses. The PPP process was documented and incorporated as part of the development of the RTP.</td>
</tr>
</tbody>
</table>
Kern County 2007 Destination 2030 Regional Transportation Plan
Environmental Documentation Compliance with
SAFETEA-LU Planning Requirements

Introduction

This section documents how the Kern County 2007 Destination 2030 Regional Transportation Plan (RTP) and its Programmatic Environmental Impact Report (PEIR) complies with SAFETEA-LU environmental requirements set forth in the Federal Notice of Proposed Rulemaking (NPRM) Section 450.104, Section 450.318 (including Appendix A to Part 450) as referenced, and Section 450.322(f)(7). NPRM provisions are provided in italics below followed by the corresponding compliance response.

A. Section 450.104 – Environmental Mitigation

Environmental mitigation activities means strategies, policies, programs, actions and activities that, over time, will serve to avoid, minimize, rectify, reduce, or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. The human and natural environment includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The environmental mitigation strategies and activities are intended to be regional in scope, even though the mitigation may address potential project-level impacts. The environmental mitigation strategies and activities must be developed in consultation with Federal, State, and Tribal wildlife, land management, and regulatory agencies during the statewide and metropolitan transportation planning processes and be reflected in all adopted transportation plans.

1. Required Environmental Mitigation Activities

SAFETEA-LU requires that “a long-range transportation plan shall include a discussion of the types of potential environmental mitigation activities and 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 plan.” The EIR for the 2007 RTP described strategy-level mitigation measures that could minimize significant adverse impacts.

The 2007 RTP EIR mitigates environmental impacts to the maximum extent feasible. The adopted mitigation measures were typical for transportation and development projects and they have been demonstrated to be effective. A Mitigation and Monitoring Reporting Program for the 2007 RTP EIR was also adopted in accordance with CEQA requirements to ensure implementation of the adopted mitigation measures to reduce significant effects on the environment. The entire list of mitigation measures and the corresponding Mitigation Monitoring Program is reflected in Table ___ of the 2007 FTP Final EIR.

2. Environmental Consultation
The federal guidance for implementing SAFETEA-LU (71 FR 33521; June 9, 2006) identified consultation requirements as including, but not limited to, providing timely information, reasonable public access, and adequate public notice. During the Kern County 2007 RTP Programmatic Environmental Impact Report planning process, the Kern County Metropolitan Planning Organization (Kern Council of Governments) notified all local agencies, other regional agencies, the California State Office of Planning and Research – State Clearinghouse, which distributes California Environmental Quality Act EIR documents to affected State resource agencies, numerous stakeholders (land use management, natural resource, environmental, historic preservation, and conservation agencies), and tribal representatives, as identified in SAFETEA-LU.

The California Environmental Quality Act is the State of California environmental review process, which requires thorough environmental assessment of projects and programs that may impact the environment. In California, an updated RTP is defined as a project, which will have environmental impacts. As a result, responsible agencies such as Kern Council of Governments, must prepare a Programmatic Environmental Impact Report for its RTP. Kern Council of Governments first prepared an EIR for its RTP in 1994 and has subsequently reaffirmed that EIR. As required by the California Environmental Quality Act, the 2007 Draft EIR includes a listing of the organizations and persons consulted during the environmental planning process. Further, the 2007 Final EIR will include a list of commenting individuals and organizations and will provide responses to the letters received on the Draft 2007 RTP EIR during the comment period.

Notifications were also sent to every federal agency involved in approving or funding projects listed in the RTP as required by CEQA. The Notice of Preparation (NOP) provided key state and federal agencies and the California Office of Planning and Research – State Clearinghouse with sufficient information, including descriptions of projects and the potential environmental impacts so as to enable the responsible agencies to provide a meaningful response. The NOP also included a description of the RTP (project), a map of the region impacted by the RTP, and the probable environmental effects of the project. Kern Council of Governments also provided notice to all counties and cities within the San Joaquin Valley, to those counties bordering Kern County, all public agencies with jurisdiction in the project area, and all other interested parties. The NOP is included in Section ___ of the 2007 Draft EIR. These consultation procedures are the standard practice of Kern Council of Governments.

In addition to the extensive consultation and coordination process followed in the preparation of the 2007 RTP EIR, Kern Council of Governments also followed a rigorous public review process required through the California Environmental Quality Act. When the NOP was sent to the agencies described above, a 30-day review and comment period was provided as required by CEQA. In addition, when the Draft EIR was completed, a notice was published in newspapers of general circulation in the Kern County region to notify the public that the Draft EIR was available for review and comment. A Notice of Completion (NOC) was also prepared and sent along with copies of the Draft EIR to the State Clearinghouse, the federal resource agencies, and other agencies or stakeholders that requested a copy of the Draft EIR.

Once comments are received from agencies or the public during the mandatory 45-day review period, the comment letters and a response to each comment will be incorporated in the Final EIR. Each of the commenting agencies or individuals will receive a copy of the Final EIR to notify them that their comments were received, responded to, or used by Kern Council of Governments to identify
changes to the Draft EIR. The Final EIR will then be processed through the Transportation Planning Policy Committee of the Kern COG Policy Board for review and certification prior to adoption of the 2007 RTP. During review of the Final EIR by the Kern COG Policy Board, the public and other interested agencies will be provided the opportunity to provide additional comment on the EIR.

The EIR for the 2007 Destination 2030 Regional Transportation Plan was placed on Kern Council of Government’s website at www.kerncog.org. The website provided access to each individual issue area, as well as mitigation measures and all related maps. All of the documents were made available in portable document format (pdf), an electronically accessible format, on the World Wide Web. Public notices included references to the electronic accessibility of the EIR documents and CDs of the RTP and EIR were produced and distributed at required points in the EIR development process. The EIR and related environmental documents will remain available on the Kern COG website.

B. Section 450.318 – Transportation Planning Studies and Project Development and Appendix A to Part 450

(a) The MPO, State and/or public transportation operator may undertake a corridor or subarea planning study as part of the metropolitan transportation planning process. The results of these transportation planning studies may be incorporated into the overall project development process to the extent that they meet the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321 et seq.) and associated implementing regulations (23 CFR part 771 and 40 CFR parts 1500-1508). Specifically, these corridor or subarea studies may be used to produce any of the following for a proposed transportation project:

1. Purpose and need or goals and objective statement(s);
2. General travel corridor and/or general mode(s) definition (i.e., highway, transit, or a highway/transit combination);
3. Preliminary screening of alternatives and elimination of unreasonable alternatives;
4. Description of the affected environment; and/or
5. Preliminary identification of environmental impacts and environmental mitigation.

(b) Publicly available documents produced by, or in support of, the transportation planning process described in this subpart may be incorporated by reference into subsequent NEPA documents, in accordance with 40 CFR 1502.21, to the extent that:

1. The NEPA lead agencies agree that such incorporation will aid in establishing or evaluating the purpose and need for the Federal action, reasonable alternatives, cumulative or other impacts on the human and natural environment, or mitigation of these impacts; and
2. The corridor or subarea planning study is conducted with:
   (i) Involvement of interested State, local, Tribal, and Federal agencies;
   (ii) Public review;
   (iii) Continual opportunity to comment during the metropolitan transportation planning process and development of the corridor or subarea planning study;
   (iv) Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document; and
   (v) The review of the FHWA and the FTA, as appropriate.
(c) By agreement of the NEPA lead agencies, the above integration may be accomplished through incorporating the subarea or corridor planning study into the draft Environmental Impact Statement or Environmental Assessment and other means of incorporation by reference that the NEPA lead agencies deem appropriate. Additional details on linkages between the transportation planning and project development/NEPA processes in contained in Appendix A to this part.

SAFETEA-LU requires MPO and statewide transportation plans to include “discussion” of environmental mitigation activities. It further requires that this discussion shall be developed with Federal, State, and tribal wildlife, land management, and regulatory agencies. Kern Council of Governments conducted expanded consultation associated with the 2007 RTP EIR mitigation measures by forwarding the Draft EIR (and will subsequently forward the Final EIR) and Mitigation Monitoring Program to commenting agencies during the mandatory 45-day Draft EIR review period and prior to certification of the Final EIR and adoption of the Mitigation Monitoring Program. The mitigation measures were developed with the inclusion of Federal, State, and tribal wildlife, land management and regulatory agencies as discussed in Item A.1 above.

SAFETEA-LU also requires that MPOs consult with local and state land use management, natural resource, historic preservation and other agencies in the development of transportation plans. Consultations associated with the 2007 RTP EIR included several notices that were published in newspapers, posted at the County Clerk’s office, distributed to the California State Office of Planning and Research – State Clearinghouse, as well as being mailed to an extensive distribution list at key points during the environmental review process. These consultations included the following notices:

- Notice of Preparation of the EIR
- Notice of Completion of the Draft EIR
- Draft and Final EIR
- Notice of Determination.

The 2007 Destination 2030 RTP Draft EIR distribution list contained numerous contacts. It included local jurisdictions and land use management, natural resource, environmental protection, historic preservation, conservation and tribal representatives as identified in SAFETEA-LU. In addition, prior to the publication of the RTP, Kern Council of Governments staff met with local planning agencies to ensure that the projections to be used in the RTP were consistent with local plans and forecasts. These consultation practices are standard in the Kern region. In addition, Kern Council of Governments conducted expanded consultation associated with the 2007 RTP EIR mitigation measures consistent with its existing coordination and consultation processes described previously.

The RTP EIR forms the basis for further environmental analysis and assessment consistent with NEPA. The subsequent project-level environmental analysis, required to assess the environmental impacts of individual projects on the environment, use information and data contained in the RTP EIR to identify potential impacts and appropriate mitigation measures required to lessen the known or potential environmental impacts of the project. Conservation plans and maps as well as inventories of natural or historic resources are contained in the RTP EIR. The proposed plans and projects were mapped against existing conservation and resource maps on a regional scale. Individual project environmental documents under CEQA and NEPA can use these maps to identify potential impacts.
The following list of maps included in the 2007 RTP EIR depict Kern Council of Government’s consideration of transportation investment impacts on existing natural, historical and cultural resources:

- Land Use Patterns (local General Plan Land Use maps are incorporated by reference)
- Open Space and Recreational Lands local General Plan Open Space maps are incorporated by reference
- Location of “Prime or Important Farmland”
- Air Quality Districts, Basins, and Monitoring Stations
- Eligible or Designated Scenic Highways
- Biotic Communities
- Cultural Resources
- Geological Provinces
- Fault Hazard Zones
- Historic Earthquake Activity
- Mining Districts
- Active Mines
- Drainage Areas.

The mapping process compared the RTP with available conservation plans and inventories of historic and natural resources. RTP projects were compared to these resources to identify any potential for conflict between the proposed projects and the identified resources. The results of this comparison were discussed in the EIR as potential impacts.

The 2007 RTP EIR also contains an assessment of project alternatives and cumulative analysis, which are both required processes of CEQA. These sections in the RTP EIR provide the opportunity to identify the most viable and feasible project alternative while at the same time considering the incremental impacts of the proposed project when added to other closely-related past, present and reasonably foreseeable future projects.

SAFETEA-LU expanded the environmental factor by adding the phrase: “Promote consistency of transportation plan and transportation improvements with State and local planned growth and economic development patterns.” FHWA suggests the following potential steps to “close the gap”:

- MPOs/State Department of Transportation (DOTs) review current process to coordinate transportation and land use/economic development planning;
- Where needed, consider methods to improve or expand coordination;
- Identify implementation timeframes;
- Include appropriate activities in statewide/metropolitan transportation planning work programs, as well as in MPO Participation Plans.

The 2007 RTP EIR addressed how the transportation improvements in the RTP were consistent with State and local planned growth and economic development patterns. The 2007 RTP and EIR contain growth projections and associated policies that either encourage
or discourage growth in certain directions. For example, infill growth, neighborhood protection and growth adjacent to transit nodes were encouraged while “leap frog” development was discouraged. Kern Council of Government’s growth projections are required to be consistent with California’s Department of Finance projections for the County and the San Joaquin Valley. County and city General Plans are required to be consistent with regional plans, including the RTP and associated growth projections. Thus, a close relationship exists between the Kern Council of Governments planning and growth projection processes and local planning.

Prior to the publication of the RTP, Kern Council of Governments staff met with local planning agencies to ensure that the growth projections to be used in the RTP were consistent with local plans and forecasts. The 2007 RTP EIR analyzed the impact of the RTP plans, policies, projects and the anticipated growth. The EIR is being circulated for public comment and comments will be responded to as part of the CEQA process. No comments were received regarding the adequacy or consistency of the growth projections with State and local planned growth and economic development patterns. Corridor studies, project study reports, and other studies and reports that provide an environmental assessment and alternatives analysis are identified as necessary, in the 2007 RTP and EIR by reference. The studies and associated environmental review documents are typically provided for projects that are included in the Transportation Improvement Program. Environmental documentation provides detailed analysis of various project alternatives necessary to identify the most feasible and viable or “preferred” project alternative. The environmental review addresses each of the environmental issues identified in NEPA and CEQA. The associated consultation process is similar to the process discussed above in Item A.1.

C. Section 450.322(f)(7) Potential Environmental Mitigation Activities

A discussion of potential environmental mitigation activities and 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 metropolitan transportation plan. The discussion shall be developed in consultation with Federal, state, and tribal land management, wildlife, and regulatory agencies. MPO may establish reasonable timeframes for performing this consultation.

Reference Items A.1 and A.2 above.

Conclusion

Based on the above discussion, SAFETEA-LU requirements specified in the sections cited above have been met through development of the 2007 RTP EIR. The process applied to develop the 2007 RTP EIR, its contents and the detailed consultation processes described above, are consistent with and address federal SAFETEA-LU requirements. The RTP EIR provides a significant resource of information and data (consistent with NEPA requirements) upon which subsequent environmental analysis for individual improvement projects or programs can be prepared.
APPENDIX E

REGIONAL TRANSPORTATION PLAN CHECKLISTS
Regional Transportation Plan Checklist

(To be completed electronically Microsoft Word format by the MPO/RTPA and submitted along with draft RTP to the Calif. Department of Transportation)

**Name of MPO/RTPA:** Kern Council of Governments

**Date Draft RTP Completed:** March 6, 2007

**RTP Adoption Date:** May 17, 2007

**Environmental Document (ED) Certification Date (if applicable):**
May 17, 2007

**Identify where the ED is located (in the RTP, separate document, etc.):**
Stand-alone Environmental Impact Report

By completing this checklist, the MPO/RTPA verifies the RTP addresses all of the following required information within the RTP.

**A. Regional Transportation Plan Components**

1. Explain how the RTP provides a coordinated and balanced transportation system. Destination 2030 RTP provides Policy, Action and Finance Elements for both the Kern County region (Chapters 2, 4, and 5, respectively) and for the San Joaquin Valley (Appendix 1). Regional, state and federal issues are discussed throughout the document

2. Contains a short-term (10-year) time horizon. Table 4-1; thru-out

3. Contains a long-term (20-year) time horizon. Table 4-1; thru-out

4. Considers strategies to meet the seven planning factors specified in Title 23, 134(f) of the U.S. Code. (MPOs only) Page 1-3

5. Identify where the RTP describes how it is consistent with the Civil Rights Act as identified in Title 23, CFR § 450.316(b)(2). (MPOs only) Ch 6

6. Specify where the RTP identifies actions necessary to meet the ADA as identified in Title 23, CFR § 450.316(b)(3). (MPOs only) Ch 4 and Ch 6

7. Explain how the RTP considers, analyzes and reflects the following social and environmental effects. (MPOs only)
   a) Housing 3-3 et seq; 4-51
   b) Employment App. A; 3-4
   c) Community development App A
   d) Land Use 3-4; 4-61; App A
   e) Central city development goals N/A
B. Public Involvement

1. Includes a public involvement program that meets the requirements of Title 23, CFR § 450.316(b)(1) (MPOs only) 1-4: App C

2. Where there are Native American Tribal Governments within the RTP boundaries, the tribal concerns have been addressed and the Plan was developed in cooperation with the Tribal Government(s) and the Secretary of the Interior (Bureau of Indian Affairs) (Title 23, CFR § 134, 135 [e]). N/A

3. Identify where the RTP describes the public involvement efforts the MPO/RTPA used during the development of the Plan. 1-4: App C

4. Identify where the RTP describes the private sector involvement efforts the MPO/RTPA used during the development of the Plan. Ch 6 & App. C

5. The RTP describes the coordination efforts of MPO/RTPA with regional air quality planning authorities. (federal nonattainment and maintenance areas only) 3-4:4-57 et seq. Conformity doc

6. Specify where the RTP addresses efforts concerning interagency coordination. Ch 2 & 4; App. A

C. Policy Element

1. Identify where the regional transportation issues are addressed in the Policy Element. 2-2 thru 2-7

2. Specify where the regional needs are identified in the Policy Element. 2-2 thru 2-7

3. Identify where the regional transportation issues are described in the RTP. Ch 4

4. Identify where the objectives in the RTP are linked to a 10-year time frame. Ch 4 & 5; thru-out

5. Identify where the objectives in the RTP are linked to a 20-year time frame. Ch 4 & 5: thru-out

D. Action Element

1. Where are the transportation needs as discussed in the Policy Element identified in the RTP. Ch. 4

2. Specify where the RTP describes that it is consistent with the adopted regional transportation goals and policies? Ch 4 & 5

3. Identify where the RTP conforms to the projected revenues. Ch 5

4. Where does the RTP identify consistency with the
projected constrained financial revenues. Ch. 4

5. Includes a discussion of highways. 4-33 et seq

6. Includes a discussion of mass transportation. 4-41 et seq

7. Includes a discussion of the regional airport system. 4-54 et seq

8. Includes a discussion of regional pedestrian needs. 4-54 et seq

9. Includes a discussion of non-motorized transportation 4-39; 4-49 ct seq

10. Includes a discussion of rail transportation. N/A

11. Includes a discussion of maritime transportation. 4-49 et seq

12. Includes a discussion of goods movement.

E. Consistency Requirement

1. Where does the RTP state the first four years of the fund estimate is consistent with four year STIP fund estimate adopted by the CTC. 5-2

2. Where does the RTP state the goal, policy and objective statements is consistent with the Financial Statement. 5-2

3. Where does the RTP state the projects included in the RTIP are consistent with those included in the RTP. 5-2

4. Where does the RTP identify the projects included in the RTIP are consistent with the RTP. Table 4-1

F. Performance Measurement

1. Identify the objective criteria for measuring the performance of the transportation system located in the RTP? 2-2; 6-5 et seq.

G. Environmental Considerations

1. How were the environmental impact considerations of the RTP addressed (choose A or B):

   a) It was determined through the Initial Study (IS) process the projects in the RTP will not impact the environment, therefore a Negative Declaration was prepared.

   b) The MPO/RTPA prepared a program EIR in accordance with CEQA guidelines.

2. Specify where the RTP identifies how it will conform to the State Implementation Plan (SIP). (federal nonattainment and

RTP SUPPLEMENT CHECKLIST
maintenance areas only)

3. Specify where the RTP identifies TCM’s to be implemented in the region.
   (federal nonattainment and maintenance areas only)

4. Identify where the RTP addresses efforts to coordinate with the regional Air
   Pollution Control District and the Calif. Air Resources Board (CARB) to
   ensure conformity with the SIP.
   (federal nonattainment and maintenance areas only)

I have reviewed the above information and concur that it is correct and complete.

Ronald E. Brummett
Print Name

March 5, 2007
Date

Executive Director
Title
APPENDIX F

RESPONSES TO COMMENTS
David Paul Dominguez, Cultural Resource Manager for the Chumash Council of Bakersfield, provided comments at the April 19, 2007, public hearing. Representing the Native American interests, Mr. Dominguez indicated that the effects of urban sprawl on endangered species habitat, especially the California condor, is of concern. As the Cultural Resource Manager, he said that part of his responsibilities is to make sure that the burial sacred sites and cultural resources of Kern County are not destroyed.

Kern COG thanks Mr. Rodriguez for his participation in the process and for his comments. Kern COG shares his concerns for protecting Kern County’s environment as the population increases. The Program EIR prepared for the 2007 RTP provides numerous mitigation measures designed to protect biota and archaeological resources. Environmental analyses for development of specific transportation projects will also provide mitigation to protect these resources. Kern COG has set up a meeting on May 11, 2007 to establish an ongoing dialogue with tribes and native persons of the Kern region.

Dennis Fox, Kern County resident, provided comments at the April 19, 2007, public hearing. Mr. Fox indicated he was in favor of two expressways rather than a freeway along Seventh Standard, and that they should extend from I-5, cross Route 99, Route 65, and connect with Rt. 184. Mr. Fox also supports heavy rail as a public transportation option.

Kern COG thanks Mr. Fox for his participation and comments. Alternative 20 of the Bakersfield System Study reviewed a North Beltway alignment, which closely matches Mr. Fox’ proposal. The adopted Alternative 15 incorporated Alternative 20; proposed phasing of this Alternative is constrained by available funding. The Metropolitan Transportation Investment Study (MTIS), which is incorporated by reference in the Regional Transportation Plan, analyzed passenger rail. At this time, priority was given to fund expanded bus service that could provide a feeder network for future light- and heavy- passenger rail.

Dr. Arthur Unger, representing the Kern Kaweah chapter of the Sierra Club, provided comments at the April 19, 2007, public hearing. Mr. Unger said that mass transit helps decrease the amount of air pollution with its attendant increase in deaths, illness and health care costs. Mr. Unger asked that transit operators not have to get 25% of the cost of running mass transit from the farebox. He also asked that Kern COG respond to city and county development proposals indicating the consequences of less dense building practices.

Kern COG thanks Dr. Unger for his participation and comments. The 2007 RTP incorporates goals, policies, and an action element that support mass transit. To clarify the requisite farebox recovery ratio, Golden Empire Transit District is required to meet a
20% farebox recovery and all other Kern area transit agencies, such as Kern Regional Transit, are required to meet a 10% farebox recovery. Kern COG’s ongoing Blueprint visioning activities are based on a State grant that supports public education of the advantages of compact development. All Kern cities and the County planning department are participating in this process. In addition, the 2007 RTP contains a Land Use Element and an appendix addressing the nexus of transportation and land use, both of which are supporting evidence of Kern COG’s commitment to planning for the region.

Brent Moore, Stantec consulting firm, provided an emailed comment on April 2, 2007, regarding the Kern Community College District’s interest in preparing a Specific Plan for a proposed Northwest Campus. Mr. Moore is concerned that the County’s transportation planning outlook of the County differs from the 2007 Destination 2030 Regional Transportation Plan, and that Supervisor Maggard is proposed establishing another process outside the RTP, RTIP, and STIP planning processes.

Kern COG thanks Mr. Moore for his comments regarding the 2007 RTP. Mr. Moore’s comment references the recent decision by Kern County Planning Director Ted James to recommend denial of multiple developments in northwest Bakersfield based partly on an overburdened transportation infrastructure. The Metropolitan Bakersfield Circulation Element requires congestion levels of Level of Service (LOS) “C” or better, while the Congestion Management Program of the RTP only requires a LOS of “E” or better. If new cost estimates for transportation infrastructure are more costly than currently expected, it is likely that the jointly adopted Metropolitan Bakersfield General Plan Circulation Element standard would be impacted before the RTP’s standard.

Regional air quality modeling trends for Kern County show that less road construction results in an overall decrease in vehicle miles traveled and a corresponding decrease in fine and very fine reentrained fugitive dust and ozone emissions from on-road mobile sources. More lane miles tend to promote high vehicle speeds, which increase fugitive dust and nitrogen oxide emissions. At the same time, increased congestion could create more stop-and-go-traffic, negatively affecting carbon monoxide levels. Currently, carbon monoxide is being monitored at levels 30 percent below the federal standard, and levels are forecasted to decrease to less than half the standard by 2020, even with a major increase in congestion. This decrease is being driven by the successful Smog Check II program. Based on air quality/transportation modeling trends, it is unlikely that congestion levels could be raised sufficiently to exceed the federal monoxide standard (however, Kern COG will continue to monitor this issue). Thus, increased congestion will likely result in lower emission levels, and when the price of projects goes up and less lane miles are built, a decrease in associated on-road mobile source emissions from both construction and vehicle travel will be experienced.

Jake Sill of Tejon Ranch provided e-mail comments on April 19, 2007.

Mr. Sill commented, “Funding projects that create the greatest return in creating jobs and that reduce air pollution is an even more worthwhile goal. Prioritizing the funding
and building of already planned park-and-ride facilities will aid in accomplishing these worthwhile goals. Data on job growth suggests that park-and-ride facilities are more needed in southern (metropolitan) Bakersfield. Proper placement of park-and-ride facilities is key for maximum utilization and community benefit. Strategic placement of park-and-ride facilities that intercept standard and reverse commuters would benefit the environment by shifting the transportation mode away from single-occupancy vehicles to high occupancy vehicles. For park and ride facilities to be built in Kern County, it is important that the funding and programming of them be addressed and prioritized in Chapters 4 and 5 (Strategic Planning Investments and Financing Transportation, respectively) of the Regional Transportation Plan. Tejon Ranch urges a higher priority for funding and programming of park-and-ride facilities,” specifically at “the intersection of Highway 99 and Highway 119, and...the Arvin/Lamont area.”

Secondly, Tejon Ranch suggests integrating three mobility options into the Transportation Control Measures “Action Element”: 1) multimodal park and ride facilities; 2) comprehensive vanpooling program; 3) dedicated transit bus peak hour service routes.

Kern COG thanks Tejon Ranch for its participation and comments. Kern COG agrees that park-and-ride facilities provide an excellent mitigation for air pollution, and will continue to work with the cities, County, and Caltrans to encourage their funding and development. Kern COG also appreciates Tejon Ranch’s commitment to working with the regional transportation planning agency toward its goals of trip reduction and air quality improvements. Kern COG will be investigating funding opportunities, such as the Caltrans special planning grant program, in order to identify potential sites and demand.

Regarding Tejon Ranch’s suggestions for implementing the RTP’s Transportation Control Measures “Action Element”, these options and others are being assessed for their cost-effectiveness and feasibility as part of Kern COG’s Commuter Connection program. It will also be important to identify the lead agency to oversee implementation of all mobility options. In addition, Kern COG’s Congestion Management Program will be updated to encompass new transportation demand management opportunities.

Kern COG looks forward to working with Tejon Ranch and others in developing sufficient park-and-ride facilities that will benefit all of Kern County.

Soli Woods, Petro Travel Center – Wheeler Ridge, provided emailed comments on April 19, 2007. Petro Travel Center strongly supports all efforts and initiatives to prioritize construction of strategically placed park and ride lots with shuttles linking these lots to work sites to the south. In addition, the development of flexible transit routes transporting employees from their neighborhoods to the employment destination points will increase transit’s share of commute trip making.

Kern COG thanks Mr. Woods and Petro Travel Center for their participation and comments. Please see the above response prepared for Tejon Ranch.
Dave Bloom, Caltrans District 9, provided faxed comments on April 18, 2007.

- The 2007 RTP will be revised on page 1-4, last sentence to say: “In addition, the Kern region is part of California Department of Transportation Districts 6 and 9.”

- Regarding Mr. Bloom’s request that page 4-33 discuss CREST service information and tie-in with Inyo/Mono Transit, this information is provided on page 4-36.

- Appendix D contact list spreadsheet will be revised to replace Chuck Andrus with Brad Bettam, Caltrans District 9 Planning, and the blank with Craig Holste, Caltrans District 9 Maintenance and Operations.

Carol McDonald, Caltrans District 6, provided emailed comments on April 11, 2007. The full packet is provided at the end of this document. Ms. McDonald’s comments are summarized below, and specific responses are provided.

Ms. McDonald states: “A valley-wide freight movement project or projects may be a goal in the Kern Council of Governments’ Draft 2007 Destination 2030 Regional Transportation Plan. The Kern Council of Governments, with the seven other San Joaquin Valley Councils of Governments, needs to develop one or two feasible valley-wide freight movement projects in order to compete with other major population centers for available Trade Corridor Bond funds, or other available funds. The Kern Council of Governments, in coordination with the seven Metropolitan Planning Organizations (sic) in the San Joaquin Valley, have done an excellent job in working together on the San Joaquin Valley Goods Movement studies I, II, and III. San Joaquin Valley COGs have made progress in exploration of freight movement issues, policies and development of a truck model.”

Kern COG thanks Ms. McDonald for Caltrans’ support of the recent Goods Movement studies. Kern COG’s 2007-08 OWP provides limited funding for research projects, public workshops, and expanded discussion of goods movement in the 2007 RTP. Another (currently unfunded) work element will be undertaken when grant monies can be identified and procured.

- Executive Summary, page 1: “over the next 24 years” is inclusive of 2007 and all future years including 2030. The statement will be modified to include this explanation.
- Text within the “Conclusion”, page 3 will be modified to indicate the section where “Performance Measures” are discussed.
- Discussion and location map of Kern’s two air basins are fully discussed in RTP’s Environmental Impact Report.
- Kern COG concurs with Caltrans’ observation that “Future federal transportation bills may desire to address timeline issues and MPO comments in regard to the issues of meeting compliance deadlines.”
Table 2-1, Destination 2030 Goals and Policies

- The Aviation policy will be revised to include “transportation facility access to airports for the air traveler.”
- A Freight policy will be added to “identify regional freight projects and strategies in a cooperative effort with the other San Joaquin Valley COGs.”
- The policy at the top of page 2-4 will be modified to include “corridor studies” along with environmental studies and design engineering.
- A new Equity policy will be added to include “consultation with available tribal entities to avoid impacts of mitigation on transportation projects”.

- Mobility and Air Quality, page 3-5 – An explanation of PM 2.5 will be added.

- Figures 4-1 and 4-2, Levels of Service 1998. Figures 4-1a and 4-2a will be added to illustrate Levels of Service for 2005. This are the most current information available. Levels of Service for 1998 were provided as baseline, while Figures 4-3 and 4-4 show the LOS at the end of the RTP’s planning horizon.

- Table 4-2, Unconstrained Program of Projects, will be revised to include the proposed. “Tehachapi Rail double-track” Dedicated truck lanes along Route 58 between Bakersfield and Tehachapi are already included in Table 4-2.

- In regard to funding bicycle storage facilities via the Transportation Development Act Article 3 program: Kern Council of Governments administers the Article 3 program which provides funding to pay for bicycle and pedestrian safety programs, bicycle parking facilities and bicycle and pedestrian travel facilities. Each member agency is allowed up to $1,000 annually for the purchase and installation of bicycle parking racks OR up to $2,400 for the purchase and installation of bicycle lockers; it cannot claim both racks and lockers in one cycle. Both bicycle racks and bicycle lockers must be made available to the public and are generally installed in high bicycle use areas such as schools, parks and other public facilities. At this time, no member agency has made use of this program, although Kern COG anticipates this will change as alternative travel modes become more attractive in the current economic climate.

- Kern COG will include a policy and action measure to support and implement corridor preservation that is responsive to the discussion on Page 7-1 under Corridor Preservation. Kern COG accepts Caltrans’ suggested language, to wit: “A concerted effort between local jurisdictions, Kern COG, Caltrans, and the public is need to ensure the dedication of rights-of-way to facilitate the planned ultimate State Highway corridors, including interchanges, as well as major local arterials and collectors.”

- Kern COG will consider adding Caltrans’ eight projects on Routes 65, 99, 119, and 178 once these projects have been brought to its member agencies for review and discussion. Kern COG will need to identify purpose and need for each project and develop ranking priorities before future inclusion of these projects.
In coordination and cooperation with other San Joaquin Valley COGs, Kern COG will likely be amending the 2007 Destination 2030 Regional Transportation Plan to bring it into compliance with SAFETEA-LU. As part of this activity, Kern COG will consider revising the document to discuss transportation issues in terms of Kern County tribal communities. Kern COG thanks Caltrans for the comprehensive list of Native American associations located throughout the San Joaquin Valley and eastern Kern County.

Comments on the 2007 Destination 2030 Regional Transportation Plan draft document provided by the Caltrans' District 6 Office of Regional and Interagency Planning within the April 11, 2007, Caltrans letter:

- The Public Participation Appendix will include all relevant copies of surveys, presentations, workshop agendas, press releases, interviews and sign-up sheets upon final completion of the document.
- As noted above, Kern COG and the other valley COGs will be amending their documents to bring them into full compliance with SAFETEA-LU requirements. This will include discussions of General Consultation and Coordination Effort and Environmental Mitigation Discussion.
- The Summary Schedule of Public Notice and Public Hearings, Appendix B will be amended to state that updates will take place every four years, rather than three.
- The Public Participation Environmental Justice Resource list, Appendix C, will be updated include all relevant Native American tribal communities, organizations, groups and individuals with cultural knowledge.

Comments from the Caltrans' Native American Liaison Branch provided within the April 11, 2007, Caltrans letter:

Kern COG thanks NALB for its comments regarding its Public Participation Plan and Environmental Justice Policies and Procedures. Kern COG, along with the other Valley COGs will be amending its Regional Transportation Plan within the next year to bring the document into compliance with SAFETEA-LU requirements.

Comments provided by the San Joaquin Valley Air Pollution Control District in a letter dated April 19, 2007:

District Rule 9510 (Indirect Source Review) requires that transportation or transit projects reduce construction exhaust emissions by 20 percent for NOx and 45 percent for PM10, as compared to the statewide fleet average. If the required emissions reductions cannot be achieved through onsite measures, the rule requires payment of offsite mitigation fees.... The RTP identifies projects for streets and highway systems, urban and rural public transportation, rail, aviation, pedestrian and bicycle facilities. Many of the projects presented in the RTP may be subject to District Rule 9510. ...The District recommends that subsequent, project-specific environmental documents
characterize the emissions reductions achieved by complying with District Rule 9510. The District further recommends that potential costs of complying with Rule 9510 be considered during the transportation budgeting process.

*Kern COG thanks the Valley Air District for their participation and comments. By sharing the 2007 Destination 2030 RTP with our member agencies and Caltrans, your comments will be reviewed by these agencies and implemented at the project level. Short- and long-term air quality impacts are provided in the RTP Environmental Impact Report, as are appropriate mitigation measures.*
Dear Mr. Marquez,

Here are proposed mitigation measures and verbiage that we would like to see included into the update of the CTP to comply with SAFETEA-LU through 2009.

Prior to any ground disturbing activities, all earth-moving and excavation contractor employees shall attend a “tailgate” session informing them of the potential for inadvertently discovered cultural resources, and/or human remains and protection measures to be followed to prevent destruction of any and all cultural resources discovered on site. The orientation will be conducted by the Project Construction Manager, Project Archaeologist and a Cultural Resource Manager from a local California Native American tribe, and will include information regarding the potential for objects to occur on site, a summary of applicable environmental law, procedures to follow if potential cultural resources are found, and the measures to be taken if cultural resources and/or human remains are unearthed as part of the project.

As soon thereafter as possible, the Project Construction Manager will prepare and maintain on file a summary report verifying the following:

1) When and where the session took place.

2) Topics discussed in the session.

3) A session attendance roster signed by employees attending the tailgate session.
If potential cultural resources are unearthed on the project site, mitigation measures shall call for the project to be monitored by a local Native American tribe for the duration of any ground disturbing activities.

SB 18 refers to Public Resource Code §5097.9 and §5097.993 to define cultural places.

- Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (Public Resource Code §5097.9).

- Native American historic, cultural, or sacred site, that is listed or historic sites may be eligible for listing in the California Register of Historic Resources pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (Public Resource Code §5097.993).

These definitions can be inclusive of a variety of places. Archaeological or historic sites may include places of tribal habitation and activity, in addition to burial grounds or cemeteries. Some examples are village sites with evidence (artifacts) of economic, artistic, or other cultural activity. Religious or ceremonial sites and sacred shrines may include places associated with creation stories or other significant spiritual history, as well as modern day places of worship. Collection or gathering sites are specific places where California Native Americans access certain plants for food, medicine, clothing, ceremonial objects, basket making, and other crafts and uses important to on-going cultural traditions and identities; these places may qualify as religious or ceremonial sites as well as sites that are listed or eligible for listing in the California Register of Historical Resources.

Native American cultural places are located throughout California because California Native American people from hundreds of different tribes made these lands their home for thousands of years. Due to the forced relocation of tribes by the Spanish, Mexicans, and Americans, most tribes do not currently control or occupy the lands on which many of their cultural places are located. As a result, California Native Americans have limited ability to maintain, protect, and access many of their cultural places.

Respectfully Submitted,

David Paul Dominguez, Cultural Resource Manager
As noted in the News Review (3/7/07), the Ridgecrest Planning Department (RPD) and Planning Commission (RPC) are preparing an update to the City’s general plan. Kern Council Of Governments (KCOG) is involved as well as a newly formed General Plan Advisory Committee (GPAC). The Pleistocene Foundation (PF) must call attention to Indian Wells Valley’s (IWV) most valuable resource, “The Desert”. “The Desert” is conspicuously absent in The Kern County General Plan (KCGP) and how many millions of acres of Kern County are desert? The Foundation must call attention to this neglected resource to the newly formed GPAC committee that all decisions and recommendations by this committee should be considered with our most valuable resource in mind. This advisory committee (GPAC) will be the communication thread to the county, the public and the state. GPAC has a unique opportunity to correct the mistakes of the past, and to design and manage a comprehensive plan that protects and promotes the City as well as Indian Wells Valley.

It is an inconvenient truth and of paramount importance that the PF point out the fact that communication between the County, the City and the public has been extremely limited. In recent telephone conversations with two Kern County planners, it was discovered that they were not familiar with Base Realignment And Closure (BRAC) and had no knowledge of the Ridgecrest real estate frenzy. Neither planner knew that the RPC had already approved rezoning subdivisions for over 3,000 new units. And this number does not include individual construction permits. Likewise, in another personal telephone conversation with an RPC member, it became clear that he was not aware of the county’s action with the 80-acre “Millionaire Mom” subdivision on the outskirts of the Ridgecrest city limits. How can City and County planners do their jobs with limited resources and outdated information? The PF suggests routine presentations by the lead City Planner to the County Planners and visa versa.

The Land Use Element in the Ridgecrest General Plan is a reasonable document. The stated goals and objectives are encouraging. However, what is not included in the KCGP, “The Desert”, must be included in the Ridgecrest General Plan (RGP). Also we must point out that the Ridgecrest Planning Department at times does not adhere to or is
in direct violation of its own General Plan. The buffer zones between the urban and rural communities and open desert in IWV are being methodically picked apart and lost forever. This is in direct violation of the City’s General Plan Goal 1.3, “to provide for a city of the future that values...the quality of life” of its residents. The City’s General Plan is not consistent with current development plans approved by the County. The Land Use Element of the RGP clearly states in policy no. 1.1.1, that the City will “encourage development with emphasis on infill of vacant parcels” rather than to promote urban sprawl. We are alarmed about the rapid extinction of 5 acre and larger parcels in IWV, with little or no regard to areas within the City, which could be utilized more efficiently, with fewer negative consequences to IWV. But as pointed out earlier a “Desert Element” is very much needed in order to improve the efficiency of land use and provide for a well-integrated city and county.

Based on the data presented below and the photographs in the attachment, we know that the incremental effects of individual projects with the effect of past projects will add to the existing environmental problems which are already are adversely impacting our valley. CEQA rules and environmental issues are being undermined or ignored. The cumulative effects are very significant. GPAC and the City must stop the developers from doing end runs around the City and County Land Use laws.

In addition, we find that past rezoning changes were not in harmony with the existing neighborhoods and did not adhere or were in violation of the City General Plan. Goal no. 1.2, of the City General Plan “Land Use Element” encourages “compatibility of land use through the management of land use resources.” On page 1-12 of the City’s Land Use Plan under “Issues and Problems 1., “Ridgecrest has developed as, a group of unrelated subdivisions with no established urban form.” The city of Ventura General Plan, Section 3.1, has a goal of “infill first”. It is an important goal that larger cities are addressing because they have lost so much of their land resources. The city of Santa Barbara has a “Coastal Element”. The County and the City should take the hint. This committee must take into consideration that some of the population resides in more remote areas for the privacy, quietness, solitude, and blending in with the desert. Larger parcels provide a buffer zone between the city of Ridgecrest and the open desert. The current residents moved to this immediate area to enjoy a low-density resident lifestyle.

A major concern of IWV residents is and should be the responsible growth of the area with “recognition of the limits placed on growth by limiting environmental factors particularly air quality and ground water.” Fugitive dust and sand storms are one of the most significant and long-term effects brought to the valley again by BRAC, greedy developers and poor planning. Just last week, desert winds and loose sand associated with the hundreds of acres of newly disturbed soil brought visibilities down at times to 200 feet or less. In addition to sand storms, IWV dust storms are comparable to Owens Valley dust storms. And it is well documented by many scientific studies that the mineral signatures of both valleys have similar concentrations of arsenic and other salts. The Great Basin Air Pollution Control District in a report “Survey of Reported Health Effects of Owens Lake Particulate Matter” by Sarah Kittle (1/14/2000). Page 6 Conclusions. “Particulate matter has been shown in several recent scientific studies to cause various adverse health effects...” “These studies show symptoms occur even when PM10 levels are within federal standards.” The attached photos are submitted as evidence of fugitive dust and sand generated in the valley last week. The first photo shows the
residual airborne dust and sand from 50+ mph winds generated earlier in the day (2/25/07 3pm). The second photo shows the clarity of the local sky conditions the following morning (2/26/07 8:30 am). Local high winds are a common occurrence and well documented in the valley. Because of BRAC, greedy developers, and poor planning, local fugitive dust events and sand storms are now more common.

Is there updated air quality data that documents this visibility issue? Are the PM10 samplers and other air monitoring equipment located in the best or at least reasonable locations? We suggest that this issue be addressed in order to help both Planning Departments environmental databases. The Pleistocene Foundation offers a location with free power and labor to operate air-monitoring equipment.

Personal sightings of Desert Tortoise and Burrowing Owls have occurred within ½ mile of the intersection of Lumill Street and Laura Avenue within the last year. Many locals jog, bike and walk in the area and should be interviewed in order to obtain a better biological database.

Noise within the Valley has also increased and should be addressed. Sources such as military aircraft, motorcycles, off-road vehicles and vehicle traffic are on the rise. It is recommended that an updated noise study be done on both the east and west side of the City. The Pleistocene Foundation offers a location with free power and labor to operate noise-monitoring equipment for the eastern portion of the City.

Traffic, both on and off-road has increased. We recommend an updated traffic study, which would take into account the off-road use of Desert Resources by Valley non-residents as well as users from Ridgecrest and its surrounding communities.

Water quality in the valley has been steadily degrading over the last decade. The Indian Well Valley Water District is now routinely chlorinating at some of their wells. According to scientific data presented to the Naval Air Weapons Station Restoration Advisory Board, the aquifer is lowering 1 to 2 foot per year. Recent scientific isotope studies indicate that current drinking water is 40,000-year-old water and it is not being replenished. This is another significant concern for the community. Water is the lifeblood of IWV and is another cumulative effect not being adequately addressed in the City or County General Plan. Without proper management, our water resources will not be able to sustain our current community, let alone the newly approved rezoning subdivisions by the City and the County.

CEQA cannot function without the participation of those familiar with IWV environmental concerns. It is our conclusion that cumulative effects are not being addressed. To ignore the facts does not change the facts. It is the fundamental intent of our state and federal environmental laws to provide the public with all necessary information on environmental impacts in order to ensure planning decisions are based on data that are factual and reliable. The PF recommends an updated city and county Environmental Impact Report.

As noted previously “The Desert” is a resource element that is not adequately addressed in the KCGP. However, in section i-6 of the City of Ridgecrest General Plan Amendment, a goal is outlined as the “identification and development of Ridgecrest as the regional center of the Mojave Desert” which implies that Ridgecrest growth will be a consideration of this important resource. The PF is requesting that the RPD adhere to the goals of the City and make evaluating and protecting our Desert resources a priority.
Kern County, the Planning Commission and the Advisory Committee have a unique opportunity to design and manage a unique valley area that both protects and promotes the Desert. We highly recommend a moratorium on any further rezoning issues until the Planning Commission has the opportunity and is given the resources it needs to provide a fair and adequate “Plan” for the citizens of Indian Wells Valley.

Raymond Kelso
Director

Cc Kern County COG
Kern County Planning Department
Ridgecrest Planning Department
Ridgecrest General Plan Advisory Committee
Supervisor McQuiston
East College Heights Home Owners Association
Sierra Kelso Environmental Consultant
> From: Moore, Brent
> Sent: Monday, April 02, 2007 2:40 PM
> To: 'brummett@kerncog.org'
> Subject: FW: Follow-up to our phone call re: Kern transportation
> Issues
> > Hello Ron: We are working with Kern Community College District in
> > preparing a Specific Plan for a proposed Northwest Campus. However,
> > due to Ted James no confidence opinion of Regional Transportation
> > Planning he has notified us that the college plan is not possible
> > under the current Transportation Planning Outlook. When I reviewed the
> > Draft Regional Transportation Plan it appears to provide a
> > transportation future completely different from Ted's. The Pdf below
> > is a Memo from Supervisor Mike Maggard establishing yet another
> > process outside the RTP, RTIP, STIP planning process. Can you shed
> > some light on this matter?
> >
From:    "Jake Sill" <jsill@tejonranch.com>
To:      <mbeardslee@kern cog.org>
Date:    4/19/2007 3:32:37 PM
Subject: Tejon Ranch RTP Comments

Dear Marilyn,
Attached are Tejon Ranch's comments. I spoke with Darrel this morning regarding the deadline. I need to get approval before this becomes official Tejon Ranch comments. Darrel said to send it in today and then I will send you any minor modifications tomorrow after internal approval. We also have an exhibit that is to be attached. Thank you for your understanding.
Sincerely,
Jake Sill

Jake Sill
Tejon Ranch Company
P.O. Box 1000
Lebec, CA 93243
(661) 663-4255 Direct
(661) 428-8763 Mobile
jsill@tejonranch.com <mailto:jsill@tejonranch.com>

CC:      <childebrand@kern cog.org>, "Barry Hibbard" <bhibbard@tejonranch.com>
Tejon Ranch Comments on Kern COG’s Regional Transportation Plan

The Kern Council of Governments Regional Transportation Plan is a long term plan for the region’s transportation network. Tejon Ranch wants to help Kern COG achieve the common goal of providing transportation solutions to Kern County employees that reduce air pollution and reduce single occupancy vehicle trips. Below are Tejon Ranch’s comments specifically relating to Kern COG’s Regional Transportation Plan (RTP).

The economic landscape of Kern County is changing. Traditional sectors such as oil, defense and agriculture are experiencing limited job growth. As Kern County’s population continues to grow, needed job growth will come from non traditional sectors of the economy. The transformation of Kern County’s economic and employment base is similar to what occurred in Riverside and San Bernardino Counties over the last two decades. Riverside and San Bernardino diversified their economies by investing in job creation within the manufacturing and logistics sectors. Today, one in twelve jobs within Riverside and San Bernardino Counties is related to logistics and manufacturing; and the transformation to a logistics and manufacturing base has had a positive impact on their economies.

Similar to these counties, Kern County is in a unique position to facilitate the creation of jobs in the logistics and manufacturing sectors due to its proximity to the LA and Long Beach Ports and the surging long term growth of imports through the ports. In order to facilitate job creation, Kern County should identify and plan for the infrastructure necessary to create sustainable jobs.

Funding projects that create the greatest return in terms of job creation is a worthwhile goal for Kern County. Funding projects that create the greatest return in creating jobs and that reduce air pollution is an even more worthwhile goal. Prioritizing the funding and building of already planned park-and-ride facilities will aid in accomplishing these worthwhile goals.

Data on job growth suggests that park-and-ride facilities are most needed in southern Bakersfield at funnel points between the employees residence and the locations where they are employed. Southern Bakersfield is ideal because it is experiencing, and will continue to experience, substantial housing growth and longer commute distances for residences because of the outlying location of housing growth. In addition, southern Kern County is a significant employment region. Several examples include the petroleum industry in the Taft area, Taft College, and Tejon Industrial Complex. Employees in these job clusters who live in Bakersfield share a common commute; they funnel through the intersection of Highway 99 and Highway 119. Employees from the Arvin and Lamont area are likely to funnel through the intersection of Highway 184 and Highway 223 when commuting to employment clusters to the south, and metropolitan Bakersfield to the north (see Exhibit A for diagram). Further, the number of Kern County residents commuting to Los Angeles County for employment is increasing. Proper placement of park-and-ride facilities is key for maximum utilization and community benefit. Strategic placement of park-and-ride facilities that intercept standard and reverse commuters would benefit the environment by shifting the mode of transportation away from single occupancy vehicles to high occupancy vehicle resulting in a reduction of vehicle miles traveled and air pollution.
Job creation is occurring in southern Kern County, particularly at Tejon Industrial Complex (TIC). Nearly 1,000 people are already employed at TIC and it is estimated that 6,000 jobs will be created at build out of the industrial park. Employees need cost effective solutions for their commute and Kern County needs solutions to reduce air pollution.

The Regional Transportation Plan (RTP) acknowledges the reverse commute that is present in Kern County. The reverse commute creates unique challenges for public transit and car/vanpool transportation because of the scattered departure and destination points of potential commuters. TIC and other clustered employment centers in southern Kern County create a unique solution to the reverse commute challenge because of their employment density. Established funnel points for employees coming from residential areas to employment clusters in Kern County have been identified at the intersection of Highway 99 and Highway 119 and the intersection of Highway 184 and Highway 223 (see Exhibit A for diagram). The added benefit of park-and-ride facilities at these locations would result in the reduction of vehicle miles traveled and resultant air pollution. In addition, the funnel points described above also support a more traditional shared ride commute from the outlying areas to the metropolitan areas of Bakersfield.

For park-and-ride facilities to be built in Kern County, it is important that the funding and programming of them be addressed and prioritized in Chapters 4 and 5 (titled Strategic Planning Investments and Financing Transportation respectively) of the Regional Transportation Plan. Tejon Ranch urges a higher priority for funding and programming of park-and-ride facilities.

The RTP’s Congestion Management Program can effectively address the transportation needs of job creation centers and their employees within Kern County by integrating three mobility options into the Transportation Control Measures “Action Element”. These options are:

- Multimodal park-and-ride facilities
- Comprehensive vanpooling program
- Dedicated transit bus peak hour service routes

In Chapter 4, Table 4.1 Constrained Program of Projects, planning for 750 park-and-ride slots is mentioned. Demand for the 750 slots will likely come from the job creation centers in southern Kern County. The employment clusters of southern Kern County are an untapped opportunity for public transit to reduce the dependence on single occupancy vehicles and to reduce air pollution.

An informal survey of employees at TIC in 2006 highlights the demand for park-and-ride facilities and the opportunity for public transit. Of the employees who responded, 71% said they would be willing to pay for transportation from a park-and-ride facility. When asked where the best location for a park-and-ride facility would be, nearly half cited the intersection of Highway 99 and Highway 119, and over a quarter cited the Arvin/Lamont area.
Public transit, in partnership with private business, has been successful in other municipalities. For example, San Mateo and Santa Clara Counties run extensive dedicated shuttles from train stops (funnel points) directly to commuter work locations; the result being a win for public transportation and private enterprise. Utilization of train services increased because the commuting public was better served.

Finally, Tejon Ranch and its staff wish to work closely with Kern County Council of Governments to achieve Kern COG’s goals of trip reduction and air quality improvements.
Southern Kern County Commute Patterns

Exhibit A

1. Intersection of Hwy 99 & Hwy 119 (Taft Hwy)
2. Intersection of Hwy 184 & Hwy 223

Traffic Funnels
Employment Clusters
Urban Areas
Bakersfield Metro Area

Scale: 0 - 5 Miles
From: "Woods, Soli" <SWoods@petrotruckstops.com>
To: <mbeardsllee@kernco.org>
Date: 4/19/2007 6:27:58 PM
Subject: FW: Comments on the 2007 Regional Transportation Plan

-----Original Message-----
From: Woods, Soli
Sent: Thursday, April 19, 2007 7:28 PM
To: 'brummett@kernco.org', 'dhildebrand@kernco.org'
Cc: 'mbeardsllee@kernco.org'
Subject: Comments on the 2007 Regional Transportation Plan

Petro Travel Center- Wheeler Ridge

5821 Dennis McCarthy Dr.

I-5 & Laval Road

Lebec, CA. 93243

To: The Kern County Council of Governments

The Seventh Annual Kern Economic Development Corporation sponsored "Economic Summit" detailed manufacturing, warehouse, logistics and construction growth in Kern County. Demand for available space permitted for such use will be particularly strong in southern Kern County. Most of the new jobs created will be for semi-skilled or lower skilled workers who can least afford a long single-occupancy commute to and from work.

Petro believes that our employees and future employees need real cost-effective commute alternatives. Employees traveling alone from the Bakersfield and Arvin areas to work places concentrated to the south along highway 99 represent a public transit opportunity if properly served. If implemented, new transit commute alternatives will reduce the need for reliance on the single-occupancy auto and certainly will improve air quality.

Therefore, our company strongly supports all efforts and initiatives to prioritize the construction of strategically placed park and ride lots with shuttles linking these lots to work sites to the south.
In addition, the development of flexible transit routes transporting employees from their neighborhoods to the employment destination points will definitely increase transit’s share of commute trip making. This alternative will go a long ways to addressing the dispersed nature of both low density housing and multiple employment location sites.

Given recent work force projections at Tejon Industrial Complex and at nearby work sites, demand for park and ride spaces may easily exceed the 750 spaces already identified in the RTP if these sites are linked by effective shuttle and van networks.

We look forward to working with the Kern County Council of Governments in the future to reduce the need for single-occupancy auto commutes.

Sincerely,

Soli Woods
Petro City Manager

(661) 477-2634
April 18, 2007

Marilyn Beardsley          File: 09-KER
Kern Council of Governments DEIR
1401 19th Street, Suite 300 SCH #: 2006111119
Bakersfield, California 93301

Dear Ms. Beardsley:

Kern COG 2007 Revisions of the Destination 2030 Regional Transportation Plan

Thank you for giving the California Department of Transportation (Caltrans) District 9 the opportunity to review the draft Regional Transportation Plan. We have the following comments:

- Page 1-4: The last sentence says it is part of District 6. It should also say that it is part of Caltrans District 9 Maintenance and Operations area for Eastern Kern County, including Local Assistance Funding and Local Development Review for highway impacts, along with maintenance and permitting functions.

- Page 4-33: Public Transportation Action Element: add CREST service information and tie in with Inyo/Mono Transit.

- Appendix D contact list spreadsheet: Replace Chuck Andrus with Brad Mettam, Caltrans District 9 Planning, and the blank w/ Craig Holste, Caltrans District 9 Maintenance and Operations.

Caltrans District 9 values a cooperative working relationship with Kern Council of Governments in Eastern Kern County transportation issues. If you have any questions, I may be contacted at (760) 872-5799.

Sincerely,

[Signature]

DAVE BLOOM
Acting Regional Transportation Planner

c: State Clearinghouse
April 11, 2007

Ronald Brummett
Kern Council of Governments
Executive Director
19th Street, Suite 300
Bakersfield, California 93301

Dear Mr. Brummett:

We have reviewed the Kern Council of Governments (Kern COG) draft 2007 Destination 2030 Regional Transportation Plan (RTP). The Kern RTP adequately meets requirements set forth in the Regional Transportation Plan guidance. Our office acknowledges Kern COGs' efforts in the GAP Analysis compliance for the Safe, Accountable, Flexible, Efficient Transportation Equity Act- Legacy for Users.

If you have any questions concerning our comments, please call Carol McDonald at (559) 445-5876

Sincerely,

Carol McDonald – Kern Regional Liaison
California Department of Transportation, District 6

Enclosure
A valley-wide freight movement project or projects may be a goal in the Kern Council of Governments’ Draft 2007 Destination 2030 Regional Transportation Plan. The Kern Council of Governments with the other 7 San Joaquin Valley Council of Governments need to develop one or two feasible valley-wide freight movement projects in order to compete with other major population centers for available Trade Corridor Bond funds or other available funds. The Kern Council of Governments in coordination with the 7 Metropolitan Planning Organizations in the San Joaquin Valley have done an excellent job in working together on the San Joaquin Valley Goods Movement studies I, II, and III. San Joaquin Valley COGs have made progress in exploration of freight movement issues, policies and development of a truck model.
Kern Council of Governments' Draft 2007 Destination
2030 Regional Transportation Plan
Caltrans’ Office of Regional Planning
Comments
April 9, 2007

The Kern Council of Governments’ (Kern COG) Draft 2007 Destination 2030 Regional Transportation Plan (RTP) adequately meets requirements set forth in the Regional Transportation Plan guidance. Kern COGs’ RTP provides a continuous, cooperative, coordinated and comprehensive multi-modal transportation system guidance for the future in Kern County. The Kern Metropolitan Planning Organization’s GAP Analysis provides an opportunity for Kern COG to comply with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users (SAFETEA-LU) signed August 10, 2005, before the July 1, 2007 deadline. Kern COG is making notable progress in compliance with the GAP Analysis deadline.

Kern COGs’ efforts in the areas of public participation and inclusion of performance measures for the purpose of multi-modal evaluation of their transportation plans are commended in the 2007 Destination 2030 RTP. Our Caltrans Office of Regional Planning offers the following comments on the RTP:

- Executive Summary, page 1; ...over the next 24 years – The "next 24 years" may need a short explanation in the text, since the RTP is from 2007 to 2030. Is the extra year before 2007, are after 2030.

- Executive Summary, Conclusion, page 3; ...that are assessed based on a number of key performance measures. A suggestion is to reference the location of the performance measures early on in the text. Performance location is noted in the text a few pages later. However, the reader may desire to access this information immediately for reference purposes.

- Transportation Planning in the Kern Region, pg. 4; The Kern and San Joaquin Air Basins previously mentioned in text. Where are these air basins located in Kern County. Is the Mojave Air Basin a part of the Kern and San Joaquin Air Basin? What is the status of modeling for the Mojave Air Basin in Kern County?

- At the Kern COGs’ Federal Certification Meeting on March 28, 2007 discussion included efforts to comply with SAFETEA-LU requirements. A major problem in meeting compliance is the timing of the RTP preparation, an understanding and publication date of the Federal Notice of Proposed Rulemaking and the time required for the MPO to adhere to guidelines set forth by law for the RTP. Future Federal Transportation Bills may desire to address timeline issues and MPO comments in regard to the issues of meeting compliance deadlines.

- Table 2.1 Destination 2030 Goals and Policies
  1) Aviation – The aviation goal does not clearly include transportation facility access to airports for the air traveler. In later text, transportation facilities to airports are mentioned in the text.
  2) Identify regional freight projects and strategies in a cooperative effort with other San Joaquin Valley COGs. This goal is needed in order to acquire available fund sources within the San Joaquin Valley. A major San Joaquin freight project is needed to mitigate the congestion within the San Joaquin Valley.
  3) ...work with Caltrans, COG member agencies and other interested parties to prepare environmental studies, corridor studies, and design engineering.
  4) Equity - Consultation with available tribal entities to avoid impacts of mitigation on transportation projects.

- Mobility and Air Quality, page 3-5; Suggest explanation of the PM 2.5 as explained for the PM 10.
- Levels of Service - 1998 - Figure 4-1, 4-2; Is there a significant change in a 1998 LOS compared to a 2007 LOS? The 1998 LOS figure provides almost a 10-year gap of information for the current 2007 RTP. We recommend a LOS update for Figure 4-1, 4-2.

- Table 4-1, Constrained and Unconstrained Program of Projects. pages 4-13 to 4-20; The projects included in the Tables appear to meet transportation needs in Kern County. Transit projects within this RTP have an increased significance in the reduction of congestion and improvement of air quality. Specific Freight projects such as the Tehachapi Rail double-track project needs to be included into the Unconstrained Program of Projects for Kern County. The Tehachapi project is included in the Goods Movement Action Plan for the State.

- Table 4.1 page 4-16; Constrained Program of Projects, Nonmotorized; Are bicycle storage facilities provided for metropolitan bicycle riders. Inclusion of storage facilities for bicycle riders at strategic locations will decrease air pollution created by mobile air sources.

- Public participation is enhanced by the RTP information in an extensive list of Kern County publications that target the general public, minorities, disadvantage and disabled populations. We applaud Kern COG’s efforts to promote public participation in the transportation process. Kern COG has pursued an aggressive public participation program through the public media, Internet sites, outreach and various other resources to provide public information.

- Appendix D, Resource/Responsible/Interested Agency Notification Listing; Please include Caltrans’ District 5 on this RTP list.

We offer the following additional comments:

The Kern COGs’ Draft 2007 Destination 2030 Regional Transportation (RTP) addresses the need for corridor preservation in Chapter 7 (Page 7-1) and identifies long-range corridors that need to be preserved (Page 7-2), based on General Plan Circulation Elements of the respective city and county.

Corridor preservation of State Highways and intersecting roadways is also important to Caltrans. The District is developing strategies to work with the local jurisdictions and the regional transportation planning agencies on developing valuable information regarding conceptual alignments of corridors and footprints of interchanges that will require expansion in the foreseeable future.

The District is requesting Kern COG’s assistance and partnership in the area of corridor preservation. It is recommended that the RTP include policy and action measures to support and implement corridor preservation. Suggested language for the RTP that would strengthen this commitment include:

A concerted effort between the local jurisdictions, the regional transportation planning agency, Caltrans, and the public is needed to insure the dedication of rights-of-way to facilitate the planned ultimate corridors of State Highways, including interchanges, as well as major local arterial and collector streets. A region-wide approach is necessary for corridor preservation of transportation facilities, which cross-jurisdictional boundaries.

Please let me know, if you have questions?
I have reviewed the "Constrained" & "Unconstrained" State Route projects in Kern's Draft RTP. Kern should consider adding the 8 projects. Kern COG has a number of "Unconstrained" projects in the RTP. The "Unconstrained" projects will be added to the Caltrans' spreadsheet.

Our office will keep you updated on changes I make to the spreadsheet.

<table>
<thead>
<tr>
<th>Route</th>
<th>Post Mile</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>0.67</td>
<td>7th Standard Rd</td>
<td>Modify Intersection</td>
</tr>
<tr>
<td>99</td>
<td>17.0/22.1</td>
<td>SR 119 to Wilson Rd</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>23.9/24.6</td>
<td>SR 58 to California Ave</td>
<td>Auxiliary Lanes</td>
</tr>
<tr>
<td>99</td>
<td>25.9</td>
<td>Buck Owens Dr</td>
<td>Improve NB Off-Ramp</td>
</tr>
<tr>
<td>99</td>
<td>R27.2/31.0</td>
<td>SR 204 to 7th Standard Rd</td>
<td>6F to 8F</td>
</tr>
<tr>
<td>99</td>
<td>R27.2/R27.8</td>
<td>SR 204 to Olive Ave</td>
<td>Auxiliary Lanes</td>
</tr>
<tr>
<td>119</td>
<td>27.3/28.3</td>
<td>Gosford Rd to Ashe Rd</td>
<td>2C to 4E</td>
</tr>
<tr>
<td>178</td>
<td>97.6</td>
<td>Jack Ranch Rd</td>
<td>Intersection Improver</td>
</tr>
</tbody>
</table>

Regional Planning Handbook, Chapter 7, Section 7.02, P 84, "Federal statute and regulations require that Tribal Governments be involved in the transportation planning and programming process." Even though there are no federally acknowledged tribal governments within Kern County there may be transportation issues in terms of the Kern County tribal communities and their interaction with federally acknowledged tribal governments in Kings and Tulare Counties. Health care is one of the services that is provided by the federally acknowledged tribal governments to federally unacknowledged tribal members. Tribal cultural resources concerns also go beyond county boundaries. The RTP revision needs a chapter within the document to reflect this requirement. Tribes governments and communities in question are the following:

Monache Inter-Tribal Association
Tinoqui-Chalola Council of Kitonemuk & Yowlumne Indians
Kawaiisu Tribe of the Tejon Indian Reservation
White Blanket Paiute Rancheria
Kern Valley Indian Community
Kern Valley Indian Paiute Tribe
Tejon Indian Tribe
Kudzubitcwanap Palap Tribe
Chumash Council of Bakersfield
Santa Rosa Tachi Yokuts Tribe
Tule River Indian Tribe
Thank you for the opportunity to review and provide comments on the 2007 COG Draft RTP. The Office of Regional and Interagency Planning (ORIP) would like to commend Kern COG for developing an excellent Plan. Our review concluded that the RTP met most of the requirements. However, we would like to comment on the following sections:

- Public Participation Section, page 1-4: Federal requirements under SAFETEA-LU require MPOs to demonstrate how the public had input in the development and implementation of the RTP and the Public Participation Plan. We recommend that Kern COG include in their RTP "documentation" that supports their Public Outreach Efforts as stated in 23 CFR Part 450.316. Some examples include copies of surveys, copies of presentations, workshop agendas and copies of press releases, interviews or sign up sheets.

- General Consultation and Coordination Efforts: Our review of the RTP concluded that Kern COG is consulting and coordinating with local jurisdictions, resource agencies, and others. However, we recommend that Kern COG include "documentation" to support their discussion and efforts. Federal requirements require MPOs to consult and coordinate with air districts, resource agencies, tribal governments and private and public groups as stated in 23 CFR Part 450.316 & 450.322.

- Environmental Mitigation Discussion, page 19: Our review concluded that a discussion on environmental mitigation measures was not sufficient. Federal regulations require 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, maintain and potentially avoid sensitive areas as stated in 23 CFR Part 450.322. The discussion may focus on policies, programs or strategies that support this effort. FHWA would like to see a discussion in the RTP, and not in the EIR.

- Summary Schedule of Public Notice and Public Hearings, Appendix B: Under the RTP column, the last updates should be every four years (4 years), not every three (3 years) for RTPs.

- Kern COG Public Participation Environmental Justice Resource list, Appendix C: appears to be incomplete.

To obtain an expanded list of Native American Tribes, communities, organizations, groups, and individuals with cultural knowledge within Kern COG boundaries send a request to the Native American Heritage Commission, 915 Capitol Mall, Sacramento, California 95814 or call (916) 653-4082.

The Native American Liaison Branch (NALB) is providing the following comments on the Draft 2007 Regional Transportation Plan (RTP) submitted by the Kern Council of Governments (KCOG).

- Public Participation Plan Update, Appendix C, Section V, Tribal Governments: KCOG region is the ancestral home to a number of federally recognized and non-federally recognized California Native American Tribes, communities, organizations, groups, and individuals. It would greatly benefit KCOG to proactively pursue early Native American involvement as mandated by federal and state guidelines, regulations, and/or statues to ensure their needs are identified, considered, and addressed during the earliest stages of transportation planning and programming to minimize impacts to projects by 1) avoiding potential delays and cost overruns and 2) gaining important knowledge and information for protecting and preserving unique biological and cultural resources (i.e. flora, fauna, prehistoric sites, religious and
ancestral places, etc.) for future generations. To obtain an expanded list of Native American Tribes, communities, organizations, and individuals within SJCOG boundaries send a request to the Native American Heritage Commission, 915 Capitol Mall, Sacramento, California 95814 or call (916) 653-4082.

Native American Tribes (Federally-recognized and non-federally recognized) and populations should also be included in all public participation or outreach planning and programming efforts as prescribed under federal and state regulations. These efforts should be documented.

- Chapter 6 – Environmental Justice: Emphasis and methods of outreach efforts to meet with traditionally underrepresented and underserved populations such as the elderly, disabled, low income, and minority (i.e. Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander) communities/groups and their community leaders need to be documented. It will also show compliance with Title VI and Environmental Justice requirements when efforts to inform multicultural populations include the use of interpreters/bilingual staff plus distribution of multilingual informational materials when attending these community meetings.

- Environmental Mitigation Discussion, page 19: Reference new environmental considerations in planning required by SAFETEA-LU Sections 6001 & 6002.

The citations for specific guidelines, regulations, and statutes as amended by the Federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) are contained within the below list of references.

**Executive Order (EO) 12898 (Environmental Justice) and Title VI of the Civil Rights Act**
EO/Environmental Justice focuses attention on steps to identify and address any disproportionately high and adverse human health or environmental effects of Federal programs, policies, and activities on minority and low-income populations (i.e. Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander).

Title VI requires that no person, because of race, color, and national origin be excluded from participation, denied the benefits of, or be subjected to discrimination by and Federal-aid activity.

**Public Participation**
All Native Americans as individual citizens, regardless of whether they are members of Federally-recognized Tribes, can contribute to the public participation process. They belong to a minority, they may be low income and they may be associated with a community-based organization or be among the groups shown above. Within public participation forums, as individuals, they are not representing Tribal Governments.

Guidelines:
California Transportation Commission (CTC), Regional Transportation Plan Guidelines (approved December 1999, amended December 2002)

Regulations:
Code of Federal Regulations (CFR) 23, § 450.316 & § 450.322
Statues:

Title 23, U.S.C., Chapter 1, Sections 134 and 135, SAFETA-LU Sections 6001, and 6002
April 19, 2007

Ms. Marilyn Beardslee
Kern Council of Governments
1401 19th Street, Suite 300
Bakersfield, CA 93301

Project: Kern County 2007 Regional Transportation Plan (RTP)

Subject: Conformity and CEQA Comments for Subject Project

District Reference No: 200700456

Dear Ms. Beardslee:

The San Joaquin Valley Unified Air Pollution Control District (District) has reviewed the project referenced above and offers the following comments:

I. CONFORMITY ANALYSIS

The San Joaquin Valley Unified Air Pollution Control District has received the Air Quality Conformity Analysis for interagency consultation. The District's comments are presented in the enclosed attachment titled: Interagency Consultation, Draft Air Quality Conformity Analysis.

II. DISTRICT RULE 9510 (INDIRECT SOURCE REVIEW)

District Rule 9510 (Indirect Source Review) was adopted by the District’s Board on December 15, 2005, and became effective March 1, 2006. Rule 9510 was adopted by the District’s Board to reduce the impacts of growth in emissions resulting from new land development in the San Joaquin Valley, including transportation and transit projects. Transportation projects consisting of modifications of existing roads that are not intended to increase single occupancy vehicle capacity, or transportation control measures included in a District air quality attainment plan, would be exempt from Rule 9510.

Transportation or transit projects subject to Rule 9510 are required to reduce construction exhaust emissions by 20 percent for NOx and 45 percent for PM10, as compared to the statewide fleet average. If the required emission reductions cannot be
achieved through onsite measures, the rule requires payment of offsite mitigation fees. One hundred percent of all offsite mitigation fees received by the District are used by the District’s existing Emission Reduction Incentive Program (ERIP) to fund emission reduction projects, achieving emission reductions in behalf of the project. Additionally, if a project is subject to off-site emission reduction fees, the developer is required to pay an administrative fee equal to four percent (4%) of the required off-site fees. This fee is to cover the District’s cost of administering the off-site emission reduction program.

The RTP identifies projects for streets and highway systems, urban and rural public transportation, rail, aviation, pedestrian, and bicycle facilities. Transportation or transit projects, where construction exhaust emissions equal or exceed two (2.0) tons NOx or two (2.0) tons of PM10, would be subject to the rule. The District has estimated that construction exhaust emissions associated with constructing a new 2-lane paved road, would exceed the two-ton applicability threshold. Therefore, many of the projects presented in the RTP may be subject to District Rule 9510. Options to mitigate emissions at the construction site include: use of newer construction equipment, use of cleaner fuel types, engine modifications, or use of exhaust after-treatment devices. New equipment can provide a high percentage of emission reductions, depending on the horsepower and the year of the equipment. Emission reductions are readily achievable through utilizing existing technology along with a mix of newer construction equipment and retrofit devices.

The District recommends that subsequent, project specific environmental review documents characterize the emission reductions achieved by complying with District Rule 9510. The District further recommends that potential costs of complying with Rule 9510 be considered during the transportation budgeting process. District staff is available to assist with understanding compliance with Rule 9510.

III. CEQA ANALYSIS

A. Findings of Significance

The San Joaquin Valley Air Basin (SJVAB) is currently designated as serious non-attainment for Ozone and non-attainment (no classification) for PM2.5. On October 30, 2006, the United States Environmental Protection Agency (US EPA) found that the San Joaquin Valley had attained the PM10 standard. The US EPA based its determination upon monitoring data demonstrating that the ambient air quality had met the requirements for attainment. The US EPA’s finding does not change the District’s classification as a serious PM10 non-attainment to attainment area. Re-designation from serious non-attainment to attainment requires additional documentation and may occur at some future date.

Transportation projects may contribute to the overall decline in air quality due to construction activities in preparation of the site, and ongoing traffic and other operational emissions. Although individual transportation projects may not exceed the District’s Thresholds of Significance for ozone precursors of 10 tons per year of reactive
organic gases (ROG) and oxides of nitrogen (NOx), the projects may have a cumulative significant impact on air quality. As discussed above in Section II, emission reductions achieved through compliance with District Rule 9510 will reduce project specific impacts on air quality within the SJVAB. As discussed below, Applicable District Rules, project specific impacts on air quality may be further reduced by compliance with applicable District rules.

Transportation projects may be located near sensitive receptors. Proposed transportation projects should be analyzed to see if Hazardous Air Pollutants (HAPs) would pose a risk to human health. If a project is near sensitive receptors and HAPs are a concern, the project developer should perform a Health Risk Assessment (HRA). For more information, please refer to the attached document titled Health Risk Assessment (HRA).

B. Applicable District Rules

Rules and Regulations have been adopted by the District to reduce emissions throughout the San Joaquin Valley. Specific transportation projects may be subject to additional District Rules not enumerated below. To identify additional rules or regulations that apply to project specific activities, or for further information, the project proponent is strongly encouraged to contact the District’s Small Business Assistance Office at (559) 230-5888. Current District rules can be found at www.valleyair.org/rules/1ruleslist.htm.

Regulation VIII (Fugitive PM10 Prohibitions) Rules 8011-8081 are designed to reduce PM10 emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carry out and track out, landfill operations, etc. The District’s compliance assistance bulletin for construction sites can be found at www.valleyair.org/busind/comply/PM10/Reg VIII CAB.pdf.

Rule 4002 (National Emission Standards for Hazardous Air Pollutants) In the event that any portion of an existing building will be renovated, partially demolished or removed, the project will be subject to District Rule 4002. Prior to any demolition activity, an asbestos survey of existing structures on the project site may be required to identify the presence of any asbestos containing building material (ACBM). In accordance with CAL-OSHA requirements, a certified asbestos contractor must remove any identified ACBM having the potential for disturbance. If you have any questions concerning asbestos related requirements, please contact the District’s Compliance Division at (559) 230-6000 or contact CAL-OSHA at (559) 454-1295. The District’s Asbestos Requirements Bulletin can be found online at http://valleyair.org/busind/comply/asbestosbultn.htm.

Rule 4102 (Nuisance) This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the project or construction of the
project creates a public nuisance, it could be in violation and be subject to District enforcement action.

**Rule 4641** (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) If asphalt paving will be used, then paving operations of this project will be subject to Rule 4641. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt, and emulsified asphalt for paving and maintenance operations.

**Rule 9510** (Indirect Source Review) Rule 9510 establishes emission reduction requirements for NOx and particulate matter (PM). The rule applies to residential and non-residential development projects, including transportation and transit projects, which equal or exceed the District’s established applicability thresholds. Emission reductions required by the rule that are not achieved through on-site emission reduction measures are subject to off-site emission reduction fees. These fees are used by the District to fund emission reduction projects, mitigating the project’s potential impact on air quality in the San Joaquin Valley Air Basin.

Transportation projects are subject only to construction exhaust emission reduction requirements. Rule 9510 requires construction exhaust emissions to be reduced by 20 percent for NOx and 45 percent for PM10 when compared to the statewide fleet average. Options to mitigate these emissions at the construction site include: use of newer construction equipment, use of cleaner fuel types, engine modifications, or use of exhaust after-treatment devices. New equipment can provide a high percentage of emission reductions, depending on the horsepower and the year of the equipment. Emission reductions are readily achievable through utilizing existing technology along with a mix of newer construction equipment and retrofit devices. For more information regarding alternative fuels and equipment retrofits, visit the ARB website at [www.arb.ca.gov/diesel/diesel.htm](http://www.arb.ca.gov/diesel/diesel.htm).

**C. Recommended Mitigation Measures**

The District encourages innovation in measures to reduce air quality impacts. There are a number of features that could be incorporated into the design of these projects to provide additional reductions of the overall level of emissions. The suggestions listed below should not be considered all-inclusive and are options that the agency with the land-use authority should consider for incorporation into the project.

Construction activity mitigation measures may include:
- Limit area subject to excavation, grading, and other construction activity at any one time
- Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use
- Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set)
- Require that all diesel engines be shut off when not in use to reduce emissions from idling
• Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways, and “Spare the Air Days” declared by the District.
• Implement activity management (e.g. rescheduling activities to reduce short-term impacts)
• During the smog season (May through October), lengthen the construction period to minimize the number of vehicles and equipment operating at the same time.
• Off road trucks should be equipped with on-road engines when possible.
• Minimize obstruction of traffic on adjacent roadways.

The District encourages fleet owners/operators to examine the District’s Heavy-Duty Engine program to reduce project emissions. The Heavy Duty program provides incentives for the replacement of older diesel engines with new, cleaner, fuel-efficient diesel engines. The program also provides incentives for the re-power of older, heavy-duty trucks with cleaner diesel engines or alternative fuel engines. New alternative fuel heavy-duty trucks also qualify. For more information regarding this program contact the District at (559) 230-5858 or visit our website at www.valleyair.org

Heavy equipment powered by alternative diesel fuel blends and equipment that meets current off-road engine emissions standards reduce construction related air impacts. Alternative-fueled equipment may use Compressed Natural Gas (CNG), Liquid Propane Gas (LPG), electricity, or other designated alternative fuels to achieve greater emission reductions than current diesel equipment. Equipment with uncontrolled engines may be re-powered with an emissionized engine that meets current standards. Tier I, Tier II, and Tier III engines have significantly less NOx and PM emissions compared to uncontrolled engines.

District staff is available further discuss the regulatory requirements that are associated with this transportation projects. If you have any questions, please call Ms. Georgia Stewart at (559) 230-5937.

Sincerely,

David Warner
Director of Permits Services

[Signature]

Arnaud Marjollet
Permit Services Manager

DW:gs

Enclosures: Interagency Consultation, Draft Air Quality Conformity Analysis; Health Risk Assessment (HRA)
April 18, 2007

Lauren Dawson
Air Quality Specialist
Plan Development
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave.
Fresno, CA 93726-0244
(559) 230-5846
lauren.dawson@valleyair.org

Interagency Consultation on the
Draft Conformity Analysis
for the
2007 Federal Transportation Improvement Program, Amendment #2
and the
2007 Regional Transportation Plan (RTP)

KERN COUNCIL OF GOVERNMENTS
Released for review March 6, 2007

The San Joaquin Valley Unified Air Pollution Control District has received the Air Quality Conformity Analysis for interagency consultation and is pleased to provide the following comments on the analysis.

1. Page 1 – Last paragraph: "Currently, the San Joaquin Valley...is designated as nonattainment areas...carbon monoxide (CO)" The attainment status for the San Joaquin Valley would more accurately be referred to as having a maintenance designation for CO for urbanized/metropolitan areas in Kern, Fresno, Stanislaus and San Joaquin counties. Same comment-Page 9-- Third paragraph: "...currently designated as nonattainment for...carbon monoxide (CO)..."

2. References to the San Joaquin Valley Unified Air Pollution Control District are made a number of times using a variety of names. For consistency, clarity and accuracy I suggest referring to the District as San Joaquin Valley Unified Air Pollution Control District (SJUVAPCD) in the first occurrence and use the acronym in subsequent references.

3. Page 3-- Under CONFORMITY TESTS: “The conformity tests specified in the ...and, (2) the emissions reduction test”- the correct term is interim emissions tests. Also later in the paragraph, “If there is no approved air quality plan...the emission reduction test applies” replace with interim emissions
test. Also Page 44 – First paragraph: “The principal requirements of the federal...or an emissions reduction test” replace with interim emissions test.

4. Page 10- I suggest the addition of the following underlined sections: “State Implementation Plans have been prepared to address carbon monoxide (maintenance plan) for the Bakersfield Metropolitan Area, the Fresno, Modesto, and Stockton Urbanized Areas, 1-hour Ozone, and PM10. State Implementation Plans are being prepared for 8-hour Ozone (due to EPA 6/15/07) and PM2.5 (due to EPA 4/5/08).

5. Page 10 – The term "designated" is used to define the attainment status, the term "classified" is used to describe the relative severity of the pollution. I suggest making the following changes for accuracy: “The San Joaquin Valley is designated classified (delete designated) a serious nonattainment area for the new 8 -hour ozone... delete NEW. Same paragraph, “EPA also designated the San Joaquin Valley as nonattainment for the new PM2.5 standards.” Replace NEW with 1997 (there are also 2006 PM2.5 standards) State Implementation Plans for 8-hour ozone and PM2.5 standards are being prepared. The 8-hour ozone plan is due to EPA June 15, 2007. The PM2.5 plan is due to EPA April 5, 2008. Page 12--Fourth paragraph: “The San Joaquin Valley is currently designated as an Extreme...” replace designated with classified.

6. Page 13 – Table 1-3: Need to add the units i.e., tons/day. Also same page third paragraph, last sentence “approval the trading mechanism.” Need to add: approval of the trading mechanism.” Page 15: Table1-4 needs to have units added e.g., tons/day and tons/year.

7. Page 16--“Amendment #XX” -Appears numerous places in Conformity Analysis-insert proper Amendment number. (See pages 9, 45 etc.)

8. Page 19 – Chapter 2- Latest Planning Assumptions and Transportation Modeling and Table 2-1 should reflect and be consistent with the Transportation Model and Latest Planning Assumptions Summary chart data transmitted 10/19/06 to the SJV Model Coordinating Committee.

9. I suggest adding RACM commitment identification codes to the Timely Implementation of Transportation Control Measures chart.

The San Joaquin Valley Unified Air Pollution Control District concludes that this draft Conformity Analysis meets the requirements of the Federal Transportation Conformity Rule. Thank you for the opportunity to comment.
Health Risk Assessment (HRA)

General Comments:
The Health Risk Assessment (HRA) guidelines promulgated by the California Office of Environmental Health Hazard Assessment (OEHHA) states the use of the latest version of HARP (Hot Spots Analysis and Reporting Program) for health risk determination [http://www.arb.ca.gov/toxics/harp/harp.htm] and OEHHA [http://www.arb.ca.gov/toxics/healthval/healthval.htm] risk assessment health values be used.

The District’s thresholds of significance for Hazardous Air Pollutants (HAPs) are the probability of contracting cancer for the Maximally Exposed Individual (MEI) exceeds 10 in one million or ground level concentrations of non-carcinogenic toxic air contaminants would result in a Hazard Index greater than 1 for the MEI. A Health Risk Assessment (HRA) should include a discussion of the toxic risk associated with the proposed project, including project equipment, operations, and vehicles.

The District requires that all input files used to conduct the Health Risk Assessment (HRA) be submitted in electronic format. Providing electronic input files to the District for modeling facilitates the District’s confirmation of the HRA in a timely manner.

Source Determination:
When making an air quality assessment for a land use project going through the CEQA process, the District considers all sources of potential emissions whether they are permitted, not permitted, or to be permitted in the future. If the modeling submitted does not include sources that may be permitted in the future, the District would have to assume that the impact from HAP emissions for a project is significant (cancer risk greater than 10 in a million and/or hazard indices greater than 1). The CEQA Initial Study or EIR may exclude sources that are permitted, as long as it is assumed that the risk from those sources may be significant. In addition, any sources that are not permitted must still be modeled and any risk is assumed to be over the District's level of significance and mitigated, see examples below.

Example #1:
An Initial Study or EIR Identifies sources (Diesel IC engines > 50HP) that will require District permits and there are no other sources of toxic pollutants identified. In this case there would be no need to have an HRA performed since the District permitting process will determine the risk from the project and limit the use, if needed, to ensure that it is below the District's levels of significance.

Example #2:
An Initial Study or EIR Identifies sources that will require District permits. It may seem that there are only permitted sources associated with this proposed project, but there are other sources of toxic pollutants that must be evaluated,
specifically, emissions from ‘passenger car equivalent’ travel, truck travel and idling from the transporting of materials in and out of the facility. Therefore, the following options are available:

1) Conduct an HRA and include all sources (Permitted and Non-permitted)
2) Conduct an HRA and include only Non-permitted sources. They would then assume that the risk from Non-permitted source is above the District’s significance level and mitigate all the risk determined from the HRA.

**Receptors**
A receptor is defined as a point where an actual person (residential or worker) may be located for a given period of time. The period of time is based on the type of assessment that is being performed. For example, if you were going to place a receptor in a river to determine short-term (1 hour) exposure that might be appropriate. To place a receptor on the river to determine long-term (1 year) exposure would not be. It is reasonable to assume that a person may be on the river for an hour but not for 24 hours per day, 7 days per week, for 70 years in the same location, unless the person lives or works on the river.

**Worker Receptors**

**Offsite:**
Offsite worksites that are not directly associated (owned) with the operation of the proposed project are considered to be offsite worksites for the purposes of modeling. These receptors should be included in any modeling runs.

**Onsite:**
Onsite worker receptors are not included in any modeling runs unless the following is true:
- The worker is living onsite and is not being paid to live onsite. The worker will be modeled for a 70 yr exposure.

**Sensitive Receptors**

**Offsite:**
All sensitive receptors should be included in any modeling runs within 2 km of the proposed site, unless otherwise determined by the District. A sensitive offsite receptor is defined as the following:
- Schools
- Daycare facilities
- Hospitals
- Care facilities (adult/elderly)
- Residential (if not covered by another grided receptor)

**Onsite:**
Onsite sensitive receptors are defined as the following:
- Schools
- Daycare facilities
- Hospitals
- Care facilities (adult/elderly)
- Residential
  - Worker Family
  - Workers not paid to live onsite
  - Family members 18 or older

The family members of a facility owner are not included in the HRA unless the child is 18 or older. In this case, the child is of legal age and a parent cannot waive his/her rights.

The project consultant should contact the District to review the proposed modeling approach before modeling begins. For more information on hazardous air pollutants (HAPs) analyses, please contact Mr. Leland Villalvazo, Supervising Air Quality Specialist, at (559) 230-6000 or hramodeler@valleyair.org.
APPENDIX G

EIR and RTP RESOLUTIONS
BEFORE THE KERN COUNCIL OF GOVERNMENTS
STATE OF CALIFORNIA, COUNTY OF KERN

RESOLUTION NO. 07-18

In the matter of:

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE 2007 DESTINATION 2030 REGIONAL TRANSPORTATION PLAN: (1) CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT; (2) ADOPTION OF STATEMENT OF OVER RIDING CONSIDERATIONS; (3) ADOPTION OF MITIGATION MONITORING PROGRAM

WHEREAS, Kern Council of Governments (Kern COG) has prepared an Environmental Impact Report (EIR) for the 2007 Destination 2030 Regional Transportation Plan ("Plan") relating to and environmentally assessing environmental effects of this Plan; and

WHEREAS, in accordance with the provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines, a Notice of Completion of the Draft EIR was filed and the Draft EIR was routed to the State Clearinghouse, responsible agencies, other governmental and trustee agencies having discretionary approval or jurisdiction by law over natural resources affected by the Plan, the County of Kern, affected transportation agencies, and other interested persons and agencies; and

WHEREAS, a 45-day public review and comment period was provided on the Draft EIR in accordance with CEQA; and

WHEREAS, a Final EIR was prepared that incorporates comments received on the Draft EIR, list of persons, organizations and public agencies commenting on the EIR, the Lead Agency's response to significant environmental points raised in the comments, and necessary changes to the text of the Draft EIR; and

NOW, THEREFORE, BE IT RESOLVED that the EIR for the 2007 Destination 2030 Regional Transportation Plan has been presented to the Kern COG Policy Board as the decision-making body of the Lead Agency, and that Kern COG has independently reviewed and evaluated the information contained in both the Draft and Final EIR and written and oral testimony; and

BE IT FURTHER RESOLVED that Kern COG, as the decision-making body for the Lead Agency, hereby certifies that the EIR for the 2007 Destination 2030 Regional Transportation Plan has been completed in compliance with CEQA and CEQA Guidelines; and

BE IT FURTHER RESOLVED that Kern COG finds that certain changes or mitigation measures will substantially lessen or avoid potentially significant environmental effects identified in the Final EIR and will be incorporated into the Regional Transportation Plan as conditions of future entitlements, permits, and agreements; and

BE IT FURTHER RESOLVED that certain unavoidable significant environmental effects, resulting from Plan implementation even with mitigation measures to reduce these effects, have been identified in the EIR, but it is infeasible to avoid or substantially lessen these effects because of specified economic, social or other considerations; and

BE IT FURTHER RESOLVED that as required by CEQA, Kern COG has balanced the benefits of the Plan against unavoidable significant environmental effects in determining whether to approve the Plan, and Kern COG has independently determined that the benefits of the Plan outweigh the unavoidable significant environmental effects for the reasons stated in the Statement of Overriding Considerations; and
BE IT FURTHER RESOLVED that Kern COG approves Exhibit A: Statement of Overriding Considerations and Exhibit B: Mitigation Monitoring Program.

AUTHORIZED AND SIGNED THIS 17TH DAY OF MAY 2007

AYES:

NOES:

ABSTAIN:

ABSENT:

__________________________
Cheryl Wegman, Chair
KERN COUNCIL OF GOVERNMENTS

ATTEST:

I hereby certify that the foregoing is a true copy of a resolution of the Kern Council of Governments duly authorized at a regularly-scheduled meeting held on the 17th day of May 2007.

__________________________
Ronald E. Brummett, Executive Director
KERN COUNCIL OF GOVERNMENTS

Date: __________________________

Resolution 07-18

FINAL ENVIRONMENTAL IMPACT REPORT FOR THE 2007 DESTINATION 2030 REGIONAL TRANSPORTATION PLAN: (1) CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT; (2) ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS; (3) ADOPTION OF MITIGATION MONITORING PROGRAM

Page 2
BEFORE THE KERN COUNCIL OF GOVERNMENTS
STATE OF CALIFORNIA, COUNTY OF KERN

Resolution No. 07-19
In the matter of:

2007 AIR QUALITY CONFORMITY ANALYSIS;
2007 DESTINATION 2030 REGIONAL TRANSPORTATION PLAN;
2007 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM AMENDMENT NO.3

WHEREAS, the Kern Council of Governments (Kern COG) 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 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 2007 Destination 2030 Regional Transportation Plan has been prepared in full compliance with federal guidance; and

WHEREAS, a 2007 Destination 2030 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 2007 Federal Transportation Improvement Program (FTIP) Amendment No. 3 has been prepared to comply with Federal and State requirements for local projects and 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 Kern Council of Governments (Kern COG) forum and general public involvement; and

WHEREAS, the 2007 FTIP Amendment No. 3 program listing is consistent with: 1) the 2007 Regional Transportation Plan; 2) the State Transportation Improvement Program; and 3) the Air Quality Conformity Analysis; and

WHEREAS, the 2007 FTIP Amendment No. 3 contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2007 FTIP Amendment No. 3 includes projects and financial information for four years of programming; and

WHEREAS, the 2007 FTIP Amendment No. 3 includes updates to the Expedited Project Selection Procedures; and

WHEREAS, projects submitted in the 2007 FTIP Amendment No. 3 must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the 2007 RTP and 2007 FTIP Amendment No. 3 do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the MPO must demonstrate conformity per 40 CFR Part 93 for the RTP and FTIP; and

WHEREAS, in accordance with EPA Companion Guidance for the Conformity Rule for multi-jurisdictional areas, Kern COG has developed their portion of the PM2.5 regional emissions analysis separately and provided the entire PM2.5 nonattainment area conformity demonstration; and
WHEREAS, the PM2.5 nonattainment area conformity demonstration is contingent upon adoption by all MPOs in the PM2.5 nonattainment area; and

WHEREAS, the Kern COG has also developed a regional emissions analysis for Carbon Monoxide (CO), Ozone, and PM-10 for Kern County; and

WHEREAS, the documents have been widely circulated and reviewed by Kern COG advisory committee representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of Kern County; and

WHEREAS, the Kern COG Policy Board has reviewed the Program Environmental Impact Report prepared for the 2007 Destination 2030 Regional Transportation Plan and has certified it as adequate and in compliance with the provisions of the California Environmental Quality Act (CEQA); and

WHEREAS, a public hearing was conducted on April 19, 2007 to hear and consider comments on the 2007 RTP, 2007 FTIP Amendment No. 3, and associated Air Quality Conformity Analysis and the remainder of the MPOs in the PM2.5 nonattainment area have conducted public hearings as well; and

WHEREAS, the Kern Council of Governments (Kern COG) Policy Board has reviewed the Air Quality Conformity Analysis and made a finding that the 2007 Destination 2030 Regional Transportation Plan and the 2007 Federal Transportation Improvement Program Amendment No. 3 are in conformance with the applicable transportation conformity rules for the applicable air quality standards.

NOW, THEREFORE, BE IT RESOLVED, that Kern Council of Governments (Kern COG) adopts the 2007 RTP, 2007 FTIP Amendment No. 3, and associated Air Quality Conformity Analysis.

AUTHORIZED AND SIGNED THIS 17TH DAY OF MAY 2007.

AYES:

NOES:

ABSTAIN:

ABSENT: __________________________
Cherylee Wegman, Chair
Kern Council of Governments

ATTEST:
I hereby certify that the foregoing is a true copy of a resolution of the Kern Council of Governments duly authorized at a regularly scheduled meeting held on the 17th day of May 2007.

Ronald E. Brummett, Executive Director
Kern Council of Governments

Date: __________________________

Resolution No. 07-19
2007 Air Quality
2007 RTP
2007 FTIP
Page 2
INTRODUCTION

The 2007 Destination 2030 Regional Transportation Plan (RTP), originally adopted in May 2007, is Kern COG’s major policy document and represents the vision of the region’s transportation system through 2030. It is required under state and federal planning regulations; projects cannot be programmed for state or federal funding, nor implemented, unless identified in the RTP.

The scope of the proposed RTP Amendment will be narrow and targeted toward incorporating those projects identified in the financially constrained Capital Improvement Program of the RTP’s Action Element.

This proposed RTP Amendment will necessitate the preparation of a transportation/air quality conformity analysis and an Addendum to the programmatic EIR for the Destination 2030 RTP.

PURPOSE AND NEED

Kern Council of Governments (Kern COG) adopted its current Destination 2030 Regional Transportation Plan (RTP) in May 2007 to comply with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) planning regulations. While Kern COG substantially meets these regulations, Federal Highway Administration requested that Kern COG continue to make progress in meeting year of expenditure requirements after December 11, 2007 and update the Congestion Management Process by its next certification review in May 2011.

SAFETEA-LU planning regulations require that the RTP’s revenues and costs be shown in year of expenditure dollars. In addition, all projects to be included in the Federal Transportation Improvement Program (FTIP) must be fully funded in the RTP, and include estimated total project cost.

The proposed amendment is needed to include projects not fully developed at the time the 2007 Destination 2030 RTP was originally adopted (May 2007), to incorporate changes in funding assumptions, and to reflect changing priorities. Amending the 2007 Destination 2030 RTP allows the projects to be programmed into the Transportation Improvement Program, making them eligible for funding.

The total net change for these amendments equals a decrease of $400 million.

The 2007 Destination 2030 RTP did not include complete year of expenditure dollars for revenues and costs. This amendment is being undertaken so that Table 4-1 (Constrained Program of Projects) and Table 4-2 (Unconstrained Program of Projects) of the Action Element can be amended to satisfy this requirements, including the
calculation of Year of Expenditure and total project costs, adjusted to a three percent-
per-year rate of inflation.

The amendment process requires that all proposed projects undergo the same
evaluation as the original RTP. These evaluations are summarized as:

- The financial analysis indicates that the 2007 RTP remains fiscally constrained
  with amendments of these projects;
- The air quality conformity analysis indicates emissions for ozone precursors and
  carbon monoxide remain below established mobile source emissions budgets;
- The environmental justice analysis indicates impacts related to implementation of
  the 2030 RTP remain balanced across the region;
- The public has been provided opportunities to comment on the projects.

The California Environmental Quality Act (CEQA) permits a lead agency to prepare an
Addendum to a previously certified Environmental Impact Report (EIR) if some changes
or additions are necessary but none of the changes or additions would require major
revisions of the previous EIR because of the involvement of new significant
environmental effects. Kern COG staff has prepared an Addendum to the Programmatic
EIR for the 2007 Destination 2030 RTP to address this proposed RTP Amendment.

Changes addressed in the Addendum do not raise any new issues or new significant
regional environmental impacts resulting from this proposed RTP Amendment. Except
for minor technical revisions, the environmental assessment for the 2007 RTP remains
unchanged as a result of this proposed RTP Amendment. The Addendum does not
need to be circulated for public review. The Kern COG Board of Directors shall consider
the Addendum to the Final EIR prior to making a decision on the proposed RTP
Amendment.

**PROPOSED SCHEDULE**

Kern COG has prepared the RTP Amendment, Addendum EIR, and associated
conformity analysis.

Kern COG is opening a public comment period on the proposed RTP Amendment on
May 14, 2008. At that time Kern COG also will commence its review of the draft air
quality conformity determination analysis and the 2009 Federal Transportation
Improvement Program required as part of this RTP amendment process.

Legal notice of the proposed air quality conformity determination will be provided to the
public at least 45 days prior to June 27, 2008. On July 17, 2008, Kern COG Board of
Directors will formally consider the RTP Amendment and its Addendum EIR, the FTIP
update and the related air quality conformity determination.

**POLICY ELEMENT**

The Policy Element of the RTP addresses legislative, planning, financial and institutional
issues and requirements, as well as any areas of regional consensus, such as land use.
The Policy Element provides guidance to decision-makers regarding the implications,
impacts, opportunities and foreclosed options that will result from RTP implementation.
The proposed amendment to the 2007 Destination 2030 continues to carry out the intentions of the RTP goals, policies, and actions.

**ACTION ELEMENT**

The Action Element sets forth plans of action for the region to pursue and meet identified transportation needs and issues. Planned investments must be consistent with the goals and policies of the RTP, and must be financially constrained. These projects are listed below in the Constrained Program of Projects (Table 4-1) and are modeled in the Air Quality Conformity analysis.

The Constrained Program of Projects includes projects that move the Kern region toward a financially constrained and balanced system (i.e., budgeted usually foreseeable funding). Constrained projects have undergone air quality conformity analyses to ensure that they contribute to the region’s compliance with state and federal air quality regulations.

The Unconstrained Program and Projects (Table 4-2) incorporates the region’s unbudgeted “vision”. These projects represent alternatives that could be moved to the constrained program if support for an individual project remains strong and if proper funding can be identified. Status as an unconstrained project does not imply that the project is not needed; rather, it simply cannot be accomplished given the fiscal constraints facing the Kern region. Kern COG will be vigilant in its search for funding to support these projects.

No unconstrained projects are included in the air quality conformity analysis. In the future, as the funding picture changes and community values and priorities for transportation projects become refined and honed, unconstrained projects may be moved to the constrained program. Should this occur, the Destination 2030 RTP would be once again amended and a new assessment of the Plan’s conformity with state and federal air quality rules and standards would be made.
TABLE 4.1 - Constrained Program of Projects

### 2007 through 2010 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
<th>Project ID</th>
<th>Start</th>
<th>Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Road</td>
<td>Metro Bkfd</td>
<td>Brimhall Rd to Stockdale Hwy - widen to six lanes</td>
<td>$7,000,000</td>
<td>KER08RTP081</td>
<td>2010</td>
<td>2012</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>$10,200,000</td>
<td>KER08RTP001</td>
<td>2010</td>
<td>2012</td>
</tr>
<tr>
<td>Challenger Dr. Ext.</td>
<td>Tehachapi</td>
<td>Extend from Viena St to Dennison Rd - construct new street</td>
<td>$1,500,000</td>
<td>KER08RTP015</td>
<td>2010</td>
<td>2012</td>
</tr>
<tr>
<td>I-5</td>
<td>Kern</td>
<td>Interchange improvements at Laval Rd</td>
<td>$11,300,000</td>
<td>KER08RTP002</td>
<td>2009</td>
<td>2011</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO Cty Line to East of Brown Material Rd - widen to four lanes</td>
<td>$232,070,000</td>
<td>KER08RTP003</td>
<td>2009</td>
<td>2011</td>
</tr>
<tr>
<td>Westside Parkway</td>
<td>Metro Bkfd</td>
<td>Stockdale Hwy/West Beltway to Truxtun Ave - construct local freeway</td>
<td>$377,000,000</td>
<td>KER08RTP004</td>
<td>2009</td>
<td>2011</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>Santa Fe Way to Coffee Rd - widen to four/six lanes</td>
<td>$57,000,000</td>
<td>KER08RTP005</td>
<td>2009</td>
<td>2011</td>
</tr>
</tbody>
</table>

Sub-total $ 696,070,000

### 2011 through 2015 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
<th>Project ID</th>
<th>Start</th>
<th>Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 1)</td>
<td>$42,000,000</td>
<td>KER08RTP006</td>
<td>2014</td>
<td>2016</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Allen Road to SR 99 - widen to six lanes</td>
<td>$44,000,000</td>
<td>KER08RTP007</td>
<td>2011</td>
<td>2013</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Hosking Road - construct interchange</td>
<td>$60,000,000</td>
<td>KER08RTP009</td>
<td>2010</td>
<td>2012</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Dr - Construct new four/six lane freeway with interchange</td>
<td>$86,000,000</td>
<td>KER08RTP010</td>
<td>2012</td>
<td>2014</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland to Miramonte Dr - widen to four/six lanes</td>
<td>$13,000,000</td>
<td>KER08RTP011</td>
<td>2011</td>
<td>2014</td>
</tr>
<tr>
<td>Route 178/24th St</td>
<td>Bakersfield</td>
<td>Rt 178/24th St and Oak St - construct intersection improvements</td>
<td>$56,000,000</td>
<td>KER08RTP012</td>
<td>2012</td>
<td>2014</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 99 to Cottonwood Rd - widen to six lanes</td>
<td>$50,000,000</td>
<td>KER08RTP019</td>
<td>2015</td>
<td>2017</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Bakersfield</td>
<td>Westside Parkway to SR 58 - construct new six lane freeway on eight-lane of right-of-way</td>
<td>$650,000,000</td>
<td>KER08RTP020</td>
<td>2015</td>
<td>2017</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204/Golden State - construct extension across SR 99</td>
<td>$85,000,000</td>
<td>KER08RTP013</td>
<td>2012</td>
<td>2014</td>
</tr>
<tr>
<td>Route 178 24th/23rd St</td>
<td>Bakersfield</td>
<td>SR 99 to M St - widen to six/eight lanes</td>
<td>$25,000,000</td>
<td>KER08RTP014</td>
<td>2013</td>
<td>2015</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>Pacheco Rd to Rosedale Hwy - construct four/six lane facility</td>
<td>$170,000,000</td>
<td>KER08RTP016</td>
<td>2014</td>
<td>2017</td>
</tr>
</tbody>
</table>

Sub-total $ 1,281,000,000

### 2016 through 2020 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
<th>Project ID</th>
<th>Start</th>
<th>Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>$42,000,000</td>
<td>KER08RTP017</td>
<td>2018</td>
<td>2020</td>
</tr>
</tbody>
</table>

Sub-total $ 42,000,000
### TABLE 4.1 - Constrained Program of Projects (Cont'd)

#### 2021 through 2025 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
<th>Project ID</th>
<th>Start</th>
<th>Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 3)</td>
<td>$32,000,000</td>
<td>KER08RTP024</td>
<td>2022</td>
<td>2024</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to County Rd - construct bypass (Phase 1)</td>
<td>$115,000,000</td>
<td>KER08RTP022</td>
<td>2022</td>
<td>2024</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Between SR 178 and China Lake Blvd - construct passing lanes</td>
<td>$20,000,000</td>
<td>KER08RTP089</td>
<td>2022</td>
<td>2024</td>
</tr>
</tbody>
</table>

**Sub-total** $167,000,000

#### 2026 through 2030 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
<th>Project ID</th>
<th>Start</th>
<th>Constructed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>East of Brown Material Rd to I-5 - widen to four lanes (Phase 4)</td>
<td>$97,000,000</td>
<td>KER08RTP018</td>
<td>2026</td>
<td>2030</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd - construct Interchange</td>
<td>$86,000,000</td>
<td>KER08RTP025</td>
<td>2028</td>
<td>2030</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Existing west terminus to Oswell St - widen to eight lanes</td>
<td>$81,000,000</td>
<td>KER08RTP026</td>
<td>2026</td>
<td>2028</td>
</tr>
</tbody>
</table>

**Sub-total** $264,000,000

**Total Major Highway Improvements** $2,450,070,000
### TABLE 4.2 - Unconstrained Program of Projects

<table>
<thead>
<tr>
<th>Project Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project Id</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2031 through 2035 - Major Highway Improvements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Route 46</strong></td>
<td>Wasco</td>
<td>Jumper Ave Alignment (North) to Rt 43 - widen to four lanes</td>
<td>$130,000,000</td>
</tr>
<tr>
<td><strong>Route 46</strong></td>
<td>Kern</td>
<td>Near Lost Hills at Interstate 5 - reconstruct interchange</td>
<td>$130,000,000</td>
</tr>
<tr>
<td><strong>Route 58</strong></td>
<td>Kern</td>
<td>Rosedale Highway - I-5 to Allen Rd - widen to four lanes</td>
<td>$90,000,000</td>
</tr>
<tr>
<td><strong>Route 58</strong></td>
<td>Tehachapi</td>
<td>Dennison Rd - construct interchange</td>
<td>$33,000,000</td>
</tr>
<tr>
<td><strong>Route 99</strong></td>
<td>Bakersfield</td>
<td>At Snow Road - construct new interchange</td>
<td>$108,000,000</td>
</tr>
<tr>
<td><strong>Route 99</strong></td>
<td>Bakersfield</td>
<td>At Olive Drive - Interchange reconstruction</td>
<td>$108,000,000</td>
</tr>
<tr>
<td><strong>Route 119</strong></td>
<td>Taft / Bakersfield</td>
<td>Elk Hills - from County Rd to Tupman Ave - widen to four lanes</td>
<td>$48,000,000</td>
</tr>
<tr>
<td><strong>Route 178</strong></td>
<td>Bakersfield</td>
<td>Miramontes Rd to Rancheria Rd - widen existing road to four / six lanes</td>
<td>$37,000,000</td>
</tr>
<tr>
<td><strong>Route 178</strong></td>
<td>Bakersfield</td>
<td>At SR 204 and 178 - reconstruction freeway ramps</td>
<td>$50,000,000</td>
</tr>
<tr>
<td><strong>Route 204</strong></td>
<td>Bakersfield</td>
<td>At F St and Golden State Ave - construct operational improvements</td>
<td>$70,000,000</td>
</tr>
<tr>
<td><strong>Route 204</strong></td>
<td>Bakersfield</td>
<td>(Golden State Ave) SR 99 to M St - construct operational improvements</td>
<td>$100,000,000</td>
</tr>
<tr>
<td><strong>Route 204</strong></td>
<td>Bakersfield</td>
<td>(Golden State Ave) from SR 99 to F St - widen to six lanes</td>
<td>$20,000,000</td>
</tr>
<tr>
<td><strong>Route 184</strong></td>
<td>Arvin</td>
<td>SR 223 to SR 178 - widen to four lanes</td>
<td>$102,000,000</td>
</tr>
<tr>
<td><strong>US 395</strong></td>
<td>Johannesburg</td>
<td>San Bdo County Line to SR 14 - widen to four lanes</td>
<td>$244,000,000</td>
</tr>
<tr>
<td><strong>South Beltway</strong></td>
<td>Bakersfield</td>
<td>I-5 to SR 58 - new expressway</td>
<td>$610,000,000</td>
</tr>
<tr>
<td><strong>Cecil Ave.</strong></td>
<td>Delano</td>
<td>Albany St to Browning Rd - widen to four lanes</td>
<td>$21,000,000</td>
</tr>
<tr>
<td><strong>Beyond 2035 - Major Highway Improvements</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interstate 5</strong></td>
<td>Kern</td>
<td>From Fort Tejon to SR 99 - widen to ten lanes</td>
<td>$86,000,000</td>
</tr>
<tr>
<td><strong>Interstate 5</strong></td>
<td>Kern</td>
<td>7th Standard Rd Interchange - reconstruction</td>
<td>$54,000,000</td>
</tr>
<tr>
<td><strong>Route 33</strong></td>
<td>Maricopa</td>
<td>Welch St to Midway Rd - widen to four lanes</td>
<td>$88,000,000</td>
</tr>
<tr>
<td><strong>Route 43</strong></td>
<td>Shafter</td>
<td>7th Standard Rd to Euclid Ave - widen to four lanes</td>
<td>$37,000,000</td>
</tr>
<tr>
<td><strong>Route 46</strong></td>
<td>Wasco</td>
<td>I-5 to Jumper Ave Alignment - widen to four lanes</td>
<td>$118,000,000</td>
</tr>
<tr>
<td><strong>Route 46</strong></td>
<td>Wasco</td>
<td>SR 43 to SR 99 - widen to four lanes</td>
<td>$70,000,000</td>
</tr>
<tr>
<td><strong>Route 58</strong></td>
<td>Bakersfield</td>
<td>Near General Beale Rd - new truck weigh station</td>
<td>$11,000,000</td>
</tr>
<tr>
<td><strong>Route 58</strong></td>
<td>Kern/Tehachapi</td>
<td>East of Tehachapi to General Beale Rd - truck auxiliary lanes / escape ramp</td>
<td>$86,000,000</td>
</tr>
<tr>
<td><strong>Route 58</strong></td>
<td>Bakersfield</td>
<td>General Beale Rd - construct new interchange</td>
<td>$54,000,000</td>
</tr>
<tr>
<td><strong>Route 65</strong></td>
<td>Kern</td>
<td>Meri Haggard Dr to County Line - widen to four lanes</td>
<td>$216,000,000</td>
</tr>
<tr>
<td><strong>Route 99</strong></td>
<td>Bakersfield</td>
<td>Ming Ave to Bear Mountain Blvd - widen to eight lanes</td>
<td>$125,000,000</td>
</tr>
<tr>
<td><strong>Route 99</strong></td>
<td>Bakersfield</td>
<td>SR 204 to Seventh Standard Rd - widen to eight lanes</td>
<td>$125,000,000</td>
</tr>
<tr>
<td><strong>Route 119</strong></td>
<td>Taft</td>
<td>SR 33 to Cherry Ave - widen to four lanes</td>
<td>$54,000,000</td>
</tr>
<tr>
<td><strong>Route 119</strong></td>
<td>Taft</td>
<td>Tupman Rd to I-5 - widen to four lanes</td>
<td>$60,000,000</td>
</tr>
<tr>
<td><strong>Route 155</strong></td>
<td>Delano</td>
<td>SR 99 to Browning Rd - four lanes; reconstruct</td>
<td>$32,000,000</td>
</tr>
<tr>
<td><strong>Route 166</strong></td>
<td>Maricopa</td>
<td>Basic School Rd - reconstruct intersection grade</td>
<td>$517,582</td>
</tr>
<tr>
<td><strong>Route 178</strong></td>
<td>Bakersfield</td>
<td>Vineland to China Garden - new freeway</td>
<td>$500,000,000</td>
</tr>
</tbody>
</table>
## TABLE 4.2 - Unconstrained Program of Projects - Continued

### Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project Id</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beyond 2035 - Major Highway Improvements</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Route 184</td>
<td>Arvin</td>
<td>SR 223 to SR 178 - widen to four lanes</td>
<td>$102,000,000</td>
<td>KER08RTP045</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Woodford-Tehachapi Rd to (Lower) Cummings Valley Rd - widen to four lanes</td>
<td>$47,445,008</td>
<td>KER08RTP046</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tucker to Woodford-Tehachapi Rd - widen to four lanes</td>
<td>$9,704,661</td>
<td>KER08RTP047</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>SR 99 to SR 184 - widen to four lanes</td>
<td>$69,010,921</td>
<td>KER08RTP048</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>From Arvin city limits to SR 58 - widen to four lanes</td>
<td>$64,697,738</td>
<td>KER08RTP049</td>
</tr>
<tr>
<td>US 395</td>
<td>Johannesburg</td>
<td>San Bdo County Line to SR 14 - widen to four lanes</td>
<td>$244,000,000</td>
<td>KER08RTP050</td>
</tr>
<tr>
<td>Santa Fe Way</td>
<td>Bakersfield</td>
<td>Hageman to Los Angeles Ave - widen to four lanes</td>
<td>$127,238,885</td>
<td>KER08RTP051</td>
</tr>
<tr>
<td>California City Blvd</td>
<td>California City</td>
<td>SR 14 east six miles - widen to four lanes</td>
<td>$22,000,000</td>
<td>KER08RTP052</td>
</tr>
<tr>
<td>Twenty Mule Team Rd</td>
<td>California City</td>
<td>California City Blvd to SR 58 - widen to four lanes</td>
<td>$21,565,913</td>
<td>KER08RTP053</td>
</tr>
<tr>
<td>North Gate Road</td>
<td>California City</td>
<td>California City Blvd to North Edwards - construct new four lane road</td>
<td>$60,384,555</td>
<td>KER08RTP054</td>
</tr>
<tr>
<td>Woomoles Ave.</td>
<td>Delano</td>
<td>SR 99 - widen bridge to four lanes; reconstruct ramps</td>
<td>$28,035,686</td>
<td>KER08RTP056</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>Interstate 5 to SR 99 - widen to four lanes</td>
<td>$288,983,230</td>
<td>KER08RTP057</td>
</tr>
<tr>
<td>Red Apple Rd</td>
<td>Kern</td>
<td>Tucker Rd to Westwood Blvd - widen to four lanes</td>
<td>$4,313,183</td>
<td>KER08RTP058</td>
</tr>
<tr>
<td>Sierra Way</td>
<td>Kern</td>
<td>Lake Isabella at South Fork Bridge - reconstruct bridge</td>
<td>$51,758,190</td>
<td>KER08RTP059</td>
</tr>
<tr>
<td>Frazier Park</td>
<td>Kern</td>
<td>Park and Ride facility near Frazier Park Blvd</td>
<td>$12,939,548</td>
<td>KER08RTP060</td>
</tr>
<tr>
<td>Wheeler Ridge Rd</td>
<td>Kern</td>
<td>I-5 to SR 223 - widen to four lanes</td>
<td>$129,395,476</td>
<td>KER08RTP061</td>
</tr>
<tr>
<td>Rosamond Blvd</td>
<td>Kern</td>
<td>Rosamond Blvd at UP Railroad - grade separation</td>
<td>$32,348,869</td>
<td>KER08RTP062</td>
</tr>
<tr>
<td>K Street</td>
<td>Kern</td>
<td>Mojave - extend K St to SR 14</td>
<td>$12,939,548</td>
<td>KER08RTP063</td>
</tr>
<tr>
<td>Teh. Willow Springs Rd</td>
<td>Tehachapi</td>
<td>SR 58 to Rosamond Blvd - widen to four lanes</td>
<td>$150,961,389</td>
<td>KER08RTP064</td>
</tr>
<tr>
<td>Valley Blvd</td>
<td>Tehachapi</td>
<td>Tucker Rd to Curry - widen to four lanes</td>
<td>$23,722,504</td>
<td>KER08RTP065</td>
</tr>
<tr>
<td>Kern Ave.</td>
<td>McFarland</td>
<td>Reconstruct pedestrian bridge at SR 99</td>
<td>$5,391,470</td>
<td>KER08RTP066</td>
</tr>
<tr>
<td>Mahan St</td>
<td>Ridgecrest</td>
<td>Inyokern to South China Lake - widen to four lanes</td>
<td>$32,348,869</td>
<td>KER08RTP067</td>
</tr>
<tr>
<td>Richmond Rd</td>
<td>Ridgecrest</td>
<td>E Ridgecrest Blvd - widen to four lanes</td>
<td>$6,469,774</td>
<td>KER08RTP068</td>
</tr>
<tr>
<td>Bowman Rd</td>
<td>Ridgecrest</td>
<td>China Lake to County Line Rd - reconstruction</td>
<td>$4,313,183</td>
<td>KER08RTP069</td>
</tr>
<tr>
<td>S. China Lake Blvd</td>
<td>Ridgecrest</td>
<td>SR 395 to College Heights - reconstruction</td>
<td>$36,662,052</td>
<td>KER08RTP070</td>
</tr>
<tr>
<td>College Heights</td>
<td>Ridgecrest</td>
<td>China Lake Blvd to Jarvis - reconstruction</td>
<td>$36,662,052</td>
<td>KER08RTP071</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>I-5 to Santa Fe Way - widen to four lanes</td>
<td>$90,576,833</td>
<td>KER08RTP072</td>
</tr>
<tr>
<td>Zachary Rd</td>
<td>Shafter</td>
<td>7th Standard Rd to Lerdo Hwy - widen to four lanes</td>
<td>$34,505,460</td>
<td>KER08RTP073</td>
</tr>
<tr>
<td>East Beltway</td>
<td>Bakersfield</td>
<td>SR 58 to Morning Drive - construct new expressway</td>
<td>$200,000,000</td>
<td>KER08RTP078</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>South metro</td>
<td>Pacheco Rd to I-5 - extend freeway</td>
<td>$100,000,000</td>
<td>KER08RTP075</td>
</tr>
<tr>
<td>West Beltway-North</td>
<td>North metro</td>
<td>Rosedale Hwy to SR 99 -Extend freeway</td>
<td>$100,000,000</td>
<td>KER08RTP076</td>
</tr>
</tbody>
</table>

Sub-total $3,866,892,576
### Metro Bakersfield Near-Term Constrained Program of Projects

**2007 through 2010 - Major Highway Improvements**

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Road</td>
<td>Metro Bkfd</td>
<td>Brimhall Rd to Stockdale Hwy - widen to six lanes</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>Westside Parkway</td>
<td>Metro Bkfd</td>
<td>Stockdale Hwy/West Beltway to Truxtun Ave - construct local freeway</td>
<td>$377,000,000</td>
</tr>
</tbody>
</table>

**Sub-total** $384,000,000

### Metro Bakersfield Long-Term Constrained Program of Projects

**2011 through 2030 - Major Highway Improvements**

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Allen Road to SR 99 - widen to six lanes</td>
<td>$44,000,000</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Hosking Road - construct interchange</td>
<td>$60,000,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Dr - Construct new four/six lane freeway with interchange</td>
<td>$86,000,000</td>
</tr>
<tr>
<td>Route 178/24th St</td>
<td>Bakersfield</td>
<td>Vineland to Miramonte Dr - widen to four/six lanes</td>
<td>$13,000,000</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 178/24th St and Oak St - construct intersection improvements</td>
<td>$56,000,000</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Bakersfield</td>
<td>Westside Parkway to SR 58 - construct new six lane freeway on eight-lane of right-of-way</td>
<td>$650,000,000</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204/Golden State - construct extension across SR 99</td>
<td>$85,000,000</td>
</tr>
<tr>
<td>Route 178/24th/23rd St</td>
<td>Bakersfield</td>
<td>SR 99 to M St - widen to six/eight lanes</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>Pacheco Rd to Rosedale Hwy - construct four/six lane facility</td>
<td>$170,000,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd - construct Interchange</td>
<td>$86,000,000</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Existing west terminus to Oswell St - widen to eight lanes</td>
<td>$81,000,000</td>
</tr>
</tbody>
</table>

**Sub-total** $1,406,000,000
Metropolitan Bakersfield Projects (2008-2010)

Figure 4-7
### Outlying Areas Near-Term Constrained Program of Projects
#### 2007 through 2010 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>$10,200,000</td>
</tr>
<tr>
<td>Challenger Dr. Ext.</td>
<td>Tehachapi</td>
<td>Extend from Viena St to Dennison Rd - construct new street</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>I-5</td>
<td>Kern</td>
<td>Interchange improvements at Laval Rd</td>
<td>$11,300,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>SLO Cty Line to East of Brown Material Rd - widen to four lanes</td>
<td>$232,070,000</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>Santa Fe Way to Coffee Rd - widen to four/six lanes</td>
<td>$57,000,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$312,070,000</strong></td>
</tr>
</tbody>
</table>

### Outlying Areas Long-Term Constrained Program of Projects
#### 2011 through 2030 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>Inflated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 1)</td>
<td>$42,000,000</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>$42,000,000</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 3)</td>
<td>$32,000,000</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Between SR 178 and Bowman Rd - construct passing lanes</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>East of Brown Material Rd to I-5 - widen to four lanes</td>
<td>$97,000,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td><strong>$233,000,000</strong></td>
</tr>
</tbody>
</table>
Near-Term Projects In Outlying Areas (2008-2010)

Figure 4-9
Long-Term Projects In Outlying Areas (2011-2030)

Figure 4-10
### Revenue Assumptions for Major Highway Improvements in Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Before Amendment</th>
<th>After Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STIP Revenue - Programmed &amp; Future</strong></td>
<td>$1,800,000,000</td>
<td>$1,397,000,000</td>
</tr>
<tr>
<td>STIP - Programmed</td>
<td>$370,000,000</td>
<td>$497,000,000</td>
</tr>
<tr>
<td>STIP - Future Estimate</td>
<td>$1,430,000,000</td>
<td>$900,000,000</td>
</tr>
<tr>
<td><strong>Federal Demonstration</strong></td>
<td>$722,000,000</td>
<td>$722,000,000</td>
</tr>
<tr>
<td><strong>Local Fees &amp; Developer Contributions</strong></td>
<td>$374,000,000</td>
<td>$374,000,000</td>
</tr>
<tr>
<td><strong>Total Highway Improvements Revenue Estimates</strong></td>
<td>$2,896,000,000</td>
<td>$2,493,000,000</td>
</tr>
</tbody>
</table>

### Programming Changes for Major Highway Improvements in Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Before Amendment</th>
<th>After Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming for Major Highway Improvements</td>
<td>$2,922,808,000</td>
<td>$2,450,070,000</td>
</tr>
</tbody>
</table>

The following adjustments are included in the revised overall estimated revenue decrease from $2.9 billion to $2.4 billion:

1. Approximately $85 million in projects have been or are under construction.
2. Approximately $500 million reduction in future STIP funding over 22 years.
3. Approximately $200 million of discretionary, state, federal and local contributions have been introduced into currently programmed projects for the transportation improvement program.
FINANCIAL ELEMENT

SAFETEA-LU, the federal surface transportation act, requires that the RTP be fiscally constrained; that is, the sum of the costs for planned projects cannot exceed reasonably available financial resources.

SAFETEA-LU now requires “year of expenditure” project cost estimates to be included in the Regional Transportation Plan. Federal regulations also require that revenue estimates reflect reasonably available dollars and that the project lists identified for construction be constrained by the projected level of revenue Year of expenditure is defined as the anticipated fiscal year that construction would begin. Regional highway projects in Table 4.1 (Constrained Program of Projects) and Table 4.2 (Unconstrained Program of Projects) have been reviewed and adjusted to meet these requirements. A statewide annual average of 3 percent for expected inflation was applied to project estimates. The impact of this adjustment is the deferral of projects previously identified for construction within the financially constrained planning range of the RTP (22 years) because expected revenue projections are less than the financing needed for these projects.

Revenue estimates for major highway improvements reflected in Table 4.1 was adjusted from $2.8 billion to $2.4 billion. The $400 million reduction reflects future formula funding for the State Transportation Improvement Program. Several projects in metropolitan Bakersfield, recently programmed using federal “demonstration” monies, have been adjusted to reflect projects expected to begin construction in the near term.

Regional project priorities for projects outside metropolitan Bakersfield continue to reflect commitments set in motion in 1999. Table 4.2 has been updated to reflect “year of expenditure” cost estimates and has been separated into two planning bands – “2031 to 2035” and “Beyond 2035”. Projects newly listed in the 2031-2035 time period reflect projects that are no longer financially constrained but are still important to the region’s highway network.

Modifications to the existing Financial Element of the (2007) Destination 2030 Regional Transportation Plan include the following:

Revenue Projection Assumptions

- County-share estimates to fund state highway projects are based on Caltrans’ projections of Kern County’s share and are projected over a 20-year period. Inflation rates were not applied. The first five years of revenue estimates assumed current FTIP project funding plus an additional $35 million. The second five years assumed a RIP rate of $35 million per year for five years and $10 million per year from the discretionary IIP source. The final 10 years assumed $35 million for RIP and $10 million for IIP per year.

Revenue Sources

Revenues identified in the Destination 2030 RTP financial forecast are those that have been provided for the construction, operation, and maintenance of the current roadway, transit and airport systems in the Kern region. Baseline revenues include existing local,
state, and federal transportation funding sources. As Table 5-1 and Figure 5.1 summarize below, revenue forecasts for the Kern region are estimated to be approximately $6.3 billion for the RTP period. Revenue levels identified in Table 5-1 reflect reasonably available funding and include estimates for funding programs used over the last several years.

Table 5-1 Revenue Forecast 2006-2030

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Regional Total $</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Transportation Funds</td>
<td>460,000,000</td>
<td>8</td>
</tr>
<tr>
<td>Bus Farebox</td>
<td>171,000,000</td>
<td>3</td>
</tr>
<tr>
<td>Local Agency Funds/Developer Fees/Regional Fees/Other</td>
<td>1,274,000,000</td>
<td>22</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,905,000,000</td>
<td>32</td>
</tr>
<tr>
<td><strong>State Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STIP (Regional and Interregional)</td>
<td>1,397,000,000</td>
<td>24</td>
</tr>
<tr>
<td>State Transit Assistance (STA)</td>
<td>460,500,000</td>
<td>8</td>
</tr>
<tr>
<td>State Highway Operation and Protection Program (SHOPP)</td>
<td>1,000,000,000</td>
<td>17</td>
</tr>
<tr>
<td>State Aid to Airports</td>
<td>3,000,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2,860,500,000</td>
<td>48</td>
</tr>
<tr>
<td><strong>Federal Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Transportation Program</td>
<td>135,000,000</td>
<td>2</td>
</tr>
<tr>
<td>Transportation Enhancement Activities Program</td>
<td>10,400,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Congestion Mitigation and Air Quality Program</td>
<td>106,000,000</td>
<td>2</td>
</tr>
<tr>
<td>Local Assistance (HES, HBRR, Section 130, Emergency Relief)</td>
<td>82,000,000</td>
<td>1</td>
</tr>
<tr>
<td>Federal Aid to Airports</td>
<td>45,000,000</td>
<td>1</td>
</tr>
<tr>
<td>FTA Section 5307 (Transit – metro)</td>
<td>38,800,000</td>
<td>1</td>
</tr>
<tr>
<td>FTA Section 5310 (Transit – senior / disabled)</td>
<td>2,100,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>FTA Section 5311 (Transit – rural)</td>
<td>5,400,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>State/Federal Demonstration</td>
<td>720,000,000</td>
<td>12</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,144,700,000</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$5,910,200,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

Baseline Expenditures

Given the Destination 2030 RTP’s baseline cost estimate of $5.9 billion, Figure 5.2 illustrates the mode split for the region. The data show that about 80% of the region’s baseline costs are dedicated to street and highway improvements or maintenance. Twenty percent of expenditures are for transit operating and capital needs. The remaining 3% of RTP expenditures are for transportation control measures, aviation, and non-motorized projects.
Figure 5.2 Transportation Investments by Mode 2007-2030

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Streets and Roads</td>
<td>50%</td>
<td>$2.8 Billion</td>
</tr>
<tr>
<td>Major Highway Network</td>
<td>37%</td>
<td>$1.7 Billion</td>
</tr>
<tr>
<td>Passenger Rail</td>
<td>0%</td>
<td>No new funding</td>
</tr>
<tr>
<td>Non-motorized</td>
<td>0.5%</td>
<td>$15 Million</td>
</tr>
<tr>
<td>Transit</td>
<td>12.5%</td>
<td>$700 Million</td>
</tr>
</tbody>
</table>

Funding Shortfall of $4.5 Billion

To further assess the region’s financial outlook, baseline revenues were matched against a program of projects that have been divided into two groups: constrained and unconstrained. The Unconstrained Program of Projects (Table 4.2) lists projects considered necessary for development of Kern County’s transportation infrastructure, but for which funding cannot be reasonably expected within the timeframe of this RTP. This comparison clearly indicated that the Kern region will experience funding deficits to operate, maintain, and rehabilitate its existing transportation system over the Destination 2030 RTP timeframe. While the shortfall is shown as approximately $4.5 billion, it is actually much greater because some projects do not as yet have actual cost estimates. Such projects as high-speed rail improvements and grade-separation projects (over- and under-crossings) do not have identified funding. Some grade separations have been included as components of street widening, while many are stand-alone projects. Costs will vary based on right-of-way purchase in addition to construction costs. A baseline cost estimate on the order of an additional $8 million per project for grade separation projects could be added to the $2.3 billion identified shortfall.

The extensive list of unconstrained projects, including regionally significant highway improvements, interchanges, regional roadway improvements, rail and bus service, railroad grade crossings, transportation control measures and deferred roadway maintenance paints a vivid picture of Kern County’s need for additional revenue.

Funds to support operations and maintenance - whether it be street and highway, bus and rail, or transportation demand management programs - are the most difficult to find. Historically, the Kern region has relied heavily on local monies for these operating funds.
Operating funds for streets and road maintenance have been available traditionally through gas taxes, Transportation Development Act (TDA) funds and flexible federal transportation funds; however, TDA funds in support of street and road maintenance projects are not expected to continue. With increasingly fuel-efficient vehicles and the rising cost of gasoline, revenues from gas taxes are not expected to increase at more than a nominal rate.

**ENVIRONMENTAL JUSTICE**

The goal of the environmental justice process is to ensure that all people, regardless of race, color, national origin or income, are protected from disproportionate negative or adverse impacts caused by the RTP Program of Projects. As part of the RTP Amendment process, Kern COG reassessed Environmental Justice performance measures to determine what, if any, impacts would occur given the project changes discussed above.

An update to Kern COG’s Environmental Justice Report (November 2003) will be circulated for public review and brought to the Board of Directors for their adoption Summer 2008.
**Equity**

Equity is considered a key performance measure, and is defined as a fair and reasonable distribution of transportation investment benefits (as a share of benefits). Kern COG took a similar approach to equity as with cost-effectiveness, comparing the total investment in roads and transit through 2030 with total passenger miles traveled in Bakersfield, rural areas and the county as a whole. All numbers were converted to percentages for simplicity.

In 2030, Bakersfield EJ TAZs will account for 38% of all passenger miles traveled in the region. However, approximately 25% of transportation expenditures will go directly into the metropolitan EJ TAZs. Similarly, rural EJ TAZs, will represent 19.7% of countywide PMT; however, 26.2% of all transportation funding will be spent in those areas. Countywide, approximately 25.5% of all passenger miles traveled will occur in EJ TAZs, which will collect 24.9% of funding and projects. For Kern County as a whole, the percent of expenditures and passenger miles traveled in EJ areas are roughly equivalent, that is, six-tenths of a percent difference. It is slightly weighted in favor of rural areas.

Although Kern COG cannot reliably project the number of passenger miles traveled by rural transit agencies in 2030, the model does predict that EJ TAZs in the metro Bakersfield region will make up approximately 57% of transit PMT. Those same TAZs, however, will receive 73% of all transit funding attributable to the metropolitan area. Stratification between metro and rural transit services is impractical because of the lack of a rural transit Passenger Miles Traveled variable.

### Percent of Expenditures versus Passenger Miles Traveled in 2030 - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>22,276,256</td>
<td>$1,796,494,000</td>
<td>40.2</td>
<td>73.9</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>33,086,568</td>
<td>$633,576,000</td>
<td>59.8</td>
<td>26.1</td>
</tr>
<tr>
<td>Countywide</td>
<td>55,362,824</td>
<td>$2,430,070,000</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

### Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>8,424,618</td>
<td>$439,439,254</td>
<td>59.6</td>
<td>24.5</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>6,515,662</td>
<td>$165,764,695</td>
<td>46.18</td>
<td>26.5</td>
</tr>
<tr>
<td>Countywide</td>
<td>14,140,280</td>
<td>$605,203,949</td>
<td>25.5</td>
<td>24.9</td>
</tr>
</tbody>
</table>
### Percent of Expenditures versus Passenger Miles Traveled in 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>101,554</td>
<td>$96,000,000</td>
<td>N/A</td>
<td>85.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$16,800,000</td>
<td>N/A</td>
<td>14.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$112,800,000</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

### Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>58,150</td>
<td>$48,800,000</td>
<td>N/A</td>
<td>73.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$17,986,500</td>
<td>N/A</td>
<td>26.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$66,786,500</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
INTRODUCTION

The 2007 Destination 2030 Regional Transportation Plan (RTP), originally adopted in May 2007, is Kern COG’s long-term policy document that represents the vision of the region’s transportation system through 2030. It is required under state and federal planning regulations; projects cannot be programmed for state or federal funding, nor implemented without first being identified in the RTP.

The scope of the proposed RTP Amendment #2 will be narrow and targeted at incorporating project updates from outlying areas, updates to the Metropolitan Bakersfield Impact Fee program list and Thomas Road Improvement Program, as well as the latest planning assumptions to measure air quality.

This proposed RTP Amendment necessitates preparation of a transportation/air quality conformity analysis and an Addendum to the programmatic EIR for the Destination 2030 RTP.

PURPOSE AND NEED

Kern Council of Governments (Kern COG) adopted its current Destination 2030 Regional Transportation Plan in May 2007 to comply with planning regulations from the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Kern COG’s long-range plan substantially meets these regulations; the Congestion Management Program will be updated by its next certification review in May 2011. SAFETEA-LU planning regulations require that the RTP’s revenues and costs be shown in year of expenditure dollars. All projects included in the Federal Transportation Improvement Program (FTIP) are shown as fully funded in the RTP with estimated total project cost at year of expenditure.

The proposed amendment is needed to include projects not fully developed at the time the 2007 Destination 2030 RTP was originally adopted to incorporate changes in funding assumptions, and to reflect changing priorities. Amending the 2007 Destination 2030 RTP allows the projects to be programmed into the Transportation Improvement Program, making them eligible for funding.

The total net change for these amendments equals an increase of approximately $600 million.

The amendment process requires that all proposed projects undergo the same evaluation as the original RTP. These evaluations are summarized as:

- The financial analysis indicates that the 2007 RTP remains fiscally constrained with these projects as amendments;
• The air quality conformity analysis indicates emissions for ozone precursors, particulate matter, and carbon monoxide remain below established mobile source emissions budgets;
• Confirmation that the project changes do not interfere with the timely implementation of approved transportation control measures
• The environmental justice analysis indicates impacts related to implementation of the 2007 RTP remain balanced across the region;
• The public has been provided opportunities to comment on the projects.

The California Environmental Quality Act (CEQA) permits a lead agency to prepare an Addendum to a previously certified Environmental Impact Report (EIR) if changes or additions are necessary but none of the changes or additions would require major revisions of the previous EIR because of the involvement of new significant environmental effects. Kern COG staff has prepared an Addendum to the Programmatic EIR for the 2007 Destination 2030 RTP to assess this proposed RTP Amendment.

Changes addressed in the Addendum do not raise any new issues or new significant regional environmental impacts resulting from this proposed RTP Amendment. Except for minor technical revisions, the environmental assessment for the 2007 RTP remains unchanged as a result of this Amendment. The Addendum does not need to be circulated for public review. The Kern COG Board of Directors will consider the Addendum to the Final EIR prior to making a decision on the proposed RTP Amendment.

PROPOSED SCHEDULE

Kern COG has prepared the RTP Amendment and Addendum EIR and is opening a 45-day public comment period on the proposed RTP Amendment on July 8, 2009. At that time, Kern COG also will commence its review of the draft air quality conformity determination analysis and the 2009 Federal Transportation Improvement Program required as part of this RTP amendment process.

The comment period will close August 21, 2009. Kern COG Board of Directors will formally consider the RTP Amendment, its Addendum EIR, the FTIP Amendment #8 and the related Air Quality Conformity determination on September 17, 2009.

POLICY ELEMENT

The Policy Element of the RTP addresses legislative, planning, financial and institutional issues and requirements, as well as any areas of regional consensus, such as land use. This Element provides guidance to decision-makers regarding the implications, impacts, opportunities and foreclosed options that will result from RTP implementation.

This proposed Amendment to the 2007 RTP continues to carry out the intentions of the RTP’s goals, policies, and actions.

ACTION ELEMENT
The Action Element sets forth plans of action for the region to pursue and meet identified transportation needs and issues. Planned investments must be consistent with the goals and policies of the RTP, and must be financially constrained. These projects are listed below in the Constrained Program of Projects (Table 4-1) and are modeled in the Air Quality Conformity Analysis.

The Constrained Program of Projects (Table 4-1) includes projects that move the Kern region toward a financially constrained and balanced, multi-modal transportation system (i.e., budgeted using foreseeable funding). Constrained projects have undergone air quality conformity analyses to ensure that they contribute to the region’s compliance with state and federal air quality regulations.

The Unconstrained Program and Projects (Table 4-2) incorporates the region’s unbudgeted “vision”. These projects represent alternatives that could be moved to the constrained program if support for an individual project remains strong and if proper funding can be identified. Status as an unconstrained project does not imply that the project is not needed; rather, it simply cannot be accomplished given the fiscal constraints facing the Kern region. Kern COG is vigilant in its search for funding to support these projects.

No unconstrained projects are included in the air quality conformity analysis. In the future, as the funding picture changes and community values and priorities for transportation projects are refined, unconstrained projects may be moved to the constrained program. Should this occur, the RTP would be once again amended and a new assessment made of the Plan’s conformity with state and federal air quality rules and standards.
### TABLE 4.1 - Constrained Program of Projects

#### 2007 through 2010 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-5</td>
<td>Kern</td>
<td>Interchange improvements at Laval Rd</td>
<td>11,300,000</td>
<td>KER08RTP002</td>
<td>2009</td>
</tr>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>SLO County Line to Halloway Rd - widen to four lanes (Segments 1 - 3)</td>
<td>232,070,000</td>
<td>KER08RTP003</td>
<td>2009</td>
</tr>
<tr>
<td>Route 99</td>
<td>Metro Bkfd</td>
<td>Hosking Ave - Construct interchange</td>
<td>35,000,000</td>
<td>KER08RTP009</td>
<td>2010</td>
</tr>
<tr>
<td>Challenger Dr. Ext.</td>
<td>Tehachapi</td>
<td>Viena St to Dennison Rd - construct new street</td>
<td>1,500,000</td>
<td>KER08RTP015</td>
<td>2010</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>10,200,000</td>
<td>KER08RTP001</td>
<td>2010</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>Santa Fe Way to Coffee Rd - widen to four/six lanes</td>
<td>57,000,000</td>
<td>KER08RTP005</td>
<td>2009</td>
</tr>
<tr>
<td>Westside Parkway</td>
<td>Metro Bkfd</td>
<td>SR 99 / Oak St to Heath Rd - construct local freeway</td>
<td>340,000,000</td>
<td>KER08RTP004</td>
<td>2009</td>
</tr>
</tbody>
</table>

Sub-total $687,070,000

#### 2011 through 2015 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase1)</td>
<td>42,000,000</td>
<td>KER08RTP006</td>
<td>2014</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Calloway Dr to SR 99 - widen to six lanes; grade separation at Landco</td>
<td>35,900,000</td>
<td>KER08RTP007</td>
<td>2011</td>
</tr>
<tr>
<td>Route 58</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy - Allen Rd to Calloway Dr - widen to four/six lanes</td>
<td>8,800,000</td>
<td>KER08RTP090</td>
<td>2011</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 99 to Cottonwood Rd. - widen to six lanes</td>
<td>50,000,000</td>
<td>KER08RTP019</td>
<td>2015</td>
</tr>
<tr>
<td>Route 99</td>
<td>Bakersfield</td>
<td>Olive Drive - Construct interchange upgrades</td>
<td>6,100,000</td>
<td>KER08RTP091</td>
<td>2012</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Morning Dr to Vineland Rd - new 4/6 lane freeway w/ interchange</td>
<td>58,800,000</td>
<td>KER08RTP010</td>
<td>2011</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd to Miramonte Dr - widen to four lanes</td>
<td>36,500,000</td>
<td>KER08RTP011</td>
<td>2011</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Bakersfield</td>
<td>Knudsen Dr to Rt 204 - construct four/six lane extension</td>
<td>68,900,000</td>
<td>KER08RTP013</td>
<td>2012</td>
</tr>
<tr>
<td>Oak St/24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 (24th St) and Oak St - construct improvements</td>
<td>19,100,000</td>
<td>KER08RTP012</td>
<td>2012</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Bakersfield</td>
<td>Westside Parkway to SR-58 - construct 6-lane freeway on 8-lane ROW</td>
<td>645,000,000</td>
<td>KER08RTP020</td>
<td>2015</td>
</tr>
<tr>
<td>24th Street</td>
<td>Bakersfield</td>
<td>Rt 178 SR-99 to M Street - widen to six/eight lanes</td>
<td>34,000,000</td>
<td>KER08RTP014</td>
<td>2013</td>
</tr>
</tbody>
</table>

Sub-total $1,005,100,000
# TABLE 4.1 - Constrained Program of Projects (Cont'd)

## 2016 through 2020 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE</th>
<th>Cost</th>
<th>Project ID</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>42,000,000</td>
<td>KER08RTP017</td>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>Route 99</td>
<td>Delano</td>
<td>Woollomes Ave - interchange upgrades</td>
<td>5,000,000</td>
<td>KER08RTP114</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>Route 178</td>
<td>Metro Bkfd</td>
<td>West of Fairfax Rd to west of Morning Drive - widen to six lanes</td>
<td>806,000</td>
<td>KER08RTP111</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>Route 178</td>
<td>Metro Bkfd</td>
<td>West of Morning Dr to Vineland Rd - widen to six lanes</td>
<td>806,000</td>
<td>KER08RTP112</td>
<td>2020</td>
<td></td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter/Bkfd</td>
<td>Rt 43 to Santa Fe Way - widen to four/six lanes</td>
<td>11,500,000</td>
<td>KER08RTP113</td>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy to Pacheco Rd - construct four/six lane facility</td>
<td>173,200,000</td>
<td>KER08RTP016</td>
<td>2018</td>
<td></td>
</tr>
</tbody>
</table>

Sub-total $233,312,000

## 2021 through 2025 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE</th>
<th>Cost</th>
<th>Project ID</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 3)</td>
<td>32,000,000</td>
<td>KER08RTP024</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rosedale Hwy - Rt 43 to Allen Rd - widen to four lanes</td>
<td>59,000,000</td>
<td>KER08RTP092</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 99 to Cottonwood Rd. - widen to eight lanes</td>
<td>47,400,000</td>
<td>KER08RTP093</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 65</td>
<td>Bakersfield</td>
<td>James Rd to Merle Haggard Blvd - widen to four lanes</td>
<td>3,000,000</td>
<td>KER08RTP094</td>
<td>2021</td>
<td></td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Elk Hills - widen to four lanes (Phase 1)</td>
<td>115,000,000</td>
<td>KER08RTP022</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>At Rt 204 - Construct interchange</td>
<td>25,700,000</td>
<td>KER08RTP095</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Miramonte Dr to Rancheria Rd widen to four lanes</td>
<td>11,700,000</td>
<td>KER08RTP084</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 184</td>
<td>Bakersfield</td>
<td>At Union Pacific Railroad - Construct grade separation</td>
<td>26,400,000</td>
<td>KER08RTP108</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 204</td>
<td>Bakersfield</td>
<td>Airport Drive to Rt 178 widen to six lanes</td>
<td>38,500,000</td>
<td>KER08RTP083</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>Route 204</td>
<td>Bakersfield</td>
<td>F St - construct interchange</td>
<td>25,700,000</td>
<td>KER08RTP081</td>
<td>2025</td>
<td></td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Between Rt 178 and China Lake Blvd - construct passing lanes</td>
<td>20,000,000</td>
<td>KER08RTP089</td>
<td>2022</td>
<td></td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>Taft Hwy to Pacheco Rd - construct four/six lane facility</td>
<td>80,400,000</td>
<td>KER08RTP097</td>
<td>2025</td>
<td></td>
</tr>
</tbody>
</table>

Sub-total $484,800,000
### TABLE 4.1 - Constrained Program of Projects (Cont'd)

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>Halloway Rd to I-5 - interchange upgrade at I-5 (Phase 4)</td>
<td>97,000,000</td>
<td>KER08RTP018</td>
<td>2026</td>
</tr>
<tr>
<td>Route 119</td>
<td>Bakersfield</td>
<td>I-5 to Buena Vista - widen to four lanes</td>
<td>31,300,000</td>
<td>KER08RTP099</td>
<td>2026</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Vineland Rd to Miramonte Dr - new Interchange; widen to six lanes</td>
<td>231,500,000</td>
<td>KER08RTP025</td>
<td>2028</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>Existing west terminus to Oswell St - widen to eight lanes</td>
<td>140,500,000</td>
<td>KER08RTP026</td>
<td>2026</td>
</tr>
<tr>
<td>Route 184</td>
<td>Bakersfield</td>
<td>Panama Rd to Rt 58 - widen to four lanes</td>
<td>10,500,000</td>
<td>KER08RTP100</td>
<td>2029</td>
</tr>
<tr>
<td>Route 184</td>
<td>Bakersfield</td>
<td>Morning Dr to Rt 178 - widen to four lanes</td>
<td>5,000,000</td>
<td>KER08RTP101</td>
<td>2026</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Metro Bkfd</td>
<td>Rosedale Hwy to 7th Standard Rd - new four/six lane facility</td>
<td>128,500,000</td>
<td>KER08RTP102</td>
<td>2028</td>
</tr>
</tbody>
</table>

**Sub-total** $644,300,000

**Total Major Highway Improvements** $3,054,582,000
<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Juniper Ave (North) to Rt 43 - widen to four lanes</td>
<td>130,000,000</td>
<td>KER08RTP079</td>
</tr>
<tr>
<td>Route 46</td>
<td>Kern</td>
<td>Near Lost Hills at Interstate 5 - upgrade and widen interchange</td>
<td>130,000,000</td>
<td>KER08RTP033</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern</td>
<td>Rosedale Highway - I-5 to Rt 43 - widen to four lanes</td>
<td>31,000,000</td>
<td>KER08RTP08</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>At various locations - ramp improvements</td>
<td>32,600,000</td>
<td>KER08RTP103</td>
</tr>
<tr>
<td>Route 58</td>
<td>Tehachapi</td>
<td>Rte 204 to 7th Standard Rd - widen to eight lanes</td>
<td>91,100,000</td>
<td>KER08RTP104</td>
</tr>
<tr>
<td>Route 99</td>
<td>Bakersfield</td>
<td>At Olive Dr - interchange reconstruction</td>
<td>108,000,000</td>
<td>KER08RTP21</td>
</tr>
<tr>
<td>Route 99</td>
<td>Bakersfield</td>
<td>Rte 335 to I-58 - new expressway</td>
<td>610,000,000</td>
<td>KER08RTP074</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft / Bakersfield</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>86,000,000</td>
<td>KER08RTP027</td>
</tr>
<tr>
<td>Route 178</td>
<td>Bakersfield</td>
<td>7th Standard Rd Interchange - reconstruction</td>
<td>54,000,000</td>
<td>KER08RTP028</td>
</tr>
<tr>
<td>Route 178</td>
<td>Maricopa</td>
<td>Welch St to Midway Rd - widen to four lanes</td>
<td>88,000,000</td>
<td>KER08RTP029</td>
</tr>
<tr>
<td>Route 184</td>
<td>Shafter</td>
<td>7th Standard Rd to Euclid Ave - widen to four lanes</td>
<td>37,000,000</td>
<td>KER08RTP030</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>I-5 to Juniper Ave - widen to four lanes</td>
<td>118,000,000</td>
<td>KER08RTP031</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 46 @ BNSF (Wasco) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP119</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Future Rt 58 from I-5 to Heath Rd at Stockdale Hwy - construct new freeway</td>
<td>500,000,000</td>
<td>KER08RTP137</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 58 / Rosedale Hwy @ Minkler Spur (Metro) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP118</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern/Tehachapi</td>
<td>Near General Beale Rd - new truck weigh station</td>
<td>11,000,000</td>
<td>KER08RTP034</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>East of Tehachapi to General Beale Rd - truck auxiliary lanes / escape ramp</td>
<td>86,000,000</td>
<td>KER08RTP035</td>
</tr>
<tr>
<td>Route 65</td>
<td>Kern</td>
<td>Merle Haggard Dr to County Line - widen to four lanes</td>
<td>216,000,000</td>
<td>KER08RTP039</td>
</tr>
</tbody>
</table>

**Beyond 2035 - Major Highway Improvements**

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>From Fort Tejon to Rt 99 - widen to ten lanes</td>
<td>86,000,000</td>
<td>KER08RTP027</td>
</tr>
<tr>
<td>Interstate 5</td>
<td>Kern</td>
<td>7th Standard Rd Interchange - reconstruction</td>
<td>54,000,000</td>
<td>KER08RTP028</td>
</tr>
<tr>
<td>Route 33</td>
<td>Maricopa</td>
<td>Welch St to Midway Rd - widen to four lanes</td>
<td>88,000,000</td>
<td>KER08RTP029</td>
</tr>
<tr>
<td>Route 43</td>
<td>Shafter</td>
<td>7th Standard Rd to Euclid Ave - widen to four lanes</td>
<td>37,000,000</td>
<td>KER08RTP030</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>I-5 to Juniper Ave - widen to four lanes</td>
<td>118,000,000</td>
<td>KER08RTP031</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 46 @ BNSF (Wasco) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP119</td>
</tr>
<tr>
<td>Route 46</td>
<td>Wasco</td>
<td>Rt 43 to Rt 99 - widen to four lanes</td>
<td>70,000,000</td>
<td>KER08RTP032</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Future Rt 58 from I-5 to Heath Rd at Stockdale Hwy - construct new freeway</td>
<td>500,000,000</td>
<td>KER08RTP137</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>Rt 58 / Rosedale Hwy @ Minkler Spur (Metro) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP118</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern</td>
<td>Near General Beale Rd - new truck weigh station</td>
<td>11,000,000</td>
<td>KER08RTP034</td>
</tr>
<tr>
<td>Route 58</td>
<td>Kern/Tehachapi</td>
<td>East of Tehachapi to General Beale Rd - truck auxiliary lanes / escape ramp</td>
<td>86,000,000</td>
<td>KER08RTP035</td>
</tr>
<tr>
<td>Route 58</td>
<td>Bakersfield</td>
<td>General Beale Rd - construct new interchange</td>
<td>54,000,000</td>
<td>KER08RTP037</td>
</tr>
<tr>
<td>Route 65</td>
<td>Kern</td>
<td>Merle Haggard Dr to County Line - widen to four lanes</td>
<td>216,000,000</td>
<td>KER08RTP039</td>
</tr>
</tbody>
</table>
### TABLE 4.2 - Unconstrained Program of Projects (Cont'd)

#### Beyond 2035 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 99</td>
<td>Cnty/Bkfd</td>
<td>Rt 99 @ Minkler Spur (Metro) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP134</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Rt 33 to Cherry Ave - widen to four lanes</td>
<td>54,000,000</td>
<td>KER08RTP040</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Tupman Rd to I-5 - widen to four lanes</td>
<td>60,000,000</td>
<td>KER08RTP041</td>
</tr>
<tr>
<td>Route 155</td>
<td>Delano</td>
<td>Rt 99 to Browning Rd - four lanes; reconstruct</td>
<td>32,000,000</td>
<td>KER08RTP042</td>
</tr>
<tr>
<td>Route 155</td>
<td>Delano</td>
<td>Rt 155 @ UPRR (Delano) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP120</td>
</tr>
<tr>
<td>Route 166</td>
<td>Maricopa</td>
<td>Basic School Rd - reconstruct intersection grade</td>
<td>517,582</td>
<td>KER08RTP043</td>
</tr>
<tr>
<td>Route 178</td>
<td>Kern Canyon</td>
<td>Vineland Rd to China Garden - construct new freeway</td>
<td>500,000,000</td>
<td>KER08RTP044</td>
</tr>
<tr>
<td>Route 204</td>
<td>Bakersfield</td>
<td>(Golden State Ave) Rt 99 to M St - construct operational improvements</td>
<td>100,000,000</td>
<td>KER08RTP082</td>
</tr>
<tr>
<td>Route 184</td>
<td>Bakersfield</td>
<td>Rt 184 / Morning Dr. @ UPRR (Metro) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP122</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Woodford-Tehachapi Rd to (Lower) Cummings Valley Rd - widen to four lanes</td>
<td>47,445,008</td>
<td>KER08RTP046</td>
</tr>
<tr>
<td>Route 202</td>
<td>Tehachapi</td>
<td>Tucker Rd to Woodford-Tehachapi Rd - widen to four lanes</td>
<td>9,704,661</td>
<td>KER08RTP047</td>
</tr>
<tr>
<td>Route 223</td>
<td>Near Arvin</td>
<td>Rt 99 to Rt 184 - widen to four lanes</td>
<td>69,010,921</td>
<td>KER08RTP048</td>
</tr>
<tr>
<td>Route 223</td>
<td>Arvin</td>
<td>East Arvin city limits to Rt 58 - widen to four lanes</td>
<td>64,697,738</td>
<td>KER08RTP049</td>
</tr>
<tr>
<td>Santa Fe Way</td>
<td>Bakersfield</td>
<td>Hageman Rd to Los Angeles Ave - widen to four lanes</td>
<td>127,238,885</td>
<td>KER08RTP051</td>
</tr>
<tr>
<td>East Beltway</td>
<td>Bakersfield</td>
<td>Rt 58 to Morning Drive - construct new expressway</td>
<td>200,000,000</td>
<td>KER08RTP078</td>
</tr>
<tr>
<td>Beale Ave</td>
<td>Bakersfield</td>
<td>L St./Beale Ave @ BNSF RR (Bakersfield) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP127</td>
</tr>
<tr>
<td>Q Street</td>
<td>Bakersfield</td>
<td>Q St @ UPRR near Golden State Hwy - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP136</td>
</tr>
<tr>
<td>Comanche Drive</td>
<td>Cnty/Bkfd</td>
<td>Comanche Dr @ UPRR (Metro) - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP123</td>
</tr>
<tr>
<td>Olive Drive</td>
<td>Cnty/Bkfd</td>
<td>Olive Dr @ UPRR (Metro) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP129</td>
</tr>
<tr>
<td>Renfro Rd</td>
<td>Cnty/Bkfd</td>
<td>Renfro Rd @ BNSF RR (Metro) - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP130</td>
</tr>
<tr>
<td>California City Blvd</td>
<td>California City</td>
<td>Rt 14 east six miles - widen to four lanes</td>
<td>22,000,000</td>
<td>KER08RTP052</td>
</tr>
<tr>
<td>Twenty Mule Team Rd</td>
<td>California City</td>
<td>California City Blvd to Rt 58 - widen to four lanes</td>
<td>21,565,913</td>
<td>KER08RTP053</td>
</tr>
<tr>
<td>North Gate Rd</td>
<td>California City</td>
<td>California City Blvd to North Edwards - construct new four lane road</td>
<td>60,384,555</td>
<td>KER08RTP054</td>
</tr>
<tr>
<td>Woollomes Ave</td>
<td>Delano</td>
<td>Rt 99 - widen bridge to four lanes; reconstruct ramps</td>
<td>28,035,686</td>
<td>KER08RTP056</td>
</tr>
<tr>
<td>Garces Highway</td>
<td>Delano</td>
<td>I-5 to Rt 99 - widen to four lanes</td>
<td>288,983,230</td>
<td>KER08RTP057</td>
</tr>
<tr>
<td>Kimberlina Rd</td>
<td>Cnty/Wasco</td>
<td>Kimberlina Rd @ BNSF (Wasco) - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP132</td>
</tr>
<tr>
<td>Red Apple Rd</td>
<td>Cnty/Tehachapi</td>
<td>Tucker Rd to Westwood Blvd - widen to four lanes</td>
<td>4,313,183</td>
<td>KER08RTP058</td>
</tr>
<tr>
<td>Sierra Way</td>
<td>Cnty/Lk Isabella</td>
<td>South Fork Bridge - reconstruct bridge</td>
<td>51,758,190</td>
<td>KER08RTP059</td>
</tr>
<tr>
<td>Frazier Park Blvd</td>
<td>Cnty/Frazier Pk</td>
<td>Construct Park and Ride facility near Frazier Park Blvd</td>
<td>12,939,548</td>
<td>KER08RTP060</td>
</tr>
</tbody>
</table>
### TABLE 4.2 - Unconstrained Program of Projects (Cont’d)

#### Beyond 2035 - Major Highway Improvements

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Project Id</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheeler Ridge Rd</td>
<td>Kern</td>
<td>I-5 to Rt 223 - widen to four lanes</td>
<td>129,395,476</td>
<td>KER08RTP061</td>
</tr>
<tr>
<td>Rosamond Blvd</td>
<td>Cnty/Rosamond</td>
<td>Rosamond Blvd at UP RR - grade separation</td>
<td>32,348,869</td>
<td>KER08RTP062</td>
</tr>
<tr>
<td>K Street</td>
<td>Cnty/Mojave</td>
<td>Extend K St to Rt 14</td>
<td>12,939,548</td>
<td>KER08RTP063</td>
</tr>
<tr>
<td>Kratzmeyer Rd</td>
<td>Kern</td>
<td>Kratzmeyer Rd @ BNSF (Metro) - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP128</td>
</tr>
<tr>
<td>Airport Drive</td>
<td>Kern</td>
<td>Airport Dr @ UPRR (Metro) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP131</td>
</tr>
<tr>
<td>Rosamond Blvd</td>
<td>Kern</td>
<td>Rosamond Blvd @ UPRR (Rosamond) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP133</td>
</tr>
<tr>
<td>K Street</td>
<td>Kern</td>
<td>K St @ UPRR (Mojave) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP135</td>
</tr>
<tr>
<td>Elmo Highway</td>
<td>McFarland</td>
<td>Elmo Hwy @ UPRR (McFarland) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP124</td>
</tr>
<tr>
<td>Dennison Rd</td>
<td>Tehachapi</td>
<td>Green St/ Dennison Rd @ UPRR (Tehachapi) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP121</td>
</tr>
<tr>
<td>Teh. Willow Springs Rd</td>
<td>Tehachapi</td>
<td>Rt 58 to Rosamond Blvd - widen to four lanes</td>
<td>150,961,389</td>
<td>KER08RTP064</td>
</tr>
<tr>
<td>Valley Blvd</td>
<td>Tehachapi</td>
<td>Tucker Rd to Curry St - widen to four lanes</td>
<td>23,722,504</td>
<td>KER08RTP065</td>
</tr>
<tr>
<td>Kern Ave</td>
<td>McFarland</td>
<td>Reconstruct pedestrian bridge at Rt 99</td>
<td>5,391,470</td>
<td>KER08RTP066</td>
</tr>
<tr>
<td>Mahan St</td>
<td>Ridgecrest</td>
<td>Inyokern to South China Lake - widen to four lanes</td>
<td>32,348,869</td>
<td>KER08RTP067</td>
</tr>
<tr>
<td>Richmond Rd</td>
<td>Ridgecrest</td>
<td>E Ridgecrest Blvd - widen to four lanes</td>
<td>6,469,774</td>
<td>KER08RTP068</td>
</tr>
<tr>
<td>Bowman Rd</td>
<td>Ridgecrest</td>
<td>China Lake Blvd to San Bernardino Blvd - reconstruction</td>
<td>4,313,183</td>
<td>KER08RTP069</td>
</tr>
<tr>
<td>S China Lake Blvd</td>
<td>Ridgecrest</td>
<td>US 395 to College Heights - reconstruction</td>
<td>36,662,052</td>
<td>KER08RTP070</td>
</tr>
<tr>
<td>Lerdo Highway</td>
<td>Shafter</td>
<td>Lerdo Hwy / Beech Ave @ BNSF RR (Shafter) - construct grade separation</td>
<td>69,000,000</td>
<td>KER08RTP125</td>
</tr>
<tr>
<td>Burbank Street</td>
<td>Shafter</td>
<td>Burbank St @ BNSF (Shafter) - construct grade separation</td>
<td>59,000,000</td>
<td>KER08RTP126</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>I-5 to Santa Fe Way - widen to four lanes</td>
<td>90,576,833</td>
<td>KER08RTP072</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Cnty/Shfter/Bkfd</td>
<td>7th Standard Rd. @ BNSF (Metro) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP116</td>
</tr>
<tr>
<td>Hageman Rd</td>
<td>Cnty/Shfter/Bkfd</td>
<td>Hageman/Santa Fe Way @ BNSF (Metro) - construct grade separation</td>
<td>39,500,000</td>
<td>KER08RTP117</td>
</tr>
<tr>
<td>Zachary Rd</td>
<td>Shafter</td>
<td>7th Standard Rd to Lerdo Hwy - widen to four lanes</td>
<td>34,505,460</td>
<td>KER08RTP073</td>
</tr>
<tr>
<td>West Beltway-South</td>
<td>South Metro</td>
<td>Taft Hwy to I-5 - extend freeway</td>
<td>100,000,000</td>
<td>KER08RTP075</td>
</tr>
<tr>
<td>West Beltway-North</td>
<td>North Metro</td>
<td>7th Standard Rd to Rt 99 - extend freeway</td>
<td>100,000,000</td>
<td>KER08RTP076</td>
</tr>
</tbody>
</table>

**Total** $6,997,430,525
Metropolitan Bakersfield Projects (2011-2015)

Figure 4-7
### TABLE 4.1 - Metro Bakersfield Near-Term Constrained Program of Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 99</td>
<td>Hosking Ave - Construct interchange</td>
<td>35,000,000</td>
<td>2010</td>
</tr>
<tr>
<td>Westside Parkway</td>
<td>SR 99 / Oak St to Heath Rd - construct local freeway</td>
<td>340,000,000</td>
<td>2009</td>
</tr>
<tr>
<td>Route 58</td>
<td>Rosedale Hwy - Calloway Dr to SR 99 - widen to six lanes; grade separation at Landco</td>
<td>35,900,000</td>
<td>2011</td>
</tr>
<tr>
<td>Route 58</td>
<td>Rosedale Hwy - Allen Rd to Calloway Dr - widen to four /six lanes</td>
<td>8,800,000</td>
<td>2011</td>
</tr>
<tr>
<td>Route 58</td>
<td>Rt 99 to Cottonwood Rd. - widen to six lanes</td>
<td>50,000,000</td>
<td>2015</td>
</tr>
<tr>
<td>Route 99</td>
<td>Olive Drive - Construct interchange upgrades</td>
<td>6,100,000</td>
<td>2012</td>
</tr>
<tr>
<td>Route 178</td>
<td>Morning Dr to Vineland Rd - new 4/6 lane freeway w/ interchange</td>
<td>58,800,000</td>
<td>2011</td>
</tr>
<tr>
<td>Route 178</td>
<td>Vineland Rd to Miramonte Dr - widen to four lanes</td>
<td>36,500,000</td>
<td>2011</td>
</tr>
<tr>
<td>Hageman Extension</td>
<td>Knudsen Dr to Rt 204 - construct four/six lane extension</td>
<td>68,900,000</td>
<td>2012</td>
</tr>
<tr>
<td>Oak St/24th Street</td>
<td>Rt 178 (24th St) and Oak St - construct improvements</td>
<td>19,100,000</td>
<td>2012</td>
</tr>
<tr>
<td>Centennial Corridor</td>
<td>Westside Parkway to SR-58 - construct 6-lane freeway on 8-lane ROW</td>
<td>645,000,000</td>
<td>2015</td>
</tr>
<tr>
<td>24th Street</td>
<td>Rt 178 SR-99 to M Street - widen to six/eight lanes</td>
<td>34,000,000</td>
<td>2013</td>
</tr>
</tbody>
</table>

**Sub-total** $1,338,100,000
Metropolitan Bakersfield Long-Term Projects (2016-2030)

Figure 4-8
<table>
<thead>
<tr>
<th>Project</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 178</td>
<td>West of Fairfax Rd to west of Morning Drive - widen to six lanes</td>
<td>806,000</td>
<td>2020</td>
</tr>
<tr>
<td>Route 178</td>
<td>West of Morning Dr to Vineland Rd - widen to six lanes</td>
<td>806,000</td>
<td>2020</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Rosedale Hwy to Pacheco Rd - construct four/six lane facility</td>
<td>173,200,000</td>
<td>2018</td>
</tr>
<tr>
<td>Route 58</td>
<td>Rosedale Hwy - Rt 43 to Allen Rd - widen to four lanes</td>
<td>59,000,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 58</td>
<td>Rt 99 to Cottonwood Rd. - widen to eight lanes</td>
<td>47,400,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 65</td>
<td>James Rd to Merle Haggard Blvd - widen to four lanes</td>
<td>3,000,000</td>
<td>2021</td>
</tr>
<tr>
<td>Route 178</td>
<td>At Rt 204 - Construct interchange</td>
<td>25,700,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 178</td>
<td>Miramonte Dr to Rancheria Rd widen to four lanes</td>
<td>11,700,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 184</td>
<td>At Union Pacific Railroad - Construct grade separation</td>
<td>26,400,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 204</td>
<td>Airport Drive to Rt 178 widen to six lanes</td>
<td>38,500,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 204</td>
<td>F St - construct interchange</td>
<td>25,700,000</td>
<td>2025</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Taft Hwy to Pacheco Rd - construct four/six lane facility</td>
<td>80,400,000</td>
<td>2025</td>
</tr>
<tr>
<td>Route 119</td>
<td>I-5 to Buena Vista - widen to four lanes</td>
<td>31,300,000</td>
<td>2026</td>
</tr>
<tr>
<td>Route 178</td>
<td>Vineland Rd to Miramonte Dr - new Interchange; widen to six lanes</td>
<td>231,500,000</td>
<td>2028</td>
</tr>
<tr>
<td>Route 178</td>
<td>Existing west terminus to Oswell St - widen to eight lanes</td>
<td>140,500,000</td>
<td>2026</td>
</tr>
<tr>
<td>Route 184</td>
<td>Panama Rd to Rt 58 - widen to four lanes</td>
<td>10,500,000</td>
<td>2029</td>
</tr>
<tr>
<td>Route 184</td>
<td>Morning Dr to Rt 178 - widen to four lanes</td>
<td>5,000,000</td>
<td>2026</td>
</tr>
<tr>
<td>West Beltway</td>
<td>Rosedale Hwy to 7th Standard Rd - new four/six lane facility</td>
<td>128,500,000</td>
<td>2028</td>
</tr>
</tbody>
</table>

**Sub-total** $1,039,912,000

**Total Major Highway Improvements** $2,378,012,000
Near-Term Projects In Outlying Areas (2011-2015)

Figure 4-9
Long-Term Projects In Outlying Areas (2016-2030)

Figure 4-10
## Outlying Areas Near-Term Constrained Program of Projects

### 2007 through 2015 - Major Highway Improvements - Outlying Areas

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-5</td>
<td>Kern</td>
<td>Interchange improvements at Laval Rd</td>
<td>11,300,000</td>
<td>2009</td>
</tr>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>SLO County Line to Halloway Rd - widen to four lanes (Segments 1 - 3)</td>
<td>232,070,000</td>
<td>2009</td>
</tr>
<tr>
<td>Challenger Dr. Ext.</td>
<td>Tehachapi</td>
<td>Viena St to Dennison Rd - construct new street</td>
<td>1,500,000</td>
<td>2010</td>
</tr>
<tr>
<td>W Ridgecrest Blvd</td>
<td>Ridgecrest</td>
<td>Mahan St to China Lake Blvd - widen to four lanes</td>
<td>10,200,000</td>
<td>2010</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter</td>
<td>Santa Fe Way to Coffee Rd - widen to four/six lanes</td>
<td>57,000,000</td>
<td>2009</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase1)</td>
<td>42,000,000</td>
<td>2014</td>
</tr>
</tbody>
</table>

**Sub-total $354,070,000**

### 2016 through 2030 - Major Highway Improvements - Outlying Areas

<table>
<thead>
<tr>
<th>Project</th>
<th>Location</th>
<th>Scope</th>
<th>YOE Cost</th>
<th>Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 2)</td>
<td>42,000,000</td>
<td>2018</td>
</tr>
<tr>
<td>Route 99</td>
<td>Delano</td>
<td>Woollomes Ave - interchange upgrades</td>
<td>5,000,000</td>
<td>2016</td>
</tr>
<tr>
<td>7th Standard Rd</td>
<td>Shafter/Bkfd</td>
<td>Rt 43 to Santa Fe Way - widen to four/six lanes</td>
<td>11,500,000</td>
<td>2016</td>
</tr>
<tr>
<td>Route 14</td>
<td>Inyokern</td>
<td>Redrock / Inyokern Rd to Rt 178 - widen to four lanes (Phase 3)</td>
<td>32,000,000</td>
<td>2022</td>
</tr>
<tr>
<td>Route 119</td>
<td>Taft</td>
<td>Cherry Ave to Elk Hills - widen to four lanes (Phase 1)</td>
<td>115,000,000</td>
<td>2022</td>
</tr>
<tr>
<td>US 395</td>
<td>Ridgecrest</td>
<td>Between Rt 178 and China Lake Blvd - construct passing lanes</td>
<td>20,000,000</td>
<td>2022</td>
</tr>
<tr>
<td>Route 46</td>
<td>Lost Hills</td>
<td>Halloway Rd to I-5 - interchange upgrade at I-5 (Phase 4)</td>
<td>97,000,000</td>
<td>2026</td>
</tr>
</tbody>
</table>

**Sub-total $322,500,000**

**Total Major Highway Improvements $676,570,000**
Financially Unconstrained Projects

Figure 4-11
## REVENUE AND EXPENDITURE SUMMARY FOR AMENDED ELEMENTS OF THE CAPITAL IMPROVEMENT PROGRAM

### Revenue Assumptions for Major Highway Improvements in Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Before Amendment</th>
<th>After Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>STIP Revenue - Programmed &amp; Future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STIP - Programmed</td>
<td>$497,000,000</td>
<td>$497,000,000</td>
</tr>
<tr>
<td>STIP - Future Estimate</td>
<td>$900,000,000</td>
<td>$900,000,000</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$1,397,000</td>
<td>$1,397,000,000</td>
</tr>
<tr>
<td>Federal Demonstration</td>
<td>$722,000,000</td>
<td>$722,000,000</td>
</tr>
<tr>
<td>Local Fees &amp; Developer Contributions</td>
<td>$374,000,000</td>
<td>$935,582,000</td>
</tr>
</tbody>
</table>

**Total Highway Improvements Revenue Estimates**

- Before Amendment: $1,097,397,000
- After Amendment: $3,054,582,000

### Programming Changes for Major Highway Improvements in Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Before Amendment</th>
<th>After Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming for Major Highway Improvements</td>
<td>$2,450,070,000</td>
<td>$3,054,582,000</td>
</tr>
</tbody>
</table>

The following adjustment is included in the revised overall estimated revenue increase from $2.4 billion upward to $3 billion:

1. Approximately $600 million increase in future Metropolitan Bakersfield Transportation Impact Fee Program funding over the next 22 years.
FINANCIAL ELEMENT

The federal surface transportation act (SAFETEA-LU) requires that the RTP be fiscally constrained; that is, the sum of the costs for planned projects cannot exceed reasonably available financial resources.

SAFETEA-LU also requires “year of expenditure” project cost estimates to be included in the Regional Transportation Plan. Revenue estimates must reflect reasonably available dollars and that the project lists identified for construction be constrained by the projected level of revenue. Year of expenditure is defined as the anticipated fiscal year that construction would begin. Regional highway projects in Table 4.1 (Constrained Program of Projects) and Table 4.2 (Unconstrained Program of Projects) have been reviewed and adjusted to meet these requirements. A statewide annual average of 3 percent for expected inflation was applied to project estimates. The impact of this adjustment is the deferral of projects previously identified for construction within the financially constrained planning range of the RTP (at least 20 years throughout its tenure) because expected revenue projections are less than the financing needed for these projects.

Revenue estimates for major highway improvements reflected in Table 4.1 were adjusted from $2.4 billion to $3.0 billion. The approximately $600 million increase reflects anticipated changes to the Metropolitan Bakersfield Impact Fee schedule, as well as modifications to the existing Thomas Road Improvement Program.

Regional project priorities for projects outside metropolitan Bakersfield continue to reflect commitments set in motion in 1999. Table 4.2 has been updated to reflect year of expenditure cost estimates and has been separated into two planning bands – “2031 to 2035” and “Beyond 2035”. The 2031-2035 planning bandwidth includes projects identified in the updated Metropolitan Bakersfield Fee Program. While these projects are considered financially constrained with anticipated revenue from the fee program, they are not expected to be built before 2030 and are not currently included in the air quality impact analysis. They will be incorporated, however, when the Regional Transportation Plan is updated in 2010.

Modifications to the existing Financial Element of the 2007 Destination 2030 Regional Transportation Plan include the following:

Revenue Projection Assumptions

County-share estimates to fund state highway projects are based on Caltrans’ projections of Kern County’s share and are projected over a 20-year period. Inflation rates are not applied. The first five years of revenue estimates assumed current FTIP project funding plus an additional $35 million. The second five years assumed a Regional Improvement Program (RIP) rate of $35 million per year for five years and $10 million per year from the discretionary Interregional Improvement Program (IIP) source. The final 10 years assumed $35 million for RIP and $10 million for IIP per year.

Revenue Sources

Revenues identified in the 2007 Destination 2030 RTP financial forecast are those that have been provided for the construction, operation, and maintenance of the Kern
region’s current roadway, transit and airport system. Baseline revenues include existing local, state, and federal transportation funding sources. As Table 5-1 and Figure 5.2 summarize below, revenue forecasts for the Kern region are estimated to be approximately $6.5 billion for the RTP’s 20-plus-year timeframe. Revenue levels identified in Table 5-1 reflect reasonably available funding and include estimates for funding programs used over the last several years.

Table 5-1 Revenue Forecast 2007-2030

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Regional Total $</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Transportation Funds</td>
<td>460,000,000</td>
<td>7</td>
</tr>
<tr>
<td>Bus Farebox</td>
<td>171,000,000</td>
<td>3</td>
</tr>
<tr>
<td>Local Agency Funds/Developer Fees/Regional Fees/Other</td>
<td>1,878,512,000</td>
<td>30</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2,509,512,000</td>
<td>40</td>
</tr>
<tr>
<td><strong>State Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STIP (Regional and Interregional)</td>
<td>1,397,000,000</td>
<td>22</td>
</tr>
<tr>
<td>State Transit Assistance (STA)</td>
<td>460,500,000</td>
<td>7</td>
</tr>
<tr>
<td>State Highway Operation and Protection Program (SHOPP)</td>
<td>1,000,000,000</td>
<td>17</td>
</tr>
<tr>
<td>State Aid to Airports</td>
<td>3,000,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2,860,500,000</td>
<td>46</td>
</tr>
<tr>
<td><strong>Federal Sources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface Transportation Program</td>
<td>135,000,000</td>
<td>2</td>
</tr>
<tr>
<td>Transportation Enhancement Activities Program</td>
<td>10,400,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Congestion Mitigation and Air Quality Program</td>
<td>106,000,000</td>
<td>2</td>
</tr>
<tr>
<td>Local Assistance (HES, HBRR, Section 130, Emergency Relief)</td>
<td>82,000,000</td>
<td>1</td>
</tr>
<tr>
<td>Federal Aid to Airports</td>
<td>45,000,000</td>
<td>1</td>
</tr>
<tr>
<td>FTA Section 5307 (Transit – metro)</td>
<td>38,800,000</td>
<td>1</td>
</tr>
<tr>
<td>FTA Section 5310 (Transit – senior / disabled)</td>
<td>2,100,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>FTA Section 5311 (Transit – rural)</td>
<td>5,400,000</td>
<td>&lt;1</td>
</tr>
<tr>
<td>State/Federal Demonstration</td>
<td>720,000,000</td>
<td>11</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1,144,700,000</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$6,514,712,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

Baseline Expenditures

Given the 2007 Destination 2030 RTP’s baseline cost estimate of $6.5 billion, Figure 5.2 illustrates the mode split for the region. The data show that about 86% of the region’s baseline costs are dedicated to street and highway improvements or maintenance. Thirteen percent of expenditures are for transit operating and capital needs. The remaining 1% of RTP expenditures is for transportation control measures, aviation, and non-motorized projects.
Figure 5.2 Transportation Investments by Mode 2007-2030

Funding Shortfall of $7 Billion

To further assess the region’s financial outlook, baseline revenues were matched against a program of projects that is divided into two groups: constrained and unconstrained. The Unconstrained Program of Projects (Table 4.2) lists projects considered necessary for development of Kern County’s transportation infrastructure, but for which funding cannot be reasonably expected within the timeframe of the RTP. This comparison clearly indicated that the Kern region will experience funding deficits to operate, maintain, and rehabilitate its existing transportation system over the 2007 RTP timeframe. While the shortfall is shown as approximately $7.0 billion, it is actually much greater because some projects do not as yet have actual cost estimates. Such projects as high-speed rail improvements and grade separation projects (over- and under-crossings) do not have identified funding. Some grade separations have been included as components of street widening, while many are stand-alone projects. Costs will vary based on right-of-way purchase in addition to construction costs.
The extensive list of unconstrained projects, including regionally significant highway improvements, interchanges, regional roadway improvements, rail and bus service, railroad grade crossings, transportation control measures and deferred roadway maintenance paints a vivid picture of Kern County’s need for additional revenue.

Funds to support operations and maintenance, whether it be street and highway, bus and rail, or transportation demand management programs, are the most difficult to find. Historically, the Kern region has relied heavily on local monies for these operating funds.

**Figure 5.9 Investment Shortfall**

Operating funds for streets and road maintenance have been available traditionally through gas taxes, Transportation Development Act (TDA) funds and flexible federal transportation funds; however, TDA funds in support of street and road maintenance projects are not expected to continue. With increasingly fuel-efficient vehicles and the rising cost of gasoline, revenues from gas taxes are not expected to increase at more than a nominal rate.

**ENVIRONMENTAL JUSTICE**

The goal of the environmental justice process is to ensure that all people, regardless of race, color, national origin or income, are protected from disproportionate negative or adverse impacts caused by the RTP Program of Projects. As part of the RTP Amendment process, Kern COG reassessed Environmental Justice performance measures to determine what, if any, impacts would occur given the project changes discussed above.
Since the adoption of the 2007 RTP, the eight San Joaquin Valley COGs have enhanced their outreach to Tribal Nations with a California Department of Transportation Environmental Justice grant. The grant has funded a program that focuses on engaging both federally and non-federally recognized tribes in a series of forums throughout the San Joaquin Valley. Projects include an action plan, report, and potential protocol for tribal monitoring during excavation at construction sites. In addition, the tribes are considering creation of an archaeological sensitivity map for use as a potential “dissuasion” layer in land use modeling for the Valleywide Blueprint.

Equity

Equity is considered a key performance measure, and is defined as a fair and reasonable distribution of transportation investment benefits (as a share of benefits). Kern COG took a similar approach to equity as with cost-effectiveness, comparing the total investment in roads and transit through 2030 with total passenger miles traveled in Bakersfield, rural areas and the county as a whole. All numbers were converted to percentages for simplicity.

In 2030, metropolitan Bakersfield Environmental Justice (EJ) Transportation Analysis Zones (TAZs) will account for 15% of all passenger miles traveled in the region. However, approximately 24% of transportation expenditures will go directly into the Bakersfield EJ TAZs. Similarly, rural EJ TAZs will represent 13% of countywide passenger miles traveled (PMT); however, 29% of all transportation funding will be spent in those areas. Countywide, approximately 27% of all passenger miles traveled will occur in EJ TAZs, which will collect 29% of funding and projects. For Kern County as a whole, the percent of expenditures and passenger miles traveled in EJ areas are roughly equivalent, that is, 2% in favor of EJ areas. The greatest benefit is to Bakersfield EJ areas.

Although Kern COG cannot reliably project the number of passenger miles traveled by rural transit agencies in 2030, the model does predict that EJ TAZs in the metro Bakersfield region will make up approximately 57% of transit PMT. Those same TAZs, however, will receive 73% of all transit funding attributable to the metropolitan area. Stratification between metro and rural transit services is impractical because of the lack of a rural transit PMT variable.

Percent of Expenditures versus Passenger Miles Traveled in 2030 - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>21,073,399</td>
<td>$2,389,512,000</td>
<td>42.1</td>
<td>78.2</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>28,978,758</td>
<td>$ 665,070,000</td>
<td>57.9</td>
<td>21.8</td>
</tr>
<tr>
<td>Countywide</td>
<td>50,052,157</td>
<td>$3,054,582,000</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
### Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Highways

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>7,340,145</td>
<td>$729,616,053</td>
<td>53.9</td>
<td>81.6</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>6,273,107</td>
<td>$164,986,881</td>
<td>46.1</td>
<td>18.4</td>
</tr>
<tr>
<td>Countywide</td>
<td>13,613,252</td>
<td>$894,602,934</td>
<td>27.2</td>
<td>29.3</td>
</tr>
</tbody>
</table>

### Percent of Expenditures versus Passenger Miles Traveled in 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>94,240</td>
<td>$96,000,000</td>
<td>N/A</td>
<td>85.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$16,800,000</td>
<td>N/A</td>
<td>14.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$112,800,000</td>
<td>N/A</td>
<td>100</td>
</tr>
</tbody>
</table>

### Percent of Expenditures versus Passenger Miles Traveled in EJ TAZs by 2030 - Transit

<table>
<thead>
<tr>
<th>Region</th>
<th>2030 PMT</th>
<th>Total investment</th>
<th>PMT (percent)</th>
<th>Investment (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakersfield</td>
<td>64,273</td>
<td>$48,800,000</td>
<td>N/A</td>
<td>73.1</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>N/A</td>
<td>$17,986,500</td>
<td>N/A</td>
<td>26.9</td>
</tr>
<tr>
<td>Countywide</td>
<td>N/A</td>
<td>$66,786,500</td>
<td>N/A</td>
<td>59.2</td>
</tr>
</tbody>
</table>