ATTACHMENT D

# other workshop handouts

# **california interregional blueprint** & california transportation plan

MOBILITY ACCESS CONNECTIONS

## POLICY FRAMEWORK

**Vision and Policy 3Es Sustainability**

- Prosperous Economy
- Social Equity
- Quality Environment

**Goals:**

- Improve Mobility and Accessibility
- Preserve, Maintain and Improve Transportation System
- Support the Economy
- Enhance Public Safety
- Enhance Transportation Security
- Connect Transportation and Land Use Planning
- Enhance and Conserve Environmental Resources

## BASELINE TRANSPORTATION PLANS AND PROGRAMS

**Statewide and Regional Transportation Plans**

- Interregional Transportation Strategic Plan
- Transportation Management System Master Plan
- California State Rail Plan/ High Speed Rail
- Statewide Transit Strategic Plan
- California Aviation System Plan
- Goods Movement Action Plan
- Regional Transportation Plans/Regional Blueprint Plans
- Tribal Transportation Plans
- Other Statewide Strategic Plans

**Statewide Programs**

- Regional Blueprint Planning
- Smart Mobility Framework
- Complete Streets
- Caltrans Essential Habitat Connectivity Study
- Caltrans Climate Action Program

## RELATED PLANS, PARTNERS AND REQUIREMENTS

**Other State Plans**

- Strategic Growth Plan
- California Water Plan
- California Wildlife Action Plan
- AB 32 Climate Change Scoping Plan

**State Partners**

- Air Resources Board
- Department of Housing and Community Development
- Natural Resources Agency
- Department of Water Resources
- Strategic Growth Council

**Legal Requirements**

- AB 32, SB 375, SB 391, Section 6001 (49 USC)
- Interim Report 2012
- California Transportation Plan (CTP) Update–2015

## TOOLS

**Phase I Baseline Effort 2010**

- Narrative/Maps
- Proof of Concept
- Report

**Phase II Modeling Tools 2012**

- Data/Robust Tools/ Scenario Testing/ Performance Measures
- Interregional Travel Demand Model
- Statewide Household Travel Survey
- Statewide Freight Model
- Statewide Integrated Interregional Model

CALIFORNIA INTERREGIONAL BLUEPRINT

CTP 2040
CONNECTING CALIFORNIA:
A Sustainable
Transportation System

A New Plan for a New Transportation Era

# **california interregional blueprint** & california transportation plan

MOBILITY ACCESS CONNECTIONS

**what?** The Department of Transportation is expanding the State's transportation planning process to include the development of a state level transportation blueprint focused on interregional travel needs. The California Interregional Blueprint (CIB) will articulate the State's vision for an integrated, multimodal interregional transportation system that complements regional transportation plans and land use visions. The CIB when fully developed will become the foundation of the 2040 update to the State's long-range transportation plan, the California Transportation Plan (CTP).

**why?** The CIB will help evaluate how well our collective plans (both State and regional) will address future demand for interregional travel, while meeting our goals for a sustainable transportation system. It will strengthen and add relevance to the existing CTP policy plan and will expand the understanding of the interactions between land use and transportation investments, especially those related to greenhouse gas emissions. This understanding will position us to respond to new legislative requirements (SB 391) for the next CTP update that require the plan to define the statewide transportation system that meets our climate change goals under AB 32 and SB 375. The ultimate benefit of this effort will be stronger partnerships, with regional and local agencies and tribal governments, and better data for improved decision-making at the State, regional, and local level.

**how?** The CIB will integrate proposed interregional highway, transit, rail (including high-speed and intercity rail), intelligent transportation system, and goods movement and other transportation system and strategic plans into a common framework for analysis. The Department is currently compiling project data from our long range planning documents, as well as projects from Regional Transportation Plans (RTPs) developed by the State's Metropolitan Planning Organizations and Regional Transportation Planning Agencies, to define the future interregional transportation system.

Using regional growth and land use projections in regional blueprint plans and RTPs, the resulting system will then be analyzed to determine how well it will meet projected demand. As more advanced tools and data become available, the project concepts and strategies along with growth and land use projections will be modeled, and their impact on various outcomes, including greenhouse gas emissions, will be quantified.

**when?** The California Interregional Blueprint will be completed in two phases. The first phase to be completed in September 2010 will focus on integrating existing State modal plans and, in advance of statewide modeling tools, developing a narrative describing how these plans relate to regional transportation and land use plans. A final report incorporating all available data and analysis will be delivered in September 2010 to the Governor's Business, Transportation and Housing Agency.

The second phase to be completed in 2012 will enhance the initial analysis by employing more robust modeling and data programs, including an integrated transportation, land use and economic model. The Statewide Integrated Interregional Model (SIIM) will enable us to model and evaluate alternative scenarios for addressing interregional transportation needs and will measure performance across defined outcomes.

**contact:** Pam Korte, Project Manager, at (916) 653-2593 or Pam.Korte@dot.ca.gov. For more information see our web portal at www.californiainterregionalbluerpint.org.

# SB 391 Requirements

**Legislative Intent**
Section 14000.6
(a) The 2020 targets and requirements entail approximately a 25-percent reduction in greenhouse gas emissions from current levels.

(b) Executive Order S-03-05 identifies a greenhouse gas emissions limit of 80-percent below 1990 levels to be achieved by 2050.

(c) Emissions from the transportation sector account for 38 percent of California's greenhouse gas emissions.

(d) The state lacks a comprehensive, statewide, multimodal planning process that details the transportation system needed in the state to meet objectives of mobility and congestion management consistent with the state's greenhouse gas emission limits and air pollution standards.

(e) Current public transportation services and facilities are inadequate to meet current and expected future increases in demand.

**Requirements**
Section 65071 (NEW)
Require Caltrans to **update the California Transportation Plan (CTP) by December 31, 2015,** and every five years thereafter.

Section 65072 (EXISTING)
The California Transportation Plan shall include all of the following:
(a) A **policy element** that describes the **state's transportation policies and system performance objectives.** These policies and objectives shall be consistent with legislative intent described in Sections 14000, 14000.5, 14000.6, and 65088.
(b) A **strategies element** that shall incorporate the broad **system concepts and strategies synthesized from the adopted regional transportation plans** prepared pursuant to Section 65080. The California Transportation Plan shall not be project specific.
(c) A **recommendations element that includes economic forecasts and recommendations** to the Legislature and the Governor to achieve the plan's broad system concepts, strategies, and performance objectives.

Section 65072.1 (NEW)
65072.1. The California Transportation Plan shall consider all of the following subject areas for the movement of people and freight:
**(a) Mobility and accessibility;**
**(b) Integration and connectivity;**
**(c) Efficient system management and operation;**
**(d) Existing system preservation;**
**(e) Safety and security;**
**(f) Economic development, including productivity and efficiency;**
**(g) and Environmental protection and quality of life.**

## SB 391 Requirements

Section 65072.2 (NEW)
Require the CTP to address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of greenhouse gas emissions to 1990 levels by 2020 and 80-percent below 1990 levels by 2050. Need to take into consideration:

- **the use of alternative fuels, new vehicle technology, tailpipe emissions reductions;**
- **and the expansion of public transit, commuter rail, intercity rail, bicycling, and walking.**

**Require the CTP to identify the statewide integrated multimodal transportation system needed to achieve these results**.

Require Caltrans, by **December 31, 2012, to submit an interim report** providing a **list and overview of sustainable communities strategies and alternative planning strategies** (prepared pursuant to SB 375), including an **assessment of how their implementation will influence the configuration of the statewide integrated multimodal transportation system.** Report to be submitted to the California Transportation Commission and Chairs of the:

- Senate Committee on Transportation and Housing;
- Senate Committee on Environmental Quality;
- Senate Committee on Local Government;
- Assembly Committee on Transportation;
- Assembly Committee on Natural Resources;
- and Assembly Committee on Local Government.

Section 65073 (AMENDED)
Caltrans shall **consult, coordinate with, and make drafts available for review and comment** to the:

- California Transportation Commission;
- Strategic Growth Council;
- State Air Resources Board;
- State Energy Resources Conservation and Development Commission;
- Air quality management districts;
- Public transit operators;
- and Regional transportation planning agencies.

Caltrans shall also provide an opportunity for **input by the general public**.

Prior to adopting the plan or update, Caltrans shall make a **final draft available to the Legislature and Governor** for review and comment.

The **CTC may present the results of its review and comment** to the Legislature and the Governor.

The Governor shall adopt the plan and submit the plan to the Legislature and the Secretary of the United States Department of Transportation.

Source: http://info.sen.ca.gov/pub/09-10/bill/sen/sb_0351-0400/sb_391_bill_20091011_chaptered.pdf.400/sb_391_bill_20091011_chaptered.pdf.

**Senate Bill No. 391**

CHAPTER 585

An act to amend Sections 65072 and 65073 of, and to add Sections 14000.6, 65071, 65072.1, and 65072.2 to, the Government Code, relating to transportation planning.

[Approved by Governor October 11, 2009. Filed with Secretary of State October 11, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

SB 391, Liu. California Transportation Plan.

Existing law requires various transportation planning activities by state and regional agencies, including preparation of sustainable communities strategies by metropolitan planning organizations. Existing law provides for the Department of Transportation to prepare the California Transportation Plan for submission to the Governor by December 1, 1993, as a long-range planning document that incorporates various elements and is consistent with specified expressions of legislative intent.

This bill would require the department to update the California Transportation Plan by December 31, 2015, and every 5 years thereafter. The bill would require the plan to address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of greenhouse gas emissions to 1990 levels by 2020 and 80% below 1990 levels by 2050. The bill would require the plan to identify the statewide integrated multimodal transportation system needed to achieve these results. The bill would require the department, by December 31, 2012, to submit to the California Transportation Commission and specified legislative committee chairs an interim report providing specified information regarding sustainable communities strategies and alternative planning strategies, including an assessment of how their implementation will influence the configuration of the statewide integrated multimodal transportation system. The bill would also specify certain subject areas to be considered in the plan for the movement of people and freight. The bill would require the department to consult with and coordinate its planning activities with specified entities and to provide an opportunity for public input. The bill would make additional legislative findings and declarations and require the plan to be consistent with that statement of legislative intent.

*The people of the State of California do enact as follows:*

SECTION 1. Section 14000.6 is added to the Government Code, to read:

14000.6. The Legislature further finds and declares all of the following:

(a) California has established statewide greenhouse gas emissions targets and requirements to be achieved by 2020 pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code), which are equivalent to 1990 greenhouse gas emissions in the state. These targets and requirements entail approximately a 25-percent reduction in greenhouse gas emissions from current levels.

(b) Executive Order S-3-05 further identifies a greenhouse gas emissions limit of 80 percent below 1990 levels to be achieved by 2050.

(c) Emissions from the transportation sector account for 38 percent of California's greenhouse gas emissions.

(d) The state lacks a comprehensive, statewide, multimodal planning process that details the transportation system needed in the state to meet objectives of mobility and congestion management consistent with the state's greenhouse gas emission limits and air pollution standards.

(e) Recent increases in gasoline prices resulted in historic increases in ridership on public transportation, including transit, commuter rail, and intercity rail, and in historic reductions in vehicle miles traveled by private vehicles. Increased demand for public transportation included a 16-percent increase in light rail ridership in Sacramento, a 15.3-percent increase in rail transit ridership in Los Angeles, a 23-percent increase in bus ridership in Orange County, a 14.4-percent increase in transit ridership in San Diego, a 6.3-percent increase in rail transit ridership in Oakland, and a 22.5-percent increase in transit ridership in Stockton. Current public transportation services and facilities are inadequate to meet current and expected future increases in demand.

SEC. 2. Section 65071 is added to the Government Code, to read:

65071. The department shall update the California Transportation Plan consistent with this chapter. The first update shall be completed by December 31, 2015. The plan shall be updated every five years thereafter.

SEC. 3. Section 65072 of the Government Code is amended to read:

65072. The California Transportation Plan shall include all of the following:

(a) A policy element that describes the state's transportation policies and system performance objectives. These policies and objectives shall be consistent with legislative intent described in Sections 14000, 14000.5, 14000.6, and 65088.

(b) A strategies element that shall incorporate the broad system concepts and strategies synthesized from the adopted regional transportation plans prepared pursuant to Section 65080. The California Transportation Plan shall not be project specific.

(c) A recommendations element that includes economic forecasts and recommendations to the Legislature and the Governor to achieve the plan's broad system concepts, strategies, and performance objectives.

SEC. 4. Section 65072.1 is added to the Government Code, to read:

65072.1. The California Transportation Plan shall consider all of the following subject areas for the movement of people and freight:

(a) Mobility and accessibility.
(b) Integration and connectivity.
(c) Efficient system management and operation.
(d) Existing system preservation.
(e) Safety and security.
(f) Economic development, including productivity and efficiency.
(g) Environmental protection and quality of life.

SEC. 5. Section 65072.2 is added to the Government Code, to read:

65072.2. In developing the California Transportation Plan pursuant to Sections 65072 and 65072.1, the department shall address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of greenhouse gas emissions to 1990 levels by 2020 as required by the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code), and 80 percent below 1990 levels by 2050, taking into consideration the use of alternative fuels, new vehicle technology, tailpipe emissions reductions, and expansion of public transit, commuter rail, intercity rail, bicycling, and walking. The plan shall identify the statewide integrated multimodal transportation system needed to achieve these results. The department shall complete an interim report by December 31, 2012, which shall include a list and provide an overview of all sustainable communities strategies and alternative planning strategies prepared pursuant to paragraph (2) of subdivision (b) of Section 65080, and shall assess how implementation of the sustainable communities strategies and alternative planning strategies will influence the configuration of the statewide integrated multimodal transportation system. The department shall submit the interim report to the California Transportation Commission and to the Chairs of the Senate Committee on Transportation and Housing, the Senate Committee on Environmental Quality, the Senate Committee on Local Government, the Assembly Committee on Transportation, the Assembly Committee on Natural Resources, and the Assembly Committee on Local Government.

SEC. 6. Section 65073 of the Government Code is amended to read:

65073. The department shall consult with, coordinate its activities with, and make a draft of its proposed plan, and each update, available to the California Transportation Commission, the Strategic Growth Council, the State Air Resources Board, the State Energy Resources Conservation and Development Commission, the air quality management districts, public transit operators, and the regional transportation planning agencies for review and comment. The department shall also provide an opportunity for input by the general public. Prior to adopting the plan or update, the department shall make a final draft available to the Legislature and Governor for review and comment. The commission may present the results of its review and comment to the Legislature and the Governor. The Governor shall adopt the plan and submit the plan to the Legislature and the Secretary of the United States Department of Transportation.

O

# Modal Plans

summaries & maps

- State Highway System
- Passenger Rail
- Goods Movement
- Public Use & Military Airports
- Transit

# California's Multi-Modal Transportation System

California's complex transportation infrastructure network supports a variety of travel modes, from highways and trains, to airplanes, buses, and bikes. Ownership and operating responsibility for the various parts of the transportation system falls to a variety of entities such as counties, cities, transit agencies, ports, private businesses, regional transportation planning agencies, tribal governments, and the state.

The state represented by Caltrans, citizens, has primary responsibility for the interregional mobility of people and goods. Much of that responsibility lies in operating and maintaining the state highway system to provide a dependable and reasonable level of service, accessibility into and through gateways and adequate connectivity to intermodal transfer points. Caltrans also supports California's interregional transportation system through funding passenger rail and transit services, regulating airports, and advocating for mass transit guideways. Most importantly, Caltrans maintains an ongoing cooperative relationship between other transportation stakeholders, particularly regional and local agencies, to mutually consult, cooperate, and seek consensus on transportation priorities and strategies.

The following narratives and accompanying maps provide an overview of California's existing and proposed interregional transportation system by mode – the State highway system, the passenger rail system, the goods movement network, the state's public use and military airports, and the transit system. The narratives describe each system, the trends and issues challenging that system and how the state proposes to address those challenges. Each narrative is followed by a map or maps illustrating the existing system for each mode and, where available, a map of the future system if Caltrans were to carry out all the planned transportation investments in its existing long-range plans.

Caltrans prepares long-range planning documents for each one of these modes that describes the vision, goals, and strategic investments for meeting California's future mobility needs. Caltrans' major long-range planning documents are the following:

**State Highway System**

- 1998 Interregional Transportation Strategic Plan
- 2009 Ten-Year SHOPP Plan
- Corridor System Management Plans
- 2009 California High Occupancy Vehicle (HOV)/Express Lane Business Plan

**Passenger Rail**

- California State Rail Plan

**Goods Movement**

- Goods Movement Action Plan

**Aeronautics**

- California Aviation System Plan

**Transit**

- Statewide Transit Strategic Plan (Concept Draft)

Caltrans has always maintained continuity between all of its long-range planning documents. However, the California Interregional Blueprint will integrate and align these state plans, along with Caltrans sponsored programs such as the Regional Blueprint Planning Program, Complete Streets, and the Smart Mobility Framework, more directly to provide a comprehensive picture of the state's multi-modal interregional transportation system.

# California Interregional State Highways

*Major Planning Considerations, Trends and Implications*

## Introduction

The California State Highway System (SHS) is comprised of over 15,400 miles (51,000 lane miles) of roadway and carries over 185 billion vehicle miles of travel (VMT) each year. The state highway system serves the State's heavily traveled rural and urban corridors, connects the communities and regions of the State and serves the State's economy by connecting centers of commerce, industry, agriculture, natural resource wealth, and recreation. The California Department of Transportation (Caltrans) has the statutory responsibility for operations, maintenance, design, construction and long-range planning of the SHS. Caltrans establishes standards and policies to maintain the system and administers the State Highway Operations and Protection Program (SHOPP) for rehabilitation and operational improvements of the system. Caltrans conducts long-range system planning in both rural and urbanized areas to identify future highway improvements and strategies, recommend prioritized improvements for funding into local and regional plans, and provide the sound technical basis for informed discussions and decision-making.

## I. Major Interregional System Elements

The state highway system serves a diverse range of needs for the interregional movement of people and goods between rural and highly urbanized areas. While all state routes are important, the Interstate system, Interregional Road System (IRRS) routes, and other major freeway trade corridors form a strong transportation network that is most critical to interregional mobility and connectivity statewide. Together, these routes carry over 80 percent of the total annual SHS VMT. Strategies to optimize the use of the system's existing capacity through better system management, integration of new technology, completing the gaps on the high-occupancy vehicle (HOV) system and completing the key underdeveloped interregional routes would help achieve maximum return from our investment and meet the State's climate goals.

For Phase 1 development of the California Interregional Blueprint (CIB), Caltrans provides a progress status on each of the Focus Route included in the 1998 Interregional Transportation Strategic Plan (ITSP). The HOV System network is also included to emphasize the need to close gaps for system continuity. These system plans are the most readily available information for illustration purposes and provide a conceptual framework for the CIB. Ultimately, the plan is to identify future highway improvements and gaps on the IRRS *(Refer to Map – Interregional Road System)*, with special emphasis on the non-urbanized areas. Priority improvements, specific to goods movement, are noted separately in the Goods Movement Action Plan section of the CIB.

### Interstate System

The designated Interstate system is the backbone of the state's transportation network for interregional, interstate and international goods movement, access to airports, air cargo terminals, and other major gateways in the urbanized area. The Interstate system is the only "completed freeway system" in California in terms of continuous high facility standards. The Interstate system is less than 18 percent of all state highway miles, however, it carries over half of all VMT annually (over 80 billion VMT) and over half of all VMT in the urbanized and metropolitan areas. The State's large metropolitan centers in Southern California and the Bay Area in Northern California rely heavily on the Interstate system for interregional and regional

mobility. In rural and nonurbanized areas, the Interstate system primarily serves critical interregional goods movement needs and recreational travel.

**Interregional Road System**

The IRRS was first identified in statute in 1989 as part of the Blueprint Legislation. The IRRS is defined as a series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreation areas, and urban and rural regions. This is simply a subset of the existing state highway routes and part of the Freeway and Expressway (F&E) System. The IRRS was conceived as part of the larger effort to address the critical transportation system funding and development needs of the State. Like most of new programs created by Legislation, the implementation is dependent on increases in state transportation revenues.

The passage of Blueprint Legislation (1989) and Senate Bill 45 (1997) made significant changes to the priorities and processes for programming and expenditure of state transportation funds. The funding formula for the State's interregional program is 25 percent and the regional share is 75 percent. The intent was for the State to be responsible for the interregional travel in the non-urbanized areas on the IRRS routes. Regional and local agencies are responsible for regional and sub-regional travel, and given the flexibility in identifying projects and system improvements to address congestion in their areas.

The term "High Emphasis Routes" was first coined in the 1990 IRRS Plan. This Plan was required in the Blueprint Legislation, but was deleted under SB 45. The High Emphasis Routes are characterized by Caltrans as the most critical IRRS routes identified in the 1990 Plan as the State's priority for programming and candidates to upgrade to freeway/expressway standards. Some Interstate routes are included as High Emphasis to highlight their critical importance to the interregional travel and the state as a whole; but they are not a priority for programming.

The term "Focus Route" is a phrase specific to the Caltrans' Interregional Transportation Strategic Plan (ITSP). The ITSP superceded the 1990 IRRS Plan and was developed in response to SB 45 to guide the investments in the State's Interregional Improvement Program (IIP). Focus Routes are a subset of the High Emphasis Routes and represent the ten IRRS corridors that should be the highest priority for upgrade to freeway and expressway standards in a 20-year period. When completed, the Focus Routes will connect all urban areas (including high-growth urbanizing areas), geographic goods movement gateways, and link rural and small urban areas to this trunk system. The Focus Routes can also be managed through a system management approach based on performance measures. *(Refer to ITSP Fact Sheet and Focus Route Development Strategy Map).*

Urban growth and development in California in the past 30 years has been directly along the Interstate System and Focus Routes (*Refer to Map – Designation Trend of Urbanized Areas on Transportation Paths).* Better management of the Interstate system and completion of the Focus Routes are central to both supporting interregional travel to and through urbanized areas and for rural mobility.

## II. Major Statewide Initiatives/Plan

### Importance of Corridor System Management Plans (CSMPs) for California's Mobility

Caltrans, in collaboration with regional and local partners, relies on the development of the CSMPs to manage corridor mobility and operations now and in the future. The CSMPs are based upon the concepts in Caltrans' Transportation Management System (TMS) Master Plan that was required by the California State Legislature in 2004. The TMS Master Plan is the foundation of the transportation component of the Governor's Strategic Growth Plan (SGP). This system management approach will restore productivity to the State's transportation system, improve corridor throughput, enhance travel time reliability across all corridor elements, and support economic growth.

The TMS Master Plan identifies three principal elements that will help restore productivity. These are: traffic control (such as ramp meters and improved signal timing on local arterials), incident management, and traveler information. These elements must be built on a strong foundation of detection in order to measure freeway performance. Aggressive deployment of these TMS elements could, on the freeway system alone, increase productivity by 20 percent, reduce projected congestion by 20 percent, and improve travel time reliability by 10 percent.

The CSMPs support and complement meeting the goals of the California Regional Blueprint efforts, compliance with Assembly Bill (AB) 32 and Senate Bill (SB) 375 to reduce greenhouse gas emissions, and the Smart Mobility Framework *(Refer to Smart Mobility Framework Fact Sheet).*

### 2009 High Occupancy Vehicle (HOV)/Express Lane Business Plan

An important element of efficiently operating California's highways is the State's HOV and express lanes - also known as high-occupancy tolling (HOT) or managed-lane system. The California HOV/Express Lane Business Plan guides the current and future development and operation of HOV and express lanes throughout the State. Caltrans Division of Traffic Operations takes the lead in implementing the business plan but it is developed in partnership with the regional transportation planning agencies, the California Highway Patrol and the Federal Highway Administration.

Currently, California has over 1,500 lane miles of HOV lanes, including three express lanes operating or under construction. Additionally, due to state and federal legislation and funding incentives, over 1,300 additional lane miles of HOV or express lanes are programmed or proposed, including a regional HOT lane network. *(Refer to Maps – HOV Lane System for Northern and Southern California).* By adjusting HOV lane operations (occupancy minimums and access design) and introducing tolling ("Express Lanes") the state and regional partners can actually manage congestion. The HOV/Express Lane Business Plan lays out a course of action during 2009-2011 for Caltrans and its partners to easily implement more flexible and effective system management strategies for HOV and Express lanes.

**2009 Ten-Year SHOPP Plan**

Caltrans' 2009 Ten-Year SHOPP identifies the needs to maintain and preserve the state highway system (2010 to 2020). The SHOPP Plan identifies specific performance measures and includes a cost estimate for the first five years of the plan. Capital improvements programmed in the SHOPP are limited to maintenance, safety improvements, and rehabilitation of the State highways and bridges, which do not add capacity to the system. Eligible SHOPP projects are grouped into eight categories: emergency response, collision reduction, mandates, bridge preservation, roadway preservation, mobility, roadside preservation and facilities.

The SHOPP is funded from the State Highway Account (SHA), receiving money through excise tax on gasoline and diesel fuel. Projected SHA funding available for the SHOPP is about $1.5 billion per year, which represent about 24 percent of the estimated annual need. Since funding is insufficient to preserve and maintain the system, Caltrans will have to focus resources on the most critical categories of projects in the SHOPP. In the absence of new revenue sources, the condition of the transportation system will continue to deteriorate over the next ten years.

Caltrans has also identified 20 high-priority future SHOPP projects that involve a complex environmental, or project selection process, or require more than four years lead time for delivery of the construction contract documents. To achieve the goals identified in the Ten-Year SHOPP Plan, Caltrans will have to start the environmental review process prior to programming these projects. The intent is to propose these projects for programming at the earliest opportunity.

*Sources:*
*Statewide Corridor System Management Plan*
*http://www.corridormobility.org*

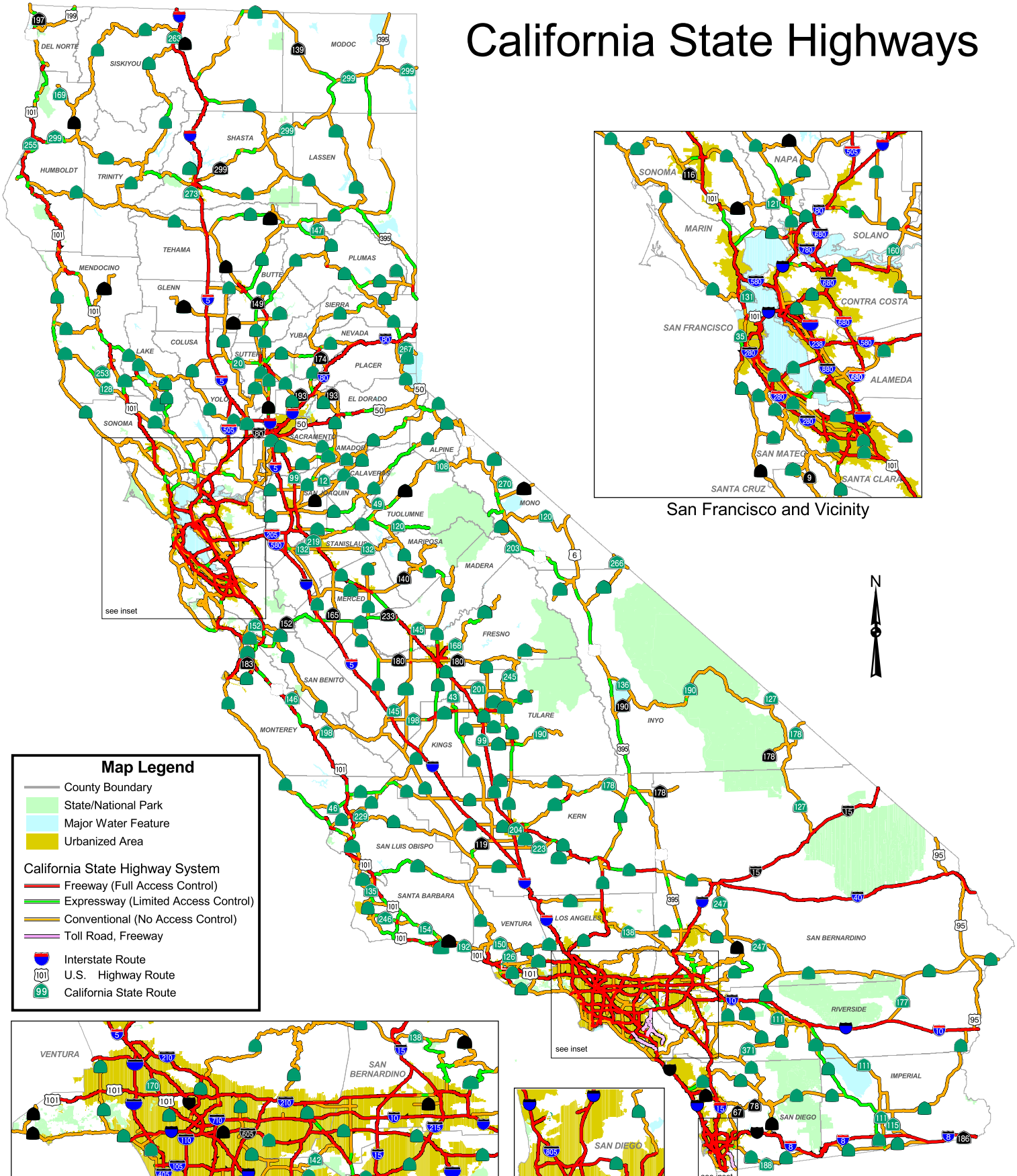
*Transportation Management System Master Plan*
*http://www.dot.ca.gov/hq/traffops/sysmgtpl/reports/MasterPlan.pdf*

*California High Occupancy Vehicle/Express Lane Business Plan*
*http://www.dot.ca.gov/hq/traffops/systemops/hov/Express_Lane/*

*SHOPP Program*
*http://www.dot.ca.gov/hq/transprog/shopp.htm*

*Lilibeth Green, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916) 653-0548; Lilibeth_Green@dot.ca.gov*

# California State Highways







San Francisco and Vicinity

## Map Legend

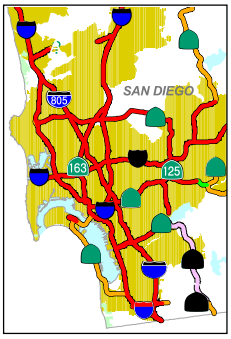
- County Boundary
- State/National Park
- Major Water Feature
- Urbanized Area

California State Highway System

- Freeway (Full Access Control)
- Expressway (Limited Access Control)
- Conventional (No Access Control)
- Toll Road, Freeway
- Interstate Route
- U.S. Highway Route
- California State Route




Los Angeles and Vicinity

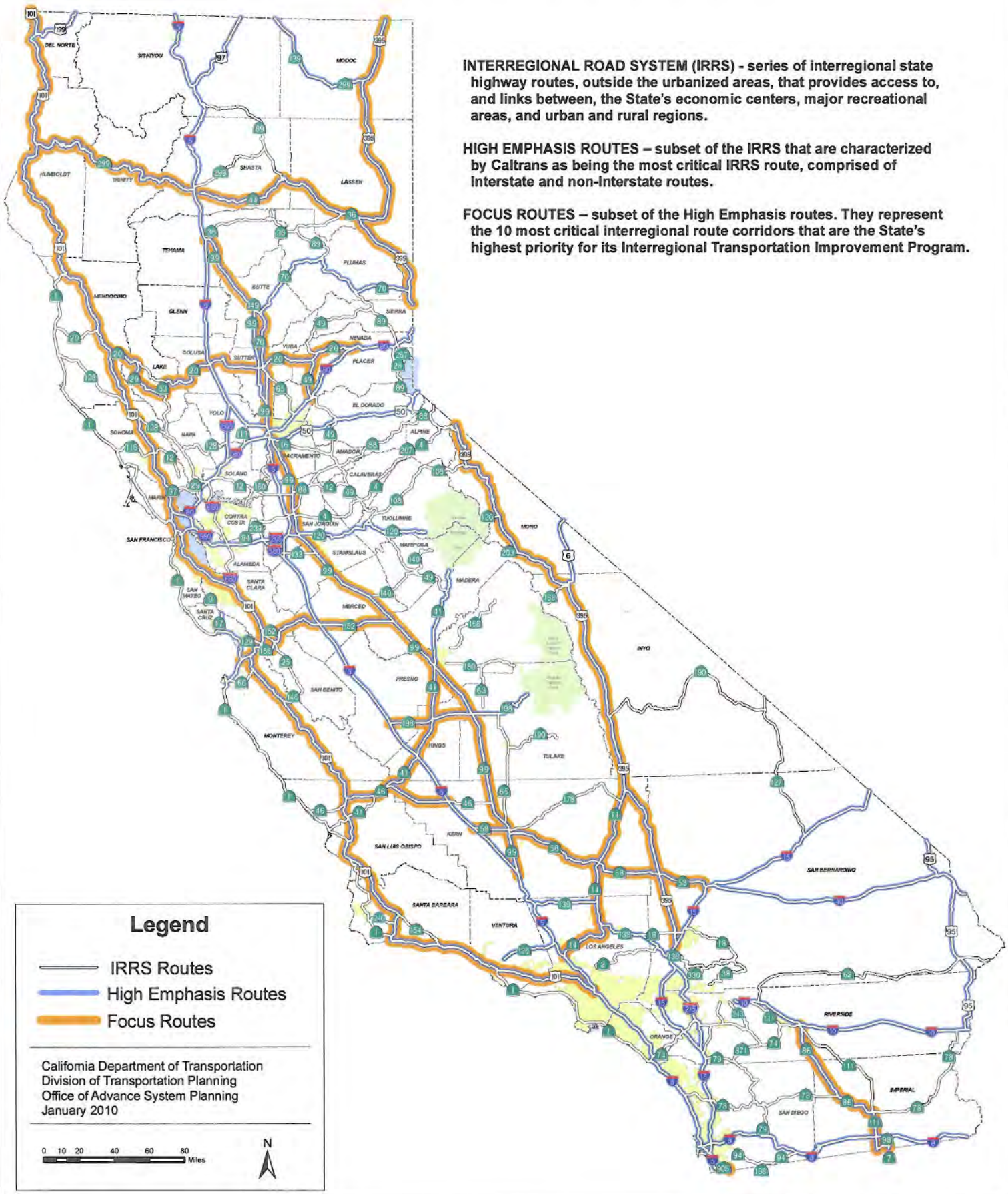



San Diego

*California Department of Transportation*
*Division of Transportation Planning*
*Office of Advance System Planning*
*January 2010*

# Interregional Road System

(Streets and Highway Code, Section 164.10 - 164.20)




**INTERREGIONAL ROAD SYSTEM (IRRS) - series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions.**

**HIGH EMPHASIS ROUTES – subset of the IRRS that are characterized by Caltrans as being the most critical IRRS route, comprised of Interstate and non-Interstate routes.**

**FOCUS ROUTES – subset of the High Emphasis routes. They represent the 10 most critical interregional route corridors that are the State's highest priority for its Interregional Transportation Improvement Program.**

## Legend

IRRS Routes

High Emphasis Routes

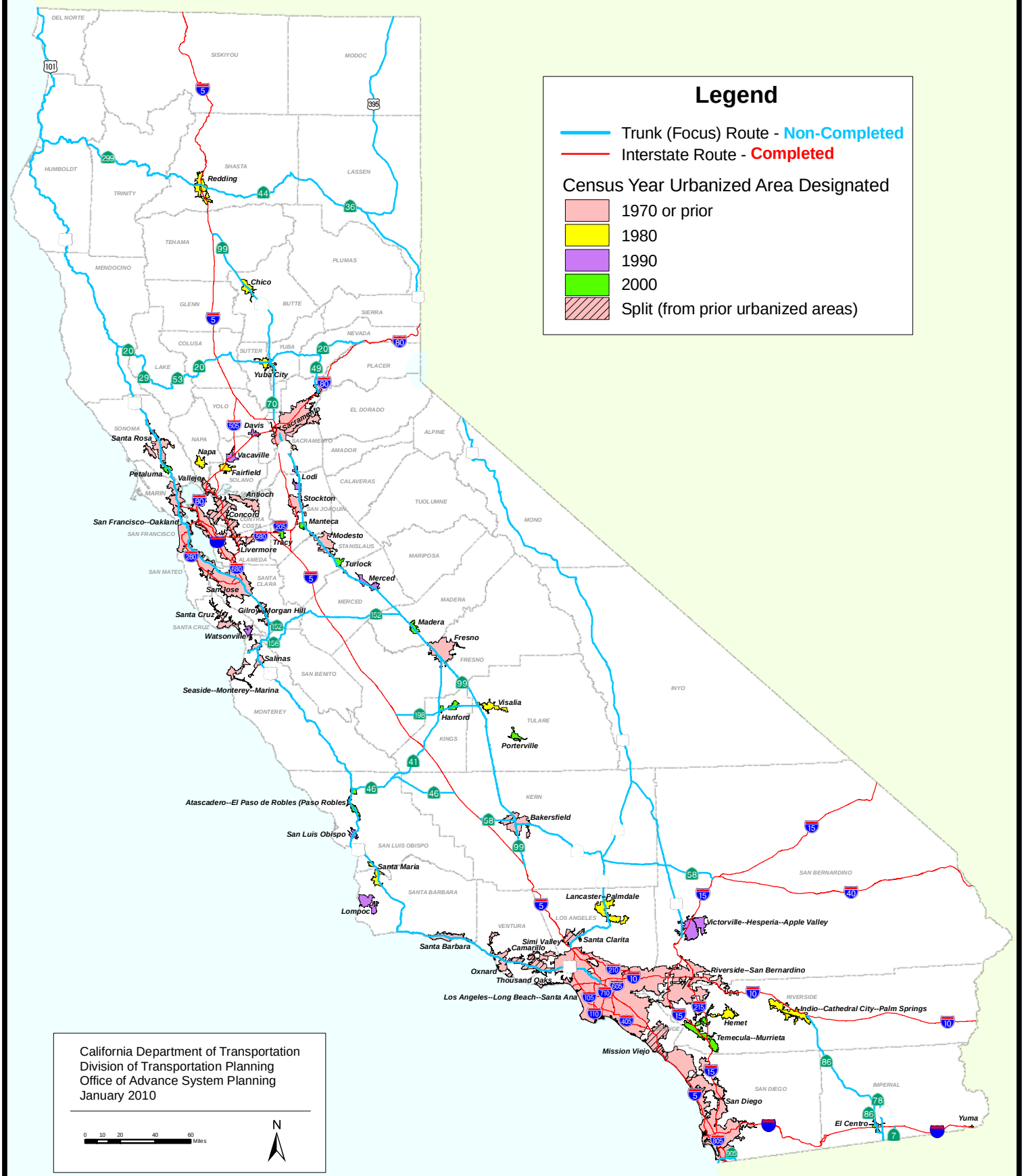
Focus Routes

California Department of Transportation
Division of Transportation Planning
Office of Advance System Planning
January 2010

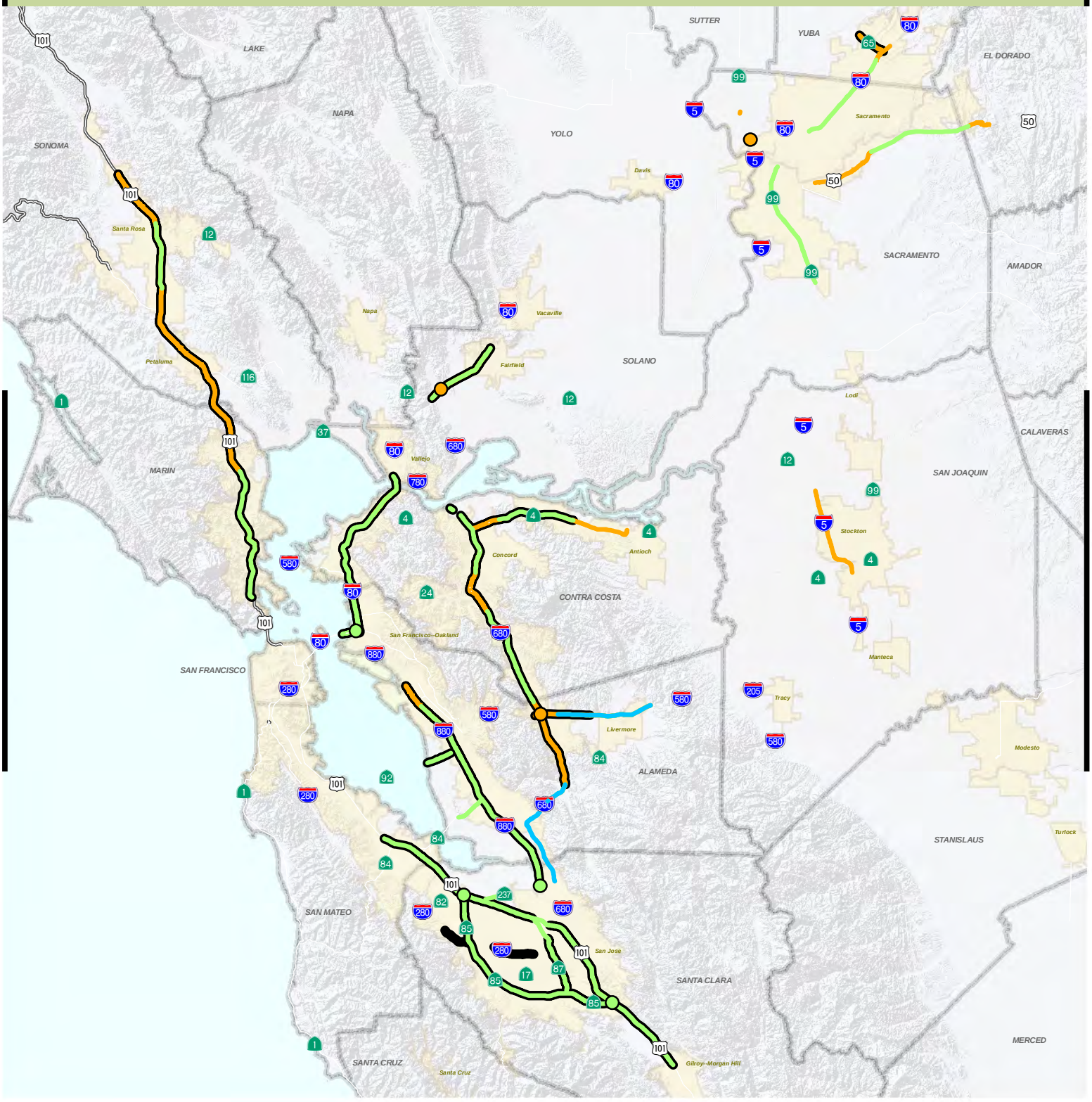
0 10 20 40 60 80 Miles

N

# Designation Trends of Urbanized Areas on Transportation Paths



# High-Occupancy Vehicle Lanes (HOV)/Express Lanes
# Northern California Region




## HOV/Express Lanes Status

- Direct HOV/HOT Connector
- HOV - Existing and Under Construction
- HOV - Proposed
- Express Lanes - Existing and Under Construction
- Express Lanes - Proposed

## Legend

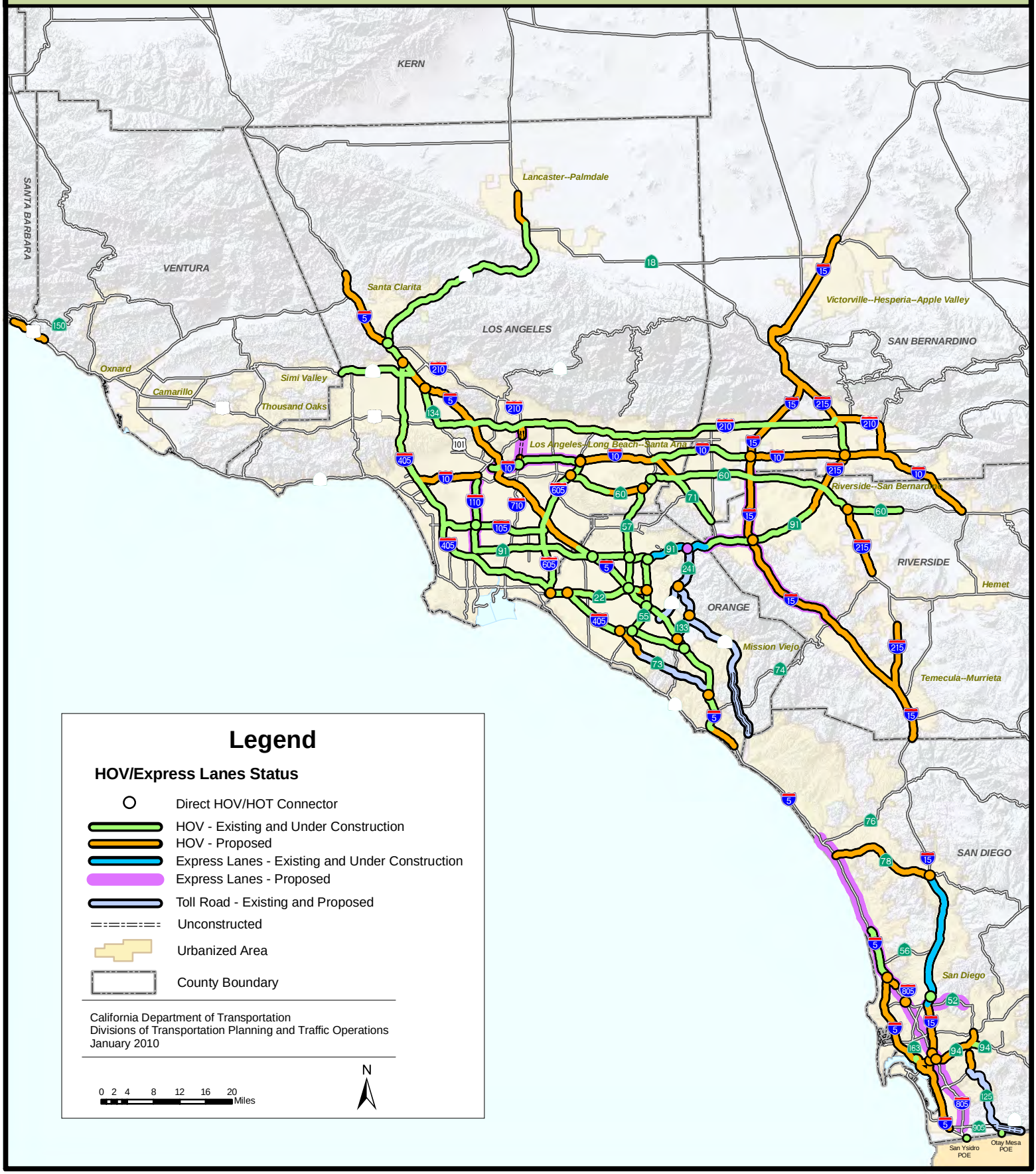
- Urbanized Area
- County Boundary

California Department of Transportation
Divisions of Transportation Planning and Traffic Operations
January 2010

0 2 4 8 12 16 20 Miles

N

# High Occupancy Vehicle Lanes (HOV)/Express Lanes
# Southern California Region




## Legend

### HOV/Express Lanes Status

- Direct HOV/HOT Connector
- HOV - Existing and Under Construction
- HOV - Proposed
- Express Lanes - Existing and Under Construction
- Express Lanes - Proposed
- Toll Road - Existing and Proposed
- Unconstructed
- Urbanized Area
- County Boundary

California Department of Transportation
Divisions of Transportation Planning and Traffic Operations
January 2010

0 2 4 8 12 16 20 Miles

N

## Interregional Transportation Strategic Plan (1998)

The State Transportation Improvement Program (STIP) Guidelines, adopted by the California Transportation Commission (CTC), require Caltrans to develop and keep updated an Interregional Transportation Strategic Plan (ITSP). The ITSP includes a vision, strategies, performance measures, principles and key objectives to guide the investment of the State's Interregional Improvement Program (IIP). These objectives are:

- Completing a trunk system of higher standards (usually expressway/freeway state highways;
- Connecting all urbanized areas, major metropolitan centers, and gateways to the freeway and expressway system to ensure a complete statewide system for the highest volume and most critical trip movements;
- Ensuring a dependable level of service for movement into and through major gateways of statewide significance and ensuring connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution facilities;
- Connecting urbanizing centers and high growth areas to the trunk system to ensure future connectivity, mobility, and access for the State's expanding population;
- Linking rural and smaller urban centers to the trunk system; and
- Implementing an intercity passenger rail program toward specified goals.

### Overview of the Focus Route Corridors and Challenges

The term "Focus Route" is a phrase specific to the ITSP. The Focus Routes represent the 10 most critical interregional route corridors that are State's highest priority for IIP funding and upgrade to higher facility standards (usually expressway and freeway). Focus Routes are a subset of the High Emphasis Routes. It include all the non-Interstate routes in the High Emphasis category and 21 additional routes or route portions that constitute a major logical transportation corridor.

*The main difference in highway facility type is access control.*

***Freeway*** *- a divided arterial highway for through traffic with full control of access and with grade separations.*

***Expressway*** *- an arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.*

***Conventional highway*** *means access from adjoining property is not restricted; Where it is restricted, it is either an "expressway" (intersections are not grade-separated) or "freeway" (intersections are grade separated with interchange structures)*

Completing the Focus Route corridors will provide a statewide trunk system for serving higher volume interregional trip movements. These corridors together with the Interstate system form a backbone system for additional capacity and a complete transportation facility for the State.

The Focus Route corridors balance north-south and east-west access and connectivity statewide. North-south route corridors include US 101, State Route (SR) 99, US 395/SR 14, portions of SR 7, SR 111, SR 78, SR 86 and all of SR 905. These route corridors are vital interregional routes extending almost the length of California from Oregon to Mexico. They serve diverse travel demands from a major commute corridor through the urbanized areas, to prime rural recreation and tourist routes along with significant goods movement route for truck travel.

The east-west focus route corridors include SR 58, SR 41/46, SR 152/156, SR 198, SR 20 combined corridor with SR 29/53 and SR 49, and SR 299/44/36. The four east-west routes (and route portions) below Sacramento to Bakersfield (SR 152/156, 198, 41/46 and 58) serve the highest degree of interregional people and goods movement, connectivity, and accessibility. They provide operational flexibility for emergencies across multiple counties from central coast to the valley. SR 20 and SR 299 corridors (and route portions) serve interregional movement of people and goods across the northern Sacramento Valley and provide routing alternatives for emergencies in the north State.

California currently has 55 urbanized areas. Thirty-three out of 55 urbanized areas with a combined population of nearly five million people are currently not served by a State highway completed to freeway and/or expressway standards. Twenty-four of the 33 urbanized areas are directly on the Focus Route corridors and eleven are within a short distance to either a Focus Route corridor or an Interstate system. SR 99 alone has 13 urbanized areas underserved by the lack of a completed freeway. The Focus Routes combined represent less than 20 percent of the State highway miles. However, they carry over 32 billion vehicle miles of travel (VMT) annually and the second largest daily VMT for 5-axle trucks (25%), next to the Interstates (58%). Eighty three percent (83%) of all large truck travel is handled by these two systems. As population and economic growth continues in California, the need for higher facility standards becomes more pressing.

**Plan to Meet the Challenge**

The route development concept strategy for the Focus Routes corridors includes upgrading over 2,200 lane miles of conventional highways to freeway/expressway standards and constructing over 170 lane miles of new passing and truck climbing lanes over the 20-year period (1998-2020). Since 1998, nearly 600 lane miles (or about 25 percent) have been constructed, including those that are currently under construction. These major system improvements added new capacity and improved the operation of the Focus Route corridors.

A statewide map (Refer to Focus Route Development Strategy Map) demonstrates the progress of completing the Focus Routes including the remaining gaps on the system. The current 2008 State Transportation Improvement Program (STIP) programmed over $4.5 billion of combined state, regional, local, Proposition 1B and Transportation Congestion Relief Program funds for continued improvement on the Focus Routes. This significant investment will add over 320 lane miles of freeway/expressway and about 20 lane miles of passing and truck climbing lanes to the interregional system.

However, given the current economic downturn and funding shortfalls, funding and construction of these programmed improvements could be further delayed or un-programmed in future STIPs. The parallel issue of increasing demand for maintenance and rehabilitation of the aging state highway system would also decrease the available STIP to fund current and future planned improvements on the Focus Routes. A challenge for funding the completion of the Focus Routes is to ensure full regional partnerships with regional improvement program dollars, considering the available county minimums.

*Sources:*
*1998 Interregional Transportation Strategic Plan*
*http://www.dot.ca.gov/hq/transprog/ocip/te/itsp.pdf*
*Lilibeth Green, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916) 653-0548; Lilibeth_Green@dot.ca.gov*

# Focus Route Development Strategy

## 1998 - 2020
## (non-urbanized areas)

Implementation Progress Report of the
1998 Interregional Transportation Strategic Plan (ITSP)


## Legend

**Funding Status (1998 - 2008 STIP)**

- Constructed/Under Construction (Funded)
- Future Completion (Programmed/Planned)
- Focus Route
- Interstate Route
- Urbanized Area

California Department of Transportation
Division of Transportation Planning
Office of Advance System Planning
January 2010

0 10 20 40 60 80 Miles

N

## Passenger Rail

Currently, California's passenger rail system combines intercity, commuter, and urban rail. In the future, high speed rail plans to join these existing rail types to enhance the State's passenger rail system. While Caltrans assumes different roles in the operation of the many passenger rail lines in California, the State strives to make the passenger rail system as "seamless" as possible with excellent connectivity to other transportation systems. Designing for connectivity enters into virtually every aspect of operations, marketing and capital planning. The California State Rail Plan describes the overall vision for the State's intercity and commuter rail systems which (along with freight rail) share the same infrastructure, generally owned by private railroads. Urban rail services (such as the Los Angeles County Metro Rail and BART) operate on separate tracks and are locally controlled and funded, so they are not covered in the State Rail Plan. However, to further the implementation of a safe, integrated, multi-modal transportation system, it is essential that the intercity and commuter rail systems be well integrated with the urban transit rail and bus systems.

### Existing Intercity Rail Service

Intercity passenger rail service is a component of the State's overall transportation system and operates between several regions of the state. In California, Amtrak operates all State-supported intercity rail service. Caltrans provides operating funding for the three Amtrak California routes, the Pacific Surfliners (San Diego to San Luis Obispo), the San Joaquins (Bay Area/Sacramento to Bakersfield), and the Capitol Corridor (San Jose to Auburn). In addition, as part of its national intercity rail system, Amtrak funds and operates four long distance train routes that link California to other states. These routes include the Coast Starlight (Los Angeles to Seattle), California Zephyr (Emeryville to Chicago), Southwest Chief (Los Angeles to Chicago), and the Sunset Limited (Los Angeles to New Orleans). The State-supported routes connect with each other and with Amtrak's national intercity passenger rail network. Many passengers use State-supported routes as part of a longer rail trip. Coordination of schedules generates additional ridership and can improve overall efficiency. See map for routes.

### Existing Commuter Rail Services

Commuter rail operates primarily within a single region of the State, serving regional and local transportation needs. Because commuter rail serves local and regional transportation needs, these services are planned and administered by local and regional transportation agencies. Various sources of funding are available at the local, state, and federal levels. Some capital funding is provided by the state through the State Transportation Improvement Program, and other sources, but operating funding is provided by the local and regional agencies. California's existing commuter routes are Coaster (San Diego to Oceanside), Metrolink (Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties), Caltrain (San Francisco-Gilroy) and Altamont Commuter Express (ACE) (Stockton to San Jose). See map for routes.

**Existing Streets and Highways**

Caltrans works to ensure that the trains are well connected to streets and highways through proper design of stations and signage, including pathfinder signs on local streets and roads and State highways that guide passengers to Amtrak stations.

**Trends and Challenges**

Caltrans' vision for California's intercity rail system includes three key elements: Provide a rail transportation alternative to other travel modes; provide relief to highway and air transportation congestion; and improve air quality, conserve fuel, and contribute to efficient and environmentally superior land use.

The box at the right describes specific goals for the State's intercity passenger rail system vision.

Intercity Passenger Rail Goals

- Expand capacity on existing routes
- Reduce train running times
- Improve equipment, stations, and facilities
- Enhance multi-modal connectivity
- Increase fare box ratio
- Improve safety
- Implement new cost effective routes

One key challenge for State-supported intercity rail is adequate and predictable funding for capital projects needed to maintain and expand the system. The only ongoing capital funding source is a limited portion of the State Transportation Improvement Plan (STIP) funds. The State's ten-year $4.03 billion capital program through fiscal year 2017-18 for the three existing State-supported intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor) and for new routes/extensions represents a program based on program needs, and not on funding expectations. Full implementation of this capital program will require major Federal funding. The State applied for Federal stimulus funds being made available in 2009-10 and received about $100 million in funding. Future grant cycles are anticipated.

**Proposed Intercity and Commuter System Description**

As part of its 10-year intercity rail plan, the State proposes to increase service frequencies on all three existing intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor), and to add three new extensions of existing State-supported service:

1) Expand service from San Francisco to San Luis Obispo and Los Angeles as part of the Pacific Surfliners
2) Expand service from Sacramento to Redding
3) Expand service from Sacramento to Reno
4) Initiate service from Los Angeles to Indio (Coachella Valley).

The four commuter rail agencies (Coaster, Metrolink, Caltrain, and ACE) also have plans for expansion of service. In addition, there are three planning initiatives for commuter rail. The Southern California Association of Governments (SCAG) has initiated a study of commuter rail service for Ventura and Santa Barbara counties. Sonoma Marin-Area

Rail Transit District proposes service between Cloverdale and the Larkspur Ferry Terminal. Six agencies have partnered to develop a service plan for a new regional commuter rail service in the Auburn and Oakland urban corridor, which would be integrated with the Capitol Corridor. See map for proposed routes.

**Proposed High-Speed Rail Service Description**

In 2008, the State Legislature approved and Governor Arnold Schwarzenegger signed AB 3034 (Galgiani), placing a $9.95 billion bond measure for high speed rail on the November 2008 ballot. Proposition 1A asked California voters to approve a down payment on construction of the high-speed train line, led by the California High Speed Rail Authority (Authority). The bond measure passed and the Authority is currently working on obtaining environmental clearance on project sections.

As reported by the Authority, the major sections of the proposed high speed train system include: Los Angeles to Orange County, Los Angeles to Bakersfield, Bakersfield to Fresno, Fresno to Merced, Merced to San Jose, and San Jose to San Francisco. Subsequent sections of the system would extend north to Sacramento and south to San Diego. See map for proposed routes. The system will be built, whenever possible, along or adjacent to existing rail transportation facilities instead of creating new transportation corridors. In addition, in most major cities, the high-speed train station will be developed in conjunction with existing rail transportation hubs to produce the most efficient linkages to local and regional transit systems. The Authority is working on a timeline that would see a complete high-speed train system in place by 2030; subsequent sections would be constructed after that time.

Proposition 1A will provide $9 billion in state general obligation bonds that require other federal, state, local, and private financing to be secured before construction can proceed. Another $950 million included in the bond measure will be used to finance capital improvements to commuter, intercity rail, and transit lines in order to connect existing infrastructure to the high-speed rail system. In February 2010, the Authority received $2.25 billion in Federal stimulus funds.

The Authority and regional partners are proposing to develop a dedicated regional rail corridor through the Altamont Pass and the Tri Valley area capable of supporting intercity and commuter rail passenger services. This project is a separate corridor project from the statewide high-speed train system. Project-level environmental review is currently underway.

**Other Proposed High Speed Rail System Descriptions**

The DesertXpress is a proposed new high-speed, steel wheel on rail double track interstate passenger rail line. This new line, being proposed by a private consortium, would run 190 miles between Victorville, California and Las Vegas, Nevada. It would run primarily at grade but would be completely grade-separated from all streets and

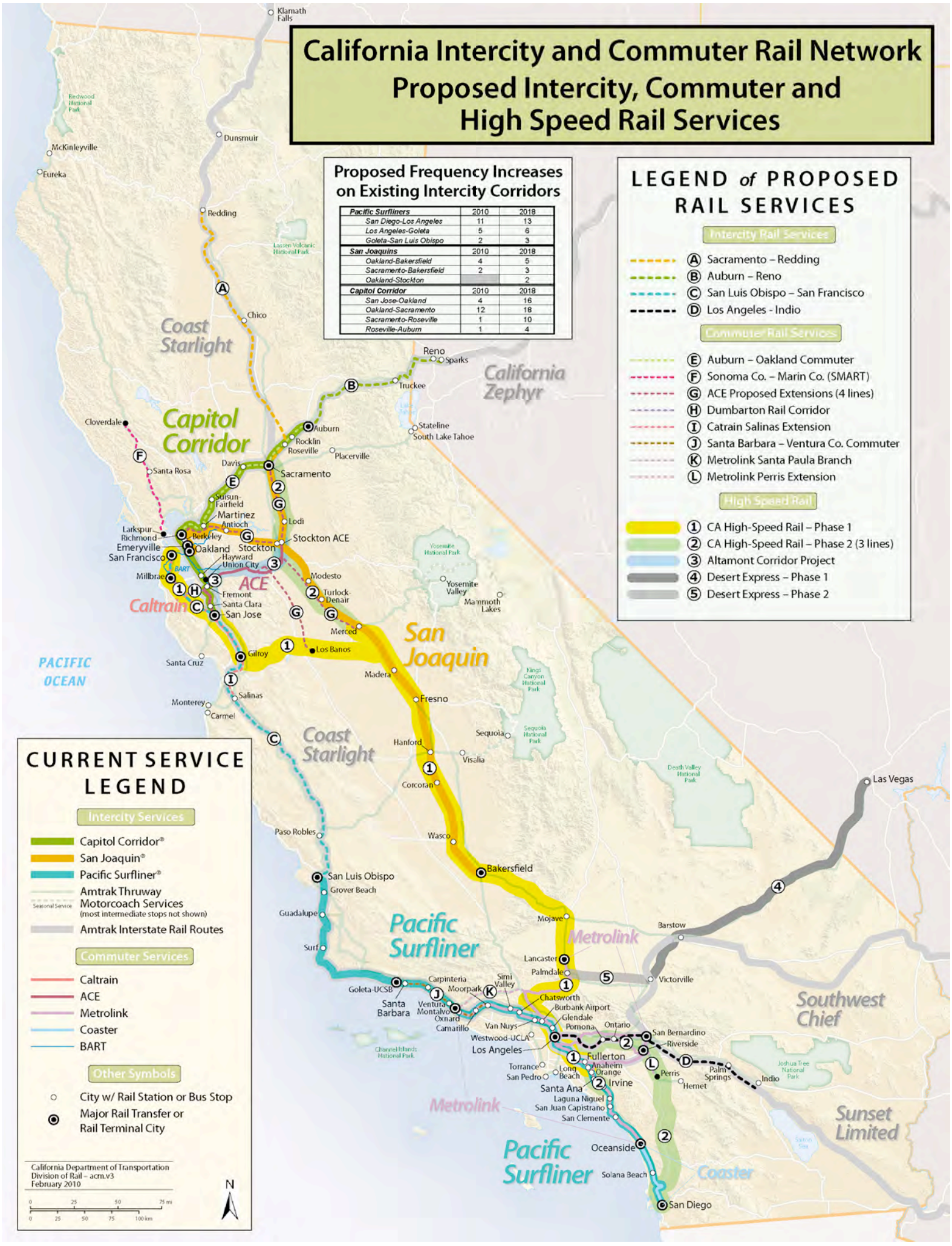
highways. The federal environmental impact statement (EIS) process is currently underway for this route.

Two high speed rail Maglev projects (Southern California Maglev Project and the Las Vegas–Anaheim Maglev Project) are also being proposed. Maglev technology uses magnetic forces to lift, propel, and guide a vehicle over a guideway. These two projects have significant hurdles to overcome. Their sponsors will need to complete engineering work and environmental documentation to further the initial concept design plans and a principal funding source remains to be identified.

*Source: California Rail Plan 2007-08 to 2017-18*
*http://www.dot.ca.gov/rail/go/dor/california-state-rail-plan/index.cfm*
*Emily Burstein, Chief, Office of Policy and Planning*
*California Department of Transportation, Division of Rail*
*(916) 654-6932; Emily_Burstein@dot.ca.gov*

*Source: California High-Speed Train Business Plan*
*http://www.cahighspeedrail.ca.gov/library.asp?p=8200*
*Eric Fredericks, Associate Transportation Planner*
*California High-Speed Rail Authority*
*(916)324-1541;EFredericks@hsr.ca.gov*


California Intercity and Commuter Rail Network
(including connecting bus service)
Current System as of February 2010
Coast Starlight
California Zephyr
Capitol Corridor
San Joaquin
Pacific Surfliner
Southwest Chief
Sunset Limited
Coaster
ACE
Caltrain
Metrolink
PACIFIC OCEAN
Klamath Falls
Redwood National Park
McKinleyville
Eureka
Dunsmuir
Redding
Lassen Volcanic National Park
Chico
Reno
Sparks
Truckee
Lake Tahoe
Stateline
South Lake Tahoe
Auburn
Rocklin
Roseville
Placerville
Davis
Sacramento
Santa Rosa
Suisun-Fairfield
Martinez
Antioch
Lodi
Richmond
Berkeley
Emeryville
Oakland
Stockton
Stockton ACE
San Francisco
Hayward
BART
Millbrae
Modesto
Turlock-Denair
Yosemite National Park
Summer only
Yosemite Valley
Mammoth Lakes
Fremont
Santa Clara
San Jose
Merced
Gilroy
Santa Cruz
Madera
Fresno
Kings Canyon National Park
Monterey
Salinas
Carmel
Sequoia
Sequoia National Park
Hanford
Visalia
Death Valley National Park
Las Vegas
Corcoran
Paso Robles
Wasco
Bakersfield
San Luis Obispo
Grover Beach
Guadalupe
Mojave
Barstow
Surf
Lancaster
Palmdale
Victorville
Carpinteria
Simi Valley
Moorpark
Goleta-UCSB
Santa Barbara
Ventura
Montalvo
Oxnard
Camarillo
Chatsworth
Burbank Airport
Glendale
Van Nuys
Ontario
San Bernardino
Westwood-UCLA
Pomona
Los Angeles
Riverside
Fullerton
Anaheim
Orange
Torrance
Long Beach
San Pedro
Palm Springs
Indio
Joshua Tree National Park
Irvine
Hemet
Santa Ana
Laguna Niguel
San Juan Capistrano
San Clemente
Channel Islands National Park
Oceanside
Solana Beach
San Diego
Salton Sea
LEGEND
Intercity Services
Capitol Corridor®
San Joaquin®
Pacific Surfliner®
Amtrak Thruway Motorcoach Services
(most intermediate stops not shown)
Seasonal Service
Amtrak Interstate Rail Routes
Commuter Services
Caltrain
ACE
Metrolink
Coaster
BART
Other Symbols
City w/ Rail Station or Bus Stop
Major Rail Transfer or Rail Terminal City
California Department of Transportation
Division of Rail – acm.v3
February 2010
0 25 50 75 mi
0 25 50 75 100 km
N


California Intercity and Commuter Rail Network
Proposed Intercity, Commuter and High Speed Rail Services
Proposed Frequency Increases on Existing Intercity Corridors
Pacific Surfliners 2010 2018
San Diego-Los Angeles 11 13
Los Angeles-Goleta 5 6
Goleta-San Luis Obispo 2 3
San Joaquins 2010 2018
Oakland-Bakersfield 4 5
Sacramento-Bakersfield 2 3
Oakland-Stockton 2
Capitol Corridor 2010 2018
San Jose-Oakland 4 16
Oakland-Sacramento 12 18
Sacramento-Roseville 1 10
Roseville-Auburn 1 4
LEGEND of PROPOSED RAIL SERVICES
Intercity Rail Services
A Sacramento – Redding
B Auburn – Reno
C San Luis Obispo – San Francisco
D Los Angeles - Indio
Commuter Rail Services
E Auburn – Oakland Commuter
F Sonoma Co. – Marin Co. (SMART)
G ACE Proposed Extensions (4 lines)
H Dumbarton Rail Corridor
I Catrain Salinas Extension
J Santa Barbara – Ventura Co. Commuter
K Metrolink Santa Paula Branch
L Metrolink Perris Extension
High Speed Rail
1 CA High-Speed Rail – Phase 1
2 CA High-Speed Rail – Phase 2 (3 lines)
3 Altamont Corridor Project
4 Desert Express – Phase 1
5 Desert Express – Phase 2
CURRENT SERVICE LEGEND
Intercity Services
Capitol Corridor®
San Joaquin®
Pacific Surfliner®
Amtrak Thruway Motorcoach Services (most intermediate stops not shown)
Amtrak Interstate Rail Routes
Commuter Services
Caltrain
ACE
Metrolink
Coaster
BART
Other Symbols
City w/ Rail Station or Bus Stop
Major Rail Transfer or Rail Terminal City
California Department of Transportation
Division of Rail – acm.v3
February 2010
Coast Starlight
Capitol Corridor
California Zephyr
San Joaquin
ACE
Caltrain
Pacific Surfliner
Metrolink
Southwest Chief
Sunset Limited
Coaster
PACIFIC OCEAN
Klamath Falls
Redwood National Park
McKinleyville
Eureka
Dunsmuir
Redding
Lassen Volcanic National Park
Chico
Reno
Sparks
Truckee
Stateline
South Lake Tahoe
Cloverdale
Santa Rosa
Auburn
Rocklin
Roseville
Placerville
Davis
Sacramento
Suisun-Fairfield
Martinez
Antioch
Lodi
Larkspur
Richmond
Berkeley
Oakland
Emeryville
San Francisco
Hayward
Union City
Stockton
Stockton ACE
Millbrae
BART
Fremont
Santa Clara
San Jose
Modesto
Turlock-Denair
Merced
Yosemite National Park
Yosemite Valley
Mammoth Lakes
Gilroy
Los Banos
Santa Cruz
Madera
Fresno
Kings Canyon National Park
Sequoia
Sequoia National Park
Monterey
Carmel
Salinas
Hanford
Visalia
Corcoran
Death Valley National Park
Las Vegas
Paso Robles
Wasco
Bakersfield
San Luis Obispo
Grover Beach
Guadalupe
Surf
Mojave
Barstow
Victorville
Lancaster
Palmdale
Goleta-UCSB
Carpinteria
Moorpark
Simi Valley
Santa Barbara
Ventura
Montalvo
Oxnard
Camarillo
Chatsworth
Burbank Airport
Glendale
Pomona
Ontario
Van Nuys
Westwood-UCLA
Los Angeles
San Bernardino
Riverside
Fullerton
Anaheim
Orange
Irvine
Torrance
San Pedro
Long Beach
Santa Ana
Laguna Niguel
San Juan Capistrano
San Clemente
Perris
Hemet
Palm Springs
Indio
Joshua Tree National Park
Channel Islands National Park
Oceanside
Solana Beach
San Diego
Salton Sea
0 25 50 75 mi
0 25 50 75 100 km
N

# Goods Movement

California's goods movement network of highways, rail lines, seaports, airports, and border crossings is an essential part of the State's interregional transportation system. California's goods movement strategy is laid out in the Goods Movement Action Plan (GMAP), developed between 2005 and 2007. The GMAP outlines a multimodal/interregional approach to address the economic and environmental issues associated with moving goods via the state's highways, railways and ports. The GMAP recognized the need to expand system capacity in tandem with significant reductions to the environmental and community health impacts associated with freight transportation.

Although the recent economic picture has substantially reduced overall trade volumes, economists expect recovery will occur over the next few years. For this reason, California must continue its strategic approach to freight transportation during a period of relative inactivity.

The following 'snapshot' provides a context for understanding the importance of the system to the State's economy and citizens, as well as its importance to the nation as a whole, and the continued need to plan and deliver appropriate infrastructure. It is clear from this snapshot that a standardized approach to planning for California's current and future goods movement transportation system will not only be inadequate but will actually be counterproductive. Thus, our planning efforts will continue to identify innovative partnerships, initiatives and funding opportunities.

<u>2007 California Good Movement Facts</u>

- California's Gross Domestic Product (GDP) was $1.7 trillion, which put California as the tenth largest economy in the world and represented 13 percent of the U.S. GDP. Considered as an independent nation, California would rank between Canada and Italy.
- 12 percent of the nation's population lived in California; international trade represented 25 percent of the State's economy.
- Hispanic buying power was estimated to be $228 billion annually and California's Asian consumer market is estimated at $150 billion annually.
- Exports accounted for 12 percent of total U. S. exports. California's top trading partners are Mexico, Canada, Japan, China and South Korea.
- Total trade equaled $516 billion in exports and imports flowed through the state by air, land and sea. From 2006 to 2007, exports increased $7 billion, to $134 billion.
- Airborne agricultural exports totaled $685 million (Los Angeles Basin and San Francisco Bay Area airports handled 93 percent of total California air cargo).
- California's goods movement infrastructure is important to the nation's economy in terms of both exports and imports. In 2006 over 8 percent of all goods moving into and out of America use California's highways, railroads, ports and airports and 45 percent of the nation's container volume surge through California's ports, highways and railways. This is a significant impact to the State's transportation and community infrastructure.

The GMAP was a significant policy initiative that supports subsequent actions, including the freight elements of Proposition 1B, and continues to guide freight-related decision-making. It also guides our input to the Surface Transportation Act currently being debated in Congress. The GMAP was specifically designed to be a living document with regular updates beginning with a major update in 2011. The 2005 priority project list will be revisited and revised in line with current conditions. The air cargo section and agriculture sections will be significantly expanded. Also to be expanded is goods movement infrastructure needs associated with tribal governmental economic development projects.

The State continues to invest in projects that will provide a safer, more effective transportation system for moving goods to and through California. Delivering the Trade Corridors Improvement Fund ("TCIF") projects (nearly $3 billion), and the Caltrans sponsorship of $143.8 million in key freight rail projects from the federal government's Transportation Investments Generating Economic Recovery -- "TIGER"--discretionary grant program are key components of this commitment. As the economy recovers, other efforts will be needed to meet the challenges that arise.

Caltrans is committed to improving the movement of goods in all areas of our transportation system and to reducing associated health impacts in our communities. Thus—beyond the State actions and initiatives described above--we're also working with Congress as it develops the new Surface Transportation Act to increase our share of federal funding for projects at our borders, seaports and throughout our vital system of highways. We are also forging new and innovative partnerships with non-traditional industry sectors, such as the Class I railroads operating in California.

The attached map shows the primary goods movement corridors in California:

**Freight Rail System Overview**

California is a key state in the national freight rail system. In 2005, California railroads operated over 7, 355 miles of track and carried over seven million carloads of freight. Railroad service plays a critical role to California, to the United States and the global economy. Burlington Northern Santa Fe (BNSL) and Union Pacific (UP) serve the import and export markets for a large number of Pacific Rim countries. Approximately 45 percent of intermodal traffic entering or leaving the U.S. passes through California ports.

**Rail capacity and constraints**

Rail capacity has become more constrained due to the increasing volumes of cargo imported and exported into and out of the State through our major seaports and trade gateways. This increased trade is due to rapidly increasing population in California, other states and foreign countries that are served by the State's rail infrastructure and goods movement industry.

**Operational Conflicts: Passenger/Freight; Freight/Freight**

In most areas of the State, rail passenger share rail rights-of-way (ROW) with freight railroads. In this case, the main issue is the capacity of the route to accommodate both rail passenger and freight rail. Statewide, shared use of ROW includes:

- Pacific Surfliner, San Joaquin, and Capitol Corridor;
- Southern California Metrolink commuter rail system;
- San Diego County Coaster commuter rail system;
- Caltrain commuter rail system in the San Francisco Bay Area;
- Altamont Commuter Express rail system.

Rail passenger operators have plans for adding more trains over the next several years. In some cases, rail capacity is insufficient to handle existing levels of both passenger and freight service, particular in the urban areas with substantial passenger and rail traffic.

**Rail System Preservation**

BNSF and UP have some 5,488 miles of track in the State. To improve productivity, profitability and maximize capacity, railroads have made many improvements. However, the high cost of these improvements has been limited to upgrading only the highest volume and most profitable lines, and leaving other lines downgraded or abandoned.

Many states believe freight service is vital to their economies and have made freight rail service, especially the preservation and retention of lower density branch lines, a significant part of their economic development and transportation programs. Therefore, it is critical to keep an inventory of inactive, underutilized, and abandoned rail segments and rail corridors for possible increased and or future use. Often times, when rail is removed for other purposes, the rail service is lost forever.

*Source: Goods Movement Action Plan*
*http://www.dot.ca.gov/hq/tpp/offices/ogm/links_files/gmap-1-11-07.pdf*
*Michele Fell, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916)653-4287; Michele_Fell@dot.ca.gov*

*Source: California Rail Plan*
*http://www.dot.ca.gov/rail.go/dor/california-state-rail-plan/index.cfm*
*Emily Burstein, Chief, Office of Policy and Planning*
*California Department of Transportation, Division of Rail*
*(916) 654-6932; Emily_Burstein@dot.ca.gov*

# Priority Regions and Corridors in California

# Public Use and Military Airports

California's 250 public use airports consist of a combination of privately owned airports, and airports that are owned by local governments, or airport districts. Ownership and operation of an airport is sometimes a combined public-private effort between a city or county, and a contract airport management company. Regardless of who owns or operates the airports in California, they are all part of a global aviation network. There are three types of airports: commercial, military, and general aviation (GA). GA airports can be for public use, or private use. As their name implies, public use airports are open to the general public and anyone can use them, while private use airports can only be used by their owner or invited guests. In addition to the public use airports, the federal government owns and operates numerous military airfields throughout state. Civilian aircraft must have special permission to use these military airfields.

## Trends and Issues

### Capacity Constraints

Capacity at commercial service airports is defined as the maximum volume of all arriving and departing aircraft. An airport can only handle a specific number of operations without saturation (the equivalent to gridlock), and is limited by runways, taxiways, and terminals. In 2003 and 2007, the Federal Aviation Administration (FAA) completed two major national airport capacity assessments, publishing their findings in the Future Airport Capacity Task (FACT) 1 and 2 reports. The reports focused on the fastest growing metropolitan areas in the country. They identified five California airports as being among the most capacity constrained airports in the nation. These airports are: John Wayne Airport (Orange County), Oakland International and San Francisco International Airports (San Francisco Bay Area), Long Beach Airport (Los Angeles County) and San Diego International (San Diego County). San Diego International is so constrained that the only way future demand can be met is through the construction of a new airport.

Although FACT 1 and 2 focused primarily on the nation's commercial airports, it acknowledged that GA airports would have an important part in meeting future system wide capacity needs. GA airports provide back-up capacity for both commercial and non-commercial aviation demand. Preservation of airports through better interagency planning, and secure funding would insure that California's future air travel demands are met. Unfortunately, GA airports are often overlooked in transportation planning at all levels of government in California.

### Complex Regulatory Framework

Airports are governed by a complex regulatory framework. They must comply with federal, state, and local aviation regulations. They must also work with numerous non-aviation agencies that have permitting or funding authority, including federal and state environmental protection and resource agencies, the Army Corps of Engineers, regional transportation planning agencies, and local governments. The State's role in regulating airports through the Caltrans Division of Aeronautics (Division) includes permitting airports and heliports, and conducting periodic safety

inspections to ensure compliance with design standards stipulated in the California Code of Regulations. The Division also provides land use guidance through planning documents such as the Airport Land Use Compatibility Handbook and the California Aviation System Plan (CASP), manages the State's Airport Noise Program, and administers airport funding through its loan and grants programs. Local government agencies are responsible for land use around airports. They include airports in their General Plan policy document and use implementing tools such as Specific Plans and zoning ordinances. Airport Land Use Commissions (ALUC) develop recommended land use strategies for property around each airport, and write Airport Land Use Compatibility Plans (ALUCP) for the airports in their county. Regional and Metropolitan Transportation Planning Agencies include airport planning as part of their overall transportation planning and programming i.e. funding work. This overlapping jurisdictional responsibility sometimes results in contradictory regulations, investments and plans.

**Aviation Funding**

Unlike other modes of transportation, airports are not funded through the State Highway Account and State Transportation Improvement Program process. The bulk of funding for GA airports comes either directly from the FAA or indirectly through the State's Aeronautics Account to the eligible public use airport owners. The types of funds available to an airport depend on the federal and state grant programs criteria.

Recent State budget balancing efforts have resulted in significant reductions in the Aeronautics Account. Suspension of all Aeronautics grant programs for FY 2009/10 and transfer of $4.0M from the Aeronautics Account has negatively impacted airports in several ways. Airports no longer have the State money to use as a match for the federal grant funds to improve their facilities. Thus, some airports are deferring routine maintenance which will result in higher future operation and maintenance costs. Airports are not eligible to receive Annual Credits in the amount of $10K/year to address safety and operational expenses, and airports are not eligible to apply for Acquisition and Development grants for safety projects that may not have been funded by the FAA.

See State ***Dollars for Your Airport*** for additional details regarding airport funding at: http://www.dot.ca.gov/hq/planning/aeronaut/document/StateDollarsForAirport2009.pdf

**Perceptions and Misperceptions about the Value of Airports**

According to the June 2003 economic study ***Aviation in California: Benefits to Our Economy and Way of Life,*** aviation generates almost 10% of the State's GDP and employment base. Aviation offers an effective business tool for expediting delivery times of passengers and cargo. Corporate location decisions are sometimes based on proximity to an airport. GA airports in rural communities provide vital links to the rest of the State and world.

Unfortunately for all their benefits, the value and potential of California's airports are often under estimated. If the airport environs are preserved to allow for airport growth, airports can be a revenue generating asset that contributes to the long term economic well being of a community.

Local governments must weigh potential future revenues against immediate short term tax revenue gains from residential and commercial projects.

**Adjacent Airport Land Uses**

The single most challenging issue facing California airports is encroachment from incompatible land uses. An incompatible land use means any land use or structure that interferes with the safe operation of the airport, or is inconsistent with the State mandated Airport Land Use Commission's compatibility plan pursuant to Public Utilities Code 21001 et seq. Competing land uses, misunderstanding of an airport's value to the community, and the cost of an airport's infrastructure work against the public's appreciation of their airport. Siting problems with wetlands, power plants, wind turbine facilities, expansion of existing land uses, and obstructions that penetrate navigable airspace around airports can also limit an airport's ability to operate safely, and constrain their economic viability and long term sustainability.

## Future Growth Opportunities

- Growth in business aviation and goods movement
- Future demand for new commercial aircraft, and individual aircraft ownership of business aircraft (including fractional ownership)
- Modify the Division's CASP System Needs Assessment and Policy Elements to include gap analysis projects and priorities
- Add a recommendation for inclusion of an airport buffer zone, like a greenbelt, in local planning documents and policies in the 2010 Airport Land Use Handbook update
- Promote green technology at airports, such as San Francisco International and Fresno Yosemite Airports see link: http://www.flysfo.com/web/page/about/green/index.html
- Amend CEQA Guidelines to require distribution of NOPs to local ALUCs for all projects within 2 miles of any public use airport
- Raise visibility and importance of aviation planning within Caltrans through a director's policy or deputy directive
- Maintain Division function at Caltrans HQ, and create aeronautics liaisons in the districts
- Highlight jobs created by the aviation sector of the economy
- Address environmental justice issues around airports
- State Aeronautics Account needs dedicated reliable funding, and protection from "fund transfers" by the Department of Finance

*Source: California Aviation System Plan*
*http://www.dot.ca.gov/hq/planning/aeronaut/documents/CASP2006.pdf*
*Colette Armao, Associate Transportation Planner*
*California Department of Transportation, Division of Aeronautics*
*(916) 654-5364; Colette_Armao@dot.ca.gov*

CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS

# Public Use Airports - 2008

## And Military Airfields


## LEGEND

- Commercial/Primary
- Metropolitan
- Regional
- Community
- Limited Use
- Joint Use (Military/Commercial)
- Military/NASA

AERONAUTICS
DEPARTMENT OF TRANSPORTATION



Rev. February 2008

# Division of Mass Transportation

## Mass Transportation in California

Transit agencies are owned and operated by private, private non-profit, or public transit entities. The California Department of Transportation (Caltrans) does not own or operate any of the existing transit systems in the state and has no authority over individual transit agencies and their services. Caltrans, however, plays an important role in supporting the transit system by administering state and federal funds, such as the Federal Transit Administration's Section 5311(f) Program which supports the connection of transit services between non-urbanized and the larger regions. Caltrans also supports the infrastructure of the transit network on its state highway system to support a safe, reliable, multi-modal transportation network.

## The California Transit Trend

Transit ridership in California is at an all-time high with 1.2 billion passengers annually. Transit operators provided 40% more services in 2007 than in 1997 and during the same time transit operating costs rose by almost 45% according to the National Transit Database.[1] Light rail trips increased at a higher rate than bus trips in the last five years, with bus trips becoming shorter and rail trips getting longer. In addition, California transit services accounted for 16% of the nation's vehicle revenue miles and hours. In 2006, California passed the first Global Warming Reduction Initiative with AB 32, setting in motion the need to reduce green house gas emissions (GHG). In 2008, SB 375 was passed directing metropolitan planning agencies to reduce GHG. The State has identified a number of strategies to reduce GHG emissions that emphasizes the use of public transportation and land use such as increased Transit Oriented Developments.

## Transit Issues

Transit Connectivity

The transit system is faced with some gaps in connectivity. Many transit riders rely on different transportation modes to complete a trip. For example, as transit ridership has increased, the issue of providing passenger services for the first and last mile of trips has become apparent. Lack of connectivity to different modes of service could cause central transit hubs to be underutilized.

Transit Funding

Transit funding is a complex issue in California. There is a host of federal and State grants available to transit agencies for capital purchases, improvements and some operating costs. However, transit funding in California has recently changed as the state tries to resolve its fiscal issues. In the 2009 State Budget, State Transit Assistance (STA) funding was eliminated for the next five years. With the elimination of STA funds, transit agencies across the State have reduced their operating services. The federal government added additional grant money through the American Recovery and Reinvestment Act (ARRA) for transit projects to help sustain the economy, but this funding is temporary.

---

[1] NTD Historical Data File TS2.1, available at *http://www.ntdprogram.gov/ntdprogram/data.htm accessed 10/22/09*.) This information does not reflect any ridership variations based on recent statewide increased unemployment, furloughs and service reductions."

**Statewide Transit Strategic Plan**

To help the State better support public transportation, Caltrans is developing the Statewide Transit Strategic Plan (STSP). This effort, through coordination and collaboration with stakeholders, will provide the platform for Caltrans to understand common transit issues and identify solutions to reduce barriers. By recognizing how transit fits into the overall theme of integrating mobility choices into the transportation planning system operation, this plan will enhance Caltrans' transportation planning on a statewide level. The work will lead to the development of an action plan that enables Caltrans to facilitate the delivery of public transit services on the State highway system. The STSP will help California gain a better understanding of its present and future roles and responsibilities for public transportation — serving as the collective vision for California's future transit system.


INTERCITY BUS SERVICE IN CALIFORNIA
Medford
Reno
Nevada
Las Vegas
Yuma
Redding
Chico
Marysville
Sacramento
Santa Rosa
San Rafael
San Francisco
Oakland
Fremont
San Jose
Santa Cruz
Monterey
Stockton
Modesto
Merced
Fresno
Bakersfield
San Luis Obispo
Santa Maria
Santa Barbara
Los Angeles
Glendale
Long Beach
Anaheim
Santa Ana
Irvine
Riverside
San Bernardino
Victorville
Lancaster
Hemet
San Diego
Yosemite NP
Kings Canyon NP
Sequoia NP
Death Valley NP
Caltrans
Legend
Intercity Stops
Passenger Railroad
Greyhound Lines
Amtrak Thruway Bus
Americanos USA
CA Shuttle Bus
Lux Bus America
Megabus
Mt. Lassen Motor Transit
Orange Belt Stages
Transportes Intercalifornias
USAsia Bus
Other Connecting Regional Services
5311(f) Routes
Urban Areas
0
25
50
100
150
Miles

# Modal Plans

summaries & maps

- State Highway System
- Passenger Rail
- Goods Movement
- Public Use & Military Airports
- Transit

# California's Multi-Modal Transportation System

California's complex transportation infrastructure network supports a variety of travel modes, from highways and trains, to airplanes, buses, and bikes. Ownership and operating responsibility for the various parts of the transportation system falls to a variety of entities such as counties, cities, transit agencies, ports, private businesses, regional transportation planning agencies, tribal governments, and the state.

The state represented by Caltrans, citizens, has primary responsibility for the interregional mobility of people and goods. Much of that responsibility lies in operating and maintaining the state highway system to provide a dependable and reasonable level of service, accessibility into and through gateways and adequate connectivity to intermodal transfer points. Caltrans also supports California's interregional transportation system through funding passenger rail and transit services, regulating airports, and advocating for mass transit guideways. Most importantly, Caltrans maintains an ongoing cooperative relationship between other transportation stakeholders, particularly regional and local agencies, to mutually consult, cooperate, and seek consensus on transportation priorities and strategies.

The following narratives and accompanying maps provide an overview of California's existing and proposed interregional transportation system by mode – the State highway system, the passenger rail system, the goods movement network, the state's public use and military airports, and the transit system. The narratives describe each system, the trends and issues challenging that system and how the state proposes to address those challenges. Each narrative is followed by a map or maps illustrating the existing system for each mode and, where available, a map of the future system if Caltrans were to carry out all the planned transportation investments in its existing long-range plans.

Caltrans prepares long-range planning documents for each one of these modes that describes the vision, goals, and strategic investments for meeting California's future mobility needs. Caltrans' major long-range planning documents are the following:

**State Highway System**

- 1998 Interregional Transportation Strategic Plan
- 2009 Ten-Year SHOPP Plan
- Corridor System Management Plans
- 2009 California High Occupancy Vehicle (HOV)/Express Lane Business Plan

**Passenger Rail**

- California State Rail Plan

**Goods Movement**

- Goods Movement Action Plan

**Aeronautics**

- California Aviation System Plan

**Transit**

- Statewide Transit Strategic Plan (Concept Draft)

Caltrans has always maintained continuity between all of its long-range planning documents. However, the California Interregional Blueprint will integrate and align these state plans, along with Caltrans sponsored programs such as the Regional Blueprint Planning Program, Complete Streets, and the Smart Mobility Framework, more directly to provide a comprehensive picture of the state's multi-modal interregional transportation system.

# California Interregional State Highways

*Major Planning Considerations, Trends and Implications*

## Introduction

The California State Highway System (SHS) is comprised of over 15,400 miles (51,000 lane miles) of roadway and carries over 185 billion vehicle miles of travel (VMT) each year. The state highway system serves the State's heavily traveled rural and urban corridors, connects the communities and regions of the State and serves the State's economy by connecting centers of commerce, industry, agriculture, natural resource wealth, and recreation. The California Department of Transportation (Caltrans) has the statutory responsibility for operations, maintenance, design, construction and long-range planning of the SHS. Caltrans establishes standards and policies to maintain the system and administers the State Highway Operations and Protection Program (SHOPP) for rehabilitation and operational improvements of the system. Caltrans conducts long-range system planning in both rural and urbanized areas to identify future highway improvements and strategies, recommend prioritized improvements for funding into local and regional plans, and provide the sound technical basis for informed discussions and decision-making.

## I. Major Interregional System Elements

The state highway system serves a diverse range of needs for the interregional movement of people and goods between rural and highly urbanized areas. While all state routes are important, the Interstate system, Interregional Road System (IRRS) routes, and other major freeway trade corridors form a strong transportation network that is most critical to interregional mobility and connectivity statewide. Together, these routes carry over 80 percent of the total annual SHS VMT. Strategies to optimize the use of the system's existing capacity through better system management, integration of new technology, completing the gaps on the high-occupancy vehicle (HOV) system and completing the key underdeveloped interregional routes would help achieve maximum return from our investment and meet the State's climate goals.

For Phase 1 development of the California Interregional Blueprint (CIB), Caltrans provides a progress status on each of the Focus Route included in the 1998 Interregional Transportation Strategic Plan (ITSP). The HOV System network is also included to emphasize the need to close gaps for system continuity. These system plans are the most readily available information for illustration purposes and provide a conceptual framework for the CIB. Ultimately, the plan is to identify future highway improvements and gaps on the IRRS *(Refer to Map – Interregional Road System)*, with special emphasis on the non-urbanized areas. Priority improvements, specific to goods movement, are noted separately in the Goods Movement Action Plan section of the CIB.

### Interstate System

The designated Interstate system is the backbone of the state's transportation network for interregional, interstate and international goods movement, access to airports, air cargo terminals, and other major gateways in the urbanized area. The Interstate system is the only "completed freeway system" in California in terms of continuous high facility standards. The Interstate system is less than 18 percent of all state highway miles, however, it carries over half of all VMT annually (over 80 billion VMT) and over half of all VMT in the urbanized and metropolitan areas. The State's large metropolitan centers in Southern California and the Bay Area in Northern California rely heavily on the Interstate system for interregional and regional

mobility. In rural and nonurbanized areas, the Interstate system primarily serves critical interregional goods movement needs and recreational travel.

**Interregional Road System**

The IRRS was first identified in statute in 1989 as part of the Blueprint Legislation. The IRRS is defined as a series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreation areas, and urban and rural regions. This is simply a subset of the existing state highway routes and part of the Freeway and Expressway (F&E) System. The IRRS was conceived as part of the larger effort to address the critical transportation system funding and development needs of the State. Like most of new programs created by Legislation, the implementation is dependent on increases in state transportation revenues.

The passage of Blueprint Legislation (1989) and Senate Bill 45 (1997) made significant changes to the priorities and processes for programming and expenditure of state transportation funds. The funding formula for the State's interregional program is 25 percent and the regional share is 75 percent. The intent was for the State to be responsible for the interregional travel in the non-urbanized areas on the IRRS routes. Regional and local agencies are responsible for regional and sub-regional travel, and given the flexibility in identifying projects and system improvements to address congestion in their areas.

The term "High Emphasis Routes" was first coined in the 1990 IRRS Plan. This Plan was required in the Blueprint Legislation, but was deleted under SB 45. The High Emphasis Routes are characterized by Caltrans as the most critical IRRS routes identified in the 1990 Plan as the State's priority for programming and candidates to upgrade to freeway/expressway standards. Some Interstate routes are included as High Emphasis to highlight their critical importance to the interregional travel and the state as a whole; but they are not a priority for programming.

The term "Focus Route" is a phrase specific to the Caltrans' Interregional Transportation Strategic Plan (ITSP). The ITSP superceded the 1990 IRRS Plan and was developed in response to SB 45 to guide the investments in the State's Interregional Improvement Program (IIP). Focus Routes are a subset of the High Emphasis Routes and represent the ten IRRS corridors that should be the highest priority for upgrade to freeway and expressway standards in a 20-year period. When completed, the Focus Routes will connect all urban areas (including high-growth urbanizing areas), geographic goods movement gateways, and link rural and small urban areas to this trunk system. The Focus Routes can also be managed through a system management approach based on performance measures. *(Refer to ITSP Fact Sheet and Focus Route Development Strategy Map).*

Urban growth and development in California in the past 30 years has been directly along the Interstate System and Focus Routes (*Refer to Map – Designation Trend of Urbanized Areas on Transportation Paths).* Better management of the Interstate system and completion of the Focus Routes are central to both supporting interregional travel to and through urbanized areas and for rural mobility.

## II. Major Statewide Initiatives/Plan

### Importance of Corridor System Management Plans (CSMPs) for California's Mobility

Caltrans, in collaboration with regional and local partners, relies on the development of the CSMPs to manage corridor mobility and operations now and in the future. The CSMPs are based upon the concepts in Caltrans' Transportation Management System (TMS) Master Plan that was required by the California State Legislature in 2004. The TMS Master Plan is the foundation of the transportation component of the Governor's Strategic Growth Plan (SGP). This system management approach will restore productivity to the State's transportation system, improve corridor throughput, enhance travel time reliability across all corridor elements, and support economic growth.

The TMS Master Plan identifies three principal elements that will help restore productivity. These are: traffic control (such as ramp meters and improved signal timing on local arterials), incident management, and traveler information. These elements must be built on a strong foundation of detection in order to measure freeway performance. Aggressive deployment of these TMS elements could, on the freeway system alone, increase productivity by 20 percent, reduce projected congestion by 20 percent, and improve travel time reliability by 10 percent.

The CSMPs support and complement meeting the goals of the California Regional Blueprint efforts, compliance with Assembly Bill (AB) 32 and Senate Bill (SB) 375 to reduce greenhouse gas emissions, and the Smart Mobility Framework *(Refer to Smart Mobility Framework Fact Sheet).*

### 2009 High Occupancy Vehicle (HOV)/Express Lane Business Plan

An important element of efficiently operating California's highways is the State's HOV and express lanes - also known as high-occupancy tolling (HOT) or managed-lane system. The California HOV/Express Lane Business Plan guides the current and future development and operation of HOV and express lanes throughout the State. Caltrans Division of Traffic Operations takes the lead in implementing the business plan but it is developed in partnership with the regional transportation planning agencies, the California Highway Patrol and the Federal Highway Administration.

Currently, California has over 1,500 lane miles of HOV lanes, including three express lanes operating or under construction. Additionally, due to state and federal legislation and funding incentives, over 1,300 additional lane miles of HOV or express lanes are programmed or proposed, including a regional HOT lane network. *(Refer to Maps – HOV Lane System for Northern and Southern California).* By adjusting HOV lane operations (occupancy minimums and access design) and introducing tolling ("Express Lanes") the state and regional partners can actually manage congestion. The HOV/Express Lane Business Plan lays out a course of action during 2009-2011 for Caltrans and its partners to easily implement more flexible and effective system management strategies for HOV and Express lanes.

**2009 Ten-Year SHOPP Plan**

Caltrans' 2009 Ten-Year SHOPP identifies the needs to maintain and preserve the state highway system (2010 to 2020). The SHOPP Plan identifies specific performance measures and includes a cost estimate for the first five years of the plan. Capital improvements programmed in the SHOPP are limited to maintenance, safety improvements, and rehabilitation of the State highways and bridges, which do not add capacity to the system. Eligible SHOPP projects are grouped into eight categories: emergency response, collision reduction, mandates, bridge preservation, roadway preservation, mobility, roadside preservation and facilities.

The SHOPP is funded from the State Highway Account (SHA), receiving money through excise tax on gasoline and diesel fuel. Projected SHA funding available for the SHOPP is about $1.5 billion per year, which represent about 24 percent of the estimated annual need. Since funding is insufficient to preserve and maintain the system, Caltrans will have to focus resources on the most critical categories of projects in the SHOPP. In the absence of new revenue sources, the condition of the transportation system will continue to deteriorate over the next ten years.

Caltrans has also identified 20 high-priority future SHOPP projects that involve a complex environmental, or project selection process, or require more than four years lead time for delivery of the construction contract documents. To achieve the goals identified in the Ten-Year SHOPP Plan, Caltrans will have to start the environmental review process prior to programming these projects. The intent is to propose these projects for programming at the earliest opportunity.

*Sources:*
*Statewide Corridor System Management Plan*
*http://www.corridormobility.org*

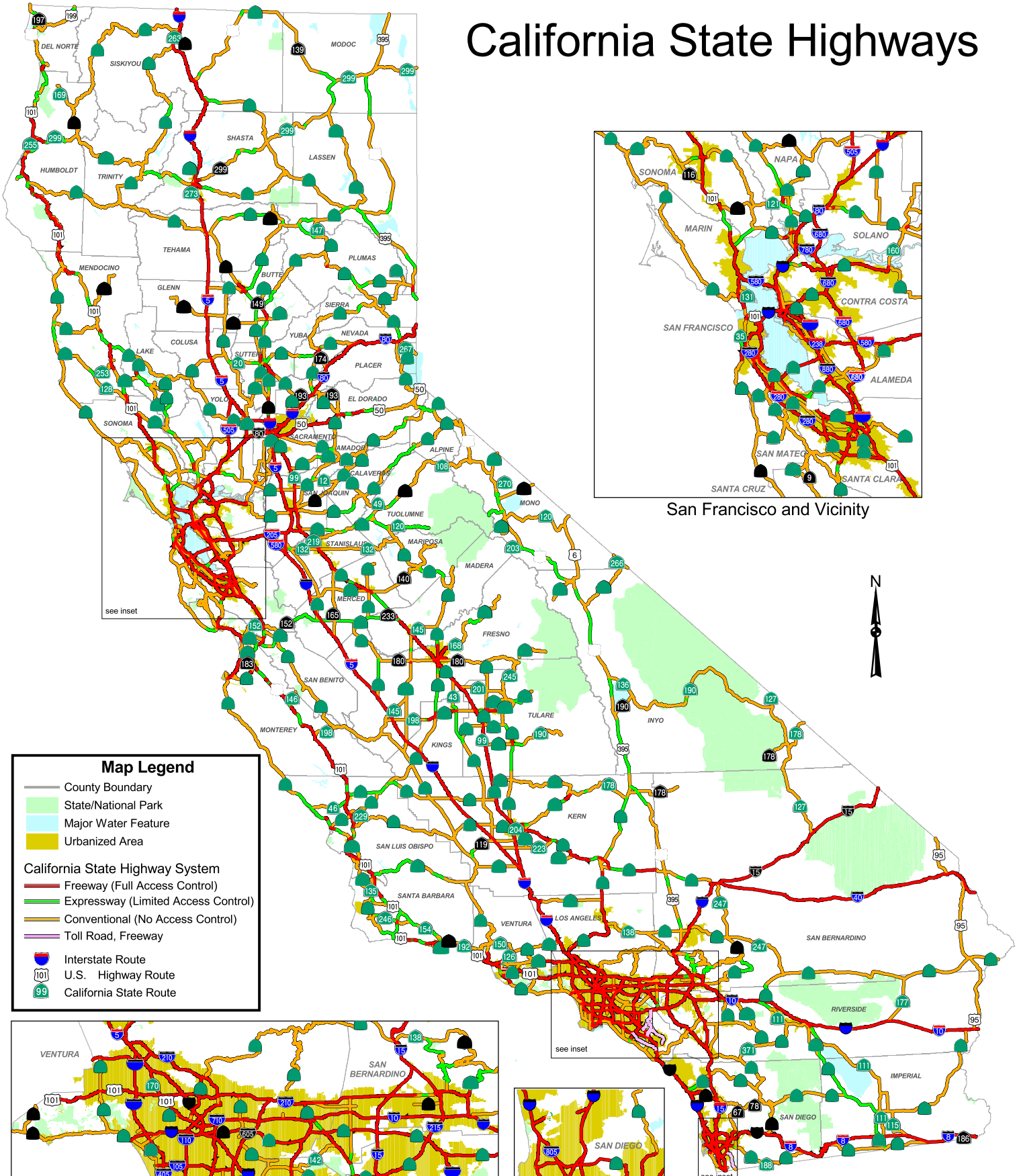
*Transportation Management System Master Plan*
*http://www.dot.ca.gov/hq/traffops/sysmgtpl/reports/MasterPlan.pdf*

*California High Occupancy Vehicle/Express Lane Business Plan*
*http://www.dot.ca.gov/hq/traffops/systemops/hov/Express_Lane/*

*SHOPP Program*
*http://www.dot.ca.gov/hq/transprog/shopp.htm*

*Lilibeth Green, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916) 653-0548; Lilibeth_Green@dot.ca.gov*

# California State Highways







San Francisco and Vicinity

## Map Legend

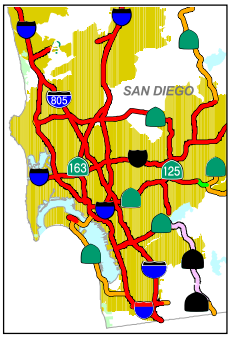
- County Boundary
- State/National Park
- Major Water Feature
- Urbanized Area

California State Highway System

- Freeway (Full Access Control)
- Expressway (Limited Access Control)
- Conventional (No Access Control)
- Toll Road, Freeway
- Interstate Route
- U.S. Highway Route
- California State Route




Los Angeles and Vicinity

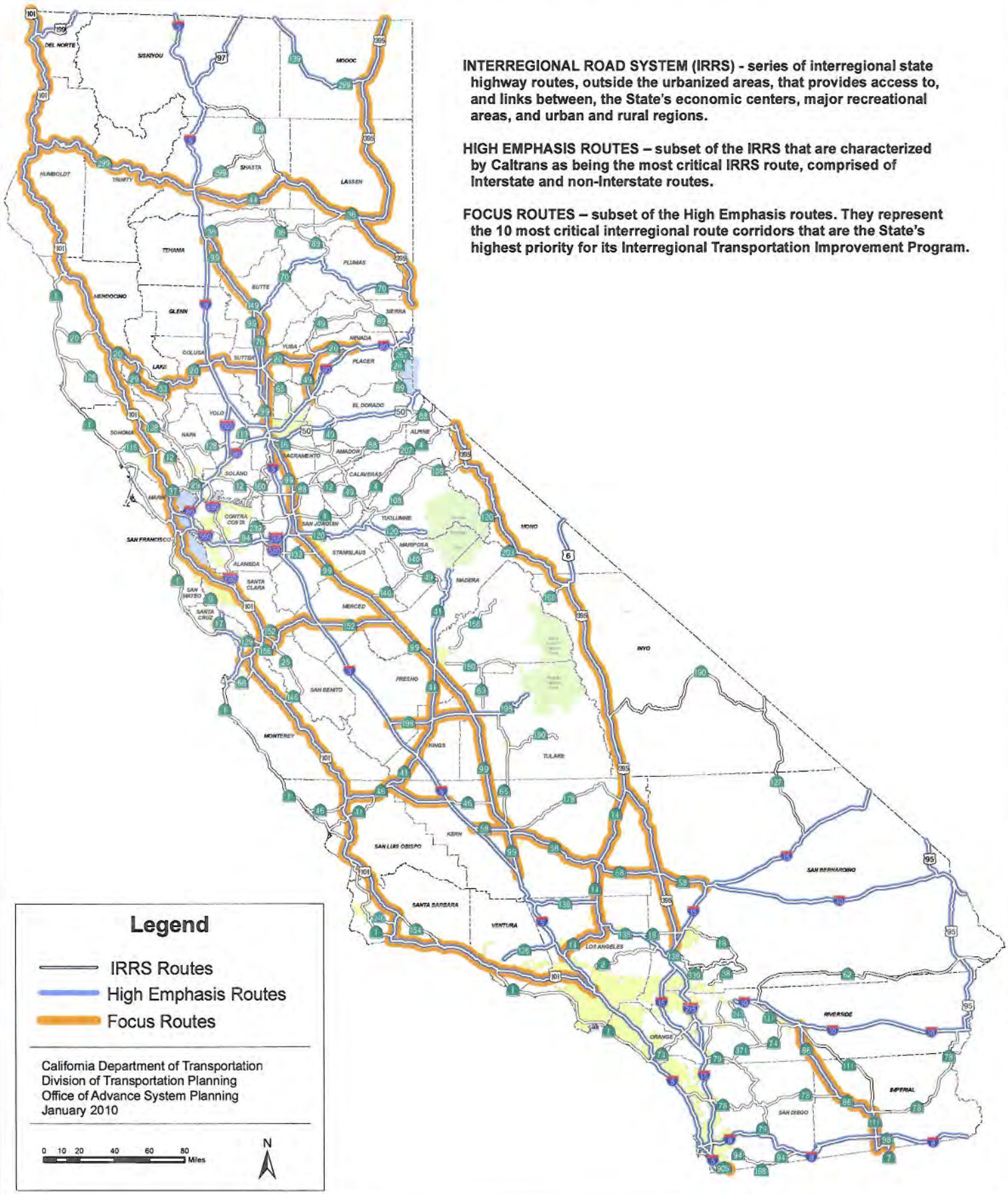



San Diego

*California Department of Transportation*
*Division of Transportation Planning*
*Office of Advance System Planning*
*January 2010*

# Interregional Road System

(Streets and Highway Code, Section 164.10 - 164.20)




**INTERREGIONAL ROAD SYSTEM (IRRS) - series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions.**

**HIGH EMPHASIS ROUTES – subset of the IRRS that are characterized by Caltrans as being the most critical IRRS route, comprised of Interstate and non-Interstate routes.**

**FOCUS ROUTES – subset of the High Emphasis routes. They represent the 10 most critical interregional route corridors that are the State's highest priority for its Interregional Transportation Improvement Program.**

## Legend

IRRS Routes

High Emphasis Routes

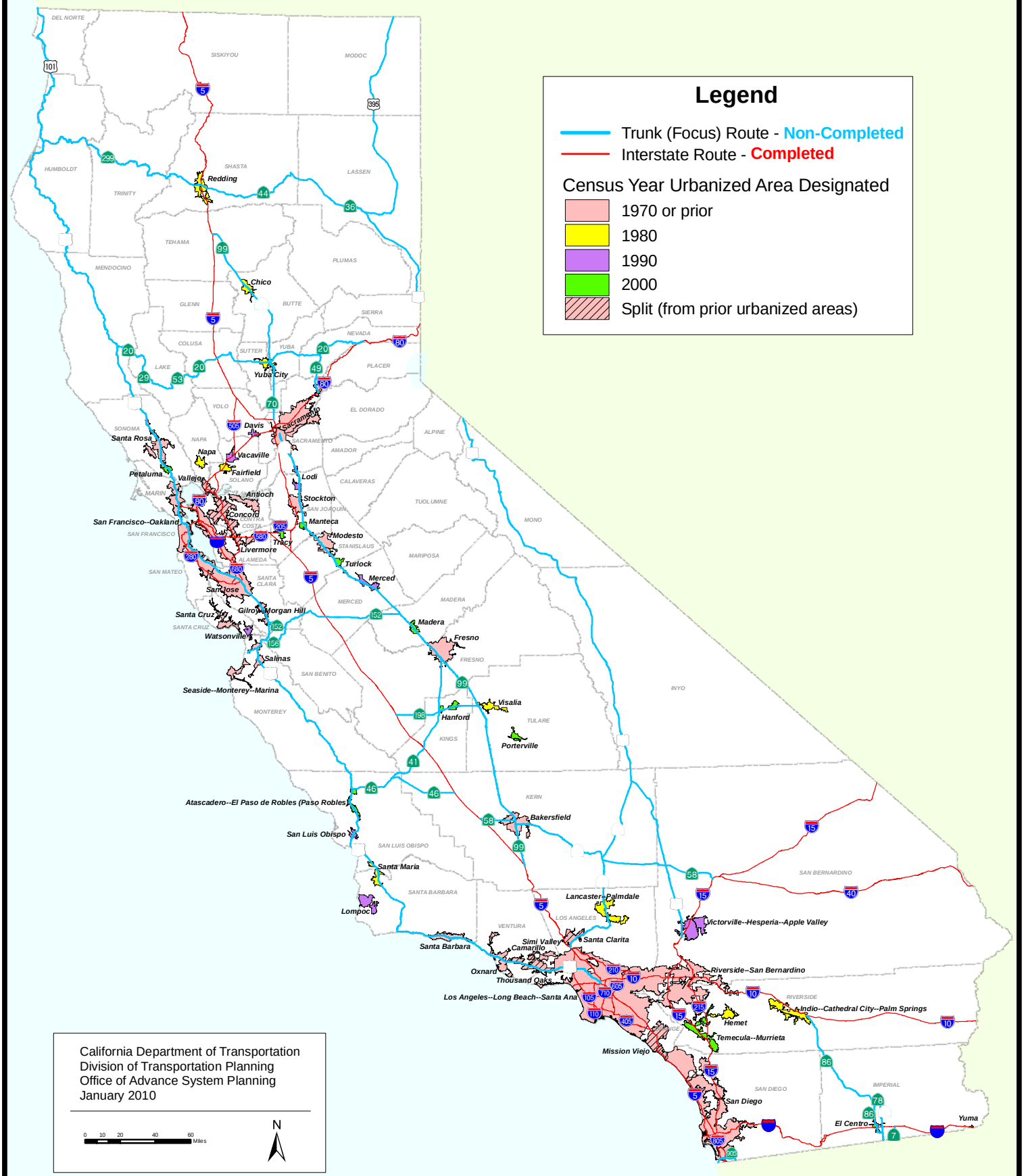
Focus Routes

California Department of Transportation
Division of Transportation Planning
Office of Advance System Planning
January 2010

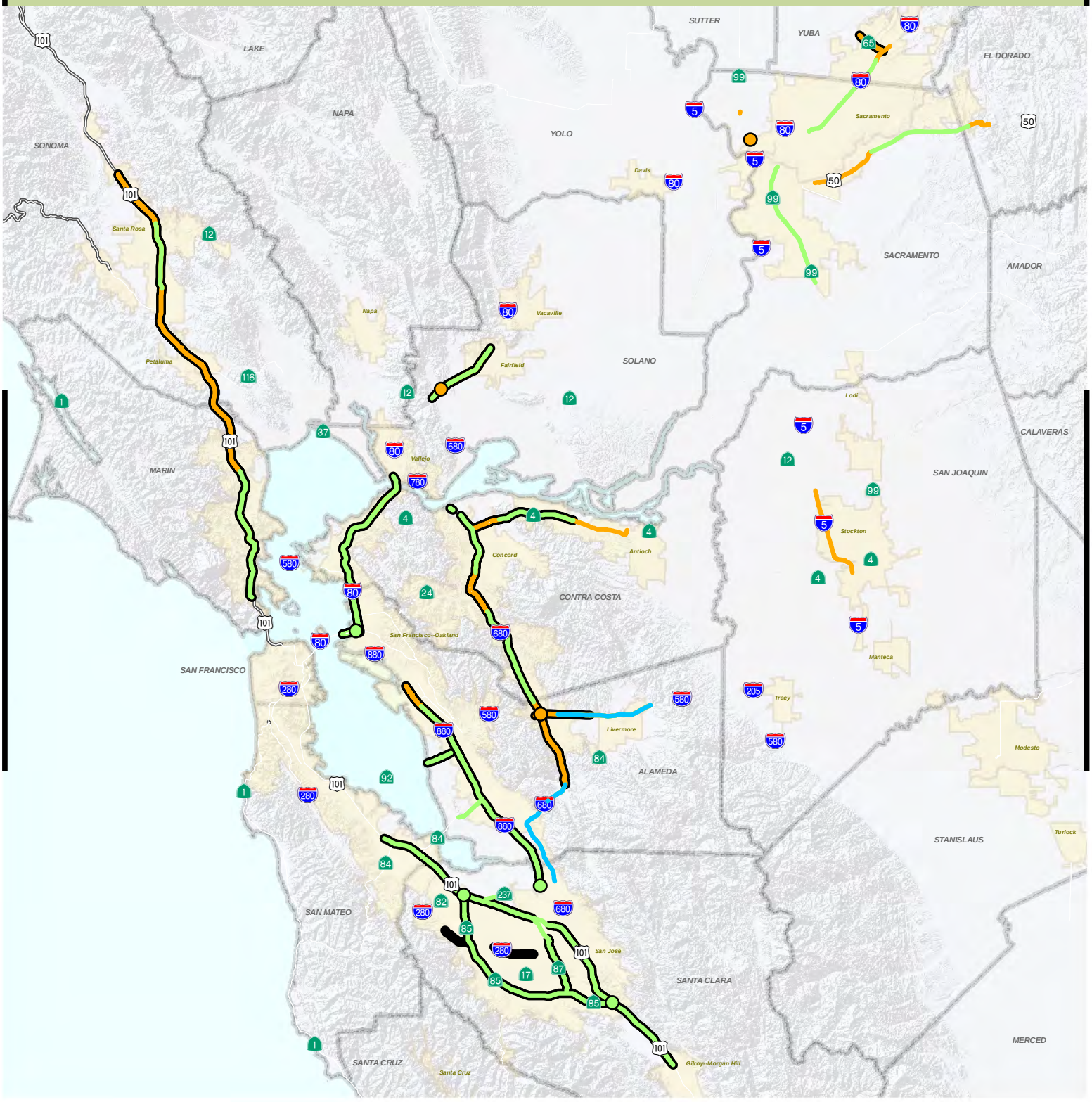
0 10 20 40 60 80 Miles

N

# Designation Trends of Urbanized Areas on Transportation Paths



# High-Occupancy Vehicle Lanes (HOV)/Express Lanes
# Northern California Region




## HOV/Express Lanes Status

- Direct HOV/HOT Connector
- HOV - Existing and Under Construction
- HOV - Proposed
- Express Lanes - Existing and Under Construction
- Express Lanes - Proposed

## Legend

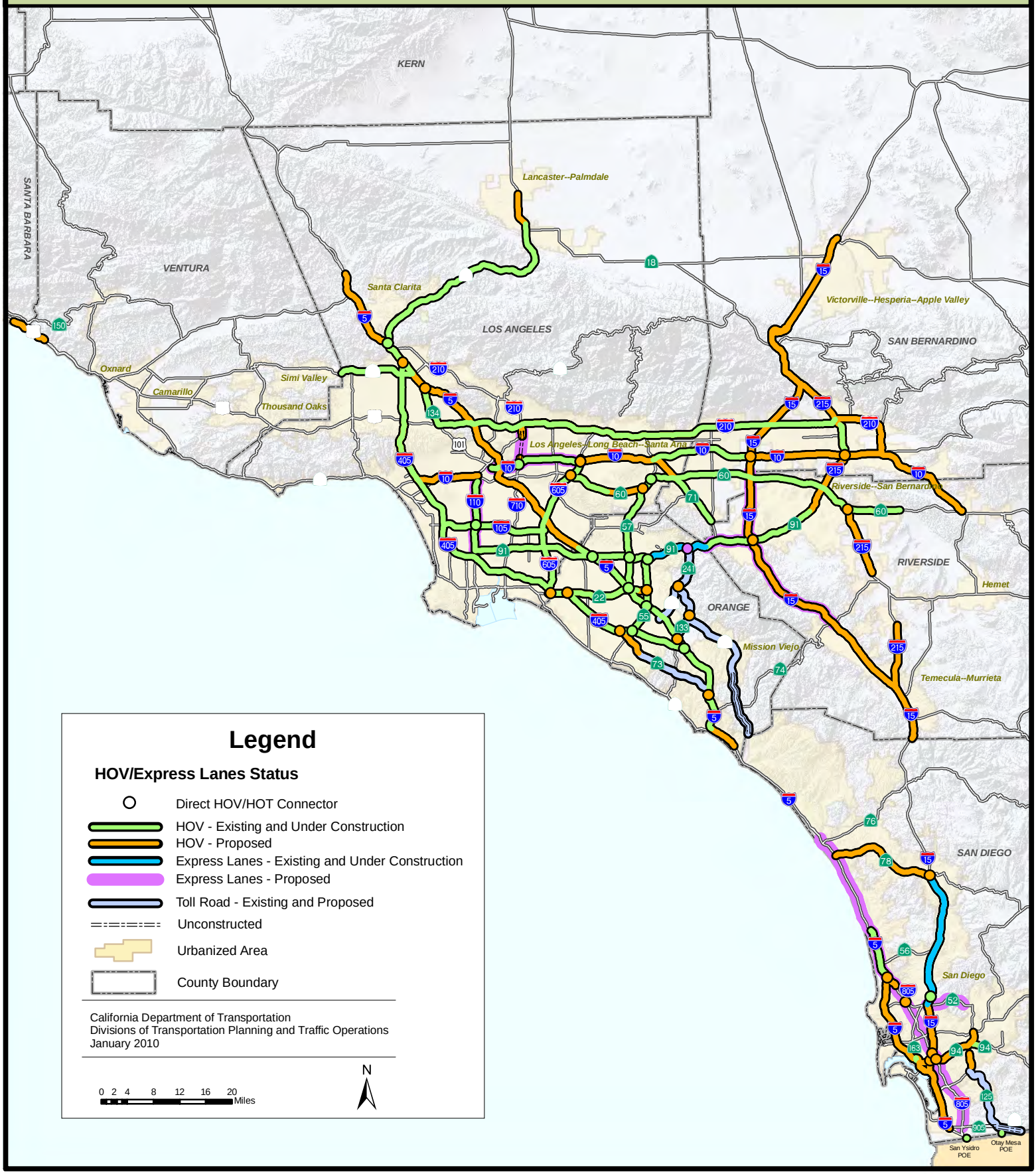
- Urbanized Area
- County Boundary

California Department of Transportation
Divisions of Transportation Planning and Traffic Operations
January 2010

0 2 4 8 12 16 20 Miles

N

# High Occupancy Vehicle Lanes (HOV)/Express Lanes
# Southern California Region




## Legend

### HOV/Express Lanes Status

- Direct HOV/HOT Connector
- HOV - Existing and Under Construction
- HOV - Proposed
- Express Lanes - Existing and Under Construction
- Express Lanes - Proposed
- Toll Road - Existing and Proposed
- Unconstructed
- Urbanized Area
- County Boundary

California Department of Transportation
Divisions of Transportation Planning and Traffic Operations
January 2010

0 2 4 8 12 16 20 Miles

N

## Interregional Transportation Strategic Plan (1998)

The State Transportation Improvement Program (STIP) Guidelines, adopted by the California Transportation Commission (CTC), require Caltrans to develop and keep updated an Interregional Transportation Strategic Plan (ITSP). The ITSP includes a vision, strategies, performance measures, principles and key objectives to guide the investment of the State's Interregional Improvement Program (IIP). These objectives are:

- Completing a trunk system of higher standards (usually expressway/freeway state highways;
- Connecting all urbanized areas, major metropolitan centers, and gateways to the freeway and expressway system to ensure a complete statewide system for the highest volume and most critical trip movements;
- Ensuring a dependable level of service for movement into and through major gateways of statewide significance and ensuring connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution facilities;
- Connecting urbanizing centers and high growth areas to the trunk system to ensure future connectivity, mobility, and access for the State's expanding population;
- Linking rural and smaller urban centers to the trunk system; and
- Implementing an intercity passenger rail program toward specified goals.

### Overview of the Focus Route Corridors and Challenges

The term "Focus Route" is a phrase specific to the ITSP. The Focus Routes represent the 10 most critical interregional route corridors that are State's highest priority for IIP funding and upgrade to higher facility standards (usually expressway and freeway). Focus Routes are a subset of the High Emphasis Routes. It include all the non-Interstate routes in the High Emphasis category and 21 additional routes or route portions that constitute a major logical transportation corridor.

*The main difference in highway facility type is access control.*

***Freeway*** *- a divided arterial highway for through traffic with full control of access and with grade separations.*

***Expressway*** *- an arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.*

***Conventional highway*** *means access from adjoining property is not restricted; Where it is restricted, it is either an "expressway" (intersections are not grade-separated) or "freeway" (intersections are grade separated with interchange structures)*

Completing the Focus Route corridors will provide a statewide trunk system for serving higher volume interregional trip movements. These corridors together with the Interstate system form a backbone system for additional capacity and a complete transportation facility for the State.

The Focus Route corridors balance north-south and east-west access and connectivity statewide. North-south route corridors include US 101, State Route (SR) 99, US 395/SR 14, portions of SR 7, SR 111, SR 78, SR 86 and all of SR 905. These route corridors are vital interregional routes extending almost the length of California from Oregon to Mexico. They serve diverse travel demands from a major commute corridor through the urbanized areas, to prime rural recreation and tourist routes along with significant goods movement route for truck travel.

The east-west focus route corridors include SR 58, SR 41/46, SR 152/156, SR 198, SR 20 combined corridor with SR 29/53 and SR 49, and SR 299/44/36. The four east-west routes (and route portions) below Sacramento to Bakersfield (SR 152/156, 198, 41/46 and 58) serve the highest degree of interregional people and goods movement, connectivity, and accessibility. They provide operational flexibility for emergencies across multiple counties from central coast to the valley. SR 20 and SR 299 corridors (and route portions) serve interregional movement of people and goods across the northern Sacramento Valley and provide routing alternatives for emergencies in the north State.

California currently has 55 urbanized areas. Thirty-three out of 55 urbanized areas with a combined population of nearly five million people are currently not served by a State highway completed to freeway and/or expressway standards. Twenty-four of the 33 urbanized areas are directly on the Focus Route corridors and eleven are within a short distance to either a Focus Route corridor or an Interstate system. SR 99 alone has 13 urbanized areas underserved by the lack of a completed freeway. The Focus Routes combined represent less than 20 percent of the State highway miles. However, they carry over 32 billion vehicle miles of travel (VMT) annually and the second largest daily VMT for 5-axle trucks (25%), next to the Interstates (58%). Eighty three percent (83%) of all large truck travel is handled by these two systems. As population and economic growth continues in California, the need for higher facility standards becomes more pressing.

**Plan to Meet the Challenge**

The route development concept strategy for the Focus Routes corridors includes upgrading over 2,200 lane miles of conventional highways to freeway/expressway standards and constructing over 170 lane miles of new passing and truck climbing lanes over the 20-year period (1998-2020). Since 1998, nearly 600 lane miles (or about 25 percent) have been constructed, including those that are currently under construction. These major system improvements added new capacity and improved the operation of the Focus Route corridors.

A statewide map (Refer to Focus Route Development Strategy Map) demonstrates the progress of completing the Focus Routes including the remaining gaps on the system. The current 2008 State Transportation Improvement Program (STIP) programmed over $4.5 billion of combined state, regional, local, Proposition 1B and Transportation Congestion Relief Program funds for continued improvement on the Focus Routes. This significant investment will add over 320 lane miles of freeway/expressway and about 20 lane miles of passing and truck climbing lanes to the interregional system.

However, given the current economic downturn and funding shortfalls, funding and construction of these programmed improvements could be further delayed or un-programmed in future STIPs. The parallel issue of increasing demand for maintenance and rehabilitation of the aging state highway system would also decrease the available STIP to fund current and future planned improvements on the Focus Routes. A challenge for funding the completion of the Focus Routes is to ensure full regional partnerships with regional improvement program dollars, considering the available county minimums.

*Sources:*
*1998 Interregional Transportation Strategic Plan*
*http://www.dot.ca.gov/hq/transprog/ocip/te/itsp.pdf*
*Lilibeth Green, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916) 653-0548; Lilibeth_Green@dot.ca.gov*

# Focus Route Development Strategy

## 1998 - 2020
## (non-urbanized areas)

Implementation Progress Report of the
1998 Interregional Transportation Strategic Plan (ITSP)


## Legend

**Funding Status (1998 - 2008 STIP)**

- Constructed/Under Construction (Funded)
- Future Completion (Programmed/Planned)
- Focus Route
- Interstate Route
- Urbanized Area

California Department of Transportation
Division of Transportation Planning
Office of Advance System Planning
January 2010

0 10 20 40 60 80 Miles

N

## Passenger Rail

Currently, California's passenger rail system combines intercity, commuter, and urban rail. In the future, high speed rail plans to join these existing rail types to enhance the State's passenger rail system. While Caltrans assumes different roles in the operation of the many passenger rail lines in California, the State strives to make the passenger rail system as "seamless" as possible with excellent connectivity to other transportation systems. Designing for connectivity enters into virtually every aspect of operations, marketing and capital planning. The California State Rail Plan describes the overall vision for the State's intercity and commuter rail systems which (along with freight rail) share the same infrastructure, generally owned by private railroads. Urban rail services (such as the Los Angeles County Metro Rail and BART) operate on separate tracks and are locally controlled and funded, so they are not covered in the State Rail Plan. However, to further the implementation of a safe, integrated, multi-modal transportation system, it is essential that the intercity and commuter rail systems be well integrated with the urban transit rail and bus systems.

### Existing Intercity Rail Service

Intercity passenger rail service is a component of the State's overall transportation system and operates between several regions of the state. In California, Amtrak operates all State-supported intercity rail service. Caltrans provides operating funding for the three Amtrak California routes, the Pacific Surfliners (San Diego to San Luis Obispo), the San Joaquins (Bay Area/Sacramento to Bakersfield), and the Capitol Corridor (San Jose to Auburn). In addition, as part of its national intercity rail system, Amtrak funds and operates four long distance train routes that link California to other states. These routes include the Coast Starlight (Los Angeles to Seattle), California Zephyr (Emeryville to Chicago), Southwest Chief (Los Angeles to Chicago), and the Sunset Limited (Los Angeles to New Orleans). The State-supported routes connect with each other and with Amtrak's national intercity passenger rail network. Many passengers use State-supported routes as part of a longer rail trip. Coordination of schedules generates additional ridership and can improve overall efficiency. See map for routes.

### Existing Commuter Rail Services

Commuter rail operates primarily within a single region of the State, serving regional and local transportation needs. Because commuter rail serves local and regional transportation needs, these services are planned and administered by local and regional transportation agencies. Various sources of funding are available at the local, state, and federal levels. Some capital funding is provided by the state through the State Transportation Improvement Program, and other sources, but operating funding is provided by the local and regional agencies. California's existing commuter routes are Coaster (San Diego to Oceanside), Metrolink (Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties), Caltrain (San Francisco-Gilroy) and Altamont Commuter Express (ACE) (Stockton to San Jose). See map for routes.

**Existing Streets and Highways**

Caltrans works to ensure that the trains are well connected to streets and highways through proper design of stations and signage, including pathfinder signs on local streets and roads and State highways that guide passengers to Amtrak stations.

**Trends and Challenges**

Caltrans' vision for California's intercity rail system includes three key elements: Provide a rail transportation alternative to other travel modes; provide relief to highway and air transportation congestion; and improve air quality, conserve fuel, and contribute to efficient and environmentally superior land use.

The box at the right describes specific goals for the State's intercity passenger rail system vision.

Intercity Passenger Rail Goals

- Expand capacity on existing routes
- Reduce train running times
- Improve equipment, stations, and facilities
- Enhance multi-modal connectivity
- Increase fare box ratio
- Improve safety
- Implement new cost effective routes

One key challenge for State-supported intercity rail is adequate and predictable funding for capital projects needed to maintain and expand the system. The only ongoing capital funding source is a limited portion of the State Transportation Improvement Plan (STIP) funds. The State's ten-year $4.03 billion capital program through fiscal year 2017-18 for the three existing State-supported intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor) and for new routes/extensions represents a program based on program needs, and not on funding expectations. Full implementation of this capital program will require major Federal funding. The State applied for Federal stimulus funds being made available in 2009-10 and received about $100 million in funding. Future grant cycles are anticipated.

**Proposed Intercity and Commuter System Description**

As part of its 10-year intercity rail plan, the State proposes to increase service frequencies on all three existing intercity routes (Pacific Surfliners, San Joaquins, and Capitol Corridor), and to add three new extensions of existing State-supported service:

1) Expand service from San Francisco to San Luis Obispo and Los Angeles as part of the Pacific Surfliners
2) Expand service from Sacramento to Redding
3) Expand service from Sacramento to Reno
4) Initiate service from Los Angeles to Indio (Coachella Valley).

The four commuter rail agencies (Coaster, Metrolink, Caltrain, and ACE) also have plans for expansion of service. In addition, there are three planning initiatives for commuter rail. The Southern California Association of Governments (SCAG) has initiated a study of commuter rail service for Ventura and Santa Barbara counties. Sonoma Marin-Area

Rail Transit District proposes service between Cloverdale and the Larkspur Ferry Terminal. Six agencies have partnered to develop a service plan for a new regional commuter rail service in the Auburn and Oakland urban corridor, which would be integrated with the Capitol Corridor. See map for proposed routes.

**Proposed High-Speed Rail Service Description**

In 2008, the State Legislature approved and Governor Arnold Schwarzenegger signed AB 3034 (Galgiani), placing a $9.95 billion bond measure for high speed rail on the November 2008 ballot. Proposition 1A asked California voters to approve a down payment on construction of the high-speed train line, led by the California High Speed Rail Authority (Authority). The bond measure passed and the Authority is currently working on obtaining environmental clearance on project sections.

As reported by the Authority, the major sections of the proposed high speed train system include: Los Angeles to Orange County, Los Angeles to Bakersfield, Bakersfield to Fresno, Fresno to Merced, Merced to San Jose, and San Jose to San Francisco. Subsequent sections of the system would extend north to Sacramento and south to San Diego. See map for proposed routes. The system will be built, whenever possible, along or adjacent to existing rail transportation facilities instead of creating new transportation corridors. In addition, in most major cities, the high-speed train station will be developed in conjunction with existing rail transportation hubs to produce the most efficient linkages to local and regional transit systems. The Authority is working on a timeline that would see a complete high-speed train system in place by 2030; subsequent sections would be constructed after that time.

Proposition 1A will provide $9 billion in state general obligation bonds that require other federal, state, local, and private financing to be secured before construction can proceed. Another $950 million included in the bond measure will be used to finance capital improvements to commuter, intercity rail, and transit lines in order to connect existing infrastructure to the high-speed rail system. In February 2010, the Authority received $2.25 billion in Federal stimulus funds.

The Authority and regional partners are proposing to develop a dedicated regional rail corridor through the Altamont Pass and the Tri Valley area capable of supporting intercity and commuter rail passenger services. This project is a separate corridor project from the statewide high-speed train system. Project-level environmental review is currently underway.

**Other Proposed High Speed Rail System Descriptions**

The DesertXpress is a proposed new high-speed, steel wheel on rail double track interstate passenger rail line. This new line, being proposed by a private consortium, would run 190 miles between Victorville, California and Las Vegas, Nevada. It would run primarily at grade but would be completely grade-separated from all streets and

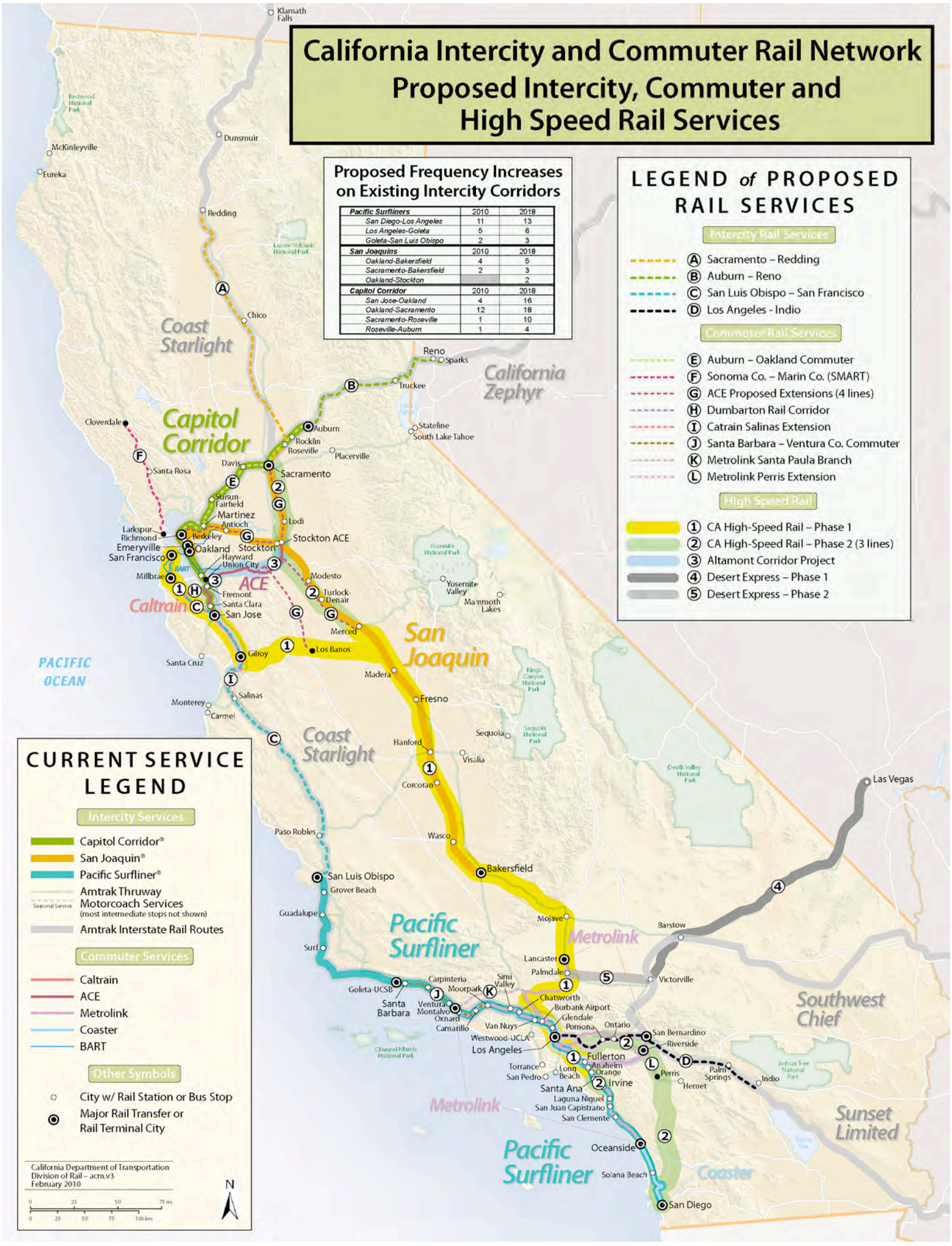
highways. The federal environmental impact statement (EIS) process is currently underway for this route.

Two high speed rail Maglev projects (Southern California Maglev Project and the Las Vegas–Anaheim Maglev Project) are also being proposed. Maglev technology uses magnetic forces to lift, propel, and guide a vehicle over a guideway. These two projects have significant hurdles to overcome. Their sponsors will need to complete engineering work and environmental documentation to further the initial concept design plans and a principal funding source remains to be identified.

*Source: California Rail Plan 2007-08 to 2017-18*
*http://www.dot.ca.gov/rail/go/dor/california-state-rail-plan/index.cfm*
*Emily Burstein, Chief, Office of Policy and Planning*
*California Department of Transportation, Division of Rail*
*(916) 654-6932; Emily_Burstein@dot.ca.gov*

*Source: California High-Speed Train Business Plan*
*http://www.cahighspeedrail.ca.gov/library.asp?p=8200*
*Eric Fredericks, Associate Transportation Planner*
*California High-Speed Rail Authority*
*(916)324-1541;EFredericks@hsr.ca.gov*


California Intercity and Commuter Rail Network
(including connecting bus service)
Current System as of February 2010
Coast Starlight
California Zephyr
Capitol Corridor
San Joaquin
Pacific Surfliner
Southwest Chief
Sunset Limited
Coaster
ACE
Caltrain
Metrolink
PACIFIC OCEAN
Klamath Falls
Redwood National Park
McKinleyville
Eureka
Dunsmuir
Redding
Lassen Volcanic National Park
Chico
Reno
Sparks
Truckee
Lake Tahoe
Stateline
South Lake Tahoe
Auburn
Rocklin
Roseville
Placerville
Davis
Sacramento
Santa Rosa
Suisun-Fairfield
Martinez
Antioch
Lodi
Richmond
Berkeley
Emeryville
Oakland
Stockton
Stockton ACE
San Francisco
Hayward
BART
Millbrae
Modesto
Turlock-Denair
Yosemite National Park
Summer only
Yosemite Valley
Mammoth Lakes
Fremont
Santa Clara
San Jose
Merced
Gilroy
Santa Cruz
Madera
Fresno
Kings Canyon National Park
Monterey
Salinas
Carmel
Sequoia
Sequoia National Park
Hanford
Visalia
Death Valley National Park
Las Vegas
Corcoran
Paso Robles
Wasco
Bakersfield
San Luis Obispo
Grover Beach
Guadalupe
Mojave
Barstow
Surf
Lancaster
Palmdale
Victorville
Carpinteria
Simi Valley
Moorpark
Goleta-UCSB
Santa Barbara
Ventura
Montalvo
Oxnard
Camarillo
Chatsworth
Burbank Airport
Glendale
Van Nuys
Ontario
San Bernardino
Westwood-UCLA
Pomona
Los Angeles
Riverside
Fullerton
Anaheim
Orange
Torrance
Long Beach
San Pedro
Palm Springs
Indio
Joshua Tree National Park
Irvine
Hemet
Santa Ana
Laguna Niguel
San Juan Capistrano
San Clemente
Channel Islands National Park
Oceanside
Solana Beach
San Diego
Salton Sea
LEGEND
Intercity Services
Capitol Corridor®
San Joaquin®
Pacific Surfliner®
Amtrak Thruway Motorcoach Services
(most intermediate stops not shown)
Seasonal Service
Amtrak Interstate Rail Routes
Commuter Services
Caltrain
ACE
Metrolink
Coaster
BART
Other Symbols
City w/ Rail Station or Bus Stop
Major Rail Transfer or Rail Terminal City
California Department of Transportation
Division of Rail – acm.v3
February 2010
0 25 50 75 mi
0 25 50 75 100 km
N


California Intercity and Commuter Rail Network
Proposed Intercity, Commuter and High Speed Rail Services
Proposed Frequency Increases on Existing Intercity Corridors
Pacific Surfliners 2010 2018
San Diego-Los Angeles 11 13
Los Angeles-Goleta 5 6
Goleta-San Luis Obispo 2 3
San Joaquins 2010 2018
Oakland-Bakersfield 4 5
Sacramento-Bakersfield 2 3
Oakland-Stockton 2
Capitol Corridor 2010 2018
San Jose-Oakland 4 16
Oakland-Sacramento 12 18
Sacramento-Roseville 1 10
Roseville-Auburn 1 4
LEGEND of PROPOSED RAIL SERVICES
Intercity Rail Services
A Sacramento – Redding
B Auburn – Reno
C San Luis Obispo – San Francisco
D Los Angeles - Indio
Commuter Rail Services
E Auburn – Oakland Commuter
F Sonoma Co. – Marin Co. (SMART)
G ACE Proposed Extensions (4 lines)
H Dumbarton Rail Corridor
I Catrain Salinas Extension
J Santa Barbara – Ventura Co. Commuter
K Metrolink Santa Paula Branch
L Metrolink Perris Extension
High Speed Rail
1 CA High-Speed Rail – Phase 1
2 CA High-Speed Rail – Phase 2 (3 lines)
3 Altamont Corridor Project
4 Desert Express – Phase 1
5 Desert Express – Phase 2
CURRENT SERVICE LEGEND
Intercity Services
Capitol Corridor®
San Joaquin®
Pacific Surfliner®
Amtrak Thruway Motorcoach Services (most intermediate stops not shown)
Amtrak Interstate Rail Routes
Commuter Services
Caltrain
ACE
Metrolink
Coaster
BART
Other Symbols
City w/ Rail Station or Bus Stop
Major Rail Transfer or Rail Terminal City
California Department of Transportation
Division of Rail – acm.v3
February 2010
Coast Starlight
Capitol Corridor
California Zephyr
San Joaquin
ACE
Caltrain
Pacific Surfliner
Metrolink
Southwest Chief
Sunset Limited
Coaster
PACIFIC OCEAN
Klamath Falls
Redwood National Park
McKinleyville
Eureka
Dunsmuir
Redding
Lassen Volcanic National Park
Chico
Reno
Sparks
Truckee
Stateline
South Lake Tahoe
Cloverdale
Santa Rosa
Auburn
Rocklin
Roseville
Placerville
Davis
Sacramento
Suisun-Fairfield
Martinez
Antioch
Lodi
Larkspur
Richmond
Berkeley
Oakland
Emeryville
San Francisco
Hayward
Union City
Stockton
Stockton ACE
Millbrae
BART
Fremont
Santa Clara
San Jose
Modesto
Turlock-Denair
Merced
Yosemite National Park
Yosemite Valley
Mammoth Lakes
Gilroy
Los Banos
Santa Cruz
Madera
Fresno
Kings Canyon National Park
Sequoia
Sequoia National Park
Monterey
Carmel
Salinas
Hanford
Visalia
Corcoran
Death Valley National Park
Las Vegas
Paso Robles
Wasco
Bakersfield
San Luis Obispo
Grover Beach
Guadalupe
Surf
Mojave
Barstow
Victorville
Lancaster
Palmdale
Goleta-UCSB
Carpinteria
Moorpark
Simi Valley
Santa Barbara
Ventura
Montalvo
Oxnard
Camarillo
Chatsworth
Burbank Airport
Glendale
Pomona
Ontario
Van Nuys
Westwood-UCLA
Los Angeles
San Bernardino
Riverside
Fullerton
Anaheim
Orange
Irvine
Torrance
San Pedro
Long Beach
Santa Ana
Laguna Niguel
San Juan Capistrano
San Clemente
Perris
Hemet
Palm Springs
Indio
Joshua Tree National Park
Channel Islands National Park
Oceanside
Solana Beach
San Diego
Salton Sea
0 25 50 75 mi
0 25 50 75 100 km
N

# Goods Movement

California's goods movement network of highways, rail lines, seaports, airports, and border crossings is an essential part of the State's interregional transportation system. California's goods movement strategy is laid out in the Goods Movement Action Plan (GMAP), developed between 2005 and 2007. The GMAP outlines a multimodal/interregional approach to address the economic and environmental issues associated with moving goods via the state's highways, railways and ports. The GMAP recognized the need to expand system capacity in tandem with significant reductions to the environmental and community health impacts associated with freight transportation.

Although the recent economic picture has substantially reduced overall trade volumes, economists expect recovery will occur over the next few years. For this reason, California must continue its strategic approach to freight transportation during a period of relative inactivity.

The following 'snapshot' provides a context for understanding the importance of the system to the State's economy and citizens, as well as its importance to the nation as a whole, and the continued need to plan and deliver appropriate infrastructure. It is clear from this snapshot that a standardized approach to planning for California's current and future goods movement transportation system will not only be inadequate but will actually be counterproductive. Thus, our planning efforts will continue to identify innovative partnerships, initiatives and funding opportunities.

<u>2007 California Good Movement Facts</u>

- California's Gross Domestic Product (GDP) was $1.7 trillion, which put California as the tenth largest economy in the world and represented 13 percent of the U.S. GDP. Considered as an independent nation, California would rank between Canada and Italy.
- 12 percent of the nation's population lived in California; international trade represented 25 percent of the State's economy.
- Hispanic buying power was estimated to be $228 billion annually and California's Asian consumer market is estimated at $150 billion annually.
- Exports accounted for 12 percent of total U. S. exports. California's top trading partners are Mexico, Canada, Japan, China and South Korea.
- Total trade equaled $516 billion in exports and imports flowed through the state by air, land and sea. From 2006 to 2007, exports increased $7 billion, to $134 billion.
- Airborne agricultural exports totaled $685 million (Los Angeles Basin and San Francisco Bay Area airports handled 93 percent of total California air cargo).
- California's goods movement infrastructure is important to the nation's economy in terms of both exports and imports. In 2006 over 8 percent of all goods moving into and out of America use California's highways, railroads, ports and airports and 45 percent of the nation's container volume surge through California's ports, highways and railways. This is a significant impact to the State's transportation and community infrastructure.

The GMAP was a significant policy initiative that supports subsequent actions, including the freight elements of Proposition 1B, and continues to guide freight-related decision-making. It also guides our input to the Surface Transportation Act currently being debated in Congress. The GMAP was specifically designed to be a living document with regular updates beginning with a major update in 2011. The 2005 priority project list will be revisited and revised in line with current conditions. The air cargo section and agriculture sections will be significantly expanded. Also to be expanded is goods movement infrastructure needs associated with tribal governmental economic development projects.

The State continues to invest in projects that will provide a safer, more effective transportation system for moving goods to and through California. Delivering the Trade Corridors Improvement Fund ("TCIF") projects (nearly $3 billion), and the Caltrans sponsorship of $143.8 million in key freight rail projects from the federal government's Transportation Investments Generating Economic Recovery -- "TIGER"--discretionary grant program are key components of this commitment. As the economy recovers, other efforts will be needed to meet the challenges that arise.

Caltrans is committed to improving the movement of goods in all areas of our transportation system and to reducing associated health impacts in our communities. Thus—beyond the State actions and initiatives described above--we're also working with Congress as it develops the new Surface Transportation Act to increase our share of federal funding for projects at our borders, seaports and throughout our vital system of highways. We are also forging new and innovative partnerships with non-traditional industry sectors, such as the Class I railroads operating in California.

The attached map shows the primary goods movement corridors in California:

**Freight Rail System Overview**

California is a key state in the national freight rail system. In 2005, California railroads operated over 7, 355 miles of track and carried over seven million carloads of freight. Railroad service plays a critical role to California, to the United States and the global economy. Burlington Northern Santa Fe (BNSL) and Union Pacific (UP) serve the import and export markets for a large number of Pacific Rim countries. Approximately 45 percent of intermodal traffic entering or leaving the U.S. passes through California ports.

**Rail capacity and constraints**

Rail capacity has become more constrained due to the increasing volumes of cargo imported and exported into and out of the State through our major seaports and trade gateways. This increased trade is due to rapidly increasing population in California, other states and foreign countries that are served by the State's rail infrastructure and goods movement industry.

**Operational Conflicts: Passenger/Freight; Freight/Freight**

In most areas of the State, rail passenger share rail rights-of-way (ROW) with freight railroads. In this case, the main issue is the capacity of the route to accommodate both rail passenger and freight rail. Statewide, shared use of ROW includes:

- Pacific Surfliner, San Joaquin, and Capitol Corridor;
- Southern California Metrolink commuter rail system;
- San Diego County Coaster commuter rail system;
- Caltrain commuter rail system in the San Francisco Bay Area;
- Altamont Commuter Express rail system.

Rail passenger operators have plans for adding more trains over the next several years. In some cases, rail capacity is insufficient to handle existing levels of both passenger and freight service, particular in the urban areas with substantial passenger and rail traffic.

**Rail System Preservation**

BNSF and UP have some 5,488 miles of track in the State. To improve productivity, profitability and maximize capacity, railroads have made many improvements. However, the high cost of these improvements has been limited to upgrading only the highest volume and most profitable lines, and leaving other lines downgraded or abandoned.

Many states believe freight service is vital to their economies and have made freight rail service, especially the preservation and retention of lower density branch lines, a significant part of their economic development and transportation programs. Therefore, it is critical to keep an inventory of inactive, underutilized, and abandoned rail segments and rail corridors for possible increased and or future use. Often times, when rail is removed for other purposes, the rail service is lost forever.

*Source: Goods Movement Action Plan*
*http://www.dot.ca.gov/hq/tpp/offices/ogm/links_files/gmap-1-11-07.pdf*
*Michele Fell, Senior Transportation Planner*
*California Department of Transportation, Division of Transportation Planning*
*(916)653-4287; Michele_Fell@dot.ca.gov*

*Source: California Rail Plan*
*http://www.dot.ca.gov/rail.go/dor/california-state-rail-plan/index.cfm*
*Emily Burstein, Chief, Office of Policy and Planning*
*California Department of Transportation, Division of Rail*
*(916) 654-6932; Emily_Burstein@dot.ca.gov*

# Priority Regions and Corridors in California

# Public Use and Military Airports

California's 250 public use airports consist of a combination of privately owned airports, and airports that are owned by local governments, or airport districts. Ownership and operation of an airport is sometimes a combined public-private effort between a city or county, and a contract airport management company. Regardless of who owns or operates the airports in California, they are all part of a global aviation network. There are three types of airports: commercial, military, and general aviation (GA). GA airports can be for public use, or private use. As their name implies, public use airports are open to the general public and anyone can use them, while private use airports can only be used by their owner or invited guests. In addition to the public use airports, the federal government owns and operates numerous military airfields throughout state. Civilian aircraft must have special permission to use these military airfields.

## Trends and Issues

### Capacity Constraints

Capacity at commercial service airports is defined as the maximum volume of all arriving and departing aircraft. An airport can only handle a specific number of operations without saturation (the equivalent to gridlock), and is limited by runways, taxiways, and terminals. In 2003 and 2007, the Federal Aviation Administration (FAA) completed two major national airport capacity assessments, publishing their findings in the Future Airport Capacity Task (FACT) 1 and 2 reports. The reports focused on the fastest growing metropolitan areas in the country. They identified five California airports as being among the most capacity constrained airports in the nation. These airports are: John Wayne Airport (Orange County), Oakland International and San Francisco International Airports (San Francisco Bay Area), Long Beach Airport (Los Angeles County) and San Diego International (San Diego County). San Diego International is so constrained that the only way future demand can be met is through the construction of a new airport.

Although FACT 1 and 2 focused primarily on the nation's commercial airports, it acknowledged that GA airports would have an important part in meeting future system wide capacity needs. GA airports provide back-up capacity for both commercial and non-commercial aviation demand. Preservation of airports through better interagency planning, and secure funding would insure that California's future air travel demands are met. Unfortunately, GA airports are often overlooked in transportation planning at all levels of government in California.

### Complex Regulatory Framework

Airports are governed by a complex regulatory framework. They must comply with federal, state, and local aviation regulations. They must also work with numerous non-aviation agencies that have permitting or funding authority, including federal and state environmental protection and resource agencies, the Army Corps of Engineers, regional transportation planning agencies, and local governments. The State's role in regulating airports through the Caltrans Division of Aeronautics (Division) includes permitting airports and heliports, and conducting periodic safety

inspections to ensure compliance with design standards stipulated in the California Code of Regulations. The Division also provides land use guidance through planning documents such as the Airport Land Use Compatibility Handbook and the California Aviation System Plan (CASP), manages the State's Airport Noise Program, and administers airport funding through its loan and grants programs. Local government agencies are responsible for land use around airports. They include airports in their General Plan policy document and use implementing tools such as Specific Plans and zoning ordinances. Airport Land Use Commissions (ALUC) develop recommended land use strategies for property around each airport, and write Airport Land Use Compatibility Plans (ALUCP) for the airports in their county. Regional and Metropolitan Transportation Planning Agencies include airport planning as part of their overall transportation planning and programming i.e. funding work. This overlapping jurisdictional responsibility sometimes results in contradictory regulations, investments and plans.

**Aviation Funding**

Unlike other modes of transportation, airports are not funded through the State Highway Account and State Transportation Improvement Program process. The bulk of funding for GA airports comes either directly from the FAA or indirectly through the State's Aeronautics Account to the eligible public use airport owners. The types of funds available to an airport depend on the federal and state grant programs criteria.

Recent State budget balancing efforts have resulted in significant reductions in the Aeronautics Account. Suspension of all Aeronautics grant programs for FY 2009/10 and transfer of $4.0M from the Aeronautics Account has negatively impacted airports in several ways. Airports no longer have the State money to use as a match for the federal grant funds to improve their facilities. Thus, some airports are deferring routine maintenance which will result in higher future operation and maintenance costs. Airports are not eligible to receive Annual Credits in the amount of $10K/year to address safety and operational expenses, and airports are not eligible to apply for Acquisition and Development grants for safety projects that may not have been funded by the FAA.

See State ***Dollars for Your Airport*** for additional details regarding airport funding at: http://www.dot.ca.gov/hq/planning/aeronaut/document/StateDollarsForAirport2009.pdf

**Perceptions and Misperceptions about the Value of Airports**

According to the June 2003 economic study ***Aviation in California: Benefits to Our Economy and Way of Life,*** aviation generates almost 10% of the State's GDP and employment base. Aviation offers an effective business tool for expediting delivery times of passengers and cargo. Corporate location decisions are sometimes based on proximity to an airport. GA airports in rural communities provide vital links to the rest of the State and world.

Unfortunately for all their benefits, the value and potential of California's airports are often under estimated. If the airport environs are preserved to allow for airport growth, airports can be a revenue generating asset that contributes to the long term economic well being of a community.

Local governments must weigh potential future revenues against immediate short term tax revenue gains from residential and commercial projects.

**Adjacent Airport Land Uses**

The single most challenging issue facing California airports is encroachment from incompatible land uses. An incompatible land use means any land use or structure that interferes with the safe operation of the airport, or is inconsistent with the State mandated Airport Land Use Commission's compatibility plan pursuant to Public Utilities Code 21001 et seq. Competing land uses, misunderstanding of an airport's value to the community, and the cost of an airport's infrastructure work against the public's appreciation of their airport. Siting problems with wetlands, power plants, wind turbine facilities, expansion of existing land uses, and obstructions that penetrate navigable airspace around airports can also limit an airport's ability to operate safely, and constrain their economic viability and long term sustainability.

## Future Growth Opportunities

- Growth in business aviation and goods movement
- Future demand for new commercial aircraft, and individual aircraft ownership of business aircraft (including fractional ownership)
- Modify the Division's CASP System Needs Assessment and Policy Elements to include gap analysis projects and priorities
- Add a recommendation for inclusion of an airport buffer zone, like a greenbelt, in local planning documents and policies in the 2010 Airport Land Use Handbook update
- Promote green technology at airports, such as San Francisco International and Fresno Yosemite Airports see link: http://www.flysfo.com/web/page/about/green/index.html
- Amend CEQA Guidelines to require distribution of NOPs to local ALUCs for all projects within 2 miles of any public use airport
- Raise visibility and importance of aviation planning within Caltrans through a director's policy or deputy directive
- Maintain Division function at Caltrans HQ, and create aeronautics liaisons in the districts
- Highlight jobs created by the aviation sector of the economy
- Address environmental justice issues around airports
- State Aeronautics Account needs dedicated reliable funding, and protection from "fund transfers" by the Department of Finance

*Source: California Aviation System Plan*
*http://www.dot.ca.gov/hq/planning/aeronaut/documents/CASP2006.pdf*
*Colette Armao, Associate Transportation Planner*
*California Department of Transportation, Division of Aeronautics*
*(916) 654-5364; Colette_Armao@dot.ca.gov*

CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS

# Public Use Airports - 2008

## And Military Airfields


## LEGEND

- Commercial/Primary
- Metropolitan
- Regional
- Community
- Limited Use
- Joint Use (Military/Commercial)
- Military/NASA

AERONAUTICS
DEPARTMENT OF TRANSPORTATION



Rev. February 2008

# Division of Mass Transportation

## Mass Transportation in California

Transit agencies are owned and operated by private, private non-profit, or public transit entities. The California Department of Transportation (Caltrans) does not own or operate any of the existing transit systems in the state and has no authority over individual transit agencies and their services. Caltrans, however, plays an important role in supporting the transit system by administering state and federal funds, such as the Federal Transit Administration's Section 5311(f) Program which supports the connection of transit services between non-urbanized and the larger regions. Caltrans also supports the infrastructure of the transit network on its state highway system to support a safe, reliable, multi-modal transportation network.

## The California Transit Trend

Transit ridership in California is at an all-time high with 1.2 billion passengers annually. Transit operators provided 40% more services in 2007 than in 1997 and during the same time transit operating costs rose by almost 45% according to the National Transit Database.[1] Light rail trips increased at a higher rate than bus trips in the last five years, with bus trips becoming shorter and rail trips getting longer. In addition, California transit services accounted for 16% of the nation's vehicle revenue miles and hours. In 2006, California passed the first Global Warming Reduction Initiative with AB 32, setting in motion the need to reduce green house gas emissions (GHG). In 2008, SB 375 was passed directing metropolitan planning agencies to reduce GHG. The State has identified a number of strategies to reduce GHG emissions that emphasizes the use of public transportation and land use such as increased Transit Oriented Developments.

## Transit Issues

Transit Connectivity

The transit system is faced with some gaps in connectivity. Many transit riders rely on different transportation modes to complete a trip. For example, as transit ridership has increased, the issue of providing passenger services for the first and last mile of trips has become apparent. Lack of connectivity to different modes of service could cause central transit hubs to be underutilized.

Transit Funding

Transit funding is a complex issue in California. There is a host of federal and State grants available to transit agencies for capital purchases, improvements and some operating costs. However, transit funding in California has recently changed as the state tries to resolve its fiscal issues. In the 2009 State Budget, State Transit Assistance (STA) funding was eliminated for the next five years. With the elimination of STA funds, transit agencies across the State have reduced their operating services. The federal government added additional grant money through the American Recovery and Reinvestment Act (ARRA) for transit projects to help sustain the economy, but this funding is temporary.

---

[1] NTD Historical Data File TS2.1, available at *http://www.ntdprogram.gov/ntdprogram/data.htm accessed 10/22/09*.) This information does not reflect any ridership variations based on recent statewide increased unemployment, furloughs and service reductions."

**Statewide Transit Strategic Plan**

To help the State better support public transportation, Caltrans is developing the Statewide Transit Strategic Plan (STSP). This effort, through coordination and collaboration with stakeholders, will provide the platform for Caltrans to understand common transit issues and identify solutions to reduce barriers. By recognizing how transit fits into the overall theme of integrating mobility choices into the transportation planning system operation, this plan will enhance Caltrans' transportation planning on a statewide level. The work will lead to the development of an action plan that enables Caltrans to facilitate the delivery of public transit services on the State highway system. The STSP will help California gain a better understanding of its present and future roles and responsibilities for public transportation — serving as the collective vision for California's future transit system.


INTERCITY BUS SERVICE IN CALIFORNIA
Medford
Reno
Nevada
Las Vegas
Yuma
Redding
Chico
Marysville
Sacramento
Santa Rosa
San Rafael
San Francisco
Oakland
Fremont
San Jose
Santa Cruz
Monterey
Stockton
Modesto
Merced
Fresno
Bakersfield
San Luis Obispo
Santa Maria
Santa Barbara
Los Angeles
Glendale
Long Beach
Anaheim
Santa Ana
Irvine
Riverside
San Bernardino
Victorville
Lancaster
Hemet
San Diego
Yosemite NP
Kings Canyon NP
Sequoia NP
Death Valley NP
Caltrans
Legend
Intercity Stops
Passenger Railroad
Greyhound Lines
Amtrak Thruway Bus
Americanos USA
CA Shuttle Bus
Lux Bus America
Megabus
Mt. Lassen Motor Transit
Orange Belt Stages
Transportes Intercalifornias
USAsia Bus
Other Connecting Regional Services
5311(f) Routes
Urban Areas
0
25
50
100
150
Miles

# Statewide Programs

fact sheets

- Regional Blueprint Plan
- Smart Mobility Framework
- Complete Streets
- Caltrans Essential Habitat Connectivity
- Caltrans Climate Action Program (Mitigation and Adaptation)

# California Regional Blueprint Planning Program

The California Regional Blueprint Program is a vital source of planning funding for regions throughout the State of California. A total of twenty million dollars in federal transportation planning funds has been awarded by the California Department of Transportation (Caltrans) since the program was initiated in 2005. In 2009, five million dollars was granted to nine Metropolitan Planning Organizations (MPOs) and nine rural Regional Transportation Planning Agencies (RTPAs) to support transportation planning activities across California. Since the genesis of the Program, seventeen MPOs and thirteen rural RTPAs have participated in Blueprint-related planning activities. An additional $1 million is being made available to rural RTPAs in 2009/2010, and new first-time applicants are anticipated.

Regional Blueprint grants help MPOs and rural RTPAs engage in public outreach to select a community-preferred vision of what the region should look like in the future. The resulting Regional Blueprints help communities to preserve what they value and identify ways to move toward what they want to become. The Program helps MPOs and rural RTPAs to improve their modeling capacity, enhancing their ability to perform integrated transportation/land use planning. The funds support regions' outreach to local elected officials, supplying data that informs them about ways to reduce greenhouse gas emissions and plan for infrastructure investments within their communities. Regional Blueprints encourage them to consider a regional context as they exercise their authority to make local land use decisions.

Through Regional Blueprints, regional transportation planning agencies attempt to balance transportation planning with land use planning, housing needs, resource protection and other planning issues in order to inform decision makers about how to achieve more sustainable regional growth patterns and improve the quality of life within their regions. Regional Blueprints are tools that are contributing to the creation of enduring communities throughout California.

For more information, contact Marilee Mortenson at (916) 653-3758, <marilee_mortenson@dot.ca.gov>, or go to http://www.calblueprint.ca.gov.

# California Regional Blueprints and Blueprint Related Efforts
## Through December 2009

# Smart Mobility Framework

## Fact Sheet

**What?** U.S. Environmental Protection Agency (USEPA) and their consultant team provided initial technical assistance to Caltrans to develop a "Smart Mobility Framework" that will evaluate transportation options available in California's urban, suburban, and rural areas. Caltrans' proposal was one of 6 applications that USEPA approved from 67 applications they received nationally in 2007. The Office of Community Planning (OCP) in the Caltrans Division of Transportation Planning (DOTP) is the sponsor of this effort in collaboration with other state project partners—the Governor's Office of Planning & Research (OPR) and the California Department of Housing & Community Development (HCD).

**Why?** The "Smart Mobility Framework" will assist with the implementation of multi-modal and sustainable transportation strategies in California, in response to specific state laws and plans. Criteria considered in developing this framework included (but was not limited to): density, design, configuration, connectivity, safety, parking strategies, mixtures of land uses, availability of transit, complete streets (including adequate, integrated bicycle and walking facilities), and open spaces.

**How?** The first phase of this project used technical assistance provided by USEPA to gather and synthesize data from California, other states, regional agencies, and State Departments of Transportation from across the country. The findings were the basis of a September 2008 USEPA team visit where Caltrans staff and other professionals discussed a definition and California-based themes on Smart Mobility for use in California. The second phase of the project used State Planning & Research funds to develop the specific framework that will assist Caltrans employees in evaluating proposed transportation plans and projects on how well they comply with the principles of Smart Mobility. Future phases of the project will refine the framework so that Caltrans and other agencies can develop effective screening tools based upon this framework to evaluate their plans and projects.

An interdisciplinary technical advisory team (TAC) guided the project and reviewed the initial interim products as well as the workshop materials. Caltrans divisions and districts as well as State, regional, and local agencies and organizations participated in the September 2008 and June 2009 workshops. USEPA, Caltrans, and a consultant team conducted the specific meetings, roundtables, and focused dialogs for the project.

**When?** The entire project is scheduled for completion by early 2010. Project information and updates can be viewed at http://www.dot.ca.gov/hq/tpp/offices/ocp/smf.html.

**Products:** An action plan has been completed that includes an evaluation framework to guide development of infrastructure consistent with Smart Mobility principles. This guidance on the use of place types and smart mobility performance measures will be available for local and regional agencies as well as for Caltrans.

**Contact:** Chris Ratekin, Project Manager, at (916) 653-4615 or Chris_Ratekin@dot.ca.gov.

# Complete Streets
## Integrating the Transportation System
### Fact Sheet

### What are Complete Streets?

Complete Streets are roadways designed to enable safe access for all legal users. Bicyclists, pedestrians, people using mobility aids, motorists, and transit riders of all ages and abilities must be able to safely use the Complete Street. Complete Streets don't all look the same. A complete Street is planned, designed, operated, and maintained in a way that's appropriate to the function and context of the roadway, whether rural, suburban, or urban. What is adequate on a major arterial is different from what would be needed on a freeway, and what is sufficient in a rural setting (often just a standard shoulder) is much different from an urban one. In fact, there is no design prescription to make a corridor 'complete'. Shoulders, sidewalks, convenient bus stop placement, traffic speed reduction, accessible pedestrian signal timing, and medians can all improve safety and mobility for users.

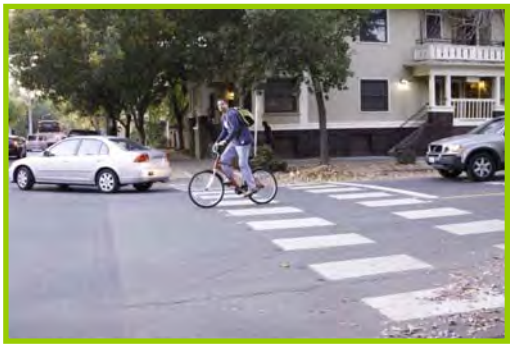


*Image © 2009 Caltrans*
A bicyclist gets ready to merge with motorized traffic. Complete street designs incorporate safety features for cyclists as well as pedestrians

### What are some of the benefits of Complete Streets?

Making room for all types of travelers on our roadways provides benefits for everyone including:

- Complete Streets contribute to a healthy and active lifestyle. Many people would walk and bike more if they could do so more easily and safely.
- Complete Streets improve traveler safety. By designing roadways with basic elements of complete streets, such as safer bus stop placements and raised medians, we all can travel more safely - including people of all ages and abilities.
- Complete Streets help the environment. Many of our daily vehicle trips are short – 3 miles or less. If some of these trips were made on bicycle or foot we could significantly reduce carbon dioxide emissions and breathe cleaner air.
- Complete Streets reduce congestion. Providing more travel options relieves some of the burden on our overcrowded roadways – everyone can get where they want to go more quickly and efficiently.

*Image © 2009 Caltrans*
Mid-block crosswalk with a raised island for pedestrian refuge and a visible crosswalk.

## What is Caltrans doing about Complete Streets?

In October 2008, Caltrans adopted Deputy Directive DD-64-R1 entitled Complete Streets. This directive included the following policy and provisions:

- Bicycle, pedestrian, and transit travel is facilitated by creating "complete streets" beginning early in system planning and continuing through project delivery and maintenance and operations. Developing a network of "complete streets" requires collaboration among all Department functional units and stakeholders to establish effective partnerships.
- State and federal laws require the Department and local agencies to promote and facilitate increased bicycling and walking. California Vehicle Code (CVC) Sections 21200 – 21212, and Streets and Highways Code Sections 890 – 894.2 identify the rights of bicyclists and pedestrians, and establish legislative intent that people of all ages using all types of mobility devices are able to travel on roads. Bicyclists, pedestrians and non-motorized traffic are permitted on all State facilities, unless prohibited.
- Caltrans will develop an Implementation Action Plan to update and incorporate complete streets provisions into guidance, manuals, and training.

Based upon DD-64-R1, the Department and local agencies have the duty to provide for the safety and mobility needs of all who have legal access to the transportation system.

The implementation of Complete Streets policies represents a strategy which cities, counties, and regional planning agencies can use to help meet the regional greenhouse gas emissions reduction targets established in AB 32 and SB 375.

Visit the Caltrans Complete Streets web site to read more.

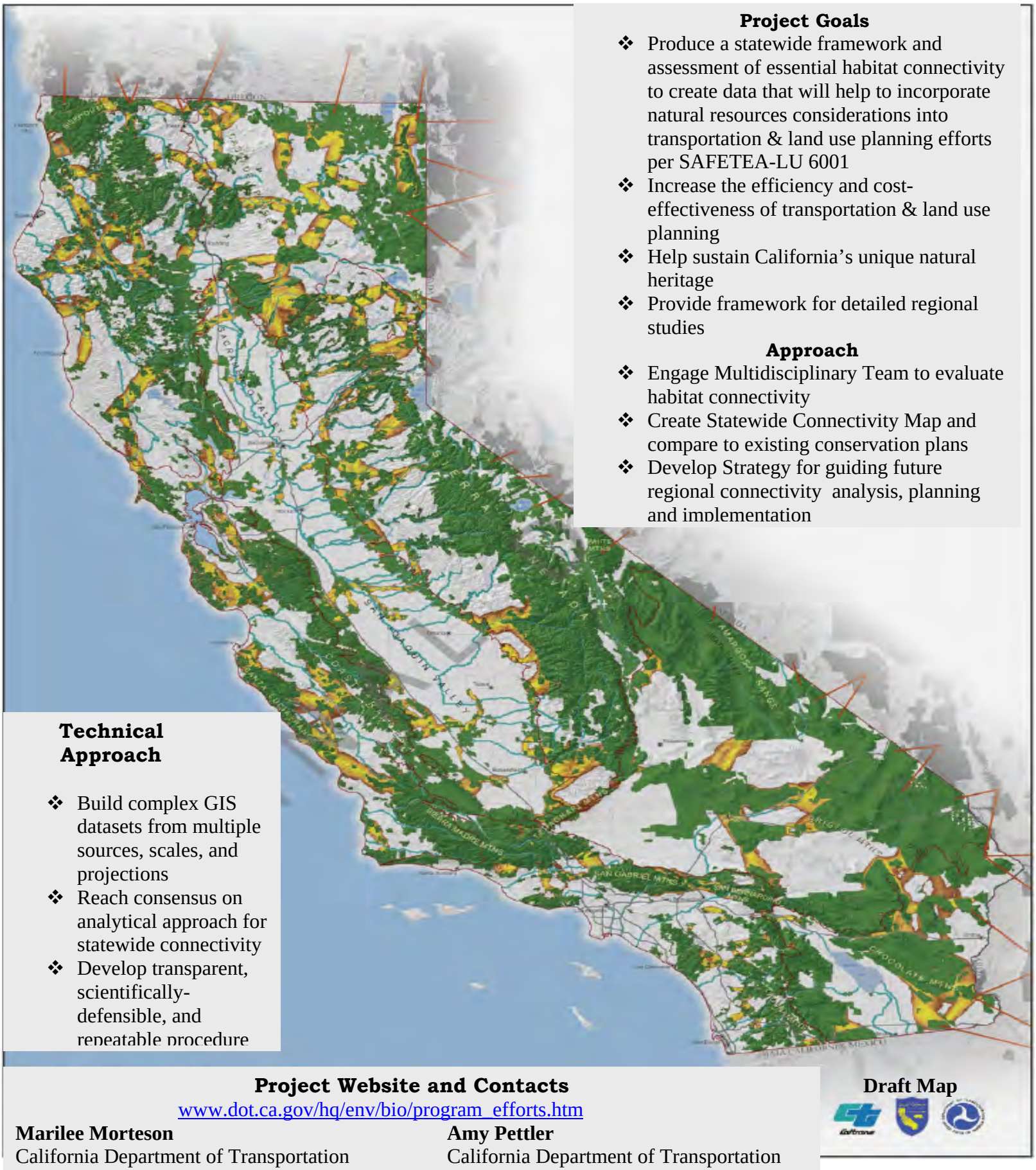
## Learn more about Complete Streets:

- Caltrans Deputy Directive DD-64-R1
  A pdf document containing Caltrans' goals towards developing complete streets.
- Complete the Streets
  A coalition of organizations in support of the implemenation of complete streets.
- California Bicycle Coalition
  An organization dedicated to improving bicycling conditions in California.
- Livable Streets
  A 'StreetsWiki' entry depicting the elements of complete streets.
- USA Today
  An article regarding an increase in awareness of complete streets nation-wide.

*Image © 2009 Caltrans*
A bus makes a stop on a road with motorized traffic and light rail train tracks. pedestrian and bicycle access is important here as people walk or ride to public transportation modes.

**Contact:** Chris Ratekin, Project Manager, at (916) 653-4615 or Chris_Ratekin@dot.ca.gov.

# CALIFORNIA ESSENTIAL HABITAT CONNECTIVITY PROJECT



## Project Goals

- Produce a statewide framework and assessment of essential habitat connectivity to create data that will help to incorporate natural resources considerations into transportation & land use planning efforts per SAFETEA-LU 6001
- Increase the efficiency and cost-effectiveness of transportation & land use planning
- Help sustain California's unique natural heritage
- Provide framework for detailed regional studies

## Approach

- Engage Multidisciplinary Team to evaluate habitat connectivity
- Create Statewide Connectivity Map and compare to existing conservation plans
- Develop Strategy for guiding future regional connectivity analysis, planning and implementation

## Technical Approach

- Build complex GIS datasets from multiple sources, scales, and projections
- Reach consensus on analytical approach for statewide connectivity
- Develop transparent, scientifically-defensible, and repeatable procedure

**Draft Map**

## Project Website and Contacts

www.dot.ca.gov/hq/env/bio/program_efforts.htm


**Marilee Morteson**
California Department of Transportation
Division of Transportation Planning
Marilee_Morteson@dot.ca.gov
916-653-3758

**Amy Pettler**
California Department of Transportation
Division of Environmental Analysis
Amy_pettler@dot.ca.gov
916-651-8166

# Climate Action Program

Division of Transportation Planning

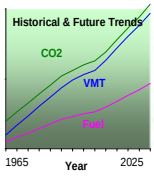
## *Mitigation*

***What?*** The Climate Action Program at Caltrans promotes clean and energy efficient transportation, coordinates climate activities and provides guidance for mainstreaming climate issues into its business operations. The intent is to lower the impact from transportation and contribute to the State's greenhouse gas (GHG) emission reduction targets.

***Why?*** The California Global Warming Solutions Act of 2006 (AB-32) codifies the greenhouse gas emission reductions targets and require state agencies to devise and implement programs within their jurisdiction to achieve emissions reductions targets set forth by this law. Caltrans is committed to continuously monitor and evaluate transportation plans, projects, and strategies in the context of greenhouse gas emissions and take measures to advance California's Climate objectives.

***How?*** Caltrans' Climate Action Report, December 2006, outlines transportation strategies that are contributing to reducing the state's GHG emission reduction levels by 2020. The overall approach is to: a) reduce congestion and improve efficiency of transportation systems through the Governor's Strategic Growth Plan; and b) institutionalize energy efficiency and GHG emission reduction measures into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

*Contact: Garth Hopkins, Chief*
*Office of Regional & Interregional Planning*
*(916) 654-8175, Garth_Hopkins@dot.ca.gov*

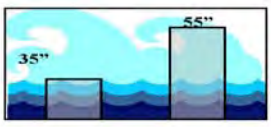



## *Adaptation*

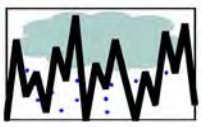
***What?*** In concert with mitigation efforts, Caltrans has undertaken the complicated task of developing California's first comprehensive climate adaptation strategy for transportation infrastructure. A new priority in the climate change arena, adaptation promises to offer solutions to climate impacts as a result of past and current emissions. Consequently, our efforts to adapt to expected climate change impacts through careful planning and preparation must occur in parallel to ongoing mitigation efforts.

***Why?*** The projected climate scenarios, from rising sea levels and temperature to changes in variability of precipitation, could pose real challenges to transportation infrastructure with potentially significant social and economical impacts. Billions of dollars in state funding are spent annually to improve and maintain our transportation infrastructure. According to Governor's Executive Order S-13-08, "California must begin now to adapt and build our resiliency to coming climate changes". Hence, strategies are required to address the risks to our transportation investments. These risks may be manageable depending on how well Caltrans is prepared for climate variations and a degree to which climate change consideration enters into Caltrans' planning, design, construction, operations, and maintenance.

***How?*** Caltrans' Vulnerability of Transportation Systems to Sea Level Rise report, February 2009, provides a preliminary assessment of how vulnerable our transportation infrastructure is to rising sea levels. Caltrans is in the process of developing a more comprehensive adaptation report that will include: a) other anticipated climate variations (increases in temperature & precipitation); b) program-specific adaptation strategies; and c) a process to integrate consideration of climate variations into State transportation investment decision-making.







*Sea Level Rise* *Higher Temperatures* *Variable Rainfall intensity*

Climate Change Adaptation Scenarios (Low and High ranges)

# Vulnerable Infrastructure

## *Sea Level Rise*

*Coast Highway in Retreat: Highway 1 in San Luis Obispo/ San Simeon - a 3-mile realignment is designed to protect the highway from rapidly eroding bluffs due to rising sea for the next 100 years. Construction is expected to begin in 2013.*

## *Increases in Temperatures*

*Derailment from warped tracks due to extreme heat.*

*Upward slab movement and shattering at a joint or crack.*

## *Highly Variable Precipitation*

*Water sheet flow crossing, Highway 190 in Death Valley 2004.*

*Facility located next to the runoff water course, Klamath flood, Highway 101, 2006.*

* Source: Pacific Institute

# Draft Narrative

outline & maps

- Executive Summary
- Narrative Outline
- Supporting Maps

**california interregional blueprint** & california transportation plan

MOBILITY
ACCESS
CONNECTIONS

**California Interregional Blueprint Narrative**
**Executive Summary**

## Background and Purpose:

The California Interregional Blueprint (CIB) will be completed in two phases. Phase I will focus on assembling data and information from existing State and regional plans to facilitate discussions about interregional and statewide investments and policies that will support sustainable growth in California. Phase II will build on the work from Phase I with the implementation of robust modeling and data programs.

An important element of the first phase of the CIB is a discussion narrative (and supporting maps) that combines the latest available data from State and regional plans on interregional corridors for State highways, intercity and high-speed passenger rail, transit, goods movement and public use airports to provide a qualitative analysis of the current and proposed interregional transportation system. This discussion narrative begins to link regional data at a statewide level to support interagency collaboration that will jointly plan for the future of an integrated California transportation and land use network.

## Outcomes:

### Analysis

This narrative describes how Blueprints influence transportation systems, creating outcomes that complement the California Transportation Plan's "3 E" objectives for a sustainable statewide transportation system based on a: prosperous economy, quality environment, and social equity. The narrative reviews and compares regional transportation plans from four Metropolitan Planning Organizations (MPOs) and the eight MPOs in the San Joaquin Valley and considers the potential positive effect Blueprint-based strategies could have on performance metrics such as greenhouse gas (GHG) emissions, congestion and multimodal access. Maps in the narrative show Blueprint-designated planning scenarios, and how Caltrans' planned interregional mobility corridors for State highways, goods movement, and intercity and high-speed passenger rail interface with Blueprint planning trends. By evaluating current and future regional transportation plans through a lens of Blueprint-designated priorities, Caltrans and regional planning partners can further reduce GHG; more effectively preserve open space; reduce congestion while increasing access to goods and services; and more efficiently allocate financial and technical resources.

Converging regional information statewide also allows for better modeling and analysis by identifying gaps in information and allowing for comparative reviews of planning strategies, funding priorities, and performance metrics. The CIB will help identify current and future GHG emissions from transportation and support the California Transportation Plan in more effective multimodal planning, as is required under Senate Bill 391. By considering regional priorities, plans and data in a statewide context, policymakers can better target funds and projects so they connect and enhance existing state and regional strategies.

**Engagement**
The CIB maps and narrative discussion are the focal points for bringing together regional planning partners around the State to collaboratively craft a shared, progressive future. Regional feedback will frame the final narrative, which will be submitted to the Business, Transportation and Housing Agency in September, 2010. It also will be a cornerstone of the California Transportation Plan 2040 that must be completed in 2015 as required by SB 391.

**Next Steps**
Phase I data gaps will become Phase II data discovery, and the improved data sets will support modeling tools that will be operational in December, 2012. The Statewide Integrated Interregional Transportation (SIIM), Land Use and Economic Model will allow continued and improved assessments of GHGs, multi-modal travel needs, and land use strategies so that improvements in any region of the state can be translated to improvements throughout the connecting corridors. The SIIM will also provide the ability to propose alternative scenarios for addressing transportation demand in order to improve these outcomes. Finally, land use and transportation planning efforts will have integrated tools to support cohesive practices that are founded on and aligned with regional priorities.

Tables in the CIB Narrative:

1) **Comparison of SACOG's RTP Performance: 2002 MTP and 2008 MTP Comparison of SACOG's RTP Investments: 2002 MTP and 2008 MTP**
2) **Metrics for Regional Transportation Plan/Regional Blueprint Plan Comparison**

Maps in the CIB Narrative:

1) **California Interregional Transportation System - Existing**
2) **California Interregional Transportation System Gaps with Blueprint Land Use**
3) **SACOG Regional Blueprint Land Use and Corridor System Map: 2050**

California Interregional Blueprint –Draft Narrative Outline

The following is an outline of the draft California Interregional Blueprint (CIB) Narrative being prepared by UC Davis' Urban Land Use and Transportation Center. In advance of statewide modeling tools now under development, this narrative (or qualitative analysis) provides a preliminary assessment of the relationship between existing interregional system plans and regional transportation and land use vision plans for the 4 largest MPOs and the combined MPOs serving the San Joaquin Valley.

1) Background
   a) Purpose, Goals, and Process Statement of CIB
      i) Description of California Interregional Blueprint – what it is, what it will do, and how it will be implemented (Phase I and II).
      ii) Definition of interregional travel (by trips and by how the road functions).
   b) Purpose of Narrative
      i) Initial qualitative assessment (in advance of statewide modeling tools) of available data to set a baseline.
      ii) Scope - limited to four largest Metropolitan Planning Organizations (MPOs) (SACOG, MTC, SCAG and SANDAG) and the MPOs representing the San Joaquin Valley (SJV).
      iii) Remaining MPOs and Regional Transportation Planning Agencies (RTPAs) to be included in further development of CIB as data becomes available.
   c) Policy Context: How SB 45 and recent environmental goals and regional development patterns in California have framed interregional transportation planning.
      i) Regional Blueprints: Reducing infrastructure expenses and GHG emissions while preserving open space and mobility through more compact development patterns which increase access to goods/services.
   d) Relationship of CIB to current sustainability initiatives and key issues: Climate Change (AB 32, SB 375, and SB 391), Economic Vitality, and Healthy Communities.

2) Potential GHG Reduction from Land Use and Transportation Strategies
   a) Methods
      i) Literature Review/Empirical Studies
      ii) Sophisticated Modeling Review (and where modeling is headed in the future)
      iii) Simple Tool Review
   b) Current Research (provide summary in table)

3) Regional Transportation Plans (RTPs)/ Blueprint Comparisons
   a) Matrix comparing RTPs for 4 largest MPOs and for the 8 MPOs of the San Joaquin Valley (SJV) indicating the extent to which the adopted RTP is based on Blueprint land use assumptions (Appendix A).
   b) Narrative examples where the new direction of Blueprint planning will have a noticeable effect on transportation demand through RTP implementation.

| Table 1: Comparison of SACOG's RTP Performance: 2002 MTP and 2008 MTP (Source: Sacramento Area Council of Governments) | | |
|---|---|---|
| Percent Change from 2005 in: | 2025 (2002 MTP) | 2035 (2008 MTP) |
| Transit Service Hours | +111% | +283% |
| Transit Boardings | +98% | +184% |
| Transit Productivity | +6% | +35% |
| GHG / Capita | 0% | -8% |
| Weekday VMT / Capita | +1% | -6% |
| Congested VMT / Capita | +114% | +16% |
| Commercial Truck VMT | -- | -2% |
| Congested VMT for Commercial Vehicles | -- | -36% |

| Table 2: Comparison of SACOG's RTP Investments: 2002 MTP and 2008 MTP (Source: Sacramento Area Council of Governments) | |
|---|---|
| | Percent Change from 2002 to 2008 MTP |
| Transit Investment | +21% |
| Bike/Ped Investment | +56% |
| Smart Growth Programs | +35% |
| Road Operations & Maintenance | +17% |

c) A comparison of the RTPs for the 4 largest MPOs and the San Joaquin Valley will include the following metrics: See Appendix A for the resulting RTP Matrix.

| Table 3: Regional Transportation Plan/Regional Blueprint Plan |
|---|
| RTP Base Year |
| RTP Horizon Year |
| RTP Budget |
| Expected / Adopted |
| Blueprint Visioning Done Prior to RTP |
| Blueprint Visioning Details |
| RTP Scenarios |
| Adopted RTP Scenario |
| Regional Land Use Allocation Projections |
| What Extent is Adopted RTP Based on Blueprint Land Use? |
| RTP PLACE3S (place types) Scenario-Based? |
| RTP or Blueprint Performance Metrics |
| RTP Findings |
| Fiscally Constrained? Definition? |

| |
|---|
| BLUEPRINT: Base Year Jobs/Household |
| BLUEPRINT: Horizon Year Jobs/Household |
| Base Year Jobs/Household |
| Horizon Year Jobs/Household |
| Includes Planned or Programmed Focus Routes? |
| Includes Planned or Programmed Inter-regional Rail corridors? |
| Includes Planned or Programmed Goods Movement System? |

4) New Plan for a New Transportation Era: Three maps with narrative description.

*a)* **Map 1: California Interregional Transportation System – Existing System** *(Sources: Caltrans Divisions of Transportation Systems Information, Transportation Planning, and Mass Transportation, Cal-Atlas and Calthorpe Associates)*

b) **Map 2: California Interregional Transportation System Gaps with Blueprint Footprint** *(Sources: Caltrans Divisions of Transportation Systems Information and Transportation Planning, Calthorpe Associates and Sacramento Area Council of Governments)*

i) Overall discussion of RTPs and Regional Blueprints and how they will connect to or will influence interregional transportation system demand

ii) Definition of "gaps" or opportunities

**iii) Regional Transportation and Blueprint Plans:**

(1) Sacramento Area Council of Governments (SACOG)

**Map 3: SACOG Regional Blueprint Land Use and Corridor System Map: 2050** *(Sources: Caltrans Divisions of Transportation Systems Information and Transportation Planning, Calthorpe Associates and Sacramento Area Council of Governments)*

Example - Regional scale view with state interregional system plans and regional transportation and land use vision plan. SACOG was selected, as it currently is the only region with a Blueprint-based RTP.

(2) San Diego Association of Governments (SANDAG)

(3) San Joaquin Valley (SJV)

(4) Southern California Association of Governments (SCAG)

(5) Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG)

5) Narrative Findings and Actions:

a) Overall discussion of improvements to Caltrans and MPO performance metrics based on the direction of regional Blueprints

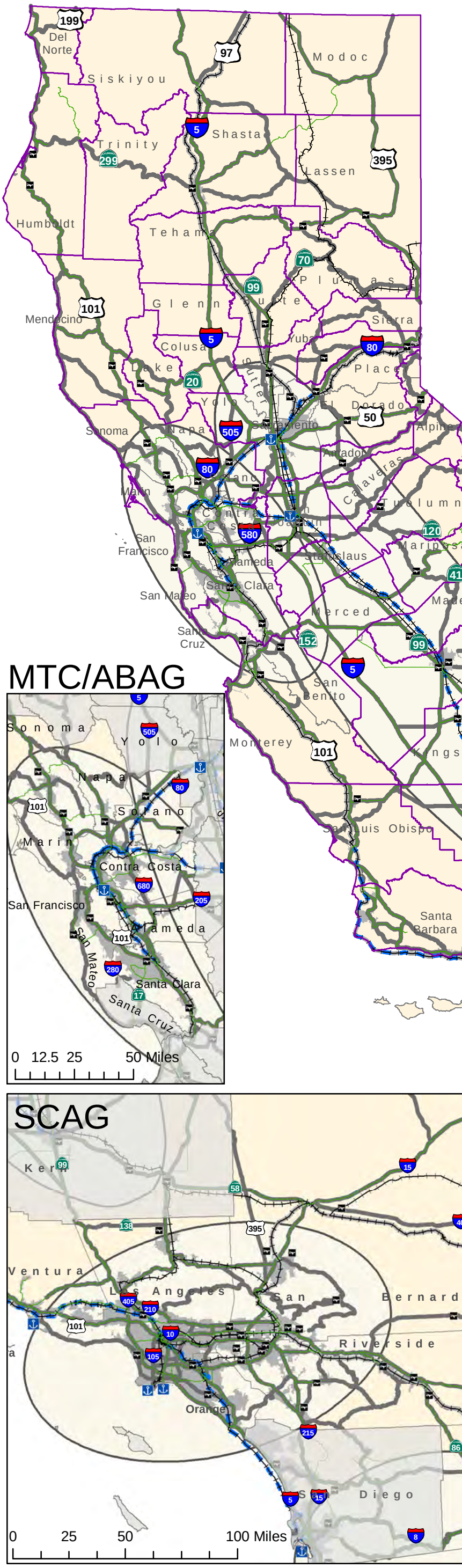
b) Specific findings and recommended actions:

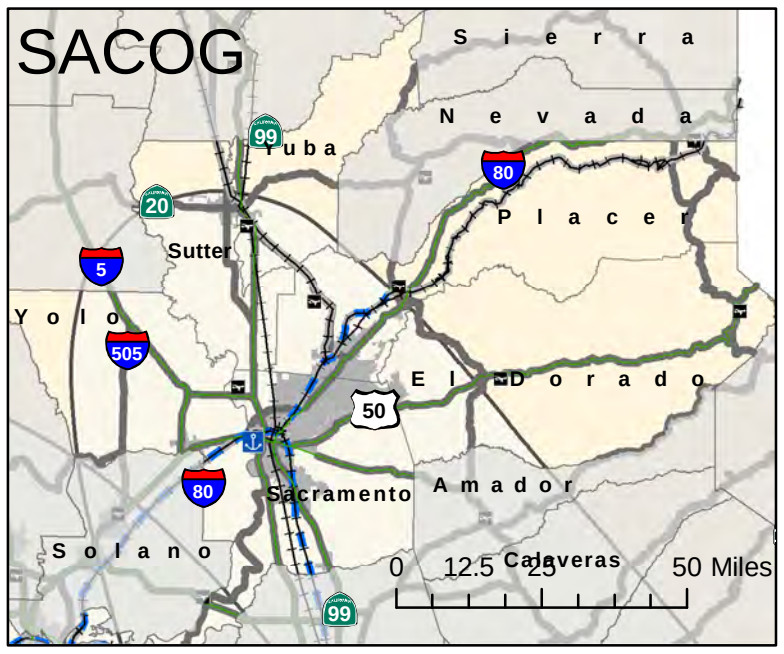
i) New direction of MPO vision plans will support reduced GHGs – State interregional system plans need analysis to determine impact of GHG
   (1) Action: Complete Statewide Transportation Demand Model (STDM), Statewide Freight Model (SFM) and the Statewide Integrated Interregional Model (SIIM) to coordinate modal plans and test GHG reduction solutions
ii) Interregional travel is impacted by regional actions (both through-trips and origin-destination trips) - interregional plans must be made in light of regional decisions
   (1) Action: Accelerate support for regional integrated models common data development including the joint California Household Travel Survey and Freight Model
iii) Capacity planning differences exist on adjoining roadways at MPO boundaries and model results for interregional trips between adjoining MPOs often do not correspond
   (1) Action: Complete STDM and a Web Interface Tool for the STDM allowing MPOs to work with each other and Caltrans to find the best solutions to different approaches

6) Next Steps:
   a) Collaborate with MPOs and RTPAs to define the process going forward
      i) Define role of Caltrans HQ and Districts
   b) Obtain and enhance data for future CIB development
      i) Obtain regional and land use planning data from all MPOs and RTPAs and continue to develop data on Caltrans system improvements
      ii) Compile sustainable communities strategies/alternative planning strategies (SCSs/APSs)
   c) Define critical performance measures for SB 391 compliance (resource: Smart Mobility Framework)
   d) Develop 2012 SB 391 interim report to the California Transportation Commission and selected Legislative committees
      i) Collaborate with MPOs/RTPAs on development and content
   e) Continue to build and enhance models and data

# California Interregional Transportation System

## Existing System

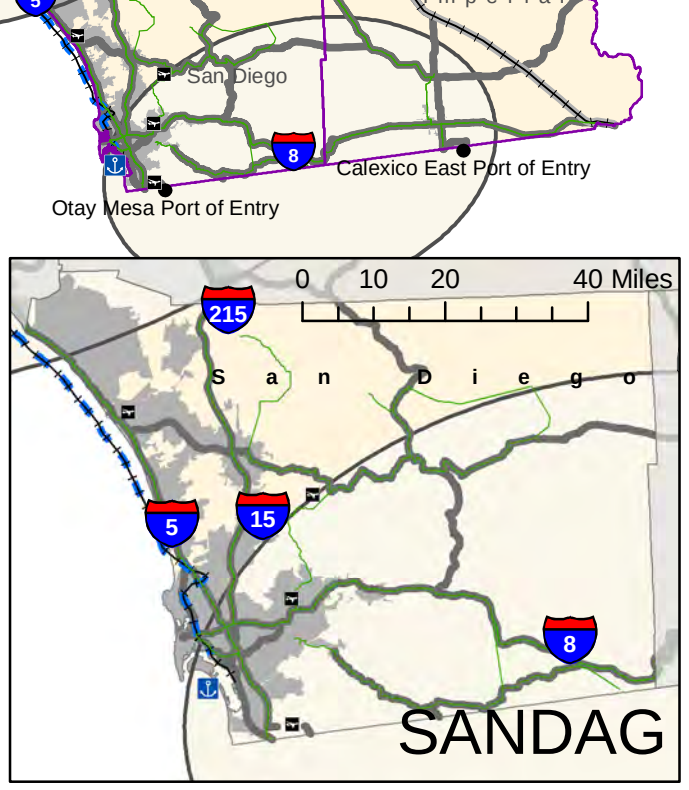






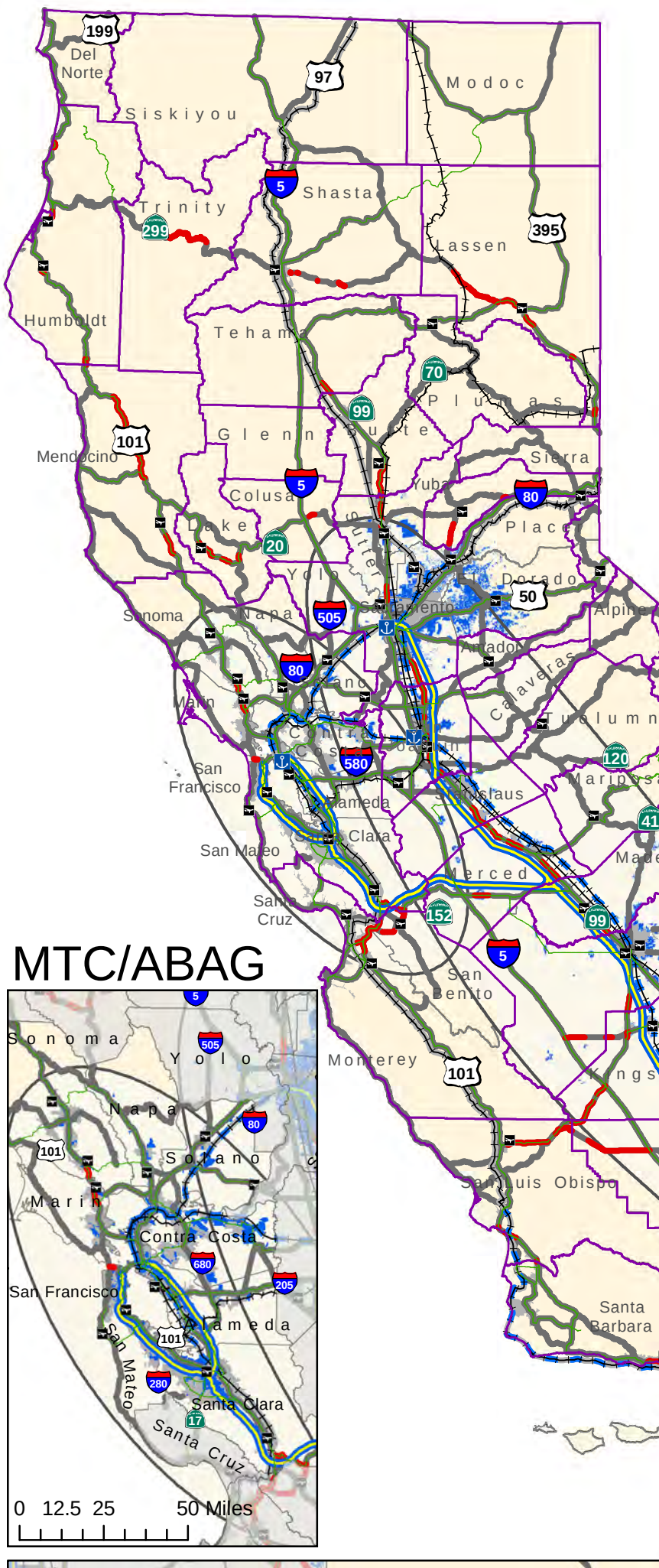


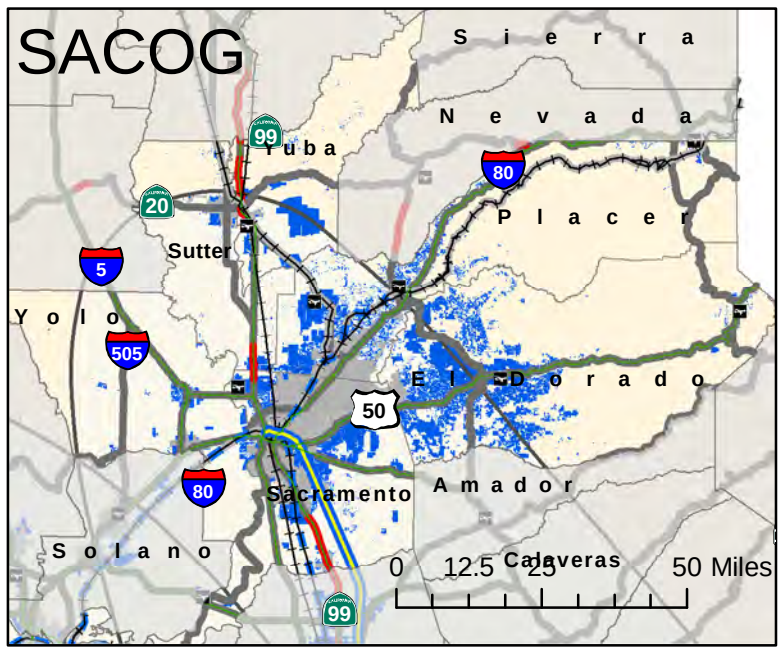




Cartography by Nathaniel Roth at ULTRANS, UC Davis, using data from CalTrans, and the Ca. Resources Agency,. Last map edits 2/9/2010.

# California Interregional Transportation System

## Gaps with Blueprint Footprint




**System Gaps**

- High Speed Rail (Proposed)
- Focus Route (Future Completion)
- Goods Movement Priority Regions
- Blueprint Footprint
- Airports
- Sea Ports
- MPO and RTPA Boundaries
- Intercity Bus (Includes Amtrak Thruway)
- Major Freight Rail
- Interstate Passenger Rail (Amtrak)
- Intercity Passenger Rail (Amtrak)
- Interregional Road System and Major Int'l Trade Routes
- Urbanized Areas

The Blueprint land use footprints represent: ABAG/MTC, SACOG, SCAG, SANDAG, SJCOG, StanCOG,MCAG, Madera CTC, KCAG, TCAG, and Kern COG

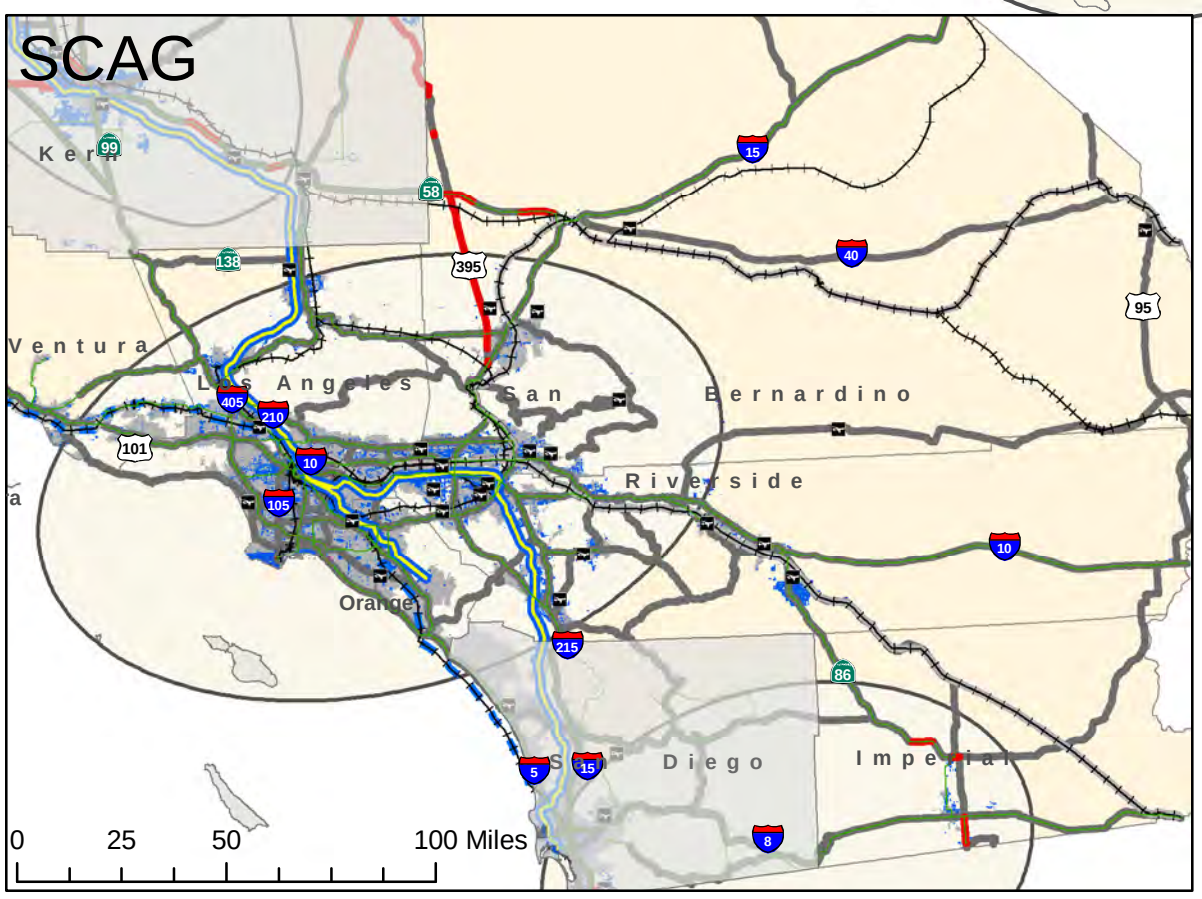
0 25 50 100 Miles

Blueprint Land Use Target Dates:
SACOG (except El Dorado): 2050
El Dorado County: 2035
San Joaquin Valley: 2050
MTC/ABAG: 2020
SCAG: 2030
SANDAG: 2030

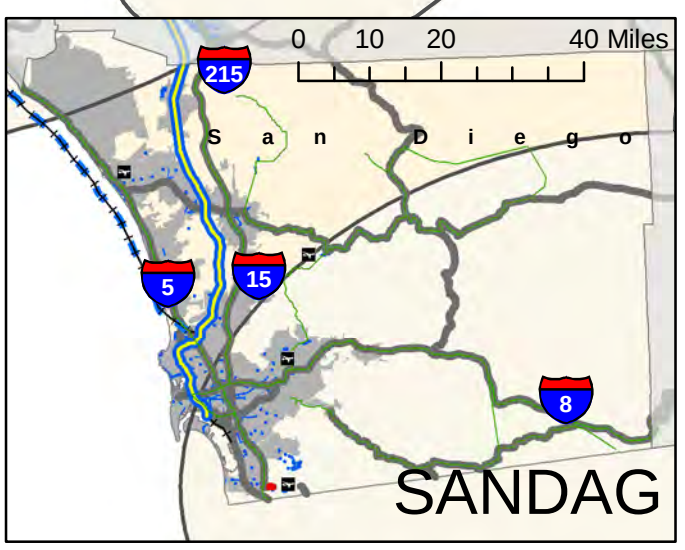
## MTC/ABAG




## SCAG

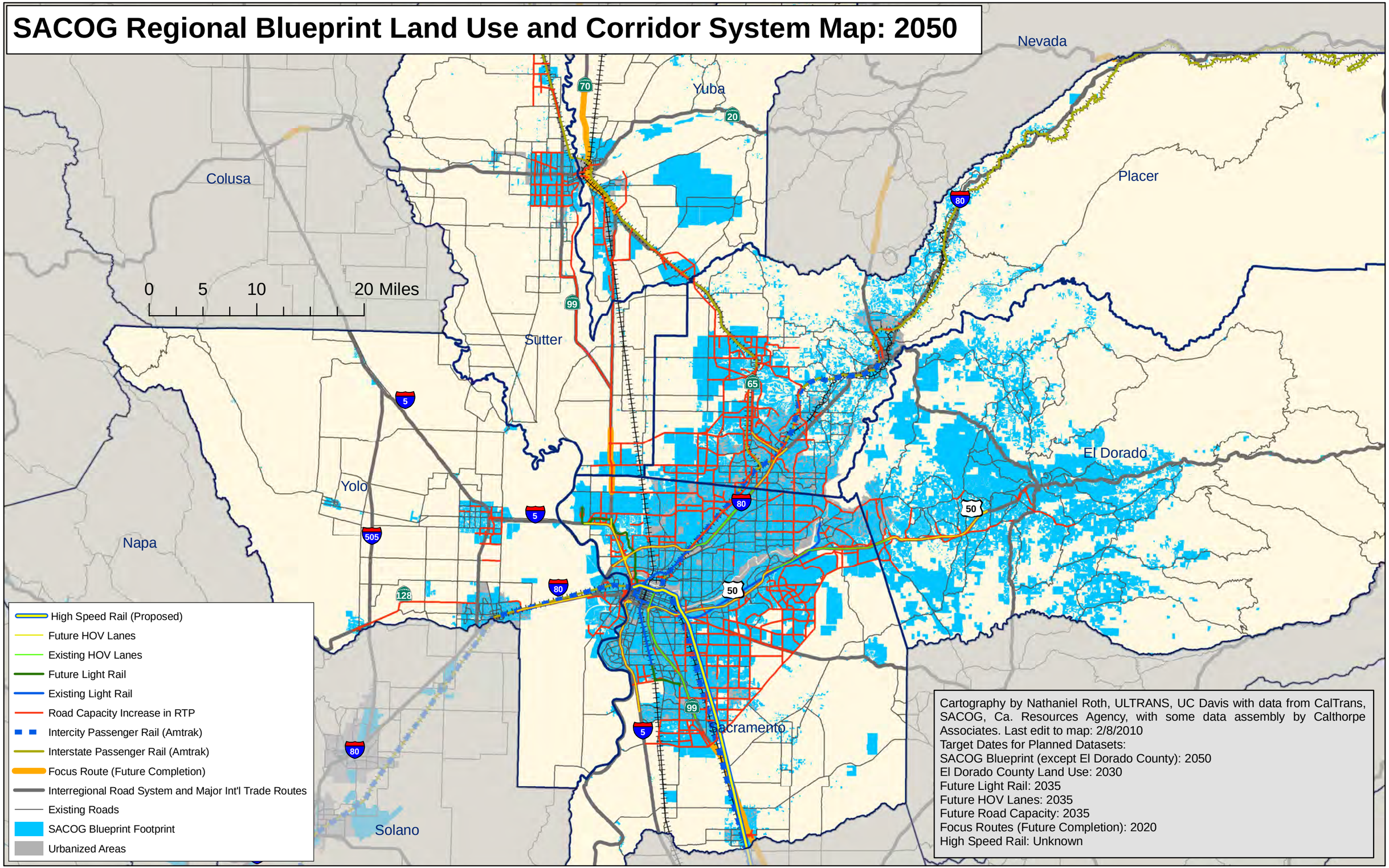







Cartography by Nathaniel Roth at ULTRANS, UC Davis using data from CalTrans, Ca. Resources Agency, SACOG, SANDAG, SCAG, ABAG, SJCOG, StanCOG,MCAG, Madera CTC, KCAG, TCAG, and Kern COG, Some data preparation by Calthorpe Associates. Last map edits 2/9/2010

# SACOG Regional Blueprint Land Use and Corridor System Map: 2050




Cartography by Nathaniel Roth, ULTRANS, UC Davis with data from CalTrans, SACOG, Ca. Resources Agency, with some data assembly by Calthorpe Associates. Last edit to map: 2/8/2010
Target Dates for Planned Datasets:
SACOG Blueprint (except El Dorado County): 2050
El Dorado County Land Use: 2030
Future Light Rail: 2035
Future HOV Lanes: 2035
Future Road Capacity: 2035
Focus Routes (Future Completion): 2020
High Speed Rail: Unknown

# Statewide Model Framework

The California Department of Transportation (Caltrans) is developing statewide, interregional, and integrated planning efforts supported by a package of tools, data and model development. The objective is a better link between short- and long-range transportation planning informed with critical data and analysis that complements regional planning efforts.

**Statewide Interregional Travel Demand Model**

The Statewide Interregional Travel Demand Model is a statewide multi-modal travel demand model designed to identify transportation efficiencies (mobility enhancements with environmental responsibility). It will estimate long distance trips between regions. It is intended to provide the analytical framework for assessing transportation system adequacy, long range plan development, systems level project analysis, as well as to provide a statewide spatial analytical framework. The cost of the Statewide Interregional Travel Demand Model is $1.0 m (funded) with a completion date of September 2010.

**Web-based Interface to Statewide Interregional Travel Demand Model**

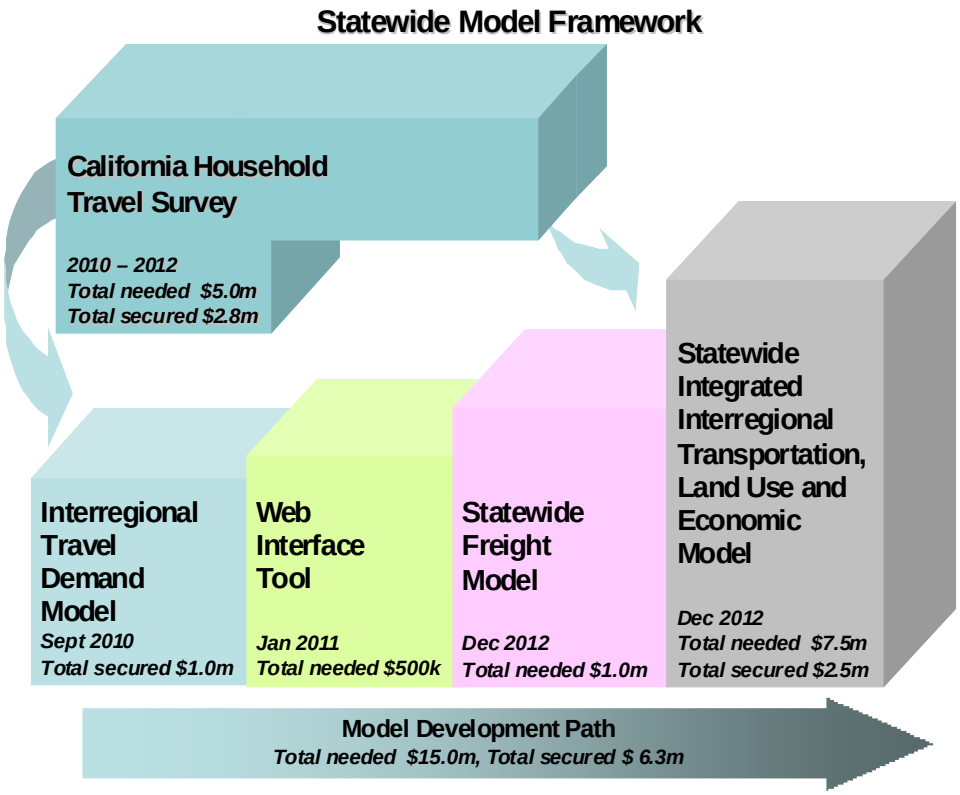
To provide easier access to the Statewide Interregional Travel Demand Model, Caltrans is pursuing the development of an additional web-based interface tool to enable regional agencies to fully utilize the statewide model. The web-based interface tool will focus on model operations and data management. The cost of the web-based interface tool is estimated at $ 0.5 m (unfunded) with an estimated completion date of January 2011.

**Freight Model**

The Caltrans Freight Model is intended help Caltrans and the Air Resources Board better understand freight movement in California and its impacts on highway infrastructure, transportation networks, highway safety, energy use, and emissions. There is a need to develop freight modeling systems capable of evaluating the impacts of infrastructure enhancements and other related projects on traffic congestion, mobility, air quality, emissions analysis, public health, and climate change. The cost of the Freight Model is estimated at $1.0 m (unfunded) with an estimated completion date of December 2012.

**Statewide Integrated Interregional Transportation, Land Use and Economic Model**

The Statewide Integrated Interregional Transportation, Land Use and Economic Model will forecast the interaction of transportation system investment and land use development. With this integration of models, Caltrans can better analyze the impacts of policy plans, programs and major investments on transportation, the economy, and the environment at a statewide level. The cost of the Statewide Integrated Interregional Transportation, Land Use and Economic Model is estimated at $7.5 m ($5.0 m unfunded) with an estimated completion date of December 2012.




**California Household Travel Survey**

Regional Travel Models and the Statewide Interregional Travel Demand Model use statewide multi-modal regional and interregional household travel behavior surveys as a base to forecast future travel behavior. With the California Association of Councils of Governments (CalCOG), Caltrans and the regional agencies have organized a Committee to implement the California Household Travel Survey. The cost of the effort, based on $170 per survey, is estimated at $5 m ($2.2 m unfunded). The California Household Travel Survey will take approximately two years to complete.

November 30, 2009

**California Department of Transportation**

**Background Paper**

# California Interregional Blueprint

This paper presents an approach for preparing a statewide interregional, multimodal blueprint. The "California Interregional Blueprint" (CIB) will provide the basis for the next update to the California Transportation Plan (CTP 2040) to be completed by 2015. The CIB will analyze the impact of multimodal interregional projects, under consideration in the Department's and regional agencies' long-range system and strategic plans, on the transportation system. It also will serve to expand the understanding of the interactions between land use and transportation investments in meeting critical climate goals. The ultimate benefit of this effort will be stronger partnerships, with regional and local agencies and tribal governments, and better data for improved decision making at the State, regional, and local level.

The CIB will aggregate planned interregional highway, transit, rail (including high-speed and intercity rail), intelligent transportation system, goods movement, and other State project concepts and strategies to complement the projects already included in Regional Transportation Plans (RTP) developed by the State's Metropolitan Planning Organizations (MPO) and Regional Transportation Planning Agencies (RTPA). Information contained in the Interregional Blueprint will be a snapshot of the best planning information available at the time it is prepared.

The CIB will be completed in two phases. Phase I will focus on assembling data and information from existing State and regional plans to facilitate discussions about interregional and statewide investments and policies that will support sustainable growth in California. Phase II will build on the work from Phase I with the implementation of robust modeling and data programs.

During Phase I, project data from existing plans will be compiled and analyzed at a system level. This analysis will consist of a narrative discussion of interregional system gaps, along with preferred regional growth and land use scenarios (with supporting maps). Ultimately, in Phase II, the project concepts and strategies, including growth and land use projections, will be modeled, and their impact on various outcomes will be quantified. One of the outcomes will be a first-ever estimate of the combined impact of these projects and system strategies on greenhouse gas (GHG) emissions. The forecasts of interregional trips (through the delivery of a Statewide Interregional Travel Demand Model in September 2010) and data from the Statewide Household Travel Survey (planned for completion in 2012) will provide critical data to inform the greenhouse gas (GHG) emission reduction dialogue.

Stakeholder workshops are scheduled for the CIB in February, March, and April 2010. These workshops, and other outreach activities, will provide an opportunity to introduce the CIB as well as discuss the concept with the Department's transportation partners. The workshops will also provide a forum to share data and analysis as it becomes available.

To implement this vision, it is recommended that the following Phase I elements be pursued and the findings incorporated into a document to be submitted to Business, Transportation and Housing Agency (BTH) in September 2010. A roadmap for products described under CIB Phase II will be incorporated into the September 2010 document as recommendations for next steps.

**Phase I Elements**

1. Provide a baseline for the interregional transportation system by:

   a. Updating the 10 focus routes in the 1998 Interregional Transportation Strategic Plan (ITSP) by providing a status on each of the project concepts included in that plan.

   b. Adding planned project concepts and strategies where possible through a narrative synopsis and maps from the following statewide planning documents:
      - Strategic Growth Plan
      - Goods Movement Action Plan
      - Proposed High-Speed Rail Routes
      - High-Occupancy Vehicle/Express Lane Business Plan 2009
      - Ten-Year State Highway Operation and Protection Plan
      - Transportation Management System Master Plan
      - California Statewide Intelligent Transportation System Architecture and System Plan
      - Corridor System Management Plans
      - Transportation Concept Reports
      - California State Rail Plan
      - California BusPool Project
      - California Aviation System Plan
      - Strategic Highway Safety Plan
      - Highway 99 Business Plan

2. Develop an initial CIB narrative (qualitative analysis) as described below.

   a. Aggregate existing data from adopted RTPs statewide and map approved growth scenarios provided by the regions where possible.

   b. Aggregate the resulting statewide transportation demand and reveal transportation system gaps, and produce preliminary statewide and interregional performance measures, including those defined in the Smart Mobility Framework, Vision California (High-Speed Rail Authority), Statewide Transit Strategic Plan, ITSP and Assembly Bill (AB) 32 Scoping Plan.

3. Consider the following initiatives that support the overall vision of a sustainable transportation system, including among others:

    - Strategic Growth Council Objectives
    - BTH Economic Development Workplan
    - Healthy Communities
    - Regional Blueprint Planning Program
    - Statewide Transit Strategic Plan
    - Bus Rapid Transit (BRT) Handbook
    - Caltrans' Park and Ride Guidance
    - Climate Action Program
    - 2009 California Climate Adaptation Strategy Discussion Draft
    - Smart Mobility Framework
    - Complete Streets
    - Essential Habitat Connectivity Project
    - Park and Ride Program Resource Guide

4. Develop a “roadmap” or work plan for Phase II development of the CIB, including recommendations for next steps.

5. Continue to consult with internal and external partners such as:

    a. Strategic Growth Council
    b. The Department’s Planning and Modal Programs and Legal Division (regarding statute prohibiting inclusion of projects)
    c. BTH
    d. 109 federally recognized California Tribal Governments
    e. Regional Caltrans Coordination Group Meeting; Rural Counties Task Force
    f. California Transportation Commission
    g. California High-Speed Rail Authority
    h. Air Resources Board
    i. California Energy Commission
    j. Housing and Community Development
    k. California Transit Association
    l. California Association for Coordinated Transportation
    m. Bus Rapid Transit/Transit Advisory Committee
    n. League of California Cities
    o. California State Association of Counties
    p. Regional Council of Rural Counties
    q. California Department of Water Resources (including at the regional level with Integrated Regional Water Management Plans)
    r. California Department of Fish and Game

**Phase II Elements**

1. More robust modeling analysis with the completion of the a statewide modeling framework comprised of: the *Statewide Interregional Travel Demand Model* September 2010; and the *Statewide Freight Model* in December 2012, as well as the *Statewide Integrated Interregional Model (Transportation, Land Use, Economics)* or *SIIM* in December 2012. (See "California Department of Transportation – Model Improvement Plan" for more specifics.)

2. Completion of National Household Travel Survey with add-on data related to bicycling and walking in October 2009 and a Caltrans Statewide Household Travel Survey in January 2012.

3. Completion of the Goods Movement Action Plan II in December 2010 and the subsequent implementation of planned actions.

4. Completion of the Statewide Transit Strategic Plan in August 2011 and the subsequent implementation of planned actions.

5. Development of the Senate Bill (SB) 375 Regional Targets Advisory Committee methodology in September 2009; final GHG targets in September 2010; and RTPs that include sustainable communities strategies (SCS) or alternative planning strategies (APS) to meet those targets by August 2013.

6. Other contributions from: (1) current research and studies that may further refine the CIB; (2) partnerships that evaluate and recommend measures promoting sustainability; and (3) potential contributions from future federal transportation authorizations.

**Estimated Cost:**

Total cost for the statewide modeling framework that will provide the modeling tools and data needed to produce the Interregional Blueprint is estimated at $15.0 million of which $6.3 million has been committed to date. The remaining $8.7 million in needed funding is proposed to come from a variety of sources, including Department planning funds, grants, foundations, and other federal and State funds. Staffing needs for the effort will be redirected from existing resources.

**Outcomes of Projects**

- Provide a multimodal, integrated vision for the State's interregional transportation system based on data and analysis that will set a baseline of system performance for future planning and project delivery efforts.
- Create an assessment of statewide transportation investment needs to inform future policy and financing discussions and decisions.

- Promote the importance of a seamless, interregional transportation system and increase productivity of the system by improving linkages to regional and local systems.
- Positions the Department to be a statewide and national leader in addressing mobility within the context of climate change, Senate Bill (SB) 375, and proposed federal requirements, including the upcoming federal transportation authorization.
- Respond to recent changes to State law under SB 391 (Liu, Chapter 585, Statutes of 2009) that now require the CTP to identify the statewide, integrated, multimodal transportation system that will achieve the State's climate change goals. It also requires the plan to consider how the sustainable communities strategies/alternative planning strategies being prepared by MPOs under SB 375 would impact the system.
- Provide an initial statewide evaluation of the impact of planned actions by the Department and MPOs to reduce GHG emissions.
- Establish a framework for scenario-based planning at the State level to provide better guidance and information on interregional trips to MPOs and RTPAs in developing their RTPs and regional blueprint plans, and to MPOs in developing their sustainable communities strategies/alternative planning strategies.